Parallels® Panel

Administrator's Guide

Panel 11.0

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Preface

In this section:

Typographical Conventions

Before you start using this guide, it is important to understand the documentation conventions used in it.

The following kinds of formatting in the text identify special information.

Formatting convention	Type of Information	Example
Special Bold	Items you must select, such as menu options, command buttons, or items in a list.	Go to the **System** tab.
	Titles of chapters, sections, and subsections.	Read the **Basic Administration** chapter.
Italics	Used to emphasize the importance of a point, to introduce a term or to designate a command line placeholder, which is to be replaced with a real name or value.	The system supports the so called *wildcard character* search.
`Monospace`	The names of commands, files, and directories.	The license file is located in the `http://docs/common/licenses` directory.

Formatting convention	Type of Information	Example
`Preformatted`	On-screen computer output in your command-line sessions; source code in XML, C++, or other programming languages.	`# ls -al /files` `total 14470`
`Preformatted Bold`	What you type, contrasted with on-screen computer output.	**`# cd /root/rpms/php`**
CAPITALS	Names of keys on the keyboard.	SHIFT, CTRL, ALT
KEY+KEY	Key combinations for which the user must press and hold down one key and then press another.	CTRL+P, ALT+F4

Feedback

If you have found an error in this guide, or if you have suggestions or ideas on how to improve this guide, please send your feedback using the online form at http://www.parallels.com/en/support/usersdoc/. Please include in your report the guide's title, chapter and section titles, and the fragment of text in which you have found an error.

After Upgrading to Panel 11

This chapter is intended to the users who switched to Panel 11 either from Plesk Panel 9 and earlier or from Parallels Small Business Panel. The chapter describes the main changes in the business model of Panel 11 comparing to these products.

In this chapter:

Upgrade from Earlier Panel Versions

Compared to the previous versions of Plesk software (Plesk 9 and earlier), Parallels Plesk Panel 10 introduces the following changes:

- **User accounts**. In Panel 11, there are no client accounts and domain administrator accounts. For users who need to resell hosting services and host their own websites, you will set up *reseller accounts*. For users who do not need to resell hosting services, but only host their own websites, you will set up *customer accounts*.

  Customers can create user accounts in the Panel if they want to allow other users to access the Panel for managing websites, installed applications, or use e-mail services. In 11, customers can create any number of users for access to their Panel, and set up multiple additional FTP accounts for access to the webspace.

- **Service plans**. In Panel 11, there are no reseller, client, or domain templates. Instead, there are *service plans* that you create according to your service offerings: *Reseller plans* for signing up resellers, and *hosting plans*, for signing up customers who do not need to resell services. After plans are created, you create reseller or customer accounts and subscribe them to the plans - and the users are provisioned with the necessary resources and authorized to perform operations in the Panel.

  The most important change brought in by service plans is that, unlike old Plesk templates, they are not applied only once, during the initial resources provisioning, but remain connected to them, so that modifications of a plan change the provisioned resources and privileges.

  In addition to hosting plans, there are also *add-on plans*. You can use them to allocate more resources and services to customers.

- **Subscriptions**. Multi-domain hosting subscriptions replace domains. Instead of creating domains for your customers, you *subscribe* them to a hosting plan, or, in other words, you create a *subscription* for the customer. Actually, not only customers can be subscribed to hosting services and host their websites and mail, the Panel administrator and resellers can have their own subscriptions as well, which they may use for their own purposes.

  Subscriptions can be created based on service plans or configured manually.

  When subscribing a new customer to your services in Panel 11, you specify a domain name at the first step. A customer's subscription is always linked to a domain, which is identified by such attributes as domain name, IP address and system user account. All subscriptions are named after the domains to which they are linked. This link is permanent and cannot be broken in any way, so moving a domain from one subscription to another is impossible. However, you can still rename domains.

  You can host a number of websites under a single subscription, and you can create several subscriptions for a single customer account.

- **Allocation of resources**. In previous versions of Plesk, resources were allocated to reseller accounts, client accounts, and domains. In Panel 11, resources are allocated to resellers and hosting service subscriptions. Customer accounts in Panel 11 do not get any resource allocations directly, so they cannot redistribute them among subscriptions that they purchase. All resources allocated to a single subscription are shared among all websites hosted in the webspace associated with the subscription.

- **Two separate panels: Server Administration Panel and Control Panel**. System administration, and customer and reseller account management tasks are performed in *Server Administration Panel*. All operations related to managing websites, hosting features, and mail accounts are performed in *Control Panel*. Server Administration Panel provides links for access to Control Panel: You can use them to log in to Control Panel and manage websites on behalf of your resellers and customers.

- **Changes in organization of subdomain-related directories.** Due to safety reasons, Panel now stores content and configuration of hosted subdomains in separate directories:

  - `/<VHOST>/`***<subdomain_name>***, the directory that contains HTTP/HTTPs documents (unlike the earlier versions that separated HTTP and HTTPS documents).

  - `/<VHOST>/<subdomains>/<subdomain_name>`, the service directory that keeps subdomain configuration. *We strongly recommend that you do not change the content of this directory.*

What Happens When You Upgrade or Migrate to Panel 11

When you upgrade or migrate to Panel 11, accounts, domains, users, and domain templates are transformed according to the following schemes:

- Reseller accounts are transferred without changes, and resources are allocated to them by means of custom subscription, which are not bound to plans.

- Client accounts become customer accounts, and after upgrade or migration is finished, you need to perform either of the following operations to make sure that the accounts fit in the new business model:

  - Redistribute former clients' resources among the subscriptions belonging to them.

  - Convert customers to resellers and assign the existing subscriptions to them. This can be done if the customer accounts did not belong to a reseller before upgrade or migration.

- Domains are converted to individual subscriptions. The subscriptions are assigned to the administrator, resellers, or customers, depending on whom the former domains belonged to.

- Domain administrator accounts are converted to user accounts, which are assigned to the customers who own the corresponding domains.

- Domain templates belonging to the server administrator and resellers are converted to hosting plans.

- Reseller templates are converted to reseller plans.

The following table summarizes the conversion of business objects.

Objects in previous versions of Plesk	Objects in Panel 11
Reseller account	Reseller account
Client account	Customer account
Domain	Subscription (Custom)
Domain administrator account	User account
Reseller template	Reseller plan
Domain template	Hosting plan

Upgrade from Small Business Panel

This chapter is intended for users who have migrated from Parallels Small Business Panel (SBP) to Parallels Plesk Panel and want to know about changes in management operations, as well as about new product possibilities. If you want to learn more about the migration procedure, refer to **Installation, Upgrade, and Migration Guide**, section **Migrating from Parallels Small Business Panel**.

Migration to Panel is almost seamless as Panel allows you to perform the majority of tasks you did in SBP. The main difference you may find is that some functions are now available in new locations or have a slightly different effect. Moreover, Panel provides you with a number of features unavailable in SBP, such as enhanced user role permissions, the Web Presence Builder tool, or access to new web apps. Learn more about product differences in the section **Differences between SBP and Panel 11** (on page 17).

After the migration, you will use Panel in Power User view - a replacement of the SBP interface. Power User view is almost identical to the SBP user interface. Panel in this view is, in essence, Control Panel with server management capabilities. For more information on Power User view, refer to the section **The Panel GUI** (on page 29).

Differences between SBP and Panel 11

User interfaces of SBP and Panel in Power User view are almost identical. Therefore, here we will discuss only the most important changes to the way you work with Panel.

In this section:

Extended User Role Permissions

Panel, comparing to SBP, allows more accurate adjustment of user role privileges due to a larger number of available permissions. For example, Panel allows dividing users on those who can manage mail accounts and those who can manage company mailing lists. As Panel has the extended list of permissions, some of SBP permissions can migrate into a number of related Panel permissions. For better understanding how permissions are migrated, refer to the table below.

SBP permission	Panel permission	Migration result comments
Manage users **Manage roles**	**Manage users and roles**	The permission is granted, if one of the SBP permissions is granted.
Manage websites and domains	**Create and manage sites** **Configure log rotation** **Configure anonymous FTP service** **Create and manage scheduled tasks** **Create and manage databases** **Configure and perform data backup and restoration** **View statistics** **Design sites in Web Presence Builder** **Create and manage additional FTP accounts** **Manage DNS settings** **Install and manage Java applications**	
Change server settings	-	The permission is not migrated, as Panel allows changing server settings to users with the Administrator role only.
Manage mail	**Create and manage mail accounts** **Create and manage mailing lists**	
Update personal information	-	The permission is not migrated, as Panel allows changing personal information to all users.
-	**Upload and manage files**	By default, this permission is denied after migration.
-	**Configure spam filter**	By default, this permission is denied after migration.
-	**Configure antivirus**	By default, this permission is denied after migration.

For more information on user role properties, refer to the section **User Roles** (on page 509).

Web Presence Builder Tool

While using SBP, you could easily create your own websites with the Site Editor tool. For the same purposes, Panel provides you with the much more powerful tool, Web Presence Builder. Comparing to Site Editor, Web Presence Builder offers:

- New intuitive interface that allows creating websites in less number of steps.
- About 100 website templates filled with content that you can use as a basis for your sites.
- Additional components that can be easily integrated with your site, such as the online store or the embedded video.
- Integration of your website with Facebook and much more.

For more information on Web Presence Builder, refer to the section **Building Websites with Web Presence Builder** (on page 599).

Note that websites created in Site Editor are not compatible with Web Presence Builder. Nevertheless, if Site Editor is installed in Panel, you can edit such websites with it. In that case, websites in **Websites & Domains** list will contain the additional button **Edit in SiteBuilder 4 or Site Editor**.

SSL Protection

Panel allows you to secure connections to your websites the same way as you did in SBP. That means you can obtain SSL certificates in **Server > Tools & Settings > SSL Certificates** and assign them to IP addresses in **Server > Tools & Settings > IP Addresses**. As in SBP, you can assign only one certificate per IP address. Thus, if your hosting resources include one shared IP address, you can secure only one website. Panel provides enhanced SSL protection features that allow you to resolve this problem:

- *Separate SSL certificates for websites*.
  If you use Panel on a Linux operating system with the SNI technology support, it is possible to use authentic SSL certificates for sites hosted on shared IP addresses. In other words, Panel allows using separate SSL certificate for each website. Learn more about separate SSL certificates in the section **SSL and Shared IP Addresses (Linux)** (on page 112).
- *Shared SSL certificate for a number of websites*.
  If you use Panel on a Windows operating system, it is possible to use one shared SSL certificate to secure connections to all sites. In that case, certificate is assigned to a domain that shares it with others. That domain is called master SSL domain. In other words, all websites will use common SSL certificate, despite of the fact it is issued to only one of your websites. Learn more about shared SSL certificates in the section **SSL and Shared IP Addresses (Windows)** (on page 112).

The process of assigning an SSL certificate to a website is covered in the section **Securing Connections with SSL Certificates** (on page 560).

Web Apps

Comparing to SBP, the app management in Panel has little or no changes. As in SBP, the list of available web apps is accessed through the **Applications** tab. For more information on app management, refer to the section **Using Website Applications** (on page 552).

Note that the uploading of your own app packages is now performed by means of Application Vault. Vault is the local Panel repository of web apps. Besides of extending the list of available apps, it allows you to update apps, configure their server-wide settings, and carry out some other operations. For more information on Application Vault, refer to the section **Web Applications** (on page 272).

Extended Mail Management

Mail management in Panel slightly varies from those in SBP. General mail settings are now available in **Mail > Change Settings**, while other settings are located in **Server > Settings > Mail**.

Comparing to SBP mail functionality, Panel provides a number of additional mail features:

- *Enhanced spam protection*:
    - Server black and white lists.
      Use these lists to always reject or always receive mail from selected servers. Learn more on black and white mail lists in the section **Server-wide Black and White Lists** (on page 70).
    - Extended SpamAssassin settings.
      Panel allows you to configure SpamAssassin more accurately. For example, you have access to such settings as spam filter sensitivity or SpamAssassin's black and white lists. Moreover, you can configure spam filter individually for each mail account. Learn more in the **Protecting from Spam** (on page 649) section.
- *Monitoring mail server message queue (on Linux platforms)*.
  This can be helpful when your mail server is overloaded and cannot cope with the amount of received messages. You can find out the reason that caused the overload using the mail queue. Learn more about message queue in the section **Mail Congestion and Message Queue (Linux)** (on page 326).

Other Panel Features

On top of main changes described above, Panel contains a number of features unavailable in SBP at all. These are event management, server health monitoring, custom branding themes and many more. The scope of this chapter does not allow to cover all of them. For the detailed information on other server management operations, refer to certain sections of this guide.

What's New in Parallels Panel

Each Panel release introduces new features, and we incorporate some of them, those that address Panel administration, into this guide. This chapter lists the new features since Panel 10.2. The features are grouped by release and are accompanied by short descriptions and links so that you can easily acquaint with them and read more as needed.

Panel 11.0

Improved web server performance with nginx (Linux hosting)

Administrators can improve the work of the web server which hosts customer websites by installing nginx, a supplementary high-performance web server specifically designed for delivering large amounts of static content. The system will configure this server to work as a reverse proxy - nginx becomes a frontend web server that stands between the Internet and Apache and processes all incoming requests from site visitors.

Such combination of two servers gives the following advantages:

- The maximum number of concurrent connections to a website increases.
- The consumption of server CPU and memory resources decreases.
- Efficiency of serving visitors with slow connection speed (GPRS, EDGE, 3G, and so on) improves.

Learn more about the nginx support in the section **Improving Web Server Performance with nginx (Linux)** (on page 53).

Improved security: The enhanced security mode

In order to improve Panel security, administrators can turn on the enhanced security mode. In this mode, Panel employs multiple security mechanisms to protect the data from unauthorized access. Learn more in the section **Turning On the Enhanced Security Mode** (on page 108).

Improved security: Password-protected backups

Administrators can protect backups with a password for additional security. Learn more in the section **Backup and Restoration** (on page 286).

Improved security: Forcing users to employ stronger passwords

You can force Panel users to employ only those passwords that meet the minimum strength requirements. There are five password strength levels which will help you to get the right balance between required protection and password complexity. Learn more in the section **Setting Up the Minimum Password Strength** (on page 107).

Activating Panel by an activation code

Administrators can activate Panel either by uploading an XML key as they did before or by using the new way - providing an activation key. Learn more in the section **Panel Licensing** (on page 254).

Transparent activation of commercial APS apps

It is possible to purchase a Panel license in a bundle with APS app licenses. When administrators activate Panel using such combined keys and then install the corresponding commercial apps, the system transparently activates the apps without any actions from the administrator.

Instant configuration of WebMatrix® (Windows hosting)

If a hosting user decides to use Microsoft WebMatrix® for website development, they can instantly set up web publishing of code from their local environment directly to their customer account. For this, they should just download an XML file with settings and import it to WebMatrix®. Learn more in the section **Web Publishing with Web Deploy (Windows)** (see page 598).

Panel 10.4

Simple view for customers

Shared hosting providers can offer customers simpler interface by hiding unnecessary interface elements of Control Panel. Learn more (on page 239).

Custom view for administrators

VPS and dedicated server providers can offer power users simpler interface by hiding unnecessary elements in the user interface. Alternatively, Panel administrators themselves can switch to Custom view voluntarily and choose only tools they would like to use. The view is activated in Settings > Interface Settings or in the initial configuration wizard. Learn more (on page 33).

Customers can control user access to subscriptions under their hosting account

Customers can specify that a certain auxiliary user can log in only to a certain subscription in case the customers have multiple subscriptions on the same hosting account. This feature also eases migration from earlier Panel versions. After the migration, administrators have no need to activate former domain administrator accounts as they are already active and limited to a certain subscription. Learn more in the section **(Advanced) Managing Auxiliary User Accounts** (on page 508).

Customizable PHP configuration

Since Panel 10.4, PHP settings are exposed to Panel GUI and both administrators and resellers have the ability to adjust them individually for each hosting plan or subscription. Moreover, customers (if allowed) can adjust their PHP settings preset individually for each of their websites and subdomains. Learn more about custom PHP configuration in the section **Customize PHP Configuration** (on page 217).

Managing hosting from Server Administration Panel

Panel 10.4 adds new interface option that allows administrators to manage hosting services right in Server Administration Panel. In earlier Panel versions, administrators could manage hosting only from Control Panel opened in a new window. Learn more about Panel GUI options in the section **Interface Views** (on page 32).

Access to Panel tools and settings from a single page

It is easier for administrators to locate certain Panel tools or settings as all of them are now available from the single **Tools & Settings** page. In earlier versions, Panel settings and tools were located on separate pages (**Settings** and **Tools & Utilities**) confusing administrators in their effort to find a certain Panel option. Read more about carrying out administrative tasks in **Panel Configuration** (on page 42) and **Panel Administration** (on page 253).

Quick search of Panel tools and objects

Administrators and customers can quickly find any Panel object (say, a subscription, domain or mail account) or navigate to any Panel page (say, to the service plan or spam filter settings and so on) by using the search bar. The search bar is located in the top right corner of Panel. Learn more about the Panel GUI in the section **The Panel GUI** (on page 29).

Panel update and upgrade improvements

Panel 10.4 introduces a number of features that make keeping Panel up-to-date even easier:

- Administrators can view the information about current Panel version and available updates and upgrades on the Home page.
- Administrators can set up Panel to notify them when upgrades to the next version become available.
- For convenience, now we add a quality tag to every Panel version: Testing, release, or stable. For example, administrators can consider upgrading to the testing Panel version, if they want to try new Panel features before an official release. On the contrary, to get the safest solution, administrators can wait until Panel enters its stable phase (it may take a couple of months after the official release).

Learn more in the section **Panel Updates and Upgrades** (on page 266).

Backup Manager improvements

We added a number of new features to the Backup Manager tool that make it even handier:

- It is easier for administrators to find out the type of user who created a backup (administrator, customer, or reseller), as it is shown in the separate column at the backup tasks list (**Tools & Settings** > **Backup Manager**).
- Panel users can now easily find out the reason of why a certain backup has failed. Panel shows the detailed error description in a separate field of a backup task.
- Panel prevents backup failures due to insufficient disk space in two following ways:

    a   Administrators have the option to start a backup only if a Panel server has enough free disk space to store it (the option is available in **Tools & Settings** > **Backup Settings**). Be aware that this option significantly increases the backup time as Panel additionally has to calculate the size of the future backup. Note that on Windows platforms, Panel does not directly calculate object sizes but takes them from the database. As object sizes in Panel database are updated only once a day, the overall calculated backup size can differ from its real value.

    b   Another option in **Tools & Settings** > **Backup Settings** is to start a backup only if a Panel server has the specified free disk space. This option is convenient when you approximately know the size of the future backup and do not want Panel to waste time and resources on calculating it.

Learn more about saving and restoring Panel data in **Backup and Restoration** (on page 286).

Migration tools improvements

Panel meets customers' needs and introduces long-awaited features in migration tools:

- It is now easier for Linux hosting administrators to keep Migration Agent up to date. The tool downloads and applies available updates automatically when administrators open **Migration Manager**.
- Windows hosting administrators have no need to search documentation for the Migration Agent download link. Now it is available directly in **Tools & Settings** > **Migration Manager**.
- It is now easier for administrators to decide what objects should be transferred during the migration of only selected objects. Before starting the migration, Panel shows what objects from a source server already exist on a destination server.
- Full server migration is more flexible now. Administrators have the option to not transfer a Panel license during the entire server migration.
- Administrators can now easily find out the reason of why a certain object was not migrated. The full error description is now available in the log field of a migration task.

Learn more about Panel data migration in **Migrating Data from Other Hosting Platforms** (on page 294).

Refined overuse settings

We redesigned the settings to make it clear that there are three options: Do not allow overuse, allow only disk space or traffic overuse, or allow overuse of all resources. For more information about resources overuse, see **Resources** (on page 679).

Usability improvements, the Domains page

This release introduces the list of minor yet important improvements to the **Domains** page (Server Administration Panel). These improvements address the needs of administrators and resellers. The list is as follows:

- Each domain name now contains a link to an associated subscription which helps administrators and resellers promptly find a subscription that contains a given domain name.
- The page shows extra information like the hosting type and domain aliases which gives the complete picture of a subscription organization.
- The page provides facilities to find a domain, a subdomain, a domain alias, a customer account, or a company by name.
- Administrators and resellers can instantly view the content of each website from the list.

Learn more about hosting services management in **Managing Customers and Subscriptions in Panel** (on page 225).

DNS templates for subdomains

Administrators can create a template of a DNS record for subdomains. This record will be added to all subdomains on a domain. The template is created using the *<subdomain>.<domain>* wildcard. Learn more about DNS configuration in the section **DNS** (on page 84).

Mail improvements

It is easier for customers to control disk space occupied by each mailbox as it is shown right on the **Mail** tab.

Adding files to archive in File Manager

Customers can add files and folders to archive using the new **Add to Archive** button in the *File Manager* tool (in Control Panel, the **Websites & Domains** tab).

Panel 10.3

APS 1.2 support

Some apps support new exciting capabilities of the APS 1.2 engine:

- Create or remove app user accounts right from Panel.
- Associate app user accounts with Panel user accounts.
- Configure server-wide settings of apps right from Application Vault.

▪   Install apps that link to external services and do not require hosting accounts to operate.

For more information on managing APS apps, refer to the section **Web Applications** (on page 272).

File sharing

Panel allows you and your webspace users to share files with each other or anyone on the Internet. Learn more in the section **Sharing Files and Folders** (on page 303).

View selector

Now you can switch between Service Provider and Power User views at any time through the Panel GUI. In earlier Panel versions, this operation was accessible only through the command line. Learn more in **The Panel GUI** (on page 29).

Panel 10.2

IPv6 Support

Parallels Plesk Panel now supports operation on IPv6 addresses. Administrators and resellers can offer service plans on IPv4 and IPv6, or create dual-stack subscriptions (on one IPv4 + one IPv6 address). To learn more, see the section **IP Pool** (on page 44).

Server name indication extension on Linux-based Panel servers

Parallels Plesk Panel for Linux allows authentic SSL certificates to be used for sites hosted on shared IP addresses. This was achieved with the added support for the Server Name Indication (SNI) extension to the Transport Layer Security protocol. To learn more, see the section **SSL and Shared IP Addresses (Linux)** (on page 112).

Customer accounts without subscriptions

When creating a new customer account, you can now choose whether to create a subscription with a website for that customer. Creating accounts without subscriptions can be useful if you do not need to set up a website for a customer at the moment, and want to transfer a subscription from another customer account, or set up a subscription later.

To learn more, see the section **Subscribing Customers to Plans in Panel**.

My webspaces

Now it is easier for administrators to create their own hosting accounts with the Panels that also serve hosting customers and resellers. Switching to Power User view that is intended for creating and managing administrator's own hosting accounts no longer means you have to give up hosting reselling anymore. Learn more about this view in the sections **Web Hosting Management** (on page 467) and **The Panel GUI** (on page 29).

C H A P T E R   3

How Panel Works

The Internet significantly evolves every year. Thus, in order to succeed in business competition, companies use more and more advanced solutions to develop and improve their web presence. Naturally, this requires a lot of efforts from the companies' IT staff: They not only have to configure a number of services (web, DNS, mail server, and so on) but also make them work with each other, maintain them, and promptly solve emerging issues.

What Is Panel?

Parallels Plesk Panel is a Parallels solution designed to help IT specialists to orchestrate the work of web, DNS, mail, database and other services through the comprehensive and user-friendly GUI. Technically speaking, Panel is a hosting control panel, a middleware between system services and users. For example, when somebody creates a website through the Panel GUI, Panel, in the background, propagates this request to a web server, either Apache or IIS, and the latter adds a new virtual host to the system. This approach of administrating all system services from a single web interface reduces maintenance costs and gives administrators necessary flexibility and control.

How Can I Use Panel?

Panel can be used not only to manage a company infrastructure, it is an essential instrument for hosting service providers (HSPs) - companies which sell shared and dedicated hosting accounts. Being installed on a server, Panel allows them to organize server resources into packages and offer these packages to their customers, the companies that need web presence but do not have a capable IT infrastructure. Learn more about the Panel target audience in the section **About Panel Users** (on page 28).

How Can I Customize Panel to Address My Needs?

Each Panel user group gets its own GUI that is customized to fully meet their needs. Thus, HSPs get tools for offering hosting services and can even employ an integrated billing solution to completely automate their business. On the contrary, companies which use Panel for their own purposes do not have hosting selling capabilities in their GUI but gain full control over a number of server management operations (like system recovery, web server configuration, and so on). Learn more about the Panel interface in the section **The Panel GUI** (on page 29).

Next in this chapter we will cover the basics of how Panel works and how different user groups should use Panel to gain all its benefits.

In this chapter:

About Panel Users

Panel is a web hosting panel that targets four user groups:

- *Power users*.
  These are companies that buy VPS hosting with preinstalled Panel or deploy it by themselves on their IT infrastructure. Panel allows such customers not only to manage various aspects of their web presence but also to have full control over server management operations, such as server backup, configuration of PHP settings, and so on. For example, web design studios use Panel as a platform for web development. Panel allows them to test created websites and present the results to clients.

- *Hosting service providers (HSPs)*.
  HSPs use Panel for two main purposes. First, as an easy tool for services configuration. Thus, providers do not need to separately configure web or FTP server - everything is done in the Panel GUI. Once services are configured, HSPs can combine them with server resources (like disk space or traffic) into hosting packages (service plans). For example, one package can contain a website, mail accounts, and a number of web applications. These packages are then sold to HSPs' clients - hosting customers and resellers.

- *Resellers*.
  These are companies that resell hosting services provided by HSPs. They use Panel to buy hosting resources in bulk, and then split the resources into smaller packages, and sell them to their customers. All server management is performed by HSPs, allowing resellers to reduce their costs and concentrate on offering services to end-users.

- *Customers*.
  These are the end-users of Panel. By subscribing to one of the hosting plans offered by an HSP or a reseller, they get access to Panel and manage the services they have bought. They can create sites, fill them with content, add mail accounts, and so on.

The Panel GUI

For convenience, Panel tools for performing server and account management tasks are divided between two web interfaces called *panels: Server Administration Panel* and *Control Panel*. In earlier Panel versions, each panel had its own unique responsibilities:

- *The Control Panel* focused on web hosting operations and had all means to create and manage websites, mailboxes, and so on.
- *The Server Administration Panel* was in charge of server maintenance and accounts management.

If administrators needed to perform a web hosting management task, for example, add a mailbox under a certain customer's account, they located the account in the Server Administration Panel and then opened the account in the Control Panel. As Panel evolved over time, the border between the panels has become subtle. Now, the only significant difference between the two panels is that *tools for serving customers and resellers are available only in the Server Administration Panel*. As for the other functions, the panels are quite similar: Both of them allow you to maintain a server and manage web hosting. If you do not use Panel for selling hosting services, you can choose any of these two panels.

The brief description of each panel is provided below, but before we go into details, we would like to acquaint you with Panel views because views and panels are tightly connected.

Panel Views

Each Panel user group has its own Panel usage scenarios. The GUI can be configured to better meet the needs of a certain group by rearranging tools between different web interfaces and hiding odd tools. For example, power users may prefer to use only the Control Panel with tools for server management, whereas hosting service providers use both panels with all available tools; shared hosting customers use the Control Panel without server management facilities. Such a user-targeted combination of available panels and tools is called *view*. Learn more about the views in the section **Interface Views** (on page 32).

Server Administration Panel

The Server Administration Panel is the main instrument of hosting providers that allows them to serve their customers and maintain a server. Here, for example, the administrator creates new hosting plans and customer accounts, configures server-wide settings of system services, and so on. In addition, the administrator can set up Panel to manage web hosting right from the Server Administration Panel (create websites and mail accounts for their customers, install web apps, and so on). Learn more in the section **Interface Views** (on page 32).

Control Panel

The main task of the Control Panel is managing hosting services. Customers use this panel to add domains and mailboxes, manage website content and so on. The administrator can use this panel to create their own hosting accounts - *webspaces* or access customer accounts. Learn more about webspaces and hosting management in the chapter **Web Hosting Management** (on page 467).

Power users also use the Control Panel but in *Power User view*. In this view, the Control Panel gets additional capabilities for server administration. Thus, power users can not only maintain their websites but control various server parameters, for example, switch off unused Apache modules or perform Panel update. Learn more about interface views in the section **Interface Views** (on page 32).

Parallels Plesk Panel Suite Components

In addition to the standard Panel functionality, Parallels Plesk Panel suite offers two optional components that significantly increase Panel capabilities: *Customer & Business Manager* and *Web Presence Builder*. These components are tightly integrated with Panel and have their own user interfaces.

- *Customer & Business Manager*.
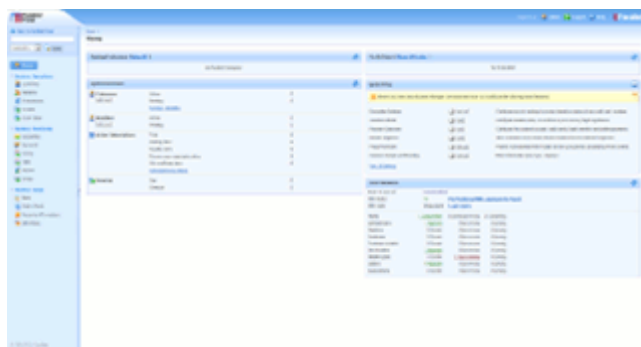
Customer and Business Manager (hereafter referred to as Business Manager) is an optional solution that automates all business operations, for example, charging customers and generating invoices. Note that Customer and Business Manager is an optional component and you may decide to use another solution or perform business operations manually. Learn more about Business Manager in **Introducing Business Manager** (on page 35).

▪ *Web Presence Builder*.

Web Presence Builder is a site building tool that helps customers create polished, professional-looking web sites in record time based on more than 100 site templates. Learn more about the tool in the section **Building Websites with Web Presence Builder** (on page 599).

In this section:

Interface Views

As mentioned earlier, each Panel user group carries out their own set of tasks through Panel. To better meet user needs, Panel offers two interface views: *Service Provider* and *Power User*. These *views define what panels you use, what tools are present in these panels, and how the tools are organized.*

- *Service Provider view*.
  This view is convenient for HSPs as it is intended for selling hosting services. It has all the features required to create and manage customer accounts, subscriptions, and service plans. This view includes the Server Administration Panel and the Control Panel.

- *Power User view*.
  This view is the best for power users - those who use Panel solely for personal needs, such as for maintaining a company portal or a mail server. In this view, both server administration and hosting services management take place in the Control Panel. As this view does not assume a reselling service to others is needed, it does not provide facilities for managing hosting plans, subscriptions, resellers, and customers. Also, as the server administration functions are included in the Control Panel in this view, the Server Administration Panel becomes unavailable.

  This view can be tailored to needs of an administrator if you select *Custom view* in the view selector. For details on how to do the customization, read **Customizing Power User View** (see page 33).

You can change the Panel view any time from **Tools & Settings > Interface Management**.

Hosting Operations in Server Administration Panel

By default, when you want to perform an operation in a certain hosting account (for example, create a mailbox), you open this account with the link on the **Domains** or **Subscriptions** pages. The account is opened in a new window.

Since Panel 10.4, there has been no need to open hosting accounts in separate windows. This may be convenient when you want to perform a series of hosting operations on a group of accounts or you are just accustomed to carrying out all hosting tasks from a single GUI as in previous Panel versions. You can set Panel to perform all *hosting operations in the Server Administration Panel* on the **Tools & Settings > Interface Management** page. Once you activate the option, Panel will open hosting accounts in the interface that is similar to the Control Panel but shown on the current page of the Server Administration Panel.

Customizing Power User View

Power User view has a subtype, *Custom View* (available in **Tools & Settings > Interface Management**), which serves two main purposes:

- *To simplify the user experience of administrators who use managed hosting.*

  Some administrators carry out only basic administration tasks (monitoring system services, administering user accounts, and so on) leaving more complex tasks, usually server and services configuration, to the support service of a service provider. This user group wants to have only tools they really need and hide the other tools.

- *Make Panel safer and more comfortable.*

  Administrators can voluntarily revoke some of their permissions to hide the tools they do not need in everyday operations and return to the full-featured Power User view only if they need some system tuning (for example, to turn on server backups).

If you go to the **Tools & Settings > Custom View Settings** page (the **Administrative Tools** tab), you can select the tools the administrator will see in this view. The view settings may be unavailable if the service provider who gave you access to Panel has decided to lock Custom view.

Locking Custom View and Hiding Custom View Settings

To *lock* Custom view means to limit the selection of Panel features available to the administrator and disallow any changes to the features list. Thus, when Custom view is locked, it is impossible to switch to any other view from the GUI (or API RPC) or change the Custom view settings. Generally, if you are a service provider, you can make some tools unavailable to administrators, and, thus, separate Panel administration into two parts:

- Day-by-day operations. These operations are performed by the Panel administrator, the person who purchased the web hosting.
- Complex configuration and maintenance. These operations are accomplished by your support team. Such operations may include configuration of a network, DNS, web server and so on.

If a Panel administrator needs a certain feature and is unable to find it, your support team turns this feature on by unlocking Custom view, modifying the view settings, and locking the view again.

Custom view is locked *only* through a command-line call of the `poweruser` utility:

```
poweruser --on -simple true -lock true
```

The lock is removed by calling `poweruser --on -lock false`.

Custom View and Webspaces

The peculiarity of Custom view is that you can instantly adjust permissions, hosting parameters, PHP settings, and other webspace parameters *of all webspaces you have created in this view*. This is possible because each webspace you create in this view derives from the artificial *Custom* service plan that is not visible in the plans list. The settings of this plan are available in **Tools & Settings > Custom View Settings**. When you change the settings, the changes (if possible) are automatically applied to all webspaces under the Custom plan.

Another point that deserves attention is that the Custom plan has a special permission, *Ability to create, remove, and switch among webspaces*. If this permission is cleared in the GUI, it is not possible to create webspaces in Custom view.

If you need to adjust custom view settings through the command-line, use the `admin` utility. Learn more about the utility options in **Parallels Plesk Panel 11.0 for Linux (Windows): Reference for Command Line Utilities**.

Introducing Business Manager

Business Manager is a billing automation system, used primarily in online business, such as:

- Domain registration
- Web hosting provisioning
- Selling SSL certificates
- Other non-hosting online stores
- Accept payments from PayPal or other payment gateways, and bank transfers

Business Manager complies with PA-DSS requirements which guarantee that the system is a secure payment application, and you are free to process customer credit cards after a certain configuration. In addition, with Business Manager you will easily meet the European Union requirements, if your business is located there.

This software is an optional Panel component, you may choose either install it or not. Next in this section we will briefly walk through the Business Manager features. If you are not going to install this component, skip this section.

In this section:

Domain Registration

Business Manager supports integration with several domain registrars and instant domain availability checking through your online store regardless of whether you're using one of the above registrars.

However, if you're using one of these registrars, your customers can purchase/transfer a domain name, pay for it, and Business Manager will issue a call automatically to that registrar's API to purchase/transfer the domain name and place it under that customer's account in your Business Manager for management (setting name servers, hosting records, etc.).

You can configure Business Manager to sell one, some, or all of the TLDs available through a particular registrar and charge your customers whatever price you want for their domain registration. Your account with your registrar will be charged whatever your standard reseller rate is for that given domain TLD. One of the clear benefits of this is that you can (for example) process ".com" sales through a certain registrar and ".ca" sales through another registrar, allowing you to use multiple registrars to make sure you're being charged the lowest possible price per TLD for the domains that you resell.

There are two steps in getting your system configured with one or more of the domain registrars through which you resell and to tie to appropriate TLDs to each of those registrars:

1. Configure domain registrar modules (on page 245).

2. Assign TLDs (on page 246).

Hosting Services

Business Manager supports selling hosting resources of servers managed by Parallels Plesk Panels for Linux and for Windows. To start offering hosting accounts to your customers, connect the panels to Business Manager and configure your hosting plans to set limits and permissions on the resources offered. For details on how to connect panels to Business Manager, see the chapter **Connecting Hosting Panels** (on page 151).

SSL Certificates Provisioning

Business Manager supports integration with eNom - an SSL certificates provider. The integration supposes that customers purchase certificates in Business Manager, and the latter acquires the certificate through the eNom API. If a customer purchases a certificate as an add-on to a hosting plan, the system will install the certificate to the customer's hosting account.

To acquire an SSL certificate, a customer submits the initial information to Business Manager that forwards it to eNom. The certificate provider analyzes the information and queries for additional details if necessary through Business Manager. The interaction is repeated until eNom has enough information to issue the certificate.

Customers are notified about these additional requests by notifications in the **Account** tab of the Panel. Until the certificate is issued, the subscription status is *user input required*.

To configure the SSL certificates provisioning, add an SSL certificate provider plugin and associate it with your plan. If some of your plans require custom eNom account or administrative contact, add another eNom plugin and associate it with these plans. This gives you the flexibility to meet customers' needs.

For details on how to set up the certificates provisioning, see the following sections: **Configuring SSL Certificate Providers**, **SSL Certificates**.

Payment Gateways

If you wish to accept credit cards payments, set up one or more payment gateways. To set up a proper payment gateway, consider payment methods you want to offer to your customers. If you plan to process credit cards, add an on-site payment gateway. If you wish to rely on payment intermediary service when processing credit cards, add an off-site payment gateway. You also can allow your customers to choose between paying by credit card (and run those charges through your on-site payment gateway) or paying by PayPal - off-site payment gateway. For details on how to set up a payment gateway, see **Setting Up Payment Gateways** (on page 141).

To add one of these gateways, you need a merchant account with a corresponding payment processing service. In addition, if you plan to store credit cards details in your database, you need to configure encryption in your system. For details on encryption configuration, see **Setting Up Encryption** (on page 454).

Business Manager supports integration with several payment gateways. Most of the gateways allow for charge, pre-auth, finalize, void, and refund abilities through Business Manager. For the list of supported gateways, see **Appendix D.** (on page 730)

Bank Transfers Processing

Parallels Customer and Business Manager provides the opportunity to accept bank transfers - direct debiting of customer's bank accounts.

When a customer places an order at your online store and selects a *bank transfer* as a payment method, the details required to perform a payment from their bank account to yours are placed into a batch. The batches are financial files of a particular format accepted by certain banks. To complete the money transfer, download and submit the batch to banks by e-mail, fax or other supported methods. For details on how bank transfers are organized in Business Manager and how to manage them, see **Managing Bank Transfers** (on page 429).

Batch format accepted by banks of one country may not be suitable for banks from other countries. For example, banks in Germany generally accept DTAUS batches, while banks in Spain accept Norma19 batches. Business Manager provides bank transfer plugins for different batch formats.

To start accepting bank transfer payments, set up one of the available bank transfer plug-ins and associate it with your online stores. For details on how to do this, refer to the **Setting Up Bank Transfer Plugin** (on page 145) section.

For details on supported batch formats, see **Appendix E** (on page 731).

Online Stores and Website Widgets

Business Manager, unlike most host-based billing platforms currently available, provides *online stores* - automatically created websites. These websites display your plans, and also have a shopping cart with checkout to let customers subscribe to your plans. Customer payments are processed by a payment gateway associated with the store. You can have multiple online stores for different currencies, locales, and product lines.

Business Manager ships with the default online store for the United States locale and USD currency. It is available at

```
https://<your-host-name>:8443/store/default.html
```

Online stores are completely customizable so you can template them to match the rest of your web site.

In addition to online stores, Business Manager offers *website widgets*. These are little snippets of code you simply drop into your company web site that feature any subset of plans you want in any format you want (listing, drop-down, etc). Because widgets are small snippets of code, they can be dropped anywhere on your web site where you want to sell plans and they require no special templating because they are included in your existing web site. This gives you precise control of the way you like to sell plans.

For instructions on how to manage online stores, see **Managing Online Stores** (on page 192).

Security Settings

To reduce the risk of compromising sensitive data hosted on your server, you might want to implement special security measures that comply with the Payment Card Industry Data Security Standard (PCI DSS). The standard is intended to help organizations protect customer account data. For detailed information about the standard, refer to https://www.pcisecuritystandards.org/security_standards/pci_dss.shtml.

To read more about the security settings you can activate in Parallels Customer and Business Manager, see **Managing Security Settings** (on page 453).

European Union Business Compliance

One of the tasks of Parallels Customer and Business Manager is to charge customers for using web hosting services - websites, servers, and applications. In terms of the European Union (EU) taxonomy, these services are called *services supplied electronically* and they are subject to the *European Union Value Added Tax* (EU VAT) regulations.

EU VAT is a consumption tax that depends on supplier and customer location thereby determining which EU country collects the VAT and what VAT rate is charged. If your business is located outside the EU, this tax is *not applicable* to your plans, and you can skip related Business Manager modifications. Otherwise, please read **Achieving EU Business Compliance** (on page 206) and configure Business Manager to comply with the EU requirements.

To learn more about EU VAT, refer to ec.europa.eu/taxation_customs/taxation/vat/how_vat_works/index_en.htm.

Viewing Information about Russian Certification

You can view the information about certification of Business Manager as a billing solution in the Russian Federation. This information is available only if the **Country** in your administrator profile is **Russia**. To view the information, go to **Business Setup** > **All Settings** > **License Info**.

How to Use Panel

On launching Panel for the first time, you should specify how you will use the product (for example, for offering hosting services, for corporate use, and so on) and define the interface view that best suits your usage scenario. Your choice predetermines the operations you will be able to perform in Panel and also defines the services you should configure to start using the system. For example, hosting service providers (HSPs) should create service plans in one of the first steps. Power users, in their turn, typically proceed to creating their websites.

Panel tasks are bucketed into three categories: configuring services and maintaining the server, serving customers, and managing hosting services. The table below describes the tasks in more detail and correlates them with the user groups. You can use this table as an entry point to the guide.

Note: As this guide is intended for Panel administrators, the table covers the tasks for the HSP and power user groups only. The main tasks performed by resellers and hosting customers are covered in the **Reseller's Guide** and **Customer's Guide** respectively.

Tasks	Power user	HSP
Configuring Services and Maintaining the Server		
Configuring Panel To allow Panel to work with different services in your infrastructure and to better suit the needs of end-users, for example, by setting up Help Desk, you should perform the configuration of Panel. Learn more in the chapter **Panel Configuration** (on page 42).	+	+
Adjusting Panel Branding and Appearance If you are an HSP, we suggest that you customize the Panel appearance to give it your personal look and feel. This can significantly improve the perception of your company by customers. If you are a power user, you may also want to change the default Panel logos to incorporate your company style into the web interface. Learn more in the section **Appearance and Branding** (on page 260).	+	+
Maintaining Panel Periodically, during the work with Panel, you may need to perform a number of common administrative tasks such as backing up and restoring data, monitoring server health, updating Panel, and so on. All these tasks are required to ensure proper Panel operation. Learn more about Panel maintenance in the chapter **Panel Administration** (on page 253).	+	+
Serving Customers		
Configuring Business Manager If you are an HSP and decide to automate hosting provisioning through the integrated Business Manager, you should carry out appropriate configuration. Basically, you should sync the Business Manager with Panel, set up an online store, define various business aspects, for example, payment methods and taxation, and so on. Learn more in the chapter **Business Manager Configuration**. The details about how to administer the Business Manager component are provided in the chapter **Business Manager Administration** (on page 401).	-	+ (Optional)
Offering Hosting Services If you are an HSP, the next thing to do once the configuration is finished is to create your service offerings. You should organize available hosting services into plans and offer customers the opportunity to subscribe to these plans. Learn more in the chapter **Offering Services to Customers and Resellers** (on page 207).	-	+
Managing Hosting Services		

You can establish your company's web presence in a few simple steps and it is easy to create sites and mail accounts, protect sites with SSL certificates, and install web apps. If you are an HSP, following hosting management principles will also help you in troubleshooting customers' issues. Learn more in the chapter **Web Hosting Management** (on page 467).	+	+

Panel Configuration

Panel configuration includes a number of operations that may be required either after the Panel installation (for example, adjusting Panel to make it work in your network environment) or during Panel operation (registering new IP addresses in the pool, adjusting spam filter settings, and so on). Panel configuration may be divided into the configuration of provided services (web, mail, and so on) and the extended Panel configuration. The latter concerns various aspects of Panel operation, such as securing connections with SSL certificates, setting up e-mail notifications of various events, and other matters.

If you have just installed Panel, we recommend that you perform Panel configuration in the following order:

1. *Install a Panel license key.*
   Panel, after the installation, uses a trial license key which provides limited functionality and is active only for a short period of time. Learn more in the section **Installing a Panel License Key (on page 43).**

2. *Configure the server IP pool.*
   During the Panel initialization, you define an IP address that Panel will use for delivering shared hosting services. To provide subscriptions with dedicated IP addresses, or use other IP addresses for shared hosting, you should configure the server IP pool. Learn more in the section **IP Pool** (on page 44).

3. *Configure Panel to run in your network environment*.
   This step may be required if you have a custom network configuration. For example, your Panel server is located behind NAT or your network policy blocks some ports used by Panel services. Learn more in the section **Configuring Panel in Different Network Environments** (on page 113).

4. *Protect the connection to Panel with SSL.*
   Secure connections to Panel using the SSL certificate. Learn more in the section **SSL Protection** (on page 108).

5. *Configure provided services.*
   Tailor Panel to meet your needs or the needs of your customers by adjusting the services that Panel provides. For example, choose appropriate webmail software, connect external databases required by web applications, and so on. The details on how to perform such configuration are provided in the corresponding sections of this chapter.

There are also a number of other operations that you may consider necessary, such as setting up a help desk service or configuring e-mail notifications. For details of these and other operations, refer to the section **Extended Panel Configuration** (on page 106).

In this chapter:

Installing a Panel License Key

Right after the installation, Panel uses a trial license key. To get a new license key, proceed to the Parallels online store (**Tools & Settings > License Management > Order New Key**).

Once you purchase the key, you will receive an activation e-mail with your activation code and a license key file. You can install a Panel license key either by entering the activation code or by uploading the file from this e-mail.

➢ *To install a license key using an activation code:*

1. Go to **Tools & Settings > License Management > Parallels Panel License Key** and click **Install Key**.

2. Enter the code you received in the e-mail to the **Enter an activation code** field and click **OK**.

➢ *To install a license key using a license key file:*

1. Go to **Tools & Settings > License Management > Parallels Panel License Key** and click **Install Key**.

2. Choose **Upload a license key file**.

3. Specify the path to the key file you received in the e-mail and click **OK**.

IP Pool

The *IP pool* is a set of available IP addresses that you can pass on to customers and resellers, or utilize them for your own websites. IP addresses may be designated as either *dedicated*, meaning that the target subscriber becomes the only owner of this address, or *shared*, meaning that this address is shared among many subscribers.

Next in this section we will describe the concepts of IP addresses and how they are allocated in Panel for web hosting purposes.

About IP Addresses

An IP address is a number that uniquely identifies each device, such as a computer, on a network. The use of IP addresses makes it possible for computers to find other computers on a network and communicate with them.

There are two formats of IP addresses:

- **IP version 4**. These 32-bit network addresses look like `192.168.1.1`. They are currently used by most network devices. The number of IPv4 addresses is limited and the last remaining portions of vacant IP addresses have already been allocated to Internet service providers.
- **IP version 6**. These 128-bit network addresses look like `2001:0db8:85a3:0000:0000:8a2e:0370:7334`. IPv6 is the new standard that was developed to address the exhaustion of IPv4 network addresses.

When Parallels Plesk Panel is deployed in IPv6-enabled networks, it can operate simultaneously on IPv4 and IPv6 addresses. Providers can add IPv4 and IPv6 addresses to the server IP pool, allocate them to resellers, and create subscriptions based on them.

Each hosting subscription can be allocated:

- One IPv4 address.
- One IPv6 address.
- One IPv4 + one IPv6 address (dual-stack subscriptions).

Note: Each subscription that needs to host FTP shares accessible by Internet users without password authorization (Anonymous FTP) must be assigned at least one dedicated IPv4 address.

Requirements for Operating on IPv6

The following requirements must be met to ensure the proper operation of Parallels Plesk Panel in IPv6-enabled networks:

- The Panel-managed server must be assigned at least one static IPv4 address. This is required for connections to the Panel licensing servers and application catalogs.
- When running in virtual environments, Parallels Virtuozzo Containers 4.6 or later must be used.

To see the list of Linux operating systems that support this feature, refer to the release notes to Panel, for Linux or for Windows.

Allocation to Resellers and Hosting Customers

The following is an overview of how IP addresses are allocated in Panel:

1. IP addresses are added to the server IP pool.

   After installation, Panel reads all assigned IP addresses from the operating system configuration and adds them to the server IP pool. When you obtain new IP addresses that you would like to use on the server, you should add them through Panel to that pool, as Panel might not recognize manual modifications you make to the network configuration files.

   > **Note:** If you are running Panel in a Parallels Virtuozzo Container (PVC), you can add IP addresses only on the PVC hardware node.

   When adding addresses to the server IP pool (in **Tools & Settings** > **IP Addresses** > **Add IP Address**), you select how they should be allocated - either as *dedicated* or *shared*:

   - A dedicated IP address can be assigned to a single reseller. Dedicated IP addresses are required for hosting e-commerce sites with SSL encryption and sites that host FTP shares that are accessible without password authorization.

     > **Note:** The Server Name Indication (SNI) extension for Panel on Linux makes it possible to enable SSL protection for sites on shared IP addresses; however, this might not work for all hosting servers and users' browsers. For more information, see the section SSL and Shared IP Addresses (Linux) (on page 112). On Windows platforms, it is possible to protect a group of websites with one certificate. See the section SSL and Shared IP Addresses (Windows) for more details.

   - A shared IP address can be literally shared among several reseller accounts and sites. Sharing of addresses helps to use scarce IPv4 address resources efficiently, but it should not be needed for IPv6 addresses.

2. When setting up reseller plans (in **Service Plans** > **Reseller Plans** > **Add New Plan** > **IP Addresses** tab), you select IP addresses that should be allocated to resellers:

   - For shared IP addresses, you can manually select which addresses should be allocated.

   - For dedicated IP addresses, you can only specify the number of addresses that should be allocated: When you create a new reseller account, a vacant dedicated IP address from the server pool is automatically selected by Panel and allocated to the reseller.

3. When signing up new customers (in **Customers** > **Add New Customer**) or creating subscriptions for your own needs (in **Subscriptions** > **Add New Subscription**), you can select IP addresses that should be allocated. All shared and dedicated addresses available from the server IP pool are listed in a menu.

About Using Panel with Dynamic IP Pools

Panel examines its IP pool during the web server start and removes IP addresses that do not exist in the system. This does not allow administrators to allocate non-existing IP addresses to services or subscriptions.

How to Perform Operations on the Server IP Pool

➢ *To view the IP addresses you have at your disposal:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group).

   Your IP addresses are listed and the following supplementary information is given:

   ▪ The **IP address**, **Subnet Mask** and **Interface** columns show which IP addresses are on which network interfaces.

   ▪ The **Resellers** column shows the number of user accounts whom you assigned a given IP address. To view the users by names, click the respective number in the **Resellers** column.

   ▪ The **Domains** column shows a number of websites hosted on an IP address. To view the domain names of these websites, click the respective number in the **Domains** column.

2. To update the list of IP addresses and their status, click **Reread IP**.

   You might need to do this if you manually added IP addresses to the network interface in the server operating system, or when operating in Parallels Virtuozzo Containers.

➢ *To add a new IP address to the server:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group), and click **Add IP Address**.

2. Select the network interface for the new IP from the **Interface** menu. All network cards installed on your server are shown in this menu.

3. Enter the IP address and subnet mask in the corresponding box. For example, `123.123.123.123/16` or `2002:7b7b:7b7b::1/64`.

4. Select the type of the new IP address, shared or dedicated.

5. From the drop-down box, select the default SSL certificate to use for the new IP address. You can select the following certificates:

   ▪ **Default certificate** - the certificate that comes with the Parallels Plesk Panel distribution package. However, this certificate is not recognized by web browsers as it is not signed by a Certificate Authority (a warning message appears). The default certificate is used to provide access to the Panel via the https protocol (https://server-name-or-IP-address:8443/).

   ▪ **Other certificates** - the certificates (self-signed or signed by a Certificate Authority) that you added to the repository of SSL certificates. About adding certificates, see **Control Panel User's Guide**, section **Securing Sites with SSL Encryption**.

6. If your server is running Windows operating system, select the **FTP over SSL** checkbox if you want to enable the ability to use secure FTP connection (FTP over SSL) for the domain on a dedicated IP address.

Note: To enable secure FTP connections, the FTP server installed on your Parallels Plesk Panel server must support FTP over SSL. For example, Gene6, Serv-U FTP, IIS FTP 7.x servers support FTP over SSL.

7. Click **OK**.

➢ *To remove an IP address from the server:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group).

2. Select the respective checkbox and click **Remove**, confirm removal and click **OK**.

➢ *To assign an IP address to a reseller:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group), and click the corresponding number in the **Resellers** column, then click **Assign**.

2. Select the account you need and click **OK**.

➢ *To revoke an IP address from a reseller:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group), and click the corresponding number in the **Resellers** column.

2. Select the respective checkbox and click **Remove**.

3. Confirm removal and click **OK**.

Since users can refer to a web resource on your server by typing an IP address and there can be several websites hosted on that address, Panel needs to know which of the sites to show in such cases. Panel automatically assigns the first website created on an IP address as the default website; however, you can select any other website and make it default.

➢ *To assign a default website (default domain) for an IP address:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group), and click the IP address you need.

2. In the **Default site** menu, select the site you need and click **OK**.

➢ *To change an IP address allocation type (shared, dedicated) or assign another SSL certificate to an IP address:*

1. Go to **Tools & Settings** > **IP Addresses** (in the **Resources** group), and click the IP address you need.

2. Select the required IP address allocation type and SSL certificate, and click **OK**.

Web Hosting

Web hosting configuration implies adjustment of a number of web server settings and settings of other related services. Thus, on Panel for Linux, you can switch off unused Apache modules; for IIS server, you can configure its application pool.

Note: This section covers only server-wide web hosting configuration. Most web hosting settings (such as PHP configuration, support for various scripting languages, and so on) are individually set for each subscription (webspace) and can be adjusted by means of service plan and subscription settings. Learn more in the section **Hosting Plans and Subscriptions** (on page 210).

In this section:

Setting Up Websites Preview

Your customers can preview their websites during domain name propagation. The two preview modes are available: *Quick Preview* and *Limited Preview*.

▪ *Quick Preview*, the recommended option, presents *customers' sites as subdomains of one of your domains*. For example, *customer-site.tld* will be available for preview as *customer-site.tld.192-0-2-12.your-domain.tld*. Here *192-0-2-12* is the site's IP where dots are replaced with dashes. Note that if you do not specify a preview domain, the site preview function will be unavailable to your customers.

▪ (Default) *Limited Preview* is used in earlier Panel versions; it presents customers' sites as directories under the Panel server. For example, *server-host-name:8443/sitepreview/http/your-domain.tld/*. This mode has two major drawbacks: Only authorized users can view such websites and some scripts and Flash animation might not work well on them. We recommend to use this mode only before the Quick Preview is configured.

The preview selector and the form to configure the preview domain name is located in **Tools & Settings** > **Website Preview Settings**.

Note: Customers also could preview their sites prior to Panel 10.4, but the preview feature had a number of limitations due to different implementation methods.The major difference is that since 10.4 customers can share the preview link with anybody, whereas previously they could only view the domain themselves. In addition, sites in the earlier preview mode would not work with complex CGI scripts or Flash content.

Presetting Content of Customer Websites

You can configure the Panel to automatically include specific files and directories into webspaces created for newly hosted websites. This can be a set of useful scripts, custom error messages, a placeholder index.html page, or any other files of your choice. These files can then be replaced, edited or removed on a per-site basis.

> ➢ *To set up the Panel so as to automatically include your Web content into webspaces:*

1. On your local file system, create the required directories: `httpdocs`, `cgi-bin`, `anon_ftp`, `error_docs`.

2. Place the files you need into the directories you have created: Place Web pages into `httpdocs` directory, scripts to `cgi-bin` directory, and custom error messages to `error_docs` directory.

3. Pack the directories and files into an archive file in tgz, tar, tar.gz, or zip format.

   Make sure that the directories are in the root of the archive file and not in a subdirectory.

4. Log in to your Parallels Plesk Panel.

5. Go to **Tools & Utilities** > **Virtual Host Template**.

6. Click the **Browse** button to locate the archive file on your local computer, select the file, and click the **Send File** button.

> ➢ *To revert back to the original structure of Web server directories and files:*

1. Go to **Tools & Utilities** > **Virtual Host Template**.

2. Click the **Default** button.

Optimizing Apache Web Server (Linux)

You can switch off the Apache web server modules that are not critical to hosting services in **Tools & Settings > Apache Modules**. This will allow you to reduce server resources consumption (for example, get the smaller RAM footprint that is critical to VPS) and, as a result, provide for more hosting customers on a server.

Note that some modules are interdependent and can be switched off (on) only when the modules they depend on are off (on). For example, the *cache* module depends on *disk_cache*, *file_cache*, and *mem_cache* modules. This means that you cannot switch off the *cache* until its three dependent modules are off.

Caution: This feature is for advanced users only. Toggle modules only if you completely understand the consequences of your actions. Note that some modifications may reduce Apache performance or even lead to it becoming inoperable. In addition, these changes may affect certain Panel functions. For example, if you turn off *mod_perl* or *mod_php*, the Perl and PHP scripts (including webmail) will stop working on websites. This may cause a situation in which you offer a feature that does not work in a service plan.

Depending on your operating system, the following Apache modules are always enabled:

Debian or Ubuntu:

- *env*
- *auth_digest*
- *authn_file*
- *authz_host*
- *authz_user*
- *actions*
- *alias*
- *dav*
- *dav_fs*
- *mime*
- *ssl*

Redhat or CentOS:

- *env*
- *auth_digest*
- *authn_file*
- *authz_host*
- *authz_user*
- *actions*
- *alias*
- *autoindex*

- *dav*
- *dir*
- *log_config*
- *mime*
- *negotiation*
- *setenvif*
- *ssl*

SUSE:

- *env*
- *auth_digest*
- *authn_file*
- *authz_host*
- *authz_user*
- *actions*
- *alias*
- *dav*
- *dir*
- *log_config*

Improving Web Server Performance with nginx (Linux)

You can improve the work of the web server which hosts customer websites by installing *nginx*, a supplementary high-performance web server which is typically used as a reverse proxy server. This web server was specifically designed for delivering large amounts of static content (like images, video, css, xml, and so on). As opposed to Apache, nginx is much more efficient when it comes to a large number of concurrent connections. Another advantage of this web server comparing with Apache is that nginx has significantly lower memory footprint per client connection.

To leverage all benefits of nginx, Panel configures it as a *reverse proxy server* that stands between the Internet and Apache (see the diagram below). This means that nginx becomes a frontend web server that processes all incoming requests from site visitors. The requests are sent to Apache which, in turn, distinguishes requests for static and dynamic content. If a request is for a static file (like jpg, css, html, and so on), Apache passes the request through all registered handlers (applies `.htaccess` directory-level configuration, rewrites a URL, and so on) and returns to nginx a response which contains only a location of the requested file on the file system. nginx locates the file and sends it to the client. If the request is for a dynamic file (like a PHP script), Apache executes the file and sends the response to nginx, which delivers it to the client.
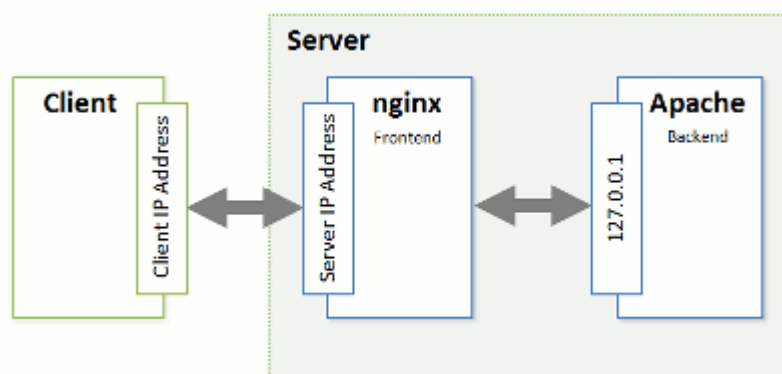
Such combination of nginx and Apache gives the following advantages:

- The maximum number of concurrent connections to a website increases.
- The consumption of server CPU and memory resources decreases.
  The maximum effect will be achieved for websites with large amount of static content (like photo galleries, video streaming sites, and so on).
- Efficiency of serving visitors with slow connection speed (GPRS, EDGE, 3G, and so on) improves.
  For example, a client with the 10 KB/s connection requests some PHP script, which generates a 100 KB response. If there is no nginx on the server, the response is delivered by Apache. During these 10 seconds required to deliver the response, Apache and PHP continue to consume full system resources for this open connection. If nginx is installed, Apache forwards the response to nginx (the nginx-to-Apache connection is very fast as both of them are located on the same server) and releases system resources. As nginx has lower memory footprint, the overall load on the system decreases. If you have a large number of such slow connections, using of nginx will significantly improve website performance.

The technical details on how Panel processes HTTP requests with the help of nginx are provided next in this section. For the information on how to turn on the support for nginx in Panel, refer to the section **Installing nginx** (on page 56). If you do not want to use nginx, make Apache your frontend web server following the instructions from the section **Making Apache a Frontend Web Server (on page 56).**

How Panel with nginx Processes HTTP Requests

To seamlessly integrate nginx with Apache, Panel uses two additional Apache modules:

- *mod_aclr2*.
  This module sets up a handler which runs after handlers of all other Apache modules (mod_rewrite, `.htaccess` related modules, mod_php, and so on). Therefore, if the request is for dynamic content, mod_aclr2 will never get it as the request will be served by upper-level handlers of certain Apache modules (mod_php, mod_perl, mod_cgi, and so on). The only exceptions are SSI requests: Once they reach mod_aclr2, it redirects them to proper handlers. If the request is for a static file, mod_aclr2 searches for the exact file location on the file system and sends the location to nginx.

- *mod_rpaf*.
  From the point of view of Apache, all of its clients have the same IP address - the address of the nginx server (see the diagram above). This causes problems to websites and web apps that use client IP addresses for authentication, statistic purposes, and so on. mod_rpaf solves the problem by replacing the IP address of the nginx server in all requests with client IP addresses. In more details, the module uses the special X-Forwarded-For header where nginx puts an IP address of a client.

Let us take a closer look on how Panel processes requests for static and dynamic content with the help of these modules.

The sequence of processing an HTTP request for a static file is as follows (see the diagram for the convenience):

1. A client sends a request to a web server.

2. nginx adds the *X-Accel-Internal* (used by mod_aclr2) and *X-Forwarded-For* (contains the IP address of the client) headers to the request and sends the request to Apache.

3. Apache receives the request and starts to process it by registered handlers (applies `.htaccess` configuration, rewrites URL, and so on). At this step, mod_rpaf replaces the IP address of the nginx server in the REMOTE_ADDR Apache variable with the client's address from the *X-Forwarded-For* header.

4. After the request is processed by all registered handlers, it reaches mod_aclr2. The handler checks for the *X-Accel-Internal* header presence. If the header is present, the module sends to nginx a response with zero content length and the *X-Accel-Redirect* header. This header contains the exact location of the file as it was determined by mod_aclr2.

5. Once nginx receives the response, it locates the file and delivers it to the client.

The diagram below is the example of how Panel handles the request for the 2 KB GIF file.

The Request for Static Content

Client

nginx

Apache

Send the Request for a GIF file

Send the Request

Added headers:
X-Accel-Internal
X-Forwarded-For = Client IP

Send the Response

Headers:

...
Content-Length = 0
X-Accel-Redirect = <path_to_file>

Send the Response

Headers:

...
Content-Length = 2048
Content-Type = image/gif
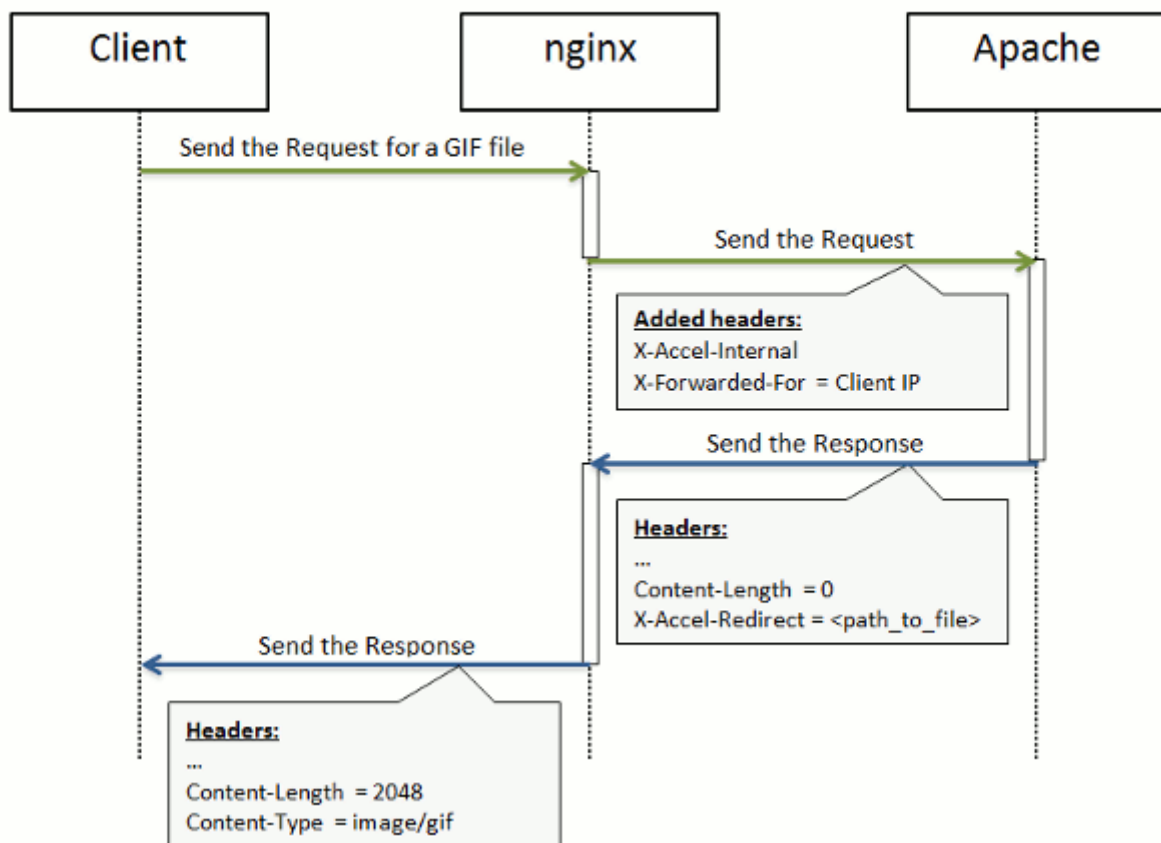
In case of processing requests for dynamic content, the steps from 1 to 3 are the same. Then the request passes to the handler of the appropriate Apache module (*mod_php*, *mod_perl*, *mod_cgi*, and so on): The request never reaches mod_aclr2 (excepting SSI requests). The handler generates a response and sends it to nginx, which, in turn, delivers the response to the client. The diagram below illustrates how Panel processes a request for some PHP file.

The Request for Dynamic Content
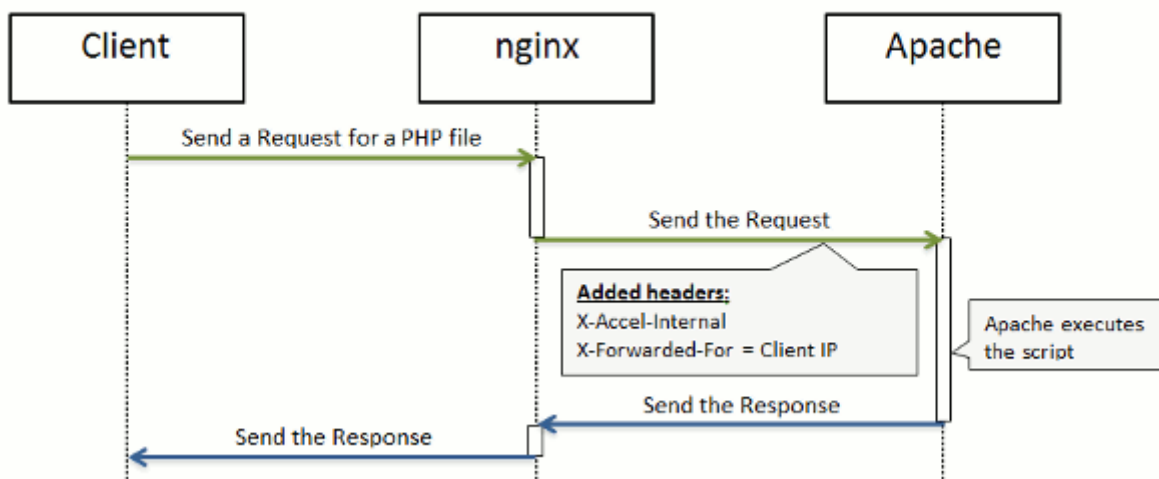
Client

nginx

Apache

Send a Request for a PHP file

Send the Request

Added headers:
X-Accel-Internal
X-Forwarded-For = Client IP

Apache executes
the script

Send the Response

Send the Response

In this section:

Installing nginx

If you perform a clean installation of Panel 11, nginx will be turned on by default. If you upgrade from earlier versions, you can add the nginx component at any time after the upgrade in **Tools & Settings > Updates & Upgrades > Add Components**. Once the component is added, you should run the **Reverse Proxy Server (nginx)** service in **Tools & Settings > Services Management**.

You can view the version of the installed nginx server in **Tools & Settings > Server Components**.

Making Apache a Frontend Web Server

To return back to the configuration with a single Apache web server, stop the **Reverse Proxy Server (nginx)** service in **Tools & Settings > Services Management**.

Once you run the service, nginx will become a frontend web server again.

Note: The start and stop operations for the **Reverse Proxy Server (nginx)** service not only start and stop nginx, they actually switch web server configuration (nginx and Apache combination or just Apache as a frontend web server). The restart operation works in the same way as for all other services: The nginx service is restarted.

Configuring IIS Application Pool (Windows)

IIS application pool serves websites and web applications hosted on your server. Dedicated IIS application pool allows your customers to have a level of isolation between websites. Since each dedicated application pool runs independently, errors in one application pool belonging to one user will not affect the applications running in other application pools dedicated to other users.

By default, Parallels Plesk Panel offers a shared application pool for all users. However, users can use dedicated application pools if this option is provided by the hosting package.

IIS application pool can work in the following two modes:

- Shared pool - one pool is used for all users and websites by default.
- Dedicated pool - separate pool for every customer is provided. It is also possible to allocate per-package pools within the customer's pool, that will isolate running websites hosted under a particular package from other customer's websites.

➢ *To change the IIS application pool working mode:*

1. Go to **Tools & Settings** > **IIS Application Pool**.

2. Select the **Global Settings** tab.

3. Select the required mode and click **OK**.

> ➢ *To limit the amount of CPU resources that the IIS application pool can use:*

1. Go to **Tools & Settings** > **IIS Application Pool**.

2. Select the **Switch on CPU monitoring** checkbox and provide a number (in percents) in the **Maximum CPU use (%)** field.

3. Click **OK**.

> ➢ *To stop all applications running in the server application pool:*

1. Go to **Tools & Settings** > **IIS Application Pool**.

2. Click **Stop**.

> ➢ *To start all applications in the application pool:*

1. Go to **Tools & Settings** > **IIS Application Pool**.

2. Click **Start**.

> ➢ *To restart all applications running in the application pool:*

1. Go to **Tools & Settings** > **IIS Application Pool**.

2. Click **Recycle**. This can be handy if some applications are known to have memory leaks or become unstable after working for a long time.

Configuring ASP.NET (Windows)

ASP.NET is a flexible set of tools and web development technologies that allows you to employ a number of applications based on ASP.NET framework. Parallels Plesk Panel supports both 1.1.x and 2.0.x versions of the .NET framework and allows configuring most of its settings. Most ASP.NET configuration settings that commonly need to be customized in order for ASP.NET applications to function in a desirable way can be edited through Parallels Plesk Panel.

➢ *To configure the server-wide ASP.NET settings:*

1. Go to **Tools & Settings** > **ASP.NET Settings** (in the **Applications** group). The settings for ASP.NET 1.1.x and ASP.NET 2.0.x are located under the corresponding tabs.

2. Set up the strings that determine database connection data for ASP.NET applications which use databases. This option is available only for ASP.NET 2.0.x.

   When you open the ASP.NET configuration page for the first time, sample connection parameters with common constructions are displayed. You can delete them and specify your own strings.

   ▪ To add a string, enter the required data into the **Name** and **Connection Parameters** input fields and click 🟢 next to them.

   ▪ To remove a string, click 🔴 next to it.

3. Set up custom error messages that will be returned by ASP.NET applications in the **Custom Error Settings** field:

   ▪ To set the custom error messages mode, select an appropriate option from the **Custom error mode** menu:

      ▪ **On** - custom error messages are enabled.

      ▪ **Off** - custom error messages are disabled and detailed errors are to be shown.

      ▪ **RemoteOnly** - custom error messages are displayed only to remote clients, and ASP.NET errors are shown to the local host.

   ▪ To add a new custom error message (which will be applied unless the **Off** mode was selected), enter the values in the **Status Code** and **Redirect URL** fields, and click 🟢.

      ▪ **Status Code** defines the HTTP status code resulting in redirection to the error page.

      ▪ **Redirect URL** defines the web address of the error page presenting information about the error to the client.

   Due to possible conflicts, you cannot add a new custom error message with an error code that already exists, but you can redefine the URL for the existing code.

   ▪ To remove a custom error message from the list, click 🔴 next to it.

4. Configure compilation settings in the **Compilation and Debugging** field:

   ▪ To determine the programming language to be used as default in dynamic compilation files, choose an entry from **Page default language** list.

- To enable compiling retail binaries, leave the **Enable debugging** checkbox empty.

- To enable compiling debug binaries, select the **Enable debugging** checkbox. In this case, the source code fragments containing error will be shown in a diagnostic page message.

Note: When running applications in debug mode, a memory and/or performance overhead occurs. It is recommended to use debugging when testing an application and to disable it before deploying the application into production scenario.

5. Configure encoding settings for ASP.NET applications in the **Globalization Settings** section:

- To set an adopted encoding of all incoming requests, enter an encoding value into the **Request encoding** field (default is utf-8).

- To set an adopted encoding of all responses, enter an encoding value into the **Response encoding** field (default is utf-8).

- To set an encoding which must be used by default for parsing of `.aspx`, `.asmx`, and `.asax` files, enter an encoding value into the **File encoding** field (default is Windows-1252).

- To set a culture which must be used by default for processing incoming web requests, select an appropriate item from the **Culture** list.

- To set a culture which must be used by default when processing searches for a locale-dependent resource, select an appropriate item from the **UI Culture** list.

6. Set a code access security trust level for ASP.NET applications in the **Code Access Security** field.

CAS trust level is a security zone to which applications execution is assigned, defining what server resources the applications will have access to.

Important: When an assembly is assigned a trust level that is too low, it does not function correctly. For more information on the permissions levels see http://msdn.microsoft.com/library/en-us/dnnetsec/html/THCMCh09.asp?frame=true#c09618429_010.

7. Set client session parameters in the **Session Settings** field:

- To set up the default authentication mode for applications, select an appropriate item from the **Authentication mode** list. **Windows** authentication mode should be selected if any form of IIS authentication is used.

- To set up time that a session can remain idle before it is abandoned, enter the appropriate number of minutes into the **Session timeout** field.

8. Click **OK** to apply all changes.

Note: Parallels Plesk Panel supports separate configurations for different versions of the .NET framework (1.1.x and 2.0.x).

CHAPTER 5

Mail

In this chapter:

Configuring Server-Wide Mail Settings

The Panel works in cooperation with mail server software, which provides e-mail services for mailboxes and mailing lists. After installation the mail server is configured automatically and is ready to serve, however, we recommend that you review the default settings to make sure that they satisfy your needs.

By default, the Postfix mail server is installed on Parallels Plesk Panel for Linux platforms, and MailEnable mail server, on Parallels Plesk Panel for Windows platforms. You can install another mail server software, if it is supported by your Panel, and then set up the Panel for using it.

If you want to use a mail server running on a separate machine, or want to prohibit your users from operating mail services, you can remove from the Panel all controls related to managing e-mail services and adding new mail accounts. This option does not actually switch off the Panel-managed mail server, but only removes the following items from the Control Panel accessed by hosting service customers and their users:

- **Mail** tab.
- **Home** tab > **Mail** group.
- **Users** tab > *user name* > **Create an e-mail address under your account** option.

> ## To hide the user interface elements related to mail services from the Control Panel:

1. In the Server Administration Panel, go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group).

2. Clear the **Enable mail management functions in Panel** checkbox.

3. Click **OK**.

> ## To use another mail server software with your Panel (currently supported only on Windows hosting):

1. Check the list of supported mail servers in Parallels Plesk Panel Installation Guide. See if the mail server software you want to use is supported.

2. Install the software according to instructions provided in Parallels Plesk Panel Installation Guide, or use the instructions provided by the mail server manufacturer.

3. Log in to the Panel and go to **Tools & Settings** > **Server Components**.

4. Click the **Mail Server** link.

   The mail server you have installed should now be displayed in the list of available mail servers.

5. Select the mail server you need and click **OK**.

The Panel will start using the new mail server without any need for server restart. Note that you can always select another mail server at any time later.

➢ *To view or configure the mail service settings:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group). The server-wide mail preferences screen will open on the **Settings** tab.

2. Leave the **Enable mail management functions in Panel** checkbox selected if you want to allow your users to create mail accounts through Control Panel and use the mail services provided by the Panel-managed mail server. If you are using an external mail server, clear this checkbox.

3. If you want to limit the size of an e-mail message that can be sent through your server, type the desired value in kilobytes into the **Maximum message size** box. Otherwise, leave this field blank.

4. To protect your server against unauthorized mail relaying or injection of unsolicited bulk mail, select the **Enable message submission** checkbox to allow your customers to send e-mail messages through the port 587.

   Also notify your customers that they need to specify in their e-mail programs' settings the port 587 for outgoing SMTP connections, and be sure to allow connections to this port in your firewall settings.

5. Select the mail relay mode.

   With closed relay the mail server will accept only e-mail addressed to the users who have mailboxes on this server. Your customers will not be able to send any mail through your outgoing SMTP server, therefore, we do not recommend closing mail relay.

   With relay after authorization, only your customers will be able to receive and send e-mail through your mail server. We recommend that you leave the **authorization is required** option selected, and specify allowed authentication methods:

   ▪ **POP3 lock time**. With POP3 authorization, once a user has successfully authenticated to the POP server, he or she is permitted to receive and send e-mail through the mail server for the specified period of time.

   ▪ **SMTP**. With SMTP authorization, your mail server requires authorization if the e-mail message must be sent to an external address.

   Note for Windows hosting users: If you do not wish to use relay restrictions for networks that you trust, specify the network IP and mask in the **Use no relay restrictions for the following networks:** field (e.g., 123.123.123.123/16) and click the ⊕ icon. To remove a network from the list, click the ⊖ icon corresponding to the network you wish to remove.

   The relay hosts on the networks in the list are considered not to be potentially operated by spammers, open relays, or open proxies. A trusted host could conceivably relay spam, but will not originate it, and will not forge header data. DNS blacklist checks will never query for hosts on these networks.

There is also an option to allow open relay without authorization, which, by default, is hidden from the user interface. Opening mail relay without authorization is not recommended because it allows spammers to send unsolicited mail through your server. If you want to set the open relay, log in to the server's file system, locate the file `root.controls.lock` in your Parallels Plesk Panel installation directory (`PRODUCT_ROOT_D/var/root.controls.lock` on Unix and `PRODUCT_DATA_D/var/root.controls.lock` on Windows platforms) and remove the line `/server/mail.php3:relay_open` from this file. The open relay option will show in your control panel.

6. Select the antivirus program that should be used on the server.

7. Select the spam protection options that should be used on the server.

Note: If you wish to set up spam protection systems, such as SpamAssassin spam filter, or protection systems based on DomainKeys, DNS blackhole lists or Sender Policy Framework (SPF), proceed to the section **Protecting from Spam** (on page 64).

8. If you are using Qmail mail server, you can also select the mail account format.

Selecting the **Use of short and full names is allowed** option will allow users to log in to their mail accounts by specifying only the left part of e-mail address before the @ sign (for example, `username`), or by specifying the full e-mail address (for example, `username@your-domain.com`).

To avoid possible authorization problems for e-mail users who reside in different domains but have identical user names and passwords, we highly recommend that you choose the **Only use of full mail account names is allowed** option.

Once you have set your mail server to support only full mail account names, you will not be able to switch back to supporting short account names until you make sure there are no encrypted passwords for mailboxes and user accounts with coinciding user names and passwords residing in different domains.

9. Click **OK** to submit any changes.

Protecting from Spam

To protect your users from spam, you can use the following tools with your Panel:

▪ **SpamAssassin spam filter**. It is a powerful spam filter that uses a wide variety of local and network tests to identify spam signatures.

You can configure the spam filter so as to either delete suspicious messages when they come to your mail server, or change the subject line and add "X-Spam-Flag: YES" and "X-Spam-Status: Yes" headers to the messages. The latter can be useful for users who prefer to filter mail with mail filtering programs installed on their own computers.

To learn more about SpamAssassin, visit http://spamassassin.apache.org.

To configure and switch on the SpamAssassin filter, proceed to the section **SpamAssassin Spam Filter** (on page 66).

▪ **DomainKeys** (available only for Linux hosting). DomainKeys is a spam protection system based on sender authentication. When an e-mail claims to originate from a certain domain, DomainKeys provides a mechanism by which the recipient system can credibly determine that the e-mail did in fact originate from a person or system authorized to send e-mail for that domain. If the sender verification fails, the recipient system discards such e-mail messages. To configure the DomainKeys system on your server, refer to the section **DomainKeys Protection (Linux)** (on page 68).

▪ **DNS blackhole lists**. This spam prevention system is based on DNS queries made by your mail server to a database, which contains known and documented sources of spam, as well as an extensive listing of dynamic IP addresses. Any positive response from this database should result in your mail server returning a '550' error, or rejection of the requested connection.

To configure your mail server for working with DNSBL databases, proceed to the section **DNS Blackhole Lists** (on page 70).

▪ **Sender Policy Framework** (available only for Linux hosting). This spam prevention system is also DNS query-based. It is designed to reduce the amount of spam sent from forged e-mail addresses. With SPF, an Internet domain owner can specify the addresses of machines that are authorized to send e-mail for users of his or her domain. Receivers that implement SPF then treat as suspect any e-mail that claims to come from that domain but fails to come from locations that domain authorizes.

To learn more about SPF, visit http://www.openspf.org/howworks.html.

To enable filtering based on SPF, proceed to the section **Sender Policy Framework System (Linux)** (on page 71).

▪ **Server-wide black and white lists**. Black and white lists are standard mail server facilities. You can use black and white lists to block or receive mail from specific servers. Your mail server retrieves domain names and IP addresses of servers which attempt to establish connection with it. If a domain name is matched against black list entries, your server refuses the connection. Thus, the potential spam message will be never received. If an IP address is matched against white list entries, your server receives a message from the sender without using the spam protection systems such as sender authentication, greylisting, or DNSBL.
To set up server-wide black and white lists, proceed to the section **Server-wide Black and White Lists** (on page 70).

- **Greylisting** (available only for Linux hosting). Greylisting is a spam protection system which works as follows: For every e-mail message that comes to the server, sender's and receiver's e-mail addresses are recorded in a database. When a message comes for the first time, its sender and receiver addresses are not listed in the database yet, and the server temporarily rejects the message with an SMTP error code. If the mail is legitimate and the sending server is properly configured, it will try sending e-mail again and the message will be accepted. If the message is sent by a spammer, then mail sending will not be retried: spammers usually send mail in bulk to thousands of recipients and do not bother with resending.

  The greylisting protection system also takes into account the server-wide and per-user black and white lists of e-mail senders: e-mail from the white-listed senders is accepted without passing through the greylisting check, and mail from the black-listed senders is always rejected.

  When the greylisting support components are installed on the server, then greylisting is automatically switched on for all domains. You can switch off and on greylisting protection for all domains at once (at **Tools & Settings** > **Spam Filter Settings**), or for individual subscriptions (in **Control Panel** > **Mail** tab > **Change Settings**).

In this section:

SpamAssassin Spam Filter

> ➤ *To switch on SpamAssassin spam filter:*

1. Go to **Tools & Settings** > **Spam Filter Settings** (in the **Mail** group).

2. To allow server wide filtering based on the settings you define, select the **Switch on server-wide SpamAssassin spam filtering** checkbox.

3. To let your users set their own spam filtering preferences on a per-mailbox basis, select the **Apply individual settings to spam filtering** checkbox.

4. If you wish to adjust the amount of system resources the spam filter should use (available only for Linux hosting), type the desired value from 1 to 5 into the **Maximum number of worker spamd processes to run (1-5)** box (1 is the lowest load, and 5 is the highest). We recommend that you use the default value.

5. If you wish to adjust the spam filter's sensitivity, type the desired value in the **The number of points a message must score to be considered spam** box.

   SpamAssassin performs a number of different tests on contents and subject line of each message. As a result, each message scores a number of points. The higher the number, the more likely a message is spam. For example, a message containing the text string "BUY VIAGRA AT LOW PRICE!!!" in Subject line and message body scores 8.3 points. By default, the filter sensitivity is set so that all messages that score 7 or more points are classified as spam.

   - When your users receive lots of spam messages with the current setting, to make filter more sensitive, try setting a lesser value in the **The score that a message must receive to qualify as spam** box; for example, 6.

   - When your users are missing e-mails because your spam filter thinks they are junk, try reducing filter sensitivity by setting a higher value in the **The score that a message must receive to qualify as spam** box.

6. To reduce the load on your Windows server, you can select the **Do not filter if mail size exceeds specified size** checkbox and specify the maximum size of the message that the spam filter will test. Recommended mail size limit is 150 - 250 Kbytes, which is usual for mail messages in HTML format with images. The size of the mail is considered critical for filter and server overload when it exceeds 500 Kbytes, which is usual for mail messages containing attachments.

7. To make sure that the spam filter on your Windows server is not leaving some e-mail messages unchecked (this can happen if the amount of incoming mail is very large), limit the number of e-mail messages that can be checked simultaneously in the **Number of threads that spam filter can create** field.

8. Specify how to mark messages recognized as spam.

At the server level, you cannot set the server-wide spam filter to automatically delete spam: you can do it only on a per-mailbox basis. So, for the server-wide policy, you can choose only marking messages as spam: "X-Spam-Flag: YES" and "X-Spam-Status: Yes" headers are added to the message source by default, and if you want, the spam filter will additionally include a specific text string to the beginning of Subject line. To include a desired combination of symbols or words to the message subject, type it into the **Add the following text to the beginning of subject of each message recognized as spam** box. If you do not want the spam filter to modify message subject, leave this box blank. If you want to include into the subject line the number of points that messages score, type *SCORE* in this box.

9. If you use Parallels Plesk Panel for Windows, define the language characteristics of mail that should always pass the filter by specifying trusted languages and locales.

- Select the required items from the boxes under **Trusted languages** and **Trusted locales** and click **Add >>**.

- Letters written in the specified languages and with the defined character sets will not be marked as spam.

10. If you do not want your users to receive e-mail from specific domains or individual senders, click the **Black List** tab, and then add the respective entries to the spam filter's black list:

- To add entries to the black list, click **Add Addresses**. Separate addresses with a coma, a colon, or a white space. You can use an asterisk (*) as a substitute for a number of letters, and question mark (?) as a substitute for a single letter. For example: address@spammers.net, user?@spammers.net, *@spammers.net. Specifying *@spammers.net will block the entire mail domain spammers.net. If you use a Windows-based server, also specify what to do with messages coming from the specified addresses. To save the entries you added, click **OK**.

- To remove entries from the black list, under the **Black List** tab, select the entries and click **Remove**. Confirm removal and click **OK**.

11. If you want to be sure that you and your users will not miss e-mail from specific senders, click the **White List** tab, and then add e-mail addresses or entire domains to the spam filter's white list:

- To add entries to the white list, click **Add Addresses**. If you have a list of entries stored in a file, click **Browse** to specify it, and then click **OK**. Otherwise, select the **From List** option, and type the e-mail addresses into the **E-mail addresses** box. Place each address in one row, or separate addresses with a coma, a colon, or a white space. You can use an asterisk (*) as a substitute for a number of letters, and question mark (?) as a substitute for a single letter. For example: address@mycompany.com, user?@mycompany.com, *@mycompany.com. Specifying *@mycompany.com will add to the white list all e-mail addresses that are under the mycompany.com mail domain. To save the entries you added, click **OK**, then confirm adding, and click **OK** again.

- To remove entries from the white list, under the **White List** tab, select the entries and click **Remove**. Confirm removal and click **OK**.

12. Once finished with setting up the spam filter, click **OK**.

Now all the incoming mail will be filtered on the server side. By default, spam filter does not delete spam mail, it only adds the "X-Spam-Flag: YES" and "X-Spam-Status: Yes" headers to the message, and "*****SPAM*****" text string to the beginning of Subject line of each message recognized as spam.

If you have enabled the **Apply individual settings to spam filtering** option, then your users will be able to set their spam filters so as to automatically delete junk mail. They will also be able to set up their personal black and white lists of correspondents that will override the server settings, and teach the spam filter on a per-mailbox basis.

If you want to adjust spam filtering settings for a specific mailbox, refer to the section **Protecting from Spam** (on page 649).

Note: Panel exposes only basic SpamAssassin functionality. If you want to create complex antispam rules, edit SpamAssassin configuration files. For more information on advanced SpamAssassin configuration, refer to the **Parallels Plesk Panel: Advanced Administration Guide, Spam Protection** for both Linux and Windows and other respective documentation at http://spamassassin.apache.org/doc/Mail_SpamAssassin_Conf.html.

DomainKeys Protection (Linux)

➢ *To switch on spam protection based on DomainKeys:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group).

2. Under the **DomainKeys spam protection** group, select the following options:

- **Allow signing outgoing mail.** Selecting this option allows you and your customers to switch on support for DomainKeys e-mail signing on a per-subscription basis through the Control Panel (**Control Panel** > **Mail** tab > **Change Settings**). It does not automatically switch on signing of outgoing e-mail messages.

- **Verify incoming mail**. Selecting this option will configure the DomainKeys system to check all e-mail messages coming to e-mail users under all domains hosted on the server.

3. Click **OK**.

Now your mail server will check all incoming e-mail messages to ensure that they come from the claimed senders. All messages, sent from the domains that use DomainKeys to sign e-mail, which fail verification will receive the header *DomainKey-Status: 'bad'*. All messages, sent from the domains that do not participate in the DomainKeys program and do not sign e-mail, will be accepted without verifying.

➢ *To switch on signing outgoing e-mail messages for all domains in a subscription:*

1. Go to **Control Panel** > **Mail** tab > **Change Settings**.

2. Select the **Use DomainKeys spam protection system to sign outgoing e-mail messages** checkbox.

3. Click **OK**.

Now, the following will happen for the selected domains:

- Private keys are generated and placed in the server's database.
- Public keys are generated and placed in the TXT resource records created in the domains' DNS zones.
- The sender's policy advertised in the DNS TXT resource records is set to "all e-mail messages sent from this domain must be cryptographically signed; if someone receives an e-mail message claiming to originate from this domain, which is not signed, then this e-mail must be discarded."
- Outgoing e-mail messages are digitally signed: the "DomainKeys-Signature" header containing a signature based on a private key is added to the message headers.

DNS Blackhole Lists

You can use free and paid subscription blackhole lists with your server.

> ➤ *To switch on spam protection based on DNSBL:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group).

2. Select the **Switch on spam protection based on DNS blackhole lists** checkbox.

3. In the **DNS zones for DNSBL service** input box, specify the host name that your mail server should query, for example: sbl.spamhaus.org.

4. Click **OK**.

Now, e-mail messages from known spammers should be rejected with an error code 550 (connection refused).

Server-wide Black and White Lists

> ➤ *To reject connections from specific mail servers:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group).

2. Click the **Black List** tab.

3. Click **Add Domain**.

4. Specify the name of the domain from which you do not want to receive e-mail. For example, 'evilspammers.net'.

5. Click **OK**.

6. Repeat steps from 3 to 5 to add as many domains as required.

> ➤ *To assure mail reception from specific servers or networks:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group).

2. Click the **White List** tab.

3. Click **Add Network**.

4. Specify an IP address or range of IP addresses from which mail must always be accepted.

5. Click **OK**.

6. Repeat steps from 3 to 5 to add as many addresses as required.

Sender Policy Framework System (Linux)

> ➢ *To set up support for Sender Policy Framework on your Linux-based server:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group). The server-wide mail preferences screen will open on the **Settings** tab.

2. Select the **Switch on SPF spam protection** checkbox and specify how to deal with e-mail:

   - To accept all incoming messages regardless of SPF check results, select the **Create only Received SPF-headers, never block** option from the **SPF checking mode** drop-down box. This option is recommended.

   - To accept all incoming messages regardless of SPF check results, even if SPF check failed due to DNS lookup problems, select the **In case of DNS lookup problems, generate temporary errors** option from the **SPF checking mode** drop-down box.

   - To reject messages from senders who are not authorized to use the domain in question, select the option **Reject mail if SPF resolves to fail** from the **SPF checking mode** drop-down box.

   - To reject the messages that are most likely from senders who are not authorized to use the domain in question, select the option **Reject mail if SPF resolves to softfail** from the **SPF checking mode** drop-down box.

   - To reject the messages from senders who cannot be identified by SPF system as authorized or not authorized because the domain has no SPF records published, select the option **Reject mail if SPF resolves to neutral** from the **SPF checking mode** drop-down box.

   - To reject the messages that do not pass SPF check for any reason (for example, when sender's domain does not implement SPF and SPF checking returns the "unknown" status), select the option **Reject mail if SPF does not resolve to pass** from the **SPF checking mode** drop-down box.

3. To specify additional rules that are applied by the spam filter before the SPF check is actually done by the mail server, type the rules you need in the **SPF local rules** box.

   We recommend that you add a rule for checking messages against the open database of trusted senders, for example, 'include:spf.trusted-forwarder.org'. For more information on SPF rules, visit http://tools.ietf.org/html/rfc4408.

4. To specify the rules that are applied to domains that do not publish SPF records, type the rules into the **SPF guess rules** box.

   For example: **v=spf1 +a/24 +mx/24 +ptr ?all**

5. To specify an arbitrary error notice that is returned to the SMTP sender when a message is rejected, type it into the **SPF explanation text** box.

   If no value is specified, the default text will be used as a notification.

6. To complete the setup, click **OK**.

Greylisting (Linux)

When the greylisting support components are installed on the server, greylisting protection is automatically switched on for all domains. Therefore, no additional actions are required. If you do not want to use greylisting protection, you can switch it off.

➤ *To switch off greylisting protection for all domains:*

1. Go to **Tools & Settings** > **Spam Filter Settings** (in the **Mail** group).

2. Clear the **Switch on server-wide greylisting spam protection** checkbox.

3. Click **OK**.

➤ *To switch on greylisting protection for all domains:*

1. Go to **Tools & Settings** > **Spam Filter Settings** (in the **Mail** group).

2. Select the **Switch on server-wide greylisting spam protection** checkbox.

3. Click **OK**.

➤ *To switch off greylisting protection for all domains in a subscription:*

1. Go to **Control Panel** > **Mail** tab > **Change Settings**.

2. Clear the **Switch on greylisting spam protection for all mail accounts under this domain** checkbox.

3. Click **OK**.

➤ *To switch on greylisting protection for all domains in a subscription:*

1. Go to **Control Panel** > **Mail** tab > **Change Settings**.

2. Select the **Switch on greylisting spam protection for all mail accounts under this domain** checkbox.

3. Click **OK**.

Protecting from Outbound Spam

If your hosting offerings include mail services, keep in mind that your mail server can be used for malicious purposes. For example, spammers can use compromised accounts for sending mass e-mails containing spam or viruses, compromised computers (also called zombies) could relay spam through your server, and so on. This may cause an increased load on the server, spam or malware complaints from recipients, or your server's IP addresses may be added to public black lists.

To prevent sending spam and other malicious messages from your server, we offer *Parallels Premium Outbound Antispam* (hereafter referred to as Outbound Antispam). This is an additional Panel component that analyzes all outgoing mail and blocks sending of undesired messages. To learn how to install Outbound Antispam, see the section **Installing Parallels Premium Outbound Antispam.** (on page 74)

To detect outgoing spam and virus messages, the component uses the external Parallels Premium Outbound Antispam service that identifies outbreaks of spam and email-borne malware over the Internet in real time. Every email outbreak can be identified by one or more recurrent patterns, even if messages within the attack differ from each other. The Parallels Premium Outbound Antispam service detects such outbreaks using constantly updated global service repositories where all spam and virus patterns are stored. When your mail server (qmail or Postfix) is requested to send a message, the local Outbound Antispam component extracts the message patterns and compares them to its local cache or sends to the service repository to identify whether they were seen in global spam or virus attacks. All messages which patterns were identified as malicious are blocked. An even more important benefit of using Outbound Antispam is that it allows you to identify spammers who use your server within the first few messages they send out, allowing you to prevent them from issuing the attack. In addition, the component counts mail from each unique sender notifying you when a sender exceeds a certain message threshold.

To learn how to turn on and configure protection from outbound spam on your server, see the section **Configuring Protection** (on page 75).

Mail Classification

Outbound Antispam uses the following mail classification.

Type	Description
Confirmed spam	Spam messages that contain patterns seen in global spam attacks. For example these messages are sent from compromised computers (zombies).
Bulk spam	Spam messages sent in bulk quantities from sources that were not yet identified as spammers. The patterns of such messages were seen in global spam attacks.
Suspected spam	Messages that are sent in bulk quantities but not yet confirmed as spam. This can be sending of legitimate mass e-mails as well as spam messages in the first few seconds of the attack

Virus messages	Messages that either contain characteristics of confirmed malware or with high likelihood pose a malware threat.
Valid mail	Legitimate messages for which Outbound Antispam does not have any incriminating information.
Non spam	Messages that are confirmed, without doubt, as coming from trusted sources. This classification is very rarely used.

In this section:

Installing Parallels Premium Outbound Antispam

To start using Parallels Premium Outbound Antispam, perform the following steps:

1. *Install the component*. This is done from the **Tools & Settings** > **Updates & Upgrades**. After the installation is completed, you will find the component on the **Tools & Settings** > **Outbound Spam Protection** page.

2. *Activate the component*. Parallels Premium Outbound Antispam requires a separate license key. You can purchase such a key from your service provider or directly from Parallels. Once you have obtained a key, install it to Panel using the **Tool & Settings** > **License Management** > **Additional License Keys** page.

Configuring Protection

Setting up outbound spam protection with Parallels Premium Outbound Antispam includes configuration of the following aspects:

1. *Connection settings* (on page 75). To let the Parallels Premium Outbound Antispam component installed on your Panel communicate with the external part of the antispam system (the repositories), you should configure the component's connection settings.

2. *Sender identification policy* (on page 76). To effectively fight sending of spam, the outbound antispam solution includes a mechanism that allows you to identify the actual e-mail senders even if they send spam from multiple e-mail addresses. You should define how the system will identify senders.

3. *Saving of message samples* (on page 77). To track suspicious activities of senders on your server, you can configure Parallels Premium Outbound Antispam to save message samples in a specified directory to let you analyze them later.

4. *Protection policy* (on page 77). To define how the system will handle spam and malware messages, configure the *protection policy*. For example, you can prohibit sending of spam messages or limit the total number of messages from a single sender. Additionally, if you are sure that a certain sender is not a spammer, you can add them to the *white list* or *bulk senders list*. The system will send mail from these senders bypassing some of the antispam checks.

In this section:

Connection Settings

To detect malicious messages, Parallels Premium Outbound Antispam uses the external Parallels Premium Outbound Antispam service that checks patterns of outgoing mail. As Parallels Premium Outbound Antispam requires a permanent connection to the service, the default policy prohibits sending *any* messages when the service is unavailable. This could happen, for example, if your Parallels Premium Outbound Antispam license key has expired or due to network connection problems.

To let users send e-mails when the service is unavailable, select the checkbox **Skip scanning when the service is unavailable** in **Tools & Settings** > **Outbound Spam Protection** > **Server Configuration** tab.

Note: The Parallels Premium Outbound Antispam service address is specified in the corresponding field on the **Server Configuration** tab of the Parallels Premium Outbound Antispam page. Normally, you should not change the default value `resolver%d.plesk.ctmail.com`. The only exception is when you experience connectivity problems and want to troubleshoot them.

Sender Identification Policy

An important aspect of outbound spam protection is identification of mail senders. The sender identification allows you to know the problematic users or accounts on your server and take actions to prevent them from sending more spam or doing other actions related to mail sending.

To let you effectively recognize unique senders, Parallels Premium Outbound Antispam offers you the following ways of identification:

- *SMTP authentication username*. If your Panel server uses SMTP authentication, Parallels Premium Outbound Antispam will identify users by usernames provided during the SMTP authorization. To switch on the SMTP authentication in Panel, go to **Tools & Settings** > **Mail Server Settings** > **Relay options**.
- *IP address* from which a sender connects to your server.
- *SMTP authorization username if available; otherwise, IP address*.
- *Custom mail header*. This may be any string of text included in the message header.

For example, if you choose *IP address*, the system will identify all users that connect to your server from this IP address as a single sender even if they use different e-mail addresses. To choose a way to identify unique senders, select the corresponding option in the **Tools & Settings** > **Outbound Spam Protection** > **Unique Sender Identifier** tab.

Saving Message Samples

To keep track of suspicious activities of e-mail senders and identify potential spammers, you can configure Parallels Premium Outbound Antispam to save samples of outgoing messages to a specific directory. To do this, select the corresponding checkbox in the **Tools & Settings** > **Outbound Spam Protection** > **Unique Sender Identifier** tab, specify the directory, and enter the *thresholds* for different message types: *spam*, *suspected spam*, and *virus messages* (see the classification in **Protecting from Outbound Spam** (on page 73)). When a number of messages of a certain type from a sender reaches the corresponding threshold, the system adds the last of these messages to the specified directory to let you analyze the message's content later. Then the system starts counting messages again from zero. For example, if you set the threshold for suspected messages to *10,* the system will save each tenth suspected message.

Note: The thresholds do not limit the number of messages that each sender can send.

Protection Policy

The *protection policy* settings located on the **Tools & Settings** > **Outbound Spam Protection** > **Protection Policy** tab define what types of messages according to the Parallels Premium Outbound Antispam classifications the system will block.

As described in the section **Protecting from Outbound Spam** (on page 73), protection works in the following way: When the Panel mail server receives a request to send a message, the Outbound Antispam component extracts message patterns and sends them to the external service. The latter, in its turn, identifies a message type (spam, valid mail, and so on) and sends the result back to the component. If the message type is selected in **Block message sending**, a server will refuse the SMTP transaction with the 5xx PERMFAIL reply code. For a sender, this means that a message could not be sent under any circumstances. If the sender is another mail server, it is discouraged from retrying to send the message. If the sender is a mail client (like Microsoft Outlook or Mozilla Thunderbird), the message will bounce back to it.

Additional Protection Settings

Outbound Antispam allows you not only to reject messages of a certain type, but to identify their senders by means of **Thresholds for blocking senders** that you can set for each message type. The system keeps statistics (available at the **Dashboard** tab) on unique senders who exceed this thresholds. Outbound Antispam counts all messages of the selected type within the *5 minute window*. If a counter value exceeds a threshold, your mail server refuses the SMTP transactions for all messages until the counter value does not become lower than the threshold again (this will mean that a sender stopped trying to send messages of that type). You can specify how the server should reject messages:

- **Delay sending**. In this case, the system will refuse SMTP transactions with the 4xx TEMPFAIL reply code. For the sending server this means that it could try to resend this message. For the users of mail clients (like Microsoft Outlook or Mozilla Thunderbird) this means that the message will stay unsent in their outbox.

- **Block sending**. In this case, the system will refuse SMTP transactions with the 5xx PERMFAIL reply code. As described above, this means that a message could not be sent under any circumstances.

Let us take a look at how the blocking thresholds work. For example, we set the threshold for blocking spam to 10 and some sender tries to send 3 spam messages per minute through our server. See the timeline below. On the 4th minute, the counter reaches 10 and Outbound Antispam starts to block all spam messages from the sender. Note that the 5 minute counting window has a 1 minute shift, thus on the 6-th minute, the counter's value will be equal to the sum of messages sent from 2-nd to 6-th minute, and so on. On the 8-th minute, the sender stops trying to send spam, but the counter's value still exceeds the threshold. Starting from the 10-th minute (when the counter's value is equal to 9), Outbound Antispam will begin to accept messages from the sender again.

	1	2	3	4	5	6	7	8	9	10	11	time, min
Messages	3	3	3	1 2	3	3	3	0	0	0	0	
Counter	3	6	9	10 12	15	15	15	12	9	6	3	
Policy	Send				Block					Send		
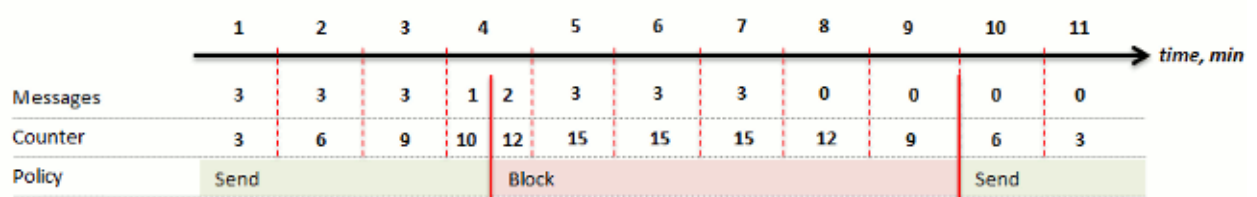
Such temporary blocking can help you to identify compromised accounts and spammers who use them. If they are unable to send messages from a certain account, they will probably stop trying to use this account.

Note that temporary blocking does not override the **Block message sending** settings but supplements them. For example, if you choose to block spam in **Block message sending** and then set the threshold for blocking spam, all spam messages will be *always* blocked regardless of the message counter value. In this case, this threshold will just help you to identify who is permanently trying to send spam through your server.

Another benefit of using thresholds is that you can limit the overall messages sending rate (the **Total messages** parameter).

Allowing Certain Users to Send All Kinds of E-mail

If you are sure that a certain sender is not a spammer, you can make the system send their mail without scanning. To do this, add the identifiers of these senders to the *white list* or *bulk senders list.* These lists are located in **Tools & Settings** > **Outbound Spam Protection** > **White List** and **Tools & Settings** > **Outbound Spam Protection** > **Bulk Senders List** tabs respectively. The difference between the lists is in the following:

- Users from the white list can send any number of messages including messages considered as spam. Parallels Premium Outbound Antispam does not check messages from the senders in the white list.
- Users from the bulk senders list can send any number of *suspected spam* - mass e-mails that Parallels Premium Outbound Antispam does not consider spam. Spam and virus messages sent by senders from this list will be blocked.

For example, if you know that your customer sends mass non-spam e-mails such as newsletters, you should add their identifier to the bulk senders list to protect them from blocking by the Parallels Premium Outbound Antispam. However, note that if the system detects these newsletters as spam, it will block sending anyway.

Protecting from Viruses

To provide your e-mail users with anti-virus protection, you can use either the Parallels Premium Antivirus or Kaspersky Antivirus solutions. Both solutions can scan server's mail traffic in real time, however, only Kaspersky Antivirus allows fine tuning and filtering of specific file types from attachments.

The both programs require an additional license key with annual renewal. Check the current prices with your provider or visit Parallels site.

➢ *To install Parallels Premium Antivirus or Kaspersky Antivirus:*

1. Go to **Tools & Settings > Updates**. Updater will open in a new window or tab.

2. Click **Cancel updating**.

3. Click **Add Components**.

4. In the list of components, expand the **Additional mail services** group, and select either **Parallels Premium antivirus** or **Kaspersky antivirus extension**.

5. Click **Continue**.

   After the installation is completed, obtain and install a license key for the selected antivirus program, as described in the following steps.

6. Go to **Tools & Settings > License Management**.

7. Click **Order New Key**. The Parallels online store page listing available add-ons opens in a new browser window.

8. On this page, select the checkbox next to **Parallels Premium Antivirus** or **Kaspersky Antivirus** and click **ADD TO MY BASKET**.

9. Because Parallels Plesk Panel add-ons are added to the license keys that already exist, you will need to specify the number of your license key to which you add this feature and click **Submit**.

10. In the next steps, indicate the currency, number of keys, provide contact details, billing address, and payment method, and submit the form. You will be notified by e-mail when your order is processed.

11. When you receive the e-mail notice, return to the **License Management** screen (**Tools & Settings** > **License Management**) and click **Retrieve Keys** to retrieve the ordered license key. The Panel's License Manager will retrieve the upgraded license key from the Parallels licensing server and install it to your control panel.

12. Go to **Tools & Settings > Virus Protection Settings** (in the **Mail** group).

13. Under **Antivirus preferences**, select the antivirus you need and click **OK**.

If you installed Parallels Premium Antivirus, you can switch on antivirus protection only on a per-mailbox basis, and only after you have set up mailboxes. By default, virus definitions are retrieved every 5 hours, and this setting is not changeable through the control panel.

If you installed Kaspersky Antivirus, go to **Tools & Settings** > **Kaspersky Antivirus** to configure it.

Selecting Webmail Software

You can install on the server a number of webmail software packages and select which of them should be available to your users. Alternately, you can redirect your users to an external webmail service. To do this, register an external webmail service address with the Panel by adding a corresponding record.

All installed webmail packages and registered external webmail services are listed in the mail settings of hosting plans and subscriptions (on the **Mail** tab). There you can select which webmail to provision to users.

➢ *To register an external webmail service:*

1. Go to **Tools & Settings** > **Webmail** (in the **Mail** group).

2. Click **Register Webmail**.

3. Specify the following:

   a. **Webmail service name**.

   b. **Webmail service URL**. Specify an address that begins with the `http://` or `https://` prefix.

   c. Leave the **Available** checkbox selected to make the registered webmail service available for selection in hosting plan settings.

4. Click **OK**.

➢ *To change the properties of an external webmail record:*

1. Go to **Tools & Settings** > **Webmail** (in the **Mail** group).

2. Click the appropriate link in the **Name** column.

3. Make the required changes and click **OK**.

➢ *To make a webmail service unavailable for inclusion into hosting plans:*

1. Go to **Tools & Settings** > **Webmail** (in the **Mail** group).

2. Do either of the following:

   ▪ To make a service temporarily unavailable without actually removing it, select the corresponding checkbox and click **Disable**.

   This works for installed webmail software packages and for links to external webmail services.

   ▪ To permanently remove a service record, select the corresponding checkbox and click **Remove**.

   This way you can remove only links to external webmail services. Installed software packages can be removed only by means of Parallels Products Installer (**Tools & Settings** > **Updates**).

Configuring Mailing Lists (Linux)

To provide your customers with capabilities to run their own mailing lists or newsletters, you should install the GNU Mailman package on your server (you could have done so during installation of Parallels Plesk Panel), and set up the mailing list administrator's account, otherwise, it will not work.

➢ *To set up the mailing list administrator's account from your control panel:*

1. Go to **Tools & Settings** > **Set Up Mailing Lists Server** (in the **Resources** group).

2. Specify the username and password that you will use for administration of mailing lists and their settings.

3. Click **OK**.

Once you have set up the Mailman administrator's account, you can configure the mailing list software or change your administrative login and password by visiting the URL: http://lists.yourservername.tld/mailman/admin/mailman

Note: After you have set up Mailman administrator's account, the **Set Up Mailing Lists Server** icon will be no longer be accessible from the Panel.

Preventing Mass E-mail Sending (Linux)

➢ *To prevent your users from sending mass e-mail, do the following:*

1. Create a file named maxrcpt in the directory $QMAIL_ROOT_D/qmail/control/

   where $QMAIL_ROOT_D is the location defined in the file `/etc/psa/psa.conf file.`

2. Type the number of allowed recipients in this file and save it.

Note that this number also affect sending of messages to mailing list or mail group subscribers. That is, if you set the value to 100, then only 100 subscribers will receive the message sent to a mailing list or a mail group.

When you no longer need to restrict the number of recipients, delete the `maxrcpt` file.

DNS

Your Parallels Plesk Panel works in cooperation with a DNS server, which enables you to run DNS service on the same machine where you host websites.

Setup of DNS zones for newly added domains is automated: When you add a new domain name to the Control Panel, a zone file is automatically generated for it in accordance with the server-wide DNS zone template and registered in the name server's database, and name server is instructed to act as a primary (master) DNS server for the zone.

You can:

- Add resource records to and remove from the template.
- Override the automatic zone configuration with custom settings on a per-domain basis.
- Select another DNS server (for example, on Windows servers, switch to Microsoft DNS server from BIND DNS server).
- Switch off the domain name service on this machine if your provider or another organization is running DNS service for your sites.
- Specify one of your zones under which all customer websites will be available for preview.

Performing Mass Operations over DNS Zones

From time to time administrators are faced with the necessity to perform mass operations over existing DNS zones. Such operations include adding, modifying, or removing DNS records from all or a large amount of websites and subdomains. Before 10.4 these operations were performed manually from the GUI or from the programming interfaces. In 10.4 administrator could perform the required modifications to the DNS template, and the modifications were automatically applied to all derived zones. Panel 11 introduces changes to this process to reduce the risk of corrupting zone files that may happen during the straightforward application of changes.

As before, all DNS zones are built from the DNS template that is available in **Tools & Settings** > **DNS Template Settings**. You should firstly add changes to the template and then deliver them to existing zones by clicking **Apply DNS Template Changes**. The following options become available after clicking this button:

- *Apply changes to unaltered zones*.
  Use this option if you desire to obtain more control and apply changes only to direct template copies leaving user-modified zones for manual review and per-zone application.
- *Apply changes to all zones*.
  Use this option to deliver changes to all zones at once.

To apply changes to a particular zone, open the related subscription in the Control Panel, and go to **Websites & Domains** > **DNS Settings** and select the zone. You should see the corresponding button in the toolbar.

Note: If you apply changes to all zones, the zones become *unaltered* and will remain in this status until somebody modifies them. The same goes for a user-modified zone if you apply the changes directly to it.

The template changes are applied using the following rules:

- User-modified records *always* remain intact (are not modified or removed under any circumstances).
- Records added to the template are added to the zone.
- Records removed from the template are removed from the zone (if they were not changed by users before that).
- Records modified in the template are modified in the zone (if they were not changed by users before that).

Note: After restoration, migration, or upgrade, *all zones* are treated as user-modified by default, so no changes will be applied if you update something in the DNS template and forward the changes only to unaltered zones. If you wish to perform DNS zone changes in bulk after upgrade, apply the changes to *all zones* at the first time.

DNS Zones for Subdomains

In earlier Panel versions, all subdomain records were included into a parent domain zone. Panel 10.4 allows each subdomain to have its own DNS zone. These subdomain zones are useful if you wish to specify a custom name server for a particular subdomain or shorten the number of domain DNS records by rearranging them to subordinate zones. Generally speaking, subdomain DNS zones bring all domain DNS features to the subdomain level.

As this new feature introduces significant changes to DNS zones organization, the default behavior is not to create subdomain DNS zones. However, if you wish to try out this feature, use the following command-line call:

```
server_pref –u –subdomain-dns-zone own
```

To turn this feature off, use:

```
server_pref –u –subdomain-dns-zone parent
```

Learn more about running Panel utilities at

- (Linux) http://download1.parallels.com/Plesk/PP11/11.0/Doc/en-US/online/plesk-unix-cli/37894.htm
- (Windows) http://download1.parallels.com/Plesk/PP11/11.0/Doc/en-US/online/plesk-win-cli/44076.htm

Note: The default behavior in 10.4 versions before MU#9 was to create subdomain DNS zones. If you apply Update #9 to 10.4, the feature will remain active. Otherwise, the default behavior will be not to create the separate zones.

When subdomain zones are off, customers modify the parent domain's DNS zone by toggling Panel control over a particular subdomain zone. In fact, when they go to **Websites & Domains** > **DNS Settings** > **Switch On/Off the DNS Service** and clicks **Manage** next to a subdomain name, the following situations are possible.

Subdomain DNS Zones	Switch the DNS Service ON	Switch the DNS Service OFF
ON	Has no effect on the DNS zone of a parent domain.	
OFF	A new DNS zone is created for the subdomain, and all DNS records corresponding to this subdomain are removed from the parent domain's DNS zone.	Only A and AAAA records corresponding to this subdomain are added to the parent domain's DNS zone.

➢ *To view the default records in the server-wide DNS template:*

Go to **Tools & Settings > DNS Template Settings**. All resource record templates will be displayed. The <ip> and <domain> templates are automatically replaced in the generated zone with real IP addresses and domain names.

➢ *To add a new resource record to the server-wide DNS template:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **Add DNS Record**.

3. Select the resource record type and specify the record properties as desired.

   Note that you can use <ip> and <domain> templates that will be replaced in the generated zone with real IP addresses and domain names. You can use a wildcard symbol (*) to specify any part of the domain name, and you can specify the exact values you need.

4. Click **OK**.

➢ *To remove a resource record from the server-wide DNS template:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Select a checkbox corresponding to the record template you wish to remove, and click **Remove**.

3. Confirm removal and click **OK**.

The Panel updates automatically the zone name, host name, administrator's e-mail address, and serial number, and writes the default values for the rest of Start of Authority record parameters to the zone files it maintains. If you are not satisfied with the default values, you can change them through the control panel.

➢ *To change the Start of Authority (SOA) record settings in the server-wide DNS template:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **SOA Records Template**.

3. Specify the desired values:

   ▪ **TTL**. This is the amount of time that other DNS servers should store the record in a cache. The Panel sets the default value of one day.

   ▪ **Refresh**. This is how often the secondary name servers check with the primary name server to see if any changes have been made to the domain's zone file. The Panel sets the default value of three hours.

   ▪ **Retry**. This is the time a secondary server waits before retrying a failed zone transfer. This time is typically less than the refresh interval. The Panel sets the default value of one hour.

   ▪ **Expire**. This is the time before a secondary server stops responding to queries, after a lapsed refresh interval where the zone was not refreshed or updated. The Panel sets the default value of one week.

   ▪ **Minimum**. This is the time a secondary server should cache a negative response. The Panel sets the default value of three hours.

4. Click **OK**. The new SOA record parameters will be set for the newly created domains.

Usage of serial number format recommended by IETF and RIPE is mandatory for many domains registered in some high-level DNS zones, mostly European ones. If your domain is registered in one of these zones and your registrar refuses your SOA serial number, using serial number format recommended by IETF and RIPE should resolve this issue.

Parallels Plesk Panel servers use UNIX timestamp syntax for configuring DNS zones. UNIX timestamp is the number of seconds since January 1, 1970 (Unix Epoch). The 32-bit timestamp will overflow by July 8, 2038.

RIPE recommends using YYYYMMDDNN format, where YYYY is year (four digits), MM is month (two digits), DD is day of month (two digits) and NN is version per day (two digits). The YYYYMMDDNN format will not overflow until the year 4294.

➢ *To change the Start of Authority (SOA) serial number format to YYYYMMDDNN for the server-wide DNS template:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **SOA Records Template**.

3. Select the **Use serial number format recommended by IETF and RIPE** checkbox.

> **Note:** See the sample of SOA serial number generated with the selected format. If the resulting number is less, than the current zone number, the modification may cause temporary malfunction of DNS for this domain. Zone updates may be invisible to Internet users for some time.

4. Click **OK**.

> ➤ *To restore the default Start of Authority (SOA) serial number format (UNIX timestamp) for the server-wide DNS template:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **SOA Records Template**.

3. Clear the **Use serial number format recommended by IETF and RIPE** checkbox.

> **Note:** See the sample of SOA serial number generated with the selected format. If the resulting number is less, than the current zone number, the modification may cause temporary malfunction of DNS for this domain. Zone updates may be invisible to Internet users for some time.

4. Click **OK**.

By default, transfer of DNS zones is allowed only for name servers designated by NS records contained within each zone. If your domain name registrar requires that you allow transfer for all zones you serve:

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **Transfer Restrictions Template**. A screen will show all hosts to which DNS zone transfers for all zones are allowed.

3. Click **Add New Address**.

4. Specify the registrar's IP or network address and click **OK**.

> ➤ *If you are using third-party DNS servers, and are not running your own DNS server, you should switch off your control panel's DNS server:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **Switch Off**.

> ➤ *To restore the original configuration of server-wide DNS template:*

1. Go to **Tools & Settings > DNS Template Settings**.

2. Click **Restore Defaults**.

You can specify whether your DNS server should provide recursive service for queries.

With recursive service allowed, your DNS server, when queried, performs all the lookup procedures required to find the destination IP address for the requestor. When recursive service is not allowed, your DNS server performs minimal number of queries only to find a server that knows where the requested resource resides and to redirect the requestor to that server. Therefore, recursive service consumes more server resources and makes your server susceptible to denial-of-service attacks, especially when the server is set to serve recursive queries from clients outside your network.

After your install Parallels Plesk Panel, the built-in DNS server defaults to serving recursive queries only from your own server and from other servers located in your network. This is the optimal setting. If your upgraded from earlier versions of Parallels Plesk Panel, your DNS server defaults to serving recursive queries from any host.

➢ *If you want to change the settings for recursive domain name service:*

1. Go to **Tools & Settings > DNS Template Settings > DNS Recursion**.

2. Select the option you need:

   ▪ To allow recursive queries from all hosts, select **Allow for all requests**.

   ▪ To allow recursive queries from your own server and hosts from your network, select **Allow for local requests only**.

   ▪ To allow recursive queries only from your own server, select **Deny**.

3. Click **OK**.

By default, users can create new subdomains and domain aliases in the DNS zones belonging to other users. This means that they can set up websites and e-mail accounts which could be used for spamming, fishing or identity theft.

➢ *To prevent users from setting up domains and domain aliases in the DNS zones belonging to other users:*

1. Go to **Tools & Settings** > **Server Settings**.

2. Select the **Do not let users create DNS subzones in other users' DNS superzones** checkbox.

3. Click **OK**.

➢ *If you need to assign a new host name to your server:*

1. Go to **Tools & Settings** > **Server Settings**.

2. In the **Full host name** box, type the new host name and click **OK**.

Databases

You can host users' databases either on a single server or on a number of different servers. Having the user databases on a remote server can be useful in multi-server installations, where centralized database hosting can be preferable for administration, backup, and resource utilization. However, if you have a single Parallels Plesk Panel server, you are advised to keep all databases on it.

➢ *To use remote database servers with your hosting server, you need to:*

1. Set up a remote database server:

    a. Install MySQL, PostgreSQL, or Microsoft SQL software.

    b. Set up database administrator's account.

    c. Enable network access to the database server.

2. Configure Parallels Plesk Panel for working with your remote database server.

In this section:

Adding Database Servers

After you have set up the required remote database server, you need to register this database server in the Panel.

➢ *To register a database server with the Panel:*

1. Log in to Parallels Plesk Panel.

2. Go to **Tools & Settings** > **Database Servers**, and click **Add Database Server**.

3. Specify the properties of the database server:

▪ Specify database server engine in the **Database server type** box. The list contains database engines which are supported by your license key. You can check what components are supported on the **Tools & Settings > License Management** page.

> **Note:** To use Microsoft SQL Server with Panel, you need to obtain Parallels Plesk Panel Power Pack.

Note that before using a database server engine you should install it in **Tools & Settings > Updates and Upgrades > Add/Remove Components**, unless it was installed with Panel.

▪ Specify hostname or IP address of the database server.

▪ Specify the port number the database server is listening on. This option is available only for MySQL. By default, MySQL servers listen on port 3306. You can leave the **Port number** box blank, if your MySQL database server is listening on the default port.

> **Note:** Do not enter the value for MySQL server port equal to 8306, because it is used by Parallels Plesk Panel for communication with its internal database.

▪ Specify which database type is running on the database server.

▪ To make this database server default for hosting customers' databases, select the **Use this server as default for MySQL** checkbox. If you have a MS SQL database server, select the checkbox **Use this server as default for MS SQL** labeled.

▪ Specify the database server administrator's login name and password.

4. Click **OK**.

➢ *To set up database hosting preferences that will affect all databases created through Parallels Plesk Panel:*

1. Go to **Tools & Settings** > **Database Hosting Preferences** (in the **Databases** group).

2. To simplify maintenance of customers' databases, select the **Add user's login name and underscore to beginning of database names** checkbox. All names of newly created databases will look like username_database name. This will allow you to locate databases related to a particular Parallels Plesk Panel user. Note that even if you do not select this checkbox, on creation of a new database, Parallels Plesk Panel will add a username to the database name input box, and you will be able to edit it or remove it.

3. You can also set up the Panel to add usernames to corresponding database user names, further simplifying the maintenance of customers' databases. To do so, select the **Add user's login name and underscore to the beginning of database user names** checkbox. All names of newly created database users will look like username_database user name. This will allow you to locate database users related to a particular Parallels Plesk Panel user.

4. Specify whether creation of databases is allowed on your Parallels Plesk Panel server. Some applications do not support remote databases and can work only with databases hosted on the same server. We recommend leaving the default option **Allow local hosting of databases for these web applications** selected, otherwise, you will not be able to use such applications.

5. Click **OK**.

If you want to back up databases hosted on a remote MS SQL Database Server you set up earlier, you need to configure the backup settings for that MS SQL Database Server.

> ➤ *To configure backup settings for a remote MS SQL Database Server:*

1. Go to **Tools & Settings** > **Database Servers** and click the required remote MS SQL Database Server name.

2. Specify the temporary directory for the remote MS SQL Database Server in the **Temporary network directory** field.

   This directory can be located anywhere in your network and it is required for backing up and restoring MS SQL databases. This directory must be accessible over the network by both the Parallels Plesk Panel server and the MS SQL server: both the Panel and the user that is running remote MS SQL database server must have read/write access to this directory.

3. Specify username and password required for accessing the temporary network directory.

4. Click **OK**.

Connecting to External Databases (Windows)

If you want your users to access the data from an external database management system, you should use Open Database Connectivity (ODBC) drivers. For example, you can install a Microsoft Access ODBC driver, creating a connection to external Microsoft Access database, and let web applications use this database for storing their data.

> ➢ *To install a new ODBC driver, creating a connection to an external database:*

1. Go to **Tools & Settings** > **ODBC Data Sources**.

2. Click **Add New ODBC DSN**.

3. Specify the ODBC connection name and description in the corresponding fields.

4. Select the required driver in the **Driver** field.

5. Click **OK**.

6. Choose the appropriate options on the driver configuration screen. Typically, you should specify the path to the database, user credentials and other connection options, depending on the selected driver.

7. Click **Test** to check whether the connection will function properly with provided settings. Click **Finish** to complete the creation.

> ➢ *To change settings of an existing ODBC connection:*

1. Go to **Tools & Settings** > **ODBC Data Sources**.

2. Click the required connection name in the list.

3. Change the settings as needed.

Click **Test** to check whether the connection will function properly with new settings. Click **Finish** to save changes.

> ➢ *To remove a redundant ODBC connection:*

1. Go to **Tools & Settings** > **ODBC Data Sources**.

2. Select a checkbox corresponding to the connection you want to remove.

3. Click **Remove**, confirm the removal and click **OK**.

Statistics and Miscellaneous Options

After installation, Parallels Plesk Panel's statistics utility is set up to:

- Count the inbound and outbound traffic.
- Count the disk space occupied by web content, log files, databases, mailboxes, web applications, mailing list archives, and backup files.
- Keep the web statistics and traffic statistics gathered by Webalizer or AWstats programs only for the last three months.

You can configure these settings at **Tools & Settings** > **Server Settings**.

Miscellaneous Options

In addition to the settings related to statistics, this screen provides the following options:

- *Rename your server's host name.*

- *Allow or forbid users to create new subdomains and domain aliases in the DNS zones belonging to other users.*
  When a customer creates a domain, they can specify not only the second-level domain names, say, *example.com* but also third- and lower levels of domain names, for example, *doc.example.com*. When a customer creates *doc.example.com* and the original domain name, *example.com*, was created by another customer, the system will not allow to create such a subdomain if the corresponding option is selected. We recommend that you select this checkbox, otherwise, users will be able to create fake subdomains and set up websites and e-mail accounts which could be used for spamming or even phishing or identity theft.

- *(Only for Windows) Include customer password in files which keep WebMatrix® publishing settings.*
  Customers have the option to write code of their websites in WebMatrix® (the development tool) and publish the code directly to their customer accounts through a special protocol called Web Deploy. To set up a connection to their accounts, the customers should specify publishing settings in WebMatrix®. Panel helps such customers by generating the XML file their can provide instead of filling in all the settings. The customer account password along with any other settings is included into this XML file. If you wish to improve the security of your system and prevent stealing the passwords, you can exclude the password from the XML file. The customers then will have to enter the password directly in WebMatrix®. Read more about WebMatrix® in **Web Publishing with Web Deploy (Windows)** (see page 598).

  Note: You can change this option programmatically. For details on how to do it, see http://download1.parallels.com/Plesk/PP11/11.0/Doc/en-US/online/plesk-win-cli/60982.htm

For instruction on viewing statistics, refer to the chapter **Viewing Statistics** (on page 331).

Configuring the Try and Buy Mode for Web Presence Builder

If you have Parallels Panel with Web Presence Builder and Business Manager, you can tune your system to offer Web Presence Builder in the *Try and Buy* (or *trial*) mode. This mode lets everyone evaluate the editor and create websites for free. However, to acquire such websites, a site owner will need to subscribe to your hosting plan or purchase a plan add-on.

Note: If you use some other billing solution instead of Business Manager, you can use the Try and Buy mode as well. Learn more in the section **Offering the Try and Buy with Alternative Billing Solutions (on page 104).**

How the Try and Buy Mode Works

The Try and Buy mode is aimed at customers who wish to create their own sites but have little or no programming skill. Panel helps such customers by giving them full access to Web Presence Builder functions to create sites at no charge. To claim the created sites the customers subscribe to a hosting plan in Panel or upgrade the existing one. The more people you attract by this promotion, the more hosting subscriptions with Web Presence Builder you will have.

The Try and Buy mode targets two different groups:

- Existing customers who want to have a website but are unable to launch Web Presence Builder due to various limitations. For example, their hosting plan does not provide this option, or they have exceeded the number of sites to publish. By using the Try and Buy, you can upsell Web Presence Builder to these customers. Learn more in the section **Configuring the Try and Buy for Existing Customers** (on page 98).
- New customers who have created a trial site and now want to claim it with a new hosting plan. Learn how to configure the Try and Buy mode for such customers in the section **Configuring the Try and Buy for Potential Customers** (on page 99).

➢ *The scenario for upselling to existing customers works this way:*

1. Links to launch Web Presence Builder become available to such customers on a number of pages in Control Panel. The customers see the links and click them.
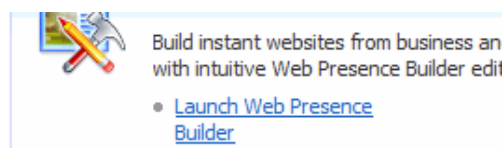
2. Panel forwards these customers to Web Presence Builder where they create trial sites.
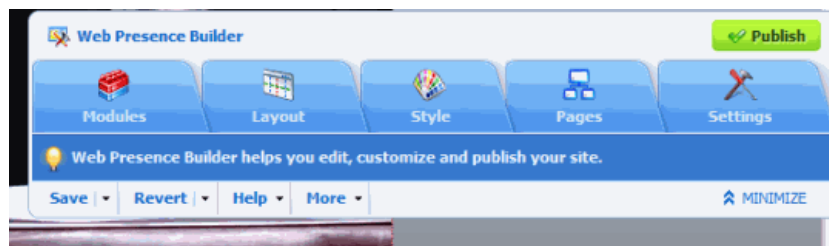
3. When the site is ready and the customers click Publish, they are prompted to upgrade their subscription.
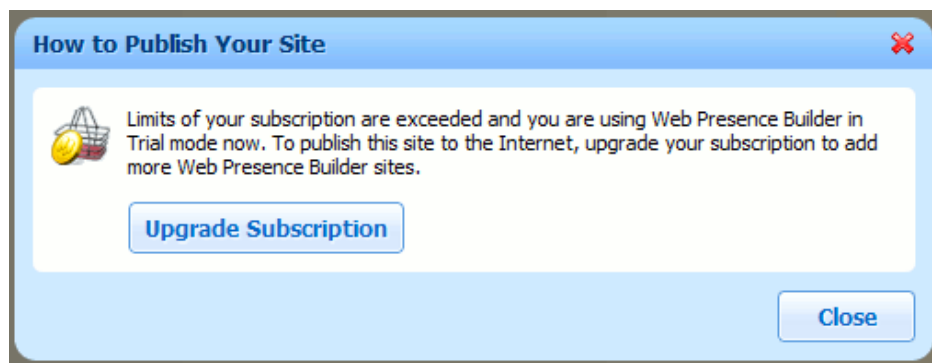
4. If the upgrade is successfully completed, the site can be published to the upgraded hosting account.

> ➢ *The scenario for selling hosting with Web Presence Builder to potential customers is as follows:*

1. You enable public access to the Web Presence Builder trial mode in Panel by selecting the corresponding checkbox in the **Server Administration Panel > Tools & Settings > Try and Buy Mode Settings**. If this mode is activated, everyone who follows a special promotional link is able to create a trial site.

2. You obtain the promotional link from the Panel GUI and put this link on your website so that potential customers can access it.

3. When the customers click the link, they are forwarded to Web Presence Builder where they create trial sites. The editor interface is identical to the one that appears in step 2.

4. As soon as the site is ready, the customers click Publish, and Panel requests them to buy a hosting plan.
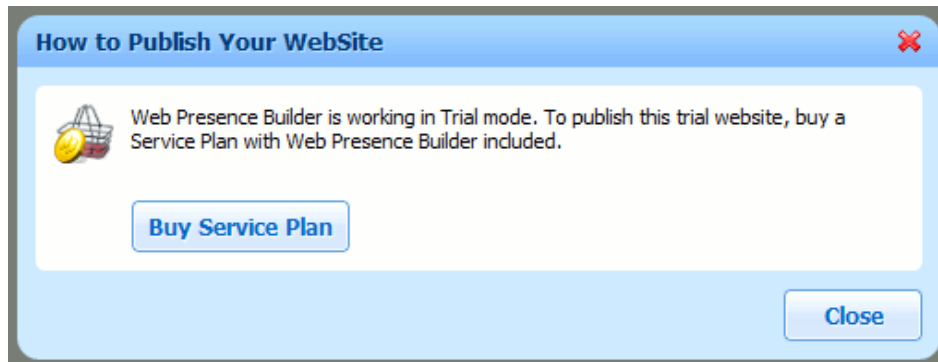
5. The customers subscribe to a new plan and are free to publish the site.

Note: All notifications that customers receive while using the Try and Buy mode can be customized. Learn more in the section **Customizing Trial Mode Notifications** (on page 101).

In this section:

Configuring the Try and Buy for Existing Customers

Use the Try and Buy mode if you want your existing customers to create trial sites even if Web Presence Builder is not provided with their license or they have exceeded the number of sites they can publish.

To configure the mode, update the settings of your hosting plans. To do that, open the settings and select the item **Allow customer to create trial Web Presence Builder websites**. After you update the plan settings, customers are able to launch Web Presence Builder by clicking the corresponding link in the Control Panel.

This feature is controlled on a per plan basis, so you can offer the Try and Buy mode only for certain plans. If you deselect this item, your customers will still see the buttons to launch Web Presence Builder but they will not be able to actually launch it unless their plan includes Web Presence Builder support.

Note: If the hosting plans you want to change are imported from Business Manager and you want to keep them synced, go to the properties of corresponding plans in Business Manager, make sure that the item **Allow up-selling Web Presence Builder sites** is selected, and send changes to Panel by clicking **Events** > **Run Events**.

For details on how to edit hosting plan properties in Business Manager, see the section **Setting Up Hosting Plans in Business Manager** (on page 231).

Configuring the Try and Buy for Potential Customers

Acquire potential hosting customers with Web Presence Builder by giving them a link to Web Presence Builder in the Try and Buy mode. After your customers follow this link, create a site, and try to publish it, Panel forwards them to the default online store of Business Manager. In the store, customers choose a plan with Web Presence Builder and subscribe to it. The subscription automatically includes the newly created site. On completing the billing and subscription setup routines, the customers become owners of the site and can publish it. You are free to block access to the trial mode URL thus make Web Presence Builder unavailable.

➢ *To offer the Try and Buy mode to potential customers, do the following:*

1. Prepare the default online store in Business Manager to display Web Presence Builder-compatible plans.

   This step requires a cosmetic update: Make sure that all plans available to potential customers include at least one Web Presence Builder site. By default, customers see the plans from the default online store. For each of these plans, go to plan properties and check that the value of item **Sites published with Web Presence Builder** is not 0. If a plan includes 0 sites, your customers will not be able to publish them after subscribing to such a plan.

   For details on how to edit hosting plan properties in Business Manager, see the section **Setting Up Hosting Plans in Business Manager** (on page 231).

2. Enable the Try and Buy in the Server Administration Panel.

   This allows customers to launch Web Presence Builder by following the trial mode access URL. In the Server Administration Panel, go to **Tools & Settings** > **Try and Buy Mode Settings**, and ensure that the **Enable public access to trial mode** checkbox is selected.

3. Obtain the trial mode access URL and put it on your website to advertise hosting with Web Presence Builder and attract customers.

   The trial mode access URL is also available on the Web Presence Builder settings page.

4. (Optionally) Configure lifetime of trial sites.

   On the same page you can optionally specify how often to remove unclaimed sites.

5. (Optionally) Forward customers to a separate online store. This is relevant when you want to display a separate list of plans to potential customers who want hosting with Web Presence Builder.

    If you wish to have a separate store for the trial offering, extend the trial mode access URL with a store ID to point to a particular store. The syntax of the new URL is: *<existing URL>*&storeId=*<custom store ID>.* To control the plans list view, independently add a widget ID to the URL. The syntax of the new URL is: *<existing URL>*&widgetId=*<custom widget ID>.*

   Note: The store and widget IDs must exist in Business Manager.

   Learn how to create online stores in the section **Adding an Online Store** (on page 193).

   Learn how to create and manage website widgets in the section **Using Website Widgets to Embed Stores into Websites (on page 194).**

Once you complete these steps, your potential customers will be able to create trial sites and acquire them. To block this feature, deselect access to the Try and Buy mode on the mode settings page.

Customizing Trial Mode Notifications

The Web Presence Builder settings (**Tools & Settings** > **Try and Buy Mode Settings**) let you either display the Try and Buy mode notification to customers or hide it. The notification is displayed in a bar at the top of the editor page. This section explains how to change the notification text or add some extra information to the notification. By default, Web Presence Builder in trial mode uses messages from the `tbbMessagesDefault.lng` file of the used locale.

➢ *To customize notifications displayed to your customers by Web Presence Builder in trial mode:*

1. Go to the `/usr/local/sb/resources/locale/<locale_name>` directory on Linux operating systems, or to `C:\Parallels\Plesk\sb\resources\locale\<locale_name>` directory on Windows operating systems.

   <locale_name> is the name of the locale for which you change the notifications. For example, the default English locale name is `en_US`.

2. Copy the `tbbMessagesDefault.lng` and rename it to `tbbMessagesCustom.lng`.

   When the `tbbMessagesCustom.lng` file exists, Web Presence Builder uses it instead of `tbbMessagesDefault.lng`.

3. Edit messages in the `tbbMessagesCustom.lng` file.

You can edit the following messages:

Message Keyword in Locale	Message Description
startUpsellLimitExceedingTitle	Title of the dialog window shown on Web Presence Builder start page to a customer who has exceeded the limit on the websites published with Web Presence Builder.
startUpsellLimitExceedingBody	Body of the dialog window shown on Web Presence Builder start page to a customer who has exceeded the limit on websites published with Web Presence Builder.
startUpsellNoSitesTitle	Title of the dialog window shown on Web Presence Builder start page to a customer whose subscription does not include Web Presence Builder.
startUpsellNoSitesBody	Body of the dialog window shown on Web Presence Builder start page to a customer whose subscription does not include Web Presence Builder.
editorTopMessageTrialSite	"Call to action" bar message at the top of Web Presence Builder Editor shown to a new customer who creates a trial site.

editorTopMessageUpsellLimit Exceeding	"Call to action" bar message for a trial site at the top of Web Presence Builder Editor shown to a customer who has exceeded the limit on the websites published with Web Presence Builder.
editorTopMessageUpsellNoSit es	"Call to action" bar message for a trial site at the top of Web Presence Builder Editor shown to a customer whose subscription does not include Web Presence Builder.
defaultPersonalName	Default name of the customer shown on Web Presence Builder start page to existing customers.
initialMailSubject	Subject of website creation e-mail confirmation sent to a new customer.
initialMailHtml	Body of website creation e-mail confirmation sent to a new customer.
limitsExceededTitle	Title of the dialog window shown upon clicking the Publish button to a customer who has exceeded the limit on the websites published with Web Presence Builder.
limitsExceededMsg	Body of the dialog window shown upon clicking the Publish button to a customer who has exceeded the limit on the websites published with Web Presence Builder.
firstSitePublishTitle	Title of the dialog window shown upon clicking the Publish button to a customer whose subscription does not include Web Presence Builder.
firstSitePublishMsg	Body of the dialog window shown upon clicking the Publish button to a customer whose subscription does not include Web Presence Builder.
licenseExceededMsg	Error message shown in the Status bar upon clicking the Publish button to a customer when the number of Web Presence Builder websites allowed by the Panel license has been reached.
trialSiteSignUpPublishTitle	Title of the dialog window shown upon clicking the Publish button to a new customer who creates a trial site.
trialSiteSignUpPublishMsg	Body of the dialog window shown upon clicking the Publish button to a new customer who creates a trial site.
trialFeatureDisabled	Error message shown in the Status bar when a new customer tries to verify ownership in the settings of a trial site.

You can use the following placeholders in Web Presence Builder trial mode notifications:

- ppServerId - unique ID of Parallels Plesk Panel server;
- billingSignUpEntryPoint - entry point to Business Manager for new customers;
- billingUpSellEntryPoint - entry point to Business Manager for existing customers;
- subscriptionId - unique ID of the user subscription;
- sbSiteUuid - unique ID of a website in Web Presence Builder;
- sbOneTimeBackUrl - link Web Presence Builder that can be used only once;
- locale - locale name;
- trialSiteLifeTime - time that passes before trial websites that were not purchased by customers are removed from the server;
- trialSiteExpireDate - expiration date of trial websites;
- trialSiteUrl - link to trial website;
- siteOwnerName - name of the user owning the website;
- siteOwnerCompanyName - user's company name;
- siteOwnerEmail - user's e-mail;
- siteOwnerPhone - user's phone number;
- siteOwnerAddress - user's address;
- siteOwnerCity - user's city;
- siteOwnerCountry - user's country;
- queryString - an additional query string passed to trial mode access URL;
- helpUrl - link to Web Presence Builder documentation;
- sbHttpHost - Web Presence Builder host name.

When using placeholders in messages, use the following placeholder markers:

- &placeholder_name& - when you use a placeholder inside a hyperlink;
- @placeholder_name@ - when you use a placeholder inside a JavaScript code;
- %placeholder_name% - when you use a placeholder in plain text.

Offering the Try and Buy with Alternative Billing Solutions

If you wish to offer the Try and Buy mode for Panel with Web Presence Builder and a custom billing solution, you should also carry out the following operations:

1. Forward customers from Web Presence Builder to a custom store and save details about created sites.

   When a customer clicks to purchase a site, Web Presence Builder sends an HTTP POST request to a billing entry point. This request contains information about the customer and the created site. Business Manager (billing engine) uses this information to associate the site with the customer's hosting account. To shift to a custom billing engine, you should change the billing entry point URL and extend your billing engine logic to save the POST parameters that come to the URL.

2. Ensure that customers purchase a hosting plan or add-on.

   This solely depends on the billing system and *is beyond the scope of the CAS integration*.

3. (For new customers only) Create a customer account, a subscription, and a site in Panel.

4. Associate the site created in Web Presence Builder with an appropriate site in Panel.

This appendix explains how to complete operations 1, 3, and 4.

How to forward customers to a custom entry point

By default, the store entry point URL points to Business Manager. This URL is stored in two placeholders (*billingSignUpEntryPoint* and *billingUpSellEntryPoint*) in file `tbbMessagesDefault.lng`. The location of this file depends on a Panel installation directory (we assume that you use the default one), server OS and architecture. Find the file in one of the following directories:

- (On Microsoft Windows) `C:\Program Files\Parallels\sb\resources\locale\en_US` or `C:\Program Files (x86)\Parallels\sb\resources\locale\en_US` depending on the server architecture.
- (On RPM package-based Linux) `/usr/local/sb/resources/locale/en_US`
- (On DEB package-based Linux) `/opt/sb/resources/locale/en_US`

To customize the entry point URL, you should create a copy of the `tbbMessagesDefault.lng.` file, name it `tbbMessagesCustom.lng`, and modify the settings in the latter file.

Note: We assume that you change the entry point for a store in the `en_US` locale. To change the entry point for other locales, create and modify the `tbbMessagesCustom.lng` file in the respective directories that are on the same level with `en_US`.

To change the entry point URL, substitute all occurrences of the placeholders *billingSignUpEntryPoint* and *billingUpSellEntryPoint* with the URL you need and remove leading and trailing "@" and "%" symbols in all occurrences of the placeholders in the file. For example, if the new entry point URL is http://www.example.com, you should change, say, @*billingUpSellEntryPoint*@ to http://www.example.com.

What parameters to save

The billing entry point receives POST requests that contain information about customers and trial sites they have created. Although the requests contain a number of parameters, you need to save only one - *sbSiteUuid*. This is the unique identifier of the created site. To move the site to the customer's hosting account, you should associate the parameter with an appropriate site in Panel.

How to create a customer account, a subscription, and a site

To create these three objects, use API RPC - the protocol to create and manage Panel objects remotely. First, you should create a customer account and save the resulting ID. Then, create a subscription with the *owner-id* (in add/gen_setup) set to the customer ID. Finally, create a site with the *webspace-id* (in add/gen_setup) set to the subscription ID. Each of these three operations is presented by a packet you send to Panel.

If you wish to quickly get started with sending API RPC packets, read **API RPC Manual**. It contains the chapter **Client Code Samples** that describes how you can implement your own packet sender by using samples of client applications (PHP, C#, VB.NET).

Find samples of the packets in **API RPC Manual**, sections:

- **Supported Operations** > **Managing Customer Accounts** > **Creating Customer Accounts** > **Request Samples**

- **Supported Operations** > **Managing Subscriptions (Webspaces)** > **Creating a Subscription (Webspace)** > **Request Samples**

- **Supported Operations** > **Managing Sites (Domains)** > **Creating a Site** > **Request Samples**

How to associate a site created in Web Presence Builder with a Panel site

An association between a Web Presence Builder site and Panel site is also achieved through API RPC. One of the protocol calls turns a trial site into a regular site and associates it with a Panel site. This association means that when a customer clicks **Edit in Web Presence Builder**, their previously created site is displayed. This operation requires two parameters - the GUID of a Panel site and *sbSiteUuid* that you previously received.

The protocol call (or packet) to associate Web Presence Builder and Panel sites is found in **API RPC Manual**, section **Supported Operations** > **Managing Integration With Web Presence Builder** > **Assigning a Trial Site** > **Request Samples**. This section contains call samples that you can reuse with your own values. Details on how to find a site GUID are also included in the reference document, section **Supported Operations** > **Managing Sites (Domains)** > **Getting Information About Sites** > **Request Samples**.

What to do next

After you have successfully achieved the basic integration, you can extend your application to work with existing customers as well. This involves you showing them the options of upgrading their current subscription with Web Presence Builder support (existing customers are forwarded to *billingUpSellEntryPoint*, while new customers go to *billingSignUpEntryPoint*) rather than creating new subscriptions.

You can also personalize the store interface by using parameters received from Web Presence Builder. For example, you can adjust the store locale based on customers' personal data, or use the data in messages displayed to customers.

Extended Panel Configuration

In this section:

Securing Panel

In this section:

Restricting Administrative Access

To alleviate security concerns, you may want to restrict administrative access to your control panel from specific IP addresses.

> ➢ *To allow administrative access to the Panel only from specific IP addresses or networks:*

1. Go to **Tools & Settings** > **Restrict Administrative Access** (in the **Security** group).

2. Click **Add New Network** and specify the required IP addresses. Click **OK**.

   To specify subnets, you can use wildcard symbols (*) and subnet masks.

3. Select the **Denied from the networks that are not listed** option, and click **Set**. When prompted to confirm the operation, click **OK**.

> ➢ *To prohibit administrative access from specific IP addresses or networks:*

1. Go to **Tools & Settings** > **Restrict Administrative Access** (in the **Security** group).

2. Click **Add New Network** and specify an IP address. Click **OK**.

   To specify subnets, you can use wildcard symbols (*) and subnet masks.

3. Select the **Allowed, excluding the networks in the list** option, and click **Set**. When prompted to confirm the operation, click **OK**.

Setting Up the Minimum Password Strength

In order to improve Panel security, you can set the minimum password strength (in **Tools & Settings** > **Password Security** > **Password strength**) for all passwords in the system. Password strength is a measure of how effectively a password is resistant to various types of attacks. Generally, the strength of a password depends on its complexity and overall length.

When any Panel user (the administrator, a customer, reseller, or auxiliary user) sets a new password in Panel (for example, creates a new mail account or changes the password of an FTP user), they are required to adjust the password until it meets the minimum password strength. Note that if you increase the minimum strength, already existing passwords will not be affected by new requirements.

We recommend that you force your users to employ stronger passwords, though, note that such passwords are harder to remember.

Panel distinguishes five levels of the password strength which allow you to get the right balance between required protection and password complexity: **Very weak**, **Weak**, **Medium**, **Strong**, and **Very strong**.

Turning On the Enhanced Security Mode

The enhanced security mode introduces advanced protection of sensitive data in Panel. In this mode, Panel employs multiple security mechanisms to protect the data from unauthorized access. In order to improve Panel security, we recommend that you turn the mode on.

This security measure is absolutely transparent to all Panel users: Turning the mode on does not imply any significant changes in the Panel behavior. The only consequences you should be warned about are the following:

- *Remote API compatibility*.
  Once you turn on the mode, it will be impossible to obtain sensitive data (for example, user passwords) using the Panel's remote API. This may affect third-party apps or your custom scripts that use corresponding API RPC functions. Therefore, if you (or your customers) employ such apps, contact the corresponding vendors to ensure they provide the full support for Panel 11.

- *Password reminders behavior*.
  A password will no longer be sent by e-mail in case a user forgets it. Instead, the e-mail will contain a link to a page where the user will be able to change the password.

Turning On the Mode

If you have a clean installation of Panel 11, the enhanced security mode is turned on by default.

If you upgraded to Panel 11 from earlier versions, you can turn on the mode in **Tools & Settings > Security Policy**. Note that this is an irrevocable operation.

Note: If you use Parallels Business Automation Standard (PBAs) as an accompanying billing solution, the enhanced security mode should be turned on.

SSL Protection

In this section:

Getting SSL Certificates

For security reasons, you can access your control panel only through a secure connection provided by Secure Sockets Layer-enabled hypertext transfer protocol. All data you exchange with the Parallels Plesk Panel-managed server are encrypted, thus preventing interception of sensitive information. The SSL certificate used in the data encryption process is automatically generated and installed on the server during installation of the control panel. This is the so-called self-signed certificate: it is not signed by a recognized certification authority (CA), therefore, upon attempt to connect to your control panel, you and your customers will see warning messages in web browsers.

To gain customer confidence, you should purchase an SSL certificate from a reputable certification authority, and install it to the control panel.

You can either:

- use the functions for purchasing SSL certificates from Comodo, GeoTrust, Inc. or GoDaddy provided by your control panel,
  OR
- create a certificate signing request (CSR) from the control panel and submit it to the certification authority of your choice, which will create an SSL certificate for you.

Note: If you are going to use the control panel's facilities for purchasing a certificate through MyPlesk.com online store, you should not use command line tools for creating the certificate signing request.

➢ *To purchase an SSL certificate from Comodo, GeoTrust, Inc. or GoDaddy through MyPleskCom online store and secure your control panel:*

1. Go to **Tools & Settings** > **SSL Certificates** (in the **Resources** group). A list of SSL certificates that you have in your repository will be displayed.

2. Click **Add SSL Certificate**.

3. Specify the certificate properties:
   - Certificate name. This will help you identify this certificate in the repository.
   - Encryption level. Choose the encryption level of your SSL certificate. We recommend that you choose a value more than 1024 bit.
   - Specify your location and organization name. The values you enter should not exceed the length of 64 symbols.
   - Specify the host name for which you wish to purchase an SSL certificate. For example: your-domain.com
   - Enter your e-mail address.

4. Make sure that all the provided information is correct and accurate, as it will be used to generate your private key.

5. Click **Buy SSL Certificate**.

   Your private key and certificate signing request will be generated. Do not delete them. MyPlesk.com login page will open in a new browser window.

6. Register or log in to an existing MyPlesk.com account and you will be taken step by step through the certificate purchase procedure.

7. Choose the type of certificate that you wish to purchase.

8. Click **Proceed to Buy** and order the certificate. In the Approver E-Mail drop-down box, please select the correct Approver e-mail.

The approver e-mail is an e-mail address that can confirm that certificate for specific domain name was requested by an authorized person.

9. Once your certificate request is processed, you will be sent a confirmation e-mail. After you confirm, the certificate will be sent to your e-mail.

10. When you receive your SSL certificate, save it on your local machine or network.

11. Return to the SSL Certificates repository (**Tools & Settings** > **SSL Certificates**).

12. Click **Browse** in the middle of the page and navigate to the location of the saved certificate. Select it, and then click **Send File.** This will upload the certificate to the repository.

13. Select the checkbox corresponding to the certificate you just added, and click **Secure the Panel**.

➢ *To secure your control panel with an SSL certificate from other certificate authorities:*

1. Go to **Tools & Settings** > **SSL Certificates** (in the **Resources** group). A list of SSL certificates that you have in your repository will be displayed.

2. Click **Add SSL Certificate**.

3. Specify the certificate properties:

- Certificate name. This will help you identify this certificate in the repository.

- Encryption level. Choose the encryption level of your SSL certificate. We recommend that you choose a value more than 1024 bit.

- Specify your location and organization name. The values you enter should not exceed the length of 64 symbols.

- Specify the host name for which you wish to purchase an SSL certificate. For example: your-domain.com

- Enter your e-mail address.

4. Make sure that all the provided information is correct and accurate, as it will be used to generate your private key.

5. Click **Request**. Your private key and certificate signing request will be generated and stored in the repository.

6. In the list of certificates, click the name of the certificate you need. A page showing the certificate properties opens.

7. Locate the **CSR section** on the page, and copy the text that starts with the line **-----BEGIN CERTIFICATE REQUEST-----** and ends with the line **-----END CERTIFICATE REQUEST-----** to the clipboard.

8. Visit the website of the certification authority from which you want to purchase an SSL certificate, and follow the links on their site to start a certificate ordering procedure. When you are prompted to specify CSR text, paste the data from the clipboard into the online form and click **Continue**. The certification authority will create an SSL certificate in accordance with the information you supplied.

9. When you receive your SSL certificate, save it on your local machine or network.

10. Return to the SSL Certificates repository (**Tools & Settings** > **SSL Certificates**).

11. Click **Browse** in the middle of the page and navigate to the location of the saved certificate. Select it, and then click **Send File.** This will upload the certificate to the repository.

12. Select the checkbox corresponding to the certificate you just added, and click **Secure the Panel**.

> ➤ *In case you need to generate a self-signed certificate, follow this procedure:*

1. Go to **Tools & Settings** > **SSL Certificates** (in the **Resources** group). A list of SSL certificates that you have in your repository will be displayed.

2. Click **Add SSL Certificate**.

3. Specify the certificate properties:

   ▪ Certificate name. This will help you identify this certificate in the repository.

   ▪ Encryption level. Choose the encryption level of your SSL certificate. We recommend that you choose a value more than 1024 bit.

   ▪ Specify your location and organization name. The values you enter should not exceed the length of 64 symbols.

   ▪ Specify the host name for which you wish to purchase an SSL certificate. For example: your-domain.com

   ▪ Enter your e-mail address.

4. Click the **Self-Signed** button. Your certificate will be generated and stored in the repository.

SSL and Shared IP Addresses (Linux)

Parallels Plesk Panel for Linux supports the Server Name Indication (SNI) extension to the Transport Layer Security protocol, which makes it possible to use authentic SSL certificates for sites hosted on shared IP addresses.

SNI helps to efficiently use IPv4 resources and provides the following benefits:

- Providers can run any number of SSL sites with independent certificates on a single IPv4 address.
- Hosting customers can install independent SSL certificates on each of their sites; therefore, there is no need to purchase another subscription. Each customer can install an SSL certificate even if there only one shared IP address on the whole server.

To see the list operating systems that support SNI, see the release notes.

SSL support with SNI on shared IP addresses requires that users' browsers also support SNI. Most modern web browsers, such as IE 7, Firefox 2.0, Opera 8.0, and Chrome support it, unless they are run on Windows XP. To learn more about SNI and client software that supports it, refer to http://en.wikipedia.org/wiki/Server_Name_Indication.

Note that in cases when SNI is not supported, assigning an SSL certificate to a site hosted on a shared IP address will associate that certificate with all other sites hosted on the same IP address.

For instructions on assigning SSL certificates to websites, refer to **Control Panel User's Guide**, section **Securing Connections to Websites with SSL**.

SSL and Shared IP addresses (Windows)

On Windows-based installations, you can secure access to a site with SSL for site owners without having them purchase their own SSL certificate. Websites that employ shared SSL are, in fact, using the certificate shared by another domain. The domain that shares its SSL certificate with others is called *master SSL domain*.

You can pick any website that belongs to you, switch on SSL support in web hosting settings, install a valid SSL certificate on that site, and make it act as a master SSL domain for all other websites hosted on the server. Or you can pick a website that belongs to one of your users (reseller or customer account), switch on SSL support in web hosting settings, install a valid SSL certificate on that site, and make it act as a master SSL domain for all websites of this user.

Once the master SSL domain is assigned, you or your customers need to add shared SSL links for each website that needs secure access.

> ### ➢ *To configure the master SSL domain and enable shared SSL on your server:*

1. Go to **Tools & Settings** > **Shared SSL** (in the **Resources** group).

2. Select the **Switch on shared SSL** checkbox.

3. Select the required website from the **Domain name** menu. Only websites that are hosted on your server and have SSL enabled are present in the list.

4. Click **OK**.

For information about adding shared SSL links for websites, refer to **Control Panel User's Guide**, section **Using SSL Certificate Shared by Another Website**.

> ➤ *To disable shared SSL on your server:*

1. Go to **Tools & Settings** > **Shared SSL** (in the **Resources** group).

2. Clear the **Switch on shared SSL** checkbox.

3. Click **OK**.

Configuring Panel in Different Network Environments

In this section:

Ports Used by Panel

This section provides information about setting up the firewall built into your panel so as to allow access to the Panel and its services.

The following is a list of ports and protocols used by Parallels Plesk Panel services.

Service name	Ports used by service
Administrative interface of Panel over HTTPS	TCP 8443
Administrative interface of Panel over HTTP	TCP 8880*
Samba (file sharing on Windows networks)	UDP 137, UDP 138, TCP 139, TCP 445
VPN service	UDP 1194
Web server	TCP 80, TCP 443
FTP server	TCP 21
SSH (secure shell) server	TCP 22
SMTP (mail sending) server	TCP 25, TCP 465
POP3 (mail retrieval) server	TCP 110, TCP 995
IMAP (mail retrieval) server	TCP 143, TCP 993
Mail password change service	TCP 106
MySQL server	TCP 3306

MS SQL server	TCP 1433
PostgreSQL server	TCP 5432
Licensing Server connections	TCP 5224
Domain name server	UDP 53, TCP 53
Panel upgrades and updates	TCP 8447

* **Warning:** If you use Web Presence Builder, do not block inbound connections to port 8880, otherwise Web Presence Builder will not function.

Running Panel Behind a Router with NAT

Every time you set up a new website in Panel, the domain name used by your website is associated with the IP address of your Panel-managed server in the DNS zone of this domain. If you are running the Panel behind a routing device with NAT (network address translation), this IP address will be an internal network address like 192.168.1.10. As the 192.168.x.x IP addresses are reserved by the Internet Assigned Numbers Authority (IANA) for use by private networks, this website will not be accessible to the Internet users. To work around this, you have to associate this domain name with the public IP address of the routing device in the DNS zone of this domain.

If you are using the Panel as a part of hosting package sold to you by your hosting provider (as opposed to having your own server), then in most cases, your hosting provider has already configured the routing device and the DNS zone template used for creation of your websites. If so, you can make your websites accessible to the Internet users using the instructions in this section.

➢ *To check if proper modifications of the DNS zone template were made by your hosting provider:*

1. Go to **Tools & Settings > DNS Template Settings** (in the **DNS** group).

2. Locate all resource records of A type. By default these records look like this:

   ▪ <domain>. A <ip>

   ▪ mail.<domain>. A <ip>

   ▪ ns.<domain>. A <ip>

   ▪ webmail.<domain>. A <ip>

If you see real IP address instead of <ip> there, it means that your hosting provider has modified the DNS zone template used for creation of your websites. Write down this IP address and go to Making Your Website Accessible When the Panel Is Running Behind Router with NAT for further instructions on how to make your websites accessible to the Internet users.

However, if you see the records as they are displayed in the example above (with <ip> instead of real IP address), it means that either the Panel provided to you as a part of your hosting package is not running behind a router with NAT, or you have to modify the DNS zone template manually.

➢ *To modify the DNS zone template used for creation of your websites:*

1. Go to **Tools & Settings > DNS Template Settings** (in the **DNS** group).

2. Locate all resource records of A type. These records look like the following:

   ▪ <domain>. A <ip>

   ▪ mail.<domain>. A <ip>

   ▪ ns.<domain>. A <ip>

   ▪ webmail.<domain>. A <ip>

3. Edit all of these A type records:

   a. Click the corresponding links in the **Host** column.

   b. In the **Enter IP address** input box, delete the `<ip>` templates, and type the public IP address allocated to you by your hosting provider. If you have forgotten the public IP address allocated to you, contact your hosting provider for assistance.

4. Click **OK**.

If you are running your own Parallels Plesk Panel server behind a router with NAT, you need to manually configure the routing device and modify the DNS zone template used for creation of your websites.

> ➢ *If you are running your own server with the Panel behind a router with NAT:*

1. Configure your routing device so as to ensure the proper address translation. Refer to the documentation of your routing device for detailed instructions.

2. Log in to the Panel and go to **Tools & Settings > DNS Template Settings** (in the **DNS** group).

3. Locate all resource records of A type. These records look like the following:

   ▪ <domain>. A <ip>

   ▪ mail.<domain>. A <ip>

   ▪ ns.<domain>. A <ip>

   ▪ webmail.<domain>. A <ip>

4. Edit all of these A type records:

   a. Click the corresponding links in the **Host** column.

   b. In the **Enter IP address** input box, delete the `<ip>` templates, and type the public IP address of the routing device.

   c. Click **OK**.

   d. Go to Making Your Website Accessible When the Panel Is Running Behind Router with NAT for further instructions on how to make your websites accessible to the Internet users.

Using the Panel Firewall (Windows)

Parallels Plesk Panel comes with a firewall, which you can use to protect your server from incoming network connections that could be used to compromise the server. The firewall comes with a set of predefined rules that allow connections to the services required for the proper functioning of a hosting server, such as web, mail, and FTP. By default, the firewall is switched off.

Read this section to learn how to:

- Switch on the firewall
- View the currently allowed inbound connections
- Allow and block inbound connections
- Allow and block ICMP communications
- Restore the default configuration of the firewall
- Switch off the firewall

In this section:

Switching the Firewall On and Off

➢ *To switch on the firewall:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Under **Tools**, click **Switch On**.

3. To switch on the firewall for a specific network interface, if you have a number of network interfaces, in the list of interfaces, click the interface name you need.

   The list of applied filtering policies (rules) opens. The **S** (status) column shows the ⊗ icon if the firewall blocks the packets that match the rule, and the ✓ icon if the firewall allows the packets that match the rule to pass through.

Note: Configuring firewall for specific network interfaces is only available under Microsoft Windows Server 2003.

➢ *To switch off the firewall:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Under **Tools**, click **Switch Off**.

Viewing the Currently Allowed Inbound Connections

By default, all inbound connections that are not explicitly allowed are blocked.

➢ *To view the currently applied firewall rules for inbound connections:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Click the network interface you need.

   All currently defined rules are listed. The **S** (status) column shows the ⊗ icon if the firewall blocks the packets that match the rule, and the ✓ icon if the firewall allows the packets that match the rule to pass through.

   Note: Configuring firewall for specific network interfaces is only available under Microsoft Windows Server 2003. If you are using Microsoft Windows Server 2008, go to the **Firewall Rules** tab.

3. Do any of the following:

   ▪ To view or change the properties of a rule, click the respective rule's name. To save any changes you have made to the rule, click **OK**. To return to the previous screen without saving any changes, click **Cancel** or click **Up Level**.

   ▪ To allow connections to a service, click **Add Firewall Rule**, specify the rule name for future reference, specify the port and the protocol for which incoming connections must be allowed. Leave the **Switch on rule** checkbox selected, if you wish to apply the rule immediately. Click **OK**.

   ▪ To allow connections to a service that you previously made inaccessible, click the respective ⊗ icon in the **S** column.

   ▪ To temporarily block connections to a service, click the respective ✓ icon in the **S** column.

   ▪ To permanently block connections to a service, select the checkbox corresponding to the rule that allows connections to the respective service, and click **Remove**. Removing a rule blocks the connections that were specified in that rule.

Allowing and Blocking Inbound Connections

By default, all inbound connections that are not explicitly allowed are blocked.

> ➤ *To allow inbound connections to a service:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Click the network interface you need.

Note: Configuring firewall for specific network interfaces is only available under Microsoft Windows Server 2003. If you are using Microsoft Windows Server 2008, go to the **Firewall Rules** tab.

3. Click **Add Firewall Rule**, and specify the following properties:

- The rule name for future reference
- The port or port range and the protocol for which inbound connections must be allowed

4. Leave the **Switch on rule** checkbox selected, if you wish to apply the rule immediately.

5. Click **OK**.

> ➤ *To block the previously allowed inbound connections to a service:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Click the network interface you need.

Note: Configuring firewall for specific network interfaces is only available under Microsoft Windows Server 2003. If you are using Microsoft Windows Server 2008, go to the **Firewall Rules** tab.

3. Select the checkbox corresponding to the rule that allows connections to the respective service, and click **Remove**.

Removing a rule blocks the connections that were specified in that rule.

Allowing and Blocking ICMP Communications

ICMP communications are used for network troubleshooting purposes. By default, all ICMP communications are allowed. For the detailed description of ICMP messages, please refer to http://msdn.microsoft.com/en-us/library/ms912869.

➢ *If you need to block or to allow ICMP communications, follow these steps:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group) > **ICMP Protocol**.

   The predefined rules for ICMP communications are listed. The **S** (status) column shows the ⊗ icon if the firewall blocks the packets that match the rule, and the ✔ icon if the firewall allows the packets that match the rule to pass through.

2. Do any of the following:

   - To allow ICMP requests of a specific type, click the respective ⊗ icon in the **S** column.

   - To block ICMP requests of a specific type, click the respective ✔ icon in the **S** column.

   - To block all ICMP requests, click **Panic Mode**.

   - To restore the default settings for ICMP requests, click **Default**.

Restoring the Default Configuration of the Firewall

➢ *To restore the initial configuration:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Click the network interface you need.

   Note: Configuring firewall for specific network interfaces is only available under Microsoft Windows Server 2003. If you are using Microsoft Windows Server 2008, go to the **Firewall Rules** tab.

3. Under **Tools**, click **Restore Defaults**.

Closing Down All Connections to the Server Using the Panic Mode

If your server is compromised and websites are defaced, you may want to make the server unavailable over the Internet and keep it down until all vulnerabilities are patched and websites are restored from backup files.

➢ *To close all connections to the server:*

1. Go to **Tools & Settings** > **Firewall** (in the **Security** group).

2. Click **Panic Mode**.

Note: Configuring firewall for specific network interfaces is only available under Microsoft Windows Server 2003. If you are using Microsoft Windows Server 2008, go to the **Firewall Rules** tab.

Configuring Port Range for Passive FTP Mode (Windows)

➢ *To set a specific port or port range for connecting to the server over FTP in passive mode:*

1. Go to **Tools & Settings** > **FTP Settings**.

2. Specify the required port or port range in the **Port or port range for passive FTP mode connections** field and click **OK**.

Configuring E-mail Notifications

The Panel notifies you and your customers of disk space and bandwidth overage by sending e-mail notifications. In addition to resource overage, the control panel can notify the users when:

- New user accounts are created.
- New domains are added.
- Hosting accounts are expired (expiration date is defined for user accounts and websites separately).

➢ *To view or modify the notification system settings:*

1. Go to **Tools & Settings** > **Notifications** (in the **Logs & Notifications** group).

2. By selecting the checkboxes in the **Notifications** table, specify the types of control panel users or external e-mail users who should receive notices on events.

3. To view or edit the default notice text, click the respective ✎ icon in the **Text** column.

   In notices you can use tags that will be replaced with actual data (see the table below).

4. Specify when to send the user account and website expiration notices. By default, such notices are sent 10 days in advance. Click **OK**.

Tags used in notification messages

Event type	Tags that can be used in notices	The data that tags denote
Creation of a reseller or customer account	*<reseller_contact_name>* *<user_contact_name>*	user's first and last name
	<reseller_login> *<user_login>*	user name for authorization in the Panel
	<password>	user's password for authorization in the Panel
	<reseller_company_name> *<user_company_name>*	company name
	<reseller_cr_date> *<user_cr_date>*	user account creation date

	<reseller_phone> *<user_phone>*	phone number
	<reseller_fax> *<user_fax>*	fax number
	<reseller_country> *<user_country>*	country
	<reseller_state_province> *<user_state_province>*	state or province
	<reseller_city> *<user_city>*	city
	<reseller_postal_ZIP_code> *<user_postal_ZIP_code>*	postal or ZIP code
	<reseller_address> *<user_address>*	address
	<reseller_id> *<user_id>*	unique identifier assigned by the system
	<hostname>	host name for access to the Panel
Addition of a new website to the server	*<domain_name>*	domain name
	<reseller_login> *<user_login>*	user name for authorization in the Panel
	<reseller_contact_name> *<user_contact_name>*	user's first and last name
	<dom_id>	unique identifier assigned by the system
	<ip>	IP address the website is hosted on

Subscription expiration notices	*<domain_name>*	subscription name
	<reseller_login> *<user_login>*	user name for authorization in the Panel
	<reseller_contact_name> *<user_contact_name>*	user's first and last name
	<dom_id>	unique identifier assigned by the system
	<domain_expiration_date>	subscription expiration date
Resource overuse notices	*<domain_name>*	subscription name
	<reseller_login> *<user_login>*	user name for authorization in the Panel
	<reseller_contact_name> *<user_contact_name>*	user's first and last name
	<disk_usage>	information about disk space usage
	<disk_space_limit>	information about the amount of disk space allocated to the account
	<resource_table>	information about all resource limits that were or will soon be reached
	<traffic>	information about bandwidth usage
	<traffic_limit>	information about the bandwidth amount allotted to the account

---

Note: If you upgraded to Parallels Plesk Panel from an earlier version, then all custom notice templates you previously used remain in effect. Because of changes in user accounts hierarchy and addition of resource overuse scheme, now any type of resource can be overused. Therefore, to show information about all overused resources in notice templates, we recommend using a single variable *<resource_table>* instead of the variables *<disk_usage>*, *<disk_space_limit>*, *<traffic>*, and *<traffic_limit>*.

Setting Up Help Desk

To allow your customers to submit problem reports through Control Panel, you can do the following:

1. Set up a subscription for hosting your corporate website.

2. Install on your site the application osTicket 1.6 or later from Application Catalog. Among available free solutions, osTicket is considered the best for its ease of use and feature set. For information about osTicket, visit their website at http://osticket.com.

➢ *To set up a subscription for hosting your own website:*

1. In Server Administration Panel, click the **Subscriptions** link in the navigation pane, under the **Hosting Services** group.

2. Click **Add New Subscription**.

3. Type the domain name of your corporate site, for example `provider-example.com`.

4. Select IP address.

5. Type the username and password that you will use for connecting to the webspace over FTP and managing files.

6. In the **Service plan** menu, select **Unlimited** to allow your site to consume unlimited amounts of resources.

7. Click **OK**.

Next time you log in to Server Administration Panel, the **Install Help Desk** link will appear in the navigation pane. You can use it to install osTicket on your website.

➢ *If you want to start installation immediately, without logging out and then logging in again:*

1. Click the link **Control Panel** next to your site's domain name. Control Panel will open in a new browser window or tab.

2. On the **Home** tab, click the **osTicket** link in the **Applications** group.

3. Click **Install**.

4. Read the terms of license agreement, confirm that you accept them, and click **Next**.

5. To open all application settings, click the link **Show All Settings** and specify the following:

- Path to the installation directory on the server.

- Administrative access to the application. Leave the **Grant administrative access to existing user** option selected, and select **Admin** from the menu if you want to use your site's FTP account username and password for managing Help Desk.

- Administrator's e-mail. Specify the Help Desk administrator's e-mail address.

- Website name. For example, Company Name customer service portal.

- Default system e-mail. Specify an e-mail address that you will advertise on your site as a means to contact your support engineers. For example, support@example.com.

- Database administrator's password.

6. Click Install.

Once installation is finished, you will be able to use the **Help Desk** link in the navigation pane of Server Administration Panel for configuring Help Desk and processing tickets submitted by your customers and customers of your resellers.

The customers will be able to submit tickets by clicking the link **Help Desk** in their Control Panels, in the **Custom Buttons** group.

Business Manager Configuration

If you decide to automate your business with Parallels Customer and Business Manager, you should perform a set of actions to get your Business Manager and Panel ready for serving your business together. Particularly, these actions are the following:

1. Perform initial configuration of Business Manager.
2. Configure various aspects of your business in Business Manager, like invoicing, payment methods, etc.
3. Prepare Panel to work with Business Manager.

Below we will describe these steps in details.

Initial Configuration

When you log in to Business Manager under Administrator's account for the first time, Business Manager invites you to perform the initial configuration. This includes the following:

▪ Specifying company details.

   Business Manager uses your company details to carry out routine tasks. For example, the e-mail templates pull your company name and contact information when creating e-mails. It is important to keep this information up-to-date. These values are initially filled with information gathered during the installation process.

▪ Specifying IP addresses to use for Business Manager subscriptions.

   When someone subscribes for a hosting account, Business Manager assigns this account an IP from IP pool of the *local Panel*, the Panel installed on the same server. This IP can be shared among multiple customers or dedicated for each account. During the initialization, select IPv4 and IPv6 addresses Business Manager will allocate to subscriptions.

Configuring Aspects of Your Business in Business Manager

After you complete the initial configuration, the system will redirect you to the Business Manager **Home** page. On this page, you will find a tool that helps you quickly get your business ready to go online - the **Quick Setup** widget. Particularly, this widget lets you configure the most important aspects:

Settings	Section
Encryption settings	**Setting Up Encryption** (on page 454)
Taxation policies	**Configuring Taxation** (on page 201)
Payment gateways	**Setting Up Payment Gateways (on page 141)**
Domain registrars	**Setting Up Accounts with Registrars (on page 245)**

| Fraud protection | **Setting Up Fraud Protection** (on page 195) |

Once you configure these aspects, proceed to other Business Manager settings described in corresponding sections of this chapter.

Preparing Panel to Work with Business Manager

Finally, after you complete configuring Business Manager, you should prepare your Panel work with Business Manager. This includes two steps:

▪   Switching off Panel notifications.
▪   Moving existing accounts, subscriptions, and service plans from Panel to Business Manager.

For details on how to get Panel ready for working with Business Manager, refer to the section **Preparing Panel to Work with Business Manager** (on page 130).

In this chapter:

Preparing Panel to Work with Business Manager

Before you start using your Panel with Business Manager, you should prepare Panel as described in this section. Particularly, preparation steps are the following:

- *Switching off Panel notifications on creating new accounts.*

- *Adding Panel subscriptions, plans, and customer accounts to Business Manager.*
  If you used Panel for providing hosting services before and want to start billing existing subscriptions with Business Manager, you should add these subscriptions using the built-in tool.

The detailed instructions on preparing Panel to work with Business Manager are provided below.

Switching Off Panel Notifications

By default, when a new customer or reseller account is created in Panel, the latter sends an e-mail notification with the account information to its owner. Business Manager sends notifications on creating new accounts as well. Therefore, if you suppose that all new subscriptions will be created in Panel by Business Manager, you should leave only Business Manager notifications. To do this, switch off sending notifications on creating new accounts in Panel on the **Tools & Settings** > **Notifications** page.

Adding Panel Subscriptions, Plans, and Customer Accounts to Business Manager

If you used Panel without Business Manager before and then decided to automate your business operations by installing it, you may want to add existing subscriptions to Business Manager. This necessity also arises if you have used Panel with an alternative billing solution and have then decided to switch to Business Manager.

The process of adding subscriptions is complicated by their relations to service plans and customer accounts, so you should add the related objects as well to ensure proper operation of the system. First you should add the plans, then the accounts and finally add the subscriptions. This procedure is flexible, and the system lets you add objects alone, but you should follow the order - *plans, customer accounts, and subscriptions*.

Once you add a Panel object to Business Manager, these objects become *linked*. The *linking* means that all changes you make to the Business Manager object properties will be applied to corresponding Panel objects. Before adding an object, Business Manager checks if it already exists in Business Manager. If a match is found, the two objects become linked. If the match is not found, Business Manager creates a new object and links the pair.

The matching algorithm works this way:

- Plans match if they have the same name.
- Customer accounts match if they have the same contact name and e-mail.

▪ Subscriptions match if their service plans and subscriber accounts match.

To add Panel objects to Business Manager, use the **Add to Business Manager** button on the page with a list of objects you want to add: **Service Plans**, **Customers**, or **Subscriptions** items of the **Hosting Services** group.

Before adding objects to Business Manager, please consider the following:

▪ A customer account you add to Business Manager must have the **Phone number** and **Address** fields filled in. Therefore, to successfully add Panel accounts to Business Manager ensure that these fields are filled in.

▪ If an account you add has auxiliary user accounts with the **Accountant** role, Panel will add these users as well. If these users do not have matching accounts in Business manager, then they will be created with random passwords that users will receive by e-mail.

▪ When you link customer accounts, a password to the account in Business Manager will be assigned to the account in Panel as well.

▪ When you add a subscription to Business Manager, the system starts a new billing cycle for it and issues the first invoice at the start of the next billing cycle. For example, if you add a subscription with a one-month billing cycle, the subscriber will get the first invoice from Business Manager one month after the addition.

Quick Start After Upgrading from 10.0 - 10.2 Versions

To make your work with Business Manager easier and faster, we significantly improved the user interface in 10.3. This section explains how to accomplish routine tasks you typically carried out in earlier 10.x versions.

Finances & workflow

The tools related to the automation of your business, particularly, invoices and schet-facturas issuing, setting up taxes for your products, and defining rules of creating and canceling subscriptions, are now available in the new location, the **Finances & Workflow** group on the **Business Setup** > **All Settings** page.

Customer permissions management

To set permissions for your customer accounts, use the links in the **Customer Management** group of the system menu. Particularly, you can set the following:

- Profile fields your customers are able to change.
- Billing accounts they can use.
- Access to upgrades and downgrades.

Discounts & promotions

The tools for promotion of your plans are located on the **Business Setup** > **Marketing Tools** page.

To limit the discounts for certain customers, include them into *customer groups*. The controls to create and manage customer groups are located on the **Business Setup** > **All Settings** > **Customer Groups** page.

Fraud prevention

To protect against fraud, you can prohibit the registration of customer accounts with certain e-mails and use *FraudGuardian* - a tool that checks new customers for being fraudulent. The controls for managing e-mail black list and configuring FraudGuardian are located in the **Fraud Prevention** group of the **Business Setup** > **All Settings** page.

Custom prices for plans

If you intend to set up custom prices for your plans, create the *price groups* and *price options* you will use for it on the **Business Setup** > **All Settings** > **Advanced Pricing** page.

Hosting panels, payment gateways, domain registrars, SSL certificate providers

The tools for managing different plug-ins as hosting panels, domain name registrars, payment gateways, and SSL certificate providers are now available in the **Hosting Panels & External Modules** group of the **Business Setup** > **All Settings page**.

The tools to manage IP pools of connected panels are accessible from the list of connected panels: **Business Setup** > **All Settings** > **Hosting Panels**.

If you want to test payment gateways with virtual terminals, click the corresponding link in the Available Operations of a certain gateway on the payment gateways list: **Business Setup** > **All Settings** > **Payment Gateways**.

Branding & customization

To change the appearance of Business Manager user interface and specify the custom content, such as your company details, e-mail templates, or printable invoices, use the controls from the Branding & Customization group on the **Business Setup** > **All Settings** page.

System information

To view information about Business Manager license and version, installed gateway, registrar, and other modules or software, use the controls from the group **System Information** on the **Business Setup** > **All Settings** page.

Moreover, if you need to troubleshoot Business Manager issues, you can find error reports and logs in the **System Information** group.

Payments

To view a list of payment transactions and uncaptured funds, go to the **Business Monitoring** > **Payments**.

The list of bank transfer batch files and bank transfer transactions are now accessible from the **Transactions** tab of the **Business Monitoring** > **Payments** page with the link **Bank transfers**.

Changing Company Details

Different system modules extract data from your company details. For example, the e-mail templates pull your company name and contact information when creating e-mails. It is important to keep this information up-to-date. These values are initially filled with information gathered during the installation process.

➢ *To change company details:*

1. Go to **System** > **System Configuration** and click **Company Details**.

2. Change the following as needed:

   - **Name**. Enter the name of your company here, as you would like it to appear to your customers.

   - **Short Description**. Provide a brief description of what your company does.

   - **Description**. You may enter a longer description here.

   - **URL**. This is the URL to your company's web page.

   - **Customer URL**. If you have made any changes to your Business Manager directory structure, you will want to edit this entry to reflect these changes. This URL determines where the system tries to take you when you click **Login as Primary Contact** on the customer details screen.

   - **Order URL**. This is the URL to your main order page. Most customers use a custom order page, so this may need to be updated.

   - **E-mail**. Enter your company's main contact e-mail address.

   - **Address 1**. Enter the first address line of your company's physical address.

   - **Address 2**. Enter the second address line of your company's physical address, or a PO box if you use one.

   - **City**. Enter the city of your company's address.

   - **State**. Enter the state of your company's address.

   - **Country.** Enter the country of your company's address.

   - **Phone 1**. Enter a primary phone number, so your customers can contact you if they need to.

   - **Phone 2.** Enter a second phone number if you have one.

   - **Fax.** If you have a separate fax number, enter it here.

   - **Tax ID Number.** If you have a Tax ID Number, enter it here.

3. Click **Save Changes**.

Setting Up Administrators

Business Manager provides a flexible system for setting up administrators within the system. Using administrator groups, you can create custom privileges for different kinds of administrators, such as a billing administrator and server provisioning administrator. By default, Business Manager creates four administrators: the **root user**, an **online store** user, an **API user**, and a **cron user**. The root user is created using the information you entered during the installation process, and is the main login you use to enter Business Manager. The online store, **API**, and **cron users** enable these parts of the system to have the level of access they need to function properly. Do not remove or modify these accounts.

In this section:

Viewing Administrators

➢ *To view the list of your administrators:*

1. Go to **Business Setup** > **All Settings** and click **Administrators**.

   You will see a list of all the administrators you have created.

Creating New Administrators

You can add any number of Business Manager administrators to your system according to your specific business needs.

➢ *To add a Business Manager administrator:*

1. Go to **Business Setup** > **All Settings** and click **Administrators**

2. Click **Add New Administrator**.

3. Fill in the necessary information:

   - **First Name**. The first name of the administrator.

   - **Last Name**. The last name of the administrator.

   - **E-mail**. The e-mail address of the administrator.

   - **User name**. The user name you would like the administrator to have.

   - **New Password**. Enter the password the administrator will use.

   - **Enter Password Again**. Enter the password a second time for verification.

   - **Theme**. If you have a custom theme, this is where you would select it.

   - **Language**. Choose the language you would like Business Manager to appear in for this administrator. Business Manager will use the language and country choice to determine which locale best fits this administrator.

   - **Country**. Enter the country in which this administrator resides. This helps determine the locale to use for the administrator. For example, if you choose Portuguese, Business Manager can either use the Portuguese locale or the Brazilian Portuguese locale, depending on where your administrator lives.

   - **Active**. You can activate and deactivate administrators as you need.

   - **Assigned Admin Groups**. Choose a group to which you want to assign this administrator. You can create additional administrator groups as needed.

4. Click **OK**.

The newly added administrator will appear on the **Administrators** page.

Setting Up Administrator Groups

Creating administrator groups allows you to grant specific sets of actions to certain administrators or groups of administrators. For example, if you have an employee who will be taking care of billing for you, but who does not need to look at any reports, you can create an administrator group called billing, add actions to this group related to generating and paying invoices, and remove any actions related to reporting.

➤ *To view the list of existing administrator groups:*

1. Go to **Business Setup** > **All Settings** > **Administrators**.

2. Click **Manage Administrator Groups**.

   You will see the list of all administrator groups in the system.

➤ *To assign more administrators to a group:*

1. Click the **Manage Actions** control for the group.

2. Add more administrators under **Assigned Admins**.

3. Here, you can also unassign administrator from a group.

➤ *To edit privileges of administrators in a group:*

1. Click the **Manage Actions** control for the group.

2. Configure privileges in the displayed categories as necessary.

3. Click **Update Action Assignments**.

Editing Administrator Profiles

If you need to change any of the settings for one of your administrators, you will follow a procedure similar to creating an administrator.

➢ *To edit an administrator profile:*

1. Go to **Business Setup** > **All Settings** > **Administrators**.

2. Click **Edit** link in the **Available Operations** column for an administrator whose profile you want to edit.

3. Edit the administrator's profile accordingly.

Note: Initially, the admin account is the same as the global account. The difference between them is that the global account lets you log in to any application within the SSO realm whereas the local account is your account in a particular application. If SSO is turned off, it is mandatory to use local accounts. Otherwise, when the service is on, it requires your global account password to authorize you. If you change the admin password, both the global account password and your local password to Business Manager are changed.

Configuring Administrator Interface

Business Manager provides an option to change the administrator interface to your liking. Particularly, it allows to change the interface language and theme. The tools for changing these settings are located on your profile form. You can open it by clicking your name on the upper bar of administrator interface, or the **Edit** button on the **Business Setup** > **All Settings** > **Administrators** > *<your name>* page.

Configuring Payment Methods

The default Business Manager installation allows you to manually charge your customers via checks or bank drafts. To start accepting online payments with credit cards or bank transfers, you should configure a *payment gateway* or a *bank transfer plugin*.

When you set up a payment gateway, your customers are able to pay for your services online. Depending on your policy, use *on-site* or *off-site* gateways for accepting payments. The difference between them is the following:

- If you use on-site gateways, your customers enter their cards information directly in your online store and the system saves their secure information to your database. To ensure the security of this information, use on-site gateways only if you have configured the encryption of customer data as described in the section **Setting Up Encryption** (on page 454).
- Off-site gateways connect Business Manager to payment systems that process transaction on their own sites, for example, *PayPal*.

Bank transfer plugins enable your customers to pay for their subscriptions online by transferring money from their bank accounts.

To add a payment gateway or a bank transfer plugin, go to **Business Setup** > **All Settings** > **Payment Gateways**, click **Add New Payment Gateway**, and choose the module you want to add. When you configure a payment gateway or a bank transfer plugin, remember that these modules can have limitations or particularities in the configuration. For example, a module might support only certain currencies or require you to fill in custom fields, or log in to your merchant account and take extra efforts to successfully set up a gateway. To learn these module-specific details, refer to the sections **Payment Gateways Configuration Details** (on page 141) and **Bank Transfer Plugins Configuration Details** (on page 145).

If you want to to change a gateway or a plugin settings, for example, start using it in another online store, go to the gateways list **Business Setup** > **All Settings** > **Payment Gateways**, and click the gateway name in the list.

When you decide to stop accepting payments with a certain payment gateway or a bank transfer plugin, remove it. To remove a payment gateway or a bank transfer plugin, go to the gateways list, select the modules that you do not need anymore, and click **Remove**.

Testing gateways and sending transactions manually

If you want to ensure that that gateway module works properly or manually start a payment transaction, use virtual terminal to send transaction data directly to the payment system. Learn more about running transactions using virtual terminals in the section **Testing Gateways Using Virtual Terminals** (on page 147).

Setting up payment queue

Business Manager creates invoices and runs payment transactions automatically. To initiate an invoice payment, the system adds the invoice to the *payment queue.* To learn how to define rules that govern the processing of the invoices in payment queue, refer to the section **Setting Up Payment Queue** (on page 149).

In this section:

Payment Gateways Configuration Details

Since different payment gateways require different configuration parameters, there is no common instruction on configuring the gateway settings. Instead of it, we provide guidelines for configuring certain gateways in this section.

In this section:

Authorize.net

This page provides clarifications on some fields you need to fill in when configuring Authorize.net.

▪ **Authorize.net Login ID**. This is the API Login ID that is available from within your authorize.net account.

▪ **Authorize.net Password**. This is the API Transaction Key.

▪ **Gateway URL**. This is the URL to which the system will send transaction data. Use **Live URL** when you want to use your Authorize.net module in a production environment. Make sure the **Gateway Testing** checkbox below is unchecked. If you want to test your AuthorizeNet module then you should create a test account at the http://developer.authorize.net/testaccount/, choose **Testing URL** and select the **Gateway Testing** checkbox. Use your test account credentials in gateway testing.

PayPal

This page provides clarifications on some fields you need to fill in when configuring PayPal.

- **ID**. yourname@yourdomain.com (Enter your primary PayPal e-mail address).

- **Item Name**. Enter a comment or description about the services you offer. This will appear on the customer's PayPal receipt.

- **Display Logo**. Enter the url to your display logo. This is the logo that will show up on the PayPal payment page once they go through the Business Manager shopping cart. This is a logo you create.

- **Submit Image**. Enter the url to your image.

- **IPN URL**. Enter the url to your IPN. PayPal sends IPN messages only to 80 and 443 ports. In turn, Business Manager accepts these messages on 8880 and 8443 ports. Learn how to configure forwarding of IPN messages to these ports here: http://kb.parallels.com/en/112756.

- **Subscription Enable**. Do you allow PayPal subscriptions (Recurring payments)?

- **PayPal Accept Addresses**. Enter any PayPal addresses at which you would like to receive payments, separated either by comma or a new line for each address. Example: `billing@yourdomain.com, service@yourdomain.com, domains@yourdomain.com`.

  Note: Any address listed here must be an active PayPal account.

Note: After you have tested the connection with PayPal, be sure to change **Gateway Testing** to **No** to accept live payments.

BBVA

This module does not have any particularities except for it accepts only EUR. To set up the gateway, enter the information you received from your merchant account provider.

Banca Sella

The system lets set up Banca Sella as an on-site or off-site payment gateway. The configuration steps in these two cases are almost identical.

To set up the gateway, select it from gateways list in the **Add New Payment Gateway** wizard, specify the initial information about the gateway and proceed to the configuration. Fill in your merchant ID, select *Basic agreement* (only for off-site payment gateways) and click OK to save the configuration.

When ready, go to your merchant account with Banca Sella and authorize Business Manager to work with the gateway by following these steps:

1. Specify the IP address of Business Manager at **Configuration** > **Environment** > **IP Address**.

2. Provide the e-mail address that will receive notifications about transactions at **Configuration** > **Environment** > **Response**.

3. Provide the callback URLs of Business Manager at **Configuration** > **Environment** > **Response**.
The URLs should be the same as the listed below with wildcards substituted to your custom values. Namely, substitute *<your-host-name>* with the actual host name of Business Manager, and *<gateway-type>* with the gateway type. Allowed gateway types are: BancaSella (for the on-site payment gateway) and BancaSellaSSL (for the off-site payment gateway).

URL for positive response:

Error! Hyperlink reference not valid.

URL for negative response:

https://**<your-host-name>**/plesk-billing/lib-mbapi/include/modules/gateway/return/HSPCCallback.php/plugin_id,OP_Banca SellaSSL/action,notify/server_url,ecomm.sella.it

URL Server to Server:

https://**<your-host-name>**/plesk-billing/lib-mbapi/include/modules/gateway/return/HSPCCallback.php/plugin_id,OP_Banca SellaSSL/action,notify/server_url,ecomm.sella.it

Example: https://example.com/plesk-billing/lib-mbapi/include/modules/gateway/return/HSPCCallback.php/plugin_id,OP_B ancaSellaSSL/action,notify/server_url,ecomm.sella.it

Banca Sella uses callback URLs to send transaction statuses to Business Manager. Unfortunately, the payment processor does not accept port numbers in callback URLs, so you should take extra steps to modify the default system configuration to automatically receive transaction statuses. Learn more about this problem and recommended solutions at http://kb.parallels.com/en/9500.

Wirecard

This page provides clarifications on some fields you need to fill in when configuring the Wirecard payment gateway.

- **Business Case Signature**. A unique number Wirecard assigns to a merchant account. This number includes up to 16 hexadecimal digits (0..9,A-F).
- **Name**. The username set up for your account.
- **Password**. The password set up for your account.
- **Country where the shop is legally registered**. The country where your company is legally registered and where payment transactions take place. In certain cases, this helps to reduce acquirer fees by up to 1% of the transaction volume. Detailed information about this functionality can be requested from the Wirecard customer services department.
- **Enable CVV2/CVC2 verification**. This item *must be selected* to make the gateway work.
- **Enable address verification (AVS)**. This item *must not be selected* to make the gateway work.
- **Check status period**. An interval between attempts to request a transaction status after committing the transaction. Default value: 60.
- **Count of transaction checks**. The number of attempts to get a transaction status. Default value: 10. If exceeded, the error status is assigned to transaction.

ATOS

This module is available only if Business Manager runs on Linux. To set up the gateway, enter the information you received from your merchant account provider.

LinkPoint

This page provides clarifications on some fields you need to fill in when configuring the LinkPoint payment gateway.

- **LinkPoint store name**. This is a number that LinkPoint assigns to you when creating your account.

- **Key file**. Obtain this file from your LinkPoint account and upload the file to the following directory on the Business Manager server:

  - On Linux systems: `/opt/plesk-billing/config/`

  - On Windows systems: `C:\Program Files\Parallels\Plesk\billing\config\`

  Ensure that the `psaadm` user (on Linux systems) or the user that runs the IIS web server (on Windows systems) has permissions to read and execute the file.

WorldPay

This page describes steps necessary for configuring WorldPay module:

1. Configure the gateway settings.

2. Make sure that the **Payment Response URL** is accessible from the Internet.

3. Log in to your WorldPay account, go to the **Installations** > **Integration Setup** page and configure the account settings the following way:

   - Select the **Payment Response enabled?** checkbox.

   - Enter your **Payment Response password** and **Payment Response URL** into the corresponding fields.

   - Enter the e-mail address to which the system should send troubleshooting e-mails into the **Payment Response failure e-mail address** field.

WorldPay Direct

Unlike the majority of payment gateways, WorldPay Direct requires a customer to provide secret data (for example, CVV or authorization code) on their bank's website each time they perform a payment. This fact implies the following limitations:

- This gateway does not support automatic payments. If your system is configured so that it charges credit cards automatically, it omits the WorldPay Direct payments.
- Administrators cannot take credit card payments from customers through WorldPay Direct using the corresponding button on the invoice details page.

To configure this module, specify the following parameters:

- **Merchant code** that you see in the left navigation pane of the WorldPay merchant interface.
- **XML Password** - the password that WorldPay assigns you to securely transfer XML files. To see this password, log in to the WorldPay merchant interface and go to the **Installations** page. You will find the XML password in the description of the corresponding installation.

If you capture funds manually and want to use the WorldPay Direct, you should switch off automatic capturing in the WorldPay merchant interface. To do this, log in to your WorldPay Direct account, go to **Profile** > **Configuration details** and set the **Capture Delay** value to **Off**.

eWAY

eWAY payment gateway requires a customer to provide their CVV2 code *each* time they perform a credit card payment. Therefore, this gateway does not support automatic payments. If your system is configured so that it charges credit cards automatically, it omits the eWAY payments.

Bank Transfer Plugins Configuration Details

This section explains how to configure certain bank transfer plugins to start accepting payments through them.

In this section:

Norma19 Plugin

The Norma19 plugin allows generating batch files of the format widely used in Spain. The plug-in is implemented in such a way that an issuer (charging party) and submitter (the party delivering a batch into a bank) requisites are always the same in the batch files profile. Thus, enter only the issuer requisites into the plug-in configuration form.

Norma19 Fields

- **Issuer customer code** - your bank customer code.
- **Issuer name** - your company name (as registered in your bank account).
- **Issuer account information** - your bank account requisites, namely:
  - **Agency** - the bank requisite, 4-digits code identifying the account.
  - **Branch** - the number identifying the bank branch where your account is registered.
  - **CD** - control digits, 2-digits code validating the Agency, Branch, and Account Number. Control digits ensure that all the requisites are correct.
  - **Account** - your bank account number.

You are also able to enter up to 16 positions of additional information (Optional field #1 - #16) to be included with batches. When filling the optional fields, use placeholders enlisted below the optional fields. The placeholders will be replaced with the actual data fetched from information provided by the customer.

If you want to include a customer's address on a receipt, check the **Include customer address** as optional record box. A customer address will be taken from a customer's account profile.

DTAUS Plugin

The DTAUS plug-in allows generating batch files of the format widely used in Germany.

DTAUS Fields

- **Merchant name** - the name you are registered under as a client in your bank.
- **Bank Code**- the code of the financial institution (batch file recipient).
- **Account number** - your bank account number.

Testing Gateways Using Virtual Terminals

If your gateway account supports it, you can use Business Manager virtual terminal to connect directly to your gateway account. This can be useful for two main things:

1. Testing your connection during the configuration process

2. Charging a customer's card without having to use the Business Manager payment process.

➢ *To use the virtual terminal:*

1. Go to **Business Setup** > **All Settings** > **Payment Gateways**.

2. Click **Virtual Terminal** in the **Available Operations** of the gateway you want to test. The first page asks two questions:

   - **Create Income Accounting Entries**. If you would like this transaction to create Income Accounting Entries, check the box. Generally, you will want to have this checked. If you are testing, however, you may want to uncheck this, as the transactions you are putting through the terminal are not for accounting, but to verify connectivity.

   - **Currency**. Choose the currency which you want to use to test the gateway.

3. Click **Next**.

4. This page acts as the actual terminal. Enter as much information here as you have access to.

   - **First Name**. Enter the first name of the customer to be charged.

   - **Last Name**. Enter the last name of the customer to be charged.

   - **Customer Email**. Enter the email address of the customer to be charged.

   - **Customer Address**. Enter the customer's billing address.

   - **Suite**. Enter the suite, if applicable.

   - **City.** Enter the city of the billing address.

   - **State**. Enter the state of the billing address.

   - **Zip**. Enter the zip code of the billing address.

   - **Customer Country**. Enter the country for the billing account.

   - **Phone**. Enter the customer's phone number.

   - **Fax**. Enter the customer's fax number, if applicable.

   - **Amount Of Payment**. Enter the exact amount of the payment to be charged.

   - **Payment Comments**. Enter any comments you want to accompany the payment. You may want to enter your company name here.

   - **Payment Type**. Enter the payment type here. The virtual terminal will only work with payment types that are enabled in your gateway account.

   - **Charge Action**. Choose to either authorize this transaction only, or to charge the card.

   - **Credit Card**. Fill in the credit card information:

- **Name on Credit Card**. Enter the customer's name as it appears on their credit card.

- **Credit Card Type**. Enter the credit card type.

- **Credit Card Number**. Enter the credit card number, with no spaces.

- **Expiration Date**. Enter the credit card expiration date.

- **CVV2 Code**. Enter the customer's CVV2 code, if this is required by your gateway.

- **Issue Number**. If you are using certain debit cards, you must enter this information (if you do not know what this is, it's likely you don't need to use this).

- **Start Date**. Like the **Issue Number**, if you are using certain debit cards, you must enter this information.

5. Click **Charge**.

Setting Up Payment Queue

If you are using a top-tier gateway such as *Authorize.net* or *Bluepay* to process your credit card or bank account transactions, the payment queue settings govern how and when invoices are added to and processed by the task *ProcessPaymentQueue*.

➢ *To set up a payment queue:*

1. Go to **Business Monitoring** > **All Settings** > **Automatic Payments**.

2. Change the **Common Settings**. These settings include the following:

   ▪ **Process New Invoices**. Do you want to process new invoices? If set to **No**, you will need to collect payments manually. For details on how to generate the list of payments to be processed, see **Generating and Running Payment Queue** (on page 428).

   ▪ **Process Declined Transactions**. Do you want to process invoices with declined transactions? If set to **Yes**, the system will collect payments according to the failure retry time set in the file `lib-billing/include/config/config.php`. If set to **No**, Business Manager will never automatically retry collecting payments. You will have to do this manually.

   ▪ **Process Errored Transactions**. Do you want to process invoices with errored transactions? If set to **Yes**, the system will collect payments according to the failure retry time set in the file `lib-billing/include/config/config.php`. If set to **No**, Business Manager will never automatically retry errored invoices. You will have to do this manually.

   ▪ **Charge On Due Date Only**. Do you want to charge the invoices only on the date invoices are due? If this is set to **Yes**, invoices will only be added to the payment queue on their due date (the due date for invoices is set in **Invoice Settings**). If set to **No**, invoices will be added to the payment queue after they are created.

   ▪ **Clear The Payment Queue First**. This should be set to **Yes**. If you do not clear the payment queue before a new one is generated, then invoices may be run multiple times.

   ▪ **Try Lesser Amounts**. If set to **Yes**, the payment queue will start from the oldest invoice and will run till the first transaction declines. If set to **No**, the payment queue starts from the invoice with the least amount.
   For example, we have invoice #1 for 20$ and invoice #2 for 10$, and 15$ is available on the customer's credit card. If you use lesser amounts, the system successfully charges 10$, and if you do not use them, the system fails to charge for invoice #1 and stops.

   ▪ **Pay for a subscription from multiple billing accounts**. This feature allows you to assign several different billing accounts to pay a single subscription, and then assign custom "weights" to each of these. For example, if a customer wants to use three credit cards to pay for one subscription, and wants to have 75% charged to one card, 20% to another, and 5% to another, you will need to enable this setting to allow this.

   ▪ **Generate Batch Prior To Due Date (Number of Days)**. How many days before the due date do you want to generate the payment queue? A normal value for this is **1**.

3. Set the **Credit Card Processing.** This includes the **Payment Queue Action**. It determines whether the items in the payment queue get sent to the gateway as *Charge*, also called `AUTH_CAPTURE`, or **Authorization Only**, which will require a payment capture at a later point in time. Generally, this item is set to **Charge**. If you wish to have the gateway just authorize transactions and collect payments later, then set this to **Authenticate Only**. Please be aware that if you do this, you will need to manually capture the funds for all recurring credit card transactions. For details on this operation, see **Capturing Uncaptured Payment** (on page 426).

4. Set the **Bank Transfers Processing**. This includes setting the following parameters:

   ▪ **Start processing batch files automatically after (in days).** How many days after the creating the batch file you want to start its processing automatically? The default value is 0.

   ▪ **Start processing batch files automatically on reaching this number of transactions.** How many transactions must be in a batch file to start its processing automatically? The default value is 0.

   ▪ **Responsible Administrator.** This parameter shows the administrator who is responsible for bank transfer processing.

5. Click **Save**.

Connecting Hosting Panels

If you plan to sell hosting resources of multiple servers, you can connect them to a single instance of Parallels Customer and Business Manager. These servers should have Parallels Plesk Panel for Linux and Parallels Plesk Panel for Windows installed on them. However, if you used other panels with one of the earlier Business Manager versions, you still are able to work with them after upgrade.

Connected Panels are divided into *panel groups*. Grouping provides flexibility in allocating hosting resources. For example, if a hosting plan is associated with a certain panel group and resources of one panel in this group are exhausted, Business Manager will create a hosting account on another panel in this group. You can find more information on configuring panels load in the section **Balancing Panels Load** (on page 153).

Each panel group contains panels of a single type. For example, Business Manager has two predefined groups, *PleskUnix* and *PleskWin*, for Linux and Windows versions of Parallels Plesk Panel, correspondingly. If you want to create more groups or add panels to existing groups, do it at the **Business Setup** > **All Settings** > **Hosting Panels** page.

The following diagram shows relations between Business Manager, hosting panels, and panel groups.
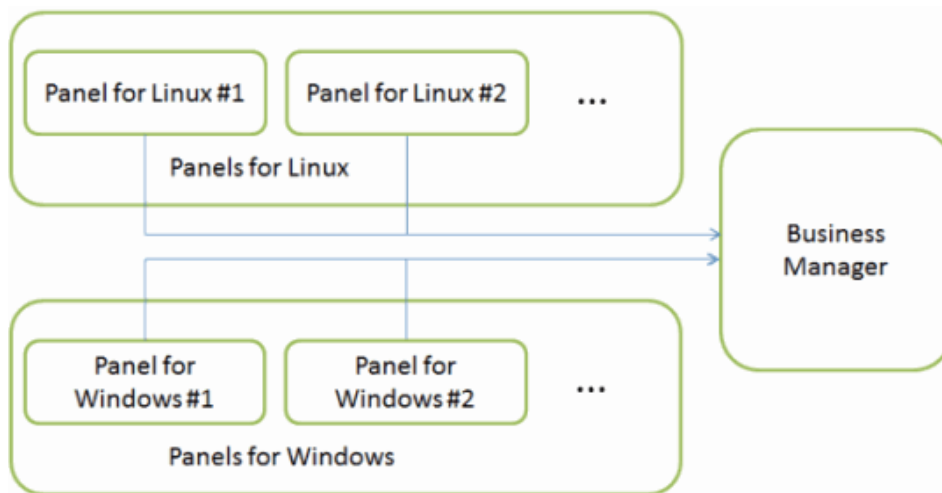
Business Manager lets you offer shared or dedicated IP hosting. If you want to offer dedicated IP plans and a certain Panel, configure the Panel IP pool from which Business Manager will take IP addresses. The number of free IPs left is available if you expand a per-panel summary block (on the **Hosting Panels** page, preceding the panel **ID**). Learn more about how to work with IP pools in the section **Setting Up IP Pool for Hosting Subscriptions on Dedicated IPs** (on page 153).

Once you connect a Panel to Business Manager, you should get this Panel ready to work with Business Manager as described in the section **Preparing Panel to Work with Business Manager** (on page 130).

Sometimes you may have problems with remote panels due to connection errors of some software problems. Find the information on possible causes of these problems and their solutions in the chapter **Troubleshooting Problems with Hosting Panels** (on page 155).

In this section:

Balancing Panels Load

When someone subscribes to a hosting plan, Business Manager assigns the subscription to a certain panels group and creates a hosting account on one of the panels from the group. You can define how Business Manager makes the panel choice by selecting one of the group settings:

- *Add new subscriptions to the least full panel*. In this case, Business Manager adds new accounts to the panel with the smallest number of accounts.
- *Fill each panel in the group until it is full*. In this case, Business Manager fills each panel with accounts until it is full, and then start filling the second panel, and so on.

To change the fill type for a panel group, click the **Edit** link for this group and choose a type from a drop-down menu.

Business Manager defines load of each panel using *server weight*. The *server weight* is a value that you assign to each hosting plan. This value refers to the number of resources a subscription to this plan is going to use on the panel sever, in terms of disk space, bandwidth, etc. For each Panel, you should assign a **Maximum Server Weight**. Configure this setting appropriate to how you plan to specify *weights* of your plans so you can be confident you will not be overselling your equipment - as each time Business Manager creates a hosting account on a panel, the *weight* of the corresponding plan subscription is added to the total *weight* of accounts already created on the server.

If you want to limit the load of certain panel, you can also restrict creating new hosting subscriptions on them. To do this, *disable* these panels. You are still able to perform all operations (suspend, activate, cancel, etc) with existing subscriptions on disabled panels. The control for disabling panels is located on the panel options page, to which you can navigate by clicking the **Edit** link for the panel.

Setting Up IP Pool for Hosting Subscriptions on Dedicated IPs

If you plan to sell hosting subscriptions on dedicated IPs, you should first add these IPs to IP pools of the corresponding panels as described in the section **IP Pool** (on page 44).

Then, make these IPs available to Business Manager subscriptions. To do this:

1. Go to **Business Setup** > **All Settings** > **Hosting Panels**.

2. Find corresponding panel group and click its **ID**.

3. Find the panel to which you added IPs at the previous step and click **IP Pool**.

4. Click **Add IP Address**.

5. Enter the range of dedicated IPs and click **Submit**.

After you add the dedicated IPs to Business Manager, make sure that subscriptions on dedicated IPs are available for certain plans and enable the corresponding option if needed.

➢ *To enable the Dedicated IP **option for a hosting plan:***

1. Go to **Business Setup** > **Plans** and choose your hosting plan.

2. Click **Change Settings**.

3. Go to the **Properties** tab and select the **Dedicated** in the **IPv4 address** or **IPv6 address** drop-down lists, or both of them.

Troubleshooting Problems with Hosting Panels

In this section you will find a list of problems you may have with hosting panels connected to Business Manager and proposed solutions for them.

Cannot Connect a Panel

Sometimes you may have problems trying to connect a certain panel to Business Manager. In this case we recommend to do the following:

- Check that you have specified correct panel options. To see the options, go to the **Business Setup** > **All Settings** > **Hosting Panels**, choose the panel, and click **Edit**.
- Ensure that Business Manager server and the panel server can resolve each other. Fix DNS settings so that Business Manager and the panel are able to resolve each other host names to IPs, if needed.
- Try to reconnect the panel using the corresponding controls on the **Business Setup** > **All Settings** > **Hosting Panels** page.

Hosting Subscription Does not Appear in Panel

If the subscription created in Business Manager fails to appear in connected panel, check the tasks responsible for sending subscriptions data periodically to the Panel. You can view the tasks from **Business Monitoring** > **Tasks**. Such tasks are of type *ProcessPanel of subscription* and are supported by a related subscription ID.

If an error occurred during the processing of a subscription data by the Panel, the related task receives the status *Failed*. To see the error details, open the task page by clicking the task's name and see the request triggered by the event in the **Task Input** field and the Panel response in the **Task log** details. The errors are highlighted in pink.

If the processing of a subscription data is not allowed by the system configuration, the related task receives the status *Blocked*. For example, this happens when the configuration requires payment of an invoice before provisioning, and the invoice has not been paid. To change the configuration, go to **Business Setup** > **All Settings** > **Provisioning Policy**.

When the reason for an error is diagnosed and fixed, re-run the respective task by locating its options, and clicking **Run Now**. If the error is resolved and subscription is successfully created in the Panel, the task receives the status *Completed*.

Plan, Customer Account, or Subscription Properties in Panel Differ from Business Manager

Besides the initial interaction between the system and a connected hosting panels, Business Manager sends updates to a panel if a plan, add-on, subscription, or primary or additional contact is modified. This action is called *syncing* and Business Manager runs it automatically after certain events. To learn what updates cause this one-way sync, refer to the **Appendix F. How Business Manager Syncs with Hosting Panels** (on page 733).

If you see that properties of panel objects do not update automatically after updates in Business Manager, you can run the syncing with certain panel by clicking the **Sync All** button for this panel in the **Business Setup** > **All Settings** > **Hosting Panels** page.

Cannot Log In to Panel

You or your customers may have problems with logging in to connected panels using the Business Manager credentials.

If a certain Business Manager administrator or customer cannot log in to a panel, this may be caused by outdating of account information on the authorization module. In this case, sync the panel with Business Manager by clicking the **Sync All** button for this panel in the **Business Setup** > **All Settings** > **Hosting Panels** page.

If nobody can log in to a panel, this may be caused by problems with the SSO service. Learn more about SSO in the section **Managing SSO Service** (on page 464). In this case, try to fix these problems by clicking the **Fix Problems With Logging in to Panels** button on the home page.

If this does not help, repair the integration between Business Manager and connected panels by running the following command from the Business Manager server shell:

- On Linux systems:

```
/usr/share/plesk-billing/integration --command=repair-all
```

- On Windows systems:

```
"plesk_bin%\billing-integration.exe" --command=repair-all
```

Setting Up Invoicing

To notify customers about future payments for services that they use, Business Manager generates and sends them *invoices* - financial documents that contain payment information: who should pay for provided services, when they should do it, and what is a payment amount. The system generates and sends invoices as PDF files, but you can also view invoice details from the page **Business Operations** > **Invoices**.

Business Manager creates invoices for a subscription in the currency of the online store in which the subscriber purchased the subscription. For example, if your online store uses the *euro* currency for transactions, all invoices for the subscriptions purchased in this store will charge customers in the euro. You cannot change the currency of an existing subscription.

You can define when the system should issue invoices by selecting an appropriate *billing mode*. To learn more about possible billing modes and decide which one suits you best, read the section **Understanding Billing Modes** (on page 159).

An addition to the billing mode, you can configure the following aspects of invoicing:

▪ The statuses of customers that will receive invoices.
▪ Printable invoices appearance.
▪ Invoice numbering, and other aspects.

The tools to change these settings are located on the **Business Setup** > **All Settings** > **Invoicing** page.

Printable Invoices Appearance

Business Manager fills in printable invoices content (names and costs of the provided services, customer and provider information) according to the administrator's profile settings: country and language. For example, if the *Admin* user's country is Russia, the system will use the comma (",") as decimal part delimiter. If the country is the USA, the invoice will use the period ("."). To learn how to change the administrator's profile settings, see the section **Configuring Administrator Interface** (on page 139).

The language of a PDF invoice form (names of the invoice fields) is the same as the language of the user who should pay this invoice. For example, invoices for customers from Germany will be written in German.

You can also change the formatting, style, and predefined content of the invoices to your liking. This includes, for example, changing invoice title, adding company logo, or changing font size. To learn how to edit the appearance of printable invoices, refer to the section **Customizing PDF Invoices** (on page 164).

Invoice Numbering

Each invoice has a unique identifier - an *invoice number.* The format of the invoice number is defined by the *invoice number template*. The template is a line of text in which you can include a set of variables such as an invoice ID number (*%%ID%%*), the current year (*%%CURYEAR%%*), month (*%%CURMONTH%%*), and day (*%%CURDAY%%*), and so on. The complete list of the variables is shown on the **Business Setup** > **All Settings** > **Invoicing** page. For example, if you want to see a creation date as a part of an invoice number, include the following line into the template: `%%CURYEAR%%-%%CURMONTH%%-%%CURDAY%%`. When the system issues an invoice, it replaces the variables with their current values, for example, *2012-03-06*.

If you have moved to Business Manager from another billing solution and want to continue the invoice numbering that you used previously, you can do it with the variable *%%SEQ%%* (invoice sequence). This is an integer value that increases by one after issuing an invoice. To make the system use your previous numbering, assign the value that continues this numbering to this variable and include it into your invoice template. For example, if you used integer identifiers starting from *1* in your invoice numbers and you issued one hundred invoices, set the invoice sequence value to *101*.

Invoices and Accounting Entries

Invoicing is one of the many features used by Business Manager to create accounting entries. The basic accounting entries that the system creates for an invoice are the following:

- *Income*: The amount of money you have coming in from the invoice, excluding taxes.
- *Taxes Payable*: The amount of money that you are going to pay in taxes for the invoice.
- *Accounts Receivable*: The amount of money (income + tax) you will receive from the customer according to the invoice.

You can define other accounting entries that the system will create after issuing an invoice. For example, the *coupon cost*: When someone uses a coupon, Business Manager will keep track of how much the plan they purchased would have cost without applying a coupon. The system creates the appropriate expense entries each time an invoice is created. Additionally, you can define the *subscription cost* to keep track of how much it costs you to create a subscription to a certain plan. For example, if a plan provides a dedicated IP address, your expenses on a subscription creation include the price of a new IP address. Business Manager will create these entries each time a new subscription to the selected plan is created.

Achieving Tax Office Compliance

For some organizations, it is obligatory to keep the originally generated invoices unchanged. However, when you re-send an existing invoice (from the invoice details page), the system re-generates the PDF invoice that may differ from the original file. The difference can be caused by changes to the system-wide settings like invoices language, or company details.

If your local tax office requires that you do not change invoice content once it is generated, *save PDF copies* of original invoices before modifying one of the following settings:

- Company details.
- The appearance and language of printable invoices.
- Administrator language.

Note: Your customers can change invoice content as well, for example, by modifying their contact information.

In this section:

Understanding Billing Modes

Business Manager is, at heart, a billing system. Because of this, it's important to understand how the billing process works, from beginning to end. There are two main billing modes in Business Manager: *Anniversary Billing Mode* and *Monthly Billing Mode*. We will outline the aspects of each of these separately, as there are some important differences between these two choices.

In this section:

Anniversary Billing Mode

As the name implies, anniversary billing mode involves billing customers on the anniversary of the day they signed up for the subscription. Broadly speaking, this has two major results:

- Having invoice due dates spread throughout the month means that you will have a steady stream of income. It also means that if there is a problem with billing for any reason (your server goes down, your gateway is having trouble), only a small percentage of your customers may be affected. This makes recovering from such occurrences less painful.

- If you generate invoices every day, customers with multiple subscriptions purchased on different dates will receive multiple invoices for their purchases. For customers who pay manually, this may be undesirable. It should not be an issue for customers who pay automatically.

In addition to the above, it is important to consider scalability. Because anniversary mode results in a monthly billing workload divided between 28-31 days, you are much less likely to have problems with race conditions and other server-based limitations as your company grows. If you intend to have more than 20 customers, we recommend that you choose anniversary billing mode.

What to Expect in Anniversary Billing

Knowing what to expect from your billing system can help alleviate a lot of potential concern and confusion. Here we will walk through the life of a hypothetical customer, focusing specifically on how they will be billed.

Say you have a customer, Alice. Alice would like to order hosting and purchase a domain name from you. She finds your plan listings on the web, and goes through your order process. This process will create a customer record in your Business Manager for Alice, and add two subscriptions to this account. Let's assume that Alice chose to pay for her hosting on a monthly billing cycle, and her domain on a yearly billing cycle and that she chose a plan called Personal Hosting. We will also assume that you have Business Manager set to generate invoices ten days before the subscription is set to renew.

As part of the order process, the first invoice for Alice's subscriptions will be created. No matter how she chooses to pay, the system will automatically enter the date that each of these subscriptions renews. Say she signs up on June 15th, 2008. Her hosting subscription, which is on a monthly billing cycle, will renew again on July 15th, 2008. Her domain, which is on a yearly cycle, will renew June 15th, 2009. Because she subscribed on the 15th of the month, these subscriptions will always renew on the 15th.

Now let's say that Alice has decided to open a small business, and she wants a separate hosting account for this business' website. She goes through your order process again, this time on the 20th of August. She buys your Business Hosting subscription. An invoice is automatically generated through the order process for this first month of hosting. Alice would already have paid for her Personal Hosting on August 15th.

In September, Alice will get two invoices. She will get an invoice for her Personal Hosting that will renew on September 15th, and a second invoice for her Business Hosting, which will renew on September 20th. Now let's fast forward to May 2009.

By default, Business Manager is set to generate domain renewal invoices 30 days in advance, rather than the 5-10 days that other subscription invoices are usually set to be generated. This is to prevent people from losing their domains. Thirty days provides enough warning that a customer should have time to pay their bill on time, and allow the renewal to take place. Because of this, Alice will receive three invoices. On May 5th, Alice will get an invoice for her Personal Hosting subscription, which renews ten days later, on May 15th. On May 10th, she will get an invoice for her Business Hosting subscription, which renews May 20th. On May 15th, Alice will get an invoice for her domain subscription, which renews June 15th.

This may sound like a lot of invoices. Keep in mind that if Alice is paying with a credit card that she keeps on file, or with PayPal subscriptions (the two most common payment methods), these payments will be made and logged by Business Manager without either you or Alice having to do any work. If Alice pays manually, she can write a single check for all three invoices and mail one payment. You can use the Quick Manual Payment feature to mark each of her invoices as paid.

Monthly Billing Mode

Like anniversary mode, monthly billing mode will invoice your customers on a regular billing cycle, usually once a month. Unlike anniversary billing, customer subscriptions will all renew on the first day of the month. Billing your customers once a month has a couple of main features:

- No matter how many subscriptions a customer might have, they will receive a single invoice listing all subscriptions renewing in any given month.
- If you choose to run your billing manually, you can set aside an afternoon to generate invoices and a second afternoon to run them through the gateway.

Monthly billing often involves proration. If a customer would like to buy a subscription on the 15th, you can either choose to have that subscription start on the first of the next month, or to prorate that first month. Proration adds another level of complexity to your billing, which can sometimes cause confusion for your potential customers. Because of this, and the scalability issues mentioned above, we recommend that companies do not use monthly billing unless they intend to have a small number of customers.

However, it is possible to use monthly billing mode and set your plans to not prorate. This causes these plans to behave as if you were in anniversary mode. This is especially useful for selling items such as SSL certificates and domains. These items have fixed start and renewal dates determined by outside sources. Proration would result in subscription renewal dates that did not match the actual item's renewal date, and could cause problems.

What to Expect in Monthly Billing

We have already seen what the typical customer's invoicing will look like in anniversary mode. Now let's see what this system will look like in monthly mode.

Meet Alice's friend Bob. On June 15th, 2008, Bob decides he wants to buy several subscriptions from you. He buys the Personal hosting plan on a monthly cycle and a domain on a yearly cycle. Your Personal hosting plan is set to prorate; your domain plan is not. Let's assume that you have your proration threshold set to the 15th. This means anyone who signs up on the 15th or later will pay for the rest of the month they are in, plus the next month.

As part of the order process, Bob paid the first invoices for these subscriptions. Like anniversary billing, no matter how Bob pays, his subscriptions will automatically be updated with their next renewal date. Because Bob's Personal Hosting subscription was set to prorate, his first invoice charged him for the rest of June and the whole month of July. The domain subscription was not set to prorate, so he was charged for a full year.

At the end of July, Bob will get another invoice for his Personal Hosting subscription, due August 1st. This will cover the whole month of August. Say that Bob decides, after paying this bill, that he would like to buy a Business Hosting subscription for his new small business. On August 5th, Bob goes through your order process again, this time to purchase Business Hosting. Because the 5th is before your proration threshold of the 15th, Bob will simply pay for the rest of August in this first invoice. At the end of August, Bob will receive a single invoice. This invoice will carry charges for both the Personal Hosting and Business Hosting account.

Fast-forward to May of 2009. Bob will again receive an invoice in late April for both the Personal Hosting and Business Hosting subscriptions. May 15th, Bob will receive a second invoice, this time for his domain which is set to renew June 15th. Remember, this subscription was set not to prorate, so it follows the anniversary billing behavior for subscription renewal dates. At the end of May, Bob will again be billed for his two hosting subscriptions on a single invoice.

Just like in anniversary mode, Bob's invoices can be set to be paid automatically, with a credit card kept on file or via third party subscription accounts.

Setting Up Invoicing

You can configure different aspects of invoicing: Who and when should receive invoices, how invoice numbers should look like, how much items to put into a single invoice, etc. The system generates invoices as PDF files, but you can also view the invoice details from web.

PDF invoices are formatted to the locale you specified for the admin user profile. For example, if the admin user country is Russia, the invoice will use "," for decimal part delimiter, and if the country is the USA, the invoice will use ".".

PDF invoice language is dictated by the user for whom the invoice was generated. For example, invoices generated for customers from Germany will be written in German. Invoices generated from the administrator interface will use the administrator's profile language settings.

To change the administrator's country and language, go to **Business Setup** > **All Settings** > **Administrators**, click an administrator and **Edit**. To change the language for your profile, click **Profile** in the top of the page.

For each subscription, Business Manager creates invoices in the currency of the online store, in which the subscription was ordered. For example, all invoices for the subscriptions ordered in a store with *euro* currency will charge subscribers in euro. You cannot change the currency of an existing subscription.

As we already mentioned, you can customize the format of invoice numbers (invoice sequence). For example, you can start with "1" or "1000" or any number specific to your business needs. The system also allows you to select how you want to number your invoices such as:

- *YEAR-ID*, example 2006-1234
- *YEAR-SEQ*, example: 2006-1
- *VATYEAR-SEQ*, example 2006-1

Invoicing is one of the many features used by Business Manager to create accounting entries. The basic accounting entries that get created for an invoice are as follows:

- *Income*: The amount of money you have coming in from the invoice in reference, not including taxes.
- *Taxes Payable*: The amount of money that you are going to pay in taxes for the invoice in reference.
- *Accounts Receivable*: The amount of money (income + tax) you will receive from the customer for the invoice in reference.

There are other accounting entries that can be made during invoice creation, but those are controlled by you. For example, coupon cost. When someone uses a coupon, Business Manager will keep track of how much the plan they purchased would have cost without applying a coupon. The system creates the appropriate expense entries each time an invoice is created.

In addition to coupon cost, there is subscription cost. You have the ability to associate generic accounting entries with each plan created. These entries are created each time a subscription of that plan type is included on an invoice.

To set up invoicing, go to **Business Setup** > **All Settings** > **Invoicing**.

Customizing PDF Invoices

The system provides means for modifying the look and feel of printable invoices. It is possible to change invoice style and formatting, modify heading labels, or add custom text. In addition, if you send invoices in windowed envelopes, you have the option to modify the address block position to fit the window size.

Business Manager also helps you create printable invoices from PDF templates that include watermarks, images or other information.

➢ *To update the appearance of printable invoices:*

1. Go to **Business Setup** > **All Settings** > **PDF Invoice Customization**.

2. Update the configuration parameters.

3. Click **Save Settings**.

If your printable invoice requires more advanced customization, you are able to directly modify the code responsible for generating invoices in PDF format. To generate PDF documents, the code uses the *TCPDF* library. Refer to http://www.tcpdf.org/ to learn how to modify PDF generation code.

The invoice rendering code is located at *<BM_dir>*/`lib-billing/include/config/PDFInvoice.example.php` directory. Here <BM_dir> stands for the directory to which Business Manager was installed. Typically, it is /usr/local/plesk-billing on FreeBSD and RPM-based Linux systems, and `/opt/plesk-billing` on deb-based Linux systems.

➢ *To add a PDF template:*

1. Create a one-page PDF file that the system will further use as a template for invoices generation.

2. Rename the file to `stationery.pdf`, and put it into one of these directories depending on your OS:

   ▪ For Linux, it is `/usr/local/share/plesk-billing/`

The system searches for this file and uses it as a PDF template if it is found.

For experienced administrators, Business Manager provides an option to deeply modify printable invoices appearance by editing the PHP script that generates them - `PDFInvoice.php`. To generate PDF invoices, the script uses the *TCPDF* and FPDI libraries. For more information on these libraries, refer to the following sites:

▪ http://www.tcpdf.org/doc/ for TCPDF.
▪ http://www.setasign.de/support/manuals/fpdi/ for FDPI.

The `PDFInvoice.php` is located in the following directory:

- On Linux systems: `opt/plesk-billing /htdocs/lib-billing/include/config/`
- On Windows systems: `C:\Program Files\Parallels\Plesk\billing\htdocs\lib-billing\include\config\`

Achieving Tax Office Compliance

For some organizations, it is obligatory to keep the originally generated invoices unchanged. However, when you re-send an existing invoice (from the invoice details page), the attached PDF file is *re-generated* and might be modified. The modification can be caused by changes to system-wide settings like invoices language, or personal details.

If your local tax office requires that you not change invoice content once generated, *save PDF copies* of original invoices before modifying one of the following:

- Company details.
- Printable invoice appearance and language. For the operation details, see **Setting Up Invoicing** (on page 163).
- Administrator language. For the operation details, **Editing Administrator Profiles** (on page 138).

Your customers are also able to cause changes to invoices content by modifying their contact information.

Configuring Schet-Facturas

Schet-factura is a financial document that certifies that you supplied a taxable service to another party. If your company is registered in Russia, the system will generate and send these documents to some of your customers. If you do not need to keep or send these documents, please skip this section.

How to Start Issuing Schet-Facturas

The system decides whether to generate schet-facturas basing on system configuration settings (**Business Setup** > **All Settings** > **Schet-Facturas Issuing**). The first option in the settings list controls the documents generation. If it is selected, schet-facturas are generated basing on the restrictions set by other options on the page. Otherwise, if the first option is cleared, schet-facturas are not generated at all, and you are unable to view or upload them. For Russian companies (company's country is Russia) this option is initially selected. If your company is not from Russia and you wish to use schet-facturas, select the first option.

When the System Issues Schet-Facturas

The system issues schet-facturas in two cases:

- *At the first day of each month*. These schet-facturas include information about all services provided during the month. Particularly, it includes payments for the following services:

  - Subscriptions that were not completed or canceled during the previous month. For such subscriptions, schet-facturas include payments for the period from the subscription creation to the end of the month (if the subscription was created in the previous month) or for the whole month (if the subscription was created earlier).

  - Hosting resources used over plan limits during the month if you allow pay-as-you-go hosting.

- *In case of changes to provided services*. These changes - subscriptions upgrade, downgrade, or add-ons adjustment - can be initiated either by administrators or by customers. Any of these changes signals the system to issue a new schet-factura. The rationale for generating the documents is that previous service (the one before changes) was supplied in full and not used anymore. Say, if a customer has subscribed to the Bronze hosting plan and then upgraded it to Silver, the new schet-factura will be issued for Bronze since this service is fully supplied and the customer does not use it anymore.

Who Can View and Download Schet-Facturas

Schet-facturas are available for viewing and downloading only to administrators. Other users receive them only by e-mail and only if you allowed them to do it in schet-factura settings. For details on how administrators can view and download schet-facturas, see **Viewing and Downloading Schet-Facturas** (on page 440).

How to Customize Schet-Facturas Content

If you issue schet-facturas, you are able to configure Business Manager to fill in some of schet-factura fields automatically. For example, you can define company head and chief accountant names. To view the full list of customizable schet-factura fields and set values for them, go to the **Business Setup** > **All Settings** > **Schet-Facturas Customization**.

Additionally, you can customize the number of schet-facturas you issue. To do this, use the *schet-factura number template* - a line of characters and variables that defines schet-facturas numbers. The rules of the schet-facturas numbering are the same as for invoices numbering. To learn more about invoices numbering, refer to the section **Setting Up Invoicing** (on page 157).

Setting Up Provisioning Policy

Provisioning policy is a set of rules that define when customers get access to resources that they order (a hosting subscription, a domain name, or an SSL certificate). By setting up the appropriate provisioning policy, you can eliminate the risk of serving customers that will never pay even the first invoice: Just configure the provisioning policy so that new customers get access to Panel only after they pay their invoices. On the other hand, if you want to make your business more customer-friendly, you can let them use ordered resources immediately after placing the order.

You can change the Business Manager provisioning policy at the **Business Setup** > **All Settings** > **Provisioning Policy** page.

Note: When provisioning a customer account to a Panel, the system attempts to create the account with the username that the customer has specified in an online store. If this is impossible (for example, this username is already taken in Panel), the system generates a random username. In addition, the system always generates random usernames for customers' access to the server over FTP, SSH, and RDP. So, if your customers experience problems with logging in to Panel using their credentials, check the credentials of their accounts in Panel.

Returning Money for the Days Before Provisioning

When a customer subscribes to your services through an online store, Business Manager starts the billing cycle of the corresponding subscription beginning from the order placement day. For example, if a customer subscribes to a plan with the *1 month* billing cycle on the *1st of June*, the first invoice will include the payment for the period from the *1st of June* to the *1st of July*. Regardless of when the subscriber pays the invoice, the first billing cycle will end on the *1st of July*. Thus, if the customer pays on the *6th of June*, they will use the subscription for 25 days for the price of the whole month.

If you want to return money paid for the days when customers did not have access to their subscriptions, switch on the option **Return unused money to credits** on the **Business Setup** > **All Settings** > **Provisioning Policy** page. In this case, once a subscriber pays the invoice, the system adds the amount of money paid for the period between placing the order and receiving the payment to the subscriber's credits. Thus, in the example above, the system will return money paid for the period from the *1st of June* to the *5th of June*.

Defining How to Handle Unpaid Subscriptions

You have the option to automatically handle situations when customers have overdue invoices: In a certain time, Business Manager starts sending such customers notifications that remind about overdue invoices. If the customers do not close the invoices, the system suspends their unpaid subscriptions. However, you can restrict suspending subscriptions of certain customers as described in the section **Limiting Discounts and Exempting Subscriptions from Suspension** (on page 440).

Also, Business Manager checks automatically suspended subscriptions with a periodic task to see if the associated invoice has been paid. If it has been paid, the system will activate the subscription.

The settings that define how to handle unpaid subscriptions are available at the **Business Setup** > **All Settings** > **Cancelation of Unpaid Subscriptions** page.

Setting Up Automatic E-mails

This chapter focuses on setting up automatic e-mails sent to users upon particular events. Sending e-mails to customers 'manually' is discussed in the **Sending Mass E-mails** (on page 414).

E-mails are an integral part of the Business Manager system. They are a large part of what makes it possible to automate: when a customer needs information, the system will generate and send an e-mail automatically, letting customers know if there is something they need to do or know. Without e-mails, managers would need to do a lot more work to keep their system up and running.

Business Manager provides an extensive e-mail system that allows you to send e-mails based on locale. There is a set of e-mail actions which are specific to each type of e-mail group you will use in your system.

Note: E-mail actions are pre-defined and cannot be modified.

In this section:

Adding E-mail Templates

➢ *To add an e-mail template group:*

1. Go to **Business Setup** > **All Settings** > **E-mail Templates**.

2. Find the e-mail action you want to add an e-mail template to and click **Add Template**.

3. Fill in the necessary information.

4. Click **Save**.

5. Click **Add Locale** button in the middle of the page. Set up the following:

   ▪ Choose the language to associate with the template.

   ▪ Choose how broadly you would like the template to apply. If you are making a Spanish template, for example, do you want it to be used by Spanish speaking people world-wide? Or just in Spain?

   ▪ If this is going to be the default locale, check the box. The default locale will be applied if no other locale can be found that applies to the customer.

   ▪ Enter a subject for the email template. This is the subject line that each e-mail will use.

   ▪ **E-mail Template HTML Body**. Enter the body of your e-mail template in html format.

   ▪ **E-mail Template Text Body**. Enter the body of your e-mail template in text format.

Note: All contacts are set to receive HTML by default when they come through the online store. If you do not want a specific customer to receive HTML e-mails, go to the customer's account details page and click on the **edit primary** button. Uncheck *HTML* for the **E-mail Format**. Click **edit contact**.

6. **Reload Options**: If you need to reload the original email templates, perform the following steps:

   1. Select the template you want to reload.

   2. **Reload HTML**. Select **Yes**.

   3. **Reload Text**. Select **Yes**.

Caution: This will replace this existing template. Make a backup of your existing template if you do not wish to lose it.

7. Scroll to the bottom of the page, and click **Save**.

Setting Up Your Locales

Business Manager has the ability to send e-mails in various different languages. Each of these locales must be set up during the configuration process. By default, the system sets up templates of a single locale (usually English).

> ➢ *To set up additional locales:*

1. Go to **Business Setup** > **All Settings** > **E-mail Templates**.

2. Choose the template you would like to add a locale to. Click on the green pencil icon to view the edit screen for this template.

3. Click **Add Locale** button in the middle of the page. Fill in the following:

   - Choose the language to associate with the template.

   - Choose how broadly you would like the template to apply. If you are making a Spanish template, for example, do you want it to be used by Spanish speaking people world-wide? Or just in Spain?

   - If this is going to be the default locale, check the box. The default locale will be applied if no other locale can be found that applies to the customer.

   - Enter a subject for the e-mail template. This is the subject line that each e-mail will use.

   - **E-mail Template HTML Body**. Enter the body of your e-mail template in html format.

   - **E-mail Template Text Body**. Enter the body of your e-mail template in text format.

   Note: All contacts are set to receive HTML by default when they come through the online store. If you do not want a specific customer to receive HTML e-mails, go to the customer's account details page and click on the **edit primary** button. Uncheck *HTML* for the **E-mail Format**. Click **edit contact**.

4. **Reload Options**: If you need to reload the original e-mail templates, perform the following steps:

   1. Select the template you want to reload.

   2. **Reload HTML**. Select **Yes**.

   3. **Reload Text**. Select **Yes**.

   Caution: This will replace this existing template. Please make a backup of your existing template if you do not wish to lose it.

5. Scroll to the bottom of the page, and click **Save**.

Editing Template Content

Whether you have just created a new locale or want to edit the defaults, you will follow the same general instructions. In addition to basic html and text content, you can use a number of predefined variables to populate the e-mails with information from the database.

➤ *To edit content of a template:*

1. Go to **Business Setup** > **All Settings** > **E-mail Templates**.

2. Choose the template you would like to edit. Click on the green pencil icon to view the edit screen for this template.

3. Click the green pencil icon for an existing locale or edit the content while adding a new locale.

4. Here you have a couple of options: you can develop the content on your own, or load our default template and then edit it. If you are looking at using our default templates, we recommend that you reload them before editing to be sure you have the latest version.

   ▪ If you choose to use your own content, you would enter it in the fields **E-mail Template HTML Body** and **E-mail Template Text Body**. As you edit, you can click preview on most templates and it will allow you to see how your work will be parsed by the system.

   ▪ If you prefer to save time by editing our template, you can scroll to the bottom of the page, choose the template you would like to use, click Test for both the HTML and text e-mail, and then click reload. You can now edit the template as above.

Note: All contacts are set to receive HTML by default when they come through the online store. If you do not want a specific customer to receive HTML e-mails, go to the customer's account details page and click **Edit primary**. Uncheck *HTML* for the **E-mail Format**. Click **Edit contact**.

5. **Reload Options**: If you need to reload the original e-mail templates, perform the following steps:

   1. Select the template you want to reload.

   2. **Reload HTML**: Select Yes.

   3. **Reload Text**: Select Yes.

      Caution: This will replace this existing template. Please make a backup of your existing template if you do not wish to lose it.

6. Click **Save**.

7. You will see your new template added with the locale you want to use for the e-mail template group you selected. You can add as many e-mail templates to this group or any other group as you need based on your specific needs.

Reloading E-mail Templates

➢ *To reload e-mail templates:*

1. Go to **Business Setup** > **All Settings** > **E-mail Templates**.

2. Click the pencil icon next to each email template you want to reload.

3. E-mail templates for each locale you have setup will display at the bottom of the page. Click the pencil icon in the **Available Operations** column.

4. At the bottom of the **Edit E-mail Template** page are the **Reload Options**. Select the template you want to reload from the drop-down box.

5. Select **Yes** for both **Reload HTML** and **Reload Text**.

6. Click **reload**. The template has now been reloaded.

7. Repeat steps 2-6 for each email template you wish to reload.

Tip: If you are reloading all 25 email templates, save time by opening each email template in step 2 in a new window or tab, and go through the remaining steps one screen at a time.

Getting Your System Ready to Send E-mail Messages

Some users have reported instances where the e-mail templates, particularly the lost password e-mails, are being sent with the content missing. Below are some points to consider to ensure that your system is set up properly to send e-mail messages.

Are e-mail templates set?

First, check to make sure you have an email template set for each template group and locale.

➢ *To do so, perform the following steps:*

1. Go to **Business Setup** > **All Settings** > **E-mail Templates**.

2. Click the pencil icon next to each e-mail template you want to view.

3. An e-mail template for each locale you have set up will display at the bottom of the page. Click the pencil icon in the **Available Operations** column.

4. You will see an HTML e-mail template and plain text email template. If these fields are blank, you will need to reload your e-mail templates as described in Reloading E-mail Templates (on page 173).

5. Test to see if the e-mail was sent out successfully. If it is still blank, see below.

Is the temp directory set properly in your `smarty.php` file?

➢ *To check, perform the following steps:*

1. Open up the file `lib-billing/include/config/smarty.php`.

2. Find the line `$CONF["smarty"]["compileDirectory"] =`

3. Make sure the path to your temp directory is set correctly after the `=` sign. Examples are provided below:

   ▪ On Linux, this is typically `$CONF["smarty"]["compileDirectory"] = "/tmp";`

   ▪ On Windows, this is typically `$CONF["smarty"]["compileDirectory"] = "C:\Temp";`

4. Find the line `$CONF["smarty"]["cacheDirectory"] =`

5. Make sure the path to your temp directory is set correctly after the `=` sign. Examples are provided below:

   ▪ On Linux, this is typically `$CONF["smarty"]["cacheDirectory"] = "/tmp";`

   ▪ On Windows, this is typically `$CONF["smarty"]["cacheDirectory"] = "C:\Temp";`

6. Save the file and test it to see if your e-mails are being sent out successfully.

Customizing E-mail Templates

All email templates in the system have special variables that are parsed at run-time. This means that the variables are replaced with the data they represent prior to being sent to the customer. Some general customer variables may be shared and made available in all templates, however many specific variables are unique to a particular template set (invoice data, subscription data, etc). It is important to understand that not all variables can be used in all templates. To view a list of available variables and their meanings, refer to the **E-mail Template Variables** section (on page 176).

The template files are found in the `lib-themes/default/lib-billing/templates/emails/widgets/` directory.

In this section:

Updating the E-mail Header

> ➢ *To update the e-mail header:*

1. Login to your server via SSH.

2. Open the following file in your Business Manager file set: `lib-themes/default/lib-billing/templates/emails/widgets/header.tpl`

3. The code below controls the header of the email. Modify it to fit your needs:

```
{$smarty.const[$headerTitle]|default:$headerTitle}
```

4. Save the file.

Updating the E-mail Layout

The e-mail templates are made up of several template files which control the display and layout of all 25 default email templates. To see which template files are used by each e-mail template, click the *pencil* icon to edit an individual e-mail template and view the source of the **Email Template HTML Body**, and find the corresponding fragments in files within the `lib-themes/default/lib-billing/templates/emails/` directory.

Each component of the HTML email templates has its own header and footer file to make it easy to update each instance of that component throughout the email template set. For example, if you would like to edit the display of the information boxes that appear in any *subscription Info* e-mail template, simply edit the `boxHeader.tpl` and `boxFooter.tpl` files and the change will take effect across the entire e-mail template system. Likewise, tables that use IF statements to display or hide information such as in the *New subscription order* can be customized by editing the `codeBoxHeader.tpl` and `codeBoxFooter.tpl` files, and so on. The default e-mail templates we provide are designed to serve as examples that can be used by any business. You are encouraged to edit the colors, font styles, and layout to match your specific needs.

E-mail Template Variables

Below is a list of e-mail variables organized by the templates in which you can use them. Please note that these variables are hard coded in the system, and cannot be changed.

In this section:

Subscription Info E-mail

Name	Variable
Your Company Name	`{$companyName}`
Your Company URL	`{$companyURL}`

Your Company Address 1	`{$companyAddress1}`
Your Company Address 2	`{$companyAddress2}`
Your Company City	`{$companyCity}`
Your Company State	`{$companyState}`
Your Company Zip	`{$companyZip}`
Contact First Name	`{$contactFirstName}`
Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`
Subscription Name	`{$packageName}`
Subscription Price	`{$packagePrice}`
Subscription IP	`{$packageIP}`
Subscriber's username	`{$packageUsername}`
Subscriber's password	`{$packagePassword}`
Domain Name	`{$domainSLD}`
Domain TLD	`{$domainTLD}`
Nameserver 1	`{$nameserver1}`
Nameserver 1 IP	`{$nameserver1IP}`
Nameserver 2	`{$nameserver2}`
Nameserver 2 IP	`{$nameserver2IP}`
Nameserver 3	`{$nameserver3}`
Nameserver 3 IP	`{$nameserver3IP}`
Nameserver 4	`{$nameserver4}`
Nameserver 4 IP	`{$nameserver4IP}`
Contact customer URL	`{$companyClientURL}`

Contact User Name	`{$contactUsername}`
Date	`{$currentDateTime}`

Invoice E-mail

Name	Variable
Your Company Name	`{$companyName}`
Your Company URL	`{$companyURL}`
Your Company Address 1	`{$companyAddress1}`
Your Company Address 2	`{$companyAddress2}`
Your Company City	`{$companyCity}`
Your Company State	`{$companyState}`
Your Company Zip	`{$companyZip}`
Contact First Name	`{$contactFirstName}`
Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`
Invoice Number	`{$invoiceNumber}`
Invoice Date Entered	`{$invoiceDateEntered}`
Loop Line Items BEGINNING	`{loop=lineItems}`
Line Item Comments	`{$lineItem.packageComments}`
Line Item Quantity	`{$lineItemQuantity}`
Line Item Description	`{$lineItemDescription}`

Line Item Price Amount	`{$lineItemPriceAmount}`
Line Item Discount Amount	`{$lineItemDiscountAmount}`
Line Item Tax Amount	`{$lineItemTaxAmount}`
Line Item Total Amount	`{$lineItemTotalAmount}`
Loop Line Items END	`{/loop}`
Invoice Amount	`{$invoiceAmount}`
Invoice Date Due	`{$invoiceDateDue}`
Invoice Comments	`{$invoiceComments}`
Date	`{$currentDateTime}`

Credit Card Payment

Name	Variable
Your Company Name	`{$companyName}`
Your Company URL	`{$companyURL}`
Your Company Address 1	`{$companyAddress1}`
Your Company Address 2	`{$companyAddress2}`
Your Company City	`{$companyCity}`
Your Company State	`{$companyState}`
Your Company Zip	`{$companyZip}`
Contact First Name	`{$contactFirstName}`
Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`

Invoice Number	{$invoiceNumber}
Invoice Amount	{$invoiceAmount}
Credit Card Type	{$billingCardType}
Credit Card Number	{$billingAccountNumLastFour}
Transaction Date/Time	{$transactionDateCreated}
Transaction ID	{$transactionCode}
Auth Return	{$authReturn}
Auth Code	{$authCode}
AVS Code	{$avsCode}
Transaction Amount	{$transactionAmount}
Notes	{$transactionNotes}
Date	{$currentDateTime}

eCheck Payment

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}
Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}

Contact City	{$contactCity}
Contact State	{$contactState}
Contact Zip	{$contactZip}
Invoice Number	{$invoiceNumber}
Invoice Amount	{$invoiceAmount}
Bank Name	{$billingBankName}
Bank ABA Code	{$billingBankAbaCode}
Bank Account Number	{$billingAccountNumLastFour}
Transaction Date/Time	{$transactionDateCreated}
Transaction ID	{$transactionCode}
Auth Return	{$authReturn}
Auth Code	{$authCode}
AVS Code	{$avsCode}
Transaction Amount	{$transactionAmount}
Notes	{$transactionNotes}
Date	{$currentDateTime}

Bank Draft Payment

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}

Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`
Invoice Number	`{$invoiceNumber}`
Invoice Amount	`{$invoiceAmount}`
Bank Name	`{$billingBankName}`
Bank ABA Code	`{$billingBankAbaCode}`
Bank Account Number	`{$billingAccountNumLastFour}`
Transaction Date/Time	`{$transactionDateCreated}`
Transaction ID	`{$transactionCode}`
Auth Return	`{$authReturn}`
Auth Code	`{$authCode}`
AVS Code	`{$avsCode}`
Transaction Amount	`{$transactionAmount}`
Notes	`{$transactionNotes}`
Date	`{$currentDateTime}`

Off-site Gateway Payment

Name	Variable
Your Company Name	`{$companyName}`
Your Company URL	`{$companyURL}`
Your Company Address 1	`{$companyAddress1}`
Your Company Address 2	`{$companyAddress2}`

Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}
Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}
Contact City	{$contactCity}
Contact State	{$contactState}
Contact Zip	{$contactZip}
Gateway Name	{$gatewayName}
Transaction Date/Time	{$transactionDateCreated}
Transaction ID	{$transactionCode}
Auth Return	{$authReturn}
Auth Code	{$authCode}
AVS Code	{$avsCode}
Transaction Amount	{$transactionAmount}
Notes	{$transactionNotes}
Date	{$currentDateTime}

Declined Payment

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	$companyAddress1}
Your Company Address 2	{$companyAddress2}

Your Company City	`{$companyCity}`
Your Company State	`{$companyState}`
Your Company Zip	`{$companyZip}`
Contact First Name	`{$contactFirstName}`
Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`
Invoice Number	`{$invoiceNumber}`
Invoice Amount	`{$invoiceAmount}`
Credit Card Type	`{$billingCardType}`
Credit Card Number	`{$billingAccountNumLastFour}`
Transaction Date/Time	`{$transactionDateCreated}`
Transaction ID	`{$transactionCode}`
Auth Return	`{$authReturn}`
Auth Code	`{$authCode}`
AVS Code	`{$avsCode}`
Transaction Amount	`{$transactionAmount}`
Notes	`{$transactionNotes}`
Date	`{$currentDateTime}`

Payment Error

Name	Variable
Your Company Name	`{$companyName}`

Your Company URL	`{$companyURL}`
Your Company Address 1	`{$companyAddress1}`
Your Company Address 2	`{$companyAddress2}`
Your Company City	`{$companyCity}`
Your Company State	`{$companyState}`
Your Company Zip	`{$companyZip}`
Contact First Name	`{$contactFirstName}`
Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`
Invoice Number	`{$invoiceNumber}`
Invoice Amount	`{$invoiceAmount}`
Credit Card Type	`{$billingCardType}`
Credit Card Number	`{$billingAccountNumLastFour}`
Transaction Date/Time	`{$transactionDateCreated}`
Transaction ID	`{$transactionCode}`
Auth Return	`{$authReturn}`
Auth Code	`{$authCode}`
AVS Code	`{$avsCode}`
Transaction Amount	`{$transactionAmount}`
Notes	`{$transactionNotes}`
Date	`{$currentDateTime}`

Domain Renewal Notice

Name	Variable
Your Company Name	`{$companyName}`
Your Company URL	`{$companyURL}`
Your Company Address 1	`{$companyAddress1}`
Your Company Address 2	`{$companyAddress2}`
Your Company City	`{$companyCity}`
Your Company State	`{$companyState}`
Your Company Zip	`{$companyZip}`
Contact First Name	`{$contactFirstName}`
Contact Last Name	`{$contactLastName}`
Contact Name	`{$clientCompany}`
Contact Address 1	`{$contactAddress1}`
Contact Address 2	`{$contactAddress2}`
Contact City	`{$contactCity}`
Contact State	`{$contactState}`
Contact Zip	`{$contactZip}`
Domain Name	`{$domainSLD}`
Domain TLD	`{$domainTLD}`
Invoice Number	`{$invoiceNumber}`
Invoice Amount	`{$invoiceAmount}`
Invoice Date Entered	`{$invoiceDateEntered}`
Domain Expiry Date	`{$domainDateExpires}`
Date	`{$currentDateTime}`

Domain Transfer - Success E-mail

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}
Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}
Contact City	{$contactCity}
Contact State	{$contactState}
Contact Zip	{$contactZip}
Domain Name	{$domainSLD}
Domain TLD	{$domainTLD}
Date	{$currentDateTime}

Domain Transfer - Failure E-mail

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}

Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}
Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}
Contact City	{$contactCity}
Contact State	{$contactState}
Contact Zip	{$contactZip}
Domain Name	{$domainSLD}
Domain TLD	{$domainTLD}
Date	{$currentDateTime}

Credit Card Expiration Notification E-mail

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}

Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}
Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}
Contact City	{$contactCity}
Contact State	{$contactState}
Contact Zip	{$contactZip}
Credit Card Type	{$billingCardType}
Credit Card Number	{$billingAccountNumLastFour}
Expire Month	{$billingCardExpMonth}
Expire Year	{$billingCardExpYear}
Date	{$currentDateTime}

Subscription Suspension E-mails

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}

Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}
Contact City	{$contactCity}
Contact State	{$contactState}
Contact Zip	{$contactZip}
Invoice Number	{$invoiceNumber}
Contact Customer URL	{$companyClientURL}
Contact User Name	{$contactUsername}
Date	{$currentDateTime}

Subscription Enable E-mail

Name	Variable
Your Company Name	{$companyName}
Your Company URL	{$companyURL}
Your Company Address 1	{$companyAddress1}
Your Company Address 2	{$companyAddress2}
Your Company City	{$companyCity}
Your Company State	{$companyState}
Your Company Zip	{$companyZip}
Contact First Name	{$contactFirstName}
Contact Last Name	{$contactLastName}
Contact Name	{$clientCompany}
Contact Address 1	{$contactAddress1}
Contact Address 2	{$contactAddress2}
Contact City	{$contactCity}
Contact State	{$contactState}

Contact Zip	`{$contactZip}`
Invoice Number	`{$invoiceNumber}`
Invoice Amount Paid	`{$invoiceAmountPaid}`
Invoice Date Paid	`{$invoiceDatePaid}`
Subscription Name	`{$packageName}`
Date	`{$currentDateTime}`

Managing Online Stores

Business Manager, unlike most host-based billing platforms currently available, provides *online stores* - automatically created websites. These websites display your plans, and also have a shopping cart with checkout to let customers subscribe to your plans. Customer payments are processed by a payment gateway associated with the store. You can have multiple online stores for different currencies, locales, and product lines.

Business Manager ships with the default online store for the United States locale and USD currency. It is available at

`https://`<your-host-name>`:8443/store/default.html`

Online stores are completely customizable so you can template them to match the rest of your web site.

In addition to online stores, Business Manager offers *website widgets*. These are little snippets of code you simply drop into your company web site that feature any subset of plans you want in any format you want (listing, drop-down, etc). Because widgets are small snippets of code, they can be dropped anywhere on your web site where you want to sell plans. This gives you precise control of the way you like to sell plans. Read more about the widgets in **Using Website Widgets to Embed Stores into Websites (on page 194).**

This section explains how to add or edit an online store, how to customize its look and feel, and how to manage website widgets.

We do not provide store configuration instructions in this section, as the configurable options are self-explanatory, and you can easily find what you need by reading about these options when adding or editing online stores.

In this section:

Adding an Online Store

If you are going to be charging your customers in more than one currency, then you need to have one online store for each currency.

➢ *To add a new online store:*

1. Go to **Business Setup** > **Online Stores**.

2. This page lists your current online stores. From here, click **Add New Store**.

3. Fill in the necessary information using the tips from the interface.

4. Click **Save**.

Editing an Online Store

Use the instructions below to edit an online store.

Tip: Assuming that you work with a single currency, you only need one online store to distribute your service plans. For these purposes, edit a default online store settings to match your needs instead of creating new stores.

➢ *To edit an online store:*

1. Go to **Business Setup** > **Online Stores** and click the store you want to edit.

2. Fill in the necessary information. Use tips next to each of the fields and to understand what a field configures.

Changing Online Store Appearance

You can perform the following changes of the Business Manager online store appearance through the GUI:

- Set the custom header and footer for the store pages. To do it, click the **Header and footer** > **[edit header and footer]** link on the store's page.

- Choose the color theme of the store from built-in themes or create your own. To do it, click the **Color theme** > **[change]** link on the store's page.

- Change the store home page layout using landing page templates. Business Manager provides two templates:*column* and *row*. To change the layout, click **Change Settings** on the store's page, choose the template from the **Landing page template** dropbox, and click **Save**.

Using Website Widgets to Embed Stores into Websites

A website widget is a piece of code that shows a part of an online store on your website. Widgets either list your plans (catalog widget) or let your customers check a domain name availability (domain widget) to further add this domain to their subscription. When customers select a plan or submit a domain name, they are forwarded to a particular online store where they can complete the order.

To create a widget within an online store, go to the store page (**Business Setup** > **Online Stores** > *store name*) and click the **Add Website Widget** button. Then fill in the required fields and save the widget.

To add a widget to your website, get the widget code by clicking **Get Code** in **Available Operations** list on the store page. A widget code may be server-side (written in PHP) or customer-side (written in JavaScript). After you get the code, add it to your website pages on which you want to show the widget.

Querying Customers for Extra Information in Online Stores

If you need additional information on your customers, for example, social security number or other information that is not stored in customer details by default, you can get it using the questions mechanism.

Questions are groups of controls displayed to a customer in an online store during the ordering process. Customers enter the answer into certain field or choose one of proposed answers. Their answers are stored on the server linked to their accounts. Therefore, questions allow to create additional fields for customer details.

For instructions on adding questions to online stores, see the section **Setting Up Customer Account Properties** (on page 445).

Setting Up Fraud Protection

To prevent your business from frauds, Parallels Customer and Business Manager offers you tools that prevent people that you do not trust from logging into the system or placing their orders in online stores. These tools are the following:

- Subscription approval policy.
- E-mail black list.

Subscription approval policy defines when new subscribers will get the access to the system: immediately after placing their orders, after your approval, or as determined by the *FraudGuardian* - a tool that detects fraudulent orders automatically. Learn more about using FraudGuardian in Business Manager in the section **Setting Up FraudGuardian** (on page 196).

Note: Only US residents can have FraudGuardian accounts.

The controls for managing the subscription approval policy are located on the **Business Setup > All Settings > Fraud Protection Settings** page.

If you want to prohibit subscriptions from certain e-mail addresses, for example, free mailboxes or an address previously used for fraud, add these addresses to your e-mail black list. This will make the system automatically reject the subscription, if such e-mail is provided in the subscriber's personal information. For details about using the e-mail black list, refer to the section **Prohibiting Subscriptions from Certain E-mail Addresses** (on page 200).

In this section:

Setting Up FraudGuardian

FraudGuardian is a tool we developed to help you screen incoming orders to help reduce the costs of fraud. FraudGuardian looks for orders that are probably not fraud and automatically approves them, helping to automate your business one step further.

Below are step-by-step instructions on how to set up FraudGuardian through Business Manager.

First you need to sign up for a FraudGuardian account. Once you have done that, you need to enable the module, then configure it. There are two main parts to configuring FraudGuardian: Fraud Sets and Thresholds.

In this section:

Step 1. Sign Up for a FraudGuardian Account

You can sign up for a FraudGuardian account at http://www.pleskbilling.com/products/fraudguardian/. Once you have done that, you need to enable the module, then configure it.

Step 2. Submit Your FraudGuardian Account Data

> ➢ *To submit your account data:*

1. Go to **Business Setup** > **All Settings** > **Fraud Protection Settings** and choose **Automatic fraud detection using FraudGuardian (for US only)**.

2. Submit your FraudGuardian account user name and password.

Step 3. Create a Fraud Set

A fraud set is a group of thresholds. The fraud set allows you to tie various thresholds with online stores, and specify the e-mail you wish to have notices sent to. If you are selling in one currency, you will need just one fraud set, as you will be using a single online store. If you are using multiple online stores, you may want to create a unique fraud set for each online store. It is also possible to have a single threshold apply to several online stores through the fraud set.

➢ *To create a Fraud Set:*

1. Go to **Business Setup** > **All Settings** > **FraudGuardian Thresholds**.

2. Fill in the required fields:

   Fraud Set Name. Enter the name of the new fraud set you want to create.

   Fraud Set Email. Enter the e-mail you want to use to e-mail your FraudGuardian reports.

3. Click **Define New Fraud Set**.

   Note: you can also modify an existing default fraud set according to your needs.

4. Click **Manage** to tie the fraud set with online stores and/or thresholds.

5. Click **Save all**.

Step 4. Create a Country Threshold

Thresholds are your way of telling the system what variables you do and do not want, and how badly you do and do not want them. For example, you may decide that free e-mail is something you do not mind, and assign it zero points. But it may be that you do not want anyone coming through a proxy, and so assign these ten points. You also set how many points a customer can have, and what behavior the system will take depending on the total points assigned to each incoming customer.

You can have a single threshold, where all new customers have the same standards applied to them, or create various different thresholds depending on countries or regions.

➢ *To define a new country threshold:*

1. On the **FraudGuardian Thresholds** page that you entered in the previous step:

   1. Enter **Threshold Name**.

   2. **Threshold Type**: Select one of the following:

      ▪ **Apply to ALL countries**.

      ▪ **Apply to ONE country**. This will apply to only one country. Select from the drop down menu.

      ▪ **Apply to REGION of countries**. You select a parent country such as North America or child countries such as the Caribbean, Central America, or Northern America.

2. Click **Configure** for the newly created threshold.

3. Configure **Fraud Score Threshold Actions**. This section allows you to set the system behavior based on a customer's final score:

   ▪ **Score 1**. Normally, you will want to set an action for approving customers with very low scores. Low scores indicate that it is unlikely the customer is fraudulent. The action **Active With Auth Capture** means that as soon as this customer has paid their signup invoice, they will be set to active. Set the highest score you would want to allow for customers to be approved as long as they pay.

   ▪ **Score 2**. Customers who score too high to safely qualify as not fraudulent, but who are not high enough to necessarily be fraud, can be set to pending so that you can approve them manually. We recommend setting **Score 2** to **Pending With Auth Capture**. Then choose the highest score you're willing to accept into the billing system.

   ▪ **Score 3**. The next level of score is usually set to **Soft Reject**. Customers meeting the Soft Reject score will not be able to proceed through to the final checkout page, and instead will have a message displayed. The message they see is something that you enter yourself. It usually includes something letting the customer know there is a potential problem with their account information, and asking them to contact sales or support, depending on how you want to handle this. Set this number to the maximum score you are willing to even consider for a customer.

- **Score 4**. **Score 4** is usually set to **Hard Reject**. Customers with a score that meets or exceeds the number you enter for this level, if set to **Hard Reject**, will see your **Hard Reject** message. This is usually set to something letting the customer know that you have identified them as fraud and are not interested in their business. Like the soft reject message, the content of the message can be set to whatever you would like it to be.

4. Configure **Amount Override Threshold Actions**.

   One of the common tactics employed by fraudsters is to charge as much as possible once they find a card that is live. It might be possible that the customer's billing account and address information matches well enough to not stand out as being fraud, but the amount they are purchasing does. For example, if a fraudster steals a card from someone in the same town, the system may not be able to tell that this is not who they say they are. But if the fraudster is trying to charge $500 worth of hosting, that might tip you off that something is amiss (depending on how much you charge for hosting). Like the section above, you can set three different sets of actions based on the amount being charged. For example:

   - **Amount 1**. Say you sell hosting for $20 a month, and your average customer buys two subscriptions and a couple of domains. The total sale will then usually be less than $100. If you set this amount to $100 and the action to *Pending with Auth Capture*, then any customer who is buying more than $100 of services will be set to pending in your system. This will give you a chance to look the order over before approving it.

   - **Amount 2** and **Amount 3**. Like the **Amount 1** setting, you can choose to set thresholds for these as well. For example, you may decide that anyone trying to buy $1000 worth of hosting from you is obviously not on legitimate, and want to set this to hard reject. You may also decide that any order over $200 might be legitimate, but that such a customer probably needs special attention. If you set this to soft reject, these customers will be encouraged to contact you directly for their sale.

5. Adjust **Fraud Score Triggers**.

   Business Manager uses what it calls Fraud Score Triggers to assign points to incoming customer accounts in order to determine whether or not the order is likely to be legitimate. The system has these triggers set to default values upon installation, but you are free to adjust them as you like. For example, you may decide that you don't care if the customer's IP matches their country for billing purposes. In that case you can set this value to 0 instead of the default: 2.5.

6. Write rejections messages.

   - **Soft Rejection Message**. This is the message that will be displayed to people who trigger your soft rejection notice for this threshold.

   - **Hard Rejection Message**. This is the message that will be displayed to people who trigger your hard rejection notice for this threshold.

7. Click the button at the foot of the page to save settings.

Step 5. Tie Fraud Sets with Online Stores and Thresholds

➤ *To tie a fraud set with online stores and thresholds:*

1. On the **FraudGuardian Thresholds** page click **Manage** for the fraud set you wish to configure.

2. Assign an online store and a threshold by selecting them and adding them to the boxes.

3. Click **Save all**.

Prohibiting Subscriptions from Certain E-mail Addresses

When customers subscribe to your service plans, they provide e-mail address as a part of their personal information. If a fragment of a subscriber's e-mail is in the Business Manager e-mail black list, and if an online store is configured to reject subscriptions from e-mails in black list, the system will not let such customers subscribe.

You can find and edit your black list at the **Business Setup** > **All Settings** > **E-mail Black List** page. To enable the rejection of subscriptions from e-mails in the black list for an online store, go to the **Security** tab of store settings page.

Configuring Taxation

As you run a hosting business in a particular country, you should set taxes to conform to legal standards of your country. Parallels Customer and Business Manager lets you achieve this through *tax rules* and *taxation policies*. The diagram below shows the relations between these entities and plans.

```
┌─────────────────────────┐
│ Taxation Policy 1       │              ┌──────────────┐
│  ┌───────────────────┐  │              │    Plan 1    │
│  │   Tax Rule 1-1    │  │              └──────────────┘
│  └───────────────────┘  │
│  ┌───────────────────┐  │              ┌──────────────┐
│  │   Tax Rule 1-2    │  │              │    Plan 2    │
│  └───────────────────┘  │              └──────────────┘
│          ⋮              │              ┌──────────────┐
│  ┌───────────────────┐  │              │    Plan 3    │
│  │   Tax Rule 1-N    │  │              └──────────────┘
│  └───────────────────┘  │                     ⋮
└─────────────────────────┘

┌─────────────────────────┐
│ Taxation Policy 2       │              ┌──────────────┐
│  ┌───────────────────┐  │              │    Plan M    │
│  │   Tax Rule 2-1    │  │              └──────────────┘
│  └───────────────────┘  │
│  ┌───────────────────┐  │              ┌──────────────┐
│  │   Tax Rule 2-2    │  │              │   Plan M+1   │
│  └───────────────────┘  │              └──────────────┘
│          ⋮              │                     ⋮
│  ┌───────────────────┐  │
│  │   Tax Rule 2-N    │  │
│  └───────────────────┘  │
└─────────────────────────┘
            ⋮
```
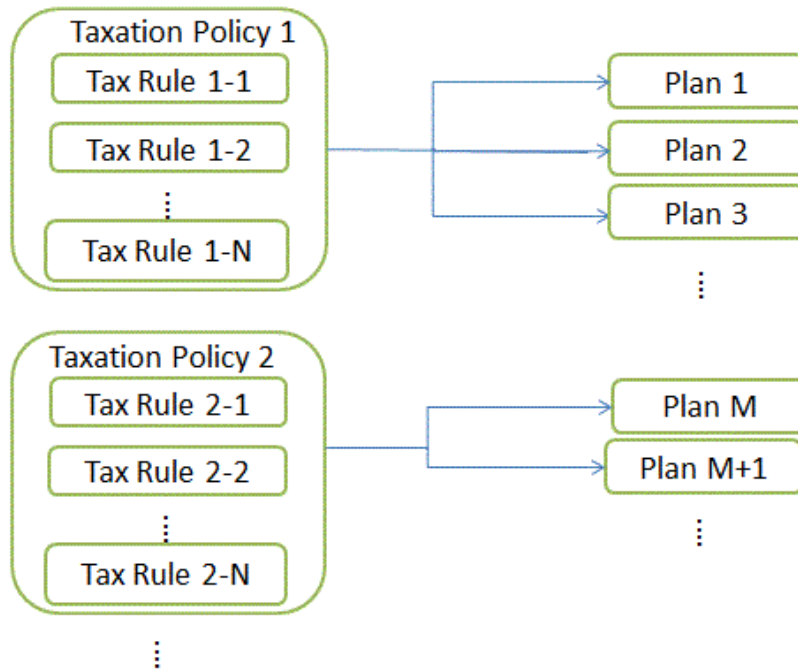
Tax Rules

A *tax rule* defines a tax for a particular country or sub-national unit where you offer your plans. For example, if you serve the American customers from states with different sales tax rates, create a separate tax rule for each state and specify their rates in these rules. The rates can be either fixed ($10) or progressive (15%). Business Manager calculates fixed rates in the currency of the online store where you sell the plan.

There are two types of tax rules: *stackable* and *non-stackable*. Stackable rules are applied to a subscription price, while non-stackable rules are applied to a total of the price and stackable tax rules values. To see an example of stackable and non-stackable rules application, refer to the **Applying Taxation Policies** section.

A state or a province where the rule applies can be a two character state abbreviation or a combination of a two character state abbreviation and city. You can also add a county name. In this case, separate location parts by dashes (-). For example, use *state-city* to specify a particular city in a certain state. The other accepted locations are: *state-county*, *state-city-county*, *state.* Set the state to asterisk (*) or leave the corresponding field blank to apply the rule to the whole country.

Taxation Policies

A *taxation policy* links together tax rules and plans to which you want to apply them. For example, to serve the American customers, create a taxation policy that contains all US tax rules and apply it to the plans you intend to sell in the US. If you offer the same plans to all customers, simply modify the default taxation policy and apply it to all plans.

Note: Each plan can have only one taxation policy applied. If you apply a new taxation policy to a plan, the existing one will be replaced.

To add new taxation policy or manage existing ones, go to the **Business Setup** > **All Settings** > **Taxation Policies** screen.

Applying Taxation Policies

If a plan is associated with a taxation policy, the system searches for matches between subscriber location and tax rules included in the policy. If the system finds the matches, it will calculate the total tax due from rates of matching tax rules.

To calculate the total taxes due for a subscription to a plan, the system uses the following algorithm:

1. Form a list of tax rules matching customer country and the selected plans.
2. Sequentially apply each stackable tax rule to a subscription price. Add up all of the calculated tax values.
3. Sequentially apply each non-stackable tax rule to the total of the price and the step two result. Add up all of the calculated tax values.
4. Add up all of the tax amounts calculated at step two and step three.

For example, a subscription price is $100, and the matching tax rules are as follows:

Rule 1: Apply 10% stackable

Rule 2: Apply 20% stackable

Rule 3: Apply 5% non-stackable

Rule 4: Apply 10% non-stackable

Then the total taxes due is calculated in the following way:

$100 * 0.10 = $10 (for Rule 1)

($100 * 0.20 = $20 (for Rule 2)

$10 + $20 = $30 (subtotal for stackable rules)

($100 + $30) * 0.05 = $6.5 (for Rule 3)

($100 + $30) * 0.10 = $13 (for Rule 4)

$6.5 + $13 = $19.5 (subtotal for non-stackable rules)

$30 + $19.5 = $49.5 (total taxes due)

To learn how to set up taxation for particular countries, see the examples below.

In this section:

The United States

If you sell your plans to the US market, apply the *sales tax*. The sales tax is non-stackable, and its rate differs depending on the state where you sell plans.

To serve customers from the New York, Pennsylvania, and New Jersey states, create a taxation policy (for example, "USA Taxation"), apply it to the plans you are going to sell in the USA, and create a separate non-stackable tax rule for each state.

➢ *To set up a sales tax:*

1. Add a taxation policy and apply it to the plans you intend to sell in the USA.

2. Add a non-stackable tax rule for the New York sales rate with **Country** set to *United States* and **State** - to *NY*, and set the **Rate** to *4%* .

3. Add a non-stackable tax rule for the Pennsylvania sales rate with **Country** set to *United States* and **State** - to *PA*, and set the **Rate** to *6%*.

4. Add a non-stackable tax rule for the New Jersey sales rate with **Country** set to *United States* and **State** - to *NJ*, and set the **Rate** to *7%* .

5. Save the policy.

Important: The rates in the example may differ from actual rates. To get the relevant information on taxation in the United States, consult your local authorities.

European Union

If your business is located in Germany and you serve customers from the European Union, apply the *value added tax* (VAT). The VAT is non-stackable, and its rate differs depending on the seller location.

➢ *To set up the VAT:*

1. Create a taxation policy (for example, "*EU Taxation*") and apply it to the plans you intend to sell in the EU.

2. Create a non-stackable tax rule with **Country** set to *European Union* and the asterisk (*) in the **State** field. Set the **Rate** to *19%*.

3. Save the policy.

After you add the VAT, configure the Business Manager to comply with EU business standards as described in the section **Achieving EU Business Compliance** .

Important: The rate in the example may differ from actual rate. To get the relevant information on taxation in the European Union, consult your local authorities.

Canada

If you run your business in the Quebec province, Canada, apply two taxes:

- *goods and services tax (GST)* - the Canadian analog to VAT.
- *Quebec sales tax (QST)* - a separate stackable tax applied in Quebec.

➢ *To set up the Quebec taxes:*

1. Create a taxation policy (for example, "*Canadian Taxation*") and apply it to the plans you intend to sell in the Quebec.

2. Create a non-stackable tax rule for the GST with **Country** set to *Canada* and the asterisk (*) in the **State** field. Set the **Rate** to *5%*.

3. Create a stackable tax rule for the QST with **Country** set to *Canada* and the **State** - to *QC*, and set the **Rate** to *8.5%*.

4. Save the policy.

Important: The rates in the example may differ from actual rates. To get the relevant information on taxation in your province, consult your local authorities.

Achieving EU Business Compliance

If your Business is located in the European Union, it is subject to the European Union Value Added Tax (EU VAT) regulations. To learn more about the regulations, see the section **European Union Business Compliance (on page 39).**

To achieve EU business compliance, configure Parallels Customer and Business Manager to meet the following requirements:

- Specify your VAT number in **Business Setup** > **All Settings** > **Company Details**. Business Manager will include it into all invoices.

- Set up the VAT charging for your customers from EU countries. For detailed instructions, see the section **European Union** (on page 204).

- Require VAT number from commercial companies.

  In your online stores, customers select whether they are individuals or commercial companies. In the latter case, they are required to provide a valid VAT number to define an applicable VAT rate. You should adjust your online stores to require this number from commercial companies and verify it. The respective option is available in the **Business Setup** > **Online Stores** > **<*store name*>** > **Change settings** > **Taxes** tab. The **<*online store*>** here is the store which you use to sell plans to EU customers.

  Note: If your company address is in the EU, these settings will be automatically applied to all new online stores.

- Display either *gross* or *net* prices in your online stores.

  Each EU country follows one of two different rules for the way prices are displayed in your online stores. Depending on the location of your business, your online stores must display prices either with VAT included (gross) or before VAT is added (net). You can update your online stores to display prices accordingly on the **Business Setup** > **Online Stores** > **<*store name*>** > **Change settings** > **Payment Options** tab. The **<*online store*>** here is the store which you use to sell plans to EU customers.

Offering Services to Customers and Resellers

When you start your hosting business, you should define how you will offer hosting resources and services to customers. Parallels Plesk Panel lets you organize your business by means of *service plans* and *subscriptions*.

Serving Customers

A *service plan* is a combination of resources and services that you sell to your customers. For example, a hosting account with 1 GB of disk space and 50 GB of traffic is a hosting service plan. If you use Panel with the Business Manager solution, you can offer your customers service plans of other types, such as domain name plans and SSL certificate plans. For example, a 1024 bits SSL certificate for a year.

When customers want to host a website on a Panel server, they *subscribe* to a plan that offers hosting resources. In other words, a s*ubscription* is a set of resources and services defined by a plan that is available to a certain customer for a limited period of time.

The typical workflow to start serving hosting customers in Panel is as follows:

1. You create a hosting service plan in Panel (on page 213).

2. When a customer is ready to subscribe to the plan, you create the account and subscription for the customer (on page 223).

3. Panel grants the customer permissions to log in and use services provided with the subscription.

Using *add-on plans,* you can offer resources and services to customers in addition to those provided by their main service plan, for example, an additional gigabyte of disk space.

Learn more about hosting service plans and their relationship with subscriptions in the section **Hosting Plans and Subscriptions** (on page 210).

Serving Resellers

Reseller plans allow you to sell your services to a special category of customers - resellers. Resellers are people who sell hosting accounts on your servers to others. From a business perspective, resellers are similar to hosting providers: they have accounts in hosting panels, and their own online stores and customer management tools. The difference is that resellers do not have their own hosting servers. Learn how to start serving resellers in the section **Reseller Plans** (on page 241).

Business Automation with Business Manager

Organizing your offerings into plans is only one stage in getting your business ready to run. Before you can start serving customers, you should also think about how potential customers will find your offerings, how you will subscribe new customers and take payments, and other aspects of your business. To make it easier to start your business, we recommend that you use an integrated automation solution - Business Manager. This will allow you to completely automate all aspects of your business. Though you can decide to use another third-party automation tool, Business Manager provides the most complete integration with all Panel features.

Business Manager has its own hosting plans, subscriptions, and customer accounts that are linked to the corresponding objects in Panel. This makes it possible to divide financial and technical information between Panel and Business Manager. For example, when you need financial details about a certain subscription, you refer to it in Business Manager. When you wish to manage hosting resources, you refer to the subscription in Panel. Subscriptions in Panel and in Business Manager are different objects. The same approach applies to plans and customer (reseller) accounts.

Business Manager keeps its plans, subscriptions, and accounts up-to-date by syncing them with respective Panel objects. The component makes periodic requests to create, modify, or remove objects owned by Panel. There is only one-way sync between Business Manager and Panel. This means that when you, for example, create a subscription in Business Manager, it is created in Panel. Alternatively, when you do the same in Panel, the object is not created in Business Manager.
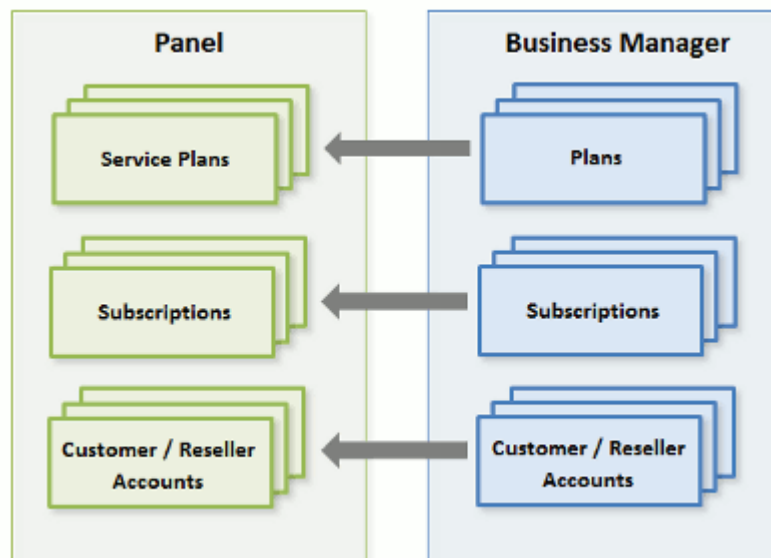
The typical workflow when using Business Manager is as follows:

1. You create a service plan in Business Manager (on page 231). The plan is automatically propagated to Panel.

2. A customer subscribes to the plan through a Business Manager online store. At this stage, Business Manager creates a new customer account and subscription.

3. Business Manager propagates the customer account and subscription to Panel.

4. Panel receives this information and sets up the subscription.

5. When the customer pays for the subscription, Business Manager notifies Panel.

6. Panel grants the customer permissions to log in and use the services provided with the subscription.

Note that to start serving your customers with Business Manager, you should perform its initial configuration - set up invoicing, payment methods, and so on. Learn how to do this in the chapter Configuration of Customer and Business Manager.

Note: You can choose not to use any automation solution at all. In this case, you should control the money flow by yourself as well as perform a number of tasks manually in the Server Administration Panel, for example, create customer accounts and subscribe them to your offerings.

This chapter contains instructions on how to set up your hosting offer in both Business Manager and in Panel without using an automated solution.

In this chapter:

Hosting Plans and Subscriptions

The hosting plan is a set of hosting resources and services you offer to your customers. For example, the properties of a hosting plan define server resources available in a plan subscription, such as disk space, traffic, number of mailboxes and so on. To learn more about how plan resources are allocated in the subscription, refer to the section **Relationship Between Plans and Subscriptions** (on page 211).

This section will guide you through the process of creating a hosting plan and starting services for your customers. The section contains instructions on how to perform these operations in both Business Manager (on page 231) and in Panel (on page 213) (in case you do not use the Business Manager automation). Note that plan creation in Business Manager requires a number of additional steps such as setting up subscription prices and taxes, choosing an online store for the plan, and specifying plan upgrade and downgrade options.

The amount of resources and services provided with a subscription can be extended by associating the subscription with add-on plans. To learn how to create add-on plans, refer to the section **Setting Up Add-on Plans in Panel** (on page 222). Note that Business Manager has its own mechanism of providing add-on plans, which is described in the section **Setting Up Hosting Plans in Business Manager** (on page 231).

In this section:

Relationship Between Plans and Subscriptions

Normally, a subscription is associated with a service plan, and this association is reflected in a list of subscriptions: each subscription name contains the service plan name in brackets at the end. The amount of resources and services provided with a subscription can be extended by associating the subscription with add-on plans. A subscription can be associated with several add-ons, but each add-on can be added to the subscription only once.

It is also possible that a subscription may not be associated with a service plan, and so it cannot be associated with any add-on plans: add-ons are only added to a "main" service plan. We call such subscriptions *custom subscriptions*, and their names are extended with "**(Custom)**" in the list of subscriptions. Having a custom subscription may be useful if you want to provide services on specific terms that are different from the usual offerings in your business model.

You can change the association between a subscription and plans at any time as follows:

- Associate the subscription with another service plan.
- Add and remove add-on plans.
- Remove the subscription association with the service plan and add-ons.

States of Subscription

Subscriptions associated with a particular plan are synchronized, or *synced*, with it: any changes made to the plan are automatically applied to all its subscriptions. This is true for all kinds of plans: service plans, their add-ons, and reseller plans.

The Panel allows the following deviations from the default subscription state of being synced with its plans:

- **Locked** state, which means *locked for syncing*, indicates that a subscription is excluded from syncing with the associated plans.

  A subscription gets locked if you change the parameters of the subscription, without changing the associated service plan. Such locking secures your customizations so that they are not overwritten the next time you change the plan and all its subscriptions are synced.

- **Unsynced** state indicates that some services or resources offered with the associated plans cannot actually be provided with the subscription.

Note: If a plan offers a privilege that makes it possible for a subscriber to change a particular resource or service, this resource/service allocation is ignored during a sync. For example, if the plan provides the privilege of PHP settings management and a customer changes some PHP setting, its subscription remains synced with the plan (even if a value of the PHP setting in the subscription differs from the corresponding one in the plan).

Unsynced subscriptions

Panel does not check whether a service or a resource that a service plan should provide is actually available in the system. For example, when creating a plan, you can select to provide ColdFusion when ColdFusion is not installed on the server, and Panel will let you do it and will show no error or warning messages.

A subscription is automatically marked as **Unsynced** if Panel cannot provision the resources and/or services defined by the plan. This may happen in the following cases:

- When the subscription is created.
- When the properties of the associated plan are changed.
- When an add-on plan is added to or removed from the subscription.

➢ *To know which of the subscription's resources or services are not synced with the plan:*

1. Go to **Subscriptions**, and click the unsynced subscription name.

2. Click **Sync**.

   The Panel will retry syncing the subscription with associated plans, and will display the conflicting properties if syncing fails.

   Be sure to take the note of the conflict report: which properties are affected, and what the **Plan value** and the **Available value** are.

   Clicking **OK** at this page will initiate setting the subscription values according to the available values, **Cancel** will leave everything unchanged.

Once you have identified the problem, you can resolve it. There are two possible ways:

1. Fine-tune the plan to conform to the system actual state.

2. Fine-tune the system to provide resources and services offered with the plan.

➢ *To change the plan properties to conform to the system:*

1. Go to **Service plans** > **<plan name>**.

2. Adjust values of the problem properties so that they correspond to the **Available values** (see above).

3. Click **Update & Sync**.

   The subscriptions will be synced automatically.

➢ *To adjust the system and re-sync a subscription:*

1. Adjust your system: install missing components, add hard disks - whatever is indicated by the conflict report.

2. Go to **Subscriptions**, and click the unsynced subscription name.

3. Click **Sync**.

The Panel will retry syncing the subscription with associated plans.

Setting Up Hosting Plans in Panel

To create a hosting service plan in Panel, run the **Service Plans > Add New Plan** wizard in the Server Administration Panel.

During the plan creation process, you will be prompted to specify various plan parameters. Learn more next in this section.

Once the plan has been created, you are ready to start serving your customers. In other words, you can create customer accounts and subscriptions. Learn more in the section **Subscribing Customers to Plans in Panel** (on page 223).

In this section:

(1) Specify Plan Properties

When creating a plan, you are prompted to specify a number of service plan parameters. These parameters are grouped with a number of tabs:

Properties of a hosting plan and subscription are grouped as follows:

- **Resources**

  These are hosting resources provided with a plan. Includes validity period, policy on overusing resources, system resources like disk space and traffic, and service resources like websites, subdomains, mailboxes, databases and so on. For example, the Domains resources sets the number of domains that a customer can register and manage in Panel.

- **Permissions**

  Includes provided services and privileges.

  Note: Some permissions prevent settings of the corresponding services from syncing (on page 211).

- **Hosting Parameters**

  Includes parameters of the provided hosting service.

- **PHP Settings**

  Includes the customizable PHP settings. The PHP settings have a great importance as they affect the work of the major part of web applications. Learn more about how to adjust PHP settings for service plans in the section **2) Specify PHP Configuration** (on page 215).

- **Mail**

  Includes parameters of the provided mail service.

- **DNS**

  Specifies if the DNS zones of the subscription's domains should be master or slave.

  Note: In case the **DNS zone management** privilege is provided, this parameter is not synced, and subscribers can set up this parameter on a per-domain basis.

- **Performance**

  Includes parameters that affect performance of all services provided with the plan.

- **Logs & Statistics**

  Includes settings of how statistics and logs of the plan's subscriptions should be stored

- **Applications**

  Lets you select which applications should be available to subscribers.

Learn more about hosting plan properties in the **Appendix A: Properties of Plans and Subscriptions** (on page 677).

(2) Specify PHP Configuration

PHP is one of the most popular scripting languages for creating dynamic web pages. The majority of today's websites and web applications are based on PHP scripts. Thus, site administrators should clearly understand how they can control the execution of PHP scripts.

There are two main factors that define how PHP scripts will be executed for a certain website:

1. *PHP handler*.
   When a visitor accesses a site based on PHP scripts, a web server interprets site scripts to generate a page that will be shown to the visitor. The PHP handler calls PHP libraries needed for this interpretation. You can choose from a number of PHP handlers: ISAPI (Windows), Apache module (Linux), FastCGI, or CGI application. The corresponding drop-down list is located on the **Hosting Parameters** tab of a service plan page: **Scripting > Run PHP as**. The decision on what PHP handler to choose depends on a number of factors such as security considerations, script execution speed, and memory consumption. Learn about PHP handler features in the section **Select PHP Handler** (on page 216).

2. *PHP settings*.
   PHP behavior is defined by a number of configuration settings. These settings specify various aspects of script execution, such as performance (for example, the amount of memory a script can use), security (for example, access to the file system and services), and so on. Administrators may adjust these settings for a number of reasons:

   - To prevent a memory leak or server hang-up caused by poorly written scripts.

   - To protect data from malicious scripts.

   - To meet the requirements of a certain web app.

   - To test their own or other scripts.

   Learn about the PHP settings hierarchy and about how to adjust the settings in the section **Customize PHP Configuration** (on page 217).

In this section:

Select PHP Handler

Choose one of the following PHP handlers at **Hosting Parameters > Scripting > Run PHP as** taking into consideration the resources consumption and security aspects of each option:

	Performance	Memory Usage	Security
Apache module (Linux only)	High. Runs as a part of the Apache web server.	Low	This handler (also known as mod_php) is the *least secure option* as all PHP scripts are executed on behalf of the `apache` user. This means that all files created by PHP scripts *of any plan subscriber* have the same owner (`apache`) and the same permission set. Thus, it is theoretically possible for a user to affect the files of another user or some important system files. **Note:** You can avoid some security issues by turning the PHP *safe_mode* option on. This disables a number of PHP functions that have potential security risks. Note that this may lead to inoperability of some web apps. The safe_mode option is considered to be obsolete and has been removed since PHP 5.3.
ISAPI extension (Windows only, *not supported since PHP 5.3*)	High. Runs as a part of the IIS web server.	Low	The ISAPI extension can provide site isolation if a dedicated IIS application pool is switched on for subscriptions. Site isolation means that the sites of different customers run their scripts independently. Thus, an error in one PHP script does not affect the work of other scripts. In addition, PHP scripts run on behalf of a system user associated with a hosting account. Learn how to configure the IIS application pool in the section **Configuring IIS Application Pool (Windows)** (on page 56). **Note:** The ISAPI extension handler is not supported starting with PHP 5.3.
CGI application	Low. Creates a new process for each request and closes it once the request is processed.	Low	The CGI handler provides PHP script execution on behalf of a system user associated with a hosting account. On Linux, this behavior is possible only when the suEXEC module of the Apache web server is on (default option). In other cases, all PHP scripts are executed on behalf of the `apache` user. We recommend that you use the **CGI application** handler only as a fallback.

FastCGI application	High (close to Apache module and ISAPI extension). Keeps the processes running to handle further incoming requests.	High	The FastCGI handler runs PHP scripts on behalf of a system user associated with a hosting account.

Note: Switching PHP from **Apache module** to **FastCGI application** may impair the functionality of existing PHP scripts.

Additionally, on Windows systems, you can specify a certain **PHP version** for a service plan:

- Version 4.x is outdated, you should use it only if you need to host old PHP application versions.
- Version 5.x is current and its use is recommended.

You can adjust the PHP configuration individually for each hosting plan or subscription. For this purpose, Panel gives a number of PHP configuration settings on the **PHP Settings** tab. To learn more about custom per-subscription PHP configuration, refer to the section **Customize PHP Configuration** (on page 217).

Customize PHP Configuration

Custom PHP Settings in Panel

Generally, PHP settings are defined by the server-wide configuration file. For Linux it is, typically, /etc/php.ini and for Windows - %plesk_dir%\Additional\PleskPHP5\php.ini. This file defines the PHP configuration for all websites hosted on your server. Since Panel 10.4, *PHP settings are visible in the Panel GUI and you can adjust them individually for each hosting plan or subscription.* Moreover, your customers (if allowed) can adjust your PHP settings and preset them individually for each of their websites and subdomains. See the PHP settings hierarchy on the diagram below.
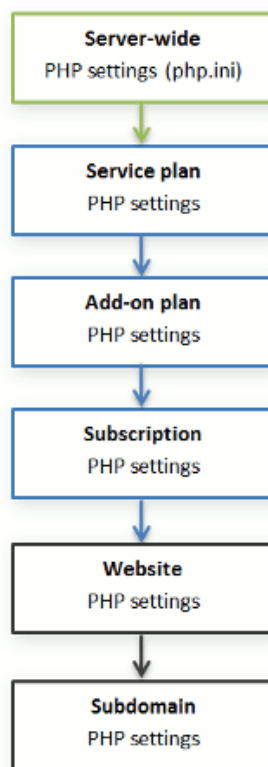
You can set the custom PHP configuration on the **PHP Settings** tab of a certain service plan, add-on plan, or subscription. Custom PHP settings for a website or subdomain can be set in the Control Panel, **Websites & Domains** > select a website or subdomain > **PHP Settings**. *PHP settings from a higher level act as a preset for a lower level, thus each lower level overrides them*. For example, you can consciously apply some PHP limitations to a service plan and then offer your customers the add-on plan that removes the limitations. PHP settings of the add-on plan will override the settings defined in the main service plan.

If customers have the corresponding permissions, they can specify the PHP configuration that is unique for each website (or subdomain) in their subscription.

Groups of PHP Settings

For convenience, all PHP settings in Panel are categorized into three groups:

- *Performance settings.*
  These settings define how scripts work with system resources. For example: Use the `memory_limit` parameter to limit the amount of memory for a script and, as a consequence, to prevent memory leaks; or prevent scripts from tying up the server by limiting the maximum time scripts are allowed to run in `max_execution_time`.

- *Common settings.*
  This group contains other commonly used PHP settings. Generally, these are: Security settings (say, the PHP safe mode toggle or the permission to register global variables), error reporting settings (e.g., the directive to log errors), and so on.

- *Additional directives.*
  If you cannot find particular parameters among performance or common settings, add them in the **PHP Settings > Additional configuration directives** field. All directives from that field will be included in the final PHP configuration. For example, if you want PHP to log errors to your own file, add the line:
  `error_log=/tmp/my_file.log`. The entire list of PHP directives is available at http://php.net/manual/en/ini.list.php. As additional directives, you can add directives that have the `PHP_INI_USER` and `PHP_INI_ALL` modes.
  Note that additional directives are available *only* to the Panel administrator. Your customers do not have a corresponding field in Control Panel.

Important: If you use Panel for Windows or Panel for Linux where PHP *does not* run as an Apache module, your customers can override some PHP settings regardless of any permissions in force. They can use the `ini_set()` function in their scripts to change the values of the following parameters: `memory_limit`, `max_execution_time`, and those of your additional directives that PHP allows to set anywhere (PHP_INI_ALL directives; learn more at http://php.net/manual/en/ini.list.php).

The Default Values of PHP Parameters

You can set the value of each parameter in **PHP Settings** either by selecting a value from a preset, typing a custom value, or leaving the **Default** value. In the latter case, *Panel takes the parameter value from the server-wide PHP configuration*. The only exceptions are add-on plans: the value set to **Default** on the add-on's **PHP Settings** tab will keep the parameter's value from the main service plan.

It is possible to use three placeholders in parameter values:

- `{DOCROOT}` for the document root directory of a domain that gets custom PHP configuration.
- `{WEBSPACEROOT}` for the root directory of a subscription (webspace).
- `{TMP}` for the directory which stores temporary files.

Allowing Customers to Change PHP Settings

You can allow your customers to override subscription PHP settings with their own *per-website* and *per-subdomain* PHP configuration. For this purpose, you should use the following permissions on the **Permissions** tab of a certain service plan or subscription:

- **Hosting performance settings management**.
  Along with management of some other settings, this permission grants customers access to PHP settings from the *performance settings* group.
- **Common PHP settings management**.
  If granted, allows customers to adjust PHP settings from the *common settings* group.

Note that you can toggle these permissions for a plan (subscription) only if it has the granted **Hosting settings management** permission.

Even if your customers do not have permissions to adjust PHP settings, you (as the administrator) can always perform such per-website (subdomain) PHP configuration. To do this, open a hosting account from the Server Administration Panel and apply changes on the **PHP Settings** tab of the particular website (subdomain) you wish to change. The **Additional configuration directives** field will also be available to you.

Location of Website-Level PHP Settings in Panel for Windows

After you apply all the necessary modifications, you can view the modified `php.ini` for a certain website. The paths to the ini files are kept in the Windows registry, under *HKEY_LOCAL_MACHINE\SOFTWARE\PHP\Per Directory Values*. For example:

HKEY_LOCAL_MACHINE\SOFTWARE\PHP\Per Directory Values\C\Inetpub\vhosts\<DOMAIN NAME>\httpdocs

where *<DOMAIN NAME>* stands for a certain domain name.

Learn more about PHP settings in Windows registry at
http://php.net/manual/en/configuration.changes.php.

(3) Offer Additional Services

In addition to the hosting services and features provided by your plan, you can expand the offering by using the following means:

- Install third-party applications packaged as Panel extensions and include the services they provide into your hosting plans.

  When such an extension is installed, the service provided by it is registered in Panel and is made available for inclusion into hosting plans by the server administrator and resellers: The option corresponding to the new service is listed in hosting plan properties, on the **Additional Services** tab.

- Add custom options to plans.

  If you, for example, run an online support service at `http://premium-support.example.com`, and want to include the support option into a service plan, you should set up a custom plan option:

  1. Go to **Service Plans** > **Additional Services** > **Add Service**.

  2. Specify service name (`Premium support`), service description, and select the option to place a button to Control Panel with the link to the online service (`http://premium-support.example.com`).

  After this is done, a new tab called **Additional Services** appears in hosting plan settings. It shows your **Premium support** option which you or your resellers can select for provisioning to customers.

> ### *To add a service provided by an application packaged as an extension:*

Install the extension according to the instructions provided in the **Installation, Upgrade, and Migration Guide**, chapter **Installing Panel Extensions**, or use the instructions provided by the extension packager.

> ### *To add a service as a custom plan option:*

1. Go to **Service Plans** > **Additional Services** tab.

2. Click **Add Service**.

3. Specify the following:

   - **Service name**.
   - **Service description**.
   - **Use custom button for the service**. Select this checkbox to place a hyperlink to your online service or a web application to subscriber's Control Panel.
   - **URL attached to the button**. Specify the Internet address where the user should be directed after clicking the button. For example: `http://premium-support.example.com`.
   - **Background image for the button**. If you do not select an image, the Panel will use the default image .
   - **Open URL in the Panel**. Leave this checkbox cleared if you want the external web resource to open in a new browser window or tab.

- If you want the Panel to send the customer and subscription information with the HTTP request, specify what information should be included:
  - Subscription ID.
  - Primary domain name associated with a subscription.
  - FTP account username and password.
  - Customer's account ID, name, e-mail, and company name.

4. Click **OK**.

➢ *If you do not want to let your resellers use an additional service and provision it to their customers:*

1. Go to **Service Plans** > **Additional Services** tab.

2. Select a checkbox corresponding to the service and click **Make Unavailable**.

➢ *To let resellers use an additional service and provision it to their customers:*

1. Go to **Service Plans** > **Additional Services** tab.

2. Select a checkbox corresponding to the service and click **Make Available**.

➢ *To remove a custom plan option from service plan properties:*

1. Go to **Service Plans** > **Additional Services** tab.

2. Select a checkbox corresponding to the service and click **Remove Service**.

➢ *To remove an additional service provided by an extension:*

Remove the extension from the Panel.

Setting Up Add-on Plans in Panel

Add-on plans extend the amount of resources and services provided with a subscription (for example, additional gigabytes of disk space or Perl scripting language support). A subscription can be associated with several add-ons, but each add-on can be added to the subscription only once.

To create an add-on plan, start the wizard **Service Plans > Add New Add-on** and specify the plan properties (on page 677).

Subscribing Customers to Plans in Panel

If you do not use billing automation, then to start serving a customer in Panel, you should create a customer account and subscribe the customer to a service plan. Any user can be subscribed to several service plans simultaneously, meaning that they will have several service subscriptions, some of which may be custom, and some of which may be associated with different add-on and service plans.

Subscribing a new customer generally means creating the customer account together with their first subscription. However, starting from Parallels Plesk Panel 10.2, you can also create customer accounts without subscriptions. This can be useful if you do not need to set up a website for a customer at the moment, and want to transfer a subscription from another customer account, or set up a subscription later. Note that customers without subscriptions cannot log in to the Control Panel.

➢ *To create a new customer account without a subscription:*

1. Go to **Customers**, and click **Add New Customer**.

2. Specify the customer's contact and billing information, Control Panel account user name and password.

3. Clear the **Create subscription for the customer** checkbox.

4. Click **OK**.

➢ *To subscribe a new customer to a service plan and, optionally, add-ons:*

1. Go to **Customers**, and click **Add New Customer**.

2. Specify the customer contact/billing information, user name and password, attributes of the domain linked with the subscription.

3. Select a service plan with which the subscription should be associated.

4. Select add-on plans if you wish to add any.

5. Leave the **Proceed to customizing the subscription...** checkbox cleared.

6. Click **OK**.

➢ *To subscribe a new customer to a service plan and add-ons on specific terms (customize subscription associated with plans):*

1. Go to **Customers**, and click **Add New Customer**.

2. Specify the customer contact/billing information, user name and password, attributes of the domain linked with the subscription.

3. Select a service plan and add-ons.

4. Select the **Proceed to customizing the subscription...** checkbox.

5. Click **OK**.

The customer account and the subscription will be created, and the Panel will offer to customize such subscription properties (on page 677) as resources and permissions. Customizing hosting, mail, DNS service parameters is not available in the Server Administration Panel.

6. Customize the subscription properties.

7. Click **Update & Lock**.

The customized subscription will get locked for syncing, it will not be synced with the service plan or add-ons in case they change. For details, refer to the section **Relationship Between Plans and Subscriptions** (on page 211).

➢ *To subscribe a new customer to your services on specific terms (create custom subscription):*

1. Go to **Customers**, and click **Add New Customer**.

2. Specify the customer contact/billing information, user name and password, attributes of the domain linked with the subscription.

3. Select **None** next to the **Service plan**.

The subscription properties will be set according to the Panel default service plan.

4. Leave the **Proceed to customizing the subscription...** checkbox selected.

5. Click **OK**.

The customer account and their custom subscription will be created. For details on custom subscriptions, refer to the section **Relationship Between Plans and Subscriptions** (on page 211).

The Panel will offer to customize such subscription properties (on page 677) as resources and permissions. Customizing hosting, mail, DNS service parameters is not available in the Server Administration Panel.

6. Customize the subscription properties.

7. Click **OK**.

➢ *To add a subscription to host your own websites and mail:*

1. Go to **Subscriptions**, and click **Add New Subscription**.

2. Specify attributes of the domain provisioned with the subscription, service plan and add-ons.

3. Optionally, select the **Proceed to customizing the subscription...** checkbox.

4. Click **OK**.

Managing Customers and Subscriptions in Panel

Managing Customer Accounts

Once you create a customer account, you can perform the following operations with it:

- Change contact information.
- Change password and username a customer uses to access Control Panel.

> **Note**: The Panel does not notify customers upon the login information change automatically. What is more important is that a customer must provide their username and e-mail address to retrieve their password. So be sure to update your customers on login information changes, especially if you change their username. Otherwise, they will not be able to use the Panel.

- Suspend accounts.
  Access to the Panel is blocked for suspended customers and Control Panel users that they created. The customer's subscriptions are suspended, too, meaning that their websites, FTP and mail services will no longer be accessible to the internet users.
- Activate accounts.
  Once an account is activated, all its subscriptions are activated, too, and all the services start working properly.
- Remove accounts.
  Once a customer account is removed, all customer's subscriptions and websites are removed as well.

If you installed the Customer and Business Manager component and configured it to work with your Panel, then the following additional links are available in Panel:

- **Business Manager**.
- **Billing Details**.
- **Invoices**.
- **Payment History**.
- **Generate Outstanding Invoices** (in the **More Business Operations** menu).
- **Create Invoice** (in the **More Business Operations** menu).
- **Credits** (in the **More Business Operations** menu).
- **Billing Accounts** (in the **More Business Operations** menu).

Use these links for managing customer accounts in Business Manager. Learn how to manage customer accounts in Business Manager in the section Administering Customers in Business Manager.

➢ *To change a customer's contact information:*

1. Go to **Customers**, and click the **<Customer Name>** in the list.
2. Click **Edit Contact Info**.
3. Update the information, and click **OK**.

➢ *To change password and username a customer uses to access Control Panel:*

1. Go to **Customers**, and click the **<Customer Name>** in the list.

2. Click **Change Login Info**.

3. Update password and username, and click **OK**.

➢ *To suspend a customer account:*

1. Go to **Customers**, and click the **<Customer Name>** in the list.

2. Click **Suspend**.

➢ *To suspend several accounts at once:*

1. Go to **Customers**.

2. (Optional) Filter out active accounts:

   a. Click the ⌄ button next to the search field above the list.
      This will open the list filter.

   b. Under the **Status** filter, select **Active**.

3. Select target accounts in the list.

4. Click **More Actions** > **Suspend**.

➢ *To activate a customer account:*

1. Go to **Customers**, and click the **<Customer Name>** in the list.

2. Click **Activate**.

➢ *To activate several accounts at once:*

1. Go to **Customers**.

2. (Optional) Filter out suspended accounts:

   a. Click the ⌄ button next to the search field above the list.
      This will open the list filter.

   b. Under the **Status** filter, select **Suspended**.

3. Select target accounts in the list.

4. Click **More Actions** > **Activate**.

➢ *To remove customer accounts:*

1. Go to **Customers**, and select the accounts you want to remove.

2. Click **Remove**.

3. Click **Yes** at the confirmation box.

Managing Subscriptions

Once a customer is subscribed to a service plan, you can perform the following operations with the subscription:

▪ Change hosting settings of a subscription.

That is, the IP address on which the subscription's websites are hosted, and credentials of system user account linked with the subscription (used to manage files and folders of websites within the subscription, and to access the server via SSH or Remote Desktop).

▪ Transfer one or several subscriptions to another user.

This means that you change owner of subscriptions, or, in other words, reassign subscriptions to another user: another customer, reseller, or yourself. In this case, the subscriptions are automatically unbound from their plans and become custom.

Note: Since Panel 10.4, customers can restrict auxiliary users to accessing only a specified subscription within their hosting account. For this purpose, user roles have the corresponding permission. When you transfer the subscription that has such an attached user role, the role with all its users is also transferred to the new subscriber.

▪ Suspend subscriptions.

Websites, FTP and mail services of suspended subscriptions are no longer accessible to the Internet users. Suspending a subscription manually may be useful in cases a website hosted within the subscription gets attacked.

▪ Activate subscriptions that were suspended manually.

Once a subscription is activated, all the services provided with it start working properly.

▪ Renew an expired subscription.

The Panel does not renew subscriptions automatically, so it suspends a subscription when the subscription expiration date comes.

▪ Remove subscriptions.

If you installed the Customer and Business Manager component and configured it to work with your Panel, then the following additional links are available in the Panel:

▪ **Business Manager**.
▪ **Billing Details**.
▪ **Upgrade**.
▪ **Downgrade**.
▪ **Add-ons**

Use these links for managing subscriptions in Business Manager. Learn how to manage subscriptions in Business Manager in the section Managing Subscriptions in Business Manager.

In order to perform operations on a subscription, you should first find it among other subscriptions. Naturally the information you have about a subscription in question is not full, say, it may be only the domain name hosted on your server. Even in this situation, it is easy to find the required subscription using the **Domains** page in Server Administration Panel. The page provides facilities to find a domain, a subdomain, a domain alias, a customer account, or a company by name. On this page, you can find relations between domain names and subscriptions and also get the following valuable information:

- The hosting type associated with a domain name.
- The indication if a domain name is an alias.

Moreover, you can instantly view the content of each website from the list.

➢ *To change a subscription's hosting settings:*

1. Go to **Subscriptions**, and click the **<Subscription>** in the list.

2. Click **Change Hosting Settings**.

3. Update the information, and click **OK**.

➢ *To transfer a subscription to another user:*

1. Go to **Subscriptions**, and click the **<Subscription>** in the list.

2. Click **Change Subscriber**.

3. Select a new subscriber and click **Next >>**.

4. Review the information about the changes to be made to the subscription settings and click **OK**.

➢ *To transfer several subscriptions to another user:*

1. Go to **Subscriptions**.

2. Select the subscriptions you want to reassign.

3. Click **Change Subscriber**.

4. Select a new subscriber and click **Next >>**.

5. Review the information about the changes to be made to the subscription settings and click **OK**.

➢ *To suspend a subscription:*

1. Go to **Subscriptions**, and click the **<Subscription Name>** in the list.

2. Click **Suspend**.

➢ *To suspend several subscriptions at once:*

1. Go to **Subscriptions**.

2. (Optional) Filter out active subscriptions:

   a. Click the ⏷ button next to the search field above the list.

      This will open the list filter.

   b. Under the **Status** filter, select **Active**.

3. Select target subscriptions in the list.

4. Click **Suspend**.

➢ *To activate a subscription:*

1. Go to **Subscriptions**, and click the **<Subscription Name>** in the list.

2. Click **Activate**.

Note: Activating a subscription in this way is good only for the subscriptions that were suspended manually. If you activate in such a way an expired subscription, it will be automatically suspended on the next day. In such cases, renew subscriptions as described below.

➢ *To activate several subscriptions at once:*

1. Go to **Subscriptions**.

2. (Optional) Filter out suspended subscriptions:

   a. Click the ⏷ button next to the search field above the list.

      This will open the list filter.

   b. Under the **Status** filter, select **Suspended**.

3. Select target subscriptions in the list.

4. Click **Activate**.

Note: Activating subscriptions in this way is good only for the subscriptions that were suspended manually. If you activate in such a way expired subscriptions, they will be automatically suspended on the next day. In such cases, renew subscriptions as described below.

➢ *To renew an expired subscription:*

1. Go to **Subscriptions**, and click the *<Subscription Name>* in the list.

2. Click **Activate**.

3. Click **Customize**.

4. On the **Resources** tab, set up a new expiration date, or select **Unlimited**.

5. Click **Update & Lock**.

> **Note:** After this step, the system will not apply further changes of the plan settings to this subscription. If you try to sync this subscription with the plan, the subscription will expire again unless you set the **Unlimited** validity period for this plan.

➢ *To remove subscriptions:*

1. Go to **Subscriptions**, and select the ones you want to remove.

2. Click **Remove**.

3. Click **Yes** at the confirmation box.

Setting Up Hosting Plans in Business Manager

If you have installed the Business Manager component and configured it to work with your Panel, then it is mandatory to create and manage hosting plans through Business Manager; otherwise, your customers will not be billed.

Note that before you can create your first service plan in Business Manager, you must perform a number of preliminary operations:

1. *Connect hosting panels.*

   You can sell hosting accounts on multiple servers with Parallels Plesk Panel installed. Before you create hosting plans, connect the panels installed on the servers that you will use to provide hosting services, and organize the panels into groups. To learn how to do this, refer to the section **Connecting Hosting Panels** (on page 151).

2. *Define how to process new hosting subscriptions.*
   Just before creating the subscription, Business Manager checks that the subscriber meets certain requirements (for example, does not have due invoices) and creates the subscription only if all requirements are met. The list of these requirements is called *the provisioning policy*. Before you start selling hosting services, check that this policy meets your needs on the **Business Setup** > **All Settings** > **Provisioning Policy** page.

3. Create online stores where you will offer hosting plans. Find instructions on configuring online stores in the section **Managing Online Stores** (on page 192).

To start plan creation, run the **Business Setup > Plans > Add Service Plan > Hosting Plan** wizard in the Server Administration Panel or directly in Business Manager.

You must complete a number of steps in order to create a hosting service plan:

- Specify general plan information, for example, a plan name or in which online stores the plan is shown.
- Specify plan properties (on page 233), such as disk space, traffic, and so on.
- Set prices for the plan (on page 233).
- Offer additional services (on page 236). In addition to the plan you create, you can offer add-on plans that provide additional services and resources (for example, extra disk space).
- Offer upgrade and downgrade options (on page 237). You can offer your customers the option to switch from their current plan to another one that provides more (upgrade) or fewer (downgrade) services and resources.

Later in this section we will provide more details about these operations.

All further workflow is automated. When a new customer subscribes to a plan in your online store, Business Manager creates an invoice. After the customer pays the invoice, Business Manager automatically creates a Panel account and subscription for the customer.

Learn how to manage customer accounts and subscriptions in the sections **Administering Customers** (on page 403) and **Managing Subscriptions** (on page 417).

Offering Pay-as-You-Go Hosting in Business Manager

To make your hosting offerings more flexible and convenient for customers, you can allow subscribers to consume resources beyond plan limits. For example, if a plan includes 1 GB of disk space, subscribers of this plan can use 2 GB and more and then pay for extra-consumed resources. This way of selling web hosting resources is called *pay-as-you-go* (or *PAYG*) web hosting. If a plan allows PAYG hosting, it does not strictly limit the resources, so we call such plans *burstable*. The prices for extra resources are called *burstable plan prices*; they are configured in plan settings. Learn more about the PAYG web hosting configuration in **Setting Up Custom Prices for a Plan**.

Every day, Business Manager calculates *usage charges* - amounts of money that subscribers of burstable plans should pay for additional resources. To learn about the calculation algorithm, see **Calculating Usage Charges** (on page 235). Customers can see their current usage charges on the **Home** page of the **Control Panel**. At the first day of each month, Business Manager issues invoices for usage charges of the previous month and resets the charge value to zero.

If you wish your customers to pay only for consumed resources, set all plan resources to minimal values, set the plan subscription price to 0, allow the PAYG web hosting, and define burstable plan prices.

Remember that subscribers can try to consume more resources than your Panels can provide if the PAYG is allowed. To avoid such situations, we recommend that you monitor the resource usage of your customers and advise them to upgrade their subscriptions if they regularly go over the plan limits.

In this section:

Plan Properties

After you specify a plan's general properties, such as name and type, define services and resources that will be provided by the plan on the **Properties** tab. To learn more about a certain plan setting, refer to **Appendix A: Properties of Plans and Subscriptions** (on page 677). Compared to plans in Panel, plans in Business Manager have a shorter list of hosting settings. For example, plans in Business Manager do not allow you to set custom per-plan PHP configuration. You will be able to define all missed settings later in the Server Administration Panel, once the plan is propagated to Panel.

Pricing and Price Options

A plan price in Business Manager is a combination of the following values:

- *Subscription price.* This is a price you charge for using services during a *billing cycle* - a period between two billings. You are free to set multiple billing cycles with different prices for a single plan. For example, set the price to $10 for 6-month subscription and $15 for 1-year subscription.

  Besides, you are able to define one-time charge - *setup fee* - for your plans. If you customers upgrade or downgrade their subscriptions to other plans, you can also set *upgrade* and *downgrade fees*.

- *Tax.* If your country legal standards imply levying taxes on customers, you can include these taxes in the plan price. Learn how to set up taxes for your services in Business Manager from the section **Configuring Taxation** (on page 201).

  After you create certain taxation policies and apply them to the plans, do not forget to configure online stores where you sell these plans to display prices properly: including taxes (*gross* prices) or excluding them (*net* prices). You can do this on the **Business Setup** > **Online Stores** > **<store name>** > **Change Settings** > **Payment Options** tab.

- *Burstable plan prices (for hosting plans).* If you allow subscribers to use Panel resources beyond plan limits (or *allow pay-as-you-go web hosting*), the subscribers will pay these prices for each unit of a resource that they consumed over the limits during a month. To learn how Business Manager defines calculates the monthly costs of resources overage (*usage charges*), see the section **Calculating Usage Charges** (on page 235). To allow resources overage, choose the appropriate option for the **Web Limits** > **Pay-as-you-go web hosting** on the **Properties** tab of the plan settings page.

  Note: If you do not define burstable plan price for a resource that can be used over the plan limit, extra amounts of this resource will be available to subscribers for free.

Set all these prices on the **Prices & Taxation** tab of the plan settings page.

You can reduce plan prices for promotional purposes by using *discounts*, *coupons*, and *customer groups*. Find more information on using these mechanisms in the section **Coupons and Discounts** (on page 449) and the section **Limiting Discounts and Exempting Subscriptions from Suspension** (on page 440).

Some plans require more flexible pricing. For example, you might want to sell the same hosting services on fast and standard servers and you wish to charge a higher price for accounts on fast servers. Business Manager allows setting custom pricing for different variations of the same plan through *price options*. Learn how to add custom price options in the section **Setting Up Custom Prices for a Plan** (on page 234).

The prices that you set on the plan settings page apply to all new subscriptions to this plan. However, you can also set custom subscription and overuse prices and apply a discount or a coupon to each subscription separately. For more information about custom subscription prices, refer to the section **Editing Subscriptions** (on page 422).

If you use accounting facilities included in Business Manager, you can define what information to add to the ledger after each invoice generation and payment. Learn how to define this format in the section **Creating General Ledger Entries for a Plan**.

In this section:

Setting Up Custom Prices for a Plan

Use price options if you want to vary a plan price depending on outer factors. For example, you have US and Europe servers that are associated with your **Gold** plan, and you want the plan subscribers to pay more for European hosting than for US hosting.

➢ *To set up custom prices:*

1. Create a price group, for example, *Location* in **Business Setup** > **All Settings** > **Advanced Pricing**, tab **Price Groups.**

2. Create price options within the price group, for example, *US* and *Europe* on the tab **Price Options**. Customers will see these names in online stores during the subscription process.

3. Go to the settings page of a plan you want to edit, open the **Price Options** tab, and select the price group and the price options that will be available for the plan. For example, for the **Gold Hosting** plan you can choose *US* and *Europe*.

Calculating Usage Charges

If the pay-as-you-go web hosting is allowed for a plan, Business Manager calculates *usage charges* - total costs of hosting resources overage - for the plan's subscribers basing on resource usage statistics that Business Manager collects from the connected Panels on a daily basis. No matter what billing mode and billing cycles you use, this happen on the first day of each month: The system finds the average daily overage of each resource except traffic and multiplies it by the month length and the monthly usage price of this resource.

Traffic

The traffic usage charge is calculated in the following way: Business Manager counts the total traffic overage for a month and multiplies it by the monthly traffic usage price. Say, if subscribers download 10 GB of files during a month while the plan limit is 5 GB, then the traffic overage is 5 GB. Assuming that the traffic usage price is $1 for a 1 GB, such subscribers will pay (10 GB - 5 GB) * $1 = $5 traffic usage fee.

Other Resources

For calculation usage charges for other resources, Business Manager uses the average daily usage values. For example, if a customer uses 500 MB of disk space over the subscription quota for 15 days and then uses extra 700 MB for other 15 days, the average overage will be (500 * 15 + 700 * 15)/30 = 600 MB. If the disk space usage price is $1 for 1 GB, then the customer will pay $0.6 for disk space overage this month.

Calculating Usage with Add-ons

If a customer purchases additional resources in the middle of a month, then the system subtracts the resource amount provided by the add-on from the daily resource usage of each day starting from the add-on purchasing day.

For example, if a customer uses 500 MB of disk space over the plan limit for a whole month and purchases the add-on that provides an additional 1 GB of disk space on the 7th day of the month, then the usage charge will include the payment for only 7 days of 500 MB of disk space overage.

Creating General Ledger Entries for a Plan

If you use Business Manager for accounting of your business, configure your plans to write information on performed business operations to the general ledger.

For example, if you want to track the price of domain registration that you pay to the registrar, define the ledger entries for this plan as described below.

> ➢ *To create ledger entries:*

1. Go to **Business Setup** > **Plans**, and select a plan.

2. Click **Ledger Entries**.

3. Click the button **Add Ledger Entry Group**.

4. Set the following:

   ▪ **Ledger Group Name**. Enter the name of the ledger group you are creating for this plan. For example, if this group covers the cost of this plan, you may want to name it *Domain Registration Cost.*

   ▪ **Filter Currencies**. The ledger entries are created when the plan is ordered through your online store. If you have multiple currencies set up, such as USD and GBP, move the currencies from the **Selectable** list to the **Selected** list by double-clicking on each one or using the arrow buttons.

   ▪ **Filter Cycles**. Similarly to **Filter Currencies**, you can select cycles for which you will create ledger entries. Move the cycles from the **Selectable** list to the **Selected** list by double-clicking on each one or using the arrow buttons.

   ▪ **Currency of Ledger Entries**. The currency you select will most likely be your native currency or the currency you use to set up your plans. You can still create ledger entries for any currency, but you will see the entries such as *Domain Registration Cost* in the currency you select from the menu.

   ▪ **Ledger Entries**:

   a. Create two ledger entries for the GL Account (General Ledger) account by clicking the **+ Add Ledger Entry** button.

   b. Select a ledger account to use such as *10000 - Cash 1* from the **GL Account** menu.

   c. Enter a description.

   d. Enter the cost of the plan in the **Credits** text box.

   e. Click the **+ Add Ledger Entry** button again.

   f. Select a ledger account to use such as *50000 - Cost of Goods* from the **GL Account** menu.

   g. Enter a description.

   h. Enter the cost of the plan in the **Debits** text box.

5. Click **Save**.

Offering Additional Services

In Parallels Customer and Business Manager you can offer additional resources and services not included in service plans as *add-on plans* (or *add-ons*). Add-ons are listed together with plans on the **Business Setup** > **Plans** page. If a plan has add-ons, online stores show them on a separate store page, so customers are welcome to include add-ons into their order. The controls to attach add-ons to plans are available on the **Add-ons** tab of the plan settings page.

Typically, an add-on provides a single resource: disk space, traffic, or other resource defined for the panel group you select for the add-on. You are also free to offer multiple resources and services as a single add-on.

To let your customers choose an add-on from a list of similar add-ons, say, different amounts of additional disk space, add-ons are organized into groups. Moreover, it is mandatory for an add-on to have a related group. When buyers subscribes to a plan, they see the names of add-on groups you attached to this plan and lists of groups items - add-ons - you selected for the plan.

For example, this can look like the following:

Would you like additional disk space? (add-on group)

- **1 Additional Gigabyte** (add-on)
- **2 Additional Gigabytes** (add-on)
- **5 Additional Gigabytes** (add-on)

To see a list of plans with which you offer an add-on, go to the **Plans** tab of the add-on settings page.

Important: A service plan and attached add-on must have same billing cycles and currencies. Otherwise, customers will not be able to purchase this add-on.

In addition to offering hosting add-ons, you can sell SSL certificates using add-ons. For instructions on how to set up the SSL certificates selling through an add-on, see the section **Offering Hosting Plans with SSL Certificates** (on page 252).

Upgrading and Downgrading Plans

Your customers may want to change plans to which they are subscribed, for example, if they need more resources that their current plans provide, or otherwise, if they do not want to pay extra money for resources that they do not use. For these cases, define available *upgrades* and *downgrades* for each plan.

You can use plans upgrades and downgrades to create a hierarchy of plans. The table below shows an example of plans set with available upgrades and downgrades:

Plan	Description	Available upgrades	Available downgrades
Bronze Hosting	An affordable hosting for individuals.	▪ **Silver Hosting** ▪ **Gold Hosting**	No
Silver Hosting	Hosting for small business.	▪ **Gold Hosting**	▪ **Bronze Hosting**
Gold Hosting	An ultimate hosting for business needs.	No	▪ **Bronze Hosting** ▪ **Silver Hosting**

If you offer plan upgrading and downgrading, define how to process upgrade and downgrade requests for all plans, for example, when to perform requested upgrades: immediately after requests or and the end of current billing cycle. The section **Configuring Upgrade and Downgrade Requests Processing** provides a list of system-wide properties related to upgrades and downgrades and description of these properties.

Besides, Business Manager provides an option to charge customers for upgrading or downgrading their subscriptions. Define upgrade and downgrade fees for each plan on the **Prices** tab of the plan settings page.

Upgrade and Downgrade Requests Processing

The Business Manager allows you to define what actions the system takes when upgrading or downgrading plans. This includes the following:

- Who can initiate upgrades and downgrades.
- How to perform upgrades and downgrades.
- How to bill upgrades and downgrades.

The controls to configure upgrade and downgrade requests processing are located at the **Business Setup** > **All Settings** > **Upgrade/Downgrade Requests**.

Customer-Initiated Upgrades and Downgrades

If you allow your customers to initiate upgrades and downgrades, define when to change their plans: immediately after request or at the end of current billing cycle.

If you decide to perform upgrades and downgrades immediately, define what to do with unused money on customer's billing account:

- Return the unused money to customers as credits. Choose this option, for example, for hosting plans.
- Do not return the money, Do it, for example, for domain registration plans, when the registrar does not return the money if you stop using a domain name.

Troubleshooting Delayed Upgrades and Downgrades

If you configure your Business Manager to perform subscription upgrades and downgrades at the end of billing cycles (or perform *delayed* upgrades and downgrades), then upgrade and downgrade requests receives advanced handling. To help you troubleshoot potential issues with delayed upgrades and downgrades, below we will describe handling of such requests in details.

For example, a customer has a *Bronze hosting* subscription and orders an upgrade to the *Silver hosting* plan. In this case, Business Manager will do the following:

1. Immediately after triggering the upgrade request, the system creates a new subscription to *Silver hosting* with the *Pending* status. The *Bronze hosting* subscription remains *Active*.
2. In a few days before the end of the current billing cycle, Business Manager issues an invoice for the *Silver hosting* subscription renewal.

3. At the first day of the next billing cycle, the system upgrades the subscription on
    Panel and removes the *Bronze hosting* subscription. If the upgrade was successful,
    Business Manager changes the *Silver hosting* subscription's status to
    Active.Otherwise, the *Silver hosting* subscription receives the *Error* status.

Before the system issues an invoice for the upgraded subscription, either you or the
subscriber can cancel the upgrade by clicking **Cancel subscription upgrade or downgrade**
on the *Bronze hosting* subscription's page. If you do this, Business Manager cancels
the *Silver hosting* subscription and issues the next invoice for the *Bronze hosting* as
usual.

After issuing the invoice for the upgraded subscription, neither you nor the subscriber
can cancel the upgrade request.

Serving Non-Technical Customers

Some of your customers may lack technical background in system administration, so it
is natural for them to feel uncomfortable when they see the full set of tools that Control
Panel offers. Even worse, they may corrupt configuration files and complicate
troubleshooting if they attempt to use the tools. To avoid these situations and present
your customers with a simple and lightweight Control Panel, we recommend that you
subscribe them to the *Default Simple* hosting plan available in **Service Plans** > the
Hosting Plans tab.

This plan allows customers to self service only simple routine operations leaving more
complex tasks to your support service. Though it already contains only the most
frequently used and popular tools, you are free to fine-grain the plan settings.

If you do not intend to create special plans for such audience, it is possible to limit the
number of tools and settings on the per-subscription basis using the instructions we
provide in this section. The instructions below explain how to achieve the successful
user interface simplification: Practically, you should hide resources and tools your
customers are not going to use.

Hiding Redundant Resources

The idea of this modification is straightforward: In hosting plan or subscription settings,
the **Resources** tab, set all unused limits to 0. According to **Visibility of Hosting Features in
the Control Panel** (on page 679), this will hide such resources in Control Panel.

For example, if you set the mailboxes limit to 0, the **Mail** tab will not be shown in Control
Panel. Read more about the resources in the **Resources** section.

Hiding Redundant Tools

The set of tools available to customers in Control Panel is defined by the subscription
or plan settings, the **Permissions** tab. For example, if you clear the **DNS zone management**
option, the tools to manage DNS will not be shown in Control Panel. Read more about
the permissions in the **Permissions** section.

Resources and Tools of Default Simple

Initially, the Default Simple hosting plan includes the following tools:

- Web Hosting Access
- Web Presence Builder
- File Manager
- Website Statistics
- Secure Your Site with SSL
- Applications
- Databases

Reseller Plans

Resellers in Panel

If your business model employs *resellers*, plans and subscriptions work in almost the same way as for hosting service customers (on page 211). The differences are as follows:

▪ In this case, we use the terms *reseller plans* and *reseller subscriptions*.

▪ Reseller add-on plans are not implemented.

▪ A reseller subscription is not linked to a domain; a reseller subscription provides a set of resources and services that the subscribed resellers redistribute by means of service subscriptions belonging to their customers or to themselves.

Note that the Panel business model has some limitations. It is not possible to:

▪ Convert customer accounts into reseller accounts.

▪ Move customer accounts from one reseller to another. You can perform this operation indirectly by moving the customer subscription from one account to another. For more details on how to change a subscription owner, refer to the section **Managing Customers and Subscriptions in Panel** (on page 225).

Resellers in Business Manager

In Business Manager, resellers combine features of customers and administrators. On one hand, they subscribe to plans in online stores, pay invoices for their subscriptions, and do other things that usual customers do. On the other hand, they offer the resources that they rent from you to other people using the administrator's workflow: resellers configure the plans that they will offer to their customers, configure online stores to sell these plans, configure payment gateways to accept online payments, etc. The diagram below shows the resellers' place in a hosting business that is run with Business Manager:
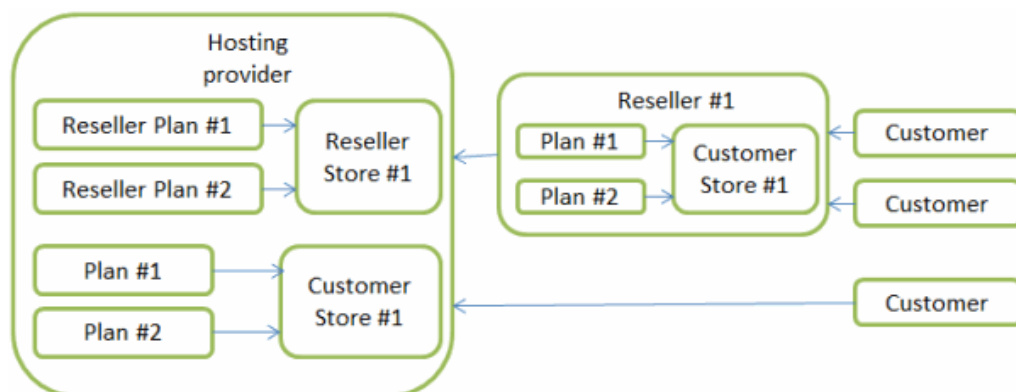
This section will guide you through the process of creating a reseller plan and starting to serve resellers. The section contains instructions on how to perform these operations in both Business Manager (on page 243) and in Panel (on page 242) (if you do not use the Business Manager automation).

In this section:

Setting Up Reseller Plans in Panel

Serving resellers is quite similar to serving hosting customers.

If you use Panel without any automation solution, then to start serving resellers, you should:

1. Create a reseller plan by running the **Service Plans > Reseller Plans > Add New Plan** wizard in the Server Administration Panel.

2. Define plan properties. Learn more about reseller plan properties in **Appendix B: Properties of Reseller Plans and Subscriptions** (on page 692).

3. When a reseller is ready to subscribe to the plan, create the reseller account and subscription. Learn more in the section **Subscribing Resellers to Plans in Panel** (on page 242).

Subscribing Resellers to Plans in Panel

If you do not use billing automation, then to start serving a reseller in Panel, you should create a reseller account and subscribe them to a reseller plan.

➢ *To subscribe a new reseller to a reseller plan:*

1. Go to **Resellers**, and click **Add New Reseller**.

2. Specify the reseller contact/billing information, user name and password.

3. Select a reseller plan with which the subscription should be associated.

4. Leave the **Proceed to customizing the subscription...** checkbox cleared.

5. Click **OK**.

Setting Up Reseller Plans in Business Manager

The process of setting up a reseller plan in Business Manager is just the same as the one for a hosting plan. Thus, to get detailed instructions on how to create a reseller plan, you can use the section **Setting Up Hosting Plans in Business Manager** (on page 231). There are just a few differences, which are described below.

Note: Before you can create your first reseller plan in Business Manager, you should create online stores where you will offer reseller plans (*reseller stores*). Find instructions on configuring online stores in the section **Managing Online Stores** (on page 192).

To start plan creation, run the **Business Setup > Plans > Reseller Plans > Add Reseller Plan** wizard in the Server Administration Panel or directly in Business Manager.

You must complete a number of steps in order to create a hosting service plan:

1. Specify plan properties, such as disk space, traffic, and so on. Find detailed descriptions of plan properties in **Appendix B: Properties of Reseller Plans and Subscriptions** (on page 692)**.**

2. Define the subscriber's administrative permissions.
    Choose what tools are available to the plan subscribers when they go to **Business Setup > All Settings**. For example, you can make the subscribers use your invoicing settings by turning off the corresponding tool. You can do the same with other features. On the one hand, this simplifies the subscriber's interface; on the other hand, it reduces Business Manager functionality. The list of available system menu items is located on the **Permissions** tab of the plan page. If you do not select an action, Business Manager will hide the corresponding tool on the **Business Setup > All Settings** page in the reseller's user interface.

3. Set prices for the plan.

4. Offer upgrade and downgrade options. You can offer your resellers the option to switch from their current plan to another one that provides more (upgrade) or fewer (downgrade) services and resources.

All further workflow is automated. When a new reseller subscribes to a plan in your online store, Business Manager creates an invoice. After the reseller pays the invoice, Business Manager automatically creates a Panel account and subscription for the reseller. The corresponding reseller account appears on the **Business Operations > Resellers** page. The subscription is added to the subscriptions list on the **Business Operations > Subscriptions** page.

Managing Reseller Accounts

To manage reseller accounts and subscriptions, use the same mechanisms as for customers: issue invoices, take payments, upgrade and downgrade subscriptions, and so on. To find detailed instructions on managing accounts and subscriptions in Business Manager, refer to the sections **Administering Customers** (on page 403) and **Managing Subscriptions** (on page 417).

Branding Resellers' Domain Names

Since your resellers run their own hosting businesses, they want to have branded domain names to use when their customers access Business Manager and panels that serve their subscriptions. This disguises the fact that the resellers are offering somebody else's resources and profiting from this. Learn how to configure resellers' access to the system with their own domain names in the section **Setting Up Branded Domain Names for Resellers (on page 451).**

Domain Name Plans

Business Manager supports integration with a variety of domain registration services. We assume that you have a merchant account with one of the registrars supported by Business Manager. To start selling domain names from this registrar in your online stores, take the following steps:

1. *Set up a registrar module and define which domain names you will register with this registrar.*

   For each registrar, you should define which *top level domains* (or *TLDs* - domain name extensions such as `.net` or `.com`) your customers will buy from this registrar. Learn how to configure domain name registrar modules in the section **Setting Up Accounts with Registrars (on page 245)**. If a TLD that you want to offer is not present in Business Manager, you can add it manually. To find out how to add new TLDs or change the properties of existing ones, refer to the section **Managing TLDs** (on page 246).

2. *Add a domain registration plan and define which of the supported TLDs you will offer within it.*

   To sell domain names, create d*omain name registration plans* on the **Plans** page. For each plan of this type, select TLDs that you will offer within this plan on the **TLDs** tab of the plan settings page.

3. *Define domain registration options for online stores.*

   During the domain name ordering process, potential customers are prompted to choose from the three options: purchase a new domain name, transfer an existing one to another registrar, or use an existing domain name. You are able to change the list of available options at the **Business Setup** > **Online Stores** > *<store name>* > **Change Settings** > **Domain Registration/Transfer** tab.

   Important: Not all domain registrars support domain transfer. To find out if a particular registrar supports the transfer, contact the registrar's customer support.

Offering Domain Name Registration in the Control Panel

If you offer domain name registration services, Business Manager can help you promote them to your hosting customers. Particularly, Panel shows customers links that let them register their domain names through your online stores. These links are displayed in the domain names list on the **Websites & Domains** tab. When a customer follows a link, Panel takes them to the online store where they purchased their hosting subscription and automatically adds a domain name registration subscription to their cart.

Note: If you have several online stores, the links will lead a customer to the online store where they purchased their hosting subscription.

Panel offers customers to register only those domain names that were not purchased in your online store, particularly:

- Domain names that customers specify as existing ones when purchasing hosting subscriptions.
- Additional domain names that customers create in the Control Panel.

If you have at least one domain name registration plan, Panel will automatically add corresponding links to the Control Panel. If you offer several domain name registration plans in a store, put the plan you want to promote above other plans of this type in the store's plans list. You can find the list on the **Offered Plans** tab of the store settings page.

In this section:

Setting Up Accounts with Registrars

If you wish to resell domain names with a certain registrar, you should add information about your merchant account to Business Manager. The system will resell domain names on behalf of this account.

Some domain name registrars require you to do additional actions to start reselling. These particularities are described in corresponding subsections of this section.

➢ *To add information about your account with a registrar:*

1. Go to **Business Setup** > **All Settings** > **Domain Registrars** and click **Add New Registrar**.

2. Select the registrar at which you have a merchant account and click **Select**.

3. Specify your account credentials, TLDs that you will register at this registrar, and other settings.

4. Click **OK**.

Wild West Domains (GoDaddy)

Only certified accounts are able to resell domain names with the Wild West Domains registrar, so you should pass the certification to start reselling.

The certification procedure verifies that your software is capable of using the registrar's API. You can proceed to the certification as soon as you add the registrar's module and specify your reseller account details. When this data is provided, the system will display the link **Learn how to complete the certification here** with detailed instructions on how to get certified.

Openprovider

When you configure this registrar, set **Remote host** to
http://www.openprovider.nl/incoming_custxml.php.

Managing TLDs

The system ships with a predefined set of TLDs that you can sell to your customers. If this set does not contain a TLD that you want to offer, add this TLD by clicking **Add TLD** on the **Business Setup** > **All Settings** > **Supported TLDs** page.

In your domain name registration plans, you can sell only *active* TLDs. Initially, all TLDs are inactive. To make a TLD active, configure a module of a domain name registrar and select this TLD on the registrar module settings page. Otherwise, you can make a TLD active by editing its settings on the **Business Setup** > **All Settings** > **Supported TLDs** page.

Checking Domain Names Availability

When a customer tries to register a new domain name through your online store, Business Manager first checks whether this name is available. By default, the system can check the availability of domain names only in TLDs that are included in the **Supported TLDs** list shipped with Business Manager. When you add a new TLD to the system, you should configure its checking parameters as described below.

For each TLD, there is a server on the Internet that provides information about domain names in this TLD. To check the availability of a domain name, Business Manager sends a request to the corresponding server and defines the availability depending on the server's response. For most TLDs, such servers use the *whois* protocol that defines the format of a request you send to this server.

If the server that checks domain names availability in your TLD uses this protocol, specify the server's domain name and, optionally, port (if it differs from the standard *43* port) in the **Whois server** field. If the server uses the *HTTP* protocol, you should explicitly specify the format of requests that you will send to the server. In this request, you can use the following variables:

- `%%domain%%` - a domain name that you want to check. For example, *domain-sld.tld*.

- `%%domainSLD%%` - a part that precedes the period in the domain name - *second level domain name* (*SLD*). *domain-sld* in the example above.

- `%%domainTLD%%` - a TLD. *tld* in the example above.

Then, for both protocols, specify the values that indicate the domain name availability in the **Whois response fragment indicating that domain name is available** and **Whois match rule** fields.

The examples below show how to configure checking domain names in a TLD with the *whois* and *HTTP* protocols:

- *Whois protocol*:

  - **Whois server**: `whois.centralnic.net`

  - **Whois response fragment indicating that domain name is available**: `DOMAIN NOT FOUND`

  - **Whois match rule**: **Should contain fragment**.

- *HTTP*: This example show the settings for the *tj* TLD:

  - **Whois server**: http://www.nic.tj/cgi/lookup3?domain=%%domainSLD%%

  - **Whois response fragment indicating that domain name is available**: `available for registration`

  - **Whois match rule**: **Should contain fragment**.

Adding ID Protect as an Add-on for Domains

ID Protect secures the information your customers specify during a domain name registration. This feature is offered by eNom and some other registrars. You can offer it as an add-on plan for domains. Please note that provisioning this add-on will only work if you use a registrar that supports this feature.

> ➢ *To add the ID Protect as add-on to domain name registration plans:*

1. Go to **Business Setup** > **Plans** and click **Add Add-on**.

2. Choose the **Non-Hosting Plan** add-on type.

3. Set the add-on **Name** to *ID Protect.*

4. Set the **Add-on group** to **New add-on group** and enter its name, for example, *Domain Options* or *Domain Features*.

5. Go to the **Properties** tab and add new custom property with the name *idProtect* and value *Yes*.

6. Go to the **Prices & Taxation** tab and set prices for billing cycles of your domain name registration plans. Typically, these cycles are *1 Year* and *2 Years*.

7. Go to the **Plans** tab and move domain name registration plans that will offer the ID Protect to the **Selected** list.

8. Save the add-on.

SSL Certificate Plans

Business Manager supports integration with SSL certificate providers. The integration supposes that customers purchase certificates in Business Manager, and the latter acquires the certificate through the provider API.

To acquire an SSL certificate, a customer submits the initial information to Business Manager, which forwards it to a provider. The certificate provider analyzes the information and queries for additional details if necessary through Business Manager. The interaction is repeated until the provider has enough information to issue the certificate.

Customers are notified about these additional requests by notifications in the **Account** tab of the Panel. Until the certificate is issued, the subscription status is *user input required*.

To sell SSL certificates to your customers, use *SSL certificate plans*. Configuring SSL certificate selling includes the following steps:

1. *Configure an SSL certificate provider plugin.*

   This will allow you to sell certificates from this provider. Learn how to do it in the chapter **Configuring SSL Certificate Providers** (on page 250).

2. *Add an SSL Certificate plan and set up the certificate types you will sell.*

   Do this from the **Properties** tab of the plan settings page.

You can also configure the system to automatically offer SSL certificates to hosting plan subscribers in online stores. This way is natural and convenient: when customers subscribe to a hosting plan, the online store offers them the chance to purchase an SSL certificate to protect their websites. To learn how to set up the SSL certificates offering, see the section **Offering Hosting Plans with SSL Certificates** (on page 252).

In this section:

Configuring SSL Certificate Providers

If you want to sell SSL certificates, first add and configure a plugin that will interact between Business Manager and one of the certificate providers (authorities). After you add a plugin, it is possible to edit the plugin properties, enable or disable it. If a plugin is enabled, you can associate it with SSL certificate plans.

Note: Disabling a plugin associated with existing plans leads to malfunctioning of the system.

➢ *To create a plugin:*

1. Go to **Business Setup** > **All Settings** > **SSL Certificate Providers** and click **Add New Plugin**.

2. Fill in the necessary parameters in the opened wizard and click **OK**.

   This will open the list of plugins containing the newly created one.

➢ *To edit a plugin:*

1. Go to **Business Setup** > **All Settings** > **SSL Certificate Providers** and click the plugin you wish to edit.

2. Update the necessary parameters and click **OK**.

   This will open the list of plugins.

➢ *To enable or disable a plugin:*

1. Go to **Business Setup** > **All Settings** > **SSL Certificate Providers** and select the plugins you wish to enable or disable.

2. Click the **Enable** or **Disable** item below the search bar.

   This will open the updated list of plugins.

   Note: Disabling a plugin associated with existing plans leads to malfunctioning of the system.

Selling SSL Certificates from SSLfactory

If you have offered SSL certificates from *SSLfactory* to your customers before, you can continue doing it using a separate plan type - *SSLfactory plans*. For more information on *SSLfactory*, refer to www.sslcenter.com.

To get the system ready to sell SSL certificates from SSLfatory, go to **Business Setup** > **All Settings** > **SSL Factory** and submit your SSLfactory account user name and access code.

Each SSLfactory plan offers one SSL certificate type:

- Quick SSL
- Rapid SSL
- True Biz SSL
- Quick SSL Premium

To set the certificate type for certain SSLfactory plan, add the custom property with name `certProductType` to this plan and assign a value from the table below to it:

Certificate type	Property value
Quick SSL	`QuickSSL`
Rapid SSL	`RapidSSL`
True Biz ID	`TrueBizID`
Quick SSL Premium	`QuickSSLPremium`

Note: The minimum billing cycle for these plans is 1 year, and you can have only a year-to-year term. You should request only keys that are 2048 bits long or longer.

Offering Hosting Plans with SSL Certificates

If you resell SSL certificates through your online stores, you can configure the system to automatically offer SSL certificates to customers who subscribe to hosting plans. This is more convenient for subscribers since this allows them to purchase hosting resources and protection for their websites in bundle: online stores prompt them to secure their websites with SSL certificates and then, if they agree, they automatically order an SSL certificate of the selected type.

➢ *To set up a secure hosting offering:*

1. Create SSL certificates plans that will offer SSL certificates of the needed types.

2. Select a hosting plan with which you will offer SSL certificates or add a new one.

3. Go to the tab **SSL Certificates** of the hosting plan settings page and add the SSL certificate plans to the **Available** list.

If a customer purchases a hosting package with an SSL certificate that you order from the *eNom*, the system automatically install the certificate to the customer's website. Otherwise, subscribers should configure the website protection with their certificate in the Control Panel manually.

Panel Administration

In this chapter:

Panel Licensing

Panel comes with a trial license key, which is already installed in the system. This license key provides limited functionality and is active only for a short period of time. Therefore, after installing Panel, you should obtain a proper license key from Parallels or its partners and install it.

Panel License Keys

You can install a Panel license key either by entering an *activation code* or by uploading a *license key file* to Panel. Learn how to do this in the section **Installing a Panel License Key (on page 43)**.

Panel license keys have a built-in expiration date. This has been implemented to help prevent fraud and theft. It requires the Panel software to check with Parallels licensing server during a 10 day period before the expiration date to verify that the key has not been reported stolen and is being used in accordance with the End User License Agreement (that is, installed on only one server). Once this is verified, the expiration date is prolonged. The verification runs automatically and you do not need to do anything unless there is a problem. If the key is expired, go to **Tools & Settings** > **License Management** and click **Retrieve Keys**. If the key cannot be updated, contact your reseller or Parallels (if you purchased the license key directly from Parallels).

Note: Panel uses the TCP port 5224 for connections to the licensing server. Please make sure that the port is not blocked by a firewall. To test the connection to the licensing server anytime, click **Retrieve Keys** in **Tools & Settings** > **License Management**.

Additional License Keys

Additional license keys are used to activate third-party software in Panel:

- *Additional Panel components.*
  Typically, these components are commercial Panel extensions like anti-virus software, webmail software, and so on. Additional keys are associated with the Panel license key and can be found in **Tools & Settings > License Management > Additional License Keys**. Learn how to order add-ons and install additional license keys in the section **Installing Additional License Keys for Panel Add-ons** (on page 256).

- *APS web apps.*
  Since Panel 11.0, it is possible to purchase a Panel license key that comes in a bundle with APS app licenses. For example, you can purchase a bundle that contains a Panel license key and a key for a commercial online store app. Technically, this means that once a user install the app to their site, it will be automatically activated without the need to purchase the app license from the vendor.

Note: If you are a hosting provider, you can allow your customers and resellers to use bundled app license keys. To do this, grant them the **Allow activating APS apps using license keys from the Panel license pool** permission on the **Permissions** tab of a certain service plan or subscription. Note that you are unable to limit the number of app installations a customer is allowed to perform. Thus, a customer can install a commercial app twice and more times on their websites without being charged for additional installations.

Licenses for APS apps are provided as additional license keys to Panel and can be found in **Tools & Settings > License Management > Additional License Keys**.

In this section:

Installing Additional License Keys for Panel Add-ons

Typically, Panel add-ons (like Panel extensions, web apps, and so on) are associated with a Panel license key. That is why, when you purchase Panel add-ons at the Parallels online store, you are prompted to enter the number of your license key. Once you purchase a key, you will receive an activation e-mail.

➢ *To install an add-on license key:*

1. Go to **Tools & Settings > License Management > Additional License Keys** and click **Retrieve Keys**.

2. The Panel's License Manager will retrieve the upgraded license key from the Parallels licensing server and automatically install it to your Panel.

If your activation e-mail contains an activation code or a license key file, you should install the key manually.

➢ *To install an add-on license key using an activation code:*

1. Go to **Tools & Settings > License Management > Additional License Keys** and click **Install Key**.

2. Enter the code you received in the e-mail to the **Enter an activation code** field and click **OK**.

➢ *To install an add-on license key using a license key file:*

1. Go to **Tools & Settings > License Management > Additional License Keys** and click **Install Key**.

2. Choose **Upload a license key file**.

3. Specify the path to the key file you received in the e-mail and click **OK**.

Upgrading Your License Key

If you are planning to expand your customer base and host more sites on the server than your current license allows, you need to upgrade your license key. All upgrades are applied to your main Panel license key. Once you purchase upgrades at the Parallels online store, you will receive an activation e-mail.

➢ *To upgrade the license key:*

1. Go to **Tools & Settings > License Management > Parallels Panel License Key** and click **Order Panel Upgrades**.

2. Order desired upgrade options. Once your order is processed, you will receive a notification e-mail.

3. Go to **Tools & Settings > License Management > Parallels Panel License Key** and click **Retrieve Keys**.

4. The Panel's License Manager will retrieve the upgraded license key from the Parallels licensing server and automatically install it to your Panel.

Rolling Back to Your Previously Used License Key

➢ *To roll back to the license key you previously used:*

1. Go to **Tools & Settings > License Management > Parallels Panel License Key.**

2. Click **Roll Back Key**. The previously installed license key will be restored.

Changing Your Password and Contact Information

➢ *To change your password:*

1. Click the **Change Password** link in the navigation pane.

2. Enter your old and new passwords.

3. Click **OK**.

➢ *To update your contact information:*

1. Click the **Profile & Preferences** link in the navigation pane.

2. Update your information as required, and click **OK**.

➢ *If you forgot your password:*

1. In your web browser's address bar, type the URL where your Parallels Plesk Panel is located.

   For example, https://your-server.com:8443.

2. Press ENTER. Parallels Plesk Panel login screen will open.

3. Click the **Forgot your password?** link.

4. You will be prompted to specify your login name and e-mail address registered in the system. Type your login name into the **Login** box, type your e-mail address registered in the system into the **E-mail** box, and click **OK**.

5. If your password cannot be sent by e-mail because it was stored by the system in encrypted form, you will be prompted to set up a new password using a secret code that will be generated for that purpose and sent to your e-mail.

6. Once you received the e-mail from the password reminder, click the link in the message body. A new browser window will open.

7. At this step, specify your login name and a new password.

   The **Secret Code** field of the form should be automatically filled by the system, and if it is not, copy the secret code from the message you received to the clipboard and paste to the form.

8. Click **OK** to submit.

   The instructions on how to restore your password will be sent to your e-mail address.

If Your Panel Works with Parallels Customer and Business Manager

For the Panel to work fine with Parallels Customer and Business Manager, you will have to actually change two passwords. The first is that you and Business Manager use to work with the Panel, and the second is a global password you use to log in to both Business Manager and the Panel.

> ➢ *To change your password if you employ Business Manager:*

1. Change your password in the Panel by following instructions from section **Changing Your Password and Contact Information** (on page 258).

2. Update this password in connection settings of Business Manager.

   a. Click **Business Setup** > **All Settings**.

   b. Click **Hosting Panels**.

   c. Select the ID of the group where the Panel resides (*PleskUnix* or *PleskWin*).

   d. Click **Edit**.

   e. Change the password to the one you specified at step 1.

3. Set this password as global account password.

   a. Make sure you are in Business Manager and click the **Profile** link in the upper-right corner of the page.

   b. Repeat the password you specified at step 1.

Appearance and Branding

In this section:

Appearance

In this section:

Interface Preferences

Changing Panel View

Depending on your goals, Panel provides two different views you can choose from when working with Panel:

▪ Select *Service Provider* if you use Panel for selling web hosting.

▪ Select *Power User* if you use Panel for own needs.

Read more about the views in **Interface Views** (on page 32).

To quickly change your view, go to **Tools & Settings** > **Interface Management**.

Hiding and Unhiding Sets of Buttons

You can easily hide predefined groups of buttons from the Panel. In this case, users do not see the controls they are not allowed to operate or the features that are not supported (services not installed).

➢ *To hide groups of buttons:*

1. Go to **Tools & Settings** > **Interface Management** (in the **Control Panel Appearance** group) > **Interface Controls Visibility** tab.

2. Select the checkboxes to hide the following sets of buttons:

   ▪ Buttons related to services provided by MyPlesk.com online store. If you are reselling domain registration services and SSL certificates, select the checkboxes **Hide buttons for domain registration**, **Hide buttons for certificate purchasing**, and **Hide buttons for extra services**. All buttons related to MyPlesk.com will be removed from the control panel at all user levels.

   ▪ Mail bounce controls. If you wish to prohibit your users from using their own mail bounce policies for e-mail addressed to non-existent e-mail recipients within their domains, select the **Hide controls for rejection of messages for non-existent mail addresses** checkbox.

   ▪ News feeds shown on default website pages.

   ▪ Parallels Virtuozzo Containers promotional links in the Panel.

3. Click **OK**.

➢ *To make groups of hidden buttons visible in the interface:*

1. Go to **Tools & Settings** > **Interface Management** (in the **Control Panel Appearance** group) > **Interface Controls Visibility** tab.

Clear the corresponding checkboxes to make the hidden groups of buttons again visible in the interface, then click **OK**.

Administrator's Interface Language

➢ *To change the interface language and other settings for your Panel:*

1. Click the **Profile & Preferences** link in the navigation pane.

2. Specify the following:

    a   **Administrator's interface language.** Select the language for your Panel.

    b   **Button label length.** To prevent lengthy button captions in languages other than English from overlapping in the Panel, you may want to specify a limit here. Any button caption longer than the defined limit will be shortened and ended with ellipsis (...).

    c   **Allow multiple sessions under administrator's login.** By default Parallels Plesk Panel allows multiple simultaneous sessions for several users logged in to the Panel using the same login and password combination. This can be useful when delegating management functions to other users or in case if you accidentally close your browser without logging out, thus becoming unable to log in again until your session expires. You may want to switch off this capability, if you do not need it.

➢ *To select the default interface language for your customers:*

1. Go to **Tools & Settings** > **Languages** (in the **Panel Appearance** group).

2. Select a checkbox corresponding to the language that will be set as default for new Panel users and click **Make Default**.

Setting Up Supported Languages

Panel includes language packs, the translations of user interface into different languages. If you would like to see the list of supported languages, refer to the product release notes available at http://www.parallels.com/products/plesk/docs/. All the supported languages are installed during the Panel installation (either clean installation or upgrade), and do not require any additional actions from you to start using them. The number of languages you can use depends on the Panel license you purchased. The Panel will alert you when you attempt to use more languages than allowed.

➢ *To view the interface languages installed in the Panel:*

1. Go to **Tools & Settings** > **Languages** (in the **Panel Appearance** group). The following information is displayed:

   ▪ Language status icon shows the current status of the language pack: 🔵 language pack is accessible to users, ❌ not accessible, ⚠️ the language pack is not available to users because the limit on the number of language packs supported by your current license is exceeded.

     Note: you can make a language unavailable to control panel users. To do this, click an icon 🔵. To make a language available to users, click an icon ❌.

   ▪ **Language pack** contains the four-letter language code;

   ▪ **Language** shows the name of the language;

   ▪ **Country** displays the countries where this language is native;

   ▪ **Used** displays the number of control panel users at all levels that use this language in their interface.

➢ *To select a new default language for the Panel:*

1. Go to **Tools & Settings** > **Languages** (in the **Panel Appearance** group).

2. Select the checkbox corresponding to the language you wish to set as default and click **Make Default**.

Adding and Removing Custom Buttons

You can add custom hyperlink buttons to the Panel and make them visible for your resellers and customers. The links may lead to web resources, such as your corporate site, or to a web application that can process online requests and accept additional information about the users who click these links.

You can specify what information about users should be passed:

- Subscription ID.
- Primary domain name associated with a subscription.
- FTP account username and password.
- Customer's account ID, name, e-mail, and company name.

You can place the buttons in the following locations of the Server Administration Panel and Control Panel, and decide who should be able to see them:

- On the **Home** page in the Server Administration Panel, visible only to you and to the users logged in under additional administrator accounts. This is achieved by selecting the **Administrator's Home page** option in the button properties.
- On the **Home** page in the Server Administration Panel, visible only to your resellers. This is achieved by selecting the **Reseller's Home page** option in the button properties.
- On the **Home** tab in the Control Panel, visible to the hosting service customers and their users who are allowed to log in to the Control Panel. This is achieved by selecting the **Customer's Home page** option in the button properties.
- On the **Websites & Domains** tab in the Control Panel, visible to the hosting service customers and their users who are allowed to log in to the Control Panel. This is achieved by selecting the **Websites & Domains page of Subscription** option in the button properties.
- On the **Home** page in the Server Administration Panel and Control Panel, visible to you, all resellers and customers. This is achieved by selecting the **Common access** option in the button properties.

➢ *To add a custom hyperlink button to the Server Administration Panel or Control Panel:*

1. Go to **Tools & Settings** > **Custom Buttons** (in the **Control Panel Appearance** group), and click **Add Link to Service**.

2. Specify the following properties of the button:
   - Type the text that will show on your button in the **Button label** box.
   - Choose the location for your button.
   - Specify the priority of the button. Your custom buttons will be arranged in the Panel in accordance with the priority you define: the lower the number, the higher the priority. Buttons are placed in the left-to-right order.
   - To use an image for a button background, type the path to its location or click **Browse** to browse for the desired file. It is recommended that you use a 16x16 pixels GIF or JPEG image for a button to be placed in the navigation pane, and 32x32 pixels GIF or JPEG image for buttons placed in the main frame or desktop.
   - Type the hyperlink of your choice to be attached to the button into the **URL** box.

- Using the checkboxes, specify whether you want the customer information and other data to be transferred within the URL. These data can be used for processing by external web applications.

- In the **Tooltip text** input field, type in the help tip that will be displayed when you hover the mouse pointer over the button.

- Select the **Open URL in Parallels Panel** checkbox if you want the destination URL to be opened right on the Panel page, otherwise, leave this checkbox cleared to open the URL in a separate browser window or tab.
If the URL leads to a Panel extension or web app, you can use the **Do not use frames** option to specify how the extension/app should be displayed on the Panel page: in a frame or as a part of the Panel GUI. The latter is recommended as the extension/app is seamlessly integrated into the Panel GUI. Note that the **Do not use frames** option is relevant only for the extensions/apps that support this feature. If an extension/app does not support the integration with the Panel GUI, it will be displayed in a frame regardless of the **Do not use frames** option.

- If you want to make this button visible only to you, select the **Show to me only** checkbox.

3. Click **Finish** to complete creation.

➢ *To remove a hyperlink button from the Panel:*

1. Go to **Tools & Settings** > **Custom Buttons** (in the **Control Panel Appearance** group).

2. Select a checkbox corresponding to the button that you want to remove and click **Remove**.

Branding and Themes

Configure your own branding for Parallels Plesk Panel by modifying page titles, logo, or applying custom Panel themes (former skins). The branding tools are available in **Tools & Settings** > **Panel Branding** (in the **Panel Appearance** group).

Here we provide details about each of the options:

- *Title of Panel pages* is the title your customers see at the top of the browser window when they log in to Panel. By default, it is *Parallels Plesk Panel 11.0.0*.

- *Logo* is a banner in the top frame visible to your customers when they log in to their Panels. You can also make your logo a clickable hyperlink.You should use a GIF, JPEG, or PNG format file for your logo, preferably not larger than 100 kilobytes to minimize the download time. It is recommended that you use an image of 50 pixels in height.

In addition to these two options, you are able to change the visual appearance and branding of the Panel by applying custom themes. Two themes are available by default: Panel 11 and Panel 10. You can try the new look or continue using the appearance of the previous Panel version. For information about using custom themes, refer to the document **Creating Custom Themes**.

Panel Updates and Upgrades

Panel is constantly evolving in terms of functionality, and new security enhancements are introduced with each update. To ensure that your Panel software is up-to-date, we recommend that you switch on automatic updates.
There is also the option to upgrade Panel to the latest versions. While *updates* include some minor fixes for Panel, *upgrades* introduce more complex changes in product functionality.

The information about current Panel version and available updates and upgrades is always displayed in the **System Overview** group of the **Home** page.

Panel Versioning

The full Panel version identifier consists of a number of fields. For example, the identifier *Panel 10.3.0 Update #12 General release* appears as follows.

Version number			Update	Release tier
Major	**Major**	**Minor**		
10	3	0	12	General release

Information about how updates (on page 267) and upgrades (on page 267) affect these fields is provided next in this section.

Note: By default, Panel updates and upgrades are downloaded from the official update server. Learn how to install updates and upgrades from other locations in the section **Changing the Updates/Upgrades Source** (on page 270).

In this section:

Panel Updates

Updates are fixes that enhance Panel security and stability. There are four types of updates:

- *Security updates*.
  These updates address security vulnerabilities. Such vulnerabilities may be exploited by hackers attempting to get access to your server. We strongly recommend that you apply security updates as soon as possible. Panel always warns you about missed security updates on the **Home** page.

  Note: Some security updates that Parallels considers to be mandatory are applied automatically regardless of your update policy.

- *Important updates*.
  These are updates that significantly improve Panel reliability. We strongly recommend that you apply such updates once they become available.
- *Recommended updates*.
  Recommended updates improve the overall stability or introduce enhancements developed after the Panel release.
- *Optional updates*.
  These are minor fixes and enhancements, which do not have any serious impact on your work in Panel and do not require immediate installation.

Updates are distinguished by types only for your convenience: Update type just indicates the urgency of applying an update. For example, a security update should be applied as soon as possible, while an optional update can be installed at any convenient time.

Applying Panel Updates

Updates can be applied only to a current Panel version. Thus, Panel does not change its version after an update: Information about the applied update is just added to the product version name, e.g. *Panel 10.3.0 Update #12*. Updates are free of charge and available to all Panel installations regardless of their license key.

You can update Panel in two ways:

- *Manually* from the **System Overview** group of the **Home** page. This page contains the information about the latest available update including its type and a link for applying the update.
- *Automatically (recommended)*. If you activate automatic updates at **Tools & Settings > Update and Upgrade Settings**, Panel will check for updates once a week. If updates are available, Panel automatically downloads and installs them.

Note: Panel updates are applied sequentially. Therefore, you cannot install only a specific update or skip one of the updates.

Panel Upgrades

Upgrades always bring a significant number of Panel enhancements or even introduce new Panel features and behavior. After an upgrade, Panel increases its major or minor version:

- Typically, if an upgrade only improves the existing functionality, then Panel increments its minor version number (e.g. from 10.3.0 to 10.3.1).
- If an upgrade includes more complex changes in Panel, then the major version number is incremented (e.g. from 10.3.1 to 10.4.0).

Panel Upgrades and Release Tiers

During its lifecycle, each major Panel version passes through a number of development stages (see the diagram below). It is natural that on earlier stages, some of newly implemented features may not be in their final state and may require some further modification. The functionality of such features in subsequent Panel versions is improved as they receive more customer feedback over time. To indicate the stage of the current Panel version, we assign one of the following release tiers to it: *Testing release*, *Early Adopter release*, *General release*, and *Late Adopter release*.

Notes:
1. By default, testing builds are not shown as available for installation. You can install the testing Panel version only by running Parallels Installer with one of the special options. Learn more in the **Installation, Upgrade, Migration, and Transfer Guide**, chapter **Installing Panel**.
2. Upgrade to the next testing release is available only to the owners of a testing build. Subsequent Panel builds do not have the corresponding option in the GUI.

The decision on what tier to use is absolutely up to you. For example, consider upgrading to the early adopter release if you want to try new features before the general availability of Panel. On the other hand, if you want to get the solution that received all major updates and is successfully used by a number of service providers, wait until Panel gets the late adopter release status (it may be a couple of months after the general release).

Once you have decided what version you need, set up Panel to notify you when upgrades to the chosen version become available. After you select the version type in **Tools & Settings > Update and Upgrade Settings**, Panel will check for upgrades once a day. When an upgrade with the selected release tier becomes available, Panel will notify you on the **Home > System Overview**. Note that Panel always notifies you when a version with a "higher" release tier becomes available. For example, if you set Panel to notify you about early adopter releases, you will still receive all upgrade notifications about general and late adopter releases. However, if you decide to use only late adopter releases, notifications for all early adopter and general release upgrades will be skipped.

The diagram below shows the rough Panel lifecycle (the version numbers are given just for example and do not have any correlation with the real ones).
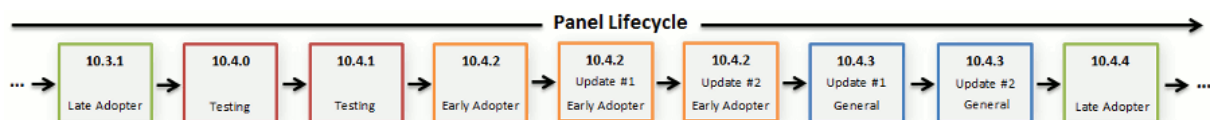
Applying Panel Upgrades

As upgrades imply multiple changes in the product and may require significant downtime, Panel does not apply them automatically. Instead, it displays upgrade notifications on the **Home** page. Once you receive such a notification, you can initiate the upgrade either from the **Home** > **System Overview** or **Tools & Settings** > **Updates and Upgrades** at any time that suits you.

The scenario described above is called in-place upgrade as Panel components are updated within one server. However, there is another way to upgrade Panel - *upgrade by transfer*. This way implies transferring Panel data to another server with a later version of Panel. Upgrade by transfer is suitable, for example, when you want not only to upgrade Panel but also to move it to a more productive server or another operating system. To learn more about differences between upgrade ways and get detailed instructions on upgrading Panel, read the **Installation, Upgrade, Migration, and Transfer Guide**.

Panel Upgrades and License Keys

Note that some Panel licenses do not grant the permission to perform complex upgrades (upgrades that change the major version number: e.g. from 10.3.1 to 10.4.0). If you attempt to perform such an upgrade, Panel will warn you about license limitations. Nevertheless, you will still be able to perform the upgrade. When it is finished, you will need to obtain and install the license key for the new Panel version. For more information about installing a license key after an upgrade, refer to the section **Upgrading Your License Key** (on page 257).

Notes on the In-Place Upgrading Procedure

- After upgrading to a new Panel version, you will receive the report of the upgrade procedure. The notification message will include the event log and a list of installed packages, if the upgrade is successful. However, you may not receive any error notice if your mail server fails. In this case you can check for errors in the `autoinstaller3.log` file located in the `/tmp` directory on the server hard drive.
- All Panel operations are suspended during installation of the so-called *base* packages that affect the Panel's core functionality.
- Starting from 10.3, Panel provides the ability to install alternative component versions (PHP 5.3, MySQL 5.5, etc.) right from the **Updates and Upgrades** page.

Changing the Updates/Upgrades Source

By default, updates and upgrades for Parallels Plesk Panel and your operating system are downloaded from the official updates server at http://autoinstall.plesk.com.

➢ *If you want to receive Parallels Plesk Panel updates from another location on the network:*

1. Go to **Tools & Settings** > **Updates.** Updater will open in a new browser window or tab.

2. If Updater starts downloading updates and you would only like to change settings at the moment, click **Cancel.**

3. Click **Updates source and installation settings**, and specify the source of update packages:

   ▪ By default, the **Official Parallels Updates server** is selected. Specify the location where the installation files will be stored. By default, the installation files are stored in the `/root/parallels` directory.

   ▪ If you select **Mirror server**, specify the `.inf3` file location in the **URL to the directory with .inf3 file field**. Specify the location where the installation files will be stored. By default, the installation files are stored in the `/root/parallels` directory.

   ▪ If you select **Local media**, specify the `.inf3` file location in the **Absolute path to the .inf3 file** field.

4. If you use a proxy server, select the **Connect using a proxy** checkbox and specify the following settings:

   ▪ Specify proxy host name and port number in the **Proxy address** and **port** fields.

   ▪ If this proxy server requires authentication, select the **Require authentication** checkbox and specify username and password.

5. Click **Save** to save the settings.

Reporting Upgrade Problems

During Panel installation or in-place upgrade, Parallels Installer captures all the problems it encounters and sends them to Parallels. These reports do not contain any personal or sensible information. Our technical experts analyze and resolve these problems making future installations and upgrades more reliable.

It is up to you whether to let Parallels Installer submit problem reports to Parallels. The Installer asks your decision during the first installation or in-place upgrade and remembers it for the Panel lifetime. If you decide to stop sending the reports to Parallels, run the Installer with the following option:

```
<full path to Parallels Installer> --disable-feedback
```

Alternatively, to start submitting the reports, use:

```
<full path to Parallels Installer> --enable-feedback
```

Managing Panel Components

Panel orchestrates the work of a number of services like web, mail, DNS, and other. Technically, Panel does not provide the services by itself, it just gains control over a number of third-party components. For example, when a customer creates a website through the Panel GUI, Panel propagates this request to a web server (Apache or IIS) and the latter adds a new virtual host to the system. The list of components is defined during Panel installation (see the **Installation, Upgrade, Migration, and Transfer Guide** for details). Panel allows you to view the list of installed components, add new ones, switch between interchangeable components, and remove them (only on Windows).

Viewing Panel Components

You can view the list of installed components and their versions in **Tools & Settings > Server Components**. *Panel for Windows* has an additional indication of a component state (the appearance of icons depends on a Panel theme):

- means that Panel is using this component, and the component is working.
- means that Panel is not using this component (usually because a license key has expired or missing), but the component is working.
- means that Panel is not using this component, because the component is stopped.
- means that Panel is not using this component, but the component is installed in the system and available.

Installing Panel Components

If you did not include a component in your Panel installation, you can add it later in **Tools & Settings > Updates and Upgrades > Add Components**.

Switching Between Interchangeable Components

Some Panel components are interchangeable: For example, on Windows you can use either MS DNS Server or BIND as your DNS server, on Linux you can choose between Postfix and Qmail for mail delivery, and so on.

On *Panel for Linux*, you can switch between interchangeable components in two ways:

- *Using service settings*. Some Panel components with similar purpose can be installed side-by-side on the same Panel server. For example, if you have two installed antivirus components, you can specify the one that will process your mail in **Tools & Settings > Mail Server Settings**.
- *Using Parallels Installer*. Some Panel components with similar purpose do not allow side-by-side installation. For example, there may be only one mail server in Panel: Either Postfix or Qmail. In this case, you should choose one of the components in **Tools & Settings > Updates and Upgrades > Add Components**.

On *Panel for Windows*, you can switch between interchangeable components in **Tools & Settings > Server Components**. To perform the switch, click on the component name (for example, **Mail Server**) and select the required component from the list.

Removing Panel Components (Windows)

If you no longer need a certain Panel component, you can remove it from Panel in **Tools & Settings > Updates and Upgrades > Add/Remove Components** or by clicking the **Add or Remove Components** link on the **Home** page.

Web Applications

The majority of customers purchase web hosting accounts to run different web applications: Webmail, CRM, e-commerce systems, blogs, image galleries and so on. Typically, such users are unable to install the apps by themselves because they lack the necessary technical skills and experience, so they ask their service providers to do it. Hence, the provider's staff becomes overloaded with routine operations related to the apps. To ease the installation (and maintenance) of web apps and reduce the staff's workload, Parallels offers a number of free and commercial apps available to Panel users directly from their Control Panel.

There are various factors that regulate what apps are available to your customers. For example, the app list is restricted by service plan or subscription properties, local repository settings and so on. To see how the apps list is formed, refer to the **How Apps Become Available to Your Customers** section.

App Types

Parallels offers two types of apps:

- Apps that are installed directly on a website (say, the WordPress blogging platform or the Joomla! content management system).
- Apps that do not require a website for their installation. These are usually external apps located somewhere on the web that only provide a link to their services (say, the iMind videoconference service or OfficeDrive - an online office suite).

Apps can be either *free* or *commercial.* Commercial apps require providing a license key to start working with them. You or your customers can buy licenses for commercial apps right from the Control Panel: In the **Applications** tab such apps are accompanied by the **Buy Now** button instead of **Install Now**. If your Panel license comes in a bundle with licenses for certain commercial apps, you do not need to additionally obtain app licenses.

App Installation and Maintenance

The process of installation does not require any specific skills from customers. They fill in app settings (say, administrator credentials), and Panel installs the app for them. Subsequent app management is also facilitated as apps are updated or removed directly in Panel. Moreover, customers can access some functions that apps make available in the Control Panel (without the need to log in to an app). For example, customers can upload a new WordPress theme or add a SugarCRM user account directly from their Control Panel. Such app functionality is a *service* the app provides to customers.

Apps Backup and Restoration

Apps are backed up by standard Panel means (the `backup` utility). Since the backup unit is a subscription, all apps in a subscription must be backed up at once. The apps from a backup are restored along with other subscription data.

Application Vault and Application Catalog

If there are no restrictions on app availability, the list of available apps in the Control Panel includes all apps from the following two sources:

1. Application Catalog - the remote repository held by Parallels, the main source of apps.

2. Application Vault - a local repository in Panel. Every Panel has own Application Vault that is available through the Server Administration Panel (**Server Management > Tools & Settings > Application Vault**).

The main purposes of the Application Vault are to:

- *Extend the list of available apps by uploading your own APS packages*.
  This is relevant if you want to offer some apps to your customers but these apps are not listed in the Application Catalog.

- *Apply updates to apps installed from the Application Catalog.*

- *Gain control over apps from the Application Catalog.*
  Download an app from the Catalog to the Vault to control some of its options. For example, you can toggle its visibility to customers or configure its server-wide settings.

For more information on managing apps through the Application Vault, refer to the **Managing Apps with the Application Vault (on page 277)** section.

Summing up, the Application Vault is not only a local repository of apps but a tool to control versioning, visibility, and server-wide settings of apps from the Application Catalog. For better understanding of the Application Vault, refer to the scheme shown in the **How Apps Become Available to Your Customers** section.

Sharing Apps among Panel Servers

Adding an APS package to the Application Vault will make it available only to your customers. If you wish to share your app with users of other Panel servers, add an app to the Application Catalog. The Catalog accepts only apps packaged according to Application Packaging Standard (APS) - the set of rules that allows easy app installation and management. After you have packaged your app, it must pass the certification procedure. For details on how to do this, see http://www.apsstandard.org/why-aps/isv/.

Storefront

Since Panel 10, Parallels Partner Storefront program offers you the possibility to earn by selling commercial apps to customers in a revenue-share model. Within this program, you select the apps you want to sell and Parallels adds them to the list of apps available in Control Panel. Once customers choose one of the paid apps selected for the program, they are forwarded to a store with your own branding to complete the order. This branded store is called the Storefront.

All ordering, licensing, and billing aspects are handled by the Storefront. You just track the sales and receive a profit from each app sold.

Note: Storefront may contain some commercial apps that are available in Application Catalog as well. In this case, Storefront apps have a priority and customers always see them first in the list of available apps.

Note that you should have the appropriate Panel license to participate in the program. For more information on Parallels Partner Storefront, refer to the http://www.parallels.com/products/plesk/storefront/.

For the details about how you can manage the availability of Storefront apps to your customers, refer to the section **How Apps Become Available to Your Customers** (on page 275).

Next in this section, we will provide details on how to manage apps using the Application Vault as well as the information on how apps become available in the customer's Control Panel.

In this section:

How Apps Become Available to Your Customers

The list of apps available to a customer depends on various factors, such as the service plan settings, the Application Vault configuration, and so on. Moreover, service providers are able to forbid accessing apps for all Panel users. If you do not adjust the app availability, your customers will see all apps from Application Catalog, Storefront (either yours or Parallels's), and all apps you uploaded to the Vault.

To view the list of apps available to a certain customer, go to the **Applications** tab > **All Available Applications**.

This diagram explains how the list of available apps is formed.
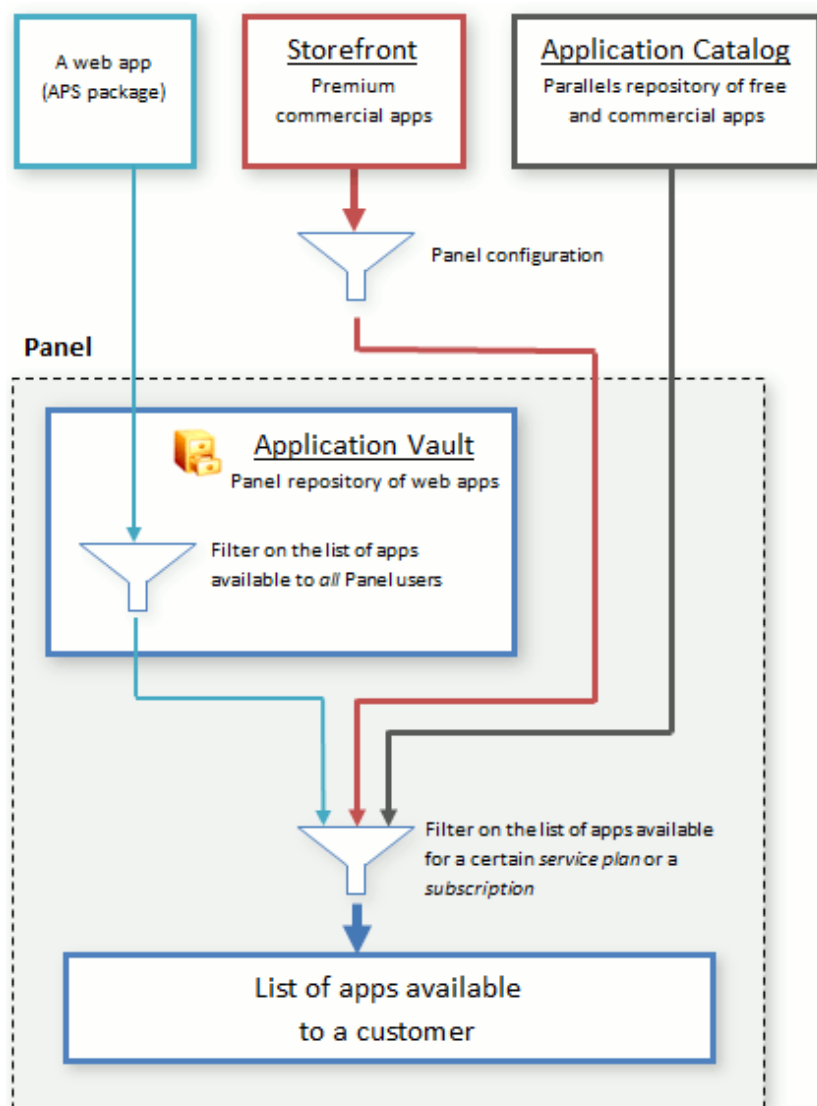
Before an app becomes available in the app list of a certain customer, it passes through a series of filters. The app is filtered on the following levels:

1. *Panel configuration (Storefront apps only)*.
   Since Panel 10.4, you can specify whether you want to offer premium commercial apps to your customers in **Tools & Settings > Interface Management >** the **Interface Controls Visibility** tab. Turning this option on implies the following:

   - If you participate in the Storefront program, customers will proceed to your own branded store to buy premium commercial apps. You will receive the commission for each app.

   - If your license does not have the Storefront feature, customers will be able to buy premium apps as well but the purchase will be performed in Parallels Storefront (Parallels online store). In this case, you do not get any sales revenue.

   If you decide not to offer premium commercial apps, they will not be shown to your customers in Control Panel regardless of your participation in the Storefront program.

2. *Application Vault*.
   Panel lets you toggle the availability of APS packages you have uploaded to the Vault. Note that this works *only for your own packages*: There is no way to control the availability of apps downloaded from the Catalog. Learn more about apps management in the **Managing Apps with the Application Vault (on page 277)** section.

3. *Service plan*.
   Panel allows you to specify what apps to include in a certain service plan. The filter affects all customers with this service plan.

4. *Subscription*.
   If you want to select the apps available to a particular customer, update the apps list in the respective subscription.

The resulting app list is available to your customers.

Managing Apps with the Application Vault

Application Vault performs the functions of a local repository and an apps management tool. The repository functionality allows you to add, update, and remove app packages. Using the management capabilities, you can view what apps were installed in Panel, configure apps, or make them unavailable for installation. In addition, you can delete temporary installation files by clearing the Vault cache. Next in this section, you will find detailed instructions on performing these operations with apps.

Application Vault is available in the Server Administration Panel: **Server Management > Tools & Settings > Application Vault**.

In this section:

Adding Your Apps to Panel

If you have a web app that you want to offer to your customers in addition to Catalog apps, you should add it to the Application Vault. Note that you can only upload apps packaged in the APS format.

To upload your app, use **Tools & Settings > Application Vault > My Apps > Add App**. After you upload the app, it will appear in the Control Panel of all customers.

Configuring Server-Wide Settings of Apps

In some cases, apps from the Catalog require server-wide configuration before customers can install them. For example, if an app installation affects some Panel services, it may require an administrator password. When your customers attempt to install such an app, they are asked to contact their provider (you) to perform the configuration. After you configure the settings, customers can install the app on their websites.

Generally, server-wide settings of an app are the settings that apply to all app installations and they cannot be changed by customers. For example, customers cannot install the ePages e-commerce app until you define how customers should access the app, either by HTTP or HTTPS.

To configure server-wide settings, complete these two steps:

1. Add the Catalog app by using **Tools & Settings > Application Vault > My Apps > Add App**.
2. Select the app from the list in the **My Apps** tab and submit the settings.

Managing Apps Availability to Customers

After an APS package is uploaded to the Vault, you can manage its availability to customers. This can be useful when you want to temporarily hide your app from *all* customers. In that case make the app unavailable in the **Tools & Settings > Application Vault > My Apps** tab. The app will disappear from the list of available apps of all customers. To return the app to the list, make it available in the **My Apps** tab. Note that you cannot perform these operations on apps you downloaded from the Catalog.

Removing App Packages

You can *only* remove packages stored in the Vault. If you remove an app from the **Tools & Settings > Application Vault > My Apps** tab, the Vault will delete the app package.

This operation does not affect *app installations*. Installed apps can be removed only by particular customers (installation owners) from their Control Panel.

Tracking App Installations

In general, customers install apps directly from the Application Catalog, bypassing the local repository. The only exceptions are apps that you have added to the Vault. Nevertheless, *all* app installations are registered in the Vault. You can view the details on the installations in the **Tools & Settings > Application Vault > Installed Apps** tab. A zero number of app installations in the list means that the app package is stored in the Vault but is has not been installed by any customers.

Updating Installed Apps

The Application Vault allows updating of any app installed in Panel to the latest version available in the Catalog. There are two main scenarios of updating apps in Panel: A certain app installation is updated by you or by your customer (installation owner). In both cases, *you should check* for available updates in the **Tools & Settings > Application Vault > Installed Apps** tab. If the updates are available, you or your customers can apply them to an *app installation*.

Clearing the Application Vault Cache

After customers install an app from Application Catalog, the app package is stored in a temporary directory on the server, the Vault cache. The files in the cache can speed up further app installations, but you can delete these files to free disk space on your server.

To delete temporary files from the Application Vault cache, use the **Tools & Settings > Application Vault > Installed Apps** tab **> Clear Cache**.

Troubleshooting App Installations

When an app cannot be installed to a customer's website due to some reason, a customer gets an error message with the recommendation to contact their hosting provider (you). The error message also contains the brief error description that should help you find the reason of a problem.

The most common problem that may occur during an app installation is when PHP does not meet app requirements:

- *PHP version is not supported*.
  To resolve the problem, install the latest available PHP version in **Tools & Settings > Updates and Upgrades**.
- *Required PHP extension is turned off*.
  To resolve the problem, turn on the required extension.You can do this by adding a certain PHP directive to the server-wide `php.ini` file or to the custom PHP configuration of the subscription (in case you want the extension to be available to a certain user only). Learn how to do this in the section **Customize PHP Configuration** (on page 217).
  After you add the directive, restart a web server. Learn how to do this on Linux and on Windows.

Database Servers

> ### *To manage a database server:*

1. Go to **Tools & Settings** > **Database Servers**.

2. Click the 🗄 icon corresponding to the database server you need. A web interface of a database management tool will open in a separate browser window.

> ### *To change the database server administrator's password:*

1. Go to **Tools & Settings** > **Database Servers**.

2. Click the host name of a database server.

3. Click **Change Password**.

4. Type the new password and click **OK**.

> ### *To unregister a database server from the Panel:*

1. Go to **Tools & Settings** > **Database Servers**.

2. Select the checkbox to the right of the database server's host name.

3. Click **Remove**.

4. Confirm the operation and click **OK**.

> ### *To unregister a database server that has databases or is assigned as default for hosting customers' databases from the Panel:*

1. Delete databases from the database server:

    a. Go to **Tools & Settings** > **Database Servers**.

    b. Click the host name of a database server that you wish to unregister from the Panel.

    c. Select the checkbox in the upper left corner of the list to select all databases.

    d. Click **Remove**.

    e. Confirm removal and click **OK**.

2. Make another database server default:

    a. Click the **Database servers** shortcut in the path bar at the top of the screen.

b. Click the host name of a database server that you wish to make default. This should be the same database server type (MySQL or MS SQL) as the one you are going to delete.

c. Click Preferences and Select the **Use this server as default for MySQL** checkbox. If you have a MS SQL database server, select the **Use this server as default for MS SQL** checkbox.

d. Click **OK**.

3. Return to the list of database servers (**Tools & Settings** > **Database Servers**).

4. Select a checkbox corresponding to the database server that you no longer need.

5. Click **Remove**.

6. Confirm the operation and click **OK**.

Important: You cannot remove web applications' databases this way. To remove them, you should first remove the respective web applications from the sites that use them.

For instructions on managing databases, refer to the Control Panel User's Guide, section Deploying Databases.

System Time and Services

You can monitor, start, stop, restart and disable various services, and also change their startup type from the Panel (on Windows-based servers).

➢ *To see the status of a system service:*

1. Go to **Tools & Settings** > **Services Management**.

2. Click **Show All** to show all services from the service groups. To hide all services, click **Hide All**. The current state of a service or a group of services is marked by an icon:

   - 🟢 means that the service or all services in a group are running,

   - ❌ means that the service or all services in a group are stopped,

   - ❓ means that several services in a group are running and some are stopped,

   - ⚪ means that the service is not installed or its management capabilities are not supported by the license key.

   - In the **Startup Type** field you can see whether the service is started automatically or should be started manually.

➢ *To start a service:*

1. Go to **Tools & Settings** > **Services Management**.

2. Click the ➡️ icon corresponding to the service you wish to start.

➢ *To restart a service:*

1. Go to **Tools & Settings** > **Services Management**.

2. Click the 🟢 icon corresponding to the service you wish to restart.

➢ *To stop a service:*

1. Go to **Tools & Settings** > **Services Management**.

2. Click the 🟥 icon corresponding to the service you wish to stop.

➢ *To set service startup type (on Windows-based servers):*

1. Go to **Tools & Settings** > **Services Management**.

2. Select the checkbox corresponding to the required service in the list.

3. Select the required startup type:

- Click 🔄 **Manual** to start selected services manually upon the Panel startup.
- Click 🔄 **Auto** to start selected services automatically upon the Panel startup.

➢ *To disable a service:*

1. Go to **Tools & Settings** > **Services Management**.

2. Select the checkbox corresponding to the required service in the list.

3. Click 🔄 **Disable**.

➢ *To make changes to a group of services:*

1. Go to **Tools & Settings** > **Services Management**.

2. Select the checkboxes corresponding to the required services in the list.

3. Click the button corresponding to the action you want to perform on the selected services:

- Click ▶️ **Start** to start selected services.
- Click 🟥 **Stop** to stop selected services.
- Click 🔘 **Restart** to restart selected services.
- Click 🔄 **Disable** to disable selected services.
- Click 🔄 **Manual** to start selected services manually upon the Panel startup.
- Click 🔄 **Auto** to start selected services automatically upon the Panel startup.

In this section:

Adjusting System Date and Time

You can manually set the server date and time through the interface and enable server time synchronization with a Network Time Protocol (NTP) server.

> ➢ *To adjust the system date and time settings:*

1. Go to **Tools & Settings** > **System Time**.

2. Change the time and date settings as desired, and select your time zone.

   You will need to restart your Parallels Plesk Panel-managed server for the time zone change to take effect.

   Note for users of Parallels Panel for Windows: Clear the **Automatically adjust clock for daylight saving changes** checkbox, if you do not want Parallels Plesk Panel to automatically adjust the server clock.

3. To synchronize your server time with that of a server running the Network Time Protocol, select the **Synchronize system time** checkbox, and specify a valid IP address or a domain name. For a list of available NTP servers, visit http://support.ntp.org/bin/view/Servers/WebSearch

4. Click **OK**.

Note: Enabling the **Synchronize system time** function will override any time and date you manually enter in the **System date and time** fields. Also, make sure that the domain name or IP address you enter for synchronization is a valid NTP server. Otherwise, this function will not work and your server will continue running with its current time settings.

Session Preferences

You can adjust the allowed idle time for all sessions in Parallels Plesk Panel as required.

➢ *To adjust session security parameters:*

1. Go to **Tools & Settings** > **Session Idle Time** (in the **Security** group).

2. Specify the required **Session idle time** in minutes in the appropriate field. Should a user session remain idle for the time period exceeding the one specified as the **Session idle time**, the control panel terminates this session.

3. Click **OK**.

➢ *To allow IP changes during one client session (available only on Windows hosting):*

1. Go to **Tools & Settings** > **Session Idle Time** (in the **Security** group).

2. Select the **Allow IP changes during one session** checkbox. This option will allow customers with dynamic IP addresses and unstable Internet connection to work with Parallels Plesk Panel at the cost of increasing the security risks.

3. Click **OK**.

➢ *To reset all parameters back to their default values:*

1. Go to **Tools & Settings** > **Session Idle Time** (in the **Security** group) and click **Default**. The default session idle time will be set to 30 minutes.

2. Click **OK**.

Backup and Restoration

With the data backup and restore functions provided by your Parallels Plesk Panel, you can perform the following operations:

- Back up the entire server. The backup archive will include your Panel license key, settings and configuration of system services, accounts, sites, and mailboxes.
- Back up individual user accounts with websites. The backup archive will include all settings and data related to user account and user's sites.
- Back up individual websites. The backup archive will include all data and settings related to a website.
- Schedule backups.
- Restore data from backup archives.

Storing Backups

Backups can be stored either in:

- The internal Panel repository - a backup storage located on your Panel server.
- An external FTP repository - a backup storage located on some external server in the Web or your local network. In this case, you should provide Panel with a server's hostname and FTP user credentials.

Backups Created by Your Customers

Your customers granted with the permission to use the backup and restore facilities can back up and restore their own account settings and websites through the Control Panel. Your customers, resellers and your resellers' customers will find shortcuts to their backup repositories in their Control Panel (**Websites & Domains** tab > **Backup Manager**).

The backup and restore functions are provided by optional Panel components that are not included in typical installations. You can install these components by using the web-based installation and update wizard: in Server Administration Panel, go to **Tools & Settings** > **Updates** > **Add Components**, and select **Plesk Backup Manager** in the **Server backup solutions** group.

Panel users are able see the role of a user who created a backup (administrator, customer, or reseller) in the the backup tasks list (**Tools & Settings** > **Backup Manager**). This lets customers differentiate between the backups they created by themselves and technical backups of their subscription. The technical backups happen when administrators or resellers back up customer subscriptions as a part of a larger backup. For example, when the Panel administrator creates a server-level backup, all customer subscriptions are backed up as well, and they are displayed to the customers as subscription backups created by the administrator.

If a certain backup task fails, Panel shows the detailed error description in a separate field of a backup task.

Creating Password-protected Backups

Since Panel 11.0, you are able to secure sensitive data in your backups by using password protection. This makes impossible for an attacker to reveal backup data if the security of your external backup storage is compromised.

You can specify a backup password in the following circumstances:

- In your FTP repository settings (**Websites & Domains** > **Backup Manager** > **Personal FTP Repository Settings**).

- When downloading a backup file from the Panel internal repository to some external location.

When uploading these backups back to Panel and restoring them, you will be prompted to provide the password you used for protection.

In this section:

Configuring Global Backup Settings

If you serve numerous websites, you may want to configure the backing up process so that it does not consume much server resources.

> ➢ *To reduce the server load and set the disk space usage policy:*

1. Go to **Tools & Settings** > **Backup Settings**.

2. Specify the number of simultaneous backup processes in the **Maximum number of simultaneously running scheduled backup processes** box. The default value is 10. Type a lesser value.

3. Select the **Run scheduled backup processes with low priority** checkbox.

4. Select the **Do not compress backup files** checkbox to disable compression.

5. Click **OK**.

6. To prevent the backing up processes from consuming all available disk space on the server, choose one of the following:

   ▪ Set Panel to to start a backup only if your server has enough free disk space to store it. Be aware that this option significantly increases the backup time as Panel additionally has to calculate the size of the future backup.

   > **Note:** Panel for Windows does not directly calculate object sizes but takes them from the database. As object sizes in Panel database are updated only once a day, the overall calculated backup size can differ from its real value.

   ▪ Set Panel to start a backup only if your server has the specified free disk space. This option is convenient when you approximately know the size of the future backup and do not want Panel to waste time and resources on calculating it.

Configuring Panel for Using FTP Repository

If you are going to use an FTP server for storing backup files, you should specify its settings in **Tools & Settings** > **Backup Manager > Personal FTP Repository Settings**:

▪ FTP server's IP address or host name.

▪ Directory on the server where you want to store backup files.

▪ User name and password for access to the FTP account.

▪ Password that Panel will use for backup protection.

Backing Up the Entire Server

> ➢ *To back up the server configuration settings and all user data you have on your hosting machine:*

1. Go to **Tools & Settings** > **Backup Manager**.

2. Click **Back Up**.

3. Specify the following:

   - Backup file name prefix and description. You cannot specify an arbitrary file name, however, you can set the control panel to add a prefix to backup file names. Note that the control panel automatically adds the date and time of backup file creation (in Universal Time) to backup file names.

   - Splitting of the backup file. To create a multi-volume backup, select the respective checkbox and specify volume size in megabytes.

   - Location where to store the backup file. Select the repository where you would like to store the backup file.

   - E-mail notification on backup completion. If you want to be notified of the backup completion, type your e-mail address.

   - What data to back up. You can back up only the server settings, or server settings and all user data.

4. Click **Back Up**. The backup process will start and the progress will be shown under the **Current Back Up Tasks** tab. You can use the **Refresh** button to update the information on the screen.

5. When backing up is finished, the backup file will be saved to the repository you selected.

Note: Custom view settings (that are stored as the Simple plan) are included into server-level backups. However, the restoration of these settings is only possible if Panel has not been yet initially configured (either by the `init_conf` utility or from GUI). Learn more about Custom view (on page 33).

Backing Up Individual Accounts and Sites

> ➢ *To back up a user account with or without sites:*

1. Click **Customers**.

2. Locate the customer whose account you want to back up, and click the corresponding **Control Panel** link.

3. Click the **Account** tab.

4. Do any of the following:

   - To back up a user account with sites, click **Back Up My Account and Websites**.

- To back up only websites with content, click **Back Up Websites**.

5. Click **Back Up**.

6. Specify the following:

- Backup file name prefix and description. You cannot specify an arbitrary file name, however, you can set the control panel to add a prefix to backup file names. Note that the control panel automatically adds the date and time of backup file creation (in Universal Time) to backup file names.

- Splitting of the backup file. To create a multivolume backup, select the respective checkbox and specify volume size in megabytes.

- Location where to store the backup file. Select the repository where you would like to store the backup file.

- E-mail notification on backup completion. If you want to send an e-mail notice on the backup completion, type the required e-mail address.

- What data to back up. You can back up only the settings, or settings and all data.

7. Click **Back Up**. The backup process will start and the progress will be shown under the **Current Back Up Tasks** tab. You can use the **Refresh** button to update the information on the screen.

When backing up is finished, the backup file will be saved to the repository you selected.

Scheduling Backups

➢ *To schedule backing up of data:*

1. Go to **Tools & Settings** > **Backup Manager**.

2. Click **Scheduled Backup Settings**.

3. Select the **Activate this backup task** checkbox and specify the following:

- When and how often to run the backup.

- Backup file name.

- Splitting of the backup file. To create a multivolume backup, select the respective checkbox and specify volume size in megabytes. Note that volume size cannot exceed 4095 megabytes.

- Location where to store the backup file. Select the repository where you would like to store the backup file.

- Maximum number of backup files stored in the repository. Type a number if you want to recycle backup files: When this limit is reached, the oldest backup files are removed.

- E-mail notification on backing up errors. If you want to send an e-mail notice when something goes wrong during backing up, type the e-mail address you need.

- What data to back up. You can back up only settings, or settings and user data.

4. Click **OK**.

Restoring Data from Backup Archives

You can restore data from backup files kept in:

- *The Panel internal repository*.
  To restore backup files from Panel repository, choose the backup file name you want to restore on the **Tools & Settings > Backup Manager > Server Repository** tab.

- *An external FTP repository* (on page 288).
  To restore backup files from Panel repository, choose the backup file name you want to restore on the **Tools & Settings > Backup Manager > Personal FTP Repository** tab.

After you choose the backup file, Panel will start the restoration wizard. You will be prompted to specify the following restoration parameters:

- **Types of data to be restored.**

- **Suspend website until restoration task is completed.** Select this if you want to avoid possible conflicts that may occur when users modify site content or settings while they are being restored.

- **Send an e-mail notice when restoration task is completed.** Type your e-mail address if you want the control panel to notify you when restoring is completed.

- **Conflicts resolution policy.** Specify what to do if any conflicts occur during restoration.

- **Backup security settings**. If the backup was protected with a password, enter the password into the **Password** field.
  If you have forgotten your password, clear the **Provide the password** option. Note that in this case, some sensitive data will not be restored properly. For example, user passwords will be replaced with random ones, the information about already installed APS apps will be lost, and so on.

Troubleshooting Restoration Errors

In case if any errors or conflicts occur during restoration of data, the wizard will prompt you to select an appropriate resolution. Follow the instructions provided on the screen to complete the wizard.

Note: The Overwrite data restoring mode means that all objects will be restored from the backup files regardless of their current presence in the system. The Overwrite mode works as follows:

- If an object or settings from the backup file are not present in Parallels Plesk Panel, then they are created or set in Parallels Plesk Panel.

- If an object or settings from the backup file are present in Parallels Plesk Panel, then the object or settings from the backup file replace the corresponding object or settings that are present in Parallels Plesk Panel.

- If an object or settings are present in Parallels Plesk Panel, but are missing from the backup file, then the object or settings currently present in Parallels Plesk Panel are not changed.

Downloading Backup Files from Server

To download a backup file from the Panel repository, choose the corresponding backup file name in **Tools & Settings** > **Backup Manager** and specify the location for the file.

In order to improve backup security, we recommend that you protect the backup with a password. This makes impossible for an attacker to obtain sensitive data in case the security of your backup storage is compromised.

Note: If you forget your password, it cannot be recovered. Therefore, it is strongly recommended to keep a list of your passwords and corresponding backup file names in a safe place.

Uploading Backup Files to Server

You can upload a backup file to the Panel repository, by running the **Tools & Settings > Backup Manager > Upload Files to Server Repository** wizard. Before starting the upload, Panel will prompt you to enter the following backup parameters:

▪ *Backup file location*.

▪ *The password you used for protection.*
  This is the password that you used for protecting the backup data.

  Note: If you provide an incorrect password, Panel will warn you but upload the backup to the server anyway. During the backup restoration, you will be prompted to enter the password again.

Removing Backup Files from Server

➢ *To remove a backup file from the backup repository in the Panel:*

1. Go to **Tools & Settings** > **Backup Manager**.

2. Select a checkbox corresponding to the backup file you want to remove.

3. Click **Remove**.

4. Confirm removal and click **OK**.

Backup Logs

When Panel starts performing a backup, it reports the progress to a log. Backup logs contain only general errors such as syntax errors (no or wrong command specified, invalid input parameters), runtime errors and unhandled exceptions, low disk space for backup, and so on.

Backup logs are stored in `/usr/local/psa/admin/PMM/sessions` on Unix/Linux systems and `%plesk_dir%\admin\PMM\sessions` on Windows systems, where `%plesk_dir%` is an environment variable for the Panel installation directory on Windows systems. Each backup log is located in a separate folder that contains date and time of the backup in its name.

You can change the level of details included into logs. This feature is available only for scheduled backups and for backups made through command line. For more information on how to change level of details, see the **Advanced Administration Guide** for Linux and Windows.

Transferring Data from Another Panel

If you want to relocate your Panel to another server, the easiest way to do this is to transfer Panel data to this server. In terms of Panel, *transfer* is a process of moving hosting data from one Panel server (*source*) to another server with Panel of the same version (*destination server*). There are two ways to transfer data from one Panel to another:

- *Transfer with the Migration & Transfer Manager utility (recommended).*

  We recommend that you transfer hosting data using the *Migration & Transfer Manager* utility. This utility runs on a destination server and automatically copies hosting data from your source Panel.

- *Transfer through backup files.*

  You can also transfer data from the source to destination server using backup files. To perform the data transfer, you should back up data on the source server, transfer the resulting archive file to the destination server manually, and restore the data on this server.

For the detailed instructions on transferring data between two Panels, refer to the chapter **Transferring Panel Data** of the **Installation, Upgrade, Migration, and Transfer Guide**.

Migrating Data from Other Hosting Platforms

If you have a server with a different hosting platform (for example, cPanel, Confixx, or other supported solution) and want to switch from this platform to Panel, you should *migrate* all hosting data from this server (*source*) to your Panel server (*destination server*).

Panel 11.0 supports migration from the following platforms:

- cPanel for Unix, versions 9, 10, 11
- Confixx 3.3.7 for Linux
- Parallels Pro Control Panel for Linux version 10.3.4 (formerly known as Ensim Pro)
- Parallels Helm 3.2
- Parallels Small Business Panel 10.x

To migrate data from another hosting solution, we recommend that you use the *Migration & Transfer Manager* utility. Before running the utility, you should perform a number of preparation steps which may vary depending on your source platform. For the detailed instructions on how to perform migration, refer to the chapter **Migrating to Panel** of the **Installation, Upgrade, Migration, and Transfer Guide**.

Managing Panel from Mobile Devices

If you need a mobile app to keep pulse on Panel <PP_short_v> server indicators, use the *Parallels Plesk Mobile Server Monitor*. If you also need to take immediate actions on Panel servers right from your mobile device, take advantage of the other application, *Parallels Plesk Mobile Server Manager*. This section discusses the features of these apps, their installation and usage instructions.

Application Features

With *Mobile Server Monitor*, administrators can:

- View the list of services on a particular server.
- View information about a server: OS, CPU, Panel version and so on.
- View vital indicators of a server health: CPU load average, memory consumption, swap usage, etc.
- Receive information about certain Panel events.

Mobile Server Manager incorporates the features of Mobile Server Monitor and additionally gives administrators control over core Panel administration functions.

With Mobile Server Manager, administrators can:

- View the list of services on a particular server.
- View information about a server: OS, CPU, Panel version and so on.

- View vital indicators of a server health: CPU load average, memory consumption, swap usage, etc.
- Receive information about certain Panel events.
- Authenticate themselves by a secret key.
- View health monitor events.
- Roll back and retrieve a Panel license key.
- Restart a server.
- Stop and start services on a particular server.

Note: Mobile Server Manager works only with servers which license includes *Parallels Plesk Panel Power Pack.* This is the license add-on that can be acquired when purchasing a Panel license or added to the license later on. Along with mobile server management, Power Pack offers premium commercial antivirus protection, web hosting of Tomcat applications and many other features. Learn more about Power Pack at http://www.parallels.com/products/plesk/power-pack/. You are welcome to try Mobile Server Monitor for free; if you feel you need control over your servers, add Power Pack to your Panel servers and enjoy Mobile Server Manager.

Supported Operating Systems and Devices

Currently, Monitor and Manager apps are supported on Android, Blackberry, and iPhone. Use the following links to download the apps from the respective app stores.

Operating System and Devices	Server Monitor	Server Manager
Android 2.2+ compatible devices.	https://play.google.com/store/apps/details?id=com.parallels.panel.monitor	https://play.google.com/store/apps/details?id=com.parallels.panel.manager
BlackBerry OS 5.0+ compatible devices: - Bold 9000, 9650, 9700, 9780, 9788, 9790, 990, 9930 - Curve 9330, 8350i, 8520, 8530, 8900, 8910, 8980 - Curve 3G 9300, 9330, 9350, 9360, 9370, 9380 - Pearl 3G 9100, 9105 - Storm 9500, 9530 - Torch 9800, 9810, 9850, 9860 - Tour 9630	http://appworld.blackberry.com/webstore/content/62901?lang=en	http://appworld.blackberry.com/webstore/content/62900/?lang=en
iOS 4.0+ compatible devices.	http://itunes.apple.com/us/app/parallels-panel-server-monitor/id477441966?mt=8	http://itunes.apple.com/us/app/plesk-manager/id477441273?mt=8

Installation and Usage Instructions

If you have a Panel installation, find guidelines on how to install and use the mobile apps at the following URLs:

▪ Mobile Server Monitor - https://Server_URL:8443/admin/promotion/mobile-monitor/

Mobile Server Manager - https://Server_URL:8443/admin/promotion/mobile-manager/ Here *Server_URL* stands for the IP address or host name of your server.

Configuring Panel to Work with Mobile Apps

To interact with Mobile Server Manager or Mobile Server Monitor 1.1 and earlier, Panel uses the built-in mechanism and does not need any additional configuration.

Starting with Mobile Server Manager and Mobile Server Monitor 1.2, Panel uses the *Mobile Center* extension for interaction with the apps. Panel installs this extension automatically after you try to connect the apps to your Panel server.

The Mobile Center extension accepts requests from the mobile apps to the Panel server, processes them, and sends responses back to mobile apps.

The extension writes information about its activities and problems to its own log file. The log file location on the Panel server is the following:

▪ On Linux: `/usr/local/psa/var/modules/plesk-mobile/MobileConnector.log`

▪ On Windows: `%plesk_dir%/var/modules/plesk-mobile/MobileConnector.log`, where %plesk_dir% is the path to the Panel installation directory.

There are three types of log entries:

▪ *Notices* - general information that may be useful for troubleshooting, for example, updating the extension database.

▪ *Warnings* - information about events that may cause problems but the system solves them automatically. For example, if the extension's configuration file is unavailable, the system will create a new file automatically and add the corresponding warning message to the log.

▪ *Errors* - information about failing certain operations, for example, when the extension fails to deliver a response to the mobile app because the mobile device is unavailable.

On the Mobile Center page (**Extensions** > **Mobile Center**), you can define the following settings:

▪ *The verbosity of the extension log* (the **Log level** parameter). Once you choose a certain level, the extension will write entries of the selected type and entries with higher severity as well. For example, if you choose the **Warning** log level, the log will contain warnings and errors. The **Off** level turns off logging.

- *iOS push notification service*. If you use Mobile Manager or Mobile Monitor on iOS, you may configure Panel to send *push notifications* to your device. Such notifications enable your device to inform you about important events on Panel server by showing alert messages when the apps are not running in foreground. Note that to accept push notifications, you should switch on the corresponding option in your mobile apps as well.

Panel Inside Parallels Virtuozzo Containers

The following operations are not available from the Panel when it is operating inside Parallels Containers:

▪ Adding to and removing IP addresses from the server's network cards.

▪ Changing host name.

▪ Setting system date and time.

After adding IP addresses to the Parallels Virtuozzo Containers hardware node, you need to use the **Reread IP** function in Server Administration Panel (in **Tools & Settings** > **IP Addresses**) to update the Panel's IP pool.

When installing the Panel inside a Parallels Container, you need to configure the Offline Service parameter for the Container to ensure that the both Parallels Plesk Panel web interface and the Parallels Power Panel, used for managing Containers, are accessible.

By default, the Container is configured so that the following parameters are enabled for the Offline Management service: **VZPP-plesk** (redirection of connections on the port 8443) and **VZPP** (redirection of connections on the port 4643). You need to disable the **VZPP-plesk** service. You can do this on Parallels Virtuozzo Containers for Linux and Windows by using the Parallels Management Console utility.

➢ *To configure the container using the Parallels Management Console:*

1. Open the Parallels Management Console.

2. Connect to the Parallels Containers hardware node.

3. Click **Virtuozzo Containers**.

4. Select the Container, right-click it, and select **Properties** from the context menu.

5. Go to **Network** > **Offline Management**, and disable the **VZPP-plesk** service.

➢ *To configure the container using the command line tools on a Linux-based hardware node:*

1. Connect to the hardware node over SSH.

2. Issue the following command:

```
vzctl set CT_ID --offline_management yes --offline_service vzpp --save
```

➢ *To configure the container using the command line tools on a Windows-based hardware node:*

1. Connect to the hardware node over Remote Desktop.

2. Issue the following commands:

```
vzctl set CT_ID --offline_management yes --save
```

```
vzcfgt set CT_ID offlineservices vzpp
```

After configuring the Container, you will be able to access the Container management functions from the Panel (at **Tools** > **Manage Your Container** [in the **Server Management** group]).

Remote Access (Windows)

The remote desktop (RDP) access feature allows you to remotely log in to the Parallels Plesk Panel server and interact with it using standard Microsoft Windows desktop interface.

➢ *To access the server via Remote Desktop interface:*

1. Go to **Tools & Settings** > **Remote Desktop**.

2. Set up screen resolution for the session in the **Screen resolution for terminal session** menu.

   Note: Higher resolutions are more taxing for your connection, decreasing the interaction speed and spending more bandwidth.

3. Select the connection method according to your browser:

   ▪ **Microsoft RDP ActiveX** - recommended to use with Internet Explorer browser, since it may not work with other browsers. When you use this method for the first time, your browser will automatically install the required ActiveX component, if Internet Explorer security settings permit this. If your browser shows security alerts, try to temporarily lower security measures in the browser options.

   ▪ **properoJavaRDP** - recommended to use with Netscape, Mozilla, or Firefox browsers, since it may not work with Internet Explorer. Only 8.0 and higher versions of Opera are supported. This component requires Java Runtime Environment (JRE) to be installed on your system. If you do not have JRE, you can download it from http://www.java.com/en/download/manual.jsp (version 1.4 and higher) and install it before using the remote desktop feature.

   Note: You don't need to install JDK (Java Development Kit) in order for the RDP feature to work.

   If you use Internet Explorer or Mozilla, you should open the Terminal Services Configuration console in Microsoft Windows (**Start** > **Administrative Tasks**), and set the **Licensing** option to **Per user** on the **Server Settings** screen.

4. Click **OK**. A new window will open with an area where your interaction with the server's desktop will take place.

5. Log in to the system. By default, the Panel uses the subscription's FTP/Microsoft FrontPage username. You can supply any valid username and password.

6. After logging in to the system you can start working with it as with a regular Windows desktop.

➢ *To finish your Remote Desktop session:*

▪ Close the browser window with the remote desktop session. This way, the session you had will be detached from your desktop, but it will keep running on the server, so when you log in there next time, you will see the remote desktop in the state you left it,

   or

▪ Select **Start** > **Log off** if you want to quit the session permanently (all running sessions consume the server's resources).

Additional Administrator Accounts (Windows)

You can create additional Administrator level accounts for your technical support engineers, enabling them to perform a virtually limitless variety of administrative tasks. All actions performed by additional Parallels Plesk Panel administrator accounts are logged, which gives the actual Parallels Plesk Panel administrator an unprecedented level of control over additional administrator accounts' activities. Additional administrator accounts have virtually all the privileges that the actual server administrator has, except the following:

▪ View and manage additional administrator accounts belonging to other users.

▪ View and manage administrator account settings.

▪ Clear Action Log.

In this section:

Creating Additional Administrator Accounts

➢ *To create additional administrator account:*

1. Go to **Tools & Settings** > **Additional Administrator Accounts**.

2. Click **Create Account**.

3. Specify administrator account properties:

   ▪ Specify account login, password and e-mail address in the corresponding fields.

   ▪ Specify the name of additional administrator account user in the **Contact name** field.

   ▪ Use **Comments** field to add your own comments about this particular additional administrator account and its user. This can be useful to differentiate between the accounts: for example, you can create one account for a technical support engineer who manages user accounts, and another account for a technical support engineer who works with all mail-related issues. By adding appropriate comments in the **Comments** field, you can always tell who's doing what, and avoid confusion.

4. Click **OK** to finish the creation of additional administrator account.

Now you can tell account login and password to its owner.

Modifying Additional Administrator Accounts

> ➢ *To modify settings of additional Administrator account:*

1. Go to **Tools & Settings** > **Additional Administrator Accounts**.

2. Click the required additional administrator account login in the list.

3. Specify new administrator account properties:

   ▪ Specify new account login, password and e-mail address in the corresponding fields.

   ▪ Specify the new name of additional Administrator account user in the **Contact name** field.

   ▪ Use **Comments** field to add your own comments about this particular additional Administrator account and its user. This can be useful to differentiate between the accounts: for example, you can create one account for a technical support engineer who manages customer accounts, and another account for a technical support engineer who works with all mail-related issues. By adding appropriate comments in the **Comments** field, you can always tell who's doing what, and avoid confusion.

4. Click **OK** to update the information of additional administrator account.

Suspending and Activating Additional Administrator Accounts

> ➢ *To suspend additional administrator account:*

1. Go to **Tools & Settings** > **Additional Administrator Accounts**.

2. Click the required additional administrator account login in the list.

3. Clear the **Allow access to control panel** checkbox and click **OK**.

> ➢ *To activate additional administrator account:*

1. Go to **Tools & Settings** > **Additional Administrator Accounts**.

2. Click the required additional administrator account login in the list.

3. Select the **Allow access to control panel** checkbox and click **OK**.

Removing Additional Administrator Accounts

➢ *To remove additional administrator account:*

1. Go to **Tools & Settings** > **Additional Administrator Accounts**.

2. Select the checkbox corresponding to the account you want to remove and click **Remove**.

3. Confirm removal and click **OK**.

Sharing Files and Folders

If you use Panel to run your own websites within a webspace, you can set up file and folder sharing. Use sharing to achieve the following goals:

- Allow users within the organization to collaborate on the same documents or other files.
- Allow privileged customers or partners, after authorization in the system, to access documents such as product roadmaps, price lists with discounts, marketing presentations.

In this section:

Setting Up File Sharing

You can access file sharing settings in both Service Provider (**Server Management > Tools & Settings > File Sharing Settings**) and Power User view (**Settings** tab **> File Sharing Settings**).

> ➢ *To set up file sharing in your information system:*

1. Open the file sharing settings page.

2. **Web Folder root URL** defines the URL for accessing the root Web Folder used by file sharing services. If you want to change the root location of the Web Folder used for file sharing, select the host name, domain name or IP address and specify a folder name.

   All other file sharing Web Folders are created inside the folder specified above. The resulting URL will be used for mounting the root Web Folder used by file sharing.

3. If you want the Panel to generate secure links to protect file transfers with SSL encryption, select the **Generate secure links to files and folders** check box.

4. If you want to grant Panel users the ability to publish uploaded files and make these files accessible to all website visitors, select the **Enable public files** check box.

   - If you want to change the folder for storing the public files, specify a new folder name in the **Folder for public files storage** field.

   - If you want to change the URL for read-only visitor access, specify a new folder name in the **URL for visitor access to public files** field.

5. If you want to allow uploading of files into a password-protected folder, that can be accessed by privileged partners or customers, select the **Enable password-protection of public files**, and provide the username and password for accessing the folder.

   - If you want to change the folder for storing the password-protected files, specify a new folder name in the **Folder for password-protected files storage** field.

6. Click **OK**.

Using File Sharing to Share and Access Files

When file and folder sharing is set up on the server, you can accomplish the following tasks:

- Share files with other users within your organization for collaboration purposes.
- Share files with privileged customers and partners. Files can be placed in a password-protected directory, and authorized users outside your organization will be able to access them.
- Place files in a private secured directory on the server for backup purposes, or to enable access them over the Internet.
- Transfer files that are too large to be sent by e-mail. You upload files to the server, generate a secret link, and send the link to the intended recipients so they can download the files.
- Access shared files and work with them:
  - Through a web browser, using File Manager built into your information system, or
  - By connecting the folder on the server to your computer's operating system as a Web Folder, and working as if the files are located on your computer.

Note that all operations described below are accessible *only in Power User view*.

In this section:

Sharing Files with Other Users Within the Organization

> ➢ *To share files with other users within the organization, in Power User view:*

1. Go to the **File Sharing** tab and select the files that you want to share:

    a. If you have to upload new files to the Panel:Go to **Shared Files** in the left navigation area and click **Upload Files**.

    b. Click **Browse** and select the files you need.

    c. Select the location inside the **Shared Files** folder where you want to upload files.

    If you want to share the files from your **Personal Files** folder:

    d. Under the **Files** tab go to **Personal Files** in the left navigation area and browse to the directory where required files are located.

    e. Select the required files and click **Share**.

    f. Select the location inside the **Shared Files** folder where you want to upload files.

2. If you want to send an e-mail notice with links to shared files, select the check box **Send e-mail with links to uploaded files upon completion**, and click **Next**. Otherwise, click **Upload** without selecting this check box.

    If you chose to send an e-mail notice, you will have to do the following on the next screen:

    a. Select whether authorization in the Panel should be required for accessing the files and whether those who have the links to files should be able to modify them.

    b. If you selected the linked files to be accessible for everyone, select the link expiration period. After this period has elapsed, the links will be no longer valid.

    c. Select the Panel user accounts who should receive the notice and type e-mail addresses of other notice recipients.

    d. Specify e-mail subject and body. Note that links to files will be inserted automatically in place of `<- [LINKS WILL BE INSERTED HERE - DO NOT REMOVE] ->` text.

3. Click **OK**.

Now the files are uploaded to the directory called `shared`, and all users registered in your information system will be able to view, modify, and delete them.

Publishing Files for Partners

If publishing to the password-protected directory called `protected` is allowed by the server policy, then authorized users of your information system will be able to upload files to this directory. After that, your partners or privileged customers will be able to download files from this directory after specifying the password that was sent to them.

➢ *To publish files for your partners and privileged customers, in Power User view:*

1. Go to the **File Sharing** tab and select the files that you want to publish:

   a. If you have to upload new files to the Panel:Under **Public Files** in the left navigation area go to **Password-protected files**.

   b. To view the credentials currently used for accessing password-protected files, click **Show Access Info** in the lower right corner of the screen. You will need to send these credentials to your partners who should have the access to files in the `protected` directory.

   c. Click **Upload Files** and select the location inside the **Password-protected files** folder where you want to upload files.

   d. Click **Browse** and select the files you need.

   If you want to publish the files from **Personal Files** or **Shared Files** folder:

   e. To view the credentials currently used for accessing password-protected files, go to **Password-protected files** and click **Show Access Info** in the lower right corner of the screen. You will need to send these credentials your partners who should have the access to files in the partners directory.

   f. Browse to the directory where required files are located, select the required files and click **Publish**.

   g. Select the **Protect access to files with a password** check box.

   h. Select the location inside the **Password-protected files** folder where you want to publish the files.

2. If you want to send an e-mail notice with links to published files, select the check box **Send e-mail with links to published files upon completion**, and click **Next**. Otherwise, click **Upload** without selecting this check box.

   If you chose to send an e-mail notice, you will have to do the following on the next screen:

   a. Select whether authorization in the Panel should be required for accessing the files and whether those who have the links to files should be able to modify them.

   b. If you selected the linked files to be accessible for everyone, select the link expiration period. After this period has elapsed, the links will be no longer valid.

c. Select the user accounts in the Panel who should receive the notice and type e-mail addresses of other notice recipients.

d. Specify e-mail subject and body. Note that links to files will be inserted automatically in place of `<- [LINKS WILL BE INSERTED HERE - DO NOT REMOVE] ->` text.

3. Click **OK**.

Now the files are published in the directory called `protected`, and only authorized users who know the password will be able to download and view these files.

Publishing Files for Your Customers

If publishing to the `public` directory is allowed by the server policy, then authorized users of the information system will be able to upload files to this directory, thus making them accessible to your customers who visit your website, and any Internet user who knows where these files are located.

> ➢ *To publish files on the Web for your customers, in Power User view:*

1. Go to the **File Sharing** tab and select the files that you want to publish:

   a. If you have to upload new files to the Panel:Go to **Public Files** in the left navigation area.

   b. Click **Upload Files** and select the location inside the **Public Files** folder where you want to upload files.

   c. Click **Browse** and select the files you need.

   If you want to publish the files from **Personal Files** or **Shared Files** folder:

   d. Browse to the directory where required files are located, select the required files and click **Publish**.

   e. Do not select the **Protect access to files with a password** check box.

   f. Select the location inside the **Public Files** folder where you want to publish the files.

2. If you want to send an e-mail notice with links to published files, select the check box **Send e-mail with links to uploaded files upon completion**, and click **Next**. Otherwise, click **Upload** without selecting this check box.

   If you chose to send an e-mail notice, you will have to do the following on the next screen:

   a. Select whether authorization in the Panel should be required for accessing the files and whether those who have the links to files should be able to modify them.

   b. If you selected the linked files to be accessible for everyone, select the link expiration period. After this period has elapsed, the links will be no longer valid.

   c. Select user accounts in the Panel who should receive the notice and type e-mail addresses of other notice recipients.

   d. Specify e-mail subject and body. Note that links to files will be inserted automatically in place of `<- [LINKS WILL BE INSERTED HERE - DO NOT REMOVE] ->` text.

3. Click **OK**.

Now the files are uploaded to the directory called `public`, and your customers, including any Internet users who know where the files are located, will be able to download and view these files.

Uploading Your Files to a Private Directory on the Server

All authorized users of your information system can use private folders on the server to:

- Store backup copies of their files.
- Access files in their private directories over the Internet.

> ➢ *To upload your files to the private directory through File Manager, in Power User view:*

1. Go to the **File Sharing** tab and click **Personal Files** in the left navigation area.

2. Click **Upload Files**.

3. Click **Browse** to select the files you need.

4. Select the folder where you want to upload files.

5. If you want to send an e-mail notice with links to the uploaded files, select the check box **Send e-mail with links to uploaded files upon completion**, and click **Next**. Otherwise, click **Upload** without selecting this check box.

   If you chose to send an e-mail notice, you will have to do the following on the next screen:

   a. Select the link expiration period. After this period has elapsed, the links will be no longer valid. If you want to make the link permanent, so that it will not expire, select the option never.

   b. Select user accounts in the Panel who should receive the notice and type e-mail addresses of other notice recipients.

   c. Specify e-mail subject and body. Note that links to files will be inserted automatically in place of `<- [LINKS WILL BE INSERTED HERE - DO NOT REMOVE] ->` text.

6. Click **OK**.

Now the files are uploaded to the directory called `private/username`, and only the owner of this directory will be able to view, download, modify, and delete these files.

Transferring Large Files that Cannot Be Sent by E-mail

➢ *If you need to send someone a file that is too large to be sent by e-mail, in Power User view:*

1. Upload the file to the server, or select the file, if it has already been uploaded to the server:

    a. If you have to upload new files to the Panel:Click the **Home** tab, and click the **Upload Files** link (in the **File Sharing** tab).

    b. Select the folder where you want to upload files, for example, **Personal Files** > **admin**.

    c. Click **Browse** and select the files you want to send.

    d. Select the check box **Send e-mail with links to published files upon completion** and click **Next**.

    If files are already uploaded to the Panel:

    e. Go to **Files** tab and browse to the directory where required files are located.

    f. Select the required files and click **E-Mail Link**.

2. If you have chosen to send a file from locations other than a user's private directory (**Personal Folder**), then also select whether authorization in the Panel should be required for accessing the files and whether those who have the links to files should be able to modify them.

3. Select the link expiration period. After this period has elapsed, the links will no longer be valid.

4. Select user accounts in the Panel who should receive the notice and type e-mail addresses of other notice recipients.

5. Specify e-mail subject and body. Note that links to files will be inserted automatically in place of `<- [LINKS WILL BE INSERTED HERE - DO NOT REMOVE] ->` text.

6. Click **OK**.

The links to files will be sent to the intended recipients, and they will be able to download the files.

Accessing and Working with Files

There are two ways to work with shared files:

- If you need to work with the files frequently, connect a Web Folder on the server to your computer.
- If you occasionally need to access the files, use the Panel interface (**Files** tab).

> ➢ *To use the File Manager built into your information system for working with files:*

1. In the Panel, click the **Files** tab. The file manager opens.

2. Use the following icons and links to work with files and directories.

In the left area:

- **Upload Files**. This starts a wizard that allows you to upload files and directories to the server.
- **Personal Files**. This takes you to the private directory where you can place files that only you can access. If you need to use the storage space on the server for backup purposes, or if you need to access files over the Internet, place your files into this directory. For more information, refer to the section Uploading Your Files to a Private Directory on the Server.
- **Shared Files**. This takes you to the shared (or common) directory where you should place files that must be available to other users within your organization. When you need to collaborate with other employees, place files into this directory. For more information, refer to the section Sharing Files with Other Users Within the Organization.

The right area shows a list of files and directories located in the currently selected directory, and a toolbar with the following items:

- **Share**. Select files in any directory and click this to move the files to the Shared Folder. This will make them accessible to all users authorized in your information system.
- **E-mail Link**. Select files in any directory and click this to send an e-mail message notifying users of files location, so that the users could download them.
- **Delete**. Select files and click this to permanently remove them.
- **More**. This menu provides access to the following operations: Create new folder, copy or move files and folders.
- The icon ![icon] (**Link to this Folder**). Click this to view or copy to clipboard the Internet address of the current folder.

In this section:

Connecting to Web Folders on Microsoft Windows Systems

➢ *To connect a Web Folder to your computer running Microsoft Windows XP:*

1. Right-click the **Start** menu button, and select **Explore**.

2. In the **Tools** menu, select **Map Network Drive**.

3. Select the drive letter that will be assigned to the network drive and click **Sign up for online storage or connect to a network server**.
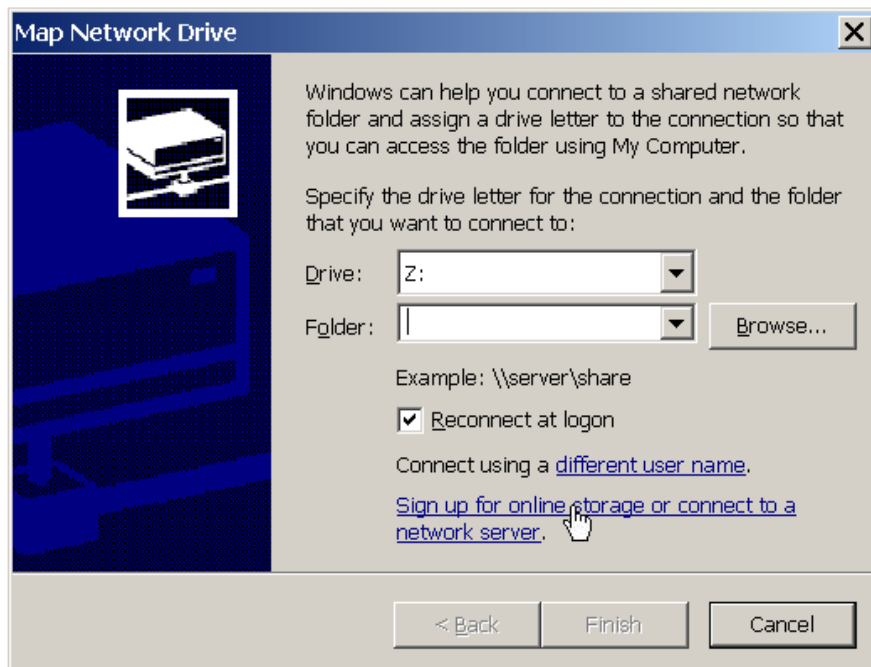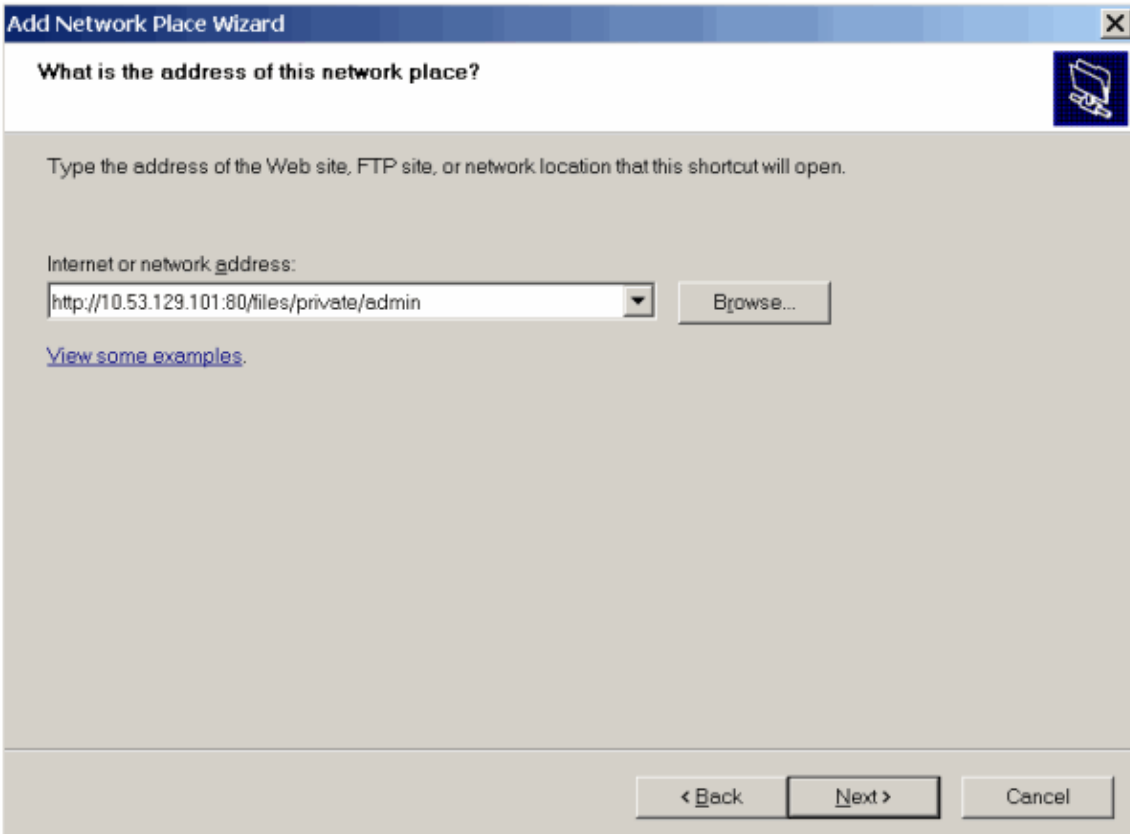
4. Click **Next.**

5. Make sure that the **Choose another network location** option is selected and click **Next**.
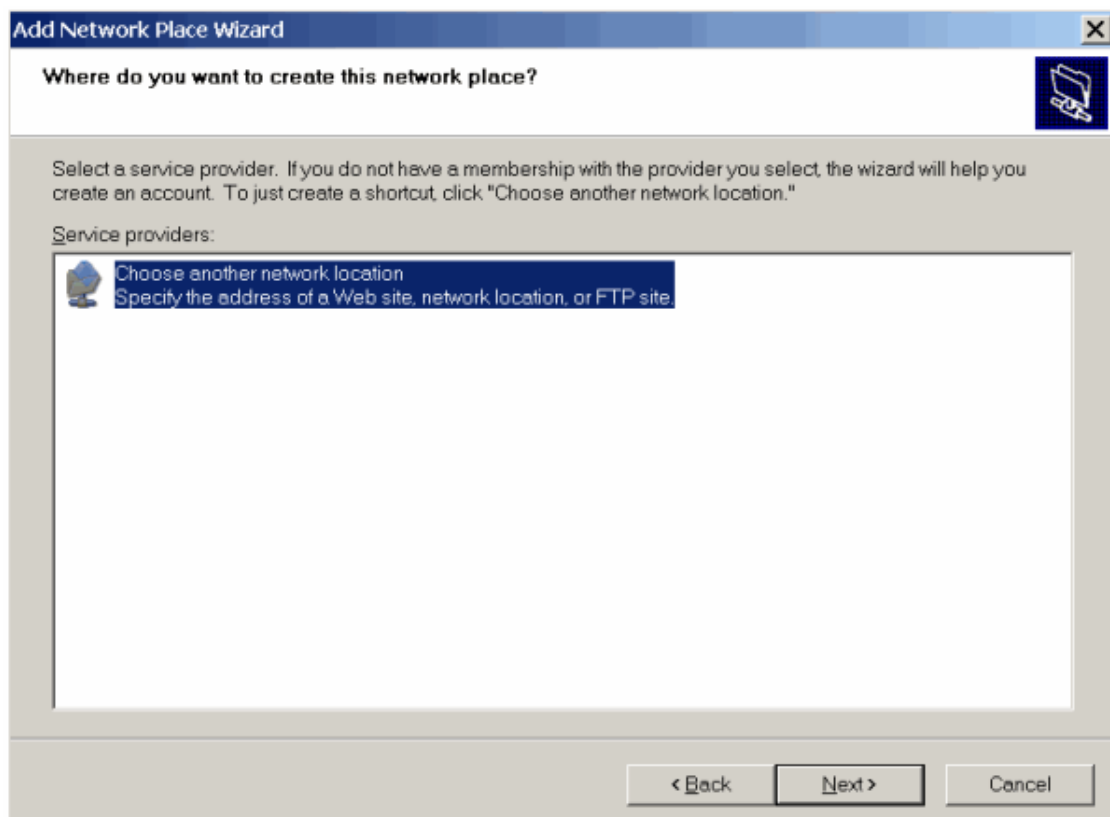
6. Go to Panel and find out the address of the required Web Folder. Log in to the Panel, go to **File Sharing**, find and enter the required folder and click the icon 📁 in the upper right corner of File Manager. The link to the current Web Folder will be shown in the opened window. Click the **Copy Link to Clipboard** button.
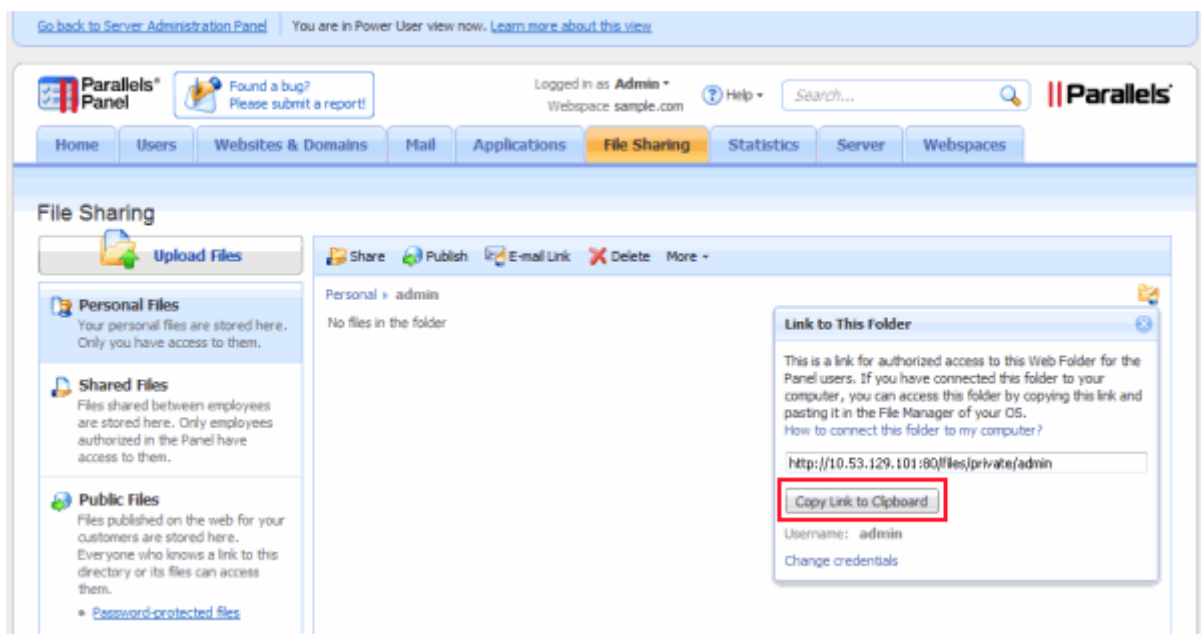
7. Return to the Add Network Place Wizard, specify the full URL to the required Web Folder and click **Next**.

8. In the window that opens, specify the username and password that you use for logging in to the Panel. Select the **Remember my password** check box and click **OK**.

9. Specify a name that you want to designate for this Web Folder in your operating system and click **Next**.

```
Add Network Place Wizard                                    [X]

   What do you want to name this place?                      [icon]

   Create a name for this shortcut that will help you easily identify this network place:

   http://10.53.129.101:80/files/private/admin.

   Type a name for this network place:

   My private folder on the corporate server

                              < Back      Next >      Cancel
```
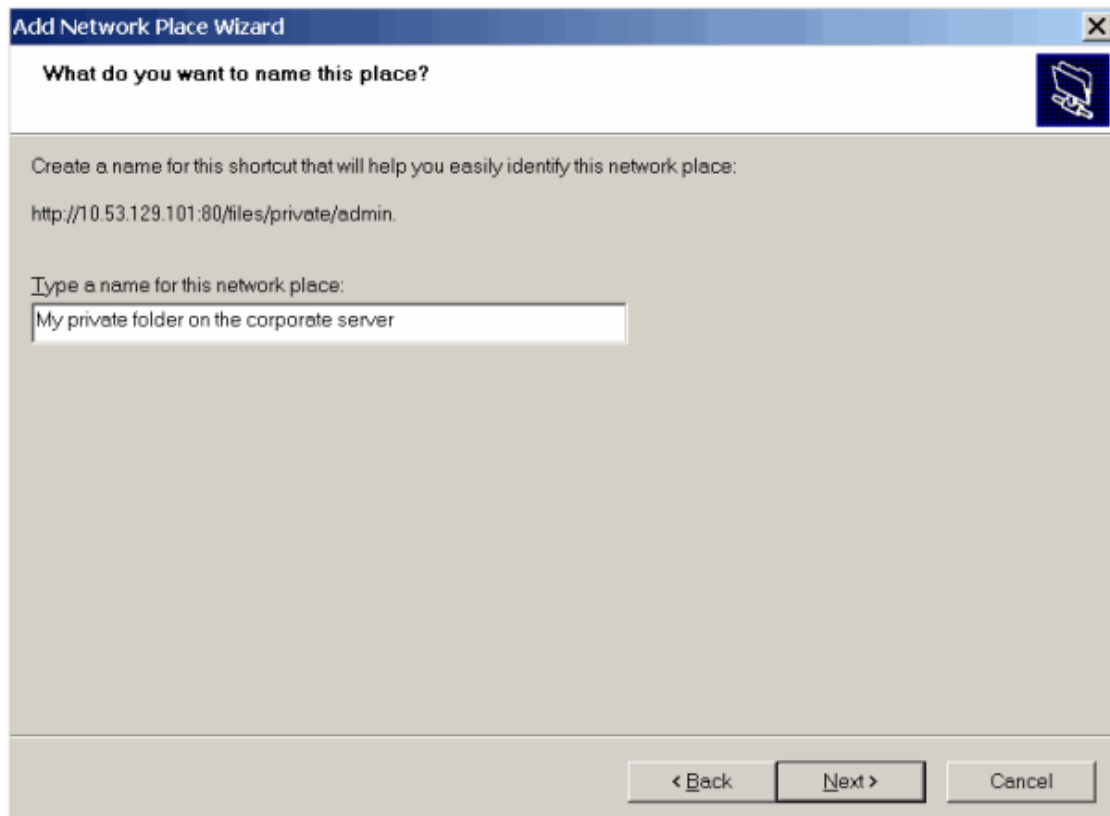
10. Click **Finish**.

Now, every time you start your computer, this Web Folder will show in your Windows Explorer, under **My Network Places**.

Note for users of Microsoft Windows operating systems: If you experience problems with connecting to a Web Folder, make sure you have installed all available operating system updates and service packs. If you are using a 32-bit version of Windows XP, Windows Vista, or Windows 2003 Server, then also install the hotfix available at http://www.microsoft.com/downloads/details.aspx?familyid=17C36612-632E-4C04-9382-987622ED1D64.

> ➢ *To connect a Web Folder to your computer running Microsoft Windows Vista or Microsoft Windows 7:*

1. Click the **Start** menu button, and select **Computer**.

2. Click **Map Network Drive**.

3. Select the drive letter that will be assigned to the network drive and click **Connect to a Web site that you can use to store your documents and pictures**.
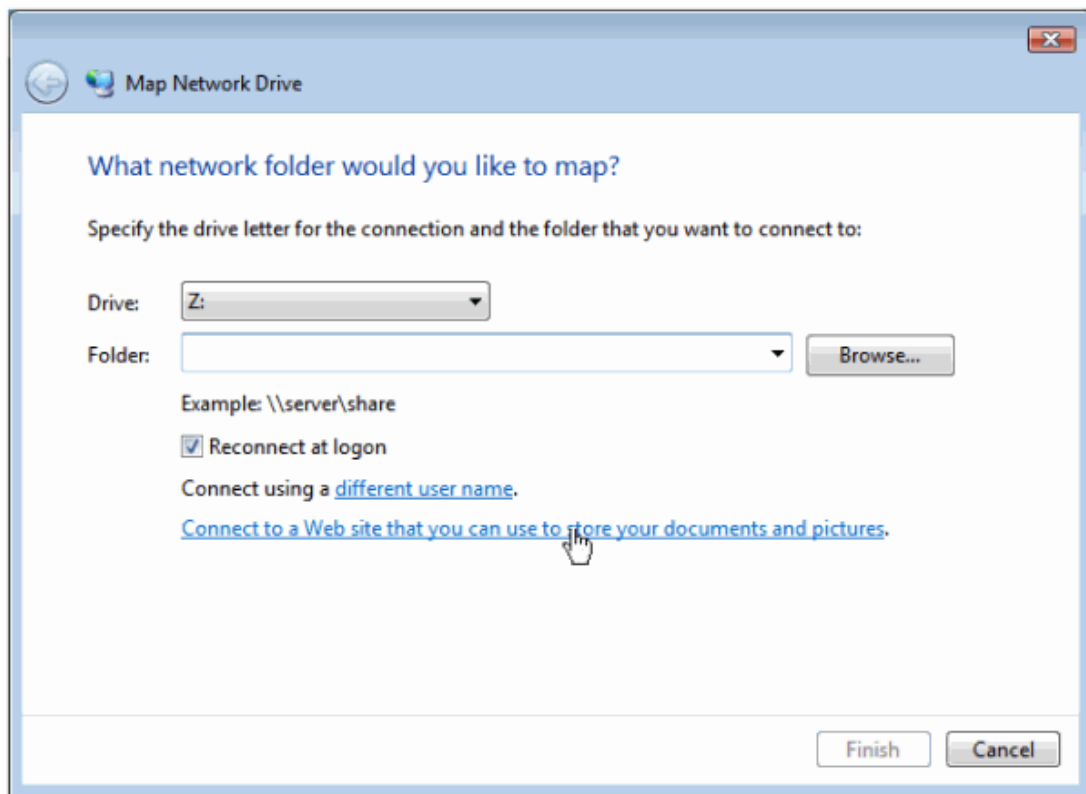
4. Go to the Panel and find out the address of the required Web Folder. Log in to the Panel, go to **File Sharing**, find and enter the required folder and click the icon in the upper right corner of File Manager. The link to the current Web Folder will be shown in the opened window. Click the **Copy Link to Clipboard** button.
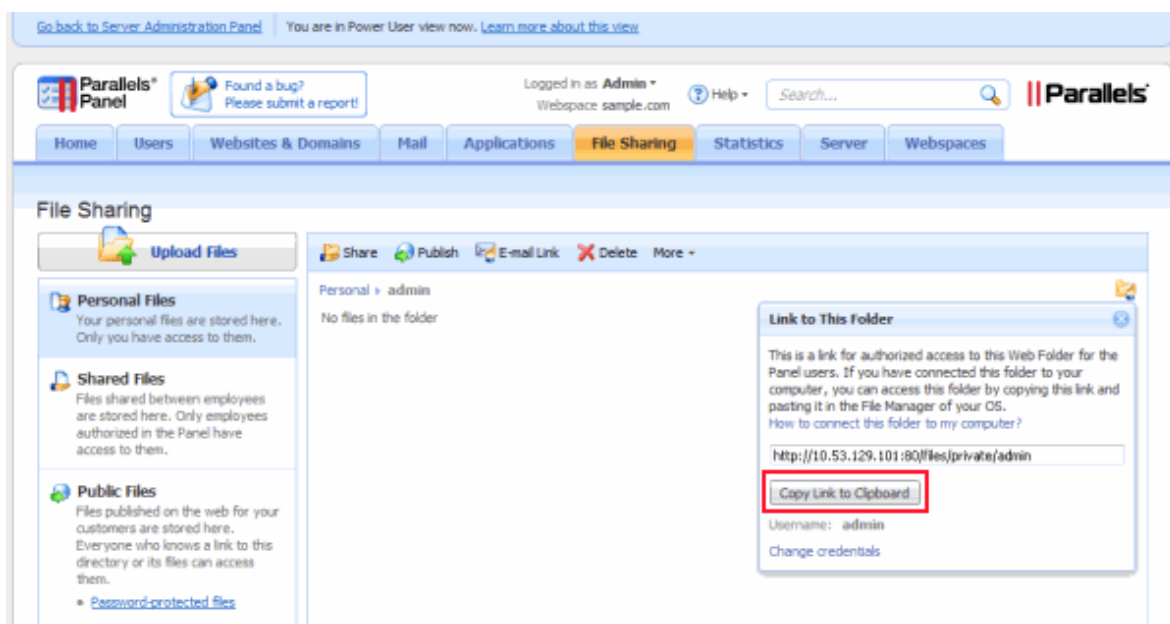
5. Return to the Map Network Drive Wizard, specify the full URL to the required Web Folder and click Finish.

6. In the window that opens, specify the username and password that you use for logging in to the Panel. Select the **Remember my password** check box and click **OK**.
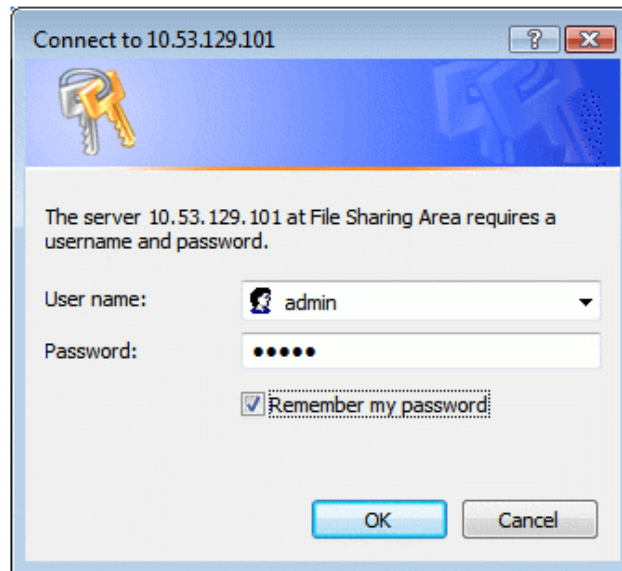
Now, every time you start your computer, this Web Folder will show in your Windows Explorer, under **Network Locations**.

Connecting to Web Folders on Linux Systems

> ➤ *To connect a Web Folder as a network drive to your Linux-based computer using GNOME Nautilus file manager:*

1. Open the file browser.

2. In the **File** menu, select **Connect to Server**.

3. From the **Service type** menu, select either **WebDAV (HTTP)** or **Secure WebDAV (HTTPS)**.

   To find out which option you need, ask your systems administrator.

4. In the **Server** field, type the host name or IP address of your server.

5. In the **Folder** field, type the path to your shared folder.

   To learn the location of your Web Folder, log in to the Panel, go to **File Sharing**, find and enter the required folder and click the icon in the upper right corner of File Manager. The link to current Web Folder will be shown in the opened window.

6. Click **Connect**.

7. The shortcut to the file share will be added to the **Places** pane. Click this shortcut.

8. Specify the username and password that you use for logging in to the Panel.

9. Select the option **Remember password forever** so that you would not have to type it every time you connect to the server.

10. Click **Connect**.

> ➤ *To connect to a Web Folder using KDE Konqueror file manager:*

1. Open Konqueror, and type the address of the shared folder in the address bar. Use webdav or webdavs as the protocol, instead of http or https.

   To learn the location of your Web Folder, log in to the Panel, go to **File Sharing**, find and enter the required folder and click the icon in the upper right corner of File Manager. The link to the current Web Folder will be shown in the opened window.

2. Specify the username and password that you use for logging in to the Panel.

Connecting to Web Folders on Mac OS

➢ *To connect a Web Folder as a network drive to your Mac OS X-based computer:*

1. Open Finder.

2. Click **Go**, and select the option **Connect to Server**.

3. Specify the location of your shared folder.

To learn the location of your Web Folder, log in to the Panel, go to **File Sharing**, find and enter the required folder and click the 🖼 icon in the upper right corner of File Manager. The link to the current Web Folder will be shown in the opened window.

4. Click **Connect**.

5. Specify the username and password that you use for logging in to the Panel.

6. Select the option **Remember this password in my keychain** so that you would not have to type it every time you connect to the server.

7. Click **OK**.

If you use SSL, you might receive an alert that the SSL certificate on the server is invalid. In such a case, just click through the SSL warning.

After the network drive is mounted, a shortcut to it will be placed on your desktop.

8. Open **System Preferences**, and select **Accounts**.

9. Select your user account and then click the **Login Items** tab.

10. Select the network drive shortcut on your desktop and drag it to the **Login Items** window (in **System Preferences** > **Accounts**).

11. If you do not want the mounted drive to automatically open in Finder every time you start your Mac, select the corresponding **Hide** check box.

12. Click **OK**.

Mass E-mail Notifications

When you need to inform your customers of scheduled server maintenance, or to introduce new service offerings, you can use the mass e-mail function (**Tools & Settings** > **Mass E-mail Messages**) to send notices to all of your customers at once.

You may want to create message templates and use them when needed, or you can send messages without using any templates.

Read this section to learn how to:

- Create message templates for further use.
- Send e-mail to multiple customers.

In this section:

Creating, Editing and Removing Message Templates

➢ *To create a new message template:*

1. Go to **Tools & Settings** > **Mass E-mail Messages** (in the **Tools** group), and click **Add Mass E-Mail Template**.

2. Specify template name in the **Template name** field.

3. Specify sender's name and e-mail address in the **From** field.

   You can specify name, e-mail address or both. To specify both name and e-mail address, use the following format: `Name <your@e-mail.address>`. For example: `John Doe <admin@server.com>`.

4. Select the recipients for your e-mail message:

   ▪ If you want to send a message to resellers, select the **Resellers** checkbox and select the required group of recipients: **All** to send message to all resellers, **Selected only** to send message only to the resellers you select manually, **All except selected** to send message to all resellers except the ones you select manually.

   ▪ To select several resellers, click **Select Addresses** to the right of the **Resellers** checkbox (note that this button is not available if **All** mode is selected), select the required resellers in the **Available resellers** field and click **Add >>**. To remove resellers from the list of selected resellers, select the required resellers in the **Selected resellers** field and click **<< Remove**.

   ▪ If you want to send a message to customers, select the **Customers** checkbox and select the required group of recipients: **All** to send message to all customers, **Selected only** to send message only to the customers you select manually, **All except selected** to send message to all customers except the ones you select manually.

   ▪ To select several customers, click **Select Addresses** to the right of the **Customers** checkbox (note that this button is not available if **All** mode is selected), select the required customers in the **Available customers** field and click **Add >>**. To remove customers from the list of selected customers, select them in the **Selected customers** field and click **<< Remove**.

   ▪ You can see your choice of selected recipients at any time by clicking the respective **Show/Hide Selected** button.

   ▪ If you want a copy of the message to be sent to your mailbox, select the **Parallels Panel administrator** checkbox.

5. Specify the subject of your message in the **Subject** field.

6. Enter your message in the **Message text** field in plain text format. If you want the Panel to automatically insert the recipient names into your message, use `<name>` variable. The names will be taken from the information specified in the **Contact name** field.

7. Click **OK** to save the template.

➢ *To edit a message template:*

1. Go to **Tools & Settings** > **Mass E-mail Messages** (in the **Tools** group), and click the required template in the list.

2. Make the required changes and click **OK**.

➢ *To remove a message template:*

1. Go to **Tools & Settings** > **Mass E-mail Messages** (in the **Tools** group).

2. Select the checkbox corresponding to the message template you want to remove and click **Remove**.

3. Confirm the removal and click **OK**.

Sending E-mail Notices

➢ *To send an e-mail message to multiple customers at once:*

1. Go to **Tools & Settings** > **Mass E-mail Messages** (in the **Tools** group).

2. If you want to use a message template that you previously created (as described in Creating, Editing and Removing Message Templates (on page 322)), click the corresponding icon in the **Send** column. If you want to send a custom message, click **Send Mass E-Mail**.

3. To insert text from a template, select the template you need and click **Insert**.

4. Specify sender's name and e-mail address in the **From** field.

   You can specify name, e-mail address or both. To specify both name and e-mail address, use the following format: `Name <your@e-mail.address>`. For example: `John Doe <admin@server.com>`.

5. Select the recipients for your e-mail message:

   ▪ If you want to send a message to resellers, select the **Resellers** checkbox and select the required group of recipients: **All** to send message to all resellers, **Selected only** to send message only to the resellers you select manually, **All except selected** to send message to all resellers except the ones you select manually.

   ▪ To select several resellers, click **Select Addresses** to the right of the **Resellers** checkbox (note that this button is not available if **All** mode is selected), select the required resellers in the **Available resellers** field and click **Add >>**. To remove resellers from the list of selected resellers, select the required resellers in the **Selected resellers** field and click **<< Remove**.

   ▪ If you want to send a message to customers, select the **Customers** checkbox and select the required group of recipients: **All** to send message to all customers, **Selected only** to send message only to the customers you select manually, **All except selected** to send message to all customers except the ones you select manually.

   ▪ To select several customers, click **Select Addresses** to the right of the **Customers** checkbox (note that this button is not available if **All** mode is selected), select the required customers in the **Available customers** field and click **Add >>**. To remove customers from the list of selected customers, select them in the **Selected customers** field and click **<< Remove**.

   ▪ You can see your choice of selected recipients at any time by clicking the respective **Show/Hide Selected** button.

   ▪ If you want a copy of the message to be sent to your mailbox, select the **Parallels Panel administrator** checkbox.

6. Specify the subject of your message in the **Subject** field.

7. Enter your message in the **Message text** field in plain text format. If you want Parallels Plesk Panel to automatically insert the recipient names into your message, use the `<name>` variable. The names will be taken from the information specified in the **Contact name** field.

8. If you want to save this message (both the text itself and information about its recipients) as a template for further use, select the checkbox to the left of **Save text to a new template named** field and specify the template name in this field.

9. Click **OK** to send the message. If you have chosen to save the message contents as a template, a template will be created and placed in the list of available templates.

Mail Congestion and Message Queue (Linux)

If your customers complain that they cannot send e-mail through your mail server, this can mean that your mail server is overloaded and cannot cope with the amount of received messages. This can happen when somebody is sending spam through your mail server, or the qmail-send daemon responsible for sending mail is down.

To return your mail server to an operable state, delete the unwanted messages from the mail server's message queue.

➢ *To see the messages in the message queue and to delete them:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group) > **Mail Queue** tab.

   The following information will be presented:

   ▪ Total number of undelivered messages. When messages come to your mail server, they are first added to the main queue. Then, the mail server preprocesses them in order to find out whether they should be delivered to a local e-mail account on the same server or sent further to a remote recipient's e-mail address. After preprocessing, the messages directed at local mail recipients are put to a local queue, and the messages directed at remote recipients are put to a remote queue. Once delivered, the messages are removed from the queues.

   ▪ Message properties: subject, sender, recipient, queue type (local, remote, not preprocessed), date the message was sent from user's computer, the time lapsed since the moment when message was put to queue (age), and message size.

2. To find a message with specific subject, select the queue in the **Queues** drop-down box, type the desired combination of symbols into the **Subject** box, and click **Search**. The messages matching your search criteria will be listed at the bottom of the screen. To reset the filter, click **Show All**.

3. To find a message from a specific sender, click the **Show Advanced** link, type the sender's e-mail address into the **Envelope Sender** box, and click **Search**. The messages matching your search criteria will be listed at the bottom of the screen. To reset the filter, click **Show All**.

4. To find a message addressed to a specific recipient, click the **Show Advanced** link, type the recipient's e-mail address into the **Recipients** box, and click **Search**. The messages matching your search criteria will be listed at the bottom of the screen. To reset the filter, click **Show All**.

5. To find a message by date, age, or size, click the **Show Advanced** link, type the required values into the **Date**, **Age**, or **Size** boxes, respectively, and click **Search**. The messages matching your search criteria will be listed at the bottom of the screen. To reset the filter, click **Show All**.

6. To delete a message from the queue, select the corresponding checkbox and click **Remove**. To delete all messages from the queue, select the checkbox in the upper-right corner of the messages list, and click **Remove**.

Statistics and Monitoring

In this section:

Logging Actions Performed by Your Customers in the Panel

You may wish to keep track of actions performed by various users in the system. All actions will be recorded in a log file that you will be able to download for viewing. The following system events (actions) can be logged:

- Administrator information changed
- System service restarted, started, or stopped
- IP address added, removed, changed
- Login settings (allowed period of inactivity for all user sessions in the control panel) changed
- Customer account created, deleted, personal or system information changed
- The status of customer account changed (suspended/activated)
- Customer's interface preferences changed
- Customer's IP pool changed
- Web applications were added to or removed from a customer's pool
- The limit on disk space is reached for a customer account
- The limit on traffic usage is reached for a customer account
- The limit on disk space is reached for a website
- The limit on traffic usage is reached for a website
- Website created, deleted, settings changed
- Website owner changed
- Website status changed (suspended/activated)
- DNS zone updated for a website
- Subdomain created, deleted, settings changed
- Domain alias created, deleted, settings changed
- DNS zone of the domain alias changed
- Resource allotments were changed for a customer account
- Customer's permissions for operations were changed
- Resource allotments were changed for a website
- Users logged in and out of the Panel
- Mail accounts created, deleted, changed
- Mailing lists created, deleted, settings changed
- Website hosting set up, deleted, changed
- Web forwarding hosting accounts were created, deleted, reconfigured
- Web application installed, reconfigured, uninstalled
- Web application package installed, uninstalled, updated
- License key expired or updated
- Database server created, deleted, updated
- Database created or deleted

- Database user account created, deleted, updated
- Customer's GUID updated
- Domain's GUID updated
- Parallels Plesk Panel component was updated or added

In this section:

Setting Up Action Logging

> ➢ *To set up action logging:*

1. Go to **Tools & Settings** > **Action Log** (in the **Logs & Notifications** group).

2. In the **Logged actions** group, select the actions to be logged using the checkboxes.

3. In the **Store records in the database** field, specify the action log cleaning options: on a daily, weekly or monthly basis, or in accordance with the specified number of records stored in the database.

4. To retain all action log records, select the **Do not remove records** option.

5. To apply all the changes made, click **OK**.

Downloading the Action Log

> ➢ *To download the action log to your machine:*

1. Go to **Tools & Settings** > **Action Log** (in the **Logs & Notifications** group).

2. In the **Log files** section, select the time period using the drop-down boxes, and click **Download**.

   The dialog window will open, prompting you to select the location for the downloaded log file to be saved to.

3. Select the location, and click **Save**.

Clearing the Action Log

➢ *To clear the action log:*

1. Go to **Tools & Settings** > **Action Log** (in the **Logs & Notifications** group).

2. In the **Log files** section, click **Clear Log**.

Viewing Statistics

> ➤ *To view the information on usage of server resources:*

1. Go to **Tools & Settings** > **Server Information**.

   The following information will be presented:
   - Processor information.
   - Parallels Plesk Panel version and build number.
   - Operating system and its kernel version.
   - Parallels Plesk Panel license key number.
   - Server uptime.
   - Processor load averages for the last 1 minute, 5 minutes and 15 minutes.
   - The amount of RAM installed and used.
   - The amount of swap space used.
   - Hard disk usage by partitions and directories.
   - The connected (mounted) storage and network storage devices.
   - The number of hosted domains: **active** shows the domains that are online; **problem** shows the domains that have exceeded the disk space and bandwidth allotments but still online; **passive** shows the domains that are offline because they were suspended by you or your resellers.

2. Click **Refresh** to update the server statistics with the latest data.

> ➤ *To view a report on resource usage by your resellers, customers, and websites:*

1. Go to **Tools & Settings** > **Summary Report**.

2. To view a summary on bandwidth usage by months, click **View Traffic History**.

Operations on reports:
   - To get more details, select the **Full Report** option from the drop-down menu.
   - To adjust the amount of information presented in a report, edit an existing report template or create a new one. To edit a template, click **Properties**, and then modify the report template.

     To create a new template, go to **Report Layouts** > **Create Report Layout**, and specify how much information you want in each section of the report: select **None** if you do not want any information, select **Summary** if you want a concise overview, or select **Full**, if you need a detailed report. Select the **Use as default report** checkbox and click **OK**.

     To delete a custom report layout, select the checkbox corresponding to the report layout name and click **Remove**.
   - To print the report, click **Print**. A report will open in a separate browser window. Select the **File** > **Print** option from the browser's menu to print the report.

- To send the report by e-mail, type the recipient's e-mail address into the input box located to the right of the Report group and click **Send by E-Mail**. If you are the recipient, then you do not need to specify an e-mail address: the system assumes by default that you are the report recipient and specifies your e-mail address registered with your Panel account.

- To have the reports automatically generated and delivered by e-mail on a daily, weekly, or monthly basis, click **Delivery Schedule** and follow the instructions supplied in the section Automating Report Generation and Delivery by E-mail (on page 332).

> *To view a report on traffic usage by users and sites:*

1. Click **Tools & Settings**.

2. Do any of the following:

   - To view reports on the amount of traffic used by resellers, click **Traffic Usage By Resellers** (in the **Resources** group).

   - To view reports on the amount of traffic used by all resellers and customers, click **Traffic Usage By Users** (in the **Resources** group).

   - To view reports on the amount of traffic used by domains (websites), click **Traffic Usage By Domains** (in the **Resources** group).

   ### In this section:

Automating Report Generation and Delivery by E-mail

> *To schedule a report delivery on a regular basis:*

1. Go to **Tools & Settings** > **Summary Report** > **Delivery Schedule**.

2. Click **Add Report Delivery Schedule**.

3. To send reports to your e-mail address registered with the system, select the **the server administrator** value from the **Deliver to** menu. To send reports to another e-mail address, select the **the e-mail address I specify** option and type the e-mail address.

4. In the **Delivery frequency** menu, select how often the report should be sent: daily, weekly, or monthly.

5. Click **OK**.

Viewing Virus and Spam Protection Statistics (Windows)

➢ *To view the information about viruses detected and removed by Kaspersky Antivirus:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group) > **Statistics** tab, and click **Virus Statistics**.

2. Select the period for which you want to view virus statistics.

If you want to view more detailed information about viruses, or e-mail addresses of e-mail senders or recipients, click the respective tab.

➢ *To view the information about spam messages detected and filtered by SpamAssassin:*

1. Go to **Tools & Settings** > **Mail Server Settings** (in the **Mail** group) > **Statistics** tab, and click **Spam Statistics**.

2. Select the period for which you want to view spam statistics.

If you want to view more detailed information about spam message recipients, click the **Recipients** tab.

About Disk Space Usage Calculation

When a Panel user creates a subscription or a webspace, Panel starts calculating disk space usage for this entity. The disk space that can potentially be consumed is categorized into the following types:

- (Always included) Website, FTP, and web users' content.
- Log files and statistic reports.
- Databases.
- Mailboxes.
- Java applications.
- Mailing lists.
- Subscription backup files.
- Subscription backups that are a part of server-level backups.

This section explains how Panel calculates disk space usage for each of these categories on Linux and on Windows. If you would like to include or exclude options from disk space calculation, you can do it on the **Tools & Settings** > **Server Settings** page.

The total disk space usage is available in **Tools & Settings** > **Summary Report**. The summary report shows the sum of disk space consumption of all subscriptions and webspaces. If you would like to view the disk space usage per subscription, go to **Subscriptions** and click a subscription name.

Variables

Next in this section we use the following variables to simplify the description:

- *HTTPD_VHOSTS_D.* This is the absolute path to the directory with virtual hosts.
- *CATALINA_HOME* is the absolute path to the Tomcat installation directory.
- *PRODUCT_ROOT_D* is the absolute path to the Panel installation directory.
- *PLESK_MAILNAMES_D* is the absolute path to the directory with mailboxes.
- *PGSQL_DATA_D* and *MYSQL_VAR_D* is the absolute path to the directory with MySQL and PostgreSQL databases correspondingly.

The variable values depend on the operating system. On Linux, you can find the values in `/etc/psa/psa.conf`.

Website Content, Anonymous FTP Content, Web Users' Content

This category of content is always included in the calculation of disk space usage.

On Windows, the size of website content is the total size of the `"%plesk_vhosts%\<domain_name>"` directory excluding these directories:

```
"%plesk_vhosts%\<domain_name>\anon_ftp"
"%plesk_vhosts%\<domain_name>\subdomains\*\anon_ftp"
"%plesk_vhosts%\<domain_name>\bin"
```

```
"%plesk_vhosts%\<domain_name>\subdomains\*\bin"
"%plesk_vhosts%\<domain_name>\conf"
"%plesk_vhosts%\<domain_name>\subdomains\*\conf"
"%plesk_vhosts%\<domain_name>\pd"
"%plesk_vhosts%\<domain_name>\subdomains\*\pd"
"%plesk_vhosts%\<domain_name>\statistics"
"%plesk_vhosts%\<domain_name>\subdomains\*\statistics"
"%plesk_vhosts%\<domain_name>\web_users"
"%plesk_vhosts%\<domain_name>\subdomains\*\web_users"
```

On Linux, the size of website content is the total size of the following directories:

```
HTTPD_VHOSTS_D/<domain_name>/cgi-bin
HTTPD_VHOSTS_D/<domain_name>/error_docs
HTTPD_VHOSTS_D/<domain_name>/httpdocs
HTTPD_VHOSTS_D/<domain_name>/httpsdocs
HTTPD_VHOSTS_D/<domain_name>/pd
HTTPD_VHOSTS_D/<domain_name>/private
HTTPD_VHOSTS_D/<domain_name>/subdomains
```

On Windows, the size of anonymous FTP content is the total size of the following directories:

```
"%plesk_vhosts%\<domain_name>\anon_ftp"
"%plesk_vhosts%\<domain_name>\subdomains\*\anon_ftp"
"%plesk_vhosts%\<domain_name>\bin"
"%plesk_vhosts%\<domain_name>\subdomains\*\bin"
```

On Linux, the size of anonymous FTP content is the total size of the following directories:

```
HTTPD_VHOSTS_D/<domain_name>/anon_ftp
```

On Windows, the size of web users' content is the total size of the following directories:

```
"%plesk_vhosts%\<domain_name>\web_users"
"%plesk_vhosts%\<domain_name>\subdomains\*\web_users"
```

On Linux, the size of web users' content is the total size of the following directories:

```
HTTPD_VHOSTS_D/<domain_name>/web_users
```

We will refer to the total of website, FTP, and web users' content as *WEB_CONTENT* in the formula for calculation the total disk space usage.

Log Files and Statistic Reports

On Windows, the size of logs and reports is the total size of the following directories:

```
"%plesk_vhosts%\<domain_name>\conf"
```

```
"%plesk_vhosts%\<domain_name>\subdomains\*\conf"
"%plesk_vhosts%\<domain_name>\pd"
"%plesk_vhosts%\<domain_name>\subdomains\*\pd"
"%plesk_vhosts%\<domain_name>\statistics"
"%plesk_vhosts%\<domain_name>\subdomains\*\statistics"
```

On Linux, the size of logs and reports is the total size of the following directories:

HTTPD_VHOSTS_D/`<domain_name>/statistics`

We will refer to the total logs and reports size as *LOG_AND_STAT* in the formula for calculation the total disk space usage.

Databases

The size of databases is calculated per website and then summed to obtain the total size.

On Windows, the size of MySQL databases is the sum of data length and index length in the following query: *SHOW TABLE STATUS FROM <db_name>*.

To get the size of MS SQL databases, the system runs the query *exec sp_databases* for each database under a particular website. The results are summed and multiplied by 1024.

On Linux, the size of PostgreSQL databases is the total size of directories `PGSQL_DATA_D/base/`*db_oid*. Here *db_oid* stands for OID of a database under a certain website.

On Linux, the size of MySQL databases is the size of the directory `MYSQL_VAR_D/`*db_name*. Here *db_name* stands for a database name under a certain website.

We will refer to the total databases size as *DATABASES* in the formula for calculation the total disk space usage.

Mailboxes

The size of mailboxes per website is the total size of directories corresponding to mailboxes. The path to a mailbox depends on a message transfer agent (for example, MailEnable).

- (Windows, MailEnable) *mailbox_dir**<domain_name>*\`MAILROOT`*mailbox_name*. The *mailbox_dir* is stored in the Windows registry HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Mail Enable\Mail Enable\Connectors\SF.
- (Windows, SmarterMail) *mailbox_dir*\`Users`*mailbox_name*. The *mailbox_dir* is obtained by calling the *GetDomainSettings* method of the *svcDomainAdmin* web service.
- (Linux) *PLESK_MAILNAMES_D*/*<domain_name>*.

We will refer to the total mailboxes size as *MAILBOXES* in the formula for calculation the total disk space usage.

Java Applications

On Windows, the total size of Java applications is the size of the directory *CATALINA_HOME*\psa-wars*domain_name*. Here *CATALINA_HOME* is the value of the *InstallPath* parameter in the Windows registry, in HKLM\SOFTWARE\Apache Software Foundation\Tomcat\<Tomcat_version>.

On Linux, the directory with Java content is CATALINA_HOME/psa-wars/*<domain_name>*.

We will refer to this total as *JAVA_APPS* in the formula for calculation the total disk space usage.

Backup Files

On Linux, the size of backups is obtained from the following utility call:

> *PRODUCT_ROOT_D*/admin/bin/pmm-ras --get-domain-dumps-disc-usage --domain-guid *<domain_guid>* --session-path *PRODUCT_ROOT_D*/PMM/logs

If the administrator specifies to exclude website backups nested in server-level backups from user quota, the utility is run with an extra option, --skip-server-dumps.

On Windows, the size of backups is cached and is the sum of numbers that follow *size_* in file names size_xxxxxx. These size_ files are stored in "%plesk_dir%\Backup*backups_dir**<domain_name>*\.discovered*\".

The *backups_dir* is:

/domains – if the backups are owned by the administrator.

/resellers/*<reseller_username>*/domains - if a website is owned by a reseller.

/resellers/*<reseller_username>*/clients/*<customer_username>*/domains - if a website is owned by a customer of some reseller.

/clients/*<customer_username>*/domains – if a website is owned by a customer directly under the administrator.

If the file "%plesk_dir%\Backup\dumps_dir\<domain_name>\.discovered*\ownertype_ server" exists then the size of website backups nested in server-level backups is not added to the disk space usage.

We will refer to the backups size as *BACKUPS* in the formula for calculation the total disk space usage.

Calculating the Total Disk Space Usage

The formula for calculating the total disk space usage is as follows:

TOTAL = WEB_CONTENT

> + *LOG_AND_STAT* (if the **log files and statistic reports** option is selected in **Tools & Settings** > **Server Settings**)

+ *DATABASES* (depends on the **databases** option on Linux and **MySQL databases** and **Microsoft SQL databases**)

+ *MAILBOXES* (if the **mailboxes** option is selected)

+ *JAVA_APPS* (if the **Java applications** option is selected)

+ *BACKUPS* (if the **domain backup files** option is selected; the value depends on **backup files created by the administrator**)

Here placeholders (for example, *WEB_CONTENT*) stand for the totals of respective categories.

Tracking Server Health with Health Monitor

Generally, as time goes by, Panel server resources become more and more utilized: The number of Panel users grows; customers create new sites that use different system services, and so on. This means that at some point you can experience the lack of system resources, such as RAM, CPU performance, or disk space. To keep you notified about the server resources usage, we offer the component - Health Monitor. Based on its statistics, you can promptly decide what services should be adjusted to lower the system resources usage or what hardware components require an upgrade.

Health Monitor is an additional Panel component that tracks all main server health parameters, such as: Memory and CPU usage by different services, hard disk utilization, number of running processes, and so on. Besides, Health Monitor can be configured to make visual and e-mail notifications when a certain health parameter exceeds some threshold.

This section provides the detailed information on how to install and configure Health Monitor as well as to get statistics on a resources usage.

In this section:

Installing Health Monitor

Health Monitor is an additional component that is provided with Panel by default. You can install it during the Panel custom installation or add it later using the **Server Management > Tools & Settings > Updates**.

Tracking Server Health

Health Monitor displays the information on server resources usage in two ways:

- A summary report on all main health parameters.
- A detailed report with graph of changes for each health parameter.

Summary Report

The summary report contains the information on all main server health parameters that are grouped for the sake of convenience. The report displays the status of each group, the instantaneous parameter values and their trends. To get the Health Monitor summary report, go to the **Server Administration Panel > Home > Server Health**.

Note that the summary report shows you *instantaneous* parameters values that are relevant only for the moment when the Home page was refreshed.

The example of summary report (random values) is shown below.
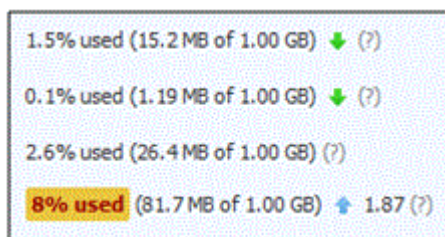
Yellow and Red Alarms

As you can see, one of the parameters exceeded some threshold and Health Monitor alarmed about it with the yellow highlighting. There are two types of alarms for each parameter:

- Yellow alarm - a parameter is close to its critical value.
- Red alarm - a parameter exceeds its critical value.

The threshold of these alarms can be set using the configuration file.

Trends

Health Monitor can also warn you if one of the parameters grows too fast. This is done with the help of trends. Trend is a way to show how a parameter value changes over time. In this example, the parameter, which was the source of the alarm increased (🔼) for the last hour by 1.87 times comparing to the hour before (the default trend interval is one hour). If a parameter value is insignificant, its trend is not shown.

Detailed Report

Detailed report can help you find out the time periods when the resources usage is maximal (minimal). To view the report, go to the **Server Management > Health Monitoring**. To see how server health parameters have been changing over time, select the corresponding checkboxes. You can select a period for which the graph is generated: From the past 3 hours to a week.

Note that the parameters values behind the graph are also *instantaneous* and are relevant only for the moment when the page was refreshed.

Accuracy of Health Monitor Values

Note that Health Monitor shows *instantaneous* parameter values. These values are relevant *only* for the moment when the web page, which contains them, was refreshed. This means that if your server is permanently loaded, you will never see the conformity between Health Monitor and a system resource usage monitor (for example, **top** in Linux or **Task Manager** in Windows).

Configuring Alarms, Trends, and E-mail Notifications

After the installation, Health Monitor works with all parameters by default. If you want to adjust some of its options, such as alarm thresholds and e-mail notifications, you should perform the component configuration. Such configuration is available using the XML file.

➢ *To configure Health Monitor:*

1. Download the current configuration file by clicking the **Download Configuration File** button in **Server Management > Health Monitoring**.

2. Change the configuration file in any text editor. With the help of this file you can define:

- Alarm threshold for each parameter.
- Type of the alarm for each parameter: Exceeding of an absolute value, a relative value, or a trend value.
- Trend calculation parameters.
- E-mail notification parameters.

  The detailed file structure and description for each of the file parameters is provided in the top of the configuration file.

3. Upload the file with changes to Panel by clicking the **Upload Configuration File** button in **Server Management > Health Monitoring**.

Updating Health Parameters After Hardware Change

Note that the hardware configuration of your Panel server is specified in Health Monitor just once - during component installation. Further changes in hardware parameters are not propagated to Health Monitor. For example, if you increase the amount of RAM from 1 GB to 2 GB, Health Monitor will continue to show that the total RAM is 1 GB. To update Health Monitor data on server configuration, use **Server Management > Health Monitoring > Detect Hardware Changes**.

Monitoring Connections to Panel and FTP Services

In this section:

Monitoring Connections to Panel

➢ *To find out who of your customers is logged in to Panel at the moment:*

1. Go to **Tools & Settings** > **Active Sessions**. All sessions including yours will be presented and the following details will be displayed:

   ▪ **Type**. A type of Panel user who established the session:

   🧑 for server administrator.

   👤 for reseller or customer.

   📧 for mailbox owner.

   ▪ **Login**. The login name the user is logged in as.

   ▪ **IP address**. The IP address from which the Panel is accessed.

   ▪ **Logon time**. The date and time when the user logged in to the Panel.

   ▪ **Idle time**. The time that user was not doing anything in the Panel while being logged in.

2. To refresh the list of user sessions, click **Refresh**.

3. To end a user session, select the corresponding checkbox and click **Remove**, then confirm removal and click **OK**.

Monitoring Connections to FTP Service

Your Parallels Plesk Panel can show active FTP sessions only when any of the following FTP server programs is installed on the hosting server:

- Microsoft FTP 7.0 (Windows hosting)
- Gene6 FTP Server (Windows hosting)
- Serv-U FTP Server (Windows hosting)
- ProFTPd (Linux/UNIX hosting)

> ➢ *To find out who is connected to your server via FTP, in what directories they currently are and what files they are uploading to or downloading from the server:*

1. Go to **Tools & Settings** > **Active Sessions**.

2. Click the **FTP Sessions** tab. All sessions including yours will be presented and the following details will be displayed:

   - **Type**. The type of user who established the session:

     🔲 for users not registered with the Panel.

     🔲 for anonymous FTP users.

     🔲 for website administrators.

     🔲 for web users (owners of personal web pages without individual domain names).

   - **Status**. The current status of FTP connection.
   - **FTP user login**. The login name used for access to FTP account.
   - **Domain name**. The domain the FTP user is currently connected to.
   - **Current location**. The directory the FTP user is currently at.
   - **File name**. The file name being operated on.
   - **Speed**. Transfer speed in kilobytes.
   - **Progress, %**. The file transfer operation progress in percentage.
   - **IP address**. The IP address from which the FTP account is accessed.
   - **Logon time**. The time lapsed since the moment user logged in.
   - **Idle time**. The time that user was not doing anything while being connected to the server through FTP.

3. To refresh the list of FTP sessions, click **Refresh**.

4. To end a session, select the respective checkbox and click **Remove**.

Monitoring Terminal Session Connections to Your Server (Windows)

> ➢ *To find out who of your customers is logged in to the server via Terminal Server session at the moment:*

1. Go to **Tools & Settings** > **Active Sessions**.

2. Click the **TS Sessions** tab. All sessions including yours will be presented and the following details will be displayed:

- **S**. The status of the terminal session:

    ⚠ - for server administrator.

    ✅ - client is connected and logged in, using valid login and password.

    ▶ - client is connected, but not logged in.

    ❌ - client is disconnected.

- **Name**. The name of this terminal session.

- **User**. The name of the terminal session user.

    You can see the session details by clicking the session name in the list.

3. To refresh the list of terminal sessions, click **Refresh**.

4. To disconnect a terminal session, select the respective checkbox and click 🔀 **Disconnect**, then confirm disconnection and click **OK**.

5. To close a terminal session, select the respective checkbox and click 🔑 **Log Out**, then confirm disconnection and click **OK**.

Event Tracking

The Event Manager is designed to help you organize data interchange between Parallels Plesk Panel and external systems. It works the following way:

1. Create a script to be executed upon a certain control panel event: Shell script file for Linux or batch file for Windows.

2. Create an event handler that triggers the event processing. You can process a single event by a number of different handlers.

3. Assign your script to the event handler.

For the full list of event parameters passed by event handlers, refer to **Appendix C: Event Parameters Passed by Event Handlers** (on page 695).

Note for users of Linux: The server administrator can create the event handlers that will be run on the server on behalf of user root. If you wish to restrict usage of the root account, create an empty file with name `root.event_handler.lock` in the location `/parallels_panel_installation_directory/var/`.

In this section:

Adding Event Handlers (Linux)

Let's, for example, create an event handler for the 'customer account creation' event. The handler will accept a customer's name and username in the Panel from environment variables. For simplicity, we will use a shell-script called `test-handler.sh` that looks as follows:

```
#!/bin/bash

echo "--------------" >> /tmp/event_handler.log

/bin/date              >> /tmp/event_handler.log # information on the
event date and time

/usr/bin/id            >> /tmp/event_handler.log # information on the
user, on behalf of which the script was executed (to ensure control)

echo "customer created" >> /tmp/event_handler.log # information on
the created customer account

echo "name: ${NEW_CONTACT_NAME}"   >> /tmp/event_handler.log #
customer's name

echo "login: ${NEW_LOGIN_NAME}"    >> /tmp/event_handler.log #
customer's username in the Panel

echo "--------------" >> /tmp/event_handler.log
```

This script prints some information to a file so that we could control its execution (we cannot output information to stdout/stderr, as the script is executed in the background mode).

Note: We strongly recommend that you use shell script files to handle events. Although you can assign direct system commands, they might not work. Say, commands with output redirection operators < or > will not work.

Suppose that our script is located in the directory `/parallels_panel_installation_directory/bin` (for instance). Let's register it by creating an event handler via the Administrative Panel:

1. Go to **Tools & Settings** > **Event Manager**.

2. Click **Add New Event Handler**.

3. Select the event, you wish to assign a handler to in the **Event** menu.

4. Select the priority for handler execution, or specify a custom value. To do this, select custom in the **Priority** menu and type in the value.

   When assigning several handlers to a single event you can specify the handler execution sequence, setting different priorities (higher value corresponds to a higher priority).

5. Select the system user, on behalf of which the handler will be executed ("root" user, for example).

6. In the **Command** input field, specify a command to be executed upon the selected event. In our example it is `/usr/local/psa/bin/test-handler.sh`.

7. Click **OK**.

Note: In the script, we have specified the variables $NEW_CONTACT_NAME and $NEW_LOGIN_NAME. During execution of the handler, they will be replaced with name and username of the created user account respectively. The entire list of available variables is provided in **Appendix C: Event Parameters Passed by Event Handlers** (on page 695).

Now if you log in to your Parallels Plesk Panel and create a new customer account, specifying the value 'Some Customer' in the **Contact name** field, and 'some_customer' in the field **Login**, the handler will be invoked, and the following records will be added to the `/tmp/event_handler.log`:

```
Fri Mar 16 15:57:25 NOVT 2007

uid=0(root) gid=0(root) groups=0(root)

customer created

name: Some Customer

login: some_customer
```

If you want to specify one or few handlers more, repeat the actions above for another handler.

Adding Event Handlers (Windows)

> *To add an Event Handler:*

For instance, let's create an event handler for the 'customer account creation' event. The handler will accept a customer's name as the first parameter, and the customer's username as the second. For simplicity, we will use a batch file called test-handler.bat that looks as follows:

```
echo "--------------" >> c:\windows\temp\event_handler.log
rem information on the event date and time
date /T   >> c:\windows\temp\event_handler.log
rem information on the created customer account
echo "customer created" >> c:\windows\temp\event_handler.log
rem customer's name
echo "name: %1"       >> c:\windows\temp\event_handler.log
rem customer's username in the Panel
echo "login: %2"      >> c:\windows\temp\event_handler.log
echo "--------------" >> c:\windows\temp\event_handler.log
```

This script prints some information to a file so that we could control its execution.

Suppose that our script is located in the directory `c:\program files\parallels\parallels panel\scripts\`. Let's register it by creating an event handler via the Administrative Panel:

1. Go to **Tools & Settings** > **Event Manager**.

2. Click **Add New Event Handler**.

3. Select the event you wish to assign a handler to in the **Event** drop-down box.

4. Select the priority for handler execution, or specify a custom value. To do this, select **custom** in the **Priority** drop-down list and type in the value.

When assigning several handlers to a single event you can specify the handler execution sequence, setting different priorities (higher value corresponds to a higher priority).

5. Select the system user, on behalf of which the handler will be executed.

6. In the **Command** input field, specify a command to be executed upon the selected event. In our example, it is `c:\program files\parallels\parallels panel\scripts\test-handler.bat" <new_contact_name> <new_login_name>`.

Note that if directory names or the file name contains spaces, the path should be quoted.

7. Click **OK**.

Note: In the command, we have specified the parameters in the angle brackets `<new_contact_name>` and `<new_login_name>`. Before executing the handler, they will be replaced with name and username of the created customer. The entire list of available parameters is provided in the section Event Parameters Passed by Event Handlers (on page 695).

Now if you login to your Parallels Plesk Panel and create a new customer account, specifying the value 'Some Customer' in the **Contact name** field, and 'some_customer' in the field **Login**, the handler will be invoked, and the following records will be added to the `c:\windows\temp\event_handler.log`:

```
Mon March 15 21:46:34 NOVT 2010
customer created
name: Some Customer
username: some_customer
```

If you want to specify one or few handlers more, repeat the actions above for another handler.

Removing Event Handlers

➢ *To remove an event handler:*

1. Go to **Tools & Settings** > **Event Manager**.

2. Select the corresponding checkboxes in the list of handlers and click **Remove**.

Scheduling Tasks

If you need to run scripts on your server at specific time, use the task scheduler facility on your server to make the system automatically run the scripts for you.

In this section:

Scheduling Tasks on Linux-based Servers

If you need to run scripts on your server at specific time, use the task scheduling facility on your server to make the system automatically run the scripts for you.

Important: To prohibit control panel users from scheduling tasks on behalf of user "root", create on the server's file system an empty file with name `root.crontab.lock` in the location `/parallels_panel_installation_directory/var/`.

During installation of Parallels Plesk Panel, the following tasks are automatically created:

- autoreport.php - delivers daily, weekly and monthly reports on clients and domains (three separate tasks)
- backupmng - initiates scheduled backing up of domains once every 30 minutes
- statistics - generates statistics on the limits imposed on domains, such as traffic, disk usage, and so on
- mysqldump.sh - creates a backup copy of three MySQL databases: psadump, MySQL, and Horde databases

Because all these tasks are related to domain statistics, databases and reports, it is strongly recommended that you neither change nor remove them.

➢ *To schedule a task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Select the system user account on whose behalf the task will be executed.

3. Click **Schedule New Task**.

4. Specify when to run your command:
    - **Minute** - enter the value from 0 to 59
    - **Hour** - enter the value from 0 to 23
    - **Day of the Month** - enter the value from 1 to 31
    - **Month** - enter the value from 1 to 12, or select the month from a drop-down box
    - **Day of the Week** - enter the value from 0 to 6 (0 for Sunday), or select the day of the week from a drop-down box

    You can schedule the time using the UNIX crontab entry format. In this format, you can

    - enter several values separated by commas. Two numbers separated by a hyphen mean an inclusive range. For example, to run a task on the 4th, 5th, 6th, and 20th of a month, type 4-6,20.
    - insert an asterisk to specify all values allowed for this field. For example, to run a task daily, type * in the **Day of the Month** text box.

    To schedule the task to run every Nth period, enter the combination */N, where N is the legal value for this field (minute, hour, day, month). For example, */15 in the **Minute** field schedules the task to start every 15 minutes.

You can type the contracted names of months and days of the week, which are the first three letters: Aug, Jul, Mon, Sat, etc. However, the contracted names cannot be separated with commas or used together with numbers.

5. Specify which command to run. Type it into the **Command** input box.

   For example, if you want to run the backup creation task at the specified time and have the backup file sent to your e-mail, you need to specify the following command in the **Command** input box:

   ```
   /usr/local/psa/admin/sbin/backupmng
   ```

6. Click **OK**.

➢ *To temporarily suspend execution of a scheduled task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Select the system user account on whose behalf the task is executed.

3. Locate the task that you want to suspend and click on the command name.

4. Clear the **Switched on** checkbox and click **OK**.

➢ *To resume execution of a scheduled task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Select the system user account on whose behalf the task is executed.

3. Locate the task whose execution you want to resume and click the command name.

4. Select the **Switched on** checkbox and click **OK**.

➢ *To cancel a task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Select the system user account on whose behalf the task is executed.

3. Select a checkbox to the left of the task that you want to cancel.

4. Click **Remove**.

5. Confirm removal and click **OK**.

Scheduling Tasks on Windows-based Servers

If you need to run scripts on your server at specific time, use the task scheduler facility on your server to make the system automatically run the scripts for you.

During installation of Parallels Plesk Panel, the following tasks are automatically created:

- Update Parallels Premium Antivirus database - updates antivirus database.
- Statistics calculation - generates statistics on resource usage, such as traffic and disk space.

Because these tasks are related to operation of system services, it is strongly recommended that you neither change nor remove them.

➢ *To schedule a task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Click **Schedule New Task**.

3. Leave the **Switched on** checkbox selected if you want your scheduled task to be active immediately after the creation.

4. Type a name for your task in the **Description** field.

5. In **Scheduler notification**, specify whether the scheduler should notify you when it runs this task. The following options are available:

   - **Switched off** - do not notify you.
   - **Send to the default e-mail** - send the notification to your default e-mail address.
   - **Send to the e-mail I specify** - send the notification to the e-mail specified in the corresponding field. After selecting this option, you need to input the required e-mail in the field on the right.

     Click **Set** to save scheduler notifications settings.

6. Specify which command to run. Type it into the **Path to executable file** input box. If you need to run the command with certain options, type them in the **Arguments** field.

   - For example, if you want to run the statistics calculation task to count disc space and see more detailed information for the example.com and example.net domains, you need to specify the following path in the **Path to executable file** input box:

     ```
     C:\Program Files\Parallels\Parallels
     Panel\admin\bin\statistics.exe
     ```

     and the following options in the **Arguments** field:

     ```
     --disk-usage --process-domains=example.com, example.net -verbose
     ```

   - If you want to run your own PHP script using the task scheduler, you need to specify the following path in the **Path to executable file** input box:

     ```
     C:\Program Files (x86)\Parallels\Parallels
     Panel\Additional\PleskPHP5\php.exe
     ```

and specify the script location in the **Arguments** field:

```
C:\Inetpub\vhosts\mydomain.tld\httpdocs\myscript.php
```

7. Select the appropriate priority in the **Task priority** field. Task priority can be set to **Low**, **Normal** or **High**.

8. Specify when to run your command by selecting the appropriate checkboxes in the **Hours**, **Days of Month**, **Months** or **Days of Week** fields.

9. Click **OK** to schedule the task or click **Run Now** to schedule the task and immediately run it.

➢ *To temporarily suspend execution of a scheduled task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Choose a task that you wish to suspend and click on the command name.

3. Clear the **Switched on** checkbox.

➢ *To resume execution of scheduled task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Choose a task whose execution you wish to resume and click on the command name.

3. Select the **Switched on** checkbox.

➢ *To cancel a task:*

1. Go to **Tools & Settings** > **Scheduled Tasks**.

2. Select a checkbox to the left of the task that you want to cancel.

3. Click **Remove**.

4. Confirm removal and click **OK**.

Using Panel Extensions (Linux)

Using additional extensions is another way of extending the functionality of your Panel for Linux. Extensions are functional components (like file server, firewall, or system monitor) developed by Parallels or third parties.

To get add-ons developed by Parallels partners, visit our online store at http://www.parallels.com/store/plesk/partners/.

The extensions can be easily installed, removed, and configured directly from Panel (**Extensions** > **Manage Extensions**). Learn more about installing Panel extensions in the **Installation, Upgrade, Migration, and Transfer Guide**, chapter **Installing Panel Extensions**.

This section contains information on how to configure extensions developed by Parallels:

- *Counter-Strike game server extension.* Used to deploy Counter Strike game servers.
- *File Server extension*. Used to share directories on a network directly from Panel.
- *Firewall extension.* Used to protect Panel server and private network from unauthorized access.
- *Watchdog extension.* Used for system monitoring.
- *VPN extension*. Used for establishing communications between geographically distributed LAN segments over public networks.

For the information about how to configure extensions developed by third parties, refer to the respective documentation.

In this section:

Google AdWords Promotion Extension

Disclaimer: The content of this section is valid only for Panel customers located in Russia. The Google AdWords Promotion Extension is not distributed in other countries.

Данное расширение (доступно в **Расширения > Google AdWords Promotion Extension**) позволяет вам бесплатно предоставлять сертификаты Google AdWords своим клиентам. Ваши клиенты, в свою очередь, могут использовать эти сертификаты для оплаты услуг по размещению рекламы в Google AdWords. Для того, чтобы использовать данное расширение, вы должны являться участником программы продвижения сертификатов Google AdWords. Подробнее о программе на http://www.parallels.com/ru/partners/plesk11specialoffer.

Данная глава поможет вам установить и настроить Google AdWords Promotion Extension.

Установка Расширения

Расширение распространяется в виде ZIP архивов (отдельно для Linux и Windows версий Panel) предоставляемых каждому участнику программы. Как и любое Panel расширение, вы можете установить Google AdWords Promotion Extension через панель управления сервером: **Расширения > Добавить Расширение**.

Если вы обслуживаете большой парк серверов с Panel, предпочтительнее установить расширение через вызовы API RPC. API RPC вызовы позволяют выполнять команды Panel удаленно с любого сервера в сети. Для установки расширения, скопируйте ZIP файл на один из веб-серверов и выполните API RPC запрос следующего типа (показан пример для Linux) для каждого из серверов, на который вы хотите установить расширение:

```
<packet version="1.6.3.5">
  <server>
    <install-module>
      <url>http://example.com/plesk-adwords-1.0-1-release-
unix.zip</url>
    </install-module>
  </server>
</packet>
```

Подробности работы с API RPC описаны в **API RPC Manual**.

Базовая Настройка Расширения

Всем участникам программы продвижения сертификатов Google AdWords присваивается уникальный идентификатор, который необходимо ввести в поле **Идентификатор партнера** после установки расширения.

Примечание: Для того, чтобы проверить действует ли программа в данный момент для вашего идентификатора, используйте кнопку **Проверить** на закладке **Общие**.

Настройка Предоставления Сертификатов

Вы можете предоставлять промо-сертификаты Google AdWords своим клиентам одним из двух способов: либо через **Дополнительные услуги** сервис-планов, либо сопоставив каждому сервис-плану соответствующий сертификат непосредственно в настройках расширения. Более подробно:

▪ *Назначение сертификатов через дополнительные услуги сервис-планов*.
   Для назначения сертификатов через дополнительные услуги сервис-планов:

   1. На закладке **Общие**, выберите режим назначения сертификатов через **Дополнительные услуги сервис-планов**. Panel сгенерирует набор из трех дополнительных услуг, по одной на каждый из трех типов промо-сертификатов (1000, 1500 и 2000 рублей).

   2. В настройках дополнительных услуг сервис-плана (**Сервис-планы > выберите сервис-план > Дополнительные услуги**), укажите какая из услуг будет предоставляться с этим планом.

   Все подписчики соответствующих планов, увидят на своей **Домашней Странце** приглашение воспользоваться сертификатом соответствующего номинала для оплаты услуг Google AdWords.

▪ *Назначение сертификатов сервис-планам в настройках расширения*.
   Данный способ настройки предоставления сертификатов быстрее, так как позволяет сопоставить каждому из существующих сервис-планов свой номинал сертификата непосредственно на странице расширения. Тем не менее, обратите внимание, что данный способ предоставления сертификатов не позволяет увидеть в настройках конкретного сервис-плана (**Сервис-планы > выберите сервис-план > Дополнительные услуги**) какой из сертификатов ему назначен. Данная информация будет доступна только на странице расширения.
   Для назначения сертификатов сервис-планам на странице расширения:

   1. На закладке **Общие**, выберите режим назначения сертификатов через **Настройки расширения**.

   2. На закладке **Сервис-Планы и Сертификаты**, сопоставьте один из трех типов сертификатов доступных в рамках программы (1000, 1500 или 2000 рублей) с предоставляемыми сервис-планами. Для планов с которыми вы не хотите предоставлять сертификаты, выберите значение **Нет**.

   Все подписчики выбранных планов, увидят на своей **Домашней Странце** приглашение воспользоваться сертификатом соответствующего номинала для оплаты услуг Google AdWords.

Для того чтобы приостановить распространение сертификатов среди своих клиентов, отключите опцию **Предоставлять клиентам промо-сертификаты** на закладке **Общие**. После этого, приглашение перестанет отображаться на **Домашней Странице** клиентов.

Counter-Strike Game Server Extension

With this extension you can:

- Deploy, configure, and uninstall Counter-Strike game servers.
- Specify which maps each game server should use.
- Start, stop, and restart game servers.
- Add and update game mods with the Steam utility provided by Valve.
- Delegate permissions for managing game servers to other users.

In this section:

Deploying Game Servers

Once you install the Counter-Strike Game Server extension on your Parallels Plesk Panel, you will need to take a few steps to install the game server program files and other required components. These files will be shared among all game servers that you will set up.

> ➢ *To obtain and install the core components of game servers:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. The installation program starts searching for an installed game server engine. If it does not detect it, the installer will offer you the two options:

   - **Install the game server automatically** - download the game server files from the official directory servers on the Internet and install them automatically. This procedure might take much time and hundreds megabytes of data transfer, depending on the number of components you wish to install. During automatic installation, you will be asked to choose the game version (Counter-Strike, Counter-Strike Source, and Counter-Strike Condition Zero) to install.

   - **Use an existing installation** - if you already have the game server engine installed, use this option to specify the path to the directory where it is installed.

3. Click **OK**.

4. Install the Steam software. Steam is an online content delivery system designed by Valve Corporation. To be able to download, install and update games from the Valve website through the Internet, you need to install the Steam client.

   Important: By downloading and installing the Steam client, you assume responsibility for the consequences of using this software. Use it at your own risk!

   - If you do not have the Steam client program or Counter-Strike game server installed, leave the **Download from the official Valve site and install** option selected and click **OK**. The Steam software will be downloaded from the official download site (http://www.steampowered.com/download/hldsupdatetool.bin). Then, the License Agreement with Valve Corporation will appear. Click **Accept** to accept the license agreement to download and install the Steam client.

   - If you have already downloaded this file (hldsupdatetool.bin) and have it on your local machine, select the **Install from the local machine** option to upload it. Click **OK**. Then, specify the path to the hldsupdatetool.bin file and click **OK**. Click **Accept** to accept the license agreement.

   - To specify the path to an existing Steam installation, select the **Use an existing Steam client installation on your Plesk server** option and click **OK**. Locate the Steam distribution package and click **OK**.

5. All game modifications (also commonly referred to as mods) that are available for downloading are shown in a list. Each mod title is accompanied with the following icon indicating whether the mod is already installed: ✅ - the game mod is already installed and ❌ - game mod is not installed.

If you have a steam account that you would like to use for retrieving installation files or updates from Valve, click the **Switch Steam Account** icon, specify your username and password, and click **OK**.

Select the checkboxes corresponding to the game mods you wish to install and click **OK**.

6. When the selected game components are installed, click **OK** to quit the wizard.

Now the core components of the selected game servers are installed, and you can proceed to setting up your game servers.

In this section:

Setting Up a Game Server

➢ *To set up a new game server:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the **Add CS Game Server** icon in the Tools group.

3. Select a game modification you want to run on your server. Click **Next >>**.

4. Choose the operation mode. If your server is going to be restricted to LAN clients only, select the **Server is running in LAN-Only mode** option. If you are serving both LAN and Internet clients, select the **Server is running in LAN & Internet mode** option.

5. To prevent the players connected through the Internet from cheating on your server, select the **Use Valve anti-cheat extension** option.

6. Click **Next >>**.

7. Specify the maximum number of players who can connect simultaneously to your server. Click **Next >>**.

8. Enter the name for this game server. Click **Next >>**.

9. Select how you want to configure your game server:

   ▪ If you wish to customize the default configuration prior to running the game server, select the **Customize the default configuration prior to running the game server** option.

   ▪ If you wish to create the game server with default configuration and run it upon completion, select the **Run the game server with the default configuration** option.

10. Click **Finish**.

The game server with optimal configuration will be set up.

If you selected the **Run the game server with the default configuration** option, the game server will run.

If you chose the **Customize the default configuration prior to running the game server**, you will be taken to the game server configuration screen on which you can adjust the following settings for your game server.

Setting	Description
Game server name	The name that you would like to call your server.
Configuration file	Select the configuration file that will be used for this game server. This drop-down list contains all configuration files available for this game mod. To edit the selected configuration file, click the **Edit** button on the right.

Operation mode	If your server is going to be restricted to LAN clients only, select the **Server is running in LAN-Only mode** option. If you are serving both LAN and Internet clients, select the **Server is running in LAN & Internet mode** option.
IP address	Specify the IP addresses at which the game server will be accessible.
Game server port	The port number the game server will work on. Default is 27015.
Maximum number of players	The maximum number of players who can simultaneously connect to your game server.
Game server auto update	Use this to automatically update the game server through the Internet upon each start.
Use WON authorization server	If you set up a game server in LAN without Internet access, and do not want your game server to connect to WON authorization server, leave this checkbox cleared.
Use Valve anti-cheat module	Valve Anti-cheat is the program that bans cheaters from game. The ban issued to the cheater depends on the severity of the cheat, and the number of offenses.
RCON password	Remote Console password is required if you wish to manage the game server remotely. The RCON password is also used by Parallels Plesk Panel for restarting the game server.
Game server entry password	If you wish to restrict access to your game server, specify the password that the authorized users will use for entering this game server.

Subsequently, when you need to modify these settings, you will access this screen by clicking **Extensions** > **Counter-Strike** > **game server name** > **Configuration tab**.

> ➢ *To fine tune your game server by modifying configuration files:*

1. Go to **Extensions** > **Counter-Strike** > **game server name** > **Configuration tab**.

2. In the **Configuration file** group, select the configuration file you need and click the **Edit** button.

3. In the **Commands** text input area, enter a list of commands. To generate the list of commands, we recommend that you use the Configuration Editor Tool available at http://server.counter-strike.net. To use the Configuration Editor, open http://server.counter-strike.net/server.php?cmd=tools# in a new browser window and click the **config editor** link in the left navigation pane. A pop-up window will open. Specify required settings and click **Configure!** at the bottom of the page. A list of commands will be generated and displayed in the **Generated Server.cfg** section of the page. Copy the generated commands to the clipboard, then return to your Parallels Plesk Panel and paste them into the **Commands** text input area.

   Note: Changes made to the configuration file will affect all game servers that run on a given configuration.

4. Click **OK** to submit the changes.

> ➢ *To create a new configuration file:*

1. Go to **Extensions** > **Counter-Strike**.

2. Click the **Configuration Files** icon.

3. Click the **New Configuration** icon.

4. Enter the mod name, configuration name (not the file name!) in the **Name** field, and a description of this configuration file that will be displayed in the list of game servers.

5. In the **Commands** text input area, enter a list of commands. To generate the list of commands, we recommend that you use the Configuration Editor Tool available at http://server.counter-strike.net. To use the Configuration Editor, open http://server.counter-strike.net/server.php?cmd=tools# in a new browser window and click the **config editor** link in the left navigation pane. A pop-up window will open. Specify required settings and click Configure! at the bottom of the page. A list of commands will be generated and displayed in the Generated Server.cfg section of the page. Copy the generated commands to the clipboard, then return to your Parallels Plesk Panel and paste them into the **Commands** text input area.

6. Click **OK** to submit your configuration.

7. If you wish to apply this configuration to a game server at this time, go to **Extensions** > **Counter-Strike** > **game server name** > **Configuration tab**, select the configuration file you need in the **Configuration file** group, and then click **OK**.

➢ *To modify a configuration file you created:*

1. Go to **Extensions** > **Counter-Strike**.

2. Click the **Configuration Files** icon.

3. Click the configuration name you need.

4. Modify the settings as desired and click **OK**.

➢ *To remove a configuration file:*

1. Go to **Extensions** > **Counter-Strike**.

2. Click the **Configuration Files** icon.

3. Select the corresponding checkbox and click **Remove Selected**.

4. On the next page, confirm the removal and click **OK**.

Note: You cannot delete the default configuration file. You can only edit it.

Choosing Maps for the Game

> ➢ *To select maps that will be available for users playing a specific type of game:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the game server's name.

3. Click the **Maps** tab. The tab has two lists: the left-hand list displays all available maps and the list on the right contains all maps available for users playing on this game server.

4. To add a map to the game, move maps from the list of available maps to the list of selected maps by using the **Add >>** and **<< Remove** buttons.

5. Click **OK.**

To simplify map selection, you can sort all maps by mission types, such as saving hostages, assassination of VIP persons, planting a bomb, knife arena, team deathmatch, escape from the area, or Arctic Warfare Police. To view all maps related to the category of interest, select the category in the **Map categories** menu.

The maps for a game will be played consequently as they go in the list, starting from the default map selected in the **Default map** menu. To move a map downward or upward in the list, use the **Move Up** or **Move Down** buttons, respectively.

Note: Each game mod has a standard set of maps. If you remove such a standard map from the list of maps (do not confuse the standard map with the default map!), they will be automatically installed during updating of your game server.

In this section:

Adding and Removing Maps

> ➢ *To add or remove maps that your game servers can use:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the **Maps Management** icon. The list of all maps for all game mods will show.

3. To view only the maps related to a specific game mod, select the respective option in the **Select the game modification** group.

4. To upload a new map, click the Browse button, select the map file you need (in zip or bsp file format), and then click **Upload**.

5. To remove the map you do not need, select the corresponding checkbox and click **Remove Selected**.

Delegating Permissions for Managing Game Servers to a Panel User

> ➢ *To delegate permissions for managing game servers to one of your customers registered with your Parallels Plesk Panel:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the **Game Server Operator** button.

3. On the page that opens, enter the username of a Parallels Plesk Panel user in the **Login** field.

> ➢ *To revoke permissions to manage game servers from a user:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the **Game Server Operator** button.

3. On the page that opens, delete the username from the **Login** field and leave this field blank.

Starting, Stopping, Restarting Game Servers

➢ *To start, stop or restart a game server:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the ✅ icon to stop a running game server, ❌ to start a stopped game server and the 🟧 icon to restart it.

Alternatively, you can click a game server name. Then click the ▶ button to run a game server, the 🟥 button to start it, and 🟧 to restart it.

Updating Game Servers

➢ *To update the game server files and components:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Click the **Update Game Servers** icon.

3. A page displaying all game modifications available for updating will appear. Each mod title is accompanied with the following icon indicating whether the mod is already installed: ✓ - the game mod is already installed and ✗ - game mod is not installed.

4. If you want to use another Steam account for updating, click **Switch Steam Account**.

5. Select the checkboxes corresponding to the game mods you want to update and click **OK**.

6. In the next step, the selected game components will be updated. When finished, click **OK** to quit the wizard.

In case of updating failure you can view the log file for details. To do this, click the link next to the operation result icon.

Removing Game Servers

➢ *To remove a game server:*

1. Click the **Extensions** shortcut in the navigation pane and, in the **Extensions** group, click the **Counter-Strike game server** icon.

2. Select the checkboxes corresponding to the game servers you want to remove, and click **Remove**. On the next page, confirm removal and click **OK**.

File Server Extension

The File Server extension enables Parallels Plesk Panel administrators to share directories on a network directly from the Parallels Plesk Panel. Using the Parallels Plesk Panel File Server, you can share access to a directory on your server, grant access to this directory to specific users or hosts, and assign read-only or write permissions for this directory. File Server uses the Microsoft SMB (Server Message Block) protocol to share resources on a Samba server for network users.

For the Parallels Plesk Panel File Server, the Samba server (version 2.2.x or 3.x) must be installed and properly configured.

In this section:

How to Access File Server

➤ *To access the File Server:*

Click the **Extensions** shortcut in the navigation pane > **Samba File Server Configuration**.

The page that opens is the File Server management page from where you can perform all File Server operations. This page has five tabs: **Status**, **Shares**, **Users**, **Interfaces**, and **Access**. Each of these tabs contains tools for managing shared resources, file server properties, network interfaces, and users and computers who will have access to the shared directories.

Configuring File Server

This section describes how to perform the following operations:

- Configure the file server.
- View the current usage of shared resources.
- Refresh server statistics.
- Disable your file server.

➢ *To view the current status of your file server:*

1. Go to **Extensions** > **File Server** > **Status**.

2. In the **Current statistics** section, view whether your file server is started or stopped. The statistics on the current connections to shared directories is provided in the table with the following columns:

- **Share**, name of the shared resource.
- **Host**, name of the remote host currently connected to the shared directory.
- **User**, user name who is currently connected to the shared directory.

➢ *To configure the file server:*

1. Go to **Extensions** > **File Server** > **Status** > **Preferences**.

2. To change the workgroup for your server on the Microsoft network, click in the **Workgroup** field and enter the name of a workgroup. If needed, edit the description in the **Description** field containing an optional description of your file server.

3. You can also configure the following security parameters for your Samba server:

- **Authentication mode**. Select one of the following security modes:
  - **Share** - in this security mode, the user authenticates themselves separately for each share. The user sends a password along with each tree connection (share mount). Passwords are meant to be associated with each share, independent of the user.
  - **User** - this security mode is based on verifying the username and password. The server can either accept or reject the username and password combination. At this stage the server has no idea what share the client will eventually try to connect to, so it bases the accept/reject decision only on the username and password and the name of the client machine.
  - **Server** - in Server Security Mode, the Samba server receives the username and password from the client and sends a session setup request to the machine designated as the password server. If the password server is in user-level security and accepts the password, Samba accepts the client's connection. The client sends all passwords in encrypted form. This security mode requires the use of a password server (see Authentication server).

- **Domain** - in Domain Security Mode, the Samba server has a domain security trust account (a machine account) and causes all authentication requests to be passed through to the domain controllers. In other words, domain security has basically the same concept as server security mode, with the exception that the Samba server becomes a member of a Windows NT domain. This means that the Samba server can participate in things such as trust relationships.

- **ADS** - in this mode, the authentication procedure is performed through an Active Directory domain. Samba in this security mode can accept Kerberos tickets.

- **Authentication server**. If you set the security mode to either Server, Domain, or ADS, you will need to specify the password server (or the authentication server). For user and share modes, the password server is not required.

  In this field, enter the NetBIOS name of the SMB server used as a password server, on which the Samba server will check the entered passwords. You can list multiple NetBIOS names separated with a space. This allows Samba to attempt a session setup request to each machine in the list in order until a server is contacted. This means that the next machine on the list is contacted only if the previous machine was unavailable.

  You must use only the NetBIOS name of the password server (not the IP address), and Samba must have a way of resolving the name to an IP address in order to attempt the connection.

  To create a local account for all users that access the Samba server and disable the password field, set this field to the asterisk character (*).

- **Encrypt password**. Select **Yes** if you want to store passwords used to authenticate users in encrypted form or **No** if password encryption is not required.

- **Guest account**. In this menu, select the system user whose rights will be granted to users logged on under the guest account. If you have no guest account on your server, select the **no guest account** option. If you need a guest account for anonymous users, it is advised that you select the **nobody** option.

  For details on the Samba security configuration options, please refer to the relevant Samba documentation.

➢ *To refresh data on the current connections to your file server:*

1. Go to **Extensions** > **File Server** > **Status**.

2. Click the **Refresh** button. The list of current connections and file server status will be refreshed.

➢ *To disable your file server:*

1. Go to **Extensions** > **File Server** > **Status**.

2. Click the **Disable** button.

Managing Shares

> ➤ *To view the list of existing shared resources:*

1. Go to **Extensions** > **File Server** > **Shares**.

2. View the following information about each share:

   - **Name**, displays the name of the shared resource.

   - **Real path**, shows the path to the shared resource.

   - **Description**, contains the description of the shared directory as specified during its creation.

   - **W**, write permissions show whether users can add new files to this directory. The ⬤ icon means that write permissions are set for this directory. The ❌ icon means that the directory is read-only.

> ➤ *To add a new shared resource:*

1. Go to **Extensions** > **File Server** > **Shares** > **Add New Share**.

2. In the **Preferences** group, enter the name of the shared directory, full path to the directory you want to share and its description. If you want to give write permissions for this directory to network users, select the **Writable** checkbox.

3. To select the users that will have access to the shared directory:

   - Select the **Any user** option if you want to grant access to the shared directory to all network users.

   - Select the **Selected only** option to grant access to the shared directory only to specified users. Select the users that will have access to this directory from the **Available users** list by using the **Add** and **Remove** buttons. If access is allowed for some users, they should specify their login and password to access this folder.

   Note: If you want to add other users to the **Available users** list, you must first add them using the **Add New User** button on the **Users** tab. See Managing Users (on page 373) on how to add new users.

4. Click **OK**.

> ➤ *To edit the properties of a share:*

1. Go to **Extensions** > **File Server** > **Shares**.

2. Click the name of the shared directory you want to edit.

3. Change the necessary parameters.

4. Click **OK**.

Managing Users

➢ *To view users who can have access to the shares:*

1. Go to **Extensions** > **File Server** > **Users**.

2. View users listed in a table with the following columns:

   ▪ **Name**, displays the username.

   ▪ **System user**, shows the system user account this File Server user belongs to.

➢ *To add a new user to the list of available users:*

1. Go to **Extensions** > **File Server** > **Users** > **Add New User**.

2. Specify the following parameters:

   ▪ **System user** - select the corresponding system user from the menu.

   ▪ **Name** - username that will be used to access a share.

   ▪ **Password** - password used to access a share.

   ▪ **Password confirmation** - confirm the password.

   All these fields are mandatory.

Note: You can add only one File Server user for each Unix system user.

➢ *To edit the user data:*

1. Go to **Extensions** > **File Server** > **Users**.

2. Click the user name you want to edit.

3. Change the parameters as needed and click **OK**.

Managing Broadcast Interfaces

By default, broadcast mode is disabled for all network interfaces mainly for security reasons. Broadcast mode enables sending data packets to the broadcast address. However, you can manually prevent your File Server from sending broadcast packets to specified network interfaces.

➢ *To view the list of network interfaces:*

1. Go to **Extensions** > **File Server** > **Interfaces**.

2. The list is organized as a table with the following columns:

   ▪ **S** - an icon indicating the status of the network interface. The ⬤ icon shows that the broadcast mode for the interface is enabled, the ⊗ icon shows that the broadcast mode is disabled for this interface, and the ⚠ icon means that broadcast mode for this interface was enabled but now the interface is physically unavailable (was removed or corrupted).

   ▪ **Interface name** - the name of the interface, for example, eth0, eth1, and so on.

   ▪ **IP Addresses** - all IP addresses and subnet addresses that work on this interface.

➢ *To enable broadcast mode for an interface:*

1. Go to **Extensions** > **File Server** > **Interfaces**.

2. Click the ⊗ icon in the **Status** column of the table listing interfaces. The selected interface will be set to work in broadcast mode.

➢ *To disable broadcast mode for an interface:*

1. Go to **Extensions** > **File Server** > **Interfaces**.

2. Click the ⬤ or ⚠ icons in the **Status** column of the table. Broadcast mode will be switched off for the selected interface.

Limiting Access to the File Server

If you want to enhance the security of your file server, you can regulate what hosts or networks will have access to your shared resources. Connections from other hosts will be refused by your file server.

> ➤ *To view all hosts and networks that have access to your file server:*

1. Go to **Extensions** > **File Server** > **Access**.

2. View the table. If the list is empty, all hosts can access your file server. This is the default option.

> ➤ *To allow access to your server only from a specific range of hosts:*

1. Go to **Extensions** > **File Server** > **Access** > **Add New Host/Network**.

2. Enter the IP address of the host you want to allow access (for example, 123.123.123.1) or the range of hosts (for example, network address/subnet mask written as 123.123.123.0/255.255.255.0).

3. Click **OK**.

This will allow only the specified hosts to connect to the shared resources on your file server. All connections from other hosts will be refused by the file server.

> ➤ *To edit the list of hosts that have access to your server:*

1. Go to **Extensions** > **File Server** > **Access**.

2. Click the address of the host in the list of allowed hosts.

3. Edit the host IP address or subnet mask (for multiple hosts) in the **Network/Host address** field.

4. Click **OK**.

> ➤ *To remove an address from the list:*

1. Go to **Extensions** > **File Server** > **Access**.

2. Select the checkbox corresponding to the host address you want to remove and click **Remove**.

3. Select the **Confirm removal** checkbox and click **OK**.

Firewall Extension

Parallels Plesk Panel Firewall is an extension that protects your Parallels Plesk Panel-enabled server and private network from unauthorized access. With this extension, you can easily set firewall rules and fine tune them through a user-friendly interface.

In this section:

Setting Up Firewall

After you installed the extension, you can do the following:

- View and change the predefined rules that control connections to the following system services: Administrative control panel; Web server; FTP server; SSH server; SMTP server; POP3 server; IMAP server; mail password change service; MySQL server; PostgreSQL server; Samba file sharing server for Windows clients; VPN; domain name server; ICMP echo requests. By default, these rules allow all incoming connections to these services.

- View and change the predefined system policies that define what to do with all incoming, outgoing, and transit communications that do not match the explicitly defined rules.

- Add, change, and remove custom rules. For example, you may want to add a rule that will allow access to FTP accounts on the server in passive mode.

In this section:

Managing Access to System Services

For each system service, you can choose whether to allow or deny all incoming communications, or allow only communications coming from specific IP and network addresses.

➢ *To allow or restrict access to a service on your Parallels Plesk Panel server:*

1. Go to **Extensions** > **Firewall** > **Edit Firewall Configuration**.

2. Click the service name.

3. Do any of the following:

   - To allow all incoming connections, select the **Allow** option and click **OK**.

   - To deny all incoming connections, select the **Deny** option and click **OK**.

   - To deny access to a service from specific IP and network addresses, select the **Allow from selected sources, deny from others** option, specify the IP address or network address from which access to the selected service is allowed, and click **Add**. After you specify the required addresses, click **OK**.

4. To apply all changes to the firewall configuration, click **Activate**, and then click **Activate** again.

Managing System Policies

System policies define what to do with all incoming, outgoing, and transit communications that do not match the explicitly defined rules. The system policies are usually displayed at the bottom of the list of rules.

> ➢ *To allow or deny communications of specific type:*

1. Go to **Extensions** > **Firewall** > **Edit Firewall Configuration**.

2. Click the icon to the left of the policy name you want to change. If the policy currently allows all connections, clicking this icon will prohibit all connections and vice versa.

3. To apply the changes, click **Activate**, and then click **Activate** again.

Managing Custom Rules

This section describes how to add, modify, remove custom rules, and change the order in which the rules are applied. This section also covers the steps required for enabling passive mode for FTP connections.

➢ *To add a custom rule:*

1. Go to **Extensions** > **Firewall** > **Edit Firewall Configuration**.

2. Click **Add Custom Rule**.

3. Enter the name of the new rule in the **Name of the rule** field.

4. Select one of the following communication directions: **Incoming** for the communications inbound to the server, **Outgoing** for communications outbound from this server, or **Forwarding** for communications transiting through your server in any direction.

   For incoming communications you can specify the destination ports on your server, the protocol used for this communication, and the IP address the communications come from.

   For outgoing communications you can specify the destination ports, destination IP address, and the protocol used for the communication.

   For transit communications going through the server, you can specify the destination ports and source / destination IP addresses.

5. To specify the port number, type it into the **Add port** input box, and click **Add**. To remove a port number from an existing rule, select it from the list and click **Remove**. If the list of ports is empty, this rule will be applied to all TCP and UDP ports.

6. To specify the IP address or network address, type it into the **Add IP address or network** input box, and click **Add**. To remove an IP address or network from the list, select it in the list and click **Remove**. If the list of IP addresses is empty, this rule will be valid for all IP addresses.

7. Specify the action that will be applied to the communications that match the defined criteria: **allow** or **deny**.

8. Click **OK** to submit the rule.

9. After you have defined the required rules, click **Activate** to apply them to your system. A confirmation screen will open, in which you can preview the shell script generated to apply your rules (this might be of interest only to advanced users). Click **Activate** to apply the new configuration.

When the new configuration is being applied, the extension will check for connection with the Parallels Plesk Panel. If there are some connection problems, the Firewall extension will automatically revert to the previous active configuration in 60 seconds. Thus, if you misconfigure your firewall in such a way that access to your Parallels Plesk Panel is prohibited even for you, this wrong configuration will be automatically discarded and you will be able to access your server in any case.

Note: Unless your configuration is activated, you have a chance to discard all the rules you configured. To do this, click the **Revert to Active Configuration** button.

Under FreeBSD, all currently established TCP connections will drop when the new configuration is activated!

➢ *To edit a custom rule:*

1. Go to **Extensions** > **Firewall** > **Edit Firewall Configuration**.

2. Click the rule name in the list of existing rules. Make necessary changes (the options are the same as when creating a new rule).

➢ *To remove a custom rule:*

1. Go to **Extensions** > **Firewall** > **Edit Firewall Configuration**.

2. Select the checkbox corresponding to the rule you want to remove and click **Remove Selected**.

➢ *To change the order in which your custom rules are applied:*

1. Go to **Extensions** > **Firewall** > **Edit Firewall Configuration**.

2. Click the icons **Up** or **Down** in the **Order** column. This will move the rule relatively to other rules covering the same direction (incoming communications, outgoing communications, or data forwarding).

➢ *To enable passive mode for FTP connections on your server:*

1. Log in as "root" to the server shell over SSH.

2. Edit your ProFTPD configuration file.

    a. Issue the command `vi /etc/proftpd.conf`.

    b. Add the following line anywhere within the <Global> section:

    `PassivePorts 49152 65534`

    c. Save the file.

3. Log in to Parallels Plesk Panel as "admin", go to **Extensions > Firewall**, and click **Edit Firewall Configuration**.

4. Click **Add Custom Rule**.

5. Specify the following:

    a. Rule name.

    b. Direction: select **Incoming**.

    c. Action: select **Allow**.

    d. Ports: in the **Add port** input box, enter the value `49152-65534`. Leave the **TCP** option selected, and click **Add**.

6. Click **OK**.

7. Click **Activate**, and then click **Activate** again.

Predefined Firewall Rules Specifications

The following table lists the system services to which you can restrict access using the Firewall's predefined rules.

Service name	Ports used by service
Parallels Plesk Panel administrative interface	TCP 8443
Samba (file sharing on Windows networks)	UDP 137, UDP 138, TCP 139, TCP 445
Parallels Plesk Panel VPN service	UDP 1194
WWW server	TCP 80, TCP 443
FTP server	TCP 21
SSH (secure shell) server	TCP 22
SMTP (mail sending) server	TCP 25, TCP 465
POP3 (mail retrieval) server	TCP 110, TCP 995
IMAP (mail retrieval) server	TCP 143, TCP 993
Mail password change service	TCP 106
MySQL server	TCP 3306
PostgreSQL server	TCP 5432
Tomcat administrative interface	TCP 9008, TCP 9080
Domain name server	UDP 53, TCP 53
ICMP requests	<ICMP echo request>

Watchdog (System Monitoring) Extension

The Watchdog extension is a solution that ensures that your server is clean from malware, all services are up and running and there is enough free disk space on the server.

Watchdog can monitor the following services:

- Web server providing the control panel interface
- Web server providing WWW service to users' sites
- SMTP Server (QMail)
- IMAP/POP3 Server (Courier-IMAP)
- DNS Server (BIND)
- Tomcat
- ColdFusion
- MySQL
- PostgreSQL
- SpamAssassin
- Parallels Premium antivirus

It can start, stop, and restart the services it monitors, and it can be configured to take actions depending on the stability of a service over some time period.

It can run other utilities and notify you when disk space usage has reached the specified amount.

For the purpose of monitoring services and disk space usage, Watchdog uses the monit utility. For information on the monit utility, visit the monit developers' website at http://www.tildeslash.com/monit/.

The Watchdog can scan the server file system for rootkits, backdoors, exploits, trojan horses and other malicious software on demand or on schedule. It can notify you by e-mail of scanning results and show reports through the control panel. It updates its security knowledge base through the Internet before each scan.

For the purpose of scanning the server for malware, Watchdog uses the Rootkit Hunter utility. For information on Rootkit Hunter, visit the Rootkit Hunter developer's Web site at http://www.rootkit.nl.

In this section:

Setting Up and Starting Watchdog Services

After you install the Watchdog extension, you should configure the settings common for all Watchdog services, and then switch on each specific type of service you need.

> ➢ *To configure Watchdog settings common for all services:*

1. Click the **Extensions** shortcut in the navigation pane > **Watchdog**. A list of Parallels Plesk Panel services will be displayed.

2. Click the **Preferences** icon in the **Tools** group.

3. Specify the following settings:

   - **Interface language**. Select the language in which Watchdog should show and send e-mail notices and alerts. By default, the language set for your Parallels Plesk Panel administrator's account is selected.

   - **Automatically refresh pages**. Leave this option selected, if you wish to have the information presented on the screens automatically updated on each poll.

   - **Monitor all services started by administrator**. Leave this option selected if you wish the extension to monitor all the Parallels Plesk Panel services that you start. If you install a new system service later on, the extension will automatically start looking after it. Clear this checkbox, if you are going to shut down some of the Parallels Plesk Panel services and you do not want the extension to bring them up automatically or bother you with any alert messages.

   - **Polling interval.** Specify the interval between service status queries in seconds.

   - **Store resource usage statistics**. Leave this option selected if you wish the system to keep reports on CPU and RAM usage for the amount of time you specify.

   - **Repeat security scanning**. Specify how often Watchdog should scan the server for malicious code.

   - **Send reports**. Specify how often Watchdog should send you consolidated reports on CPU and RAM load, monitored services, disk space partitions and security scanning results.

   - **Send e-mail to**. Specify the e-mail address where Watchdog should deliver alerts and reports. By default, the Parallels Plesk Panel administrator's e-mail address is used.

   - **Send e-mail from**. E-mail address on behalf of which the reports and alerts should be sent. By default, this e-mail address is watchdog@your-host-name.

   - **SMTP server for sending alerts**. Specify local or remote SMTP servers that should be used for sending alert messages. You can specify several host names or IP addresses separated by commas. Leave the **localhost** entry to use your server's SMTP service. If your Parallels Plesk Panel server is not running SMTP service, be sure to specify another remote mail server, otherwise, Watchdog will not be able to send you alerts.

4. Click **Apply** to submit the settings.

You have specified the general settings, and now you can further customize and run the Watchdog services you need: Monitoring of system services and monitoring of disk space usage require fine tuning before you can start them, however, regular security scanning requires no additional setup and therefore will start immediately after you have specified the general settings. By default, security scanning is started at 2 a.m. local time at the beginning of the specified time period.

In this section:

Setting Up and Starting Monitoring of System Services

➢ *To specify what services should be monitored and to start monitoring:*

1. Go to **Extensions** > **Watchdog**.

All services controlled by Parallels Plesk Panel will be listed on the **Services** tab.

An icon in the **S** (status) column shows whether a service is currently monitored by Watchdog and it indicates the status of a service returned by the last poll:

⚪ - the service is not currently monitored.

⓵ - you started monitoring but the service has not yet been polled for its status.

▶ - the service is monitored and Watchdog reports that the service is running.

❌ - the service is monitored and Watchdog reports that the service is down.

⏱ - the service is no longer monitored by Watchdog because this service was unstable.

An icon in the **M** (Monitoring) column shows whether you set Watchdog to monitor the service and it also indicates whether the service was installed on the server and properly configured:

🔽 - the service is not installed or is not configured.

🔍 - you did not set Watchdog to monitor the service.

🔍 - you set Watchdog to monitor the service.

2. Specify the services that should be monitored and specify monitoring preferences:

a. Click a service name.

b. Select the **Monitor the service** checkbox to set the Watchdog to monitor the service.

c. Select the **Save service statistics** checkbox if you wish Watchdog to keep the information on CPU and RAM resources used by the service, and present it in graphical reports (**Extensions > Watchdog > Statistics**).

d. Select the **Stop monitoring the service if it frequently restarts** option, if you wish Watchdog to stop monitoring the service if it fails the specified number of times, and specify the failure ratio. Otherwise the Watchdog will bother you with alert messages each time it attempts to restart a non-responsive service. The default value of five failed attempts should be enough.

e. Specify the time during which Watchdog will be waiting for response from the polled service in the **Connection timeout** box. Watchdog polls the service and then is waiting for response during the specified amount of time. If Watchdog receives no response, it restarts the service. If you host a great number of sites and e-mail accounts on your machine, you are recommended to set the **Connection timeout** for Qmail mail server to 120 seconds, and Apache Web server to 15 seconds, otherwise Watchdog will consider the busy services to be malfunctioning and will restart them.

f. Review the commands that Watchdog uses to start and stop the service. It is recommended that you leave the prefilled values unchanged. You can write custom scripts that, for example, will clean up log files or send an SMS to your cell phone before actually starting the service, and specify the commands to run your scripts in the **To start the service, run the command** field.

g. If you are using the default commands for running the services, leave the predefined value of 60 seconds in the **Service startup time** box. If you are running custom scripts, and they take more than 60 seconds to execute, specify the required time in the **Service startup time** box. When a script is executed but does not complete its work within the specified time frame, Watchdog terminates execution of that script.

h. Click **OK** to submit the settings.

i. Repeat this procedure to configure monitoring for all services you need. If you are satisfied with the default monitoring settings we have predefined for each service, you can set Watchdog to monitor the required services by simply clicking the respective ⊙ icons in the list of services.

3. Once you have specified all services you would like Watchdog to monitor, click the **Enable** icon in the **Tools** group.

Now the services will be monitored in accordance with the settings you specified. If you decided to use the default settings, the following actions will be taken:

- All services will be automatically restarted in case of failure.
- Watchdog will stop monitoring all services failing 5 times out of 5 polls.
- Alert messages will be sent to the e-mail address specified in the Parallels Plesk Panel administrator's account on any event.

➢ *To stop monitoring a specific service:*

1. Go to **Extensions** > **Watchdog**.

2. Click a 🔵 icon corresponding to the service you would like Watchdog to stop monitoring.

➢ *To stop monitoring all services:*

1. Go to **Extensions** > **Watchdog**.

2. Click the **Disable** icon in the **Tools** group.

Important: Performing this action affects the whole monitoring service, meaning that not only all system services, but all disk partitions (see page 389) will stop being monitored.

Setting Up and Starting Monitoring of Disk Space Usage

> ➢ *To configure and start monitoring disk space usage:*

1. Go to **Extensions** > **Watchdog** > the **Disks** tab.

All connected (mounted) devices will be listed.

An icon in the **S** (status) column shows whether a hard disk partition or storage device is currently monitored by Watchdog and it indicates the current disk space usage rate:

- ⚪ - the disk drive or partition is not currently monitored.

- ⓘ - you started monitoring but the disk or partition has not yet been checked.

- ✅ - the disk drive or partition is monitored and Watchdog reports that disk space usage has not reached the threshold you defined.

- ❌ - the disk drive or partition is monitored and Watchdog reports that disk space usage has reached the threshold you defined and soon there will be no free space left on that disk or partition.

An icon in the **M** (monitoring) column shows whether you set Watchdog to monitor disk space usage on a storage device or disk partition:

- 🔍 - you did not set Watchdog to monitor the disk space or partition.

- 🔍 - you set Watchdog to monitor the disk space or partition.

The **Device** and **Mount point** columns show information on storage device and the partition mount point. The **Mount point** column shows hyphen (-) if a partition is no longer connected to the file system: when the partition is reconnected to the system, Watchdog will resume monitoring it.

The **Disk space usage rate** column shows the amount of disk space that can be used without drawing your attention. You can specify the amount of disk space either in percentage from total amount or in measurement units: gigabytes, megabytes or kilobytes. When the specified amount is reached, Watchdog will notify you and run the command you defined. A hyphen (-) in this column shows that the partition or device is not monitored.

The **Files number rate** column shows the amount of files or directories that can be stored on the file system without drawing your attention. The number of files or directories is limited not only by disk space, but also by the file system capacity. You can specify either the exact number of files and directories (if you know it) or a percent from the total amount. Watchdog will notify you when the specified amount is reached. A hyphen (-) in this column shows that the partition or device is not monitored.

The **Command** column shows the command that Watchdog will run when the disk space threshold is reached.

2. Specify the hard drive partitions that should be monitored and specify monitoring preferences:

a. Click a partition or device name.

b. Specify the amount of disk space that can be used without drawing your attention. When this threshold is reached, Watchdog will send you an alert and run the command you specified. We would recommend leaving the 80 % value selected.

c. Specify the number of files and directories that can be created on the server without drawing your attention. When this threshold is reached, Watchdog will send you an alert. We would recommend leaving the 80 % value selected. You can specify the exact number of files, if you know the total capacity of your file system: to find it out, log in as root to the server and run the command `dumpe2fs <device name>` from shell.

d. Specify the command that Watchdog will run when the specified disk space threshold is reached. This can be a command to run a disk space cleaning utility like a tmpwatch on RedHat Linux systems.

e. Click **OK**.

f. Repeat the procedure to configure monitoring for all the partitions you need.

3. Once you have specified all partitions you would like Watchdog to monitor, click the **Enable** icon in the **Tools** group.

➢ *To stop monitoring a specific partition:*

1. Go to **Extensions** > **Watchdog** > the **Disks** tab.

2. Click an icon 🔍 corresponding to the partition you would like Watchdog to stop monitoring.

➢ *To stop monitoring all partitions:*

1. Go to **Extensions** > **Watchdog** > the **Disks** tab.

2. Click the **Disable** icon in the **Tools** group.

Important: Performing this action affects the whole monitoring service, meaning that not only all disk partitions, but all system services (see page 386) will stop being monitored.

Setting Up and Starting Security Scanning

> ➢ *To set up and start regular security scanning:*

1. Go to **Extensions** > **Watchdog** > the **Preferences** tab.

2. Specify how often Watchdog should scan the server for malicious code in the **Repeat security scanning** menu.

3. Click **Apply**.

   Security scanning will start immediately and will repeat in accordance with the settings you defined. By default, security scanning is started at 2 a.m. local time.

> ➢ *To run on demand scanning:*

1. Go to **Extensions** > **Watchdog** > the **Security** tab.

2. Click the **Start** icon in the **Tools** group.

   Watchdog will update its knowledge base and start scanning. Upon completion, a detailed report will be presented on the screen.

> ➢ *To switch off regular security scanning:*

1. Go to **Extensions** > **Watchdog** > the **Preferences** tab.

2. Select the **disabled** value from the **Repeat security scanning** menu.

3. Click **Apply**.

Viewing Status of System Services

➢ *To view the status of Parallels Plesk Panel-managed services:*

▪ Click **Tools & Utilities** > **Services Management**. A list of Parallels Plesk Panel services will show. From that screen you can manage services and view their status.
  Or

▪ Click **Extensions** > **Watchdog**. A list of Parallels Plesk Panel services will show. From that screen you can view service statuses and manage monitoring preferences.

  The following information is displayed:

  An icon in the **S** (status) column shows whether a service is currently monitored by Watchdog and it indicates the status of a service returned by the last poll:

  ⬜ - the service is not currently monitored.

  ❓ - you started monitoring but the service has not yet been polled for its status.

  ▶ - the service is monitored and Watchdog reports that the service is running.

  ❌ - the service is monitored and Watchdog reports that the service is down.

  🟠 - the service is no longer monitored by Watchdog because this service was unstable.

  An icon in the **M** (Monitoring) column shows whether you set Watchdog to monitor the service and it also indicates whether the service was installed on the server and properly configured:

  ⬇ - the service is not installed or is not configured.

  🔍 - you did not set Watchdog to monitor the service.

  🔍 - you set Watchdog to monitor the service.

Viewing Status of Hard Disk Drives and Connected Storage Devices

➢ *To view the status of hard disk drives and other connected storage devices:*

1. Go to **Extensions** > **Watchdog** > the **Disks** tab.

2. View all connected (mounted) devices listed.

Note: Watchdog might not detect properly some mounted devices.

An icon in the **S** (status) column shows whether a hard disk partition or storage device is currently monitored by Watchdog and it indicates the current disk space usage rate:

- ⬤ - the disk drive or partition is not currently monitored.

- ⬤ - you started monitoring but the disk or partition has not yet been checked.

- ✅ - the disk drive or partition is monitored and Watchdog reports that disk space usage has not reached the threshold you defined.

- ❌ - the disk drive or partition is monitored and Watchdog reports that disk space usage has reached the threshold you defined and soon there will be no free space left on that disk or partition.

An icon in the **M** (monitoring) column shows whether you set Watchdog to monitor disk space usage on a storage device or disk partition:

- 🔍 - you did not set Watchdog to monitor the disk space or partition.

- 🔍 - you set Watchdog to monitor the disk space or partition.

The **Device** and **Mount point** columns show information on storage device and the partition mount point. The **Mount point** column shows hyphen (-) if a partition is no longer connected to the file system: when the partition is reconnected to the system, Watchdog will resume monitoring it.

The **Disk space usage rate** column shows the amount of disk space that can be used without drawing your attention. You can specify the amount of disk space either in percentage from total amount or in measurement units: gigabytes, megabytes or kilobytes. When the specified amount is reached, Watchdog will notify you and run the command you defined. A hyphen (-) in this column shows that the partition or device is not monitored.

The **Files number rate** column shows the amount of files or directories that can be stored on the file system without drawing your attention. The number of files or directories is limited not only by disk space, but also by the file system capacity. You can specify either the exact number of files and directories (if you know it) or a percent from the total amount. Watchdog will notify you when the specified amount is reached. A hyphen (-) in this column shows that the partition or device is not monitored.

The **Command** column shows the command that Watchdog will run when the disk space threshold is reached.

Viewing CPU and RAM Usage Statistics

➢ *To view the statistics on CPU and RAM usage by system services:*

1. Go to **Extensions** > **Watchdog** > the **Statistics** tab.

2. In the **Statistics presentation preferences** group, select the period and system services for which you would like to view statistics.

3. Click **Apply**.

   CPU and RAM usage diagrams will be presented on the screen. The CPU Usage diagram will show the total load for all CPUs your server may have.

Viewing Server Scanning Reports

➢ *To view the report for the last system scan:*

1. Go to **Extensions** > **Watchdog** > the **Security** tab.

2. View the detailed report will be presented on the screen. If you wish to run a new scan, click the **Start** icon in the **Tools** group.

Troubleshooting

Issue: When I stop a Parallels Plesk Panel service, it starts automatically, and the extension does not seem to work properly.

Resolution: Make sure you did not remove the Parallels Plesk Panel event handlers that are required for the proper work of the extension:

```
Service started lowest (0) psaadm /usr/local/psa/admin/bin/php
/usr/local/psa/admin/bin/modules/watchdog/wd --monit-service=<new_service>
--plesk-name
Service stopped lowest (0) psaadm /usr/local/psa/admin/bin/php
/usr/local/psa/admin/bin/modules/watchdog/wd --unmonit-
service=<new_service>
--plesk-name
```

Note: If you use Debian Linux or Ubuntu Linux, the path to Watchdog's system files is `/opt/psa/admin/modules/watchdog/`.

Issue: No alerts are delivered.

Resolution: Please check if the outgoing SMTP server settings you specified are correct.

VPN Extension

Virtual Private Networking technologies allow communications between geographically distributed LAN segments over public networks. VPN message traffic passes through public networking infrastructures, such as the Internet, via secure tunnel protocols.

One of the most useful implementations of VPN is allowing access to a local network for a single remote host. For example, if a user needs to get access to a remote network from his home computer, they must establish a VPN connection.

The Parallels Plesk Panel VPN extension extends Parallels Plesk Panel with the ability to support peer-to-peer communication between two Parallels Plesk Panel hosts or between your Parallels Plesk Panel host and any other computer. At present, the Parallels Plesk Panel VPN extension supports connection to the server only from a single remote host and does not support connections from multiple hosts. The extension is based on the OpenVPN solution which uses OpenSSL for encryption and the virtual TUN/TAP driver for tunneling.

In this section:

Software Requirements

You should have one of the following operating systems to use the OpenVPN solution: Linux, Windows 2000/XP and higher, OpenBSD, FreeBSD, NetBSD, Mac OS X, or Solaris.

Accessing the VPN Extension

➢ *To access the Parallels Plesk Panel VPN extension:*

Click the **Extensions** shortcut in the navigation pane > **Virtual Private Networking**.
If you access the extension for the first time, the first page that opens is the VPN Preferences page (on page 397). You cannot get access to other VPN extension options unless you specify the preferences for your VPN connection.

Setting up VPN Preferences

➢ *To set up a VPN connection:*

1. Go to **Extensions** > **Virtual Private Networking**.

2. On the **Preferences** page that opens, specify the following parameters:

   ▪ **Remote Address**, enter the host name or the IP address of the host you want to communicate to. Leave this field blank if you wish the other party to be able to connect to your server from different addresses or if the remote IP address is not known in advance. Note, however, that one server cannot be involved in simultaneous communication with two or more remote hosts.

   ▪ **Remote UDP port**, specify the port on the remote host to which UDP packets from this server will be sent. The default port is 1194. Note that though VPN uses only UDP for the encrypted traffic flow, all IP protocols, including TCP, are supported over the virtual private network. You can leave this field blank if you have not specified the remote address above.

   ▪ **Local UDP port**, your server will listen for incoming VPN traffic on this local UDP port. The default port is 1194. You can leave this field blank if you do not want to allocate a specific port, but in that case you must specify the remote address and port fields above to allow the local host to be the initiating party.

   ▪ **Local peer address** and **Remote peer address**, two hosts connected by a VPN channel need to have a pair of virtual network interfaces to route the traffic through. You need to assign two IP addresses to them, one for each side of the VPN circuit. These IP addresses should be chosen from some private address spaces and it is important that they should not overlap with any of the IP addresses present within the local networks on either side of the tunnel. These two addresses must differ only in the two least significant bits. You can pick .1 and .2 for the last octets, for example. Note that the default values are only an illustration! Always check the real configuration of your network so that you do not run into IP collision problems.

3. Click **OK**.

Note: The Parallels Plesk Panel VPN extension is initially disabled. To use the VPN functionality, enable the extension by clicking the **Enable** button.

Managing Keys

To establish a VPN connection between your Parallels Plesk Panel server and a remote host, both sides must have the same cryptographic key. This key is required for authentication and encryption of your traffic, ensuring that your communications cannot be eavesdropped or interfered by a third party. Do not forget to share the same key between both communicating parties each time you generate or upload a new key.

A cryptographic key is generated automatically and saved to a special directory during extension installation. However, you might want to replace the initial key with the new one.

➢ *To generate a new VPN key:*

1. Go to **Extensions** > **Virtual Private Networking**.

2. Click **Generate Key**. The new key will automatically replace the existing key.

Note: After the new key is generated, your old key will become invalid. In order to continue communication, you must share the new key with the other communicating party.

➢ *To save the generated key to your local machine:*

1. Go to **Extensions** > **Virtual Private Networking** > **Download Key**.

2. Save the key to a specified location on your disk.

You can then transmit this key file to another host on removable media or through another secure way.

➢ *To upload a cryptographic key that you received from another machine:*

1. Go to **Extensions** > **Virtual Private Networking** > **Upload Key**.

2. Specify the location of the key file and click **OK**.

This way of key management is especially useful if you are establishing a VPN connection between two Parallels Plesk Panel-enabled servers. If the remote host does not have Parallels Plesk Panel, it is more convenient to use client packages (on page 399).

Using Client Packages

To simplify the task of connecting a non-Plesk host to your Parallels Plesk Panel server, Parallels Plesk Panel supplies preconfigured client packages containing configuration files and the cryptographic key for the other party. The contents of the archives are specifically tailored to the preferences you have specified earlier.

- If your user is running Windows, click **For a Windows Client** to download and save the client package on your local machine.

  The client package is a ZIP archive that contains the following files:

    - `Install TAP device.bat` - installs the TAP driver on your computer.

    - `Uninstall TAP device.bat` - removes the TAP driver from your computer.

    - `Connect to VPN.bat` - establishes a VPN connection.

    - System folder - contains the cryptographic key and your VPN preferences.

  To install and uninstall the TAP drivers, you must have Windows administrator rights on your computer.

  To install the TAP driver, run the `install TAP device.bat` file. After the driver is installed, you can establish a VPN connection to the Parallels Plesk Panel-enabled server by running the `connect to VPN.bat` file. The OpenVPN software itself is contained within the client package and does not require any installation or removal procedures.

- If your user is running Unix, click **For a Unix client** to download and save the client package on your local machine.

  The package contains the `openvpn.conf` file with your current VPN preferences and the `vpn-key` file that is a cryptographic key for your VPN connection. If you are using this package, OpenVPN (version 2.0) must be already installed on the client machine. For smooth operation, we advise that you use OpenVPN 2.0 beta 11 as the extension was tested on this beta version.

If the preferences on the Parallels Plesk Panel server change or a new key is generated or uploaded to the Parallels Plesk Panel server, the client packages must be downloaded again because they include your current key and existing VPN preferences.

Starting and Stopping a VPN Connection

➢ *To enable a VPN connection from Parallels Plesk Panel:*

1. Go to **Extensions** > **Virtual Private Networking**.

2. Click **Enable**.

➢ *To disable a VPN connection from Parallels Plesk Panel:*

1. Go to **Extensions** > **Virtual Private Networking**.

2. Click **Disable**.

If you want to disable a VPN connection on a Windows client, close the **Connect to VPN** dialog box that appeared when you established your connection. When the Windows user logs out, the VPN connection shuts down as well.

Business Manager Administration

In this chapter:

Business Manager Licensing

Business Manager is the Panel component, and you should change the Panel license to switch to full-featured Business Manager. The license management facilities are found in the Panel, at **Server Management** > **Tools & Utilities** > **License Management.**

To view information related to the license for your Business Manager, go to **Business Setup** > **All Settings** > **License Info**. Here you will find the following:

- **Business Manager**. This will tell you the version number you are running. The build number is not included here.
- **License**. This will tell you what kind of license you have.
- **Max Customers**. Each license has a particular customer capacity. This will tell you the maximum number of non-archived customers you can have in your system before you need to upgrade to a larger capacity license.
- **Renews on**. Each month, your system calls out to our licensing server to verify that your license is still valid. The date listed here lets you know when the next call is due to occur.

If you have questions on the licensing, contact Parallels sales.

Viewing System Information on the Dashboard

To keep you notified about important events in the system, Business Manager displays facts require your attention on the **Home** page. Particularly, on this page, you see the following:

- *New subscribers* (**Pending Customers**).

  After new customers complete the ordering process, they appear in the list of **Pending Customers** and the system wait for your approval. You can review the accounts and have options to activate each account, cancel it, or mark it as fraud. Only customers with activated accounts will be able to log in to the system. If you suspect than an account is fraudulent or you do not want to activate it for another reason, you can cancel the subscription or mark it as fraud for future reference. Whatever option you choose, customer accounts will remain in Business Manager.

  If you want to completely automate new orders processing, enable the FraudGuardian.

- *System statistics* (**System Overview**)*.*

  This widget shows statistical information such as number of customers, subscriptions, and invoices.

- *Information on syncing objects with connected Panels* (**Sync Statistics**).

  Each time a new plan, new customer, or new subscription appears in Business Manager, it adds them to a connected Panel. To keep the related objects in actual state, Business Manager *syncs* them each 5 minutes, or, in other words, updates Panel objects to match the current state of Business Manager objects. If you see that there errors occurred during the syncing, you can run it manually from the **Business Monitoring** > **Tasks** page or find other instructions in the section **Troubleshooting**.

- *Items that may require your personal attention or actions* (**To-do Items**).

  For example, a hosting subscription may not have been provisioned correctly, or there may be some trouble with a customer's domain registration. When this happens, Business Manager sends you a note by creating a to-do item and showing it on the **Home** page.

Administering Customers

Here you will find a one-stop shop for customer management. You can approve new customers, view your archived and non-archived customers, or add new customers. You can also view statistics about your customers and access customer details.

In this section:

Adding New Customers

There are two main methods for new customer records to be added to your Business Manager system: through the administrator interface (available for Business Manager administrators) and through the order process.

Adding customers through the administrative interface is a one-step procedure that involves adding customer details, contact details, and billing account. Each customer account can have several contacts tied to it. In this step you will specify the first of these contacts.

➢ *To add a customer account:*

1. Go to **Business Operations** > **Customers** and click **Add New Customer**.

2. Enter **General Settings**, and **Primary Contact Information**.

3. Set up a **Billing Account** for the customer.

4. Click **Add Customer**.

You have completed the process of adding a customer account. You can now view the details of this account and begin to add subscriptions and generate invoices by clicking the **Customer ID**.

Managing Existing Customers

Business Manager allows managing your customers through the **Customer Summary** page which you can access at **Customers** > select specific customer. The Customer Summary page lists contact details, various billing information, subscriptions details, and notifications sent to customers.

To manage the details of a customer account, go to **Business Operations** > **Customers**, find the customer you want to view, and click Full Name corresponding to an account.

In this section:

Managing Billing Accounts and Details

In this section:

Adding Billing Accounts

➢ *To add a billing account to a customer account:*

1. Go to **Business Operations** > **Customers** > click a specific account.

2. Click **Show All Billing Accounts** in the **Billing Account Summary** section

3. Find the contact you want to add a new billing account for and click **Add Billing Account to Primary Contact**.

4. Select the type of billing account you want to add for this customer.

5. Fill out the details section according to the type of billing account you chose in Step 4 above.

6. Click **Save Billing Account**.

Editing Billing Accounts

You can edit any billing accounts associated with a customer's account.

➢ *To edit a billing account:*

1. Go to **Business Operations** > **Customers** > click a specific account.

2. Click **Show All Billing Accounts** in the **Billing Account Summary** section.

3. You will see a list of all billing accounts (if available) and their associated contacts.

4. Find the billing account you want to modify in the list and click its name.

5. Edit the account details.

6. If encryption is turned on, enter your **Encryption Passphrase**.

7. Click **Update Billing Account**.

Note: To remove the billing account, click **Remove** in the **Available Operations** list.

Viewing Accounting Totals

This section outlines the following account and balance information available at a customer summary page (accessed from **Business Operations** > **Customers** > click a customer name).

Accounts Receivable - money owed to you by the customer. Here you can also view the detailed **Customer Payment History** if you click the **Accounts Receivable** link.

Credit. This option allows you to credit your customers.

Accounts payable. This is the money to be paid by you to the customer.

Refunds. This field shows you the total refunds.

Expenses. This shows the expenses.

Viewing Billing Account Summary

The **Billing Account Summary** counts the number of billing accounts by type. In this section you can also **Add Billing Account to Primary Contact**. See the **Adding Billing Accounts** (on page 405).

It is also possible to see all billing accounts of this customer. For this, click the **Show All Billing Accounts** link. You will see the list of all billing accounts for this customer account.

You can also view a callback log by clicking the **Show Callback History** link.

Managing Customer Invoices

In this section:

Viewing Invoice History

The invoices history displays invoices due and invoices paid. This page also allows you to view all invoices for this customer, to generate invoices, to take customer payment, and to add single invoice.

➢ *To view all invoices:*

1. Go to **Business Operations** > **Customers** > click a certain account.

2. Click the **Show All Invoices** link in the **Invoice Summary** section.

    You will see a list of invoices (assuming invoices have been generated).

Generating Invoices

➢ *To generate an invoice:*

1. Go to **Business Operations** > **Customers** > click a certain account.

2. Click the **Generate Invoice** link in the **Invoice Summary** section.

3. Specify the generation settings and click on the **continue** button.

4. If you selected to preview invoices, review them and click the **Proceed with invoice generation** button.

Adding Custom One-Time Invoice

Business Manager allows you to create and generate a single (one-off) invoice for one-time charges.

➢ *To generate a single invoice:*

1. Go to **Business Operations** > **Customers** > click a certain account.

2. Click the **Add Custom Invoice** link in the **Invoice Summary** section.

3. On the form that appears, enter appropriate information:

   1. Enter a short description for the invoice.

   2. You can also add a **Long Description**.

   3. Set the **Invoice Date**.

   4. Enter the **Invoice Amount**.

   5. Tick the box, if you would like to send your customer an e-mail with invoice.

   6. Set the period to defer revenue.

4. Tick the box next to the **Apply a payment as well**, if you would like to take manual payment for the service provided. Enter all necessary information.

5. Click **Process Invoice**.

Taking Customer Payment

➢ *To take customer payment:*

1. Go to **Business Operations** > **Customers** > click a certain account.

2. Click the **Take Customer Payment** link in the **Invoice Summary** section.

3. Choose the invoice to be charged.

4. If the encryption is on, enter your LEK PIN.

5. Click **Charge account**.

Managing Customer Details

From the **Customer Summary** page you can edit customer details, manage customer account properties, add new primary/additional contact, or edit existing contacts.

In this section:

Editing Customer Details, Status and Billing Account

> ### *To Edit Customer Details:*

1. Go to **Business Operations** > **Customers** > Click a customer's full name.

2. Click **Edit Details** in the **Customer Details** section and update the details.

3. Click **Save.**

Managing Contacts

One customer in Business Manager can have several contacts. One of the contacts will be set as a primary contact, all the other will be additional contacts. The **Customer Summary** page allows adding new contacts, editing existing contacts, logging in as primary contact, and resetting and resending password.

> ### *To add a new contact:*

1. Go to **Business Operations** > **Customers** and click a customer's full name.

2. Click **Add New Contact** in the **Customer Primary Contact** section.

3. Specify the contact information and click **Save**.

> ### *To edit a contact:*

1. Go to **Business Operations** > **Customers** and click a customer's full name.

2. Click **Edit Contact Info** link.

3. Edit all necessary information and click **Save**.

Editing Customer Account Properties

The **Customer Summary** page lists the customer-related properties. The system uses them to apply a special logic to customers who have these properties. For example, it is possible to apply discounts using properties. You are also able to edit the properties for a customer.

➢ *To edit the properties:*

1. Go to **Business Operations** > **Customers** and click a customer's full name.

2. Scroll down to the **Properties** section.

3. Click the **Edit Customer Account Properties** link.

4. Specify if the attribute is active or not.

5. Set the **internal value**.

6. Click **Save All**.

Taking Administrative Actions

Administrative Actions are a collection of actions that help you quickly manage a customer's account. The current administrative actions include:

▪ **Suspend Customer Account**. Select this option if you would like to suspend a customer's account. Such customers will be unable to log into the customer area.

▪ **Cancel Customer Account**. You can use this for customers who let you know they would like to terminate their service. They are also unable to log into the customer area.

▪ **Archive Customer Account**. Archiving a customer essentially makes the customer non-functional. Archived customers do not count against your license limit. The records associated with the customer will be present, but you will not be able to perform any functions on the customer, such as collecting payment for outstanding balances.

Adding Credits to Customer Account

You can deposit funds (credits) into a customer account. The credits are utilized first to pay for subscriptions. When a credit balance is exhausted, the customer's default payment method is used to pay for the services.

> ➢ *To add a credit:*

1. Go to **Customers** and click a customer's full name.

2. Click the **Add Credit** link in the **Accounting Totals** section.

3. Fill in the form and click **Add Credit**.

After you update a customer credit balance, you are able to see the customer's credit balance changes history by locating the customer summary page and clicking **Credits**.

Viewing FraudGuardian Check Results

Business Manager allows you to check your incoming orders for fraud. You can view the results of this check per each customer per order at the **Customer Summary** page.

> ➢ *To view FraudGuardian results:*

1. Go to the **Customer Summary** page accessed at **Business Operations** > **Customers** > click a certain account.

2. Click the **Display/Hide Additional Data** link next to the subscription you want to edit in the **Fraud Results** section.

The page section will show you the total **Fraud Score** for each order, and the other information such as IP, customer bank, e-mail, proxy, etc.

Managing Invoices

The customer summary page allows you to view invoices for a particular customer. The system lists the **Recent Invoices** and gives you the option to **show all invoices** by clicking a respective link. From this section you can view basic details on the invoice, such as the **Invoice Number**, the **Amount** of money, the dates **Entered** and **Due,** and the **Status.** The **Available Operations** column gives you the option to manage and print the invoice.

> ➢ *To manage the invoice:*

1. Go to the **Customer Summary** page accessed at **Business Operations** > **Customers** > Click a customer's full name.

2. Click the **Details** link next to the invoice you want to edit in the **Recent invoices** section.

Note: You will be taken to which can also be accessed from the **Finances** > **Invoices** of the particular invoice.

Adding Notes

The **Recent Notes** section of the **Customer Summary** page shows you the recent notes you added for this particular customer. These notes are strictly internal, and provide only the administrator with additional information.

➢ *To add a new note:*

1. Go to the **Customer Summary** page accessed at **Business Operations** > **Customers** and click a customer's full name.

2. Click the **Read/Add Notes** link of the **Recent Notes** section.

3. Add any information in the **Note text** box.

4. **Add Note**.

Viewing Statistical Information

Quick Stats has two main sections: **Customers by Status** and **Trend Reports**. The top section lists the possible status that a customer may have, and below each status, the number of customers in each category. This number is a link; clicking on it will take you to a screen listing all customers of that type. For example, if you would like to see a list of all your pending customers, you can click on the number underneath the title Pending. Below the actual count is the percentage each category comprises of the total number of customers. Trend Reports actually lists just one report. This report will show all new signups over the last year.

To view the customer statistics, go to **Business Operations** > **Customers** > **Quick Stats**.

The page also shows a pie chart and a key representing each of the numbers and their specific categories.

Viewing Customer Accounts

There are two types of customer accounts in Business Manager - *non-archived* and *archived*. You can filter the customer accounts by this status.

Customers is where you will find information about the vast majority of the customers entered in your Business Manager system. All customers count against your license limit. Initially, the page displays a list of all customers with the status of **Pending**, **Active**, **Canceled**, **Fraudulent**, **Suspended**, **Inactive**, and **Declined**, from newest to oldest. Clicking on one of the column headers will sort your customer data by the relevant heading.

➢ *To view customer accounts:*

Go to the **Business Operations** > **Customers**. This will open a list of accounts.

You can access the customer details screen for each customer listed by either clicking the **Customer ID** or the **Details** link.

Clicking the e-mail address in the **Customers** list will enable you to send an e-mail directly to this customer. You can format these e-mails using various rich text tools.

Verifying New Customer Accounts

To prevent your business from frauds, you can confirm or cancel each registration of a customer account by hand. If you choose **Manual approval of all incoming orders** in as fraud protection policy, you will see a list of all new customer accounts pending approval in the **New Customers** group on the **Home** page.

Click the **Review** link to see more information about a particular order. Once you have verified the order, check the **Activate** or **Cancel** check box and click **Submit**.

Note: If you choose the **Cancel** option, remember to select the appropriate cancelation function in the Define policy on canceling subscriptions for this customer drop down menu at the bottom of the list prior to clicking the **Submit** button.

If you do not want to verify new accounts manually, change the fraud protection policy on the page **All Settings** > **Fraud Protection Settings**.

Viewing Subscription Details

Business Manager allows you to manage customer subscriptions from two sections at **Customer Summary** page: from **Subscription Details** and **Recent Subscriptions** sections. The first of them shows the number of subscriptions the customer owns and allows the administrator to add a subscription to a customer. The **Recent Subscriptions** section provides details on each particular subscription and allows the administrator to manage the subscription. For more details on subscription management, see **Managing Subscriptions** (on page 417).

Sending Mass E-Mails

Along with the automatic e-mails (on page 169) sent by Business Manager when particular events happen, you can also manually send e-mails to selected customers. This is useful when, for example, you need to send an announcement to all, or to selected customers.

If required, you can always re-send an e-mail to all its recipients, be it an automatic e-mail or the one sent manually.

In this section:

Sending E-Mail

➢ *To send an e-mail:*

1. Go to the Sending E-mail Wizard: **Business Monitoring** > **Emails** > **Send Emails**.

2. Specify recipients of the e-mail:

   a. Define the target customers by using **Customers Filter**: enter the customers IDs separated with commas and/or filter them by **Status**, **Customer Group**, **Server**, **Panel Group** and **Plan** if required.

   b. Select the customer's contacts to which the e-mail should be sent, either all or only the primary one.

3. Under **Email Template**, select a template.

   Note that the templates list contains only templates from the group User Defined Emails.

4. Click **Next**.

   A list of e-mail accounts filtered according to the specified parameters (customer filter and contact) is displayed.

5. Verify that the list of contacts is correct and click **Next**.

   Alternatively, click **Back** to go to the previous step and change customer filter or contact settings.

6. On the final screen showing all of the information on the e-mail you are about to send, check the e-mail properties (recipients, e-mail properties, e-mail message body) and click **Send**.

   The e-mail will be sent, and will appear in the **Show Emails** list.

Resending E-Mails Sent Previously

➢ *To resend e-mails:*

1. Go to **Business Monitoring** > **E-mails**.

2. Find the e-mail you want to send again and click **Resend**.

Viewing Latest Correspondence

The **Recent E-mails** section of the **Customer Summary** page shows a list of the last five e-mails sent to the client. Each of the entries shows the following information:

Subject: Click the name and id to view, edit or resend the e-mail.

   Timestamp: Includes date and time the e-mail was sent to the client.

   The system also allows you to **Resend** and **Edit Email** the e-mails on the page that appears when you click the e-mail subject.

Sending Custom E-mails

➢ *To send a custom e-mail:*

1. Go to the customer's details page for the customer you want to send an e-mail to.

2. Click the e-mail address of a customer in the customers list available from **Business Operations** > **Customers**.

3. By default, the customer's e-mail address will already be in the **Contacts** list. If this is not correct, make the necessary changes accordingly.

4. Next, if this e-mail requires a copy e-mail, enter it in the **CC addresses** field.

5. If this e-mail requires an additional copy e-mail (unseen by the recipient), enter it in the **BCC addresses** field.

6. Enter a subject in the **Message subject** field.

7. Enter your e-mail message in the **Message body** field.

8. Click **Send**.

Managing Subscriptions

The services or resources you sell to your customers are organized into plans. A *subscription* is basically a permission to use the services or resources for a particular period of time.

Subscriptions also serve as a connection point in Business Manager. Invoices are tied to subscriptions. So are add-ons. A customer may stay the same, but they may have different subscriptions, and thus different add-ons and invoices, at various times in their life cycle. Subscription to a plan is a prerequisite for billing a customer. You cannot bill a customer unless they have at least one subscription tied to their account.

Business Manager handles subscriptions in two broad categories: domain subscriptions and all others. Domains subscriptions are created when a customer either purchases or transfers a domain through Business Manager.

In this section:

Adding New Subscriptions to Customer Accounts

Usually, customers subscribe to your plans in online stores and Business Manager creates these subscriptions automatically. However, you may need to add a customer's subscription by yourself, for example, if you want to move an existing subscription from one Business Manager server to another.

To add a subscription to a customer account, go to **Business Operations** > **Customers** > **<*customer_name*>** and click **Add New Subscription**. The system will ask you to choose a service plan and a billing cycle and then to provide the subscription's details depending on the selected plan.

Viewing Subscriptions Details

➢ *To view subscription details:*

1. Go to **Business Operations** > **Subscriptions**.

2. Click the name of a subscription you wish to view.

The page that shows will show you **Subscription Details**, including general information, subscription status, pricing information, policy on canceling subscriptions, subscription dates, and payment information. Here you can also view the **Comments** for the plan, the information on **Last Invoice**, and **Subscription Add-ons and Properties** and change the server associated with the subscription. Note that reassigning will tie this subscription to a different panel. It will not move the actual hosting account.

Changing Subscription Status

Business Manager allows for a number of different kinds of subscription statuses. These statuses can be divided into groups based on their behavior:

- **Active**. By far the most common status for a subscription. Active subscriptions are those that, as the name implies, are being actively used by a customer. This might be a current hosting subscription, software license, or service subscription. Subscriptions marked **Active** will be invoiced.

- **Pending**. The first status after a subscription is purchased. Pending subscriptions will be invoiced only once.

- **Canceled**. If a subscription is canceled, it is removed or suspended on the server which stores this subscription. These subscriptions are not invoiced.

    Important: If you manually change the subscription status to Canceled, it will not be canceled. To cancel the subscription, use the policy on canceling subscriptions.

- **Suspended**. If a subscription is suspended, the subscriber is not able to access service plan resources. These subscriptions are invoiced if it is defined in the server-wide settings (on page 163).

- **Pending Renewal**. Applies only to subscriptions which include domain registration. When a domain is approaching its renewal date, and an invoice is sent to the customer, the subscription status is set to this value. Once the customer pays, the invoice and the domain are actually renewed with the registrar, the subscription status again changes to Active. Subscriptions marked as Pending Renewal will not be invoiced.
- **Completed**. This status is assigned when a subscription is available only for a limited number of billing cycles, and this number is reached.
- **Transferred**. If you transfer a subscription from one customer to another, this subscription will be marked as Transferred. These subscriptions are not invoiced.
- **Failed**. Generally, this status is set when provisioning of a subscription fails.
- **Fraudulent**. The FraudGuardian module assigns this status to a subscription if it considers that customer details are fraudulent.
- **Expired**. Subscriptions marked **Expired** will not be invoiced.
- **Submitted**. Subscriptions marked **Submitted** will not be invoiced.

You can create an invoice for a subscription with a status other than active or suspended by manually generating an invoice through the customer summary page.

The system also includes the following statuses that are not set automatically:

- **Stopped**. Subscriptions marked **Stopped** will not be invoiced.
- **Started**. Subscriptions marked **Started** will not be invoiced.
- **Collections**. Assign this status to suspended subscriptions that were not debited for a long period of time. This will simplify the search for problem subscribers and the work of collection departments.
- **In Progress**. Subscriptions marked **In Progress** will not be invoiced.

Why have many different kinds of status, when they all behave about the same? For example, if you are using Business Manager to sell web design in addition to hosting, you may want to set the web design subscription as something other than just **Active** or **Completed**. You may want to **Start** the subscription, it may be **In Progress**, you may have to **Stop** the project for some reason, and the project may become **Inactive**, without ever being completed. These extra status designations allow you to keep track of general information in Business Manager. You can change the status of a subscription at any time.

➢ *To change the status of a subscription:*

1. Go to **Business Operations** > **Subscriptions**. The page displays all subscriptions in the system.

2. Find the subscription you want to edit and click its name.

3. Click **Edit** in the **Available Operations** row.

4. Find the **Subscription Status Options** section. Fill in the corresponding fields with the new status and change reason.

5. Click **Save**.

Note: You can also navigate to a subscription page from **Customer Summary Page** of the customer to whom this subscription belongs. Click **Show All Subscriptions** in the **Subscription Details** box and find the subscription you wish to edit.

Activating or Suspending Subscriptions

Note: The customer subscription should be tied to a control panel in order to suspend/activate the subscription, otherwise the function to perform this action will not appear in the interface.

➢ *To suspend or activate a subscription:*

1. Go to **Business Operations** > **Subscriptions**.

2. Click the name of a subscription you want to suspend or activate.

3. Click **Suspend** or **Activate** depending on the current subscription status.

4. When the events queue runs, the subscription will be set to **Suspended** or **Activated** on a corresponding server.

Canceling Hosting Subscriptions

If a subscription is tied to a panel group, meaning the hosting account is created, follow the instructions in Method 1 below. If the subscription is not tied to a panel group, skip down to the second method.

➢ *To cancel a subscription tied to a panel group:*

1. Go to **Business Operations** > **Subscriptions**.

2. Click the name of a subscription you want to cancel.

3. When the **Available Operations** items appear, click the **Edit** link.

4. Find a **Servers** section, and click the pencil icon in the **Available Operations** column.

5. When a window appears, select **Canceled** from the drop down menu and click the **Edit** button.

A system event will be created. The event will be run automatically if you have your system set up for automation. Otherwise, run the event.

➢ *To cancel a subscription tied to a panel group:*

1. Go to **Business Operations** > **Subscriptions**.

2. Click the name of a subscription you want to cancel.

3. When the **Available Operations** items appear, click the **Edit** link.

4. Select **Canceled** from the **Status** drop down menu.

5. Click the **Save** button.

Running Subscription Tasks

There are two ways you can run subscription tasks:

- All at once.
- One by one.

To run subscription tasks all at once, click the **Run All** link on the **Business Monitoring** > **Tasks** page.

Note: Running all tasks at the same time will process everything, not just subscription related tasks.

To run a single subscription task, find this it in the list on the **One-time Tasks** tab of **Business Monitoring** > **Tasks** and click the **Run Now** link in the **Available Operations** menu for this task.

Editing Subscriptions

Normally Business Manager creates subscriptions automatically basing on plan settings and the information provided by a subscriber, but you can change certain settings of each subscription manually. For example, you can specify a custom name for a subscription or change its status.

To make your business more flexible, Business Manager allows overwriting some plan settings by customer values for each subscription separately. This is useful, for example, to set up more strict rules in the cancelation policy or change the billing cycle. To see the full list of subscription settings and change them, click the **Change Settings** link of the subscription page.

Editing Subscription Prices

A price of a new subscription is equal to the plan price with applied discounts and coupons. However, in some situations it is necessary to specify a custom price or apply a custom tax, coupon, or discount to a subscription. You can achieve this by editing prices of a subscription available on the **Subscription Prices** page (from the subscription overview page, click **Edit Prices** in the **Available Operations**).

Additionally, if a hosting plan settings allow scalable web hosting (using resources over plan limits), you can set custom resources usage prices on this page as well.

To prevent overwriting custom subscription prices when changing plan settings, lock prices of this subscription by selecting the appropriate checkbox on the **Subscription Prices** page.

Note: You still have the option to overwrite prices of both locked and unlocked subscriptions if you specify this option when changing plan settings.

Upgrading and Downgrading Subscriptions

Before you upgrade or downgrade a subscription, make sure you have your plans configured to upgrade. Refer to the section **Upgrading and Downgrading Plans (on page 237)** for details.

➢ *To upgrade a subscription:*

1. Go **Business Operations** > **Customers** and click a customer's full name.

2. Click the name of a subscription you want to upgrade to.

3. Click the **Upgrade** link in the **Available Operations** form that appears.

➢ *To downgrade a subscription:*

1. Go to **Business Operations** > **Customers** > Click a customer's full name.

2. Click the name of a subscription you want to downgrade to.

3. Click **Show/Hide Operations Menu**, and click the **Downgrade** link in the **Available Operations** form that appears.

When you upgrade or downgrade a subscription, you can choose between the three options described below.

- **Upgrade/Downgrade now and apply proration credits**. If this is selected, the system performs the following:
    - Adds money for the remaining number of days till the end of the current billing cycle as credits to the customer account.
    - Creates a subscription of type *Upgrade Fee* or *Downgrade Fee*. The subscription price is the price of a plan the customer upgrades or downgrades to respectively *for the remaining number of days till the end of the billing cycle*.
    - If **Generate invoice immediately** is selected, the system creates an invoice for this subscription for the current billing cycle. The next invoice (for the new plan) will be generated as usual before the next billing cycle. If **Generate invoice immediately** is not selected, the invoice will be generated in the next run of "ProcessInvoices" event. Typically, this event runs daily.
    - Applies the credits to the new invoice.
    - Creates the event to provision the upgraded or downgraded subscription to the Panel.
- **Upgrade/Downgrade now and DO NOT apply proration credits**. If it is selected, the system performs the following:
    - Creates the event to provision the upgraded or downgraded subscription to the Panel. The next invoice (for the new plan) will be generated as usual before the next billing cycle. Option **Generate invoice immediately** is not taken into account in this case.

        Note: It is not possible to upgrade or downgrade this subscription again till the end of the current billing cycle.

- **End of current cycle**. If it is selected, the system performs the following:
    - Upgrades or downgrades the subscription in Business Manager, but sets it to be provisioned *only in the next billing cycle*. The next invoice (for the new plan) will be generated as usual before the next billing cycle. Option **Generate invoice immediately** is not taken into account in this case.

Adding an Add-on to a Subscription

➢ *To add an add-on to a subscription:*

1. Go to **Business Operations** > **Subscriptions**.
2. Click the name of a subscription to which you want to add an add-on.
3. Click **Add-ons** in the **Available Operations** column.
4. Click **Add New Add-on**.
5. Select an add-on you want to attach to the customer account from the plans list.
6. Update the pricing if necessary.
7. Click the **Add** button.

Viewing Add-ons with Their Properties

➢ *To view the subscription add-ons:*

1. Go to **Business Operations** > **Subscriptions** and click a subscription name.

2. Click **Add-ons** in the **Available Operations** form that appears.

On the page that loads, you will see the add-ons for the given subscription and their details. Here you can also **Edit** the add-ons and see the add-on **Properties** by clicking the respective icons next to each add-on.

Here you can also add or change **Subscription add-ons** (on page 423).

Viewing Subscription Properties

➢ *To view the subscription properties:*

1. Go to **Business Operations** > **Subscriptions** and click a subscription name.

2. Click the **Properties** link in the **Available Operations** form that appears.

The page that lists subscription properties opens.

On this page, you can do the following:

- View details of a property.
- Edit a property or its value by clicking the **Edit** icon next to the given value.

Transferring a Subscription

Business Manager allows administrators to transfer a subscription from one customer to another.

➢ *To transfer a subscription:*

1. Go to **Business Operations** > **Subscriptions** and click the name of a subscription you want to transfer.

2. Click the **Transfer Subscription** link in the **Available Operations** form that appears.

3. In the form that appears, enter the **ID** of the customer you want to transfer a subscription to.

4. Specify the billing account to pay for this subscription and confirm the transfer.

Performing Manual Payments

In this section:

Using a Credit Card to Pay an Invoice

➢ *To pay an invoice using a credit card:*

1. Select the invoice from the list available at **Business Operations** > **Invoices**.

2. When the invoice page is displayed, click the **Take Credit Card Payment** link in the **Quick Links** section at the top of the page.

3. Select the gateway you want to use to pay this invoice and click **Next**.

4. Enter all the payment information accordingly.

5. Click **Charge**.

Note: Payments of this kind are performed using the *virtual terminals* feature. Find more information about it in the section **Testing Gateways Using Virtual Terminals** (on page 147).

Capturing Authentication-only Payments

➢ *To capture Authentication-only payments:*

1. Select the invoice from the list available at **Business Operations** > **Invoices**.

2. When the invoice page is displayed, click the **Take Credit Card Payment** link in the **Tools** section at the top of the page.

3. Select the gateway you want to use for an authenticate-only charge and click **Next**.

4. Enter all the payment information accordingly.

5. Select **Authenticate Only** in the **Charge Action** drop down menu.

6. Click the **Charge** button.

This transaction will just validate the card and will not take the money.

Capturing Uncaptured Payments

➢ *To capture uncaptured payments:*

1. Go to **Business Monitoring** > **Payments** > **Uncaptured Funds** tab.

2. Click each check box next to the records you want to capture funds from. The checked records are highlighted in red.

3. Click **Capture funds**.

Note: There is no confirmation screen after clicking the **Capture funds** button. The funds will be captured automatically.

Issuing Refunds

➢ *To issue refunds:*

1. Go to the invoice (on page 435) you want to issue a refund for.

2. Click on the **Refund** button in the Status column located in the **Transactions** section.

3. Verify that the refund details are correct. If passphrase encryption is used, enter it in the corresponding field.

4. Click the **Yes, process this refund** button. Otherwise, click **Cancel**.

Generating and Running Payment Queue

If you want to confirm all payments from credit cards and bank accounts, generate and run the payment queue. When you click to generate the queue, the system analyses the list of existing invoices and creates tasks to pay them. Next, depending on the configuration, the system runs the tasks or not.

➢ *To generate and run payment queue:*

1. Go to **Business Monitoring** > **Payments** > **Payment Queue** tab and click **Generate Payment Queue.**

2. Set the following:

   Invoice Options:

   - **Clear all items currently in Payment Queue**. Check the box to avoid replicating the same items.

   - **Generate**. Select from one of the following: New, Declined, or Errored.

   - **Generate Due Date Only**. Select Yes if you want to generate payments based on invoice due dates only. Select No if you want to generate payments regardless of invoice due dates.

   - **Due on or before**. Select from the drop down menu the date you want to generate payments on or before or click the **...** button to set the date using the built-in calendar.

   - **Number of invoices to generate payments for**. Enter the number or leave it as *0* to generate payments for all invoices.

   Run Options:

   Try charging lesser amounts on failed accounts. Check the box if you want the system to automatically charge less amounts for invoices IF they fail on the initial payment processing.

   Run Payment Queue. Select one of the following: *Don't Run* or *Run at a later date/time*.

   Date to run Payment Queue. Set the date to run the payment queue in the drop down menu or click on the **...** button to select the date using the built-in calendar.

   Transaction Type. Select one of the following: **Charge** or **Authenticate Only**.

   Enter your Credit Card Encryption Key. Enter the key you generated when you set up your encryption settings.

3. Click **Continue**.

Managing Bank Transfers

This section explains how bank transfers processing is organized in Parallels Customer and Business Manager, lists the bank transfers management operations, and addresses the processing automation. For details on these topics, refer to the corresponding subsections of this section.

To read the introduction to bank transfers processing, refer to the section **Bank Transfers Processing** (on page 38).

In this section:

How Bank Transfer Processing Works

This section discusses bank transfers processing and explains what operations Business Manager provides to manage bank transfers.

Bank transfers processing works as follows:

1. Customer submits an order at one of your online stores using the *bank transfer* payment method.

2. Business Manager creates a new transaction that keeps the payment details.

3. The transaction is appended to an open *batch.* Batches are specifically formatted files that comprise orders to transfer funds from one bank account to another. The batch format is dictated by a transfer plugin (on page 145) associated with the online store. Each plugin has a single open batch which status is always *Open*. If the batch does not exist, the system creates it and opens.

4. After an open batch reaches a certain number of transactions, or after a certain period of time, the system starts *processing* this batch file. This includes closing the batch, giving it a unique name, setting the transaction statuses within the batch to *pending*, and opening a new batch.
   You can manually request the system to start processing a batch.

   For details on how to configure automatic processing, see **Configuring Automatic Processing** (on page 434).

   Note: The financial information of the receiving party is extracted from the profile of an administrator responsible for batch processing. You can change the administrator in the bank transfers manager settings.

5. If the batch is in the processing status, it is possible to download and submit it to a bank to perform transfers.

6. When you receive the bank response, either approve or decline the transactions included in the batch to activate paid subscriptions. If there is at least one approved transaction, the batch status is set to *completed*. This does not affect the statuses of included transactions.

After a transaction is either approved or declined, the only way to modify this is to remove a batch that includes the transaction. The removal is possible only if the batch contains at least one pending transaction. If you remove a batch, the transactions within the batch are included in a corresponding new batch.

You are able to *exclude* transactions from new batches or *include* transactions in new batches. This is useful when you balance the amount of funds included in a batch or wish to reorganize transactions.

Business Manager imposes the following constrains on manipulations with transactions:

- It is only possible to adjust the number of transactions in new batches (the batches under processing, completed, or declined are not modified).

- You can include only transactions that are not bound to any batch. To unbound transactions, remove the new batch that contains them.

- It is not possible to move transactions between new batches corresponding to different plugins.

Finally, Business Manager provides total amounts of transactions by statuses. This may be useful for statistical or auditing purposes.

For details on how to perform a particular operation, see **Supported Operations** (on page 432).

Supported Operations

This section lists the operations on batches and transactions available in Business Manager. For details on routine bank transfer processing and operation descriptions, see **How Bank Transfer Processing Works** (on page 430).

➢ *To view the list of batches:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Batch Files**.

This will open the batch files list.

View included transactions to approve or decline them.

➢ *To view the transactions included in a batch:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Batch Files**.

3. Click the batch file.

This will open the list of transactions included in the batch.

Start processing a batch file to be able to download it.

➢ *To start processing a New batch file:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Batch Files**.

3. Click **Start Processing** next to the batch file (column **Available Operations**).

This will change the batch file status to **Processing**.

Download a batch file to send it to a bank.

➢ *To download a batch file:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Batch Files**.

3. Click **Download** next to the batch file (column **Available Operations**).

This will start the downloading process.

➢ *To remove a batch file:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Batch Files**, and click the batch you wish to remove.

3. Click **Remove Batch File and Unbound Transactions**, and confirm the operation.

This will remove the batch from the batches list.

View total amounts of transactions by statuses for statistical, auditing, or other purposes.

➢ *To view the total amount of transactions by status:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Transactions**.

This will open the statistics followed by the transactions list.

Include or exclude transactions to balance the amount of funds included in a batch, reorganize transactions or for other purposes.

➢ *To include or exclude a transaction:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Transactions**.

3. Click the particular action next to the transaction (column **Available Operations**) and confirm the operation.

This will change the action name to the opposite (for example, display **Include** instead of **Exclude**).

Approve or decline the transaction to update the associated subscription status.

➢ *To approve or decline a transaction in a batch:*

1. Go to **Business Monitoring** > **Payments** > **Bank Transfers** on the **Transactions** tab.

2. Select tab **Batch Files**.

3. Click the batch containing the transaction.

4. Click either **Approve** or **Decline**.

This will change the transaction status.

Note: You can change the transaction status directly from the transactions list.

➢ *To change a responsible administrator:*

1. Go to **Business Setup** > **All Settings** > **Automatic Payments** > **Bank Transfers** on the **Transactions** tab.

2. Set the appropriate administrator in the **Responsible Administrator** field and click **Save**.

This will change the responsible administrator.

Configuring Automatic Processing

The bank transfer processing settings are available at **Finances** > **Manage Billing** > **Bank Transfers Manager**, tab **Settings**. You can adjust the following settings:

- **Process After XX days**. This instructs the system to start batch processing in a certain number of days after a batch file is created. Use 0 to turn the feature off.

- **Process After XX transactions included.** This instructs the system to start batch processing after reaching a certain number of transactions. Use 0 to turn the feature off.

For details on routine bank transfer processing and operation descriptions, see **How Bank Transfer Processing Works** (on page 430).

Managing Invoices and Payments

In this section:

Generating Invoices Manually

You are able to generate invoices that include payments for previous or next billing cycles depending on the parameters you specify before starting the generation. For a single customer, the system generates only a unified invoice per currency. For example, if your customer ordered a monthly subscription in EUR and USD online stores, and requires an invoice for the next four months, the system will generate two invoices - one for the EUR and one for the USD subscription. Each of the invoices aggregates amounts for the four months.

Prior to generating invoices in your system, you should set up invoicing (on page 163).

➢ *To generate invoices manually:*

1. Make sure there are **Active** or **Suspended** subscriptions in the system.

2. Go to **Business Operations** > **Invoices** > **Generate Invoices**.

3. Specify the invoice generation parameters and click **Continue**.

4. Click **Business Monitoring** > **Tasks**.

5. You will see a list of events specific to the invoices that will be generated.

   At this point you have two options:

   ▪ Process all the events at one time by clicking **Run All**.

   ▪ Run invoice entities one by one by clicking **Run Now** for each task.

   Make your selection and proceed forward with generating your invoices.

Viewing Invoices

➢ *To view invoices for your customer accounts:*

1. Go to **Business Operations** > **Invoices**.

   The list of all invoices issued by the system will be opened.

2. Click the invoice ID in the **Invoice No.** column for the invoice you wish to view. (You can also access an invoice by clicking the magnifying glass icon in the **Available Operations** column.) The invoice details will appear.

Editing Invoices

There are several ways to get to the *edit* screen for any invoice in your system. The easiest way to edit invoices for your customer accounts is to follow the instructions below.

➢ *To edit an invoice:*

1. Go to **Business Operations** > **Invoices**.

2. You will be presented with a list of all invoices issued by the system. Click the invoice id in the Invoice No. column for the invoice you wish to view. (You can also access an invoice by clicking the magnifying glass icon in the **Available Operations** column.)

3. Click **Edit**.

4. Update the invoice information according to your needs and click **Save**.

Note: Some organizations require you not to modify the existing invoices. For details, see **Achieving Tax Office Compliance** (on page 165).

Taking Credit Card Payments

Business Manager allows administrators to take credit card payments from their customers for unpaid invoices.

➢ *To take a credit card payment:*

1. Go to **Business Operations** > **Invoices**.

2. Locate the invoice with *Due* status to which you want to apply payment manually and click its *ID*.

3. The invoice details will appear below the record of the invoice you are viewing. The other option is to click on the magnifying glass icon in the **Available Operations** column to view the invoice details.

4. Click the **Take Credit Card Payment** link in the **Tools** section of the page.

5. Choose the **Gateway** and click **Next** to proceed.

6. Enter the billing account details.

7. Click the **Charge** button

Applying Payments Manually

➢ *To apply payments to any invoice manually:*

1. Go to **Business Operations** > **Invoices**.

2. Locate the invoice with *Due* status to which you want to apply payment manually and click its **ID**.

3. The invoice details will appear below the record of the invoice you are viewing. The other option is to click on the magnifying glass icon in the **Available Operations** column to view the invoice details.

4. Click the **Quick Manual Payment** link in the **Tools** section of the page.

5. Set the following:

   ▪ **Choose Billing Account**. Select the billing account you want to use for this payment in the drop down menu.

   ▪ **Payment Method**. Select the payment method you want to use for this payment in the drop down menu.

   ▪ **Check Number**. If payment is being made by check, enter the check number.

   ▪ **Apply Payment To**. Select **Entire Invoice** or **Selected Line Items**. If you choose the **Selected Line Items** option, it will list the line items available for this invoice. Choose accordingly.

   ▪ **Amount of Payment**. Enter the payment amount that you are applying to this invoice.

   ▪ **Payment Comments**. Enter comments according to your specific needs.

6. Click **Apply Payment**.

Paying by Credits

You can utilize customer credits to pay for subscriptions. When a credit balance is exhausted, the customer's default payment method is used to pay for the services.

➢ *To apply credits to any invoice manually:*

1. Go to **Business Operations** > **Invoices**.

2. Locate the invoice to which you want to apply credit and click its *ID*.

3. The invoice details will appear below the record of the invoice you are viewing. The other option is to click on the magnifying glass icon in the **Available Operations** column to view the invoice details.

4. Click **Apply Credit** in the **Tools** section of the page.

5. Set the following:

   ▪ **Apply Credit To**. Select **Entire Invoice** or **Selected Line Items**. If you choose the

   ▪ **Selected Line Items** option, it will list the line items available for this invoice. Choose

   ▪ accordingly.

   ▪ **Amount of Payment**. Enter the payment amount that you are applying to this invoice.

   ▪ **Credit Comments**. Enter comments according to your specific needs.

6. Click **Apply Credit**.

Voiding Invoices

➢ *To void any invoice manually:*

1. Go to **Business Operations** > **Invoices**.

2. Locate the invoice that you want to void and click its *ID*.

3. The invoice details will appear below the record of the invoice you are viewing. The other option is to click on the magnifying glass icon in the **Available Operations** column to view the invoice details.

4. Click **Create an Invoice Reversal** in the **Tools** section of the page.

5. Click **Yes, create a credit note and void this invoice**.

6. Go to **Finances** > **Invoices** again. You will see two entries for each invoice.

Printing Invoices

➢ *To print an invoice:*

1. Go to **Business Operations** > **Invoices**, and find the invoice you want to print.

2. Click **Print** next to the invoice.

    A new window with the invoice in PDF format opens. You can print the invoice from this new window using your browser's print function or save it to your computer.

Manually Paying an Invoice Using Saved Credit Card Information

Business Manager gives you the flexibility to manually pay an invoice using saved credit card information. This document explains how to decrypt saved credit card information to manually pay an invoice.

➢ *To decrypt credit card information:*

1. Go to **Business Operations** > **Customers**.

2. Locate the customer whose invoice you want to pay by clicking the customer ID.

3. Click the link **Show All Billing Accounts** in the **Billing Account Summary** panel in the center of the screen.

4. All billing accounts associated with this customer will now be displayed. Click the blue arrow icon for the credit card account you would like to use, which will expand with several options.

5. Click the magnifying glass icon next to the **Account Last Four** digits. A box will pop up prompting you to enter the encryption key you chose when configuring your Business Manager (for more information on encryption, view the **Encryption Settings** section).

6. Enter your encryption key and click the **Submit** button. The decrypted credit card number will be displayed.

7. Copy the credit card number.

8. Go back to the customer summary page and locate the invoice you wish to pay.

9. Make a credit card payment according to the instructions in the **Using a Credit Card to Pay an Invoice** (on page 426) section.

Viewing Transactions List

The transactions list displays the operations performed from customer billing accounts. The list excludes bank transfer transactions that are available at bank transfers manager.

To view the transactions list, go to **Business Monitoring** > **Payments**.

Re-sending Invoices

In Business Manager, PDF versions of invoices are attached to each invoice e-mail. If you need to re-send an invoice, you can either re-generate PDF invoice or take the existing PDF attachment.

To re-send an invoice with a renewed PDF attachment, go to **Business Operations** > **Invoices** > choose the invoice you need and click **Resend**. To re-send an invoice with a former PDF attachment, see **Re-sending E-Mails Sent Previously** (on page 415).

Viewing and Downloading Schet-Facturas

If your company is located in Russia and sells services to companies or individual entrepreneurs, the accounting policy requires you to send schet-facturas to them each time you supplied a taxable service. Although the system sends these documents automatically, there can be cases when you might need to re-send a schet-factura or to view it. To carry out these operations, go to **Business Operations** > **Invoices** > tab **Schet-Facturas** and follow on-screen instructions.

If you do not see the **Schet-Facturas** tab, the documents issuing is not configured. For details on how to configure it, see **Configuring Schet-Facturas** (on page 166).

Creating Custom Billing Cycles

Business Manager has a number of predefined billing cycles. When creating a plan, you can select one or several of them depending on how frequently you want to charge customers for that plan. If you wish to create a custom billing cycle, go to **All Settings** > **Billing Cycles**.

Note: To delete a cycle, click on the icon with the red X in the actions column for the cycle you want to remove. You will be asked to verify that you would like to proceed, as removing a cycle can have repercussions for other parts of the system. You will want to make sure that no plans are using the cycle you remove. Click "yes, really remove" to confirm the action.

Limiting Discounts and Exempting Subscriptions from Suspension

Business Manager allows you to limit discounts for certain customers or exempt their subscriptions from suspension. To do it, create a *customer group* (or modify the default one) and add the certain customer accounts to it. Customer groups set the following properties for their members:

- *Maximum discount* defines the maximum discount that group members can get when they subscribe to a plan. For example, if you provide a 20% discount on a plan, the member of a group with maximum discount 10% will get a 10% discount on this plan.

- *Guaranteed discount* defines the discount that group members will get in addition to other discounts when they subscribe to any plan. For example, if you provide a 5% discount on a plan, the member of a group with guaranteed discount 10% will get a 15% discount on this plan. If you do not provide discounts on a plan, a member of this group will still get a 10% discount.

- *Exempt from suspension.* If this option is enabled, Business Manager does not automatically suspend the subscriptions of the group members if they do not pay in time.

If you change these properties for a group, Business Manager automatically applies them to existing members. Besides, you can override the group properties by custom values for each member. Changing properties of a group does not affect member with custom values of these properties.

To add new or manage existing customer groups, go to the **Business Setup** > **All Settings** > **Customer Groups** screen.

To add a customer account to a group or override group properties for a customer, go to the customer **Business Operations** > **Customers** > **<customer name>** > **Edit Customer Account Properties**.

Creating Properties and Add-ons

During the ordering process in online stores, the system can ask customers for additional information that affect the resulting subscription or customer profile. Here you are able to write questions that the system will ask, set up available answers to these questions, and define the answer-dependent properties that will be added either as subscription properties (if you add a plan property), a customer account property (for customer properties), or an add-on property (if you add a generic property and configure a plan add-on to use it).

As mentioned, Business Manager supports three distinct types of *properties*:

1. Plan properties

2. Customer account properties

3. Generic properties

Depending upon your business rules, you may need to set up one or more of these properties.

Add-ons are basically what their name suggests - items that can be added on to a subscription. Add-ons can be created from two types of things: properties and other plans.

Plan add-ons are typically presented with a question/answer setup. You can create any type of add-on such as web design, bandwidth, database support, extended support, hardware, software, or anything that meets your specific business needs. Creating add-ons from properties is described in the **Creating Generic Plan Add-ons** (on page 447) section.

In this section:

Setting Up Plan Properties

When subscribing to a plan in online stores, you can ask customers to specify the plan-specific information that is included in subscription properties. For example, for hosting plans this can be a choice between equal web servers or mail servers. This information does not affect pricing and it helps initially configure the subscription in the way that best fits customers.

To ask customers about the configuration preferences, write *custom questions* that will be displayed when choosing a certain plan, and connect the answers to these questions with the sets of properties and values to be included in the subscription. To properly handle this information, the receiving module (hosting panel, domain name registrar, etc.), should be able to recognize and process them.

Custom questions are displayed in the shopping cart in a section called *Additional Plan Information* on the page where the customer enters their contact and payment information.

Note: Custom questions do not use pricing. Typically questions are general and are not associated with a particular plan.

➢ *To set up a plan property:*

1. Go to **Business Setup** > **All Settings** > **Plan, Customer, and Generic Properties**. From here you will see three buttons:

   ▪ **New Generic Properties**. This field is used internally only. Customers will not see these questions and the values need to be entered by the administrator.

   ▪ **Manage Questions**. This is similar to the above

   ▪ **New Plan or Customer Property**. This is used to collect information through the online store from a customer to be tied to either the customer or the customer's subscription

2. Click **New Plan or Customer Property**. A pop-up window will appear. Enter a descriptive name for the property you are going to enter. This is something that only the administrator will see. Then click **Edit**.

3. You should now see a new line item, containing the name you just assigned. Click the green pencil next to **Null**. Choose **Plan Property**. Click **Edit**.

4. Next is the **Association** field. This will decide which plan this property is tied to. If you want to have the same property tied to several different plans, you will need to create a property for each of them. You can use the same custom question over and over (this will be created in the next step), but each plan must have its own property.

5. Create the question to be tied to this property. Click **Manage Questions**. From this new screen, click **Add Custom Question**. There are several fields here:

   ▪ **Name**. Choose a descriptive title for this question. This is an internal value, and your customers will not see it.

   ▪ **Display Order**. This can be set at whatever the default value is.

   ▪ **Question**. This is the question you will ask your customers.

> **Important**: Do not put a question mark at the end, as this will not parse correctly!

- **Description**. Write a brief description to clarify the question. It will be displayed with the question.

- **Type**. Set the format the answer will take. Choices include **Hidden**, **Text**, **Password**, **Text Area**, **Select**, and **Radio**.

- **Input Restrictions**. These should include anything to restrict the input a customer will send you. In this case, the only restriction your customer probably needs is **Required**, which will require them to choose a control panel when purchasing the plan. When you are done filling these out, click **Next**.

6. **Answers**. Some question types require that you set predetermined answers. If these are required, you must enter the values in a list, one item per line, with no commas or other separators. Click **Next**.

7. Here you will set the display values the customer sees for all of the possible answers you set in the previous step.

   Values. Set a display value for each of the answers.

   Selected. Choose the value to display first in the drop down menu. Click **next**.

8. This stage lets you review the answers you have entered. If they are correct, click **add wizard question** to finalize your choices. This should take you back to the questions screen, where you will see the question you created, as it will appear on the online store.

9. Now we need to tie this question to your property. Go to **System** > **System Configuration** and click **Plan, Customer, and Generic Properties** again. Find the property you were working on before. Click on the green pencil in the column **Custom Question**. From the drop down menu, select the question you just created, and click **edit**.

10. To view your work, go through the order process. Choose the plan you have tied the property to, and proceed to the cart. You should see this question as part of the section **Additional Plan Information**.

Setting Up Customer Account Properties

Customer account properties also do not affect pricing. They create questions that will appear during the order process. Answers to these questions will be added to customer account properties.

➢ *To set up a customer account property:*

1. Go to **Business Setup** > **All Settings** > **Plan, Customer, and Generic Properties**.

2. Click **New Plan or Customer Property**. A pop-up window will appear. Enter a descriptive name for the property you are going to enter. This is something that only the administrator will see. Then click **Edit**.

3. You should now see a new line item, containing the name you just assigned. Click the green pencil next to **Null**. Choose **Customer property**. Click **Edit**.

4. Next is the **Association** field. This will decide which plan this property is tied to. If you want to have the same property tied to several different plans, you will need to create a property for each of them. You can use the same custom question over and over (this will be created in the next step), but each plan must have its own property.

5. Create the question to be tied to this property. Click **Manage Questions**. From this new screen, click **Add Custom Question**. There are several fields here:

   ▪ **Name**. Choose a descriptive title for this question. This is an internal value, and your customers will not see it.

   ▪ **Display Order**. This can be set at whatever the default value is.

   ▪ **Question**. This is the question you will ask your customers.

   > **Important**: Do not put a question mark at the end, as this will not parse correctly!

   ▪ **Description**. Write a brief description to clarify the question. It will be displayed with the question.

   ▪ **Type**. Set the format the answer will take. Choices include **Hidden**, **Text**, **Password**, **Text Area**, **Select**, and **Radio**.

   ▪ **Input Restrictions**. These include anything to restrict the input a customer will send you. In this case, the only restriction your customer probably needs is **Required**, which will require them to choose a control panel when purchasing the plan. When you are done filling these out, click **next**.

6. **Answers**. Some question types require that you set predetermined answers. If these are required, you must enter the values in a list, one item per line, with no commas or other separators. Click **next**.

7. Here you will set the display values the customer sees for all of the possible answers you set in the previous step.

   ▪ **Values**. Set a display value for each of the answers.

   ▪ **Selected**. Choose the value to display first in the drop down menu. Click **next**.

8. This stage lets you review the answers you have entered. If they are correct, click **add wizard question** to finalize your choices. This should take you back to the questions screen, where you will see the question you created, as it will appear on the online store.

9. Now we need to tie this question to your property. Go to **System** > **System Configuration** and click **Plan, Customer, and Generic Properties** again. Find the property you were working on before. Click on the green pencil in the column **Custom Question**. From the drop down menu, select the question you just created, and click **edit**.

10. To view your work, go through the order process. Choose the order you have tied the property to, and proceed to the cart. You should see this question as part of the section **Additional Customer Information**.

Creating Generic Plan Add-ons

Generic properties can affect pricing. They create questions that will appear during the order process. Answers to these questions will create subscription properties. If the subscription property modifies an already existing property, Business Manager should be able to pass this value to the panel module to be automatically provisioned.

Generic properties are used for creating add-ons. Add-ons were designed to replace panel properties associated with a plan. However, if you have a plan that *is not* associated with a panel, but want to create add-ons for it anyway, you need to setup the generic properties *first*.

Notes:

1. Generic properties by themselves *do not* affect pricing.
2. Generic properties used for creating add-ons *can* affect pricing.

➢ *To create an add-on:*

1. Go to **Business Setup** > **All Settings** > **Plan, Customer, and Generic Properties**.

2. Click **New Generic Property**. There are several fields here that must be filled in:

   - **Generic property key**. This is the internal property name, something only you will see. Choose a descriptive name.

   - **Generic question name**. This is an internal value for the question. Enter something meaningful, like a brief version of the question.

   - **Default question**. This value will appear in the plan property screen.

   - **Default answer value**. This is the default answer you would like for the Default Question. You may leave this blank.

   - **Question description**. This is a description that will appear with the question on the online store page.

3. Click **Save**.

4. Go to the plan you want to create an add-on for. Click **Properties**. You should see the property that you just created displayed here. Next, you will want to create an add-on, which is what will create the options and process for this property.

5. Click **Add-ons** and **Attach New Add-on Group**. Walk through the add-on wizard and click **Finish** on completion.

6. You should now see the add-on group you have created, along with each of the options you created for it. To view the result of your work, go through the order process, choosing the plan you tied the add-on to. When you get to the cart, you should see the add-on options you created.

Promoting Your Plans

Promotion is an important aspect of every business nowadays. Effective promotion can make your business more successful in different ways, for example, improve the recognition of your brand, attract new customers, and increase the loyalty of existing customers.

Business Manager contains a set of strategies that will help you promote your business. Particularly, you can use the following options:

- *Discounts* - reduce prices of certain plans in you online stores for everybody.
- *Coupons* - reduce order price for their owners.
- *Affiliate programs* - let your subscribers earn money by bringing new customers.

The controls to configure these marketing tools are available to you on the **Business Setup** > **Marketing Tools** page. To learn when and how to apply these tools, read the corresponding subsections of this section.

In this section:

Coupons and Discounts

Business Manager contains two mechanisms to reduce prices of your offerings - *coupons* and *discounts.*

Use *discounts* if you want to promote a subscription for a certain billing cycle, say, 1-year subscription. A discount targets all online stores but only particular billing cycles of plans.

Use *coupons* to organize promotional actions among your customers. With coupons, your customers are able to reduce subscription price by entering in a coupon code during the ordering process. Coupons are best for promoting specific plans in a certain store. Say, if you sell a plan in two stores, *US Store* and *EU Store*, you have the option to lower the subscription price only in *EU Store*.

To create limited offerings, for example, discounts for the first 100 subscriptions to a new plan, create a coupon and set it to be automatically applied. In this case, online stores show new prices of the plans as if the coupon was already applied to the plans.

The table below describes the differences between discounts and coupons:

	Discounts	Coupons
Availability to customers	Lower prices for all customers	Lower prices for those who have coupon codes (unless the coupons are applied automatically)
Apply to a specific store	No	Yes
Reduce price for a certain billing cycle	Yes	No
Cut-off amount	Percentage of subscription price	- Percentage of subscription price - Fixed amount
Period of action	Unlimited	- A number of billing cycles - Unlimited
Validity period:	Unlimited	- Limited - Unlimited

To create and manage discounts and coupons, use the controls on the **Business Setup >
Marketing Tools** page.

Affiliate Programs

Business Manager enables you to involve your customers in promoting your plans: *Affiliate
programs* let customers earn money by bringing new customers to you. Customers
participating in your affiliate programs (your *affiliates*) distribute links to your websites and
earn a commission for each sign-up under these links. Later, you pay out this money to
affiliates as credits so they can use it to pay for existing subscriptions or order new services
in your online stores.

Affiliate programs have a great advantage over traditional advertising: they allow you to pay
for promotion only when it brings the result you want. In this section, we will explain how to
promote your business with affiliate programs in Business Manager.

Setting Up Affiliate Programs

Each affiliate program promotes a single online store. Affiliate links point to the store, and
affiliates receive commissions in the store's currency. If you decide to promote two stores,
use multiple affiliate programs. The tools to create and manage affiliate programs are
available on the tab **Affiliate Programs** of the **Business Setup > Marketing Tools** page.

Affiliate programs in Business Manager use the *pay-per-sale* principle. This means that an
affiliate's commission for each sing-up is a certain percentage of the order price (the
commission rate).

To define how much a program participant should earn to receive their commissions to
credits, specify the program's *payment threshold*. This threshold shows the affiliate when to
expect the payout; However, you can still pay out affiliate earnings whenever you want.

Viewing Affiliates List

After you set up your affiliate programs, customers can join them by clicking the
corresponding links on the **Account** tab of the Control Panel. You can view the list of your
affiliates on the **Affiliates** tab of the **Business Operations > Customers** page.

The system accumulates an affiliate's commissions on their *affiliate balance*. You can see
the balances of your affiliates in the corresponding column of the affiliates list. Additionally,
the **System Overview** widget on your **Home** page contains the **Total affiliates commission** - the sum
of your affiliates' current balances.

Affiliates cannot use the credits on their affiliate balances for any purposes. To let them use
the credits, you should pay out the commissions.

Paying Out Commissions

When an affiliate's balance exceeds the payment threshold of an affiliate program, the
system adds this balance to the **Above threshold** value on your **Home** page. From time to time
(usually, upon reaching payment thresholds), you should perform payouts to transform
affiliates' commissions to their credits. For this, select them in the affiliates list and click **Pay
Out**: The system will pay out the entire affiliate balance to credits and reset it to zero.

Affiliate Program Example

For example, you have an affiliate program that allows participants to earn the *10%* commission for each sign up in the *Default store* and receive credits when the affiliate balance exceeds *$20*.

Meet Jerry, he is an affiliate. He invited 3 friends and each of them placed an order for $50 in the Default store. Jerry earns the commission of $15, but he cannot receive the payout because his affiliate balance is less than $20. Jerry invites more people so that the balance exceeds $20. Now you can pay out his commission.

After the commission is paid out, Jerry receives $20 of credits, his affiliate balance is reset to $0, and he continues inviting people to your stores to earn more money.

Setting Up Branded Domain Names for Resellers

Resellers naturally want to hide the fact that their business is selling resources of their hosting providers. If the customers know this fact, they may refuse the resellers' offerings and subscribe directly to the hosting provider. To avoid this, Business Manager allows resellers to use their own domains names as access points to the system.

When a reseller asks you to configure the access with a branded domain name, perform the following steps:

1. *Define what Panel serves the reseller's subscription.* This will help you define how much domain names (one or two) you will need to hide your domain names from the reseller's customers.
2. *Adjust DNS settings.* Update the settings so that the branded domain names point to Panel and Business Manager IP addresses.
3. *Adjust the domain name branding on the Panel server.*
4. *Change the reseller's URLs.*

Below we discuss these steps in more details.

Define what Panel serves the reseller's subscription

To see the host name of Panel that serves the reseller's subscription, go to the **Business Operations** > **Subscriptions** page and open the subscription page.

If the subscription is created on a *remote* Panel (a Panel installed on a different host), ask the resellers to provide you with two domain names: you will need the to replace both Panel host name and Business Manager host name to which customers are redirected for authorization purposes. If the Panel that serves the reseller's subscription is *local* (installed on a single host with Business Manager), one domain name is enough.

Adjust DNS settings

This step requires your cooperation with the reseller. You can make the domain names point to your IP addresses the following ways:

- You add DNS record mapping the reseller's domain names to the IP addresses of the Business Manager and Panel hosts and tell the reseller to set your nameservers in the domain settings. Learn how to add DNS records in the section **DNS** (on page 84).
- If the reseller has purchased the DNS service together with the domain names, the reseller should add the corresponding records to the domain name registrar's nameservers.

Adjust the domain name branding on the Panel server.

If the Panel that serves reseller's subscription, skip this step. Otherwise, configure the Panel host to redirect visitors of the *<remote_reseller_host>* to Business Manager SSO page. To perform this configuration, run the following command on the remote Panel server:

- On Linux systems: `/usr/local/psa/bin/sso --set-branded-idp -domain` *<remoteresellerhost>* `-url https://`<mainresellerhost>`:8443`
- On Windows systems: `%plesk_dir%\bin\sso.exe --set-branded-idp -domain` *<remoteresellerhost>* `-url https://`<mainresellerhost>`:8443,` where `%plesk_dir%` is a directory in which the Panel is installed.

Change the reseller's URLs

Update the reseller's **Business Manager URL for customer**s and **Online store URL** to the new domain name. To do this, log in as the reseller and go to the **Business Setup** > **All Settings** > **Branding**.

After performing these steps, the reseller's customers access Business Manager and panel with URLs like the these:

- Panel: `https://`<reseller_host_1>`:8443`
- Business Manager: `https://`<reseller_host_2>`:8443/plesk-billing/client`

Note: if the subscription is served by the local Panel, then the *<reseller_host_1>* and *<reseller_host_2>* are equal.

Managing Security Settings

To reinforce Parallels Customer and Business Manager security, configure password expiration and lockout policy for administrator accounts. To protect data in your database, set up encryption of the sensitive data. To track user activity within the system, use the audit log. For details on how to perform these tasks, see the corresponding subsections of this section.

In this section:

Setting Up Encryption

If you process credit card or bank accounts payments directly (through on-site payment gateways or bank transfers), customer credit card and bank account numbers are stored in Parallels Customer and Business Manager database. To protect customer account data, set up encryption. You can use either passphrase or local encryption key (LEK) encryption. *If the encryption is turned off, the system neither saves information about new accounts nor stores the existing accounts details.*

Use the LEK encryption if you intend to automatically charge customer accounts. However, you are required to enter a LEK PIN - a special 4-digit code - to view sensitive information like customers' credit card or bank account numbers and to void and refund transactions.

Use the passphrase encryption if you require confirmation of each transaction. The system asks for a passphrase to perform all operations related to customer billing accounts and payments. When a customer changes billing account details, you receive a corresponding to-do item to re-encrypt the new data with your passphrase. The re-encryption of the new data is mandatory. For details on how to perform payments with passphrase encryption turned on, see **Generating and Running Payment Queue** (on page 428).

As the system uses LEK to encrypt and decrypt billing accounts, all operations related to payments processing are halted when the key becomes damaged, corrupted, or lost. To avoid these situations, back up your LEK in advance and restore it if necessary.

When you back up an LEK, it is divided between two administrators you assign. You can be one of these administrators. These administrators are able to back up their key part or restore it. After both administrators restore their key parts, the system restores the LEK and displays a notification about it.

➢ *To configure encryption settings:*

1. Go to the **Business Setup** > **All Settings** > **Encryption Settings** page.

2. Enter **agree** in the **Encryption Agree** field.

3. Set a secret passphrase or PIN. It may remain empty if you wish

    Note: To change from passphrase to previously specified PIN, leave the PIN fields empty.

4. Click the **Submit Changes** button.

    Important! To prevent irreversible database corruption during re-encryption by a new passphrase, we highly recommend that you back up the Business Manager database before submitting changes. You are also required to forbid access to adding and editing billing account information during re-encryption process.

➢ *To assign a key part owner:*

1. Go to the **Business Setup** > **All Settings** > **Encryption Settings** page.

    It is assumed that LEK encryption is turned on.

2. Select two administrator accounts.

3. Click the **Submit Changes** button.

> ➢ *To back up your LEK:*

1. Go to the **Business Setup** > **All Settings** > **Encryption Settings** page.
   It is assumed that LEK encryption is turned on.

2. Click **Backup**.

> ➢ *To restore your LEK:*

1. Go to the **Business Setup** > **All Settings** > **Encryption Settings** page.
   it is assumed that LEK encryption is turned on.

2. Fill in the current LEK PIN and specify the backup file.

3. Click **Restore**.

Note: You should turn on LEK encryption.

Configuring Password Expiration

To prevent unauthorized access to Business Manager with stolen passwords, configure Business Manager to ask administrators to change their passwords periodically.

> ➢ *To update the password expiration period:*

1. Go to the **Business Setup** > **All Settings** > **Authentication and Password Management** (in the **Security Settings** group).

Update the password expiration period and click **OK**.

Note: If your password is expired and you log in to Business Manager, the system blocks all pages except for Edit My Account and forwards you to this page from other pages until you change your password.

Configuring Administrator Account Lockout Policy

You are capable of improving the system security level by setting the maximum number of failed login attempts for administrator accounts. If the number is exceeded, an account is locked out for an adjustable period of time. Additionally, depending on the system configuration, the primary administrator (*admin* user), the account owner, or both receive e-mail notifications about the account lockout.

➢ *To update the administrator account lockout policy:*

1. Go to the **Business Setup** > **All Settings** > **Authentication and Password Management** (in the **Security Settings** group).

2. Update the lockout policy settings and click **OK**.

Note: To view the lockout e-mails in Business Manager, go to **Business Monitoring** > **Tasks**.

Viewing Audit Log

The audit log captures operations performed by administrators and customers. The audited operations either change the user session state (log in or out), display personal information, or change it. A user who requested such an operation is listed in the log as a *requester*. A user to whom such operation applies is a *target user*.

Origination of an operation request is also captured. It can be either the Business Manager GUI, internal API, or MBAPI (remote calls protocol).

Some operations provide supporting details that simplify changes tracking. For example, if a username is changed, the old and new names are written to the log.

Important: The audit is *always turned on*, and there is no way to stop it.

At first, when an audit log record is created, it is added to the database. Then, periodically, the system exports the records from the database to a regular file and removes them from the database. You can adjust the exports frequency in the audit log settings.

Audit records are exported in CSV format. The resulting files reside in `/var/lib/plesk-billing`.

To view the audit log, go to the **Business Setup** > **All Settings** > **Audit Log**.

To access the audit log settings, open the audit log and click **Settings**.

Viewing and Running Scheduled Tasks

In Business Manager, you can automate a number of business routines such as issuing invoices, processing payments, creating customer accounts and subscriptions on connected Panels, and many others. However, the system does not do these routines instantly; Instead, it adds them to a queue and then runs them by schedule. To do this, Business Manager employs the *task manager* - a scheduler that defines when to perform each routine. For each business routine that Business Manager can automate there is a *task* that performs the required actions: For example, to generate invoices automatically, Business Manager periodically runs a task that searches a list of active subscriptions and creates invoices for subscriptions that will require payments in a short time.

Business Manager tasks can have the following types:

- *One-time tasks*. These tasks carry out actions that require a single execution, such as creating subscriptions in Panels, registering and renewing domain names, or manual invoice generating and payments accepting. Each of these tasks has a timestamp that shows when the task manager will execute the task. If the system cannot run a task at the time due to the provisioning policy, it will retry to run this task in a period specified in the provisioning policy. To learn more about the provisioning policy, see the section **Setting Up Provisioning Policy** (on page 167).
- *Periodic tasks*. Right after the installation, Business Manager schedules a set of tasks that perform some of the repetitive routines like generating invoices, suspending customers who do not pay their bills, and charging credit cards. To tune the system to your needs, you can change the execution period and next execution time of each periodic task. The descriptions of Business Manager periodic tasks are provided in the section **Periodic Tasks** (on page 458).

The lists of scheduled and recently executed one-time and periodic tasks are available at the corresponding tabs of the **Business Monitoring** > **Tasks** page. From this page, you can also run each task manually.

In this section:

Periodic Tasks

This section lists and describes tasks that Business Manager runs on a periodic basis.

In this section:

ProcessInvoices

Part of the configuration process involves telling Business Manager how soon before a subscription renews you would like the invoice for that subscription to be generated. This task searches through your list of active subscriptions. It finds any that are due to be invoiced, and generates the invoices. It also sends by e-mail a copy to your customers, reminding them that another payment is due.

For more information about invoicing in Business Manager, see the section **Setting Up Invoicing** (on page 157).

ProcessPaymentQueue

Once Business Manager has generated invoices, it searches the system for invoices that are both due and set to be paid by a credit card or a bank account. It will collect payment on these invoices, if they meet the criteria you set in your payment queue settings. For detailed information on payment queue settings, refer to the section **Setting Up Payment Queue** (on page 149).

Note: Payment automation is not possible if you encrypt customer account information with a passphrase. For details on encryption, see **Setting Up Encryption** (on page 454).

ProcessSuspensions

If you are using the auto-suspend rules, this task runs periodically and sends notices to customers with past due bills. It will also create one-time tasks to suspend accounts that reach your final threshold.

For more information on configuring automatic suspension of subscriptions, see the section **Defining How to Handle Unpaid Subscriptions** (on page 168).

ProcessUnsuspensions

When a subscription has been suspended, customers still have access to their account and can log in and pay their bill. This task looks for past due invoices that have been paid. Like `ProcessSuspensions`, this task creates one-time events to activate paid subscriptions.

ProcessUsage

If you allow overusing resources for some of your plans, this task runs periodically and searches your system for any subscriptions that require overuse billing. Then it contacts the server to pull this information over to Business Manager for local storage.

For more information on charging your customers for overuse of resources, refer to the section **Pricing and Price Options** (on page 233).

ProcessCancellation

When a subscription is canceled it is marked as such. Subscriptions can either be cancelled immediately, or at the end of the billing cycle. `ProcessCancellation` runs periodically, searching for subscriptions that need to be canceled and then carrying out that action.

ProcessExpiredCreditCards

This task searches through the database for credit cards that will be expiring soon. If it finds any, it will e-mail the card holder reminding them the card is going to expire soon and asking them to update the card information to avoid missing a payment.

ProcessDomainSynchronization

If you use the eNom registrar, this task requests eNom to update renewal dates for all domains that are listed in your system as being registered in eNom.

Note: This task does not change the subscription renewal dates, only the renewal date listed for the domain in the domain details screen.

ProcessBatchFiles

To receive payments from customers who pay with bank transfers, you should provide your bank with information about these payments. The system stores this information in special files called *batch* files. Before you can send such file a bank, you should prepare it (or process it, in terms of Business Manager). Business Manager offers the automation facilities by periodically checking batches and processing them if they contain a certain number of payments or exist for certain number of days, depending on automatic payments settings. The task that performs this processing runs once a day and it is called *ProcessBatchFiles*.

Learn more about bank transfers in the section **Bank Transfer Processing** (on page 38).

ProcessActionLog

When administrators or customers perform actions in Business Manager, it writes the information about these actions to the audit log. The audit log is stored in the Business Manager database. In order to free up the database, the system periodically moves the log from the database to a file. To do this, Business Manager uses the *ProcessActionLog* task. By default, it runs every three months, but you can change the frequency of executions.

For more information on logging users' actions, see the section **Viewing Audit Log** (on page 456).

ProcessSync

Every 5 minutes, Business Manager executes an task that looks for changes in Business Manager its objects (customer and administrator accounts, plans, and subscriptions) and applies these changes to corresponding objects on connected panels. You can view the sync state on the **Home** page.

ProcessSchetFacturas

If you use schet-facturas in your business, Business Manager runs an task that check all subscriptions and generates schet-facturas for them as needed once a day. In addition, this task sends schet-facturas to your customers by e-mail according to configuration on the **Business Setup** > **All Settings** > **Schet-Facturas Issuing** page. Find more information about setting up issuing and sending of schet-facturas in the chapter **Configuring Schet-Facturas** (on page 166).

Viewing Accounting Information

In this section:

Generating Accounting Reports

Business Manager allows you to generate the following types of accounting reports:

- The *Balance Sheet Report* is a summary of your assets, liabilities, and equity account balance.

- The *Profit and Loss Report* is a summary of your revenue, cogs, and expense account balance.

- The *Accounts Receivable Aging Report* shows what is owed to you and how long it has been owed.

- The *Ranged Cash Flow Report* shows you the change (and gives you small explanations of what they mean to your business) for a few important accounts.

- The *Ranged Plan Revenue Report* shows us the amount of revenue generated on a per plan basis for a given date range.

- The *Daily Invoice Sheet* is the list of invoices and their respective amounts and customers for a given day.

- The *Ranged Daily Signup Report* is a list of the customers that signed up in a particular date range, grouped by day, and totaled daily, and for the range. The revenue from their signup invoices is also included.

➢ *To generate a report:*

1. Go to **Business Monitoring** > **Accounting** > **Reports**.

2. Click the type of report you need.

3. Choose a date range.

4. Click **Generate**.

Generating Daily Journals

With Business Manager you can keep two types of daily journals:

▪ *Sales & Receipts Journal* includes all daily sales and payments received.

▪ *Purchases Journal* includes all daily cash disbursements.

Note: The *Purchases Journal* is currently not being used.

➢ *To generate a daily journal:*

1. Go to **Business Monitoring** > **Accounting** > **Daily Journals**.

2. Click the type of report you need.

3. Choose a date range.

4. Click **Generate**.

Viewing General Journal

The *General Journal* report includes a list of all debits and credits in the system.

To view the General Journal, go to **Business Monitoring** > **Accounting** > **General Journal**.

Generating General Ledgers

Business Manager supports the following types of general ledgers:

▪ The *General Ledger* is a permanent summary of all supporting daily journals. Financial statements are generated from this ledger.

▪ The *Accounts Receivable Ledger* is a special general ledger used only for posting accounts receivable journal entries. Monthly customer statements are generated from this ledger.

▪ The *Accounts Payable Ledger* is a special general ledger used only for posting accounts payable journal entries. Monthly statements for companies you owe are generated from this ledger.

▪ The *Tax Payable Ledger* is a special general ledger used only for posting tax payable journal entries. Annual statements for the taxes you owe are generated from this ledger.

➢ *To generate a ledger:*

1. Go to **Business Monitoring** > **Accounting** > **General Ledgers**.

2. Click the type of ledger you need.

3. Choose a date range.

4. Click **Generate**.

Viewing System Information

Server Information

Clicking **Business Setup** > **All Settings** > **Server Info** will provide you with a brief rundown of your server information:

- **Server Information**. Here you should see the type of OS and web server you are running, including version number.
- **PHP Information**. A brief display of the PHP version you are running. The *PHPinfo* script displays detailed information about your PHP settings here. We include access to this script inside Business Manager to enable you to see clearly which PHP Business Manager is using, and what the settings are. Having access to the PHPinfo script can also be extremely useful for Business Manager support technicians, as system incompatibilities can be easily identified and suggestions for corrections made. Switching off the `phpinfo` function in PHP will disable this view in Business Manager as well.
- **Database Information**. This is the version of the database you are using.
- **cURL Information**. The version of cURL you are using, including SSL information.

This information is cursory, and is not meant to be exhaustive. It functions mainly to provide our technicians basic information in the event they need to investigate a problem in your Business Manager.

Business Manager Version

To view your Business Manager version, go to **Business Setup** > **All Settings** > **License Info.**

Note: The versions feature is specific to Business Manager developers only. This will be relocated and hidden in a future release.

Module Information

To list all of the available modules, go to **Business Setup** > **All Settings** > **Server Info**. Here you will find the modules organized by type. You will also see displayed the status of the module (whether stable or testing), the latest version number, the author, and DRM information.

Managing SSO Service

Business Manager offers the *global account* feature that allows you to authorize only once and then switch between Parallels Plesk Panel and Business Manager without being prompted to log in again. The global accounts are managed by the *Single Sign-On* (*SSO)* service.

The software that provides the SSO service is called *SSO server*. This server is automatically installed together with Panel. By default, the SSO is automatically set up to share global accounts between Business Manager and Panel installed on the same server (the *local* Panel). In this case, the SSO does not need to know the IP addresses of the Business Manager and Panel, so it uses the *localhost* IP address (127.0.0.1) for referring to them. This SSO mode is called *single-panel mode*. The single-panel mode best suits for beginner hosting providers that use a single Panel (which is local). This mode works out of the box and does not require any additional host name configuration steps.

If you want to expand you business and sell hosting accounts on two or more Panel servers, make sure that all these servers are able to connect to Business Manager and reconfigure the SSO to work with multiple Panels. To check if the Panel servers resolve the Business Manager host name, run the `nslookup` system utility on these servers:

`nslookup` *<bm_host_name>*

If your Business Manager host name is not registered, register it or purchase a new host name and configure Business Manager to use it by running the following command:

`/usr/share/plesk-billing/integration --command=update --`
`hostname=`*<new_host_name>*

After you make sure that Panel servers are able to connect to Business Manager server, switch the SSO to the *multiple-panels* mode. In this mode, the SSO uses the servers host names instead of the localhost and this allows Business Manager to interact with multiple remote panels. After switching the SSO mode, connect the remote Panels. You can find the instructions on changing the SSO mode below.

The interaction between the SSO service and Business Manager is regulated by the SSO utility. To learn more what you can do with this utility, refer to the **Parallels Plesk Panel Command Line Reference** for Linux or Windows, section **Single Sign-On Configuration**.

Switching SSO Modes

Note: Before you switch SSO to multiple-panels mode, ensure that connected Panels servers resolve the Business Manager domain name.

To switch the SSO to multiple-panels mode, run the following command on the Business Manager server:

`/usr/share/plesk-billing/integration --command=switch-sso-mode --sso-`
`mode=multiple-panels`

To switch the SSO back to *single-panel* mode, run the `integration` utility the following way:

`/usr/share/plesk-billing/integration --command=switch-sso-mode --sso-`
`mode=single-panel`

Important: If you switch SSO to the single-panel mode while the remote Panels are still connected to Business Manager, your customers whose subscriptions are served by remote Panels will experience problems with transparent switching to these Panels.

Troubleshooting

This section lists common problems you may encounter when operating with Parallels Customer and Business Manager and provides recommended solutions.

In this section:

Turning on Debug Logging

If an error occurs, the debug logging helps you collect the information necessary for our support engineers to diagnose and fix it. You should turn this service on, reproduce the error, and attach the newly added log records to the error description.

➢ *To turn on the debug logging, do the following:*

1. In file `config.php,` set *true* for parameter *ALLOW_DEBUG_LOGGING*.

If you run Linux, the file resides in `/opt/plesk-billing/lib-billing/include/config/.`

2. Go to the **Business Setup** > **All Settings** > **Debug Log** and click **Enable Logging** .

Note: The value of *ALLOW_DEBUG_LOGGING* also affects the information provided in error reports. If you only wish to output extended details in error reports, skip step 2. Be aware that these reports may contain sensitive information. The error reports list is available at **Help & Support** > **Show error reports**.

Web Hosting Management

As described in the chapter How Panel Works, one of the Panel's main functions is simplified administration of hosted websites, mailboxes, and other network resources. You can use hosting resources on your server for your own needs as well as for selling these resources to customers: For example, you can set up your corporate website or mailbox on the Panel server.

Setting Up Your Own Subscriptions (Webspaces)

To set up your own hosting account, create a webspace in the Server Administration Panel, **Home** > **My Webspaces** group. A *webspace* is a subscription to the **Unlimited** service plan (a plan with unlimited resources). During webspace creation, you will be prompted to specify a domain name for the webspace and access credentials. The webspace will appear in the list on the **Subscription** page together with your customers' subscriptions. To start creating your website or editing the subscription settings, click the **Open in Control Panel** link next to the subscription name. A list of operations available to you in the Control Panel is provided in the table below.

Each webspace opens in the Power User view. This view combines management of own hosting accounts and server administration capabilities. In turn, actions related to hosting plans, resellers, and customers are still performed in the Server Administration Panel.

To switch back to serving hosting customers and resellers, click **Go back to Server Administration Panel** at the top of Control Panel pages.

For more information about Power User view, see the section **The Panel GUI** (on page 29).

Helping Customers Manage Their Subscriptions

Your customers have different levels of technical expertise and, therefore, may have problems with managing certain settings of their subscriptions. To assist your customers, you can log in to the Control Panel under a customer's account and edit their websites and subscription properties as your own ones. To start managing a customer's subscription in the Control Panel, find this subscription in the list on the **Subscriptions** page and click **Open in Control Panel**.

Operating in Control Panel

Operations related to managing hosting accounts, such as managing websites content, adding and removing mailboxes, changing hosting settings, and so on, are available to you in a separate interface called *the Control Panel*.

The sections of this chapter explain how to perform hosting operations in the Control Panel. The instructions are applicable to your own subscriptions and subscriptions of your customers. This means that when we say *your website*, *your subscription*, and so on, we imply both your own and your customers' websites or subscriptions. The table below lists the sections of this chapter and briefly describes what you can learn from them.

Section	Description
Quick Start with Parallels Panel	Explains the workflow of setting up a website and a mail account in the Control Panel.
Customer Account Administration	Explains how to view and manage account settings, subscriptions, invoices, and resources in the Control Panel.
Websites and Domains	Explains how to create websites, fill them with content, add applications, and configure subscriptions' properties related to websites and domain names.
Building Websites with Web Presence Builder	Provides instructions on creating websites using Web Presence Builder - a visual website editor coming in a bundle with Panel.
FTP Access to Your Websites	Explains how to set up access to websites over the FTP for subscribers and auxiliary users.
Mail	Describes how to set up mail accounts and configure mail settings under subscriptions.
Scheduling Tasks	Provides instructions on configuring Panel to automatically run scripts at specific time.
Using Databases	Explains how to use databases under subscriptions: create new databases, import existing ones, or access external databases.
Backing Up and Recovering Websites	Provides instructions on backing up and restoring data of certain customer subscriptions on behalf of subscribers.

In this chapter:

Quick Start with Parallels Panel

According to the latest studies, the Internet has become the most popular source of information in the world, leaving far behind all traditional media such as TV or newspapers. Nowadays, the first thing people do when trying to find services is to searching for them on the web. Thus, a proper web presence is vital for every business. There are a number of ways you can present your company on the Web. A web presence may be as simple as a contacts page, or as complex as a large company website with access to an ERP system. In both cases, you should perform the same steps to get your business online.

Before proceeding any further, you will need to take the following two essential steps:

- *Purchase a customer account from a hosting provider*.
  Your customer account provides access to the services that are vital for a web presence - Internet connectivity, disk space to store your website content, and so on. For more information about customer accounts in Panel, refer to the chapter **Customer Account Administration**.

- *Register a domain name*.
  This is the name people will use to access your site from their browsers. For example, `www.example.com`.

These two elements - an account for web hosting management and a domain name make up your *website.*

In this chapter, we will explain how to create your first website, fill it with content, create mailboxes for users of the site, and, finally, view the site visits statistics.

Advanced Hosting Features

Once you are comfortable with basic Panel capabilities, try out some advanced hosting features: Expand website functionality by installing web applications (on page 552), secure your sites with SSL certificates (on page 560), employ databases, and much more. Note that hosting providers can turn off some of the advanced features to make your Control Panel look simple and user friendly. We have used the **(Advanced)** prefix to designate the sections about features that may be turned off. If you require one of the advanced options, contact your hosting provider.

In this section:

Set Up Your First Website

Now that you have a customer account and a domain name, the first thing you will want to do is create a website. The information about the possible ways to do it is provided in the section **1. Create Your Site** (on page 470)

When your site is ready, you may want to take a look at the result in your browser. Learn how to do it in the section **2. Preview your Site** (on page 473).

Even a perfectly designed site will not be effective if no one knows about it. When all the design work is done, you need to submit your site to popular search engines. The corresponding instruction is located in the section **3. Submit Your Sites to Search Engines** (on page 474).

In this section:

1. Create Your Site

There are three general ways to create a website:

- Employ a web design studio to create a site for you, and then you will just maintain its content.

- Create a site by yourself using *Web Presence Builder* - the powerful tool that allows you to create professional-looking websites in a few mouse clicks. Learn more in the section **Web Presence Builder** (on page 471).

- Create your website in a third-party *Content Management System* - an editor that allows you to easily create and edit website content such as pages, scripts, applications, and so on. To learn more about creating sites in third-party content management systems, see the section **Content Management Systems** (on page 471).

If you have purchased a ready-made site or created it by yourself, you should upload the site content to your account to make the site visible on the web. There are two ways to upload content:

- *Using FTP*. Learn more in the section **Uploading Content Using FTP** (on page 473).

- *Using an integrated <filemng>*. Learn more in the section **Uploading Content with <filemng>** (on page 473).

In this section:

Web Presence Builder

Web Presence Builder is a tool that enables users with no knowledge of HTML markup or graphic design skills to create professional-looking sites. This tool provides a simple visual editor and a huge set of templates for different websites. The editor allows you to create web pages, add content of different types (text, images, video, scripts), and edit website settings such as website name, keywords, icons, and so on.

To create websites in Web Presence Builder, ensure that your hosting subscription includes this option. If it does not, choose another way or upgrade your subscription.

> ➢ *To create a website with Web Presence Builder:*

1. Go to either the **Home** tab or the **Websites & Domains** tab, and click the link **Launch Web Presence Builder**.

2. Select a topic that best suits your website.

3. Edit the website:

    a. *Structure*: add more pages, remove the predefined pages that you do not need.

    b. *Content*: change the predefined content to your own, add text, images, videos, scripts, and other required elements.

    c. *Design*: change the layout and color scheme.

4. Publish the website.

Find more information about creating websites with Web Presence Builder in the section **Building Websites with Web Presence Builder** (on page 599).

Content Management Systems

Content Management Systems (or *CMS*) are applications that provide a graphical user interface for adding and editing website content: pages, scripts, files, multimedia content, and so on.

Before you can create a website in a third-party CMS, you should install the CMS on your hosting account. Note that you can install the CMS only if your hosting subscription allows it.

> ➢ *To create a website using a CMS:*

1. Go to the **Applications** tab.

2. Find the CMS you need in the list of available applications, and install it as described in the section **Using Website Applications** (on page 552).

3. Create your website in the CMS. For information about creating websites with your CMS, refer to the relevant documentation.

Uploading Content

If you already have a website created by yourself or a web design studio, just upload the website files and folders to your provider's server. You can do this in one of the following ways:

- *Using FTP*. This way is better when several people manage a website's content because it does not require access to your customer account. You can just create FTP users for them. Learn more about this method in the section **Uploading Content Using FTP** (on page 473).

- *Using Control Panel File Manager*. This way is more convenient since it uses the Control Panel GUI and provides a set of useful features, for example, a visual HTML editor and a file permissions manager. Find more information on the features of content manager in the section **Uploading Content with File Manager** (on page 473).

In this section:

Uploading Content Using FTP

> ➤ *To publish a website using FTP:*

1. Connect to your webspace on the server with an FTP client program, using your FTP account username and password.

You can change your username and password in the Panel at the **Websites & Domains** tab > **Web Hosting Settings**.

The FTP address should be ftp://your-domain-name.com, where your-domain-name.com is your site's Internet address.

Enable the passive mode if you are behind a firewall.

2. Upload the files and directories of your site to the `httpdocs` directory. If you use CGI scripts, place them in the `cgi-bin` directory.

3. Close your FTP session.

You can also set up additional FTP accounts if you need to collaborate on website content with other users. For more information, see the section **Adding FTP Accounts** (on page 640).

Uploading Content with File Manager

To upload a website from your computer to Panel server with File Manager, open the **Files** tab of Control Panel and drag the website folder to the central area of this tab. You can also upload your website as a compressed ZIP file and then extract the contents using the archiver integrated in File Manager.

With File Manager, you can also do the following:

- Edit HTML files in the visual editor.
- Preview website pages.
- Edit files in the text editor.
- Manage the files' access permissions.

Learn more about uploading and editing website files and folders with File Manager in the section **Managing Website Content** (on page 543).

2. Preview Your Site

After you uploaded website files to the webspace, you can check how your site will look in a web browser, even before the information about the new site has spread in the Domain Name System.

> ➤ *To preview a site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. In the list of domain names at the bottom of the screen, locate the website that you want to preview and click the corresponding icon .

You site will open in a new browser window.

Note: For sites created with Web Presence Builder, protected access to site pages can work incorrectly in Preview mode.

Sometimes, you may need to show your site to someone when your domain name is not registered yet. There are several ways to do it without giving a person access to your customer account. Learn more in the section **Previewing Websites** (on page 551).

3. Submit Your Sites to Search Engines

To gain more visitors and drive traffic to your site after you publish it on the Internet, you need to submit it to search engines. Before the site submission, you can improve the site ranking in search results by the following content optimizations:

- Include in the text contained in your web pages the frequently searched keyword phrases, which are relevant to the topic of your site. For example, mention your product or a topic of your interest several times in the text on a web page.

- Add relevant keywords to the `<title>` and `<meta>` tags. Some search engines look for keywords and descriptions in meta tags placed within web pages, and present these keywords in search results.

For example, if you are selling hosting automation software, then you can include the following tags in HTML pages of your website:

```
<HEAD>
<TITLE>Ordering hosting automation software
</TITLE>
<META name="keywords" content="order,hosting,software">
<META name="description" content="Ordering Hosting Automation Software">
</HEAD>
```

Separate the keywords with a comma without white spaces.

After you optimize the website and publish it to your customer account, submit it to search engines, such as Google, Yahoo, Bing, and other engines that you know to be popular in your country.

- To submit a site to Google, visit http://www.google.com/addurl/.
- To submit a site to Yahoo, visit https://siteexplorer.search.yahoo.com/submit.
- To submit a site to Bing, visit https://ssl.bing.com/webmaster/SubmitSitePage.aspx.

Set Up Mail Accounts

Once your website is ready, you can start creating mail accounts. You can choose, for example, to create mail accounts for all users within your organization. Note that the number and size of mailboxes is limited by your hosting plan.

In this section:

1. Create Mail Account

> ➢ *To create an e-mail address:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Mail** tab.

3. Click **Create E-mail Address**.

4. Type the left part of the e-mail address before the @ sign, and, if you have several domain names on your account, select the domain name under which the e-mail address will be created.

5. Leave the **Mailbox** checkbox selected.

Clearing this checkbox makes sense only if you want to use this address as a mail forwarder, which will forward all incoming mail to another address.

6. Specify the mailbox size or use the default size defined by the provider's policy or your service plan.

7. Specify a password consisting of five or more Latin characters.

8. Click **OK**.

2. Access Your Mailbox

There are two ways to access a mailbox for sending and receiving e-mail messages:

- Set up and use an e-mail client program on your computer. Typically, in such programs you should specify the following settings:

    - **Username**. In this field, specify your full e-mail address. for example, johndoe@example.com.

    - **Password**. Most likely, the password to your e-mail account.

    - **Mail server protocol**. This property defines whether you want to keep copies of messages on the server or not. To keep the copies on the server, select the **IMAP** option. If you do not want to keep them on the server, select **POP3**. Selecting IMAP will also allow you to train the SpamAssassin spam filter on e-mail messages you receive, if SpamAssassin is enabled on the server.

    - **Incoming mail server** *(POP3/IMAP)*. Type your domain name. For example, *example.com*. The POP3 port is 110. The IMAP port is 143.

    - **Outgoing mail server** *(SMTP)*. Type your domain name. For example, *example.com*. The SMTP port is 25. This server requires authentication.

    To get detailed instructions on configuring popular e-mail clients to work with your mailbox, see subsections of this section.

- Use a web browser to connect to the webmail interface. Webmail interface is provided by Horde IMP Webmail software, which is installed by default. You can either use the default Horde IMP Webmail, or install Atmail Webmail Lite software.

In this section:

Access from Webmail

➢ *To access your mailbox through webmail, do any of the following:*

- In a Web browser, visit the URL `webmail.example.com`, where `example.com` is the Internet address of your website. When prompted, specify your full e-mail address as the username (for example, `mail@example.com`), and specify the password that you use for logging in to the Panel.

- When logged in to the Panel, click the **Mail** tab, and in the list of e-mail addresses, click an icon 🖼 corresponding to the e-mail address you need.

Access from Microsoft Office Outlook

➢ *To set up Microsoft Office Outlook 2010:*

1. Open Microsoft Office Outlook.

2. Go to **File > Info > Add Account**.

3. Select the checkbox **Manually configure server settings or additional server types**.
   Click **Next**.

4. Select the **Internet E-mail** option and click **Next**.
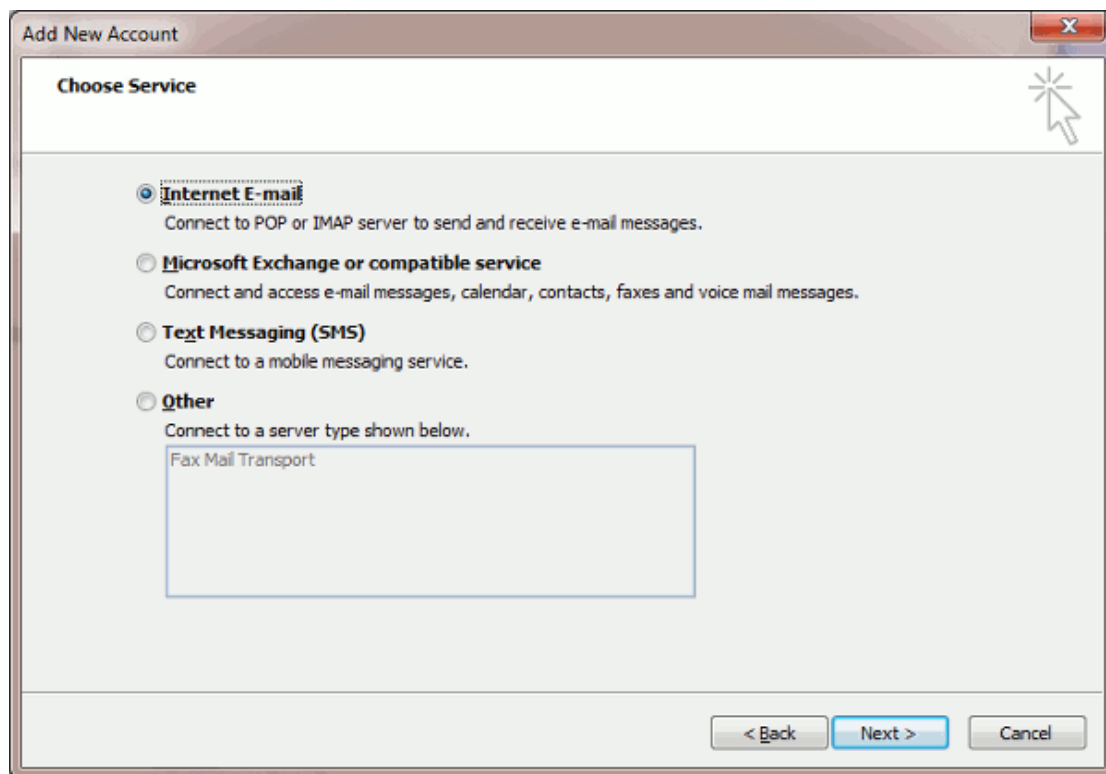
5. Specify the following:

- Your name.

- Your e-mail address.

- **Account type.** If you want to keep copies of messages on the server, select the IMAP option. If you do not want to keep any messages on the server, select the POP3 option. Selecting IMAP will also allow you to train the SpamAssassin spam filter on e-mail messages you receive, if SpamAssassin is enabled on the server.

- Incoming mail server. Type your domain name. For example, example.com.

- **Outgoing mail server (SMTP).** Type your domain name. For example, example.com.

- **User Name.** Specify your full e-mail address. Example: johndoe@example.com.

- **Password**. Most likely, this password coincides with the password you use for logging in to Panel.

- **Require logon using Secure Password Authentication (SPA)**. Leave this option cleared.

6. Click **More Settings**, open the **Outgoing Server** tab and check **My outgoing server (SMTP) requires authentication**.
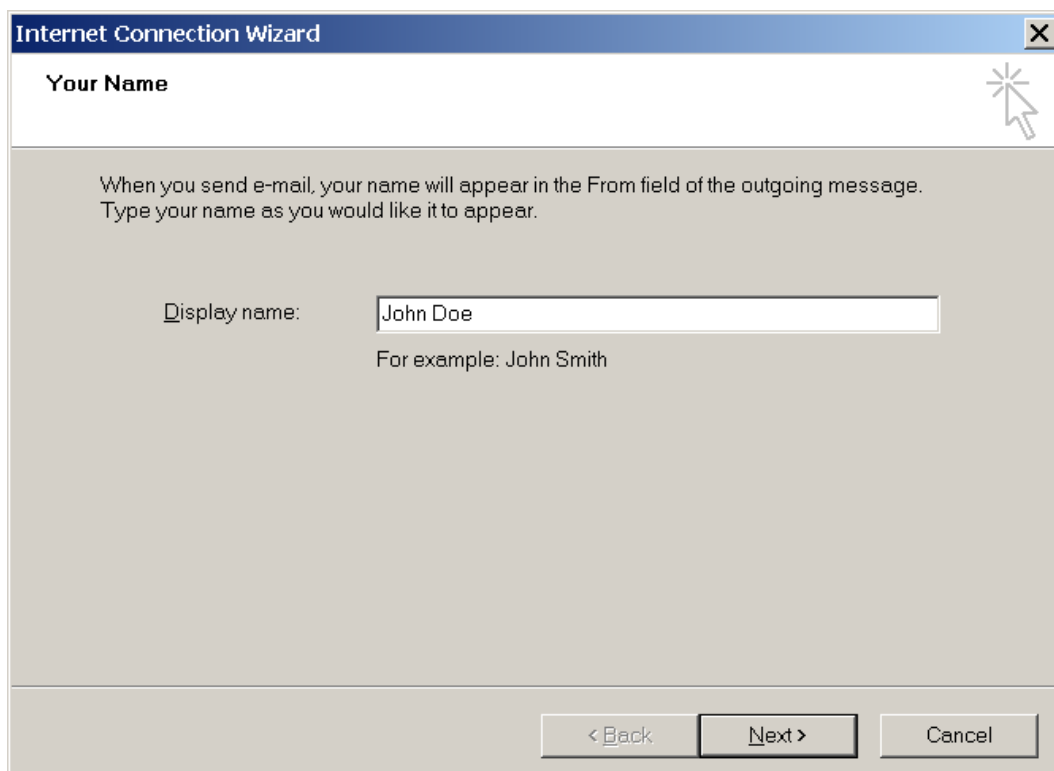
7. Click **Next**.

8. Click **Finish**.

Access from Microsoft Outlook Express

The instructions provided in this section were verified against Microsoft Outlook Express 6. They might not work with earlier or later versions of Microsoft Outlook Express.

➢ *To set up Microsoft Outlook Express:*

1. Open Microsoft Outlook Express.

2. Go to **Tools** > **Accounts**.

3. Click the **Add** button and select the **Mail** item.

4. Enter your name as you want it to appear in any messages you send, and click **Next**.

5. Type your e-mail address, and click **Next**.
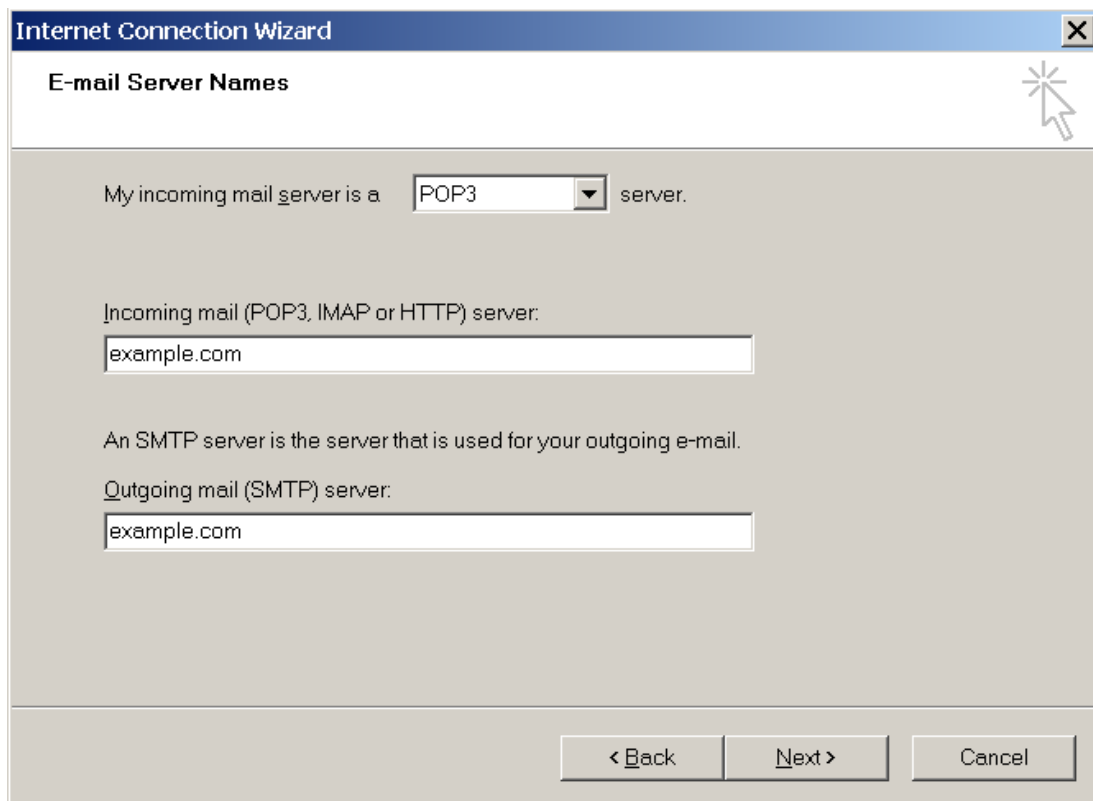
6. Specify the following settings:

    ▪ Protocol of your incoming mail server.

      If you want to keep copies of messages on the server, select the **IMAP** option. If you do not want to keep any messages on the server, select the **POP3** option. Selecting IMAP will also allow you to train the SpamAssassin spam filter on e-mail messages you receive, if SpamAssassin is enabled on the server.

    ▪ Incoming mail server. Specify your website's Internet address.

    ▪ Outgoing mail server. Specify your website's Internet address.

7. Click **Next**.

8. Specify the following:

   - Your account name. Type your e-mail address in the **Account name** box.

   - Your password. Most likely, this password coincides with the password you use for logging in to the Panel.

   - **Remember password** checkbox. Leave it selected if you do not want to be prompted to enter password each time your e-mail program connects to the mail server to check for new mail, and click **Next**.

9. To complete setting up your e-mail program, click **Finish**.

Access from Mozilla Thunderbird

The instructions provided in this section were verified against Mozilla Thunderbird 12. They might not work with earlier or later versions of Mozilla Thunderbird.

➤ *To set up Mozilla Thunderbird:*

1. Open Mozilla Thunderbird.

2. Go to **Tools** > **Account Settings** > **Account Actions** > **Add Mail Account.**

3. Specify the following:

   - Your name, as you want it to appear in any messages you send.

   - Your e-mail address and password.

4. Click **Continue**.

5. If Thunderbird fails to find the settings automatically, specify the following:

   - Account type. If you want to keep copies of messages on the server, select the **IMAP** option. If you do not want to keep any messages on the server, select the **POP3** option. Selecting IMAP will also allow you to train the SpamAssassin spam filter on e-mail messages you receive, if SpamAssassin is enabled on the server.
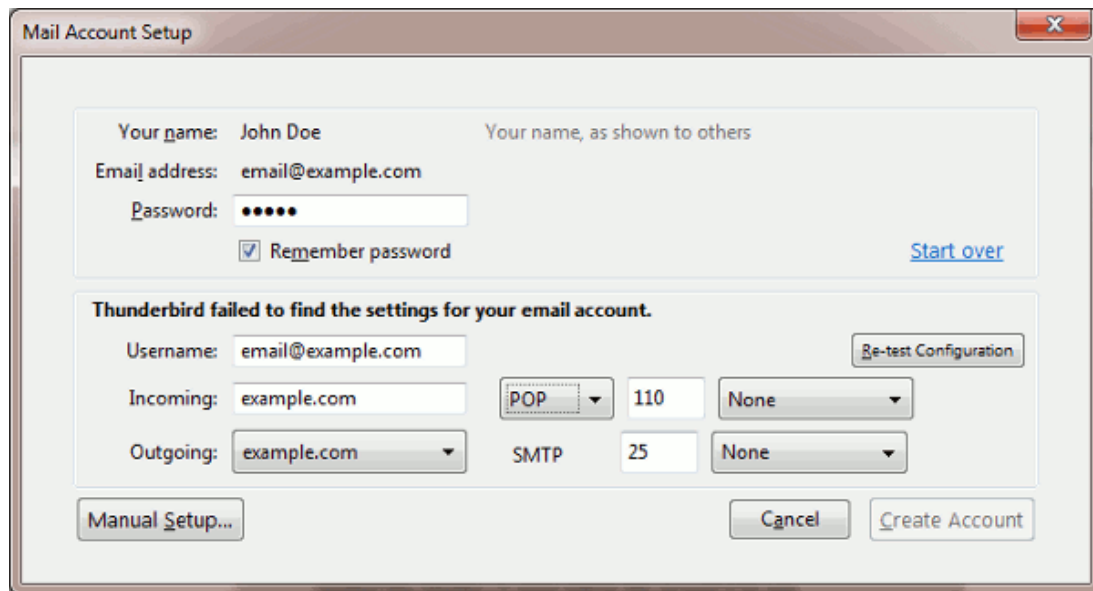
6. Click **Create Account**.

If you set up a mail account manually, please use the following typical combinations of connection security and authentication method settings. If the settings do not work for you, ask your hosting provider about the correct combination.

On Linux:
- **Connection security**: STARTTLS
- **Authentication method**: Encrypted password

On Windows, IMAP:
- **Connection security**: None
- **Authentication method**: Encrypted password

On Windows, POP3:
- **Connection security**: None

Authentication method: Password, transmitted insecurely Other parameters that you may need when configuring your account manually:

- POP3 port: 110
- IMAP port: 143
- SMTP port: 25
- **Username**. Your full e-mail address. For example: johndoe@example.com.
- **Incoming server address** (POP3/IMAP). Specify your website's Internet address. Example: *example.com*
- **Outgoing server address**. Specify your website's Internet address. Example: *example.com*

Access from Apple Mail

The instructions provided in this section were verified against Apple Mail 3.6 (Leopard). They might not work with earlier or later versions of Apple Mail.

➤ *To set up Apple Mail:*

1. Run Apple Mail.

   If you run it for the first time and do not have any mail accounts configured in it, skip the next step: Apple Mail will take you directly to creating one.

2. Open the Adding Mail Account wizard:

   a. Click **Mail** > **Preferences....**

   b. Select the **Accounts** tab.

   c. Click the **+** button at the bottom left corner.

3. Enter the account information:

   ▪ Your full name

   ▪ Your full e-mail address

   ▪ The password you use to log in to the Panel.
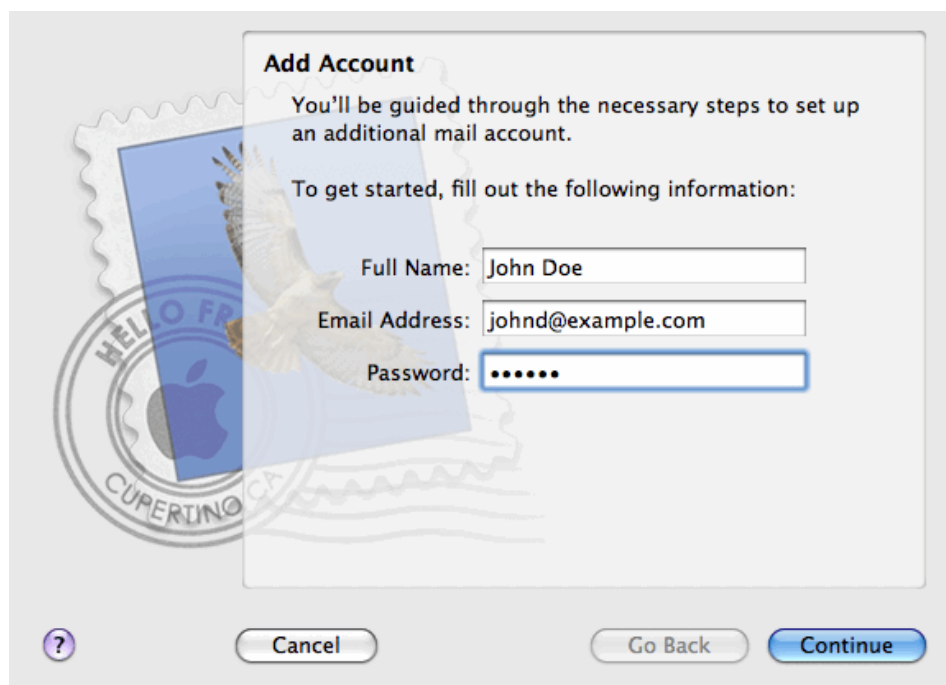
4. Click **Continue**.

5. Fill in the following incoming mail server information:

   ▪ **Account Type**: select whether you want to use IMAP or POP protocol.

We recommend selecting IMAP if you use SpamAssassin as a spam filtering solution: IMAP account is a requirement for SpamAssassin learning which messages are spam and which are not.

- **Incoming Mail Server**: type in the name of domain which serves your mail (which follows the @ sign in your e-mail address).

- **User Name**: enter your full e-mail address.

- **Password**: leave it auto-completed (Apple Mail takes it from the previous step).
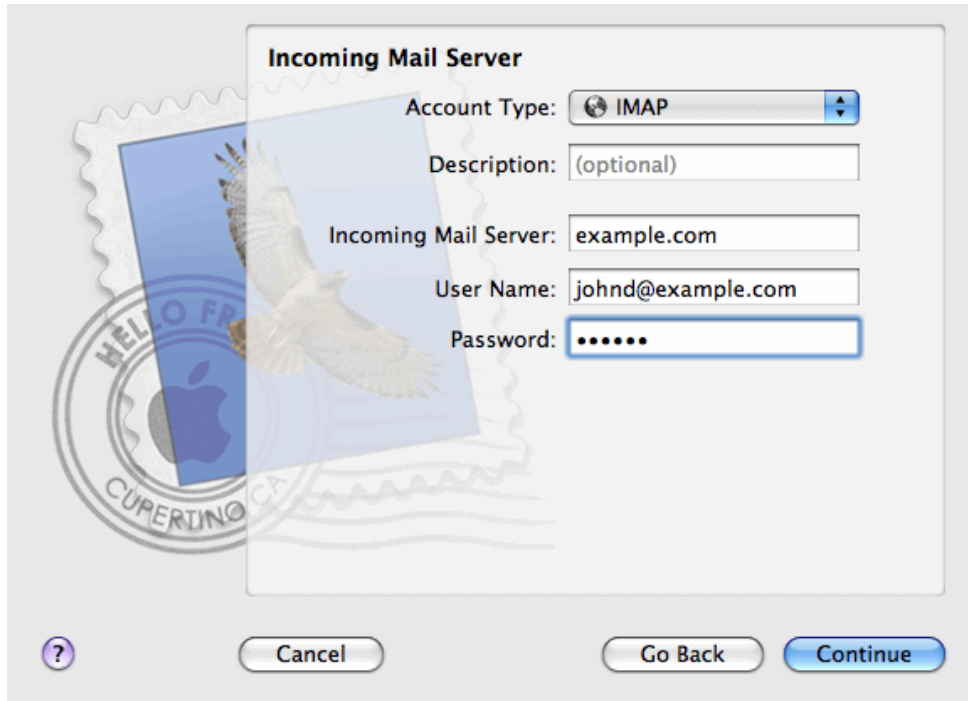
6. Click **Continue**.

7. (Optional) Specify the incoming mail security options:

   a. Select the **Use Secure Sockets Layer (SSL)** checkbox.

   b. Select the authentication method.

   Keep the default method if you are not sure which to select.

   Apple Mail displays this setup screen only if a mail server bundled with Parallels Small Business Panel supports SSL for the selected account type (POP or IMAP).

8. Click **Continue**.

9. Fill in the following outgoing mail server information:

   - **Outgoing Mail Server**: type in the name of domain which serves your mail (which follows the @ sign in your e-mail address).

   - **Use only this server**: selected.

   - **Use Authentication**: selected.

   - **User Name**: enter your full e-mail address.

   - **Password**: leave it auto-completed (Apple Mail takes it from the previous step).

10. Click **Continue**.

Apple Mail displays overall description of the mail account that is going to be created.

11. Select the **Take account online** checkbox and click **Create**.
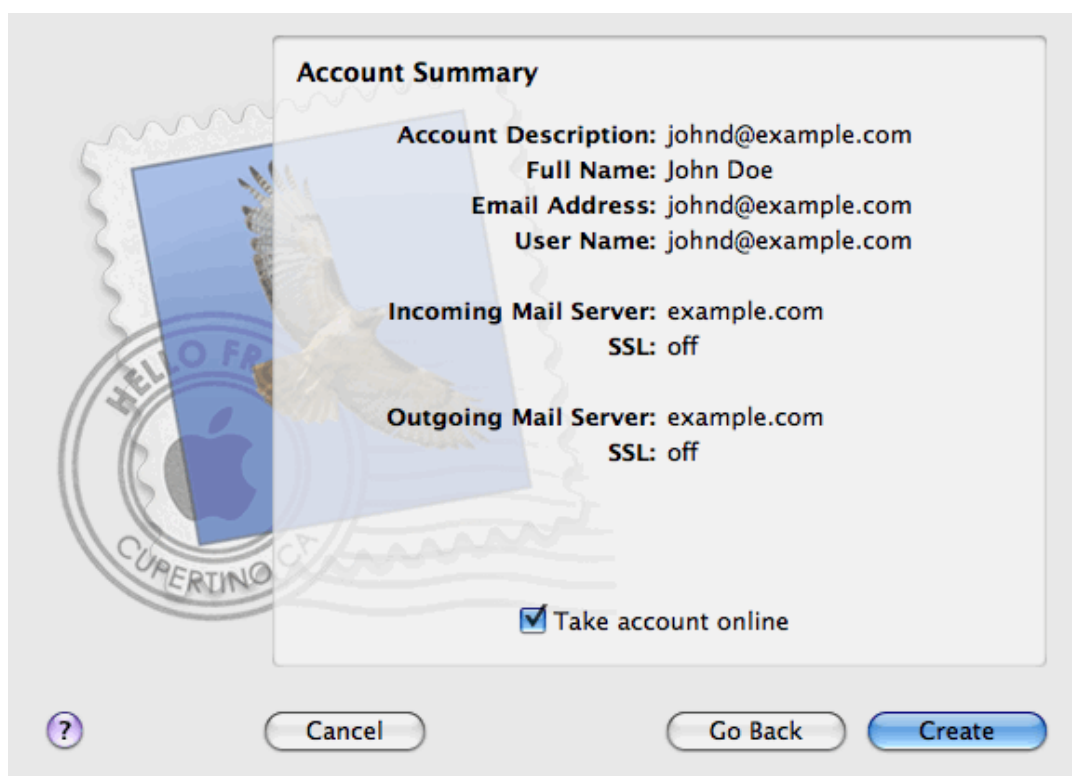
View Site Visit Statistics

Finally, when your site works fine and search engines return it in search results, it is the best time to evaluate site efficiency by viewing the visits statistics.

➢ *To find out how many people visited a site, from what countries, and what pages of the site they viewed:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Web Statistics**.

   The site visitor statistics will show in a new browser window.

3. To view statistics for web pages viewed from the SSL-secured area of your site, select **SSL Web Statistics** in the menu.

4. To view statistics for files downloaded over the file transfer protocol (FTP), select **FTP Statistics** in the menu.

Alternately, you can view the visits statistics for a site by visiting the following URL: https://your-domain.com/plesk-stat/webstat. When prompted for username and password, specify your FTP account username and password.

You have successfully completed the quick start part of the guide. Feel free to read about other features that are available to you in the Control Panel.

Customer Account Administration

As described in the section **Quick Start with Parallels Panel**, the first step in establishing your company's web presence is signing up to the services provided by a hosting company (hosting provider). After you subscribe to a hosting plan, a *customer account* in Panel is created to enable you to log in to Panel and use the hosting services and resources like mailboxes, disk space, and bandwidth.

Customer Account and Multiple Subscriptions

Panel allows you to subscribe to as many hosting plans as you need. For example, if you do not want your main site to share hosting resources with a company's branch site you can subscribe to another hosting plan under the same customer account. In other words, a customer account is a personalized access to all your subscriptions (see the picture below).
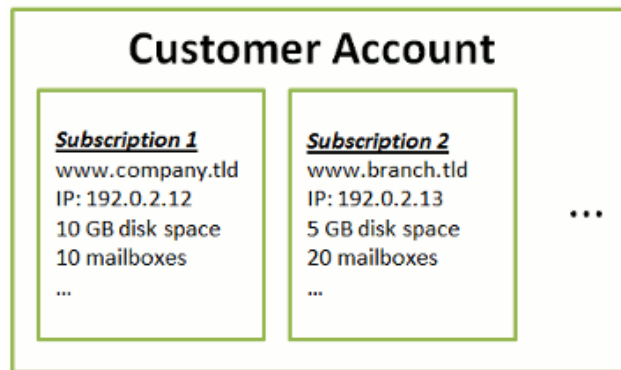
Another reason for using multiple subscriptions is that subscription is limited to *only one IPv4 and one IPv6 address*. Thus, all domains within a subscription share the same IP address (v4 or v6). If you need to host sites on different IP addresses, you should additionally order the same plan for as many IP addresses as you need. This can be useful, for example, if you want to secure connections to each of your sites with a separate SSL certificate. For information on how to purchase an additional subscription, refer to the section **Ordering More Resources** (on page 504).

If you have multiple subscriptions under a single customer account, you can easily switch among them from the **Account** tab. To be more specific, the **Account** tab provides access to operations that apply to *all your subscriptions*. All other tabs (like **Mail**, **Users**, or **Domains & Websites**) are, on the contrary, *subscription-wide*. This means that to change mail settings on a particular subscription, *you should first switch to it* before clicking **Mail**.

Adding Resources to a Subscription

Purchasing a new subscription for extending hosting resources is not always necessary. You can always improve just one of your subscriptions. For example, add extra disk space or SSL support. This can be done by switching to another hosting plan or by purchasing hosting plan add-ons. Learn more in the section **Ordering More Resources** (on page 504).

Managing Customer Account

In Panel, you can perform a number of administrative operations on your customer account:

- Change an account password and personal information. Learn more in the section **Changing Your Password and Contact Information** (on page 493).
- View the list of services and resources provided by subscription on the **Account** tab. For detailed information about all subscription features, refer to the section **Viewing Subscription Summary** (on page 494).
- Make payments to renew your subscription. Learn more in the section **Managing Account Balance and Invoices** (on page 501).
- View statistics on your account: For example, disk space or traffic usage. Learn more in the section **Viewing Statistics** (on page 506).

Allow Other Users to Access Your Account

If the number of hosting maintenance operations is too large to be handled by one person, you can delegate some of them to other people. For this purpose, you can create auxiliary user accounts grouped by means of user roles. For example, you can create a group that is allowed to only upload content to websites. Users in this group will not be able to perform any operations except for managing website content. For more information about auxiliary users, refer to the section **(Advanced) Managing Auxiliary User Accounts** (on page 508).

In this section:

Changing Your Password and Contact Information

➢ *To change your password for access to Control Panel:*

1. Click a link with your name at the top of the screen.

2. Type a new password, and click **OK**.

➢ *To change a username or password that you use for connecting to your webspace:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click **Web Hosting Settings**.

4. Type the new username or password, and click **OK**.

➢ *To change your contact information:*

1. Click a link with your name at the top of the screen.

2. Click the **Contact Details** tab.

3. Update your contact information and click **OK**.

Viewing Subscription Summary

When you subscribe to hosting services, a user account is created in the Panel to allow you to manage your websites and mailboxes on your own.

You can view the following information about your account:

- Current subscriptions to service plans.

  You can be subscribed to a number of service plans at once, and, therefore, can have several subscriptions associated with your account. If a billing system is connected to the Panel, then you can also purchase additional subscriptions, upgrade or downgrade them, and pay your invoices.
- Allocated and consumed resources.
- Hosting features available for your websites.
- Operations you can perform in your Panel.
- Account balance, unpaid invoices, and monthly fee for your hosting package.

➢ *To view the information about your account and your current subscriptions:*

1. Click the **Account** tab.

   A list of your current subscriptions is shown.

2. If the billing system is integrated with the Panel, then the following information is shown:

   - **Account credit balance**. This is how much money is available in your billing account.
   - **Due invoices balance**. This is how much money you owe to your provider. Here, you can pay all invoices at once by clicking **Pay All Outstanding Invoices**, or pay one of invoices by clicking a **Pay Now** link in the list titled **Latest Outstanding Invoices**. You can also view all invoices by clicking the link **Show all invoices**, or print an invoice by clicking an invoice number and then clicking **Print**.
   - **Latest to-do items**. This shows reminders from the system about the actions you need to take.
   - List of all your subscriptions. You can use links in the list to perform the following operations:
     - View subscription properties by clicking a link with subscription name.
     - Select a subscription that you want to manage through the Control Panel by clicking the corresponding link **Switch to Subscription**.
     - Order an SSL certificate for a site by clicking **Request SSL Certificate**. This operation is described in the section **Ordering SSL Certificates**.
     - View properties of already ordered SSL certificates by clicking **Show Certificate Info**.
     - View or change domain information, contact information, and DNS settings specified at a registrar's site, by clicking **Show Domain Info**. These operations are described in the section **Registrar's DNS Settings in Panel** (on page 530).

3. To view detailed information about resource allotments, available hosting options, and permissions for operations, click a subscription's name.

4. Do any of the following:

 ▪ To view a list of allocated and consumed resources, click the **Resources** tab.

 ▪ To view a list of hosting features available for your account, click the **Hosting Options** tab.

 ▪ To view a list of operations that you can perform in your Hosting Panel, click the **Permissions** tab.

In this section:

Allocated and Consumed Resources

If you are subscribed to a number of service plans at once, then you have several subscriptions. For each subscription, the following types of allocated resources are listed in the Panel at the **Account** tab > *subscription name* > **Resources** tab:

- **Disk space**. This is the total amount of disk space allocated to your account with subscription. This amount includes all data related to your websites, e-mail accounts, applications, backups, and log files.

- **Traffic**. This is the total amount of data in megabytes that can be transferred monthly from all your websites.

- **Domains**. This is the number of websites that can have separate second-level domain names, such as, for example, example.com.

  For information about setting up websites, refer to the sections **Set Up Your First Website** (on page 470) and **Adding Domains** (on page 517).

- **Subdomains**. This is the number of additional websites that can have third-level domain names, such as, for example, news.example.com.

  For information about setting up subdomains, refer to the section **Adding Subdomains** (on page 519).

- **Domain aliases**. This is the number of additional domain names that can be set up to point to one of your sites. For example, example.fr and example.de can both point to example.com.

  For information about setting up domain aliases, refer to the section **Adding Domain Aliases** (on page 521).

- **Mailboxes**. This is the number of mailboxes that can be created under all your websites.

  For information about creating mailboxes, refer to the chapter **Mail**.

- **Mailbox size**. This is the amount of disk space that can be occupied by a mailbox.

- **Total mailboxes quota**. This is the total amount of disk space that can be used by all mailboxes under all your domains. This option is available only on Windows-based customer accounts.

- **Mailing lists**. This is the total number of mailing lists that can be set up under all your websites. Note that there are mailing lists and mail groups, which serve the same purpose, but are slightly different in functionality. Mailing lists support archiving and pre-moderation of messages, while mail groups can only be used for sending one message to a number of recipients at once.

  For information about setting up and using mailing lists, refer to the section **Using Mailing Lists** (on page 653).

- **Additional FTP accounts**. This is the number of FTP accounts that can be set up for accessing the webspace, in addition to the main FTP account that was created when your subscription was activated.

  For information about setting up FTP accounts, refer to the sections **Changing FTP Access Credentials** (on page 639) and **Adding FTP Accounts** (on page 640).

- **Databases** (Linux). This is the number of databases that can be hosted for all your websites. Databases are a standard means of organizing data storage that allows dynamic websites, web applications, and their users to store, search, and retrieve information.

  For information about working with databases, refer to the chapter **(Advanced) Using Databases**.

- **MySQL databases** and **Microsoft SQL Server databases** (Windows). This is the maximum number of MySQL and Microsoft SQL Server databases respectively that can be created on the Panel database servers and used by the subscription's websites.

- **MySQL databases quota** and **Microsoft SQL databases quota** (Windows). This is the maximum amount of disk space (in megabytes) that the subscription's MySQL and Microsoft SQL Server databases respectively can occupy.

- **Java applications**. This is the number of Java applications packaged in WAR format that you can install on your sites.

- **Sites published with Web Presence Builder**. This is the number of sites that you can create and publish using Web Presence Builder, if Web Presence Builder option is included in your hosting package.

- **Mobile sites**.This is the total number of websites that you can host with the UNITY Mobile online service, which optimizes sites for viewing on mobile devices.

- **Web users**. This is the number of user accounts that you can create for hosting web pages for other users under your domains.

- **FrontPage accounts**. This is the number of Microsoft FrontPage user accounts that you can create for collaboration on site content using FrontPage. This option is available only for Windows-based customer accounts.

- **Shared SSL links**. This is the number of websites that you can secure with an SSL certificate shared by your provider. This option is available only for Windows-based customer accounts.

- **ODBC DSN connections**. This is the number of connections to external databases that you can create for web applications running on your customer account. This option is available only for Windows-based customer accounts.

- **ColdFusion DSN connections**. This is the number of connections to external databases that you can create for web applications written in Adobe ColdFusion, which are running on your customer account. This option is available only for Windows-based customer accounts.

Hosting Features Available for Your Websites

Depending on your service plan, the following hosting features may be available for your websites (listed at the **Account** tab > *subscription name* > **Hosting Options** tab):

- **SSL support**. This allows you to secure connections to websites with SSL encryption.
  For information about securing sites with SSL, refer to the section **Securing Connections with SSL Certificates** (on page 560).

- **Web statistics**. This allows you to view website visits statistics presented in diagrams and charts.
  For information about viewing website visits statistics, refer to the section **Viewing Statistics** (on page 506).

- **Custom error documents**. This allows you to create custom HTML pages and configure web server to show them instead of typical error messages, such as `404 Not Found`.
  For information about setting up custom error documents, refer to the section **Setting Up Custom Error Pages** (on page 569).

- **Support for programming and scripting languages**, such as PHP, CGI, Perl, Python, Microsoft ASP, ASP.NET, Adobe ColdFusion, SSI.

- **Microsoft FrontPage support** and **Microsoft FrontPage over SSL support**. These allow you to use Microsoft FrontPage to create and edit website content. These options are available only for Windows-based customer accounts.

- **Remote Microsoft FrontPage authoring** (Windows). This allows you to use Microsoft FrontPage to create and edit website content directly on the server. This option is available only for Windows-based customer accounts.

- **Dedicated IIS application pool** (Windows). This provides isolation and improved stability for web applications working on sites.

- **Additional write/modify permissions** (Windows). This option allows the web applications to use a file-based database (like Jet) located in the root of `httpdocs` folder.

- **Allow web users to use scripts**. This allows scripting at web pages available at URLs like http://example.com/~<username>/<webpage>, where *<username>* refers to a web user. Web users are individuals who do not need their own domain names. This service is popular with educational institutions that host non-commercial personal pages of their students and staff.

The following is a list of permissions for operations that you can perform in your Panel (shown at the **Account** tab > *subscription name* > **Permissions** tab):

- **DNS zone management**. Manage resource records in the DNS zones of websites. DNS stands for Domain Name System. It is a service that enables web browsers to locate websites by domain names.
  For information about configuring DNS settings for your websites, refer to the section **(Advanced) Configuring DNS for a Domain** (on page 524).

- **Hosting settings management**. Manage web hosting settings, such as support for scripting languages.

- **PHP safe mode management**. This option is available only for Linux-based customer accounts. It allows you to switch PHP safe mode on or off for websites. Safe mode is a security restriction that does not allow scripts written in PHP to perform potentially dangerous operations on the server. You might need to switch off the safe mode for PHP if you use some web applications written in PHP and if they do not function properly.

- **Management of access to the server over SSH** and **Management of access to the server over Remote Desktop**. Securely upload web content to the server through Secure Shell (Linux) or a Remote Desktop connection (Windows).

- **Anonymous FTP management**. Set up a folder on the server which should be accessible to the Internet users over FTP protocol. This folder can have an address like, for example, ftp://downloads.example.com. This feature is called anonymous FTP because the users will not need to specify a username and password to browse, download, or upload files.

  For information about setting up FTP folder with unrestricted access, refer to the section **Setting Up Anonymous FTP Access** (on page 642).

- **Scheduler management**. Schedule execution of programs or scripts in the server's operating system.

  For information about scheduling tasks, refer to the chapter **Scheduling Tasks**.

- **Spam filter management**. Set custom settings for protection from unsolicited commercial e-mail, also known as spam.

  For information about setting up spam filtering, refer to the section Protecting Mailboxes from Spam.

- **Antivirus management**. Set custom settings for protection from viruses and other malicious software that spreads itself through e-mail.

  For information about setting up virus protection, refer to the section Protecting Mailboxes from Viruses.

- **Data backup and restoration using the server repository**. Use the backup and restore functions of the Panel to back up and restore websites, mail accounts, settings, and keep your backup files on the server.

  For information about backing up and restoring data, refer to the chapter **(Advanced) Back Up and Restore Data**.

- **Data backup and restoration using a personal FTP repository**. Use the backup and restore functions of the Panel to back up and restore websites, mail accounts, settings, and save your backup files to an FTP folder on another server.

  For information about backing up and restoring data, refer to the chapter **(Advanced) Back Up and Restore Data**.

- **Web statistics management**. Set custom preferences for visitor statistics reports.

  For information about configuring and viewing website visitor statistics, refer to the section **Viewing Statistics** (on page 506).

- **Log rotation management**. Set custom preferences for recycling (rotation) of web server logs. Web server records information about connections to your sites and errors occurred on attempts to retrieve missing files. You can use these log files for website debugging purposes.

  For information about working with web server access logs, refer to the section **Log Files** (on page 506).

- **Access to Application Catalog**. View and install applications on websites. For information about applications, refer to the section **Employing Website Applications** (on page 552).

- **Setup of potentially insecure web scripting options that override provider's policy.** This allows you to override the hosting security policy, if it is applied by the provider.

- **Domain creation**. Set up and manage new websites.

  For information about setting up websites, refer to the sections **Set Up Your First Website** (on page 470) and **Adding Domains** (on page 517).

- **Subdomains management**. Set up and manage new websites with addresses like forum.example.com.

  For information about setting up subdomains, refer to the section **Adding Subdomains** (on page 519).

- **Domain aliases management**. Set up and manage additional domain names for a site.

  For information about setting up domain aliases, refer to the chapter **Adding Domain Aliases** (on page 521).

- **Additional FTP accounts management**. Set up and manage additional FTP accounts. To enable collaboration on website content, you can set up FTP accounts for other users and specify which directories of the site should be accessible to them.

  For information about setting up FTP accounts, refer to the section **Adding FTP Accounts** (on page 640).

- **Java applications management**. Install and manage Java applications distributed in WAR archives and obtained separately from third-party vendors or application developers.

  For information about installing Java applications, refer to the section Installing Java Applications.

- **Mailing lists management**. Set up and manage mailing lists.

  For information about setting up and using mailing lists, refer to the section **Using Mailing Lists** (on page 653).

- **Hosting performance settings management**. Limit the bandwidth and number of connections to websites.

  For information about restricting bandwidth usage for sites, refer to the section **Limiting Bandwidth and Number of Connections to Websites** (on page 578).

- **IIS application pool management**. Set custom preferences for IIS application pool (available only on Windows-based customer accounts).

  For information about setting up IIS application pool, refer to the section **Setting Up IIS Application Pool (Windows)** (on page 596).

- **Additional write/modify permissions management**. Set additional write/modify permissions for websites that use file-based databases (available only on Windows-based customer accounts).

- **Shared SSL management**. Secure connections to your sites with SSL protection by using an SSL certificate shared by your provider.

  For more information, refer to the section **Using Shared SSL Certificates (Windows)** (on page 564).

- **Hard disk quota assignment**. Adjust hard quotas on disk space if that is supported by your customer account.

- **Database server selection**. Select a database server for creating databases, if multiple database servers are available.

Managing Account Balance and Invoices

The operations described below are available if your Control Panel is integrated with a billing system.

> ## ➢ *To view your account balance and pay for hosting services:*

1. Click the **Account** tab.

2. The following information is shown:

   - *Account credit balance*. This is how much money is available in your account.

   - *(Optional) Usage charge*. If your subscription allows consuming hosting resources over the plan limit, this number shows how much money you should pay for these resources in addition to your subscription price. To view the detailed information about how much resources you used over limits, click the link **See details** below the charge amount. To learn how the system calculates usage charges, see the section **Calculating Usage Charges** (on page 235).

   - *Due invoices balance*. This is how much money you owe to your provider. Here, you can pay all invoices at once by clicking **Pay All Outstanding Invoices**, or pay one of invoices by clicking a **Pay Now** link in the list titled **Latest Outstanding Invoices**.

   - *Latest to-do items*. This shows reminders from the system about actions you need to take.

   - *(Optional) Affiliate programs*. Your provider may let you earn money for promoting their plans. To start earning, you should join their *affiliate programs*. Here you can find the link to join affiliate programs or the info about your money you earn if you already joined the programs. To learn how to get profit from affiliate programs, see the section **Earning Credits for Promoting Provider's Plans** (on page 503).

   - *List of all your subscriptions*. You can use links in the list to perform the following operations:

     - To view subscription properties, click a link with subscription name.

     - To select a subscription that you want to manage through the Control Panel, click the corresponding link **Switch to Subscription**.

     - To order an SSL certificate for a site, click **Order a Certificate**. For more information about this operation, see the section **Ordering SSL Certificates**.

     - To view properties of already ordered SSL certificates, click **Show Certificate Info**.

     - To view or change domain information, contact information, and DNS settings specified at a registrar's site, click **Show Domain Info**. For more information about these operations, see the section **Registrar's DNS Settings in Panel** (on page 530).

> ## ➢ *To choose a payment method that you would like to use for paying for services:*

1. Go to the **Account** tab > **Billing Accounts**.

   A record about the payment method that you used for purchasing the services for the first time is shown.

2. Do any of the following:

- To view or change settings for a billing account, click the corresponding link in the **Billing account name** column, specify the information about your bank card or account, and select the subscriptions that should be paid by it. Click **OK**.

- To add a new billing account, click **Add New Billing Account**, select the payment method, click **Next**, specify the required information about your bank card or account, and select the subscriptions that should be paid by it. Click **OK**.

- To remove a billing account, click the corresponding **Remove** link.

In this section:

Calculating Usage Charges

If the pay-as-you-go web hosting is allowed for a plan, Business Manager calculates *usage charges* - total costs of hosting resources overage - for the plan's subscribers basing on resource usage statistics that Business Manager collects from the connected Panels on a daily basis. No matter what billing mode and billing cycles you use, this happen on the first day of each month: The system finds the average daily overage of each resource except traffic and multiplies it by the month length and the monthly usage price of this resource.

Traffic

The traffic usage charge is calculated in the following way: Business Manager counts the total traffic overage for a month and multiplies it by the monthly traffic usage price. Say, if subscribers download 10 GB of files during a month while the plan limit is 5 GB, then the traffic overage is 5 GB. Assuming that the traffic usage price is $1 for a 1 GB, such subscribers will pay (10 GB - 5 GB) * $1 = $5 traffic usage fee.

Other Resources

For calculation usage charges for other resources, Business Manager uses the average daily usage values. For example, if a customer uses 500 MB of disk space over the subscription quota for 15 days and then uses extra 700 MB for other 15 days, the average overage will be (500 * 15 + 700 * 15)/30 = 600 MB. If the disk space usage price is $1 for 1 GB, then the customer will pay $0.6 for disk space overage this month.

Calculating Usage with Add-ons

If a customer purchases additional resources in the middle of a month, then the system subtracts the resource amount provided by the add-on from the daily resource usage of each day starting from the add-on purchasing day.

For example, if a customer uses 500 MB of disk space over the plan limit for a whole month and purchases the add-on that provides an additional 1 GB of disk space on the 7th day of the month, then the usage charge will include the payment for only 7 days of 500 MB of disk space overage.

Earning Credits for Promoting Provider's Plans

Panel lets you earn money for promoting your provider's service plans. Particularly, you can get a certain commission for each order placed in the provider's online stores by people who signed up using your referral link.

Participants of affiliate programs (*affiliates*) distribute links to their provider's online stores. Each link is unique, so the system defines who brought a new customer and adds the commission to the link owner's *affiliate balance*. This commission is defined by the terms of the affiliate program and may vary depending on an online store. Affiliates can use money they earn only after the provider pays these money to their account credit balance. Normally, the provider pays out affiliates' commissions when they exceed the affiliate program's *payment threshold*. However, affiliates can ask the provider to pay out their commission before their balances exceed the threshold or, alternatively, delay payments and generate more credits.

Becoming an Affiliate

To start earning money, click the link **Become an Affiliate** on the **Account** tab. Once became an affiliate, you will get the access to the list of the provider's affiliate programs and your affiliate links. To see the programs list and your links, click the **Affiliate Programs** list on the **Account** tab.

Tracking Your Earnings

To see your current affiliate balance, go to the **Account** tab and find the balance in the **Affiliate Programs** group. If you want to see detailed information about your earnings, click the link **Revenue from Referrals**.

Example

For example, your provider offers you an affiliate program with *10%* commission rate and *$20* payment threshold. You share your affiliate link with your friends, and three of them subscribe to a web hosting plan which costs $50. The total commission that you get to your affiliate balance is $50 * 3 * 10% = $15. This amount is less than the program's payment threshold, so to receive credits, you should bring more customers to the online store with your link. When you do this and your balance exceeds the payment threshold which is $20, the provider will add this balance to your credits. When you receive them, you can use them to pay for your subscriptions or subscribe to new services in the provider's online stores.

Participating in Multiple Programs

Your hosting provider may have multiple online stores with different currencies. If the provider offers affiliate programs for stores with different currencies, you will receive separate commissions in the corresponding currencies. For example, if you distribute links to stores with *USD* and *EUR* currencies, your affiliate balance contains two separate affiliate balances, one for each currency. Your provider pays out the commissions separately as well. For example, your affiliate balance is USD 50 and EUR 40 and the payment thresholds of the corresponding programs are USD 40 and EUR 45, your provider will pay out USD 50 to your credits and your affiliate balances will be USD 0 and EUR 40.

Ordering More Resources

The operations described below are available if your Control Panel is integrated with a billing system.

➢ *To add more resources to your subscription or upgrade to another service plan:*

1. Click the **Account** tab.

2. In the list of subscriptions, locate the subscription that you want to upgrade to another service plan, and click a link with the currently used plan's name.

3. Click **Upgrade**.

   If there is no **Upgrade** link, then it means that you cannot upgrade to another hosting plan from your Control Panel, and you need to contact your provider.

4. Do any of the following:

- To add resources to your subscription without upgrading to another plan, select the options you would like to add and click **Adjust Add-ons**.

- To upgrade to another service plan, click **Order Upgrade**.

➢ *To reduce the amounts of resources or downgrade to another service plan:*

1. Click the **Account** tab.

2. In the list of subscriptions, locate the subscription that you want to downgrade to another service plan, and click a link with the currently used plan's name.

3. Click **Downgrade**.

If there is no **Downgrade** link, then it means that you cannot downgrade to another hosting plan from your Control Panel, and you need to contact your provider.

4. Do any of the following:

- To reduce the amounts of allocated resources without downgrading to another plan, select the options you would like to reduce and click **Adjust Add-ons**.

- To downgrade to another service plan, click **Order Downgrade**.

➢ *To subscribe to a hosting plan in addition to your main plan:*

1. Go to the **Account** tab and click the **Add Subscription** link.

2. Select the hosting plan to which you want to subscribe, and click **Buy Now**. Follow the instructions on the screen to complete the order.

Viewing Statistics

➢ *To view the reports on disk space and traffic usage by your account:*

1. If you have several subscriptions associated with your account, in the **Subscription** menu at the top of the screen, select the required subscription.

2. Click the **Statistics** tab.

The following information is presented in charts:

- Disk space used by websites, mail accounts, databases, and other files located in your webspace.

- Traffic used by FTP, web, and mail services during the current month.

  FTP field shows the information about the total size of files transferred to and from the webspace over the file transfer protocol.

  HTTP field shows the information about the total amount of data transferred from all of your websites over HTTP protocol, that is, retrieved by web browsers.

  POP3/IMAP field shows the total amount of data received by all mail accounts under your domains.

  SMTP field shows the total amount of data sent by all mail accounts under your domains.

3. Do any of the following:

- To view a report on the amount of data transferred to and from your sites over FTP, click **FTP Statistics**.

- To view a report on the amount of data transferred to and from your FTP directory, which is accessed without authorization, click **Anonymous FTP statistics**.

- To view a report on the amount of traffic used by services during a certain month, click **Data Transfer Statistics**, and select the required month from the menu.

Log Files

All connections to the web server and requests for files that were not found on the server are registered in log files. These log files are analyzed by the statistics programs running on the server, which then present graphical reports on demand. You may want to download these log files to your computer for processing by third-party statistics programs, or view their contents for web server debugging purposes.

➢ *To prevent these log files from growing too large, you should enable automatic cleanup and recycling of log files:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Logs** (in the **Advanced Operations** group) > **Log Rotation**.

3. Click **Switch On**. If you see only the **Switch Off** button there, this means that log recycling is already switched on.

4. Specify when to recycle log files and how many copies of each log file to store on the server. Also specify whether they should be compressed and sent to an e-mail address after processing.

5. Click **OK**.

➢ *To view the contents of a log file or download it to your computer:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Logs** (in the **Advanced Operations** group). A list of log files opens.

3. Do any of the following:

- To view all entries in a log file, click the log file name. If you want to view only a few last lines from the log file, type the number of lines into the input box under the **Settings** group, and then click the log file name.

- To download a file to your computer, click the corresponding icon .

- To remove a processed log file from the server, select the corresponding checkbox and click **Remove**. Confirm removal and click **OK**.

➢ *To download log files to your computer via FTP:*

1. Connect to the Panel server via FTP and log in using access credentials of the subscription logs of which you want to download.

2. Go to the `/statistics/logs` directory and copy the log files to you computer.

(Advanced) Managing Auxiliary User Accounts

If you want to allow other users to access the Panel for managing websites and installed applications, or to use e-mail services under your domains, then you need to create user accounts for them.

Auxiliary Users and User Roles

Auxiliary user accounts are created based on user roles. The roles include privileges to access certain areas of the Panel and perform operations in the Panel. There are several predefined user roles, namely: Accountant, Application User, Owner, and Webmaster. You can review and modify the Accountant, Application User, and Webmaster roles to suit your needs, or you can create your own custom roles. For more information on user roles and user account creation, refer to the sections **User Roles** (on page 509) and **Auxiliary User Accounts (on page 511)** correspondingly.

After auxiliary user accounts are created, the users will be able to log in to their accounts in Panel and use shortcuts in their Panels to access their mailboxes and work with applications. In addition, you can extend the list of links available to your auxiliary users with your custom links. These can be links to corporate resources, sites on the web, and so on. Learn more in **Custom Links** (on page 513).

Auxiliary Users and Multiple Subscriptions

Since Panel 10.4, if your customer account includes more than one subscription, you can allow auxiliary users to access only a specified subscription. If the **Access to subscriptions** property of a user account is set to a certain subscription, the user will always log in to this subscription and will not be able to switch to other subscriptions.

In this section:

User Roles

➢ *To create a user role:*

1. Go to the **Users** tab > **User Roles** tab > **Create User Role**.

2. Specify the following:

- **User role name**.
- **Access to Panel services**. Grant the required permissions for operations to the user:
  - **Manage users and roles**. Add, modify, and remove user accounts and roles. Note that even if this permission is not granted to a user, the user will be able to browse contact information of other users after logging in to the Panel.
  - **Create and manage sites**. Set up, modify, remove domain names and subdomains, host websites and change web hosting settings.
  - **Configure log rotation**. Manage settings for recycling of web server access and error log files. View, download, and remove log files.
  - **Configure anonymous FTP service**. Set up a directory accessible to all Internet users over FTP without authorization.
  - **Create and manage scheduled tasks**. Schedule execution of scripts or programs on your customer account.
  - **Configure spam filter**. Set up spam protection for mailboxes.
  - **Configure antivirus**. Set up virus protection for mailboxes.
  - **Create and manage databases**. Add, modify, and remove databases stored on your customer account.
  - **Configure and perform data backup and restoration**. Back up and restore data related to your customer account, websites, and mailboxes under your domains.
  - **View statistics**. View reports on disk space and traffic usage by your websites, and website visits.
  - **Install and manage applications**. Install applications on websites and manage them.
  - **Design sites in Web Presence Builder**. Create websites using Web Presence Builder.
  - **Upload and manage files**. Manage files and directories located in the webspace by using the Panel's file manager.
  - **Create and manage additional FTP accounts**. Set up additional FTP accounts for other users.
  - **Manage DNS settings**. Manage DNS settings for domains.
  - **Install and manage Java applications**. Install on websites third-party Java applications.
  - **Create and manage mail accounts**. Create, modify, and remove e-mail accounts.
  - **Create and manage mailing lists**. Create, modify, and remove mailing lists.
- **Access to apps**. Select the applications that the user should be able to access and use. All web applications installed on the server are listed in this area.

  For more information about installing applications and providing access to users, refer to the section **Granting Auxiliary Users Access to Apps** (on page 554).

3. Click **OK**.

➢ *To modify user role properties:*

1. Go to the **Users** tab > **User Roles** tab.

2. Click a link with the role name that you want to change.

3. Change the role properties as required and click **OK**.

➢ *To remove a user role:*

1. Go to the **Users** tab > **User Roles** tab.

2. Select a checkbox corresponding to the role you want to remove and click **Remove**. Note that it is impossible to remove the **Owner** role and other roles that are assigned to one or more users.

3. Click **Yes** to confirm the removal.

Auxiliary User Accounts

➢ *To create a user account:*

1. Go to the **Users** tab > **Create User Account**.

2. Specify the following:

   ▪ **Contact name**.

   ▪ **E-mail address**. The e-mail address will be used as a username for logging in to the Panel.

     ▪ To create a new e-mail address for the user, select the option **Create an e-mail address under your account**,

       type the desired left part of the address which goes before the @ sign, and, if you have a number of domains on your account, select the domain name under which the e-mail address should be created.

     ▪ To associate with this user account an external e-mail address, select the option **Use an external e-mail address**, and specify an existing external e-mail address.

   ▪ **User role**. Select the required user role from the menu.

   ▪ **Access to subscriptions**. Allow a user to access only a specified subscription. The **All** value grants them access to all subscriptions within your customer account.

   ▪ **Password**. Type the password for access to the Panel.

3. Leave the **User is active** checkbox selected. Otherwise, the user will not be able to access the Panel and use applications on your customer account.

4. Click **OK**.

5. Now, if you want to add contact information for the user, click a link with the user's name, and then click the **Contact Details** tab, and specify the user's contact information.

6. Click **OK**.

Now you can notify the user about creation of his or her account and ability to access the Panel. Provide the user with the address to open in his or her browser, the username (which is the user's e-mail address), and the password that you specified in the account settings.

➢ *To change user account properties:*

1. Click the **Users** tab.

2. Click a link with the user's name.

3. Make the required changes and click **OK**.

➢ *To suspend or activate a user account:*

1. Click the **Users** tab.

2. Click a link with the user's name.

3. Do any of the following:

-   To suspend a user account, clear the **User is active** checkbox. The user will no longer be able to log in to the Panel and access applications.
-   To activate a user account, select the **User is active** checkbox.

4. Click **OK**.

➢ *To remove a user account:*

1. Click the **Users** tab.

2. Select a checkbox corresponding to the user account you want to remove, and click **Remove**. Note that you cannot remove your own account.

3. Click **Yes** to confirm the removal.

Custom Links

You can add custom hyperlinks to the Panel and make them visible for your users. The links may lead to web resources, such as your corporate site, or to a web application that can process online requests and accept additional information about the users who click these links.

You can specify what information about users should be passed:

- Subscription ID.
- Primary domain name associated with a subscription.
- FTP account username and password.
- Customer's account ID, name, e-mail, and company name.

You can place the links in the following locations of the Control Panel, and decide who should be able to see them:

- On the **Home** page in the Control Panel, visible only to you. This is achieved by selecting the **Customer's Home page** option in the link properties.
- On the **Home** page in the Control Panel, visible to you and your users who are allowed to log in to the Control Panel. This is achieved by selecting the **Common access** option in the link properties.
- On the **Websites & Domains** tab in the Control Panel, visible to you and your users who are allowed to log in to the Control Panel. This is achieved by selecting the **Websites & Domains page of Subscription** option in the link properties.

> ➢ *To add a custom hyperlink to the Control Panel:*

1. Go to the **Account** tab > **Additional Services**, and click **Add Link to Service**.
2. Specify the following settings:
    - Type the text that will show on your button in the **Button label** box.
    - Choose the location for your button.
    - Specify the priority of the button. Your custom buttons will be arranged in the Panel in accordance with the priority you define: the lower the number, the higher the priority. Buttons are placed in the left-to-right order.
    - To use an image for a button background, type the path to its location or click **Browse** to browse for the desired file. It is recommended that you use a 16x16 pixels GIF or JPEG image for a button to be placed in the navigation pane, and 32x32 pixels GIF or JPEG image for buttons placed in the main frame or desktop.
    - Type the hyperlink of your choice to be attached to the button into the **URL** box.
    - Using the checkboxes, specify whether you want the customer information and other data to be transferred within the URL. These data can be used for processing by external web applications.
    - In the **Tooltip text** input field, type in the help tip that will be displayed when the users place the mouse pointer over the button.

- Select the **Open URL in Parallels Panel** checkbox if you want the destination URL to be opened in the main frame of the Panel, otherwise, leave this checkbox cleared to open the URL in a separate browser window or tab.

- If you want to make this button visible only to you, select the **Show to me only** checkbox.

3. Click **Finish** to complete creation.

➢ *To remove a hyperlink button from the Panel:*

1. Go to the **Account** tab > **Additional Services**.

2. Select a checkbox corresponding to the link that you want to remove and click **Remove**.

Websites and Domains

As described in the chapter **Quick Start with Parallels Panel**, creating your web presence always starts with purchasing a domain name. The *domain name* (or simply, *domain*) is the name people use to access your site from their browsers, for example, `www.example.com`. The domain registration is carried out by authorized companies - domain name registrars. Hosting providers often carry out this function. For detailed information about how to manage domains in Panel, refer to the section **Domains and DNS** (on page 516).

However, a domain is not a website. To make it accessible from the web and fill it with content, you should subscribe to hosting services (obtain a customer account). That is to supplement your domain with Internet connectivity, some disk space to store your content, mail services, and so on. Thus, *a website is a domain with provided hosting services*.

Panel provides a full range of operations in regard to domains and websites:

- Adding and removing domains, subdomains, and aliases.
- Managing the content of your websites.
- Installing various web apps.
- Securing connections to your websites and much more.

This chapter provides detailed information on all the possible operations on websites and domains in Panel. Note that some of these operations may be unavailable according to your hosting plan.

In this section:

Domains and DNS

As described above, a domain name is the name that people type in their browsers to access your website.

A domain name is hierarchical and may consist of a number of parts called labels:

- The label furthest to the right is called the *top-level domain*. For example, `com` is the top-level domain of `www.example.com`. The number of top-level domains is limited and all of them are managed by separate international authorities.

- *The second-level domain* is the label that we mainly use to imply the purpose of our website. In `www.example.com` it is the `example` part. The combination of the second-level and top-level domain names specifies the exact location of your website.

- Each label to the left is a subdomain of the domain to the right. For example, `www` is the subdomain of `example.com`. Subdomains can be convenient when you want to isolate some content from the main site, e.g. you can organize your personal blog on `myblog.example.com`. For information on how to add subdomains in Panel, refer to the section **Adding Subdomains** (on page 519).

If you want to host more than one website under your subscription, you can register more domains and add them to your subscription. Registering new domains may be available to you in the Control Panel if your hosting provider allows this. For information on how to purchase and add domains in Panel, refer to the section **Adding Domains** (on page 517).

In fact, domain names exist only for convenience; the real communication between browser and web servers uses IP addresses - the numerical host identifiers. For example, the real address of `www.example.com` may be 192.0.2.12 (IPv4). To resolve domain names into IP addresses, web hosts use DNS technology. For more details about how DNS is implemented in Panel, refer to the section **(Advanced) Configuring DNS for a Domain** (on page 524).

DNS allows several domains to be resolved into one IP address. Such additional names are called domain aliases. This is convenient when you have purchased several domains that you want to point to the same website. For information on how to add aliases to existing domains, refer to the section **Adding Domain Aliases** (on page 521).

In this section:

Adding Domains

If your hosting package includes more than one domain name (website), then you can easily add new domains to the server. Before you start adding a new domain that will use a second-level domain name, like *example.com*, be sure to register this domain name. If your hosting provider provides the domain name registration service, you can do this from the Control Panel as described below. Otherwise, you should register your domain name with another domain name registration authority.

You can set up the following types of site configurations through Panel:

- **Website addressed by a second-level domain name.** The following services are available for websites:
  - A unique Internet address (domain name), like *example.com*.
  - Additional domain names (domain aliases).
  - Subdomains - divisions of a site accessible by easy-to-remember addresses that are added to the main site, like mail.example.com.
  - Separate FTP accounts for collaboration on the site content. For every FTP account, you can specify which directories can be accessed.
  - Creating content using Web Presence Builder.
  - Simplified deployment of applications, such as content management systems, photo galleries, shopping carts, blogging platforms, and many more.
  - Secure data exchange implemented by SSL protocol. This requires that a site be hosted on a dedicated IP address, which is not shared among other users and sites.
  - Mailboxes and mailing lists.
  - Viewing statistics on site visits.
- **Website or a division of a website addressed by a third-level domain name (subdomain).** This is usually a division of an existing site. It has an Internet address comprising of three parts separated by dots. The following services are available for subdomains:
  - Separate document root from the main site. Document root is a directory on the server where web pages of a site are stored.
  - Access over FTP for content management.
  - Creating content using Web Presence Builder.
  - Simplified deployment of applications.
  - Secure data exchange implemented by SSL protocol.
  - Viewing statistics on site visits.

Adding More Domains

➢ *To host a new website with a second-level domain name:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab, click **Add New Domain** and follow on-screen instructions.

> **Note**: If you select the recommended option, you should connect the DNS settings related and your domain name with the domain name at the registrar's side. To achieve this, enter the Panel name server IP address into the respective NS record of the registrar. The instruction on how to obtain the IP is as follows: go to **Websites & Domains** > **DNS Settings**, find the NS record, and then find the A record corresponding to the NS record value.
> For example, if your NS record is
> *example.com.   NS   ns.example.com*,
> find the A record with *ns.example.com, say,*
> *ns.example.com.   A   192.0.2.12*
>
> The resulting value, *192.0.2.12*, is the Panel name server IP you need.

3. Click **OK**.

The new domain name is now shown in the list at the bottom of the screen.

4. If the operation of changing hosting settings is available for your account, then you can click the domain name of the new website to view or change the hosting settings, as described in the section **Changing Hosting Settings** (on page 533).

You can now start creating your website with Web Presence Builder or upload your web content to the webspace of the new website, as described in the section **Managing Website Content** (on page 543).

Registering Domains

If your service provider offers the domain name registration service as well as web hosting, you can initiate a domain registration directly from Panel. To register a domain name, add it as described above and then click the link **register it now** beside the new domain name in the domains list on the **Websites & Domains** tab. This will redirect you to the provider's online store where you can complete the registration.

After you register a domain name, it appears in the **Registered domain names** list on the **Websites & Domains** tab. To get information about a domain name registration, for example, the registration price and next renewal date, click the domain name in this list.

Removing Domains

When you delete a domain from Panel, all data related to the corresponding site are deleted from the server. The first domain name (default domain) that was created for your account cannot be deleted; however, it can be renamed.

➢ *To remove a domain:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. In the list of domain names, select the domains or subdomains that you want to remove and click **Remove**.

4. Confirm removal and click **OK**.

Note: Removing domain names from the Control Panel does not cancel the registration of these names. If you registered these domains name, you still can use them for your websites.

Adding Subdomains

If your hosting package includes subdomains, which are additional third-level domain names, then you can use them to:

- Organize logically the structure of your site.
- Host additional websites or parts of a website on the same server without the need to pay for registration of additional domain names.

An example of using subdomains:

You have a website your-product.com dedicated to promoting and selling your product. For publishing information related to customer service and online order tracking, you can organize the subdomain "orders" so that your users will be able to access this information directly by visiting the Internet address "orders.your-product.com".

As subdomains have the same status with the additional domains, you can use the same set of tools and services for working with subdomains. For example, SSL protection, Web Presence Builder, web statistics, and so on.

➤ *To set up a subdomain for a site division or a separate site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click **Add New Subdomain**.

4. Specify the following:

   a. In the **Subdomain name** box, type the portion of address that will be added to the domain name of your main site.

   b. In the **Document root** box, type the desired location of the directory where all files and subdirectories of this site will be kept. You can use the default directory of the main site, called httpdocs, or specify another directory.

5. Click **OK**.

The new subdomain name is now shown in the list at the bottom of the screen.

You can now upload your web content to the subdomains webspace (directory on the server), as described in the section **Uploading Content over FTP** (on page 545).

Wildcard Subdomains

If you enter the asterisk (*) symbol as a subdomain name, Panel will create a so-called *wildcard subdomain*.When site visitors enter *any* subdomain name that is not registered in Panel, they will be redirected to this wildcard subdomain. You can create wildcard subdomains on any domain name level. For example, you can create the **.mystore.example.com* subdomain. Learn more about wildcard subdomains in the section **Adding Wildcard Subdomains (Linux)** .

Adding Domain Aliases

If you have registered with a domain name registrar several domain names that you would like to point to the same website that you host on this server, you should set up domain aliases.

➢ *To set up a domain alias:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab.

3. Click **Add New Domain Alias** above the list of domain names.

4. Type the desired domain alias name, for example alias.com.

   Domain aliases can comprise letters, digits and hyphens. Each part of the domain alias between dots should not be longer than 63 symbols.

5. Select the **Synchronize DNS zone with the primary domain** checkbox if you want the domain alias to use the same DNS zone resource records as in primary domain. With this setting, any subsequent changes in resource records of the primary domain's zone will be applied to the DNS zone of this domain alias.

6. Select the **Mail service** checkbox, if you want e-mail directed at the e-mail addresses under the domain alias to be redirected to the e-mail addresses under your original domain name.

   Example: You have an e-mail address mail@yourdomain.com. You have set up an alias for your domain name, for example, alias.com. If you want to receive mail to your mailbox mail@yourdomain.com when it is sent to mail@alias.com, select the **Mail service** checkbox.

7. Select the **Web service** checkbox. Otherwise, the web server will not serve the web content to users coming to your site by typing the domain alias in their browsers.

8. If you use hosting services based on a Linux platform, and you have Java applications installed on your site that you want to make accessible through the domain alias, select the **Java web applications** checkbox.

9. Click **OK**.

➢ *To change the properties of an alias:*

1. Go to the **Websites & Domains** tab.

2. In the list of domain names, click the alias name you need.

3. Click **Settings** in the **Tools** group.

4. Modify the domain alias properties as required and click **OK**.

➢ *To modify resource records in the DNS zone of a domain alias:*

1. Go to the **Websites & Domains** tab.

2. In the list of domain names, click the alias name you need.

3. Click **DNS**.

4. Add, edit or remove the resource records as required:

   ▪ To add a resource record to the zone, click **Add New Record**. Specify the required values and click **OK** to write the values to the zone.

   ▪ To modify a resource record, under the **Host** column, click a hyperlink corresponding to the record you need.

   ▪ To remove a record, select a checkbox corresponding to the record you wish to remove and click **Remove**.

➢ *To remove an alias from a domain:*

1. Go to the **Websites & Domains** tab.

2. Select a checkbox corresponding to the domain alias that you want to remove.

3. Click **Remove**.

4. Confirm removal and click **OK**.

Adding Wildcard Subdomains (Linux)

Use wildcard subdomains to redirect visitors from *non-existent subdomains* to one of your websites, commonly, to your main website. The typical use cases of this feature are:

- Improve website organization and run marketing campaigns.

  For example, you do not have the *vps-limited-offer* subdomain but wish to forward users from *limited-vps-offer.example.com* to *example.com*.

- Help users reach your website even if they mistyped a subdomain name.

  It is a widespread mistake to mistype a website name if it has the leading www prefix (for example, typing *ww.example.com)*.

- Finally, some website applications (WordPress) use wildcard subdomains to create dynamic subdomains for convenience and better user experience.

Note: Traffic to existent subdomains will not be affected in any way if you add a wildcard subdomain.

How to Add Wildcard Subdomains

You can add one wildcard subdomain per each of domain names under a subscription. For this, go to the **Websites & Domains** tab and add a new subdomain which name is "***" to one of your domain names. Example: **.example.com*. If you wish this subdomain to have a custom set of scripts or website content, specify a custom document root for this subdomain.

Limitations of Wildcard Subdomains

Wildcard subdomains act like typical subdomains with the following exceptions:

- *Linux-only feature*. Currently, wildcard subdomains are supported only on Panel for Linux.
- *Renaming is not available*. It is not possible to rename such subdomains.
- *No DNS zone*. This type of subdomains does not have own zone record in the Panel's DNS server. Instead, they have the A record that points to the IP address associated with a corresponding domain name.
- *Installation of APS apps is not allowed*. Panel users are unable to install APS apps to wildcard subdomains.
- *No Web Presence Builder sites.* Panel users are unable to edit and publish sites to these subdomains.

(Advanced) Configuring DNS for a Domain

The Domain Name System (DNS) is a hierarchical naming system that translates understandable domain names into the numerical identifiers (IP addresses) associated with web hosts. Such translation is called *resolving*. When you add a domain name (using **Websites & Domains** > **Add New Domain**), you should choose the role of Panel in resolving your resources: It can directly process all translation requests, be a backup server, or pass the translation requests to a remote server. This role can be changed for existing domain names (**Websites & Domains** > click a domain name> **DNS Settings**). We discuss details about each of the roles and provide instructions how to assign them next in this section.

DNS Name Resolving

DNS is based on a hierarchical tree structure called the domain namespace. This global namespace contains all possible domain names and is divided into logical parts - domain zones (see the picture below). A domain zone is a part of the namespace that contains the addresses of particular domains. Addresses are stored in a file on a separate name server with authority for that zone. For example, when a browser tries to access `www.example.com`, it gets the site's IP address from a server with authority for the `example.com` zone. For more information about how DNS works, refer to the respective documentation. You can find it in numerous sources on the Internet, for example, Microsoft TechNet.
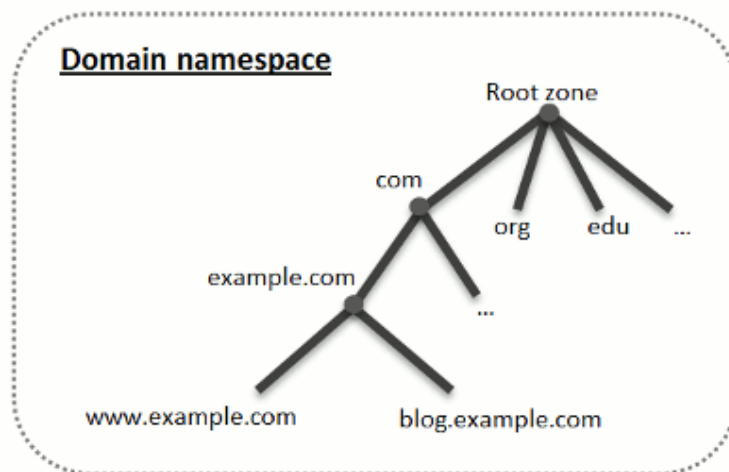
When you purchase a domain, a registrar gives you access to the settings for the DNS zone responsible for your domain and its subdomains. You can either allow the registrar to manage the zone, or delegate the zone to Panel. The latter option gives you the ability to manage a zone directly from your customer account. For information about how to delegate your zone to the Panel, refer to the section **Panel as a Master DNS Server** (on page 526).

If you are an advanced user and already have a DNS server that you want to give authority for your zone, you can set up Panel to be a slave (also called secondary) DNS server. In this case, Panel just stores a copy of your zone and you do not have the option to manage it from the Control Panel. The Panel DNS server will be used only if your primary name server becomes inaccessible or inoperable. For information about how to make Panel act as a secondary DNS server, refer to the section **Panel as a Slave DNS Server** (on page 530).

If you decide *not* to use Panel as a DNS server, all zone management should be performed on a domain registrar's site. Some registrars provide support for remote DNS zone management. If your hosting provider uses this feature, you will still be able to modify the DNS zone from the Control Panel regardless of where your authoritative name server is located. For information about how to switch off the Panel's DNS server and manage your zone remotely, refer to the section **Registrar's DNS Settings in Panel** (on page 530).

In this section:

Panel as a Master DNS Server

For each new domain name, the Panel automatically creates a DNS zone in accordance with the settings configured by your service provider. The domain names should work fine with the automatic configuration, however, if you need to perform custom modifications in the domain name zone, you can do that through your Panel.

> ➢ *To view the resource records in a DNS zone of a domain:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to view.

   A screen will show all resource records for a given domain.

> ➢ *To add a new resource record to the zone:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **Add Record**.

4. Select a resource record type, and specify the appropriate data:

   - For an NS record, which specifies the domain name of a name server that is responsible for a DNS zone of a domain, you need to specify the domain name (or a subdomain), and then the corresponding name server's domain name. If you are defining an NS record for your main domain, then you should leave the domain name field empty. If you are defining a name server for a subdomain, then type the subdomain into the **domain name** field. After that, type the appropriate name server's domain name into the **name server** field. For example: ns1.mynameserver.com.

   - For A and AAAA records, which associate IP addresses with domain names, you need to specify the domain name and IP address. If you are simply defining a record for your main domain, then you should leave the **domain name** field empty. If you are defining a record for a name server, then type ns1 or ns2 into the **domain name** field. Then specify the appropriate IP address with which to associate the domain name.

   - For a CNAME record, which specifies which subdomains (or domain aliases that look like subdomains, for example, www) should be associated in the Domain Name System with the main domain address, you need to type the subdomain name or www alias, and then, the main domain name.

   - For an MX record, which specifies the host name of the preferred mail server for the given domain, you need to specify the mail domain (or subdomain), the domain name of the mail exchange server responsible for receiving e-mail, and the server's priority. For the main domain, you would simply leave the available field blank. Then type the domain name of your mail server. If you are running a remote mail server named 'mail.myhostname.com', then simply type 'mail.myhostname.com' into the **Mail exchange server** field. After that, specify its priority: 0 is the highest and 50 is the lowest.

- For a PTR record, which is required for reverse DNS lookup (an IP address is translated to domain name), you need to enter the IP address/mask, and then type the appropriate domain name for this IP address to be translated to.

- For a TXT record, which is used for specifying arbitrary human-readable text, you can type an arbitrary text string, or an SPF record.

- For an SRV record, which is used for specifying location of services other than mail, you will need to enter the service name, protocol name, port number, and target host. Service and protocol names should start with the underscore symbol. You can also specify the priority of the target host, and relative weight (for records with the same priority) in the appropriate fields.

4. Click **OK**, and then click **Update**.

➢ *To modify the properties of a resource record:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click the hyperlink in the **Host** column corresponding to the resource record you want to modify.

4. Modify the record as required, click **OK**, and then click **Update**.

In addition to the resource records described above, there is also a Start of Authority record. This record indicates that this DNS name server is responsible for the domain's DNS zone. It also contains settings that affect propagation of information about the DNS zone in the Domain Name System.

➢ *To modify the entries in the Start of Authority (SOA) record for a domain:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **SOA Record**.

4. Specify the required values:

- **Refresh interval**. This is how often the secondary name servers check with the master name server to see if any changes have been made to the domain's zone file. The Panel sets the default value of three hours.

- **Retry interval**. This is the time a secondary server waits before retrying a failed zone transfer. This time is typically less than the refresh interval. The Panel sets the default value of one hour.

- **Expire interval**. This is the time before a secondary server stops responding to queries, after a lapsed refresh interval where the zone was not refreshed or updated. The Panel sets the default value of one week.

- **Minimum TTL**. This is the time a secondary server should cache a negative response. The Panel sets the default value of three hours.

▪ **Default TTL**. This is the amount of time that other DNS servers should store the record in a cache. The Panel sets the default value of one day.

5. Click **OK**, and then click **Update**.

Usage of serial number format recommended by IETF and RIPE is mandatory for many domains registered in some high-level DNS zones, mostly European ones. If your domain is registered in one of these zones and your registrar refuses your SOA serial number, using serial number format recommended by IETF and RIPE should resolve this issue.

The Panel-managed servers use UNIX timestamp syntax for configuring DNS zones. UNIX timestamp is the number of seconds since January 1, 1970 (Unix Epoch). The 32-bit timestamp will overflow by July 8, 2038.

RIPE recommends using YYYYMMDDNN format, where YYYY is year (four digits), MM is month (two digits), DD is day of month (two digits) and NN is version per day (two digits). The YYYYMMDDNN format will not overflow until the year 4294.

➢ *To change the Start of Authority (SOA) serial number format to YYYYMMDDNN for a domain:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **SOA Record**.

4. Select the **Use serial number format recommended by IETF and RIPE** checkbox.

> **Note:** See the sample of SOA serial number generated with the selected format. If the resulting number is less than the current zone number, the modification may cause temporary malfunction of DNS for this domain. Zone updates may be invisible to the Internet users for some time.

5. Click **OK**, and then click **Update**.

➢ *To remove a resource record from the zone:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Select a checkbox corresponding to the record you want to remove.

4. Click **Remove**.

5. Confirm removal, click **OK**, and then click **Update**.

➢ *To restore the original zone configuration in accordance with the default DNS template settings used on the server:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **Restore Defaults**.

4. In the **IP address** menu, select the IP address to be used for restoring the zone.

5. Specify whether a www alias is required for the domain.

6. Select the **Confirm the restoration of the DNS zone** checkbox, and click OK.

> ➢ *To restore the default Start of Authority (SOA) serial number format (UNIX timestamp) for a domain:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **SOA Record**.

4. Clear the Use serial number format recommended by IETF and RIPE checkbox.

Note: See the sample of SOA serial number generated with the selected format. If the resulting number is less than the current zone number, the modification may cause temporary malfunction of DNS for this domain. Zone updates may be invisible to the Internet users for some time.

5. Click **OK**, and then click **Update**.

By default, transfer of DNS zones is allowed only for the name servers designated by NS records contained within each zone. If you are using a Windows-based account, then you can change zone transfer settings.

> ➢ *If your domain name registrar requires that you allow transfer for all zones you serve:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **Zone Transfers**. A screen will show all hosts to which DNS zone transfers for all zones are allowed.

4. Specify the registrar's IP or network address and click **Add Network**.

Panel as a Slave DNS Server

If you host websites on your account and have a standalone DNS server acting as a primary (master) name server for your sites, you may want to set up the Panel's DNS server to function as a secondary (slave) name server.

> ➤ *To make the Panel's DNS server act as a secondary name server:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **Switch DNS Service Mode**.

4. Click **Add Record**.

5. Specify the IP address of the primary (master) DNS server.

6. Click **OK**, and then click **Update**.

7. Repeat steps from 2 to 6 for each website that needs to have a secondary name server on your server.

> ➤ *To make the Panel's DNS server act as a primary back:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **Switch DNS Service Mode**.

    The original resource records for the zone will be restored.

Registrar's DNS Settings in Panel

If you have external primary and secondary name servers that are authoritative for some of your websites, switch off the Panel's DNS service for each of these sites.

> ➤ *To switch off the Panel's DNS service for a site served by external name servers:*

1. Go to the **Websites & Domains** tab > **DNS Settings**.

2. If you have several domain names, select the domain name whose DNS settings you want to manage.

3. Click **Switch Off the DNS Service**.

Turning the DNS service off for the zone will refresh the screen, so that only a list of name servers remains. Note that the listed name server records have no effect on the system. They are only presented on the screen as clickable links to give you a chance to validate the configuration of the zone maintained on the external authoritative name servers.

4. If you want to validate the configuration of a zone maintained on authoritative name servers, do the following:

   a. Add to the list the entries pointing to the appropriate name servers that are authoritative for the zone: Click **Add Record**, specify a name server, click **OK**, and then click **Update**.

   b. Repeat the step a for each name server you would like to test. The records will appear in the list.

   c. Click the records that you have just created.

The Panel will retrieve the zone file from remote name servers and will check the resource records to make sure that domain's resources are properly resolved. The results will be interpreted and displayed on the screen.

If your Control Panel is integrated with a billing system, then the following operations on domains might be available from the Panel:

- Setting a password for access to domain management panel at a registrar's site.
- Locking and unlocking domain name for transferring to another provider.
- Changing domain registrant and other contact information.
- Changing DNS settings for domain zones served by a domain registrar.
- Configure automatic renewal of the domain account at the domain name registration company.

➢ *To set a new password for access to your domain management control panel at a registrar's site:*

1. Go to the **Account** tab.

2. Locate the domain name for which you want to change settings, and click the link **Show Domain Info** next to it.

3. Click **Change Domain Password.**

4. Type a new password and click **OK**.

➢ *To lock or unlock domain name for transferring to another provider:*

1. Go to the **Account** tab.

2. Locate the domain name for which you want to change settings, and click the link **Show Domain Info** next to it.

3. Click **Change Registrar Lock Setting**.

4. To allow domain name transfer, clear the **Lock** checkbox and click **OK**.

➢ *To change domain owner's contact, technical, administrative, or billing information:*

1. Go to the **Account** tab.

2. Locate the domain name for which you want to change settings, and click the link **Show Domain Info** next to it.

3. Click **Edit Contact Info**.

4. Make the necessary changes and click **OK**.

➢ *To change DNS settings for a domain:*

1. Go to the **Account** tab.

2. Locate the domain name for which you want to change settings, and click the link **Show Domain Info** next to it.

3. Click **Edit DNS Settings**.

4. Specify the domain name servers that serve the DNS zone for your website and IP address of the server where the website is hosted.

5. If the DNS zone of your website is served by your domain name registrar, then you can also specify other resource records that affect how your website's services are accessible over the Internet.

6. To save your changes, click **OK**.

➢ *To configure automatic renewal of the domain name:*

1. Go to the **Account** tab.

2. Locate the domain name for which you want to change settings, and click the link **Show Domain Info** next to it.

3. Click **Automatic Domain Renewal**.

4. To allow auto renewal of the domain registration, select the **Turn on auto renewal** checkbox and click **OK**.

Changing Hosting Settings

Panel allows you to manage a number of various hosting settings:

- *Basic settings*, like a domain name or hosting type.
- *Security settings*. To secure connections to your site with SSL certificates, you should activate the SSL support first.
- *Scripting settings*. You can specify what scripting languages your site will support. Learn more in the section **Web Scripting Settings (on page 535).** Moreover, Panel supports custom per-site (per-subdomain) configuration for the PHP and ASP.NET languages. To learn more about the adjustable settings, see the sections **PHP Settings** and **ASP.NET Settings (Windows)** (on page 539).

➢ *If you want to review the hosting settings or select the hosting features and scripting languages that should be supported on your site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the webspace where the website is hosted.

2. Click the **Websites & Domains** tab.

3. In the list of websites at the bottom of the screen, click the website address.

4. Review or change the following hosting settings and options:

   - **Hosting type**. The type of hosting configuration selected by default is website hosting, which means that the website is hosted on this server. You can also choose to redirect visitors to another website (this setup is also known as web forwarding); switch off web hosting service if you need to host only mailboxes and mailing lists under that domain; or suspend the website and all mailboxes and mailing lists hosted under the website's domain name.

     - If you want to redirect visitors to another site, click the **Change** link, select the **Forwarding** option, type the destination site address, select the forwarding scheme, and click **OK**.

     - If you want to switch off web service and use only e-mail services under that domain, click the **Change** link, select the **No web hosting** option, and click **OK**.

     - If you want to suspend the website and all services associated with it, including mail, click the **Suspend** link. When you need to bring that domain or website back online, return to the **Websites & Domains** tab > *domain name*, and click the **Activate** link.

   - **Document root**. The location of the directory where all files and subdirectories of the site will be kept. You can use the default directory called httpdocs or specify another directory.

- **Enable SSL support**. Secure Sockets Layer encryption is generally used for protecting transfer of sensitive data during online transactions on e-commerce websites that run on dedicated IP addresses. SSL certificates that participate in the encryption process are usually applied to a single domain name on a single IP address, therefore, each site that needs SSL protection must be hosted on a dedicated IP address. An exception to this is subdomains, which you can protect with a wildcard certificate. Installing an SSL certificate on a web server that hosts several websites with different domain names on a single IP address is technically possible, however, it is not recommended: the encryption will be provided, but users will get warning messages on attempt to connect to the secure site. To allow SSL encryption for the website, select the **Enable SSL support** checkbox.

- **Scripting languages**. Specify which of the following programming and scripting languages should be supported by the web server: Active Server Pages (ASP), Microsoft ASP.NET, Server Side Includes (SSI), PHP hypertext preprocessor (PHP), Common Gateway Interface (CGI), Fast Common Gateway Interface (FastCGI), Perl and Python. By default, PHP is configured to operate in safe mode, with functional restrictions that strengthen hosting security. To learn more about PHP safe mode, refer to http://php.net/features.safe-mode.

- **Microsoft FrontPage settings**. Microsoft FrontPage is a popular website authoring tool. To enable content creation and publishing through Microsoft FrontPage, select the options **Microsoft FrontPage support**, **Microsoft FrontPage over SSL support**, and **Remote FrontPage authoring allowed**.

- **Web statistics**. Select the web statistics software that you want to use for viewing graphical reports and charts on website visitors. Also, select the corresponding checkbox if you want to be able to access the statistical reports by visiting the password-protected directory http://your-website/plesk-stat/webstat.

- **Custom error documents**. When visitors coming to a site request pages that the web server cannot find, the web server generates and displays a standard HTML page with an error message. If you want to create your own error pages and use them on the web server, select the **Custom error documents** checkbox.

- **Additional write and modify permissions** (available only for Windows hosting). This option is required if web applications on the site will be using a file-based database (like Jet) located in the root of httpdocs directory. Note that selecting this option will seriously compromise the website security.

5. When finished with viewing or changing hosting settings, click **OK**.

The Location of the cgi-bin Directory

When creating a domain, you may see different possible locations of your `cgi-bin` directory (the CGI support checkbox). Let us discuss them on samples.

A typical domain files organization in Panel 11 is as follows:

- `/var/www/vhosts/webspace1.com/example1.com/`
- `/var/www/vhosts/webspace1.com/example2.com/`
- `/var/www/vhosts/webspace1.com/example3.com/`

Here `example` domains are created under the webspace1.com webspace.

If you specify that the cgi-bin directory for a domain example3.com is *the root directory of webspace*, its absolute path will be

```
/var/www/vhosts/webspace1.com/cgi-bin/
```

If you specify that the directory is *the document root of this domain*, its absolute path will be

```
/var/www/vhosts/webspace1.com/example3.com/cgi-bin/
```

If you specify *old-style root of this domain* (this option is available only after upgrading Panel from previous versions), the absolute path will be

```
/var/www/vhosts/domain3.com/cgi-bin
```

This option provides the compatibility with the obsoleted organization of domain files on the file system.

In this section:

Web Scripting Settings

For each website in your subscription you can specify which of the following programming and scripting languages should be supported by the web server: Active Server Pages (ASP), Microsoft ASP.NET, Server Side Includes (SSI), PHP hypertext preprocessor (PHP), Common Gateway Interface (CGI), Fast Common Gateway Interface (FastCGI), Perl and Python. Since Panel 10.4, you are able to configure PHP settings individually for each website (or subdomain) in your subscription. This is possible only if your subscription have the corresponding permissions. To get the details about custom PHP configuration, refer to the section **PHP Settings**.

In this section:

PHP Settings

PHP is one of the most popular scripting languages for creating dynamic web pages. The majority of today's websites and web applications are based on PHP scripts. Thus, site administrators should clearly understand how they can control the execution of PHP scripts.

There are two main aspects that completely define how PHP scripts will be executed for a certain website: The PHP handler type and values of PHP settings for the site. You can set up these parameters for a certain website by selecting the site from the list in **Websites & Domains.**

PHP Handler

When a visitor accesses a site based on PHP scripts, a web server interprets site scripts to generate a page that will be shown to the visitor. PHP handler calls PHP libraries needed for this interpretation. You can choose from a number of PHP handlers: ISAPI (Windows), Apache module (Linux), FastCGI, or CGI application. The decision on what PHP handler to choose should depend on a number of factors like security considerations, script execution speed, and memory consumption.

Choose one of the following PHP handlers at the **Websites & Domains >** select a website > **General** tab > **PHP support**:

	Performance	Memory Usage	Security
Apache module (Linux only)	High. Runs as a part of the Apache web server.	Low	This handler (also known as mod_php) is the *least secure option* as all PHP scripts are executed on behalf of the `apache` user. This means that all files created by PHP scripts *of any plan subscriber* have the same owner (`apache`) and the same permission set. Thus, a user has a theoretical possibility to affect files of another user or some important system files. **Note:** You can evade some security issues by turning the PHP *safe_mode* option on. It disables a number of PHP functions that bring potential security risk. Note that this may lead to inoperability of some web apps. The safe_mode option is considered to be obsolete and is deprecated in PHP 5.3.

ISAPI extension (Windows only, *not supported since PHP 5.3*)	High. Runs as a part of the IIS web server.	Low	The ISAPI extension can provide site isolation in case a dedicated IIS application pool is switched on for subscriptions. Site isolation means that sites of different customers run their scripts independently. Thus, an error in one PHP script does not affect the work of other scripts. In addition, PHP scripts run on behalf of a system user associated with a hosting account. **Note:** The ISAPI extension handler is not supported since PHP 5.3.
CGI application	Low. Creates a new process for each request and closes it once the request is processed.	Low	The CGI handler provides PHP script execution on behalf of a system user associated with a hosting account. On Linux, this behavior is possible only when the suEXEC module of the Apache web server is on (default option). In other case, all PHP scripts are executed on behalf of the `apache` user. We recommend that you use the **CGI application** handler only as a fall-back.
FastCGI application	High (close to Apache module and ISAPI extension). Keeps the processes running to handle further incoming requests.	High	The FastCGI handler runs PHP scripts on behalf of a system user associated with a hosting account.

Note: Switching PHP from **Apache module** to **FastCGI application** may break functionality of existing PHP scripts.

If you use Windows hosting, you can additionally choose a PHP version. Always use PHP 5.x except the cases when you need PHP 4.x to host some old PHP apps.

PHP Settings

PHP behavior is defined by a number of configuration settings. These settings specify various script execution aspects, like performance (for example, the amount of memory a script can use), security (for example, access to file system and services), and so on. You may adjust these settings for a number of reasons:

- Preventing a memory leak or server hang-up by poorly written scripts.
- Protecting data from malicious scripts.
- Meeting the requirements of a certain web app.
- Testing own scripts and other.

All customizable PHP settings are located in the Control Panel, **Websites & Domains** > select a website > **PHP Settings** tab. For convenience, all PHP settings are divided into three groups:

- **Performance settings***.*
  These settings define how scripts work with system resources. For example: Use the `memory_limit` parameter to limit the amount of memory for a script to prevent a memory leak. In addition, you can prevent scripts from tying up the server by limiting the maximum time scripts are allowed to run in `max_execution_time`.

- **Common settings***.*
  This group contains other commonly used PHP settings. Generally, these are: Security settings (for example, the PHP safe mode toggle or the permission to register global variables), error reporting settings (for example, the directive to log errors), and others.

You can set the value of each parameter in **PHP Settings** either by selecting a value from a preset, typing a custom value, or leaving the **Default** value. In the latter case, *Panel uses the values defined by the server-wide php.ini file.* For information about certain PHP settings, refer to the respective documentation. For example, http://php.net/manual/en/ini.list.php.

It is possible to use three placeholders in parameter values:

- `{DOCROOT}` for the document root directory of a domain that gets custom PHP configuration.

- `{WEBSPACEROOT}` for the root directory of a subscription (webspace).

- `{TMP}` for the directory which stores temporary files.

Note: Custom PHP configuration of a website acts as a preset for all subdomains of this site. You can perform further per-subdomain PHP configuration in the same way as for the websites.

ASP.NET Settings (Windows)

> ### *To configure ASP.NET Settings for a site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **ASP.NET Settings** (in the **Advanced Operations** group).

3. Set up the strings that determine database connection data for ASP.NET applications that use databases. This option is available only for ASP.NET 2.0.x.

   When you open the ASP.NET configuration screen for the first time, sample connection parameters with common constructions are displayed. You can delete them and specify your own strings.

   ▪ To add a string, enter the required data into the **Name** and **Connection Parameters** input fields and click ⊕ next to them.

   ▪ To remove a string, click ⊖ next to it.

4. Set up custom error messages that will be returned by ASP.NET applications in the **Custom Error Settings** field:

   ▪ To set the custom error messages mode, select an appropriate option from the **Custom error mode** menu:

      ▪ **On** - custom error messages are enabled.

      ▪ **Off** - custom error messages are disabled and detailed errors are to be shown.

      ▪ **RemoteOnly** - custom error messages are displayed only to remote clients, and ASP.NET errors are shown to the local host users.

   ▪ To add a new custom error message (which will be applied unless the **Off** mode was selected), enter the values in the **Status Code** and **Redirect URL** fields, and click ⊕.

      ▪ **Status Code** defines the HTTP status code resulting in redirection to the error page.

      ▪ **Redirect URL** defines the web address of the error page presenting information about the error to the client.

   Due to possible conflicts, you cannot add a new custom error message with an error code that already exists, but you can redefine the URL for the existing code.

   ▪ To remove a custom error message from the list, click ⊖ next to it.

5. Configure compilation settings in the **Compilation and Debugging** field:

   ▪ To determine the programming language to be used as default in dynamic compilation files, choose an entry from **Default web page language** list.

   ▪ To enable compiling retail binaries, leave the **Switch on debugging** checkbox empty.

- To enable compiling debug binaries, select the **Switch on debugging** checkbox. In this case, the source code fragments containing error will be shown in a diagnostic page message.

> **Note.** When running applications in debug mode, a memory and/or performance overhead occurs. It is recommended to use debugging when testing an application and to disable it before deploying the application into production scenario.

6. Configure encoding settings for ASP.NET applications in the **Globalization Settings** section:

   - To set an adopted encoding of all incoming requests, enter an encoding value into the **Request encoding** field (default is utf-8).

   - To set an adopted encoding of all responses, enter an encoding value into the **Response encoding** field (default is utf-8).

   - To set an encoding which must be used by default for parsing of `.aspx`, `.asmx`, and `.asax` files, enter an encoding value into the **File encoding** field (default is Windows-1252).

   - To set a culture which must be used by default for processing incoming web requests, select an appropriate item from the **Culture** list.

   - To set a culture which must be used by default when processing searches for a locale-dependent resource, select an appropriate item from the **UI Culture** list.

7. Set a code access security trust level for ASP.NET applications in the **Code Access Security** field.

   CAS trust level is a security zone to which applications execution is assigned, defining what server resources the applications will have access to.

   > **Important:** When an assembly is assigned a trust level that is too low, it does not function correctly. For more information on the permissions levels see http://msdn.microsoft.com/library/en-us/dnnetsec/html/THCMCh09.asp?frame=true#c09618429_010.

8. Enable the usage of the auxiliary scripts in the **Script Library Settings** field. Specifying the script library settings is necessary if the validation web controls are used on your web site. This option is available only for ASP.NET 1.1.x.

   - If you need to use auxiliary scripts (specifically, scripts implementing objects for validating input data), provide the settings for .NET framework script library. To do so, enter the path beginning with the domain root directory preceded by the forward slash into the **Path to Microsoft script library** field, or click the folder icon next to the **Path to Microsoft script library** field and browse for the required location.

   - To initiate the auto-installation of files containing the scripts to the specified location, select the **Install** checkbox. If the files already exist there, they will be rewritten.

9. Set client session parameters in the **Session Settings** field:

   - To set up the default authentication mode for applications, select an appropriate item from the **Authentication mode** list. **Windows** authentication mode should be selected if any form of IIS authentication is used.

   - To set up time that a session can remain idle, type the number of minutes into the **Session timeout** box.

10. Click **OK** to apply all changes.

Suspending and Activating Websites

When a website is suspended, it becomes inaccessible over the Internet, and e-mail addresses under the site's domain name stop working.

➢ *To suspend a website:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click the domain name of the site that you want to suspend.

4. Click the **Suspend** link next to the **Hosting type** field.

➢ *To activate a website:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click the domain name of the site that you want to activate.

4. Click the **Activate** link next to the **Hosting type** field.

In this section:

Suspending Websites for Maintenance

If you want to shut down a site for maintenance and let your visitors know that it is temporarily unavailable and will be back online later, switch on the *site maintenance mode*. When a site is in the maintenance mode, the "503 Service Unavailable" error document is shown to website visitors instead of the actual site pages.

If your hosting plan provides the option to customize web server error documents (the "Custom error pages" option), then you can use File Manager to open and customize the error page: Instead of the "Service Temporarily Unavailable" message, you can write your own message like "The site is temporarily down for maintenance, it will be up soon."

When maintenance work is finished, switch the maintenance mode off for the site to make it available to the visitors.

➢ *To switch on the maintenance mode for a website:*

1. Go to the **Websites & Domains** tab.

2. Click **Website Maintenance Mode** (in the **Advanced Operations** group).

3. If you have several websites, locate the site you want to temporarily suspend, and click the corresponding **Manage** link.

4. Select the **Switch on the maintenance mode for website** checkbox.

5. Click **OK**.

If the custom error documents option is switched on for the site, then you can edit the "503 Service Temporarily Unavailable" document to include your own text. For information about customizing error pages, refer to the section **Setting Up Custom Error Pages** (on page 569).

➢ *To switch off the maintenance mode and put a site back online:*

1. Go to the **Websites & Domains** tab.

2. In the list of your websites, locate the website you want to put back online. It should be accompanied by the **Switched off for maintenance** status indicator.

3. Click the corresponding **Change** link.

4. Clear the **Switch on the maintenance mode for website** checkbox.

5. Click **OK**.

Managing Website Content

To create your website and fill it with the content you need (text, images, videos, and so on), use one of the methods provided by the Panel:

- Using website creation and management tools. If you do not have a website yet, consider setting one up by yourself with a tool for creating, editing, and publishing websites. You can do this even if you do not possess the necessary web programming and design skills. The best tools of this sort are the following:
    - *Web Presence Builder* - a website editor integrated with the Control Panel.
    - *Third-party Content Management Systems* (*CMS*) - web applications for creating and editing websites.
- Uploading existing websites to your hosting account using one the following methods:
    - *FTP client program.* You can obtain a free FTP client from the Internet, or, if you are using Windows, use Windows Explorer. This enables you to access your directory on the hosting server and manage your files. If you collaborate with other people when managing your website (say, programmers or designers), you can provide them with access to your directory using FTP to let them edit the website by themselves.
    - *File Manager*. A tool for uploading and managing website files and directories through the Panel web interface.

Note: if you have a website created in Microsoft FrontPage editor, refer to the section **Working with Microsoft Frontpage Websites (Windows)** (on page 579) for details on managing this site in Panel.

Below you will find detailed descriptions of the ways to manage your content.

Web Presence Builder

Web Presence Builder is a great tool that enables users with no knowledge of HTML markup or graphic design skills to create professional-looking sites. Just pick a suitable page design and content template, add your text to the pages, and publish the site.

You can create and publish websites using Web Presence Builder if your hosting subscription provides this option. If it does not, or if you have already created and published the allowed number of sites, you still can create a new website with Web Presence Builder and edit it. However, to publish this website, you will need to upgrade your hosting plan.

To start creating a website using Web Presence Builder or edit an existing Web Presence Builder site, go to either the **Home** tab or the **Websites & Domains** tab, and click **Launch Web Presence Builder**. If you have several domain names or subdomains, click the corresponding link **Edit in Web Presence Builder**. Find more information on creating and editing websites in Web Presence Builder in the chapter **Building Websites with Web Presence Builder**.

Third-Party Content Management Systems

To create and maintain a website, you can use third-party *Content Management Systems* (*CMS)* - web applications that let you easily edit a website's structure and content with a graphical user interface. Examples of such systems are *Drupal* and *Joomla*.

CMS are usually server applications, so to start using one of them you should install it on your hosting account. Hence, if you plan to use a CMS, ensure that your hosting subscription allows such applications to be installed.

➢ *To create a website using a CMS:*

1. Go to the **Applications** tab.

2. Find the CMS you need in the list of available applications, and install it as described in the section **Employing Website Applications (on page 552).**

3. Create and edit your website in the CMS. For information on how to create websites with your CMS, refer to the relevant documentation.

Uploading Using FTP

If you already have all your website files and directories, consider uploading them to your hosting account using FTP. This is the quickest way for simple uploading of files when you do not need to edit or manage them on the server.

➢ *To upload files using FTP:*

1. Connect to your site's domain name with an FTP client program using your FTP access credentials. Learn how to configure these credentials in the section **Adding FTP Accounts** (on page 640).

2. Copy the website files and directories to your directory on the server.

File Manager

Another way to publish a website created outside the Panel is File Manager - a tool that provides a set of file management functions through the web interface. File Manager is available from the **Websites & Domains** tab of the Control Panel.

To upload a website from your computer to Panel server with File Manager, go to the **Website & Domains > File Manager** page, click **Add New Directory**, and upload the directory containing your website to Panel. If your website is compressed to a ZIP file, you can upload this file by clicking **Add New File** and then extract it by clicking **Extract Files**.

If you want to edit pages of your website, you can do it in File Manager. It provides an HTML editor that allows visual editing of HTML pages (without needing to manually type HTML tags). To edit a file in the HTML editor, click the button 🖼 in the **Tools** column next to the file's name.

You can also edit files in File Manager's text editor if you like. To open a file in the text editor, click the corresponding button ✏ in the **Tools** column.

If you have files or web pages that you want to make inaccessible on the Internet, change these files' access permissions in File Manager. To edit access permissions for a file or a directory, click the corresponding link in the **Permissions** column. To learn how to review and edit the permissions, refer to the sections **Setting File and Directory Access Permissions**.

In this section:

Creating Websites with Web Presence Builder

➢ *To start creating a website using Web Presence Builder:*

1. Go to either the **Home** tab or the **Websites & Domains** tab, and click **Launch Web Presence Builder**.

   If you have only one domain name configured, Web Presence Builder will open in a new browser window or tab.

2. If you have several domain names or subdomains, click the corresponding link **Edit in Web Presence Builder**. The Web Presence Builder wizard will open in a new browser window or tab.

Uploading Content over FTP

➢ *To publish website through FTP:*

1. Connect to your webspace on the server with an FTP client program, using your FTP account username and password.

   You can change your username and password in the Panel at the **Websites & Domains** tab > **Web Hosting Settings**.

   The FTP address should be ftp://your-domain-name.com, where your-domain-name.com is your site's Internet address.

   Enable the passive mode if you are behind a firewall.

2. Upload the files and directories of your site to the `httpdocs` directory. If you use CGI scripts, place them into the `cgi-bin` directory.

3. Close your FTP session.

You can also set up additional FTP accounts if you need to collaborate on website content with other users. For information, see the section **Adding FTP Accounts**.

Using Content Manager

> ➢ *To upload files through the Panel's file manager:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click **File Manager**.

4. Create or upload files and directories.

Place the files and directories of your site to the `httpdocs` directory. If you use CGI scripts, place them into the `cgi-bin` directory.

- To upload a file from your computer, click **Add New File**, click the **Browse** button to locate the file, or specify the path to its location in the **Path to file** box, and then click **OK**.

- To upload a ZIP archive to the server and then extract its contents, click **Add New File**, click the **Browse** button to locate the archive file, and click **OK**. After the file is uploaded, select the corresponding checkbox on the left, and click **Extract Files**.

- To create a new directory within your current location, click **Add New Directory**.

- To create new files in the required directory, click **Add New File**, select the **Create a file** option, specify the file name, select the **Use html template** checkbox, if you want file manager to insert some basic HTML tags into the new file, and click **OK**. A page will open allowing you to enter the content or HTML-formatted source of a new file. After you finished, click **OK**.

- To add files to a ZIP archive, select the files you want to pack, click **Add to Archive**, and specify the name of your archive file.

When you upload web content through File Manager or FTP, the Panel automatically sets the appropriate access permissions for files and directories. On Linux-based servers, the permissions are represented as three sets of symbols, for example, 'rwx rwx r--'. The first set tells what the owner of the file or directory can do with it; the second tells what the user group, the file or directory belongs to, can do with the file or directory; the third set indicates what other users (the rest of the world, that is, Internet users visiting a site) can do with the file or directory. R means the permission to read the file or directory, W means the permission to write to the file or directory, and X means the permission to execute the file or look inside the directory.

To modify permissions for a file or directory on a Linux-based account, click a hyperlink representing the set of permissions in the **Permissions** column. If you use a Windows-based account, click the icon 🔒. Modify the permissions as desired and click **OK**.

To edit the source code of a file, click 🖊.

To edit the Web page in the built-in visual editor (available only to users of Microsoft Internet Explorer), click 🔲. When editing an HTML file, the Panel opens internal WYSIWYG editor by default. If you want to edit the source code of the HTML file, click **HTML**. To return back to WYSIWYG mode, click **Design**.

To view the file, click .

To rename a file or directory, click . Type in a new name and click **OK**.

To copy or move a file or directory to another location, select the required file or directory using the appropriate checkbox, and click **Copy/Move**. Specify the destination for the file or directory to be copied or renamed to, then click **Copy** to copy, or **Move** to move it.

To update the file or directory creation date, click **Change Timestamp**. The time stamp will be updated with the current local time.

To download a file, click the corresponding icon .

To remove a file or directory, select the corresponding checkbox, and click **Remove**. Confirm removal and click **OK**.

Setting File and Directory Access Permissions (Linux Hosting)

➢ *To review or change the permissions set for files and directories:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click **File Manager**.

   The permissions set for files and directories are shown in the **Permissions** column. They are represented as three sets of symbols, for example, 'rwx rwx r--'. The first set tells what the owner of the file or directory can do with it; the second tells what the user group, the file or directory belongs to, can do with the file or directory; the third set indicates what other users (the rest of the world, that is, Internet users visiting a site) can do with the file or directory. R means the permission to read the file or directory, W means the permission to write to the file or directory, and X means the permission to execute the file or look inside the directory.

4. Locate the file or directory for which you want to modify permissions and click a hyperlink in the **Permissions** column.

5. Modify the permissions as desired and click **OK**.

Setting File and Directory Access Permissions (Windows Hosting)

➢ *To set access permissions for a file or directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **File Manager**.

3. Locate the file or directory for which you want to set access permissions, and click the corresponding icon 🔒.

4. Do the following:

- To make the file or folder inherit permissions from a parent folder (if it does not), select the checkbox **Allow inheritable permissions from the parent to propagate to this object and all child objects. Include these with entries explicitly defined here**.

- To make the files and folders, which are contained in this folder, inherit the folder permissions you define, select the checkbox **Replace permission entries on all child objects with entries shown here that apply to child objects**.

- To change or remove permissions from a group or a user, click the required name in the **Group or user names** list. If the group or user is not listed in the **Group or user names** list, select the required user or group name from the menu located above the list and click ➕: the user/group appears in the list. Select it.

  To allow or deny permissions to a selected group/user, select the **Allow** or **Deny** checkboxes corresponding to permissions listed under **Permissions for <*user/group name*>**. If the checkboxes in the **Allow** or **Deny** columns are shown in grey, it means that the corresponding permissions are inherited from a parent folder.

- To deny the permissions, which are inherited from a parent object as allowed, select the required checkboxes under **Deny**. This will override inherited permissions for this file/folder.

- To allow the permissions, which are inherited from a parent object as denied, clear the **Allow inheritable permissions from the parent to propagate to this object and all child objects. Include these with entries explicitly defined here** checkbox: this removes the inherited permissions. Then select the required checkboxes under **Allow** and **Deny**.

- To remove access permissions from a group or user, select the required name in the **Group or user names** list and click the icon ⛔ next to it.

5. If you need advanced fine-tuning of permissions, click the **Advanced** button, and do the following:

- To create a permission entry for a group or user, select the required name from the **Group or user names** list and click ➕.

- To set or change file/folder permissions for a group or user, select the required name from the **Group or user names** list, select the required **Allow** and **Deny** checkboxes corresponding to permissions listed under **Permissions for <*user/group name*>**.

- To remove a permission entry for a group or user, select the required name from the **Group or user names** list and click ⛔.

- To make child objects of a folder inherit its permissions defined under **Permissions for <*user/group name*>**, select the **Replace permission entries on all child objects with entries shown here that apply to child objects** checkbox, and select checkboxes in the **Apply to** list which correspond to the objects that must inherit the permissions.

6. Click **OK**.

(Advanced) Restricting Access to Content

If you have directories in a site that only authorized users should see, restrict access to these directories with password protection.

> ➢ *To protect a directory in your site with a password and to specify authorized users:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Password-protected Directories** (in the **Advanced Operations** group).

3. Click **Add Protected Directory**.

4. In the **Directory name** box, specify the path to the directory that you want to protect with a password.

   This can be any directory existing in the site, for example: `/private`. If the directory that you would like to protect has not yet been created, specify the path and the directory name – the Panel will create it for you.

5. If you are using a Linux-based account, you can also protect your CGI scripts stored in the `cgi-bin` directory. To do this, leave '/' in the **Directory name** box and select the **cgi-bin** checkbox.

6. In the **Title of the protected area** box, type a resource description or a welcoming message that your users will see when they visit the protected area.

7. Click **OK**. The directory you specified will be protected.

8. To add authorized users, click **Add New User**.

9. Specify the username and password that will be used for accessing the protected area. The password should be from 5 to 14 symbols in length. Click **OK**.

> ➢ *To add an authorized user of a protected directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Password-protected Directories** (in the **Advanced Operations** group).

3. Click on the name of the directory you need.

4. Click the **Add New User** icon.

5. Specify the username and password that will be used for accessing the protected area. The password should be from 5 to 14 symbols in length.

6. Click **OK**.

> ## *To change password for an authorized user of a protected directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab **> Password-protected Directories** (in the **Advanced Operations** group).

3. Click on the name of the directory you need. A list of authorized users will open.

4. Click on the user's name.

5. Specify the new password and re-type it for confirmation.

6. Click **OK**.

> ## *To revoke a permission to access the protected directory from a user:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab **> Password-protected Directories** (in the **Advanced Operations** group).

3. Click on the name of the directory you need. A list of authorized users will open.

4. Select a checkbox corresponding to the user's name.

5. Click **Remove**. Confirm the operation and click **OK**.

> ## *To remove password protection and make the resource available to the public:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab **> Password-protected Directories** (in the **Advanced Operations** group).

3. Select a checkbox corresponding to the name of the directory, from which you want to remove protection.

4. Click **Remove Protection**. The protection will be removed and the contents of the directory will be accessible to the public without restrictions.

Previewing Websites

After you purchase a domain, its registration can require some time. The reason for the delay is that name servers update their zone information periodically. Thus, until all name servers have received information about your zone, you will not be able to access your site by its domain name. Nevertheless, you can always access your site during domain name propagation using the button on the **Websites & Domains** tab.

During domain name propagation other people can access your site too. For this purpose, Panel registers your website as a subdomain of one of the provider's sites. For example, if your website is *my-domain.tld* and a provider has configured the preview service on *provider-domain.tld*, you can access your site on *my-domain.tld.192-0-2-12.provider-domain.tld*. Here *192-0-2-12* is the site's IP address where dots are replaced with dashes.

Note: If you do not have the site preview button on the **Websites & Domains** page, contact your hosting provider.

Using Website Applications

You can significantly increase your website functionality by using different web apps. Apps being installed on a website can perform a number of tasks. If you are an individual, you can, for example, present yourself with a blog or organize online storage of your media files. Companies can move part of their business online by using the e-commerce or CRM web apps. All these apps are available for installation right from your Control Panel, the **Applications** tab.

The list of available apps is governed by your hosting plan. For example, it might include only free apps or no apps at all. For more information on available apps, refer to your hosting provider.

App Types

There are two types of web apps:

- Apps that are installed directly on a website (say, the WordPress blogging platform or the Joomla! content management system).
- Apps installed on external servers and provided by third-parties.

Regardless of the installation type, apps can be either *free* or *commercial.* Commercial apps require you to provide a license key to start working with them, and in the **Applications** tab they are accompanied by the **Buy Now** button instead of **Install Now**. If you decide to use commercial apps, read the **Managing Commercial Apps Licenses** section to familiarize yourself with acquiring and managing app licenses.

App Installation and Maintenance

The process of installation does not require any specific skills. You just fill in app settings (such as, administrator credentials), and Panel installs the app for you. Further app management is also facilitated as you can update or remove apps directly in Panel. Moreover, you can access some functions that apps reveal to the Control Panel (without the need to log in to an app). For example, you can add SugarCRM user account right from your Control Panel. Such app functionality is a *service* provided by the app.

After you install an app, grant other auxiliary user accounts access to it if you want them to be able to use the app. To get started with managing apps, see the section **Managing Apps**.

Access to Apps

Make your apps available to certain auxiliary users by adjusting their permissions. Once you allow a user to access an app, a link to the app appears on their **Home** page. Note that *you can control app access only for user groups*, so you should either modify the permissions of an existing group or create a new one, and then assign users to it. For details on access to apps, refer to the section **Granting Auxiliary Users Access to Apps** (on page 554).

By default, the app administrator in Panel is a user with the **Owner** role. As well as accessing apps from the **Home** page, this user can also install and manage apps within a subscription. These administrative tools are found in the **Applications** tab which is available only to app administrators. You can grant access to these tools to other subscription users. For details on this operation, refer to the section **Granting Auxiliary Users Access to Apps** (on page 554).

Apps and Auxiliary User Accounts

Some apps let you create and manage user accounts directly in Panel. For example, the SugarCRM app allows you to add SugarCRM users without logging in to the app. All apps with such "account services" can associate their accounts with users of a Panel subscription (auxiliary users). To perform such an association, you should grant the auxiliary users access to that account service (in the same way as you grant access to apps). For details on account association, refer to the section **Linking Apps and Auxiliary (on page 554)User Accounts**.

You can install, configure, update, and remove apps right from the Control Panel.

In this section:

Configuring Apps

Generally, all apps allow the configuration of their main parameters directly in the Control Panel. You can access app settings by selecting the app from the list in **Applications > Manage Installed Applications**. After you select an app, you can configure the following:

- *General settings*.
  These are basic app settings (say, administrator password) that can be changed with **Change Settings**.

- *Service settings*.
  If an app provides a part of its functionality to Panel by means of services, you have the option to configure them. For example, the SugarCRM app allows the creation of user accounts and provides this ability as a service in the Control Panel. After you select this service in **Provided services**, you can view all app user accounts and create new ones. For some apps, you can associate the app accounts with auxiliary user accounts. Learn more about account association in the section **Linking App and Auxiliary (on page 554)User Accounts**.

Granting Auxiliary Users Access to Apps

By default, after you install an app, only users with the **Owner** role can access it. To allow other subscription users to access the app:

- Grant permission to access the app to a certain user group in **Users > User Roles**.
- Be sure to add users of your choice to the group.

Once you allow users to access the app, a link to the app appears on their **Home** page.

By default, the app administrator is a subscription user with the **Owner** role. As well as accessing the apps from the **Home** page, this user can also install and manage apps within a subscription. For these purposes, their interface has the additional **Applications** tab. You can provide the same administrative privileges to other subscription users by granting the **Install and manage applications** permission to their role in **Users > User Roles**. This gives users full administrative access to *all* apps within a subscription. As well as the administrator, the users with this permission can install, configure, update, and remove apps through the **Applications** tab in their Control Panel.

Linking Apps and Auxiliary User Accounts

Some apps let you create and manage user accounts without logging in to the app. If an app provides such an *account service*, you can link users of a Panel subscription with accounts in the app. To perform such an association:

1. Organize the users into a certain group (**Users > User Roles**).

2. Grant one of these group permissions:

   - *Public access*.
     If granted, all users in the group will have access to the app through the link on the **Home** page.

   - *Personal access*.
     If granted, *the app will automatically create accounts* for all users in the group. After that, the users' **Home** page will contain an additional link that allows logging in to a personal account in the app. Note that if you deny the **Personal access** permission, *the app will automatically remove all accounts* associated with this group.

Updating Installed Apps

Basically, your service provider is in charge of app updates. If the update is available, your provider can get it for you, or you can do it, yourself. The last case is relevant if you want to review the changes available in the new version and decide whether to update the app or continue with the current version. The update link appears in **Applications > Manage Installed Applications**.

Managing Commercial App Licenses

If you decide to buy an application license in the Control Panel and click the corresponding button on the **Applications** tab, you will be forwarded to *Storefront*, the online store where you complete your order. Actually it is not only a store, it also includes its own web interface to help you perform various operations with the licenses you own. For example, from this web interface you can renew a license, cancel it, change your payment methods and so on. This section explains how to carry out these operations.

Storefront Basics

When you order a first license in Storefront, it creates an *account* for you. This account contains your personal and financial information; if you log in to Storefront under this account, you will be able to do various operations with your licenses.

Each time you successfully check out in Storefront, a purchase *order* is generated. It is a document that lists the cart items you ordered. Storefront assigns different statuses to orders. These statuses explain the current state of your purchase - whether it is unpaid, canceled, or successfully delivered.

Storefront and Panel share the service plans business model. In Storefront, each application is presented by a separate *service plan*, and when you order an application license you *subscribe* to one of the service plans. In other words, each license you purchase is shown as a *subscription* in the web interface. For instance, if you would like to view a license price, terms, or an expiration date, you should open the corresponding subscription.

Note: If your Panel license comes in a bundle with licenses for certain commercial apps, you will be able to install such apps without proceeding to Storefront. These apps will be accompanied by the **Install Now** button instead of **Buy Now** as they are considered purchased. The pool of used and unused app license keys is available in **Tools & Settings > License Management > Additional License Keys**.

How to Get a License File or Key

After you order a license and pay for it, Storefront sends you an e-mail with your license file or key. We recommend that you keep the information in a safe place because there is no way to request it again or view it from the web interface. If you did not receive the e-mail with a license file or key, contact us at https://support.parallels.com/.

Available Operations

The operations you can carry out in Storefront fall into three groups:

- *Operations with your user account*. These operations include viewing and modifying your personal information and preferences and changing the password to your user account.
- *Operations with payments and payment methods.* This group comprises operations with your credit cards, payments, and orders.
- *Operations with subscriptions.* Use them to acquire new licenses, obtain information about your existing licenses, and check the subscription renewal method for a particular subscription.

Learn more about these operations in the subsections of this section.

In this section:

User Account

You can do the following operations with your user account.

View and Change Your Account Information

The system uses your account information to add your personal and financial details into invoices. If you see that you need to update your details, open the **My Contact Info** submenu on the Navigation menu and select **Account Info**.

View and Change Your Personal Information

Your personal information mostly duplicates the account information. It does not appear in financial documents, but some services use this information as technical contact details. For example, it is possible to order a domain name through Storefront, and if you do so, Storefront will send your personal information (as the technical contact) to a domain name registrar.
To view user personal information, open the **My Contact Info** > **Personal Info** menu on the left panel. Here you can also edit your personal information and change password to your Storefront account.

Configure e-mail notifications

E-mail notifications are sent on different events to your account contact e-mail address. They fall into a number of categories. For example, subscription renewal and expiration, your credit card(s) expiration, etc. You can select messages format for every group of messages and decide whether to send certain messages or not. To configure messages types to receive, open **My Contact Info** > **Notification Methods**.

Payments and Payment Methods

This section describes operations with payments and credit cards available to you in Storefront.

Registering a Credit Card

Before a credit card becomes available for making online payments, it is necessary to register it in Storefront. To register a credit card, open **Billing Manager** > **My Financial Info** > **Payment Methods** and click the appropriate button.

Configuring Automatic Payments

You can assign one of the registered credit cards to be used for paying orders automatically. In this case, you will not need to pay each order manually. If you assign a payment method to be used for automatic payments, the previous default one is unselected automatically. Thus, only one payment method can be used for automated payments.

To turn on automatic payments from a card, go to **Billing Manager** > **My Financial Info** > **Payment Methods**, select the card by clicking on its **ID** or **Type**, and, finally, enable automatic payments on the card properties screen.

Making a Payment

To add new payment, open the **Billing Manager** > **New Payment** link on the dashboard. The adding new payment wizard starts. The list of pending documents appears on the screen. If there are no pending documents, click **Cancel** to finish the wizard. Otherwise, walk through the wizard by providing the payment settings.

Viewing Open Orders

Your open orders are available in the **Billing Manager** > **My Financial Info** > **Open Orders** submenu.

Subscriptions

Storefront offers you a powerful and comprehensive mechanism of subscriptions (licenses) management, allowing you to perform the following operations.

Buying a Subscription

If you want to purchase one more app license or another service offered by Storefront, there is no need for you to go to the Control Panel. The Storefront web interface provides all facilities for making the purchase. To start the subscription ordering wizard, open **Billing Manager** > **Subscription Management** and click **Buy New Subscription**.

Renewing a Subscription Manually

If you did not configure the auto renewal feature, your subscription will expire unless you do not renew it manually. The auto renewal setup instructions are given later in this section. To renew a subscription manually, open **Billing Manager** > **Subscription Management** > **Renew Subscription** and follow the wizard steps.

Renewing Subscriptions Automatically

Configuring a subscription for auto renewal helps renewing your subscriptions in time. To allow the auto renewal, open **Billing Manager** > **Subscription Management** > **Renew Subscription**, click a subscription for which you want to turn the option on, and click **Turn On AutoRenew Option**. Clear the option to cancel the auto renewal.

Canceling a Subscription

A subscription cancelation results in termination of the subscription services and money refund. To cancel a subscription, open **Billing Manager** > **Subscription Management** > **Renew Subscription**, click a subscription you want to cancel, and start the cancelation wizard by clicking **Cancel Subscription**.

(Advanced) Securing Your Websites

In this section:

Securing Connections with SSL Certificates

If your website transfers private data, for example, visitors' credit card numbers, we recommend that you use the SSL secure channel for this website. To set up such a channel, you should purchase an *SSL* certificate for your website.

SSL certificates are used not only for establishing secure communication channels on the Internet but also for verifying a website's identity as well. When users visit your secure online store, they are notified that your website is really what it claims to be and that all sensitive data, such as credit card numbers, will be transferred over a secure channel.

SSL certificates are issued by specific organizations - *SSL certificate providers*. However, some hosting providers allow customers to purchase SSL certificates directly from Panel.

Purchasing SSL Certificates

Depending on your hosting provider, you can have the following ways of purchasing SSL certificates:

- *Order an SSL certificate from Panel*. This way is available to you if your provider configures the corresponding Panel settings. The links for purchasing SSL certificates from Panel may let your purchase certificates either from your provider in their online store or from Parallels in the MyPlesk outlet. To learn how to order an SSL certificate through Panel, see the section **Purchasing SSL Certificates through Panel** (on page 561).
- *Order an SSL certificate from the SSL certificate provider you like.* In this case, you should create a *certificate signing request (CSR)* for your website in Panel and submit it to an SSL certificate provider. To learn how to create such request and purchase a certificate with it, refer to the section **Generating Certificate Signing Requests** (on page 562).

Securing Websites

After you obtain a certificate for your website, you should secure the connection to the website with the certificate. The section **Securing Websites** (on page 563) explains how to do this.

Securing Websites with Shared SSL Certificates

On Windows systems, you may be able to secure your websites without purchasing your own SSL certificates. This feature is available to you if your hosting provider offers *shared SSL certificates*. The section **Using Shared SSL Certificates (Windows)** (on page 564) explains how to secure a website with a shared SSL certificate.

In this section:

Purchasing SSL Certificates Through Panel

The links for purchasing SSL certificates in Panel let you purchase either certificates from your provider if they offer their own certificates, or certificates from Parallels in the *MyPlesk outlet*. These links may also be unavailable to you if your provider decides so.

➢ *To purchase an SSL certificate through Panel:*

1. Open the corresponding subscription in the Control Panel

2. Go to the **Websites & Domains** > **Secure Your Sites page.**

3. Click **Add SSL Certificate**.

4. Specify the following certificate parameters:

   - *Certificate name*. This will help you identify this certificate in the repository.

   - *Encryption level*. Choose the encryption level of your SSL certificate. We recommend that you choose a value more than 1024 bit.

   - *Your location and organization name*. The values you enter should not exceed the length of 64 symbols.

   - *The domain name for which you want to purchase an SSL certificate.* This should be a fully qualified domain name. Example: *your-domain.com*.

   - *The website administrator's e-mail address*.

5. Make sure that all the provided information is correct and accurate, as it will be used to generate your private key.

6. Click **Buy SSL Certificate**.

7. Complete all steps of an SSL certificate purchase in the online store and you will receive your SSL certificate by e-mail.

Generating Certificate Signing Requests

If your hosting provider does not allow purchasing SSL certificates through Panel, you can create a certificate signing request and submit it to an SSL certificate provider. The provider will generate an SSL certificate for your website basing on this request.

➢ *To generate a certificate signing request:*

1. Open the corresponding subscription on the Control Panel

2. Go to the **Websites & Domains** > **Secure Your Sites page.**

3. Click **Add SSL Certificate**.

4. Specify the following certificate parameters:

   ▪ *Certificate name*. This will help you identify this certificate in the repository.

   ▪ *Encryption level*. Choose the encryption level of your SSL certificate. We recommend that you choose a value more than 1024 bit.

   ▪ *Your location and organization name*. The values you enter should not exceed the length of 64 symbols.

   ▪ *The domain name for which you want to purchase an SSL certificate.* This should be a fully qualified domain name. Example: *your-domain.com*.

   ▪ *The website administrator's e-mail address*.

5. Make sure that all the provided information is correct and accurate, as it will be used to generate your private key.

6. Click **Request**. Panel will generate your private key and certificate signing request and add them to your certificates repository (**Websites & Domains** > **Secure Your Sites**).

7. In the list of certificates, click the name of the certificate you need.

8. Locate the **CSR section** on the page, and copy the text that starts with the line **-----BEGIN CERTIFICATE REQUEST-----** and ends with the line **-----END CERTIFICATE REQUEST-----** to the clipboard.

9. Visit the website of the certification authority from which you want to purchase an SSL certificate, and follow the links on their site to start a certificate ordering procedure. When you are prompted to specify CSR text, paste the data from the clipboard into the online form and click **Continue**. The certification authority will create an SSL certificate in accordance with the information you supplied.

Securing Websites

After you receive an SSL certificate for your website, secure the website with this certificate.

> ➢ *To secure a website with an SSL certificate:*

1. Log in to the Control Panel and select the subscription that contains the website you want to secure in the **Subscriptions** menu at the top of the screen.

2. Go to the SSL certificates repository of the selected subscription (**Websites & Domains** tab > **Secure Your Sites**).

3. Upload the SSL certificate: Click **Browse** in the middle of the screen and navigate to the location of the saved certificate. Select it, and then click **Send File.**

    This will upload and install the certificate against the corresponding private key.

4. To install the certificate on a site, return to the **Websites & Domains** tab, and click the domain name of the website that you want to secure.

5. To switch on SSL protection, select the **Enable SSL support** checkbox.

6. From the **SSL certificate** menu, select your SSL certificate and click **OK**.

Using Shared SSL Certificates (Windows)

If your hosting service provider offers shared SSL for securing access to sites, then you can switch on SSL encryption without purchasing your own SSL certificate.

> ➢ *To secure connections to a site by using an SSL certificate shared by your provider:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Shared SSL** (in the **Advanced Operations** group).

3. Select the domain name of the site that you want to secure.

4. Select the **Switch on shared SSL** checkbox.

5. Specify the virtual directory name in the corresponding input field. The virtual directory with the supplied name will be created under the domain whose SSL certificate is shared (called master SSL domain). This directory will be used for accessing your site through SSL.

   For example, let us suppose that you have a domain named mydomain.com, the master SSL domain is defined as master_ssl_domain.com, and the virtual directory name you supplied is `my_virtual_dir`. In this case, to access your site through SSL, you need to use the following address: https://master_ssl_domain.com/my_virtual_dir.

   Note: You cannot use your domain name (for example, mydomain.com) to access your site via SSL if you are using shared SSL.

6. Select the directory where protected content is located under your website. The documents within the specified directory will be accessible only through SSL.

7. To make your domain accessible via SSL only, select the checkbox **Make this website accessible only through secure connections**.

8. Click **OK**.

Protecting Sites from Hotlinking (Windows)

Hotlinking (also called file leeching, remote linking, direct linking, bandwidth stealing or bandwidth banditism) is a term used for describing a situation when a web page of one domain owner is directly linking to images (or other multimedia files) on the web pages of another domain owner, usually using an <IMG> tag. If your domains are hotlinked, you may face the problem of excessive bandwidth usage.

> ➢ *To protect a website from hotlinking:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Hotlink Protection** (in the **Advanced Operations** group).

3. Click **Switch On** to enable the protection from hotlinking.

4. Specify the extensions of files that you want to protect from hotlinking (for example, jpg, bmp, and so on) in the **Protected files extensions** field. When listing several file extensions, separate them with white spaces.

5. If you want to allow direct linking to your files from certain sites, type the website addresses into the **Addresses of friendly websites** field, and click **Add**.

6. Click **OK**.

(Advanced) Extended Website Management

Panel provides a number of operations on websites and domains for advanced users: Working with third-party applications and services, fine tuning of some system services, and much more. This section contains the detailed instructions on all these operations.

In this section:

Working with a Staging Site

If you have a production website and are planning major site changes, consider setting up a staging site — a separate location on the server where you can conveniently update and test a copy of the site before putting it into production.

We recommend that you work with a staging site in the following way:

1. Decide where you want to host the development copy and prepare the development environment. You can choose to host it in the same webspace, in a separate webspace on the same server, or upload it to an FTP account on another server.

    If you choose the same webspace, then you first need to set up a new website by adding a domain or a subdomain.

2. (Optional step.) If you set up your development environment under your account in the Panel and your production site has APS applications installed via the Panel (at the **Applications** tab), install the desired site applications in your development environment in the same subdirectory as you have on your production site. This step is optional; however, it will help you avoid changing manually database connection settings in the application scripts.

3. Make a copy of the website and place it in the staging environment.

4. Make copies of the databases used by the site and deploy them in the staging environment.

5. Change database connection settings in the scripts to point at the databases in the staging environment.

6. (Optional step.) Complete APS applications setup. Go to the **Applications** tab for your development site, locate the application in the list of installed applications, open its **Settings** screen and re-save the parameters. With this operation, the APS scripts should stop pointing at the production database and reconnect the application to the database copy. This step is needed if your production site has APS apps installed via the Panel and you performed Step 2 of the current instruction.

7. Make the required changes to the site copy in the staging environment, and test them to make sure everything works as intended.

8. Publish the updated site. This is done by pointing the document root of the production site to the staging site location.

> ➤ *To set up a site for staging purposes:*

1. Go to the **Websites & Domains** tab.

2. Click either **Add New Domain** or **Add New Subdomain**.

    We recommend that you use a subdomain for staging purposes.

3. Proceed as described in **Adding Domains** (on page 517) or **Adding Subdomains** (on page 519).

If you do not want your staging site to be accessible to the Internet users, do not register the newly added domain or subdomain name with a domain name registrar, or use an `.htaccess` file (on Linux hosting) to restrict access to it.

➢ *To make a copy of website files:*

1. Go to the **Websites & Domains** tab.

2. Click **Website Copying** (in the **Advanced Operations** group).

3. If you have several websites, select the one you need and click **Manage**.

4. To copy website files to the document root of an existing site:

   a. Select the option **Website in the Panel**.

   b. Select the destination site from the **Site name** menu.

   c. Specify what to do with the files that might already be present in the destination directory.

5. To copy website files to an FTP account on this or another server:

   a. Select the option **FTP storage**.

   b. Specify the server's host name and credentials for connecting to the FTP account.

   c. In the **FTP connection method** field, leave the **Active mode** option selected. If the Panel fails to connect to the external FTP account, select the **Passive mode** option here.

6. Click **OK**.

If the site uses scripts that work with a database, copy the database to the staging environment:

▪ If the database is hosted on the same server managed by Panel 10, use the procedure below to copy it.

▪ If the database is hosted on a server which is not managed by Panel 10, use the `mysqldump` utility to export the database, move the resulting data dump file to the staging environment and deploy it there. Modify the site's scripts in the staging environment so that they connect to the copied database.

➢ *To make a copy of a database from the Panel-managed server:*

1. Go to the **Websites & Domains** tab > **Databases** > *database name*.

2. Click **Make a Copy**.

3. Specify the following:

   ▪ **Destination database server**. You can select the same Panel-managed database server, or a database server located elsewhere. For an external database server, specify the host name or IP address, and access credentials: the username and password of a database management system user authorized to create new databases and database tables.

   ▪ **Destination database**. You can choose to create a new database or copy the data to an existing database.

   ▪ **Create a full copy**. Leave this option selected to copy the database structure and all data.

4. Click **OK**.

The copy of the database will be deployed on the destination server.

5. Modify the site's scripts in the staging environment so that they connect to the copied database.

When the site copy in the staging environment is updated and ready to go live, publish it as described in the following steps.

➢ *To publish the updated site to the production environment:*

1. Go to the **Websites & Domains** tab.

2. In the list of domain names, locate the address of your production site and click it.

3. In the **Document root** box, specify the document root directory of the staging site.

4. Click **OK**.

This will make the updated site copy in the staging site location accessible to visitors of your production site address.

Setting Up Mobile Sites

Your service plan may include the option to create website copies optimized for viewing on mobile devices. The copies are hosted with external UNITY Mobile online service.

> **Important**: In Panel 10.4, if a customer ordered the Unity Express offering from the Applications tab, the system could confuse the offering with Unity One. If you faced this problem, we recommend that you remove the site created with Unity One and create the new one in order to get Unity Express.

➢ *To create a copy of your website optimized for viewing on mobile devices, or set up a new mobile website:*

1. Go to **Websites & Domains** tab > **Mobile Websites**.

2. Click the corresponding **Create Mobile Site** link.

3. Specify an address for the mobile site.

If your site is accessible, for example, by domain name `example.com`, you can type a prefix like `mobile`, and then the optimized copy of your website will be accessible by the address `mobile.example.com`.

4. Click **OK**.

5. Click **Edit Site Content**. A UNITY Mobile site opens in a new browser window or tab, and you are logged on under your account.

6. In the **Import from the web section** showing your main website's domain name, click the button [▶].

7. Complete the website import wizard by following instructions presented on the screen.

After the mobile site is created, you can add a link to it to your main site.

You can now perform the following operations on the mobile site using links in Control Panel:

- Open site editor.
- Remove mobile site.

Setting Up Custom Error Pages

When visitors coming to a site request pages that the web server cannot find, the web server generates and displays a standard HTML page with an error message. You may want to create your own error pages and use them for your sites or individual virtual directories. The following error messages are the ones customized most often:

- 400 Bad File Request. Usually means the syntax used in the URL is incorrect (for example, uppercase letter should be lowercase letter; wrong punctuation marks).
- 401 Unauthorized. Server is looking for some encryption key from the client and is not getting it. Also, wrong password may have been entered.
- 403 Forbidden/Access denied. Similar to 401; a special permission is needed to access the site – a password or username, if it is a registration issue.
- 404 Not Found. Server cannot find the requested file. File has either been moved or deleted, or the wrong URL or document name was entered. This is the most common error.
- 500 Internal Server Error. Could not retrieve the HTML document because of server configuration problems.
- 503 Service Temporarily Unavailable. The site is temporarily unavailable due to maintenance.

In this section:

Setting Up Custom Error Pages on Windows Servers

➢ *To configure the web server to show custom error pages for a site or a directory within a site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Switch on support for custom error documents.

   a. Go to the **Websites & Domains** tab and in the list of domains, click the domain name you need.

   b. Select the **Custom error documents** checkbox.

   c. Click **OK**.

3. Go to the **Websites & Domains** tab > **Virtual Directories** to see the list of error documents for the root web directory. Error documents located here are used for all web pages of the selected site. If you want to customize error pages for a specific virtual directory, navigate to that directory.

4. Click **Error Documents** tab and click the required error document in the list.

   - To use the default document provided by IIS for this error page, select **Default** in the **Type** menu.

   - To use a custom HTML document already located in the `error_docs` directory in the virtual host directory of the domain, select **File** in the **Type** menu and specify the file name in the **Location** field.

   - To use a custom HTML document located in a directory other than `error_docs` on a domain, select **URL** in the **Type** menu and enter the path to your document in the **Location** field. The path should be relative to the virtual host root (that is, `<vhosts>\<domain>\httpdocs`).

     For example, you have created a file `forbidden_403_1.html` and saved it in the `my_errors` directory located in the `httpdocs`. To use this file as an error document, you need to type the following path into the **Location** field: `/my_errors/forbidden_403_1.html`.

   Note: You can use a connection over FTP or File Manager in the Panel to upload your custom error document to the server. By default, all error documents are stored in the `/vhosts/your-domain.com/error_docs/` directory (located in `C:\InetPub` by default).

5. Once the web server is restarted, it will start using your error documents.

Setting Up Custom Error Pages on Linux Servers

➢ *To configure the web server to show custom error pages for a site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Switch on support for custom error documents.

   a. Go to the **Websites & Domains** tab and in the list of domains, click the domain name you need.

   b. Select the **Custom error documents** checkbox.

   c. Click **OK**.

3. Connect to your FTP account, and go to the `error_docs` directory.

4. Edit or replace the respective files. Be sure to preserve the correct file names:

   - 400 Bad File Request - bad_request.html
   - 401 Unauthorized - unauthorized.html
   - 403 Forbidden/Access denied - forbidden.html
   - 404 Not Found - not_found.html
   - 405 Method Not Allowed - method_not_allowed.html
   - 406 Not Acceptable - not_acceptable.html
   - 407 Proxy Authentication Required - proxy_authentication_required.html
   - 412 Precondition Failed - precondition_failed.html
   - 414 Request-URI Too Long - request-uri_too_long.html
   - 415 Unsupported Media Type - unsupported_media_type.html
   - 500 Internal Server Error - internal_server_error.html
   - 501 Not Implemented - not_implemented.html
   - 502 Bad Gateway - bad_gateway.html
   - 503 Service Temporarily Unavailable - maintenance.html

The web server will start using your error documents in a few hours, after it is restarted.

Adding a Domain Forwarder

You can set up a new domain name or reconfigure an existing domain name so that it will redirect visitors to another website.

➢ *To add a new domain forwarder:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, select the required webspace in the **Subscription** menu at the top of the screen.

2. Click the **Websites & Domains** tab.

3. Click **Add New Domain**.

4. Specify the following:

   a. In the **Domain name** box, type the domain name that you have registered with your service provider or a domain name registration company.

   b. Under **DNS server configuration**, select the option **Keep master DNS zone on this server**.

   c. Under **Hosting type**, select the **Forwarding** option.

   d. In the **Destination address** box, type the Internet address to which you want to redirect visitors.

   e. Under **Forwarding type**, select the preferred type of forwarding. With **standard forwarding**, a user is redirected to the site and the actual site's address is shown in the user's browser, so the user always knows that he or she is redirected to another address. With **frame forwarding**, a user is redirected to the site without knowing that the site actually resides at another location, therefore, frame forwarding should be preferred.

5. Click **OK**.

➢ *To reconfigure an existing domain and make it a domain forwarder:*

1. Go to **Websites & Domains** tab > domain name.

2. Click the **Change** link next to the **Hosting type** field.

3. Specify the following:

   a. Under **Hosting type**, select the **Forwarding** option.

   b. In the **Destination address** box, type the Internet address to which you want to redirect visitors.

    c. Under **Forwarding type**, select the preferred type of forwarding. With **standard forwarding**, a user is redirected to the site and the actual site's address is shown in the user's browser, so the user always knows that he or she is redirected to another address. With **frame forwarding**, a user is redirected to the site without knowing that the site actually resides at another location, therefore, frame forwarding should be preferred.

4. Click **OK**.

Using Google Services

Using links in the Panel, you can generate code for inserting a custom Google search engine into your site, submit your website to Google through Webmaster Tools area, enroll in the AdSense program, embed YouTube videos, Google Translate service, or other Google products into your site.

Google Custom Search is a search engine provided by Google. It adds search functions to your site and allows you to apply your website's look and feel to the search results page. It can be used for free on websites of individuals and non-profit organizations. Websites related to for-profit businesses can either use a Custom Search Engine that will show advertisements from Google, or purchase a subscription to Google Site Search service, which starts from $100 per year. To learn more about Google Site Search and current prices, visit http://www.google.com/sitesearch.

Google Webmaster Tools allow webmasters to submit a website to Google and view search statistics. To learn more about Webmaster Tools, visit http://www.google.com/support/webmasters/?hl=en.

Google AdSense allows webmasters to earn money for displaying targeted Google ads on their websites. To learn more about AdSense, visit https://www.google.com/adsense/login/en/.

Google Web Elements allows webmasters to easily add their favorite Google products to websites. Embed content, such as news, maps, YouTube videos, and social conversations from Google Friend Connect to Web pages with simple cut-n-paste. To learn more about Google Web Elements, visit http://www.google.com/webelements/.

Before you start using Google services, you need to confirm acceptance of Google Terms of Services, and then confirm ownership for your sites.

➢ *To confirm acceptance of Google terms of service and then confirm ownership of your sites:*

1. Go to either the **Home** tab or the **Websites & Domains** tab, and click the **Google Services for Websites** link.

2. Click the appropriate links in the Panel to open and read the Terms of Service documents.

3. To confirm that you accept the Terms of Service, select the checkbox and click **Confirm**.

Now you can do the following:

- Submit your site to Google and improve site visibility in search results by clicking **Google Webmaster Tools**.
- Add search functions to a site by clicking **Add New Custom Search Engine**.
- Enroll in the AdSense program by clicking **Google AdSense**.
- Embed Google products into your site by clicking **Google Web Elements.**

> ➢ *To submit a site to Google:*

1. Go to either the **Home** tab or the **Websites & Domains** tab, and click the **Google Services for Websites** link.

2. Click **Google Webmaster Tools**.

    The Google Webmaster Tools area opens in a new browser window or tab.

3. Create a *Sitemap* and submit it to Google by following instructions at http://www.google.com/support/webmasters/bin/answer.py?hl=en&answer=156184.

> ➢ *To add a custom search engine to a site:*

1. Go to either the **Home** tab or the **Websites & Domains** tab, and click the **Google Services for Websites** link.

2. Click **Custom Site Search**.

3. Click **Add New Custom Search Engine**.

4. Type a search engine name and select the website you need.

5. Select the checkbox to confirm your acceptance of Terms of Service, and click **OK**.

    The record corresponding to the new search engine is added to the Panel.

6. Click the corresponding **Get Code** link, copy the generated code to the clipboard and paste it into the source code of your website pages.

The other links in the list of Custom Search Engines will help you perform the following operations:

- **Make Money**. Connect your Custom Search Engine to a Google AdSense account. You make money when users click on an ad they see in your search results. If you have more than one Custom Search engine, all of your search engines will automatically be associated with the same AdSense account.

- **Manage**. Manage your Custom Search Engines.

- **Look and Feel**. Adjust the appearance of search box and search results page.

- **Upgrade**. Upgrade a Custom Search Engine to ads-free Google Site Search.

- **Statistics**. Review site search reports.

- **Delete**. Delete a Custom Search Engine.

> ➢ *To participate in the Google AdSense program:*

1. Go to either the **Home** tab or the **Websites & Domains** tab, and click the **Google Services for Websites** link.

2. Click **Google AdSense**.

3. Click **Google AdSense** account.

4. Fill in all the required fields to create a new AdSense account, or select an existing account, and click **OK**.

A confirmation e-mail with further instructions will be sent to your e-mail address.

Hosting Personal Web Pages Under Your Domains

You can host on your web server personal web pages for users who do not need their own domain names. These pages usually have web addresses like http://your-domain.com/~username.

> ➢ *To accommodate a personal web page under your domain and set up an FTP account for publishing:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Web Users** (in the **Advanced Operations** group).

3. Click **Settings**.

4. If you want to allow execution of scripts embedded in personal web pages, select the **Allow web users to use scripts** checkbox.

5. Click **OK**.

The settings you have defined at the step 4 are common for all personal web pages you might host on your account. Therefore, you will not need to perform the steps from 3 to 5 next time you set up a new web user account.

6. Click **Add New Web User**.

7. Specify a username and a password that will be used for accessing the webspace through FTP and publishing the web pages.

You can use only lower-case alphanumeric, hyphen and underscore symbols in the username. The username should begin with an alphabet character. It cannot contain white spaces. The password cannot contain quotation marks, white space, username, and should be between 5 and 14 characters in length.

8. If you want to limit the amount of disk space that can be occupied by the web page content, type the desired value in megabytes into the **Hard disk quota** box.

When the specified limit is exceeded, the web page owner will not be able to add files to his or her webspace.

9. Specify the programming languages that should be supported for the web page.

For example, if the web page is written in PHP, select the **PHP support** checkbox.

10. If you use a Windows-based hosting account and this personal web page's applications need to use a file-based database (like Jet) located in the root of `httpdocs` directory, select the **Additional write/modify permissions** option. Note that selecting this option might seriously compromise the website security.

11. Click **OK**.

Now you can tell your user the FTP account credentials, so that he or she can publish their web page.

➢ *To change FTP password for a web page owner:*

1. Go to the **Websites & Domains** tab > **Web Users**.

2. Click the user name you need.

3. Type the new password into the **New password** and **Confirm password** boxes.

4. Click **OK**.

➢ *To allocate more disk space to the web page owner:*

1. Go to the **Websites & Domains** tab > **Web Users**.

2. Click the user name you need.

3. Type the amount of disk space in megabytes into the **Hard disk quota** box.

4. Click **OK**.

➢ *To remove a web page owner's account together with their web page:*

1. Go to the **Websites & Domains** tab > **Web Users**.

2. Select a checkbox corresponding to the user account you want to remove and click **Remove**.

3. Confirm removal and click **OK**.

Limiting Bandwidth and Number of Connections to Websites

To avoid excessive usage of bandwidth, and protect your site from Denial Of Service attacks, you can limit bandwidth usage for a site and number of simultaneous connections.

➢ *To limit bandwidth usage and number of connections to a site:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Bandwidth Limiting** (in the **Advanced Operations** group).

3. Select the **Switch on bandwidth limiting** checkbox.

4. In the **Maximum bandwidth usage (KB/S)** box, specify the maximum speed, measured in kilobytes per second, that a website can share among all its connections.

5. Select the **Switch on connections limiting** checkbox.

6. In the **Connections limited to** box, specify the maximum number of simultaneous connections to the site.

7. Click **OK**.

Working with Microsoft Frontpage Websites (Windows)

Microsoft FrontPage deals with two kinds of websites: disk-based and server-based. In short, a disk-based site is a FrontPage website you create on your local hard disk and then later publish to the server. A server-based site is one you create and work with directly on the server, without the extra step of publishing. This section provides you with instructions on publishing only disk-based websites.

You can publish disk-based websites either through FTP or HTTP. If your hosting server is running FrontPage Server Extensions, you would publish your site over HTTP. For example: http://your-domain.com/MyWebSite. If your hosting server supports FTP, you would publish to an FTP location. For example: ftp://ftp.your-domain.com/myFolder.

After publishing, you can manage your site through FrontPage Server Extensions.

➢ *To access FrontPage Server Extensions management interface:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. In the **Advanced Operations** group, click **FrontPage.**

4. Do either of the following:

   ▪ To manage a site over HTTP connection, click **Frontpage Webadmin**.

   ▪ To manage a site over a secure SSL connection, if SSL support is enabled for the site, click **Frontpage SSL Webadmin**.

5. Type your FrontPage administrator's username and password, and click **OK**.

For instructions on using FrontPage server extensions, see online help (**Frontpage Webadmin** > **Help**) or visit Microsoft website.

The following FrontPage settings are changeable through the Panel:

   ▪ The use of Microsoft FrontPage IIS Index Server for building the full-text index of your website.

   ▪ SMTP mail server and sender's e-mail address. These options are applicable if you use FrontPage forms that submit information from your site by e-mail. By default, SMTP server specified in the domain's DNS zone is used for sending mail. If no SMTP server is specified in the zone, then FrontPage uses the mail service running on the server where the domain (site) is hosted.

➢ *To change any of these settings:*

1. Go to the **Websites & Domains** tab > **FrontPage** > **Settings.**

2. Make the required changes and click **OK**.

In this section:

Publishing FrontPage Websites

> ➢ *To publish files through FTP:*

1. Open your FrontPage program.

2. Open a FrontPage website: open **File** menu and select the **Open Site** item.

3. Go to **Remote Web site** view: click the **Web Site** tab, and then the **Remote Web Site** button at the bottom of the window.

4. Set up your Remote Web Site Properties:

   ▪ Click the **Remote Web Site Properties** button in the upper-right corner of the window.

   ▪ Select **FTP** as the remote Web server.

   ▪ In the **Remote Web site location** box, type your host name (for example, ftp://ftp.your-domain.com)

   ▪ In the **FTP directory** box, type your FTP directory if your hosting company provided one. Leave it blank if they did not specify one.

   ▪ Select the **Use Passive FTP** check box if your computer or network is protected by a firewall.

5. Click **OK** to connect to the remote site.

   The Remote Web site view will show files that you have in your local and remote sites.

6. Click the **Publish Web site** button in the lower-right corner of the window.

> ➢ *To publish files through HTTP on a server that supports FrontPage Server Extensions:*

1. Open your FrontPage program.

2. Open a FrontPage website: open **File** menu and select the **Open Site** item.

3. Go to **Remote Web site** view: click the **Web Site** tab, and then the **Remote Web Site** button at the bottom of the window.

4. Click the **Remote Web Site Properties** button in the upper-right corner of the window.

5. On the **Remote Web Site** tab, under **Remote Web server type**, click **FrontPage or SharePoint Services.**

6. In the **Remote Web site location** box, type the Internet address, including the protocol, of the remote website that you want to publish folders and files to, for example, http://www.your-domain.com, or click **Browse** to locate the site.

7. Do any of the following:

- To use Secure Sockets Layer (SSL) for establishing a secure communications channel to prevent the interception of critical information, click **Encryption connection required (SSL)**. To use SSL connections on your web server, the server must be configured with a security certificate from a recognized certificate authority. If the server does not support SSL, clear this check box. Otherwise, you will not be able to publish folders and files to the remote website.

- To remove specific types of code from web pages as they are being published, on the **Optimize HTML** tab, select the options you want.

- To change the default options for publishing, on the **Publishing** tab, select the options you want.

8. Click **OK** to connect to the remote site.

   The **Remote Web site** view will show files that you have in your local and remote sites.

9. Click the **Publish Web site** button in the lower-right corner of the window.

Adding FrontPage Accounts

If you are using Microsoft FrontPage for collaborating on website content with other users, then you need to create additional Microsoft FrontPage accounts.

➢ *To create an additional Microsoft FrontPage account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. In the **Advanced Operations** group, click **FrontPage.**

4. Click **Add New FrontPage Account**.

5. Specify the following:

   ▪ Username and password for the account.

   ▪ Limit on disk space. If you wish to limit the amount of disk space that can be used by this account, clear the **Unlimited** check box and type the desired value in megabytes into the **Hard disk quota** box.

   When the specified limit is exceeded, the user will not be able to upload more files to the webspace.

6. Click **OK**.

➢ *To change settings for an additional Microsoft FrontPage account:*

1. Go to the **Websites & Domains** tab > **FrontPage**.

2. Click the required account name in the list.

3. Adjust the settings as necessary and click **OK** to save changes.

➢ *To remove an additional Microsoft FrontPage account:*

1. Go to the **Websites & Domains** tab > **FrontPage**.

2. Select the checkbox corresponding to the account you want to remove.

3. Click **Remove**.

4. Confirm the removal and click **OK**.

Using Virtual Directories (Windows)

A virtual directory is a link to an existing physical directory that is present on the server's hard disk. Virtual directories can have a number of specific settings like custom ASP.NET configuration, access permissions, and protection with a password.

Because any virtual directory can have its own settings, including customized ASP.NET configuration, virtual directories are very useful in setting up your web applications, especially those written in ASP.NET. For example, if you have three web applications that use ASP.NET version 1.1, and you need to install one web application that uses ASP.NET version 2.0, you can create a virtual directory for the ASP.NET 2.0 application, configure ASP.NET settings for this directory so as to enable support for version 2.0, and then successfully install the required application.

Virtual directories can also be used as aliases. For example, you have a web application installed on your domain "example.com" in the physical directory "`/my_data/web_apps/forum`". To access this web application, users need to type "`example.com/my_data/web_apps/forum`", which is hard to remember and too long to type. You can create virtual directory called `forum` in the root of your virtual host, and link this virtual directory to "`/my_data/web_apps/forum`", so the users who want to access the web application will need to type "`example.com/forum`", which is much shorter and easier to remember.

In this section:

Creating Virtual Directories

> ➢ *To create a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group). You are in your web site root now.

3. Navigate to the directory in which you want to create a new virtual directory.

4. Click **Create Virtual Directory**.

Note: To create a physical directory instead of virtual directory, click **Create Directory**, specify the name of the directory and click **OK**.

---

5. Specify the required parameters:

   - **Name** - specify the virtual directory name.

   - **Path** - specify the virtual directory path:

     - Select the **Create physical directory with the same name as virtual directory** checkbox to automatically create a physical directory with the same name as the virtual directory you are creating.

     - Clear the **Create physical directory with the same name as virtual directory** checkbox and specify the path in the field to select a physical directory that already exists.

   - **Script source access** - select this checkbox to allow users to access source code if either Read or Write permissions are set. Source code includes scripts in ASP applications.

   - **Read permission** - select this checkbox to allow users to read files or directories and their associated properties.

   - **Write permission** - select this checkbox to allow users to upload files and their associated properties to the virtual directory or to change content in a write-enabled file. Write access is allowed only if browser supports the PUT feature of the HTTP 1.1 protocol.

   - **Directory browsing** - select this checkbox to allow users to see a hypertext listing of the files and subdirectories in the virtual directory.

   - **Log visits** - select this checkbox if you want to store the information about visits of the virtual directory.

   - **Create application** - select this checkbox to make the directory an IIS application. The directory becomes logically independent from the rest of the website.

   - **Execute permissions** - select the appropriate program execution level allowed for the virtual directory.

     - **None** - allow access only to static files such as HTML or image files.

     - **Scripts only** - allow running scripts only, not executables.

- **Scripts and Executables** - remove all restrictions so that all file types can be executed.

- **ASP Settings** - set specific settings for ASP-based web applications.

  - If you are using ASP-based applications that cannot operate correctly under data transfer restrictions currently set by IIS, clear the **Defined by parent directory** checkbox corresponding to the field you want to change and type in the required number.

  - If you want to enable debugging of ASP applications on the server side, clear the corresponding **Defined by parent directory** checkbox and select the **Enable ASP server-side script debugging** checkbox.

  - If you want to enable debugging of ASP applications on the client side, clear the corresponding **Defined by parent directory** checkbox and select the **Enable ASP client-side script debugging** checkbox.

  Note that if you are trying to change ASP Settings for the root virtual directory, the default checkbox names will be **Defined by IIS** instead of **Defined by parent directory**.

6. Click **OK**.

➢ *To remove a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Select the checkbox corresponding to the directory you want to remove.

4. Click **Remove**.

5. Confirm the removal and click **OK**.

Configuring ASP.NET for Virtual Directories

> ➤ *To configure ASP.NET settings for a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Browse to the required directory and click a link with its name.

4. Click **ASP.NET Settings**.

5. Set up the strings that determine database connection data for ASP.NET applications that use databases. This option is available only for ASP.NET 2.0.x.

   When you open the ASP.NET configuration page for the first time, sample connection parameters with common constructions are displayed. You can delete them and specify your own strings.

   ▪ To add a string, enter the required data into the **Name** and **Connection Parameters** input fields and click ⊕ next to them.

   ▪ To remove a string, click ⊖ next to it.

6. Set up custom error messages that will be returned by ASP.NET applications:

   ▪ To set the custom error messages mode, select an appropriate option from the **Custom error mode** menu:

      ▪ **On** - custom error messages are enabled.

      ▪ **Off** - custom error messages are disabled and detailed errors are to be shown.

      ▪ **RemoteOnly** - custom error messages are displayed only to remote clients, and ASP.NET errors are shown to the local host.

   ▪ To add a new custom error message (which will be applied unless the **Off** mode was selected), enter the values in the **Status Code** and **Redirect URL** fields, and click ⊕.

      ▪ **Status Code** defines the HTTP status code resulting in redirection to the error page.

      ▪ **Redirect URL** defines the web address of the error page presenting information about the error to the client.

   Due to possible conflicts, you cannot add a new custom error message with an error code that already exists, but you can redefine the URL for the existing code.

   ▪ To remove a custom error message from the list, click ⊖ next to it.

7. Configure compilation settings in the **Compilation and Debugging** field:

   ▪ To determine the programming language to be used as default in dynamic compilation files, choose an entry from the **Default web page language** menu.

- To enable compiling of retail binaries, leave the **Switch on debugging** checkbox empty.

- To enable compiling of debug binaries, select the **Switch on debugging** checkbox. In this case, the source code fragments containing error will be shown in a diagnostic message.

Note: When running applications in debug mode, a memory and performance overhead occurs. We recommended that you use debugging when testing an application, and disable it before deploying the application into production scenario.

8. Configure encoding settings for ASP.NET applications in the **Globalization Settings** section:

- To set an adopted encoding of all incoming requests, enter an encoding value into the **Request encoding** field (default is utf-8).

- To set an adopted encoding of all responses, enter an encoding value into the **Response encoding** field (default is utf-8).

- To set an encoding which must be used by default for parsing of `.aspx`, `.asmx`, and `.asax` files, enter an encoding value into the **File encoding** field (default is Windows-1252).

- To set a culture which must be used by default for processing incoming web requests, select an appropriate item from the **Culture** list.

- To set a culture which must be used by default when processing searches for a locale-dependent resource, select an appropriate item from the **UI Culture** list.

9. Set a code access security trust level for ASP.NET applications in the **Code Access Security** field.

CAS trust level is a security zone to which applications execution is assigned, defining what server resources the applications will have access to.

Important: When an assembly is assigned a trust level that is too low, it does not function correctly. For more information on the permission levels, see http://msdn.microsoft.com/library/en-us/dnnetsec/html/THCMCh09.asp?frame=true#c09618429_010.

10. If you are using ASP.NET 1.1.x, then you can enable the usage of the auxiliary scripts in the **Script Library Settings** field. Specifying the script library settings is necessary if the validation web controls are used on your web site.

- If you need to use auxiliary scripts (specifically, scripts implementing objects for validating input data), provide the settings for .NET framework script library. To do so, enter the path beginning with the domain root directory preceded by the forward slash into the **Path to Microsoft script library** field, or click the folder icon next to the **Path to Microsoft script library** field and browse for the required location.

- To initiate installation of files containing the scripts to the specified location, select the **Install** checkbox. If the files already exist there, they will be rewritten.

11. Set client session parameters in the **Session Settings** field:

- To set up the default authentication mode for applications, select an appropriate item from the **Authentication mode** list. **Windows** authentication mode should be selected if any form of IIS authentication is used.

- To set up the allowed session idle time, enter appropriate number minutes into the **Session timeout** field.

12. Click **OK** to apply all changes.

Configuring PHP for Virtual Directories

To be able to use web applications that require PHP4 or PHP5, you can select the required PHP version for individual virtual directories.

➢ *To select PHP version for a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Browse to the required directory and click a link with its name.

4. In the **Tools** group, click **PHP Settings**.

5. Select the required version of PHP and click **OK**.

Setting Up Access to Virtual Directories

> ### *To set access permissions for a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. To set access permissions for the current virtual directory, in the **Tools** group, click **Directory Access Permissions**. If you want to set permissions for a subdirectory located within the current directory, click the corresponding icon 🔒.

4. Do the following:

- To make the file/folder inherit permissions from a parent folder (if it does not), select the checkbox **Allow inheritable permissions from the parent to propagate to this object and all child objects. Include these with entries explicitly defined here**.

- To make the files and folders, which are contained in this folder, inherit the folder permissions you define, select the checkbox **Replace permission entries on all child objects with entries shown here that apply to child objects**.

- To change or remove permissions from a group or a user, click the required name in the **Group or user names** list. If the group or user is not listed in the **Group or user names** list, select the required user or group name from the menu located above the list and click ➕: the user/group appears in the list. Select it.

  To allow or deny permissions to a selected group/user, select the **Allow** or **Deny** checkboxes corresponding to permissions listed under **Permissions for <***user/group name***>**. If the checkboxes in **Allow** or **Deny** columns are shown in grey, it means that the corresponding permissions are inherited from a parent folder.

- To deny the permissions, which are inherited from a parent object as allowed, select the required checkboxes under **Deny**. This will override inherited permissions for this file/folder.

- To allow the permissions, which are inherited from a parent object as denied, clear the **Allow inheritable permissions from the parent to propagate to this object and all child objects. Include these with entries explicitly defined here** checkbox: this removes the inherited permissions. Then select the required checkboxes under **Allow** and **Deny**.

- To remove access permissions from a group or user, select the required name in the **Group or user names** list and click the icon ➖ next to it.

5. If you need advanced fine-tuning of permissions, click the **Advanced** button, and do the following:

- To create a permission entry for a group or user, select the required name from the **Group or user names** list and click ➕.

- To set or change file/folder permissions for a group or user, select the required name from the **Group or user names** list, select the required **Allow** and **Deny** checkboxes corresponding to permissions listed under **Permissions for <*user/group name*>**.

- To remove a permission entry for a group or user, select the required name from the **Group or user names** list and click 🚫.

- To make child objects of a folder inherit its permissions defined under **Permissions for <*user/group name*>**, select the **Replace permission entries on all child objects with entries shown here that apply to child objects** checkbox, and select checkboxes in the **Apply to** list which correspond to the objects that must inherit the permissions.

6. Click **OK**.

> *To restrict access to files and directories located within a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories.**

3. Navigate to the directory you want to protect and click the **Protection** tab.

4. Click **Protect**.

5. To specify users who will be able to access the directory, click **Add User**, specify username and password, and click **OK**.

6. If you want to specify a title for the protected area that will be shown to users when they attempt to access the directory, click **Settings**, specify a title, and click **OK**.

> *To revoke a permission to access a directory from a user:*

1. Go to the **Websites & Domains** tab > **Virtual Directories** > the **Protection** tab.

2. Select the checkbox corresponding to the user's name and click **Remove**.

> *To remove protection from a directory and allow the general public to see the directory contents without restrictions:*

1. Go to the **Websites & Domains** tab > **Virtual Directories** > the **Protection** tab.

2. Click **Remove Protection**.

3. Click **OK** to confirm removal.

Changing Virtual Directory Settings

> ➢ *To change settings of a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Browse to the directory whose preferences you want to change, and click the corresponding icon 🌐, or click **Directory Properties** when inside the required directory.

4. Change the settings as required:

   - **Name** - specify virtual directory name.

   - **Path** - specify the path to the physical directory to which the virtual directory is linked.

   - **Script source access** - select this checkbox to allow users to access source code if either Read or Write permissions are set. Source code includes scripts in ASP applications.

   - **Read permission** - select this checkbox to allow users to read files or directories and their associated properties.

   - **Write permission** - select this checkbox to allow users to upload files and their associated properties to the virtual directory or to change content in a write-enabled file. Write access is allowed only if browser supports the PUT feature of the HTTP 1.1 protocol.

   - **Directory browsing** - select this checkbox to allow users to see a hypertext listing of the files and subdirectories in the virtual directory.

   - **Log visits** - select this checkbox if you want to store the information about visits to the virtual directory.

   - **Create application** - select this checkbox to make the web directory an IIS application. The directory becomes logically independent from the rest of the website.

   - **Execute permissions** - select the appropriate program execution level allowed for the virtual directory.

     - **None** - allow access only to static files such as HTML or image files.

     - **Scripts only** - allow running scripts only, not executables.

     - **Scripts and Executables** - remove all restrictions so that all file types can be executed.

   - **Allow to use parent paths** - select this checkbox to allow using double period in the path name when referring to a folder above the current directory. This enables users to move up the folder tree without knowing the folder name or the whereabouts in the hierarchy. If the option is selected, parent path directories should not have the **Execute permission** checkbox selected in their properties, so that applications do not have the ability of unauthorized running of programs in the parent paths.

- **Allow application execution in MTA (multi-threaded apartment) mode** - select this checkbox to allow the application execution in multi-threaded apartment (MTA) mode. Otherwise, the application will run in a single-threaded apartment (STA) mode. Using STA, each application pool is executed in a dedicated process. With MTA, several concurrent application pools are executed in one thread which can increase performance in some cases.

- **Use default documents** - select this checkbox to allow the use of default documents for the current directory. The default document is sent when users access the directory on the web without a specific file name (for example, using http://www.example.com as opposed to http://www.example.com/index.html). If this checkbox is cleared and the **Directory browsing** checkbox is selected, the web server returns a folder listing. If this checkbox is cleared and the **Directory browsing** checkbox is cleared as well, the web server returns an "Access Forbidden" error message.

- **Default documents search order** - specifies the order in which IIS searches for the default document, sending user the first available file it finds. If no match is found, IIS behaves as in the cases when the default content page is disabled.

- **Allow anonymous access** - select this checkbox if you want to make the directory public so that the Internet users could access it without authentication.

- **Require SSL** - select this checkbox to enable access to the folder only via SSL-encrypted connections.

- **ASP Settings** - set specific settings for ASP-based web applications.

  - If you are using ASP-based applications that cannot operate correctly under data transfer restrictions set by IIS, clear the **Defined by parent directory** checkbox corresponding to the field you want to change and type in the required number.

  - If you want to enable debugging of ASP applications on the server side, clear the corresponding **Defined by parent directory** checkbox and select the **Enable ASP server-side script debugging** checkbox.

  - If you want to enable debugging of ASP applications on the client side, clear the corresponding **Defined by parent directory** checkbox and select the **Enable ASP client-side script debugging** checkbox.

    Note that if you are trying to change ASP Settings for the root directory, the default checkbox names will be **Defined by IIS** instead of **Defined by parent directory**.

5. Click **OK** to save changes.

Adding and Removing MIME Types

Multipurpose Internet Mail Exchange (MIME) types instruct a web browser or mail application how to handle files received from a server. For example, when a web browser requests an item on a server, it also requests the MIME type of the object. Some MIME types, like graphics, can be displayed inside the browser. Others, such as word processing documents, require an external application to be displayed.

When a web server delivers a web page to a client web browser, it also sends the MIME type of the data it is sending. If there is an attached or embedded file in a specific format, IIS also tells the client application the MIME type of the embedded or attached file. The client application then knows how to process or display the data being received from IIS.

IIS can only operate files of registered MIME types. These types could be defined both on the global IIS level and on the website or virtual directory level. Globally-defined MIME types are inherited by all websites and virtual directories while ones defined on the website main or virtual directory level are used only for the area where they are defined. Otherwise, if the web server receives request for a file with unregistered MIME type, it returns the 404.3 (Not Found) error.

➢ *To add a new MIME type for a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Navigate to the required virtual directory and click the corresponding link with its name.

4. Click the **MIME Types** tab.

5. Click **Add MIME Type**.

6. Specify the following:

   - Type the file name extension in the **Extension** field. File name extension should begin with a dot (.), or a wildcard (*) to serve all files regardless of file name extension.

   - Specify the file content type in the **Content** field.

   - You can either select the appropriate value from the list or define a new content type. To do this, select **Custom** and enter the content type in the input box provided.

7. Click **OK** to finish the creation.

➢ *To edit a MIME type for a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Navigate to the required virtual directory and click the corresponding link with its name.

4. Select the **MIME Types** tab.

5. Select the required MIME type in the list.

- Type the file name extension in the **Extension** field. File name extension should begin with a dot (.), or a wildcard (*) to serve all files regardless of file name extension.

- Specify the file content type in the **Content** field.

- You can either select the appropriate value from the list or define a new content type. To do this, select **Custom** and enter the content type in the input box provided.

6. Click **OK** to save changes.

> ➢ *To remove a MIME type for a virtual directory:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Virtual Directories** (in the **Advanced Operations** group).

3. Navigate to the required virtual directory and click the corresponding link with its name.

4. Select the **MIME Types** tab.

5. Select the checkbox corresponding to the MIME type you want to remove.

6. Click **Remove**.

7. Confirm removal and click **OK**.

Setting Up IIS Application Pool (Windows)

IIS Application Pool contains all web applications installed on your sites. If your service provider allocated a dedicated IIS application pool for your sites, then you can have a level of isolation between web applications used by your sites and web applications used by other hosting users who host their websites on the same server. Because each application pool runs independently, errors in one application pool will not affect the applications running in other application pools.

Once you switch on the application pool, all web applications on your websites will be using it.

➢ *To switch on dedicated IIS application pool for your websites:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Dedicated IIS Application Pool for Your Websites** (in the **Advanced Operations** group).

3. Click **Switch On**.

4. To limit the amount of CPU resources that this application pool can use, select the **Switch on CPU monitoring** checkbox and type a number in percents into the Maximum **CPU use (%)** box.

5. Click **OK**.

➢ *To stop all applications running in the application pool:*

1. Go to the **Websites & Domains** tab > **Dedicated IIS Application Pool for Your Websites** (in the **Advanced Operations** group).

2. Click **Stop**.

➢ *To start all applications in the application pool:*

1. Go to the **Websites & Domains** tab > **Dedicated IIS Application Pool for Your Websites** (in the **Advanced Operations** group).

2. Click **Start**.

If you run applications that are known to have memory leaks or become unstable after working for a long time, then you might need to restart them from time to time.

➢ *To restart all applications running in the application pool:*

1. Go to the **Websites & Domains** tab > **Dedicated IIS Application Pool for Your Websites** (in the **Advanced Operations** group).

2. Click **Recycle**.

➢ *To switch off the dedicated IIS application pool for your websites:*

1. Go to the **Websites & Domains** tab > **Dedicated IIS Application Pool for Your Websites** (in the **Advanced Operations** group).

2. Click **Switch Off**.

Web Publishing with Web Deploy (Windows)

Web Deploy (Web Deployment Tool) is a Microsoft tool that significantly simplifies the migration, management, and deployment of your websites and web applications. More precisely, you can write a code in your local environment, for example, in *Visual Studio®* (IDE) or *WebMatrix®* (development tool), and then periodically publish the updates to your production server by means of Web Deploy.

Differences Between Visual Studio® and WebMatrix®

If you are looking for an environment that lets you seamlessly publish code updates to your account, it is likely you will choose between Visual Studio® and WebMatrix®.

- Visual Studio® is a classic integrated development environment (IDE) for writing .NET applications and sites of any scale. It has a variety of plugins that extend its basic functionality. However, to run and debug your applications in Visual Studio®, you should perform extra configuration (such as preparing a database and environment settings). Thus, this tool is more suitable for advanced users.

- With WebMatrix® you have a built-in set of application templates and even working applications (WordPress, Joomla) right out of the box. If you wish to instantly add an app to your customer account or run it, you just need to select the app from the list and WebMatrix® will transparently configure it for you. Moreover, you can promptly find and subscribe to a hosting plan for your project without leaving WebMatrix®. Summing up, this tool is suitable even for novice users and encourages fast development by using ready-to-run applications and templates. The details on how to install and use WebMatrix® are available at http://www.microsoft.com/web/webmatrix/.

It is up to you to decide which is better for your project.

How to Configure Web Publishing in Visual Studio® and WebMatrix®

Generally, to set up web publishing in your environment, you should open the publishing settings and specify the IP address of your customer account and the username and password you use to log in to the Control Panel.

In WebMatrix®, the publishing settings are found in **Home > Publish**. You can provide these settings either manually or as an XML file; Panel automatically generates it. To download the file for a certain website, click on a corresponding **Download** link in **Websites & Domains > Advanced Operations > Web Deploy Publishing Settings**. The settings are only available if Web Deploy is installed on the Panel server and is running. If you do not see these settings, contact your hosting provider.

For a step-by-step instruction on how to set up web publishing in WebMatrix®, see http://www.microsoft.com/web/post/how-to-publish-a-web-application-using-webmatrix.

To learn more about publication settings in Visual Studio®, see http://msdn.microsoft.com/en-us/library/7z83t16a.aspx.

Note: You can decide whether to transfer updates securely to your customer account by selecting the corresponding option in the publication settings. If your hosting provider does not have a valid SSL certificate, you will receive an error message on attempting publication. To resolve the problem, contact your hosting provider for assistance or avoid using the secure connection.

Securing WebMatrix® Publishing Settings

An XML file which keeps WebMatrix® publishing settings may include the password to a customer's account. Administrators have the option to configure Panel so that it excludes these passwords from the XML files. If the administrators wish to improve the security of the system and prevent stealing the passwords, they can specify to exclude the password from the XML file. The customers then will have to enter the password directly in WebMatrix®. The option is available on the **Tools & Settings** > **Server Settings** page.

Building Websites with Web Presence Builder

Parallels Web Presence Builder (also referred to as *editor*) is a visual editor that lets small business owners and individuals create their websites quickly and easily. With Web Presence Builder, you do not have to write code or configure servers to start a blog, open an online store, or set up any other form of website. You just add the content blocks that comprise your site (text, image gallery, online store) by dragging them to pages, fill these blocks with your content, and publish the result. That's it!

Start Creating a Website

When you start working on your website, you do not have to write text, search for the images, and adjust the site look. Just choose a topic that best suits your website, and Web Presence Builder will generate a site template that already contains a set of pages, pictures, and text relevant to the selected topic. Each time Web Presence Builder generates a website, it uses a random set of element designs, so you can be sure that your website design is never repeated.

Once you have selected the topic, you will be prompted to enter some additional information that Web Presence Builder will add to the website's pages, for example, your phone number, which will appear on the *Contact Us* page.

For more details on how to start creating your website, see the section **Creating a Website** (on page 603).

Import Websites Created in SiteBuilder 4.5

If you already have a website created with SiteBuilder 4.5 and hosted elsewhere, you can import your website to your new customer account. Learn how to move your SiteBuilder 4.5 website to Web Presence Builder in the section **Importing Sites from SiteBuilder 4.5** (on page 604).

Fill the Site with Content

As soon as Web Presence Builder creates your website, you can fill it with your content. Your main editing tool is the Web Presence Builder's main menu. You can do the following by using the menu:

▪ *Change the structure of your site*: Add or remove pages.
▪ *Edit the website design*: Change colors and layout.

- *Fill the site with your content*: Remove unused predefined content and add your own elements:
    - Text
    - Images and image galleries
    - Videos
    - Scripts
    - Blogs
    - Search boxes
    - Other elements
- *Let your visitors share the information in your website in social media* such as Facebook or Twitter: Add the corresponding buttons to the pages of your site.

To learn more about actions available to you in the editor, refer to the section **Getting Familiar With the Web Presence Builder Editor** (on page 601).

Find instructions on managing website look and content in the section **Editing a Website** (on page 605).

Make the Site Available on the Internet

After you finish editing the website, make it available on the Internet. To let people see your site at your domain name, *publish* the website by clicking the corresponding button in the main menu. When you click this link, Web Presence Builder generates the static pages and scripts that comprise your website and places them in the appropriate locations on the server so that people see them when they enter your domain name in their browsers. Learn more about publishing websites in the section **Publishing a Website to the Internet** (on page 635).

You can also attract more visitors to your sites by placing a site copy on *Facebook* - a popular social network. Refer to the section **Publishing a Website Copy to Facebook** (on page 635) for detailed instructions on how to do this.

In this section:

Getting Familiar With Web Presence Builder

The interface of the Web Presence Builder editor has two main parts: your website and the main menu.

A website consists of a number of elements, or modules. Each module can be edited separately. Here we will familiarize you with the basic principles of website module editing. These are similar for all modules.

When adding a module to a page, you can choose whether it should be shown only on the current page (page-specific module) or on all pages of the site (site-wide module). The only exceptions are the **Search**, **Advertisement**, **Site Logo**, **Navigation**, and **Breadcrumbs** modules: when you add them, they are placed on all pages of the website.

To place a module only on the current page, select the module under the **Modules** tab, and drag it to any of the areas marked with the text **PAGE-SPECIFIC AREA**. Such areas are located within the main content block and near the top of each sidebar.

To place a module on all pages of the website, select the module under the **Modules** tab, and drag it to any of the areas marked with the text **SITE-WIDE AREA**. Such areas are located above and below the main content block, in sidebars, header, and footer.

To locate or edit a website module, hover the mouse pointer over the part of the website you want to change. A dotted frame will appear around the module. A control panel prompting you to move, edit, or remove the module will appear next to the dotted frame.

The dotted frame around page-specific modules is green, but around site-wide modules it is blue.

The editor's main menu offers website editing options grouped under five tabs:

- **Modules**. Here you can choose necessary modules and drag them to any place on the page to fill your website with content.
- **Design**. Here you can select the layout and general color scheme for your website, change colors of different elements, and select fonts and border style.
- **Pages**. Here you can add and delete pages, rename them, edit page meta information such as descriptions and keywords for use by search engines, or mark a page as hidden so that your visitors cannot access it from the site menu.
- **Documents**. Here you can upload documents, images, and other files in various formats to your hosting account. You can then easily insert links to these documents into your website pages. Or, you can just keep the files on the hosting account for your own needs.
- **Settings**. Here you can edit your website name, description and keywords for search engines, upload a site icon (favicon), optimize the ranking of your website in search engine results, connect your site to Google Analytics, and add a copy of your site to a Facebook page.

From the main menu, you can also do the following:

- Access the **Dashboard** to perform the following operations:
  - View statistics on website visits. The statistics are provided by Google Analytics.

- View new comments left by site visitors on your website pages. The commenting functionality is provided by Disqus.

- View new orders from customers visiting your online stores. The online store functionality is provided by Ecwid.

- Save and load copies of your website by using the **Save** and **Revert** options.

- Access **Web Presence Builder Getting Started** video tutorial, view **User's Guide**, or send us your feedback. To do this, select the corresponding option from the **Help** menu.

- Publish your website by using the **Publish** button.

- Discard any changes made to a site and start creating the site anew by selecting **More** > **Start Over**. This does not delete your already published site copy.

- Delete a current website draft from the editor by selecting **More** > **Remove Site**. This does not delete your already published site copy.

You can drag the main menu to any place on the page for your convenience, or minimize it.

You can also access all options of the main menu in the context menu at any place on the page. To open the context menu, click the right mouse button.

Creating a Website

To minimize your efforts when creating a website, Web Presence Builder offers you a set of predefined website topics. When you start creating a website, choose a topic that is most appropriate for you, and Web Presence Builder will generate a website with the content relevant to this topic. For example, it will include a price list template for a retail store or an image gallery for an artist's site. If you cannot find a suitable topic, you can contact your service provider to ask them to create the corresponding template and add it to the list of available topics.

When you start creating a website, Web Presence Builder also prompts you to provide information about yourself or your company. Web Presence Builder will automatically add this information to certain pages as appropriate, for example, to the *About Us* and *Contact Us* pages.

Note: Web Presence Builder will not store or use the information you provide anywhere except for your website pages. You can change or remove this information later.

➢ *To start creating a website in Web Presence Builder:*

1. Launch Web Presence Builder by clicking the corresponding link:
   - If you have only one domain name in the subscription, click **Launch Web Presence Builder** on the **Home** tab or the **Websites & Domains** tab.
   - If you have several domain names, click the corresponding link **Edit in Web Presence Builder** in the list of available domain names.

2. Select a website topic.

3. Type the website name and select website language.

4. Provide the information to pre-fill your website.

5. Click **Submit and Create Site**.

Importing Sites from SiteBuilder 4.5

If you have a site created with SiteBuilder 4.5, you can import it to Web Presence Builder.

Note: The import of sites from earlier versions of SiteBuilder or other content management systems is not supported.

If your site was created with an earlier version of SiteBuilder (4.4 or earlier), and you would like to transfer your site, you can do the following:

- Contact your hosting provider and ask them to upgrade your account to the latest version of Web Presence Builder.
- Transfer your site manually by copying and pasting the content.

During site import, most parts of the site structure and content can be transferred successfully. However, we cannot guarantee that all content will be transferred.

In most cases, the following elements are imported successfully:

- Site map.
- Static pages, including links and images in text modules. Note that text blocks exceeding 30 kilobytes may be cut; therefore, some parts of the text may be missing.
- Banner (if it is not a custom image).
- Slogan, site title.
- Logo (if it is not a custom image).
- Footer text.
- Meta info (keywords, description).

The other modules can be imported only as text widgets with static content, links and images. Buttons will not work. The image gallery structure can be imported without images.

➢ *To import a site from SiteBuilder 4.5:*

1. Open the Web Presence Builder editor, and on the topic selection screen, click **Import Site from SiteBuilder 4.5**.

2. Type the Internet address (domain name) of the site that you want to import. For example: `http://example.com`.

3. Select the checkbox to confirm that you are aware of possible import issues, and click **Import Site**.

4. After the site is imported, review and edit it as required (on page 605). You can compare the imported site version with your original site and add the missing information manually.

5. When finished with editing, publish the site to your customer account (on page 635).

If you are publishing your new site to the same webspace on which your site created with SiteBuilder 4.5 was hosted, the old site will be overwritten.

Editing Websites

In Web Presence Builder, you can change almost any element of your website. Most of the elements are changed in place - you open a page where the element is used, edit it and see the result right away. Site-wide elements, such as **Search** block and **Advertisement** block are changed in one place but the changes are applied to each page of your website.

Note: If you are using Internet Explorer, we strongly recommend that you avoid using browser zoom to change the size of text displayed in your browser window. Please note that websites in Web Presence Builder will perform and look best at normal zoom (100%).

In this section:

Structure: Pages and Navigation

This section describes how to add pages to a site, set their location in the site structure, and add navigation links.

In this section:

Adding and Removing Pages

Your site can have two levels of nested pages.

➢ *To add a new page to your website:*

1. Go to the **Pages** tab.

2. Click **Add page**. The new page appears highlighted in green.

3. Position the new page by dragging it to the right place or by clicking the arrows.

4. Specify the page title.

5. Give a concise description of the page content that will be displayed on search engine results pages and the keywords by which the page will be found by search engines.

   > Note: **Page name** and **Page link name** are required fields. **Description** and **Keywords** are optional fields. If you specify keywords for a page, they should be separated by commas without white spaces.

6. If you want to make the page invisible to your website visitors, select the **Hidden page** checkbox.

7. If you want to restrict access to the page with password authentication, select the **Protected page** checkbox and specify a username and a password.

8. Click **OK** to save changes.

➢ *To change the location or properties of a page:*

1. Go to the **Pages** tab.

2. Select the page you want to edit.

3. Change the page position by dragging it to the right place or by clicking the arrows.

4. Edit the page title.

5. Edit or remove the concise description of the page content that will be displayed on search engine results pages and the keywords by which the page will be found by search engines.

   > Note: **Page name** and **Page link name** are required fields. **Description** and **Keywords** are optional fields. If you specify keywords for a page, they should be separated by commas without white spaces.

6. If you want to make the page invisible to your website visitors, select the **Hidden page** checkbox.

7. If you want to restrict access to the page with password authentication, select the **Protected page** checkbox and specify a username and a password.

8. Click **OK** to save changes.

> ➤ *To delete a page from your website:*

1. Go to the **Pages** tab.

2. Select the page you want to delete.

3. Click **Delete page**.

4. Click **OK** to save changes.

Adding and Removing Navigation Links

By default, a horizontal navigation bar with links to site pages is inserted below or above the header of your site. It is automatically updated every time you add, change, move, or remove pages from the site.

If you use sidebars on the site, then the horizontal bar under the header includes only links to the first level pages, and the sidebars show the links of the second and third levels.

You can move navigation blocks by dragging them to other areas of the site.

For each navigation block, you can specify what levels of pages should be included in the menu, change menu alignment (for example, show it in the middle of the page instead of the default alignment to the left), and change the color, style, and size of the font used for the links. To change any of these settings, place the mouse pointer over a navigation block and click **Edit**.

If you occasionally remove a navigation block, you can re-insert it. To do this, go to the **Modules** tab, select **Navigation**, and drag the block to the area on the page where you want to add it. The navigation block will be inserted into all pages of the website.

For the convenience of your site visitors, you might also want to add breadcrumb navigation blocks. Breadcrumb navigation is a chain of links that represents the user's path from the site's main page to a current page. To add a breadcrumb navigation block, go to the **Modules** tab, select **Breadcrumbs**, and drag the module to the area on the page where you want to add it. The navigation block will be inserted into all pages of the website.

Design: Layout, Styles, Color Scheme, and Header

This section describes how to change the layout, color scheme, and header elements of the site.

In this section:

Changing Your Website Layout

The layout of your site can consist of the following elements:

- **Header**. This is the topmost area where a banner image and a company logo are usually placed. You can do the following to the header:
  - Move the banner image and logo from the header area to any place on the page.
  - Reduce the header height to 25 pixels by removing all elements from it.
  - Change the header width from the default size to 100 percent, so that it is expanded to fit the page width.
- **Content area**. This is the main part of a webpage where most of the content is placed. You can do the following to the content area:
  - Adjust the height of the content area.
  - Divide the content area into several columns. You can do this by dragging new modules to the left or right edge of the content area and inserting them.
  - Change location of the columns in the content area by moving the content to the left or to the right.
- **Sidebars**. These are vertical columns that can be used for placing all kinds of modules, site-wide and page-specific. You can do the following to sidebars:
  - Add one sidebar and place it to the left or to the right of the content area.
  - Add two sidebars. They will be placed to the left and to the right of the content area.
  - Adjust the height and width of the sidebars.
  - Move the sidebars to the top of the page and place them to the left or to the right of the header area.
  - Switch places of the sidebars.
- **Footer**. This is the lowest area where the company name, contact information, or a copyright notice are usually placed. You can do the following to the footer:
  - Reduce the footer height to 25 pixels by removing all elements from it.
  - Change the footer width from the default size to 100 percent, so that it is expanded to fit the page width.

➢ *To change the layout of your site:*

1. Go to the **Design** tab > **Layout** tab.

2. Select the number of sidebars: Under **Sidebars**, select **No**, **One**, or **Two**.

3. Select the locations of sidebars:

- To move a sidebar to another side of your website, or to switch places of sidebars (if you have two sidebars on your site), click **Switch sidebars**.
- To move the sidebars to the top of the page, click them in the layout model.

4. Set the size of page elements:

- To set the total width of the website pages, under **Website width**, select either of the following:

  - **Fixed layout**: your website will be of a specific size regardless of the size of the browser window viewing the page. In this case, specify your website width in pixels.

  - **Liquid layout**: based on percentages of the current browser window's size. In this case, specify your website width as a percentage of the browser window's size.

- To change the width of the header and footer areas to fit the page width, click the corresponding elements in the layout model.

- Under **Minimal column height in pixels**, specify the height of the main content area and each sidebar, if you have chosen to use them.

  This value shows the height of your website elements without content. When you add content to the main content area and to the sidebars, they will stretch in height to fit the content.

- To ensure that the sidebars and the content area are vertically aligned, select the checkbox **Stretch the sidebars and the content area down to the footer**.

- If you use one or two sidebars, under **Sidebar width in pixels**, specify the width of each sidebar. The size of the main content area will be determined automatically.

- Under **Margin sizes in pixels**, specify the size of vertical and horizontal margins. A margin is the space between the edges of neighboring elements.

5. Click **OK** to save changes.

Selecting Website Colors, Fonts, and Styles for Borders and Corners

The general color scheme, or styleset, of your website comprises four colors. Each color is used for several website elements at once. You can adjust colors of individual elements on the **Design** tab > **Colors** tab.

➢ *To select the general color scheme for your website:*

1. Go to the **Design** tab > **Scheme** tab.

2. Select the color scheme, or styleset, of your website in the menu.

   You will see the four colors used in the color scheme of your website.

3. To adjust one of the colors of your website color scheme, click the respective color field and change the hexadecimal color code value or select a color with the color picker.

   Note: These changes will override any previous changes of individual elements' colors made on the **Colors** tab.

4. Click **OK** to save changes.

➢ *To select colors of individual website elements:*

1. Go to the **Design** tab > **Colors** tab.

2. Select the website element in the menu.

3. Adjust the element's background color by clicking the background color field and editing the hexadecimal color code value or by selecting a color with the color picker.

4. If you want to use gradient filling, select the **Gradient** option, and then select the pattern from the menu.

5. For an element with text, adjust font colors by clicking the respective color field and editing the hexadecimal color code value or by selecting a color with the color picker.

   Note: Modifying the styleset on the **Scheme** tab will override the changes made on the **Color** tab.

6. Click **OK** to save changes.

➢ *To select fonts for headings and body text of your website:*

1. Go to the **Design** tab > **Fonts** tab.

2. For each font type, select the font face and size in the menus.

3. For headings, select the font decoration. You can use bold (the **B** icon) and italics (the *I* icon).

> **Note:** The settings made here define only general rules for your website fonts. You can always adjust fonts of individual elements in place.

4. Click **OK** to save changes.

➢ *To select the shape of corners (square or rounded) for website elements:*

1. Go to the **Design** tab > **Corners** tab.

2. In the **Page area** menu, select the element whose corners you want to change.

3. Do any of the following:

- To make rounded corners, select the corresponding checkboxes.
- To make square corners, clear the corresponding checkboxes.

4. Click **OK** to save changes.

➢ *To select borders for website elements:*

1. Go to the **Design** tab > **Borders** tab.

2. Select the border type for elements inside your website from the **Internal containers border** menu.

3. Select the elements that will have the border.

> **Note:** You can select only one internal border type for all elements on your website, but you can select whether this border will be used for certain elements.

4. Select the external border for your website from the **External site border** menu.

5. Click **OK** to save changes.

Changing the Website Header Elements

The site header consists of the following elements:

- **Banner**. You can do the following to the banner:
  - Upload your own banner image.
  - Select and apply a banner from the Web Presence Builder library.
  - Remove the banner and use a background filled with a color or images.
  - Remove the banner and all other elements from the header area to reduce its height to 25 pixels.
  - Move the banner to the content area and insert it into a specific page or into all pages of the website.

    Note: You can use only one banner per site. If you choose to insert it into a specific page, you will not be able to add it to other pages of the website. For this reason, we recommend that you place it into the site-wide areas.

- **Logo image**. You can do the following to the logo:
  - Upload your own logo image.
  - Move the logo from the header area to other parts of webpages, such as sidebars and content area.
  - Insert any number of logo images into the site-wide areas.
  - Remove the logo.
- **Site name**. This usually contains a company name or a brief site description like, for example, "John Doe's Recipes".
- **Site slogan**. This usually includes a description of your site or a company slogan.

➤ *To change the banner image or other elements of the header (logo, site name, or slogan):*

1. Click the banner image.

2. Do any of the following:
   - To use an image from the Web Presence Builder's library, select the option **Selection from our library**, and then select an image from the **Image list** menu. To help you find an appropriate image, select the **Recommended** option or type a keyword in the input box.
   - To use your own image, select the option **Selection from own file**, click **Browse**, and select the image you want to use. You should use only images in the GIF, JPEG, and PNG formats, preferably not wider than 900 pixels.
   - To remove an image, select the option **no image** and specify the height of the header block in pixels.

3. If you want to scale a banner to fit the header area, select the **Fit image size** checkbox.

4. Under **Show banner elements**, select the checkboxes corresponding to the elements that you want to show in the header.

5. If you want to remove a logo image or upload your own logo, click the logo image.

6. If you want to change the site name or slogan, click the corresponding fields on the header and change them as you want.

To make it easier to see the site name or slogan, select the **Outline** checkbox. This adds a black or white outline around text, one pixel in width. If the font color in site title or slogan is black, then the outline is white, and vice versa.

Note that you can freely move the blocks with website name, description, and logo within the header area.

If you occasionally remove the banner, you can re-insert it.

➢ *To insert a banner:*

Go to the **Modules** tab, select **Banner**, and drag the module to any of the site-wide areas on the page where you want to add it.

➢ *To insert a logo image:*

Go to the **Modules** tab, select **Site Logo**, and drag the module to any of the site-wide areas on the page where you want to add it. You can upload a new logo image and align it to the left, center, or right.

Content: Text, Tables, Images, Video, Forms, and Scripts

This section describes how to fill your site with content and enhance it with useful functions provided by the editor's modules.

When adding a module to a page, you can choose whether it should be shown only on the current page (page-specific module) or on all pages of the site (site-wide module). The only exceptions are the **Search**, **Advertisement**, **Site Logo**, **Navigation**, and **Breadcrumbs** modules: when you add them, they are placed on all pages of the website.

- To place a module only on the current page, select the module under the **Modules** tab, and drag it to any of the areas marked with the text **PAGE-SPECIFIC AREA**. Such areas are located within the main content block and near the top of each sidebar.

  To divide the content area into columns and insert a module into one of them, drag the module to the left or right edge of the content area and then insert it. Note that sidebar areas cannot be divided into columns.

- To place a module on all pages of the website, select the module under the **Modules** tab, and drag it to any of the areas marked with the text **SITE-WIDE AREA**. Such areas are located above and below the main content block, in sidebars, header, and footer.

In this section:

Text, Tables, Hyperlinks, and Images

Before you start working on website content, we suggest that you select the appropriate website language in **Settings** tab > **Languages** > **Website language** menu.

The website language is a site-wide setting that defines the language in which you will be adding content to your website. It affects the following:

- The language in which certain website elements (in particular those provided by third-party services), such as Google Search and navigation buttons in image galleries, will be shown. Note that not all third-party services and modules provided by the editor support all available languages.
- The direction in which you will type text in the editor (from left to right or from right to left). If you select a right-to-left language, your website content and design will be RTL-enabled.

Note: Changing a website language does not reload the currently selected website topic in a different language. The topic language will remain unchanged, however, the text orientation will change.

➢ *To add text, lists, tables, or images to a page:*

1. Go to the **Modules** tab, select **Text & Images**, and drag the module to the page:

- To add a block with text and images to the current page, drag the module to any of the areas marked with the text **PAGE-SPECIFIC AREA**. Such areas are located within the main content block and near the top of each sidebar.

  To divide the content area into columns and insert a block into one of them, drag the module to the left or right edge of the content area and then insert it. Note that sidebar areas cannot be divided into columns.

- To add a block with text and images to all pages of the site, drag the module to any of the areas marked with the text **SITE-WIDE AREA**. Such areas are located above and below the main content block, in sidebars, header, and footer.

2. Type the text on the screen and use the icons on the module's toolbar to format the text, add tables, hyperlinks, and images.

The toolbar of the **Text & Images** module provides access to the following tools and functions.
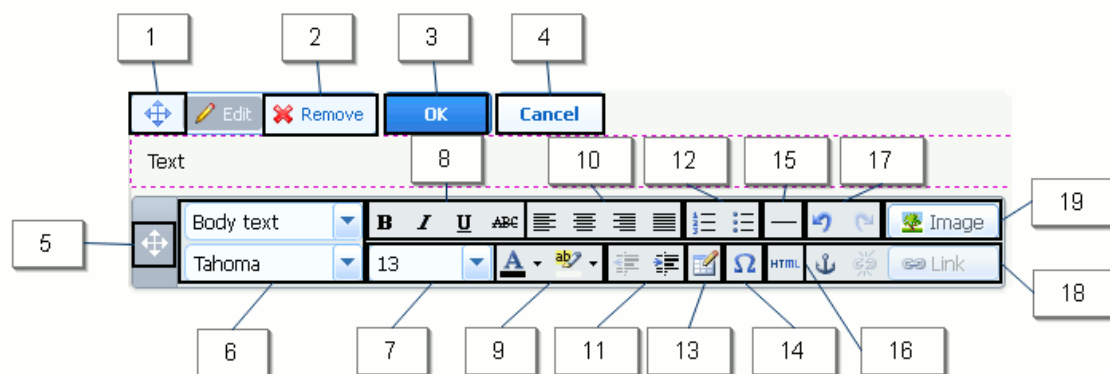
1. Move the text and image block within the webpage.

2. Remove the block with its contents.

3. Save changes.

4. Cancel the changes made.

5. Move the toolbar.

6. Select the paragraph style and font face.

7. Select the font size.

8. Select the font style: bold, italics, underlined, and strikethrough.

9. Select the text and background colors.

10. Select text alignment: left, center, right, or justified (aligned to both the left and right margins with added extra spaces between words).

11. Increase and decrease the indent level of the paragraph.

12. Start a numbered or bulleted list.

13. Insert a table and specify the number of rows and columns.

    After you insert a table, a number of additional icons become accessible from the toolbar. Use them to change the properties of the table rows and cells, to insert and remove rows and columns, or to split and merge table cells.

14. Insert symbols that are not on your keyboard, such as copyright and trade mark signs, and other Unicode symbols.

15. Insert a horizontal line.

16. Edit the HTML source code of the page.

17. Undo and redo changes.

18. Add and remove hyperlinks to the pages of your website or external resources. Insert HTML anchors into particular sections of webpages so that you can link to them from other pages of your site.

19. Insert an image, adjust its size, specify an alternative text, and text wrapping. In browsers that do not support or are configured to not show images, the alternative text is shown instead of images.

If you want to insert many pictures into a single page, consider using the **Image Gallery** module instead of the **Text & Images** module. With **Image Gallery**, you can upload pictures from your local computer or use pictures published to the Picasa Web Albums photo sharing service.

➢ *To add an image gallery to your site and upload pictures:*

1. Go to the **Modules** tab, select **Image Gallery**, and drag the module to the page.

2. In module settings, on the **Image Storage** tab, select where you want to keep pictures:

   ▪ If you do not have a Picasa Web Albums account that you would like to use, leave the **Web Presence Builder** option selected. All images you use on your site will be kept on your customer account.

- If you have an account in Picasa Web Albums and want to use pictures that you store there on your site, do the following:

  a. Select the **Picasa** option, click the link on the **Image Storage** tab to sign in to Google, and grant access to your albums from Web Presence Builder.

  b. Select the album whose pictures you want to use or click **Create Album** to create a new album.

  c. If you want Web Presence Builder to remove images from Picasa Web Albums when you remove them from the gallery, select the checkbox **Delete images when I remove them from gallery**.

  When you upload images to an image gallery through the Web Presence Builder editor, they are automatically copied to your Picasa Web Albums account. When you remove images from the gallery, they are removed from Picasa Web Albums only if you have selected the option **Delete images when I remove them from gallery**.

3. (Optional step.) If you want to select the size of image thumbnails to be shown in the image gallery, click the **Gallery Properties** tab and select the size of thumbnails:

   - Small (95 x 75 pixels).
   - Normal (140 x 130 pixels). This is the default setting.
   - Large (170 x 170 pixels).

4. To add images to the gallery, click the text **Click here to upload your images**, select the images that you want to upload, and click **OK.**

   You can select and upload multiple images at once. Only images in GIF, JPEG, and PNG formats are supported.

   We recommend that you use resized images that do not exceed 1024 x 768 pixels.

5. To change image title and description, click the corresponding thumbnail, click the title or description, and edit the text.

   If you delete the default text entirely, it will not be shown on your published site; however, it will still be shown when you edit the site in the Web Presence Builder editor.

➢ *To remove an image from the gallery:*

Place the mouse pointer over the image thumbnail and click the icon **[x]**.

➢ *To remove an image gallery with all pictures:*

Place the mouse pointer over the image gallery block and click **Remove**.

➢ *To insert a hyperlink or a link to an e-mail address into text:*

1. Select the text that you want to make a link.

2. On the toolbar of the **Text & Images** module, click the icon `⊖ Link`.

3. Do any of the following:

▪ To add a link to another webpage on your site, select the option **A page of this site**. In the **Select page** menu, select the target webpage.

▪ To add a link to a webpage or a file located on another site, select the option **A webpage or file on the Internet**, and type the address. For example, `http://example.com`.

▪ To add a link to a document or another downloadable file that you have previously uploaded through the Document Manager (as described in Documents and Other Downloadable Files (on page 625)), select the option **A document on this site**, and select the target file.

▪ To add a link that will open a new e-mail message with a pre-filled destination e-mail address, select the option **A webpage or file on the Internet**, and type `mailto:<address>`. For example, `mailto:postmaster@example.com`.

You can also:

▪ Predefine the message subject line. For example:
`mailto:postmaster@example.com?subject=My%20Subject`.

▪ Add recipients to CC and BCC lists. For example:
`mailto:postmaster@example.com?subject=My%20Subject&cc=addres`
`s1@example.com&bcc=address2@example.com`.

▪ Predefine text to put in the message body. For example:
`mailto:postmaster@example.com?subject=My%20Subject&body=This`
`%20is%20sent%20from%20your%20site!`

Note: You should replace white spaces with `%20`.

4. In the **Open link in** menu, select where you want to open the target page. You can choose to open it in the same or in a new browser window or tab.

5. In the **Title** box, type the description that should appear when users place the mouse pointer over the link.

6. Click **OK**.

Embedded Video

You can embed into website pages video clips located on popular video sharing sites, such as YouTube (youtube.com), Vimeo (vimeo.com), MySpace (myspace.com), and Dailymotion (dailymotion.com).

➢ *To insert a video into a webpage:*

1. Go to the **Modules** tab, select **Embedded Video**, and drag the module to the page.

2. Insert a link to the video or select the option **Embed code** if you have obtained a code from a file sharing site, and then paste the code.

3. Click **OK**.

➢ *To remove a video:*

Place the mouse pointer over the video and click **Remove**.

Contact Form

If you want your site visitors to be able to send you messages from your site, you can add a contact form.

➢ *To add a contact form:*

1. Go to the **Modules** tab, select **Contact Form**, and drag the module to the page.

2. On the **Settings** tab, specify the following:

   - Recipient's e-mail address. You can specify only one e-mail address.

   - Message subject.

   - Text to be shown on the button that sends the message.

3. If you want to add, move, or remove input fields from the form, or change their labels, click the **Fields** tab, and make the required changes.

4. If you want to change the default message "Your message was sent. Thank you." which is shown when a message is sent, click the **Reply** tab and type the new text.

5. Click **OK**.

➢ *To remove a contact form:*

Place the mouse pointer over the form and click **Remove**.

Blog

If you want to maintain an online diary on your site, or regularly publish articles on a subject and automatically present them in a chronological order, then you need a blog.

A blog module can be added only to the first-level pages that do not have subpages. Within blog posts, you can use text, images, embedded videos and scripts. Each blog post can have its distinctive page description and meta information to be used by search engines. Note that blog posts are not listed on the Pages tab (on page 606).

To let your visitors comment on your blog posts, you need to register with Disqus, a free third-party service that provides commenting functions for your sites and keeps all comments.

> ➢ *To add a blog to your webpage:*

1. Go to the **Modules** tab, select **Blog**, and drag the module to the page.

2. In the module properties, specify the following:

   ▪ Number of blog posts to show on the page.

   ▪ Specify whether the site visitors will be able to leave their comments.

3. Click **OK**.

4. To enable commenting, click the link **Click here to add a new blog post.**

5. Click within the gray information box at the bottom of the blank blog post.

6. To register with Disqus, click the **Register** button. A registration form will open in a new browser window or tab.

7. Specify the following:

   ▪ Your site's URL, desired name and shortname (unique ID). You will need to specify this site ID (shortname) later in the Blog module settings to enable commenting.

   ▪ Comment moderator's username, password, and e-mail address. A confirmation message will be sent to this e-mail address, so be sure that it is valid.

8. Click **Continue**.

9. Specify your language and other settings, and click **Continue**.

10. On the last step of the registration form, no further action is required. Just log out of the Disqus site.

11. Check your e-mail inbox for the confirmation message from Disqus. In this message, click the link to verify your address.

12. Return to the browser window where you have the Web Presence Builder editor with the Blog module properties opened.

13. In the box titled **Apply here the website ID (shortname) received during registration**, type or paste the site ID that you specified during registration with Disqus in step 7.

14. Click **Apply**.

15. Click **OK**.

Now your blog can accept comments from visitors, and you can make the first post.

➢ *To add a blog post:*

1. Go to the website page containing a blog module.

2. Click the link **Click here to add a new blog post** (might also appear as **New Post Title**).

3. Type the post title and content.

   If you want to change the date of posting, click within the field **Posted dd.mm.yy** and then select a date from the calendar.

   If your post is lengthy and contains numerous text blocks, images, and embedded videos, you might want to show only a portion (beginning of the post) to site visitors in your blog's main page. To do this, while editing a blog post, move the divider element (containing the line **-------- Drag this above modules that should not appear in the list of posts --------**) to the desired area.

4. Click **OK**.

5. If you want to view, edit, or remove a concise description of the page that will be displayed on search engines results pages and the keywords by which the page will be found by search engines, click in a blank area to the right of the post title, and then click the **SEO Settings** tab.

   Note: **Post link name** is a required field. **Meta description** and **Meta keywords** are optional fields. If you specify keywords for a page, they should be separated by commas without white spaces.

6. To return to the blog's main page, click the **Back** link below the post you have just created.

➢ *To remove a blog post:*

1. Go to the website page containing a blog module.

2. Place the mouse pointer over the post title and click **Remove**.

3. Click **Yes** to confirm removal.

➢ *To edit a blog post:*

1. Go to the website page containing a blog module.

2. Click the post title.

3. Make the required changes and click **OK**.

➢ *To remove a blog with all posted content:*

1. Go to the website page containing a blog module.

2. Place the mouse pointer over the link **Click here to add a new blog post** and click **Remove**.

3. Click **Yes** to confirm removal.

Commenting

If you want to let your site visitors leave comments on webpages, you need to insert the Commenting module into those webpages.

The commenting functionality is powered by Disqus, a third-party service that stores and processes all comments. Before your visitors can leave comments, you need to register an account with Disqus and then specify a site ID in the Commenting module settings.

You can insert several Commenting modules into a single website. Because all Commenting modules on the site will use the same site ID, you will only need to specify the site ID once in the module settings, when inserting the first Commenting module.

➢ *To add commenting functions to a webpage:*

1. Go to the **Modules** tab, select **Commenting**, and drag the module to the page.

2. If you have not registered an account with Disqus yet, click the **Register** button. A registration form will open in a new browser window or tab.

3. Specify the following:

   ▪ Your site's URL, desired name and shortname (unique ID). You will need to specify this site ID (shortname) later in the Commenting module settings to enable commenting.

   ▪ Comment moderator's username, password, and e-mail address. A confirmation message will be sent to this e-mail address, so be sure that it is valid.

4. Click **Continue**.

5. Specify your language and other settings, and click **Continue**.

6. On the last step of the registration form, no further action is required. Just log out of the Disqus site.

7. Check your e-mail inbox for the confirmation message from Disqus. In this message, click the link to verify your address.

8. Return to the browser window where you have the Web Presence Builder editor with the Commenting module properties opened.

9. In the box titled **Apply here the website ID (shortname) received during registration**, type or paste the site ID that you specified during registration with Disqus in step 3.

10. Click **Apply**.

11. Click **OK**.

Now you can publish your website to the customer account and start receiving comments from your visitors.

In addition to adding and viewing comments, you can do the following:

- Edit comments.
- Delete comments.
- Mark comments as spam.
- Ban users (by e-mail or IP address) from posting comments on your site.
- Change the settings, such as appearance of comments, and remove the trackback URL. You can do this by logging in to your account at www.disqus.com, and going to the **Settings** tab.

➤ *To moderate comments:*

1. Log in to Disqus as the site administrator. You can do this in either of the following ways:

- Visit the Disqus site at www.disqus.com and log in there.
- In the Web Presence Builder editor, go to the page where you have the Commenting module and click inside the **Add New Comment** field. Click the **Post as** button, click the **Disqus** link in the left navigation pane, type your username and password, and click **Login**.

2. After you are logged in to Disqus, you can moderate comments in either of the following ways:

- On the Disqus site, use the items in the **Dashboard** and **Admin** areas.
- In the Web Presence Builder editor or on the published site, go to the page where you have the Commenting module, place the mouse pointer over the comment you want to moderate, and use the **Moderate** link that will appear next to the comment.

Alternately, you can moderate comments by using links in the notification messages that Disqus sends you when someone leaves a comment on your site.

➤ *To remove commenting functions from a webpage:*

1. In the Web Presence Builder editor, go to the website page containing the Commenting module.

2. Place the mouse pointer over the **Add New Comment** field and click **Remove**.

3. Click **Yes** to confirm removal.

Documents and Other Downloadable Files

The editor now provides a convenient control panel for working with files in your customer account. You can upload your documents, images, and other files in various formats to the editor (on the **Documents** tab), and then insert links to them in your website pages. Alternatively, you can just keep them in your customer account for your own needs.

➢ *To upload a file to the customer account:*

1. Go to the **Documents** tab.

2. Click **Upload**.

3. Select the file and click **Open**.

Now, to let your site visitors download this file, you can insert a link to it in a webpage.

➢ *To insert a link to file:*

1. Select the text that you want to make into a link.

2. On the **Text & Images** module's toolbar, click the icon .

3. Select the option **A document on this site.**

4. Select your file and click **OK**.

➢ *To remove a file from the customer account:*

1. Go to the **Documents** tab.

2. Select the file and click **Remove**.

3. Confirm removal and click **OK**.

Buttons for Sharing on Social Networks

If you want to let your visitors easily share your content on social networks or online bookmarking services, you can insert a toolbar with buttons for sharing on Facebook, Twitter, Myspace, and other popular services.

➢ *To add the Share on Social Media toolbar to a webpage:*

1. Go to the **Modules** tab, select **Social Sharing**, and drag the module to the page.

2. Select the appearance of the toolbar.

3. If you want to modify the list of social networks and sharing services shown on the toolbar, place the mouse pointer over the icon **[+]** and click the **Settings** link.

The changes you make to the list of services will be visible after you publish the site.

4. Click **OK**.

Note: When someone shares your content on Twitter by using the Tweet button, the counter of tweets is not increased immediately. It can take several hours for the counter to update.

➢ *To remove the Social Media toolbar:*

Place the mouse pointer over the toolbar and click **Remove**.

Site Search

If you want to let your visitors search for information on your website, you can add a search bar to the site. After inserting the search bar into a webpage, it is automatically added to all pages of the site.

By default, the search bar is configured to use the Google search engine. If you want to use another search engine, you can obtain the search script code and insert it into the **Search** module.

➢ *To add a search bar to the site:*

1. Go to the **Modules** tab, select **Search**, and drag the module to the page.

2. Do any of the following:

▪ If you want to use the search service provided by Google, leave the **Google** option selected.

▪ If you want to use another search engine, select **Other** and paste the code that you have obtained from that service.

Make sure that the code you insert is correct, as Web Presence Builder does not validate it.

3. Click **OK**.

The search bar will appear on your site after publishing.

➢ *To remove a search bar:*

Place the mouse pointer over the search bar and click **Remove**.

Online Store

If you want to sell products or services through your site, you can use the **Online Store** and **Shopping Cart** modules to add a fully functional online store to the site. You can add only one store per site.

The store functionality is provided by Ecwid - a third-party SaaS solutions provider that securely stores and processes all your data, including product catalogs, images, orders, and customers' payments.

➢ *To add an online store to your site:*

1. Go to the **Modules** tab, select **Online Store**, and drag the module to the page.

2. Create an account with Ecwid if you do not have one yet, or specify the ID of an existing store if you have previously created a store at Ecwid through Web Presence Builder and want to show it on your site.

   If you do not have an account with Ecwid yet, do the following:

   a. In module settings, on the **General** tab, select the option **Register with Ecwid**.

   b. Type your name, e-mail address, and password. You will use the e-mail address and password to sign in to Ecwid and manage your store.

   c. Click **Send**. A confirmation message from Ecwid will be sent to your e-mail address. You will need to confirm that you own this e-mail address within three days, otherwise the online store will be deactivated.

   If you already have an account with Ecwid, select the option **Enter an ID of an existing shop**, specify the store ID and e-mail address that you specified during account registration, and click **Apply**.

   Note: If the online store was created directly at the Ecwid website without using Web Presence Builder, you can do the following: Create a new Ecwid account through WPB, log in to the previously existing Ecwid account, export all the goods to a CSV file. After that, log in to the new account and import the file.

3. (Optional step.) If you want to let your customers add items to the cart by dragging them to a shopping bag icon, go to the **Modules** tab, select the **Shopping Cart** module, and drag it to the page.

Note that the shopping bag icon will be inserted into all pages of your site. If you do not want that, do not use the **Shopping Cart** module. Your customers will still be able to add items to the cart and proceed to checkout by using the **Shopping Bag** link that appears at the top of the product catalog area.

4. (Optional step.) If you want to change the appearance of the product catalog, in module settings, go to the **View** tab.

5. To set up your store, fill the product catalog with items, and remove the default fruit and vegetable items added by Ecwid, click the **Manage** link on the module's toolbar.

The Ecwid control panel will open in a new browser window or tab.

6. After you have finished setting up the store in the Ecwid control panel, return to the Web Presence Builder editor and click the **Reload** link on the **Online Store** module's toolbar.

You must use the **Reload** link to synchronize the content of your online store with online store at Ecwid.

7. Click **OK** to finish setting up the store.

➢ *To manage a store:*

Place the mouse pointer over the product catalog and click **Manage**. The Ecwid control panel will open in a new browser window or tab.

Note: After publishing your site, you can also view information about new orders on the Dashboard (on page 637).

➢ *To remove a store:*

Place the mouse pointer over the product catalog and click **Remove**.

Custom Scripts

You can insert custom scripts written in PHP, JavaScript, or VBScript in any page of your website.

➢ *To insert a script in a webpage:*

1. Go to the **Modules** tab, select **Script**, and drag the module to the page.

2. Paste the code into the input field.

For PHP, use the opening tag `<?php`. Make sure the code you insert into this field is correct, as Web Presence Builder does not validate it.

3. Click **OK**.

Your code will be active only on the published website.

➢ *To remove a script:*

Place the mouse pointer over the script block and click **Remove**.

Advertisements

If you are participating in a banner exchange or other online advertising programs, you might want to add an advertisement block to your site. After inserting the block in a webpage, it will be automatically added to all pages of your site.

➢ *To add an advertisement block:*

1. Go to the **Modules** tab, select **Advertisement**, and drag the module to the page.

2. Paste the code provided by your advertising vendor into the input field.

   Make sure that the code you insert into this field is correct, as Web Presence Builder does not validate it. With some advertising vendors, you will need to validate your account first.

3. Click **OK**.

Advertisements will appear on your website after publishing.

➢ *To remove an advertising block:*

Place the mouse pointer over the block and click **Remove**.

Settings and Tools for Webmasters

This section describes how to do the following:

- Change website name, description, and keywords.
- Upload a site icon (favicon) for your website.
- Make your website more visible in search results, and embed various search engine services.
- Prevent certain pages or areas of your website from being indexed by search engines and shown in search results.

➤ *To edit your website name, description, and keywords:*

1. Go to the **Settings** tab > **Basic** tab.

2. Specify the website name that your visitors will see as the title of their browser window when they visit your website.

3. To show both your website name and the current page name in the browser title window and to increase your website recognition in search engine results, select the **Add website name to page titles** checkbox.

4. Add short description (up to 255 symbols) of your website.

   This will be used as the default description for new pages. It will be shown by search engines when people see your website in search results.

5. Provide a list of keywords that describe your website (10-15 keywords are recommended).

   These keywords will be used as default keywords for new pages. Keywords are analyzed by search engines and are used for displaying your website when people search for these keywords.

6. Click **OK** to save changes.

A favicon is a small icon displayed in the browser's address bar when you visit a website, and also appears next to the website name in the list of favorite bookmarks. You can create a favicon using a variety of online tools and then upload your favicon through the Web Presence Builder editor. All your website visitors will see this favicon.

➤ *To upload a favicon for your website:*

1. Go to the **Settings** tab > **Basic** tab.

2. Click **Browse** and select the location of the favicon to upload. The favicon will be uploaded.

3. Click **OK** to save changes.

➤ *To remove a favicon from your website:*

1. Go to the **Settings** tab > **Basic** tab.

2. Click **Remove** in the **Favicon** section. The favicon will be removed.

3. Click **OK** to save changes.

Most search engines require you to verify website ownership when you register your website or sign up for webmaster assistance services. Verification is typically done by uploading or creating a file with a specific file name.

➢ *To verify website ownership:*

1. Go to the **Settings** tab > **Advanced** tab.

2. Provide the verification file:

- If you know the name of the verification file requested by a search engine, provide the verification file name in the **Create verification file** field and click **OK**. Web Presence Builder will create it in the correct place.

- If you have already downloaded your verification file from a search engine, upload the verification file to the **Upload verification file** field and click **OK**.

3. After the verification file is created or uploaded and your website is published, confirm your ownership on the search engine website.

4. Click **OK** to save changes.

➢ *To edit the HTML `<head>` section of your website (for example, to add ownership verification meta code):*

1. Go to the **Settings** tab of the Web Presence Builder's main menu, then go to the **Advanced** subtab.

2. Click **Edit Metadata**.

3. Insert the code into the provided field and click **Add**.

> **Note:** Only valid HTML tags permitted for `<head>` section by HTML standards are supported. Metadata changes will be available only after you publish your website.

4. Click **OK** to save changes.

Google Analytics is a tool that allows you to obtain information about your visitors. After you register with Google Analytics and acquire the required code, you can embed Google Analytics on your website.

➢ *To embed Google Analytics:*

1. Register with the Google Analytics service and acquire the code.

2. Go to the **Settings** tab > **Advanced** tab.

3. Click **Embed Google Analytics**.

4. Insert the code you have received from Google Analytics into the provided field and click **Add**.

Note: Google Analytics will start working only after you publish your website.

5. Click **OK** to save changes.

Some search engines will ask you to provide your sitemap for analysis and optimization purposes. You can download your sitemap from the Web Presence Builder editor.

➢ *To download your website sitemap:*

1. Go to the **Settings** tab > **Advanced** tab.

2. Click **Download Sitemap**.

3. Click **OK** to start downloading the `sitemap.xml` file.

To prevent search engines from indexing certain pages of your website, you can add the appropriate directives into the `robots.txt` file. This file is stored on the customer account to which your site is published.

➢ *To prevent search engines from indexing certain areas of your website:*

1. Go to the **Settings** tab > **Advanced** tab.

2. Click the link **Edit robots.txt**.

3. Type your directives into the input field. Place each directive on a new line.

For example, to prevent all search engine robots and crawlers from indexing the contents of the directory `/private` and the file `/my_secret.html` on your customer account, add the following lines:

```
User-agent: *
Disallow: /private/
Disallow: /my_secret.html
```

For more information about the `robots.txt` file and directives you can use, refer to http://www.robotstxt.org/robotstxt.html.

Saving and Loading Copies of a Website

While working on the content and design of a website, you can save several copies of each site to the server and restore sites from the saved copies (also referred to as *snapshots*). Saving site copies can be useful in the following cases:

▪ You want to prepare several versions of the same website, so that you can later load them for review, choose the best designed or the most appropriate version, and publish it to the Internet.

▪ You want to make significant changes or experiment on the site design or content, but be sure that you can safely undo the changes should anything go wrong.

Note: Pictures from the **Image Gallery** modules are not saved in snapshots. Images are stored on your customer account or Picasa Web Albums (if you use that option).

➢ *To save the current design and content of a site:*

1. In the Web Presence Builder editor's main menu, click the icon ⏷ next to the **Save** option.

   Note: If you click **Save**, a quick-save site copy will be saved under the name **auto-saved snapshot**. You will be able to restore a site from this copy later, by clicking **Revert** in the main menu.

2. In the list that opens, select a free saving slot, type a name for the backup copy, and click **Save**.

➢ *To restore a site from a saved copy:*

1. In the Web Presence Builder editor's main menu, click the icon ⏷ next to the **Revert** option.

   Note: If you click **Revert**, a site will be restored from the quick-save copy that was made the last time you clicked **Save**.

2. In the list that opens, select a site copy and click **Load**.

3. Click **Yes** to confirm you want to restore.

➢ *To download a site copy:*

1. In the Web Presence Builder editor's main menu, click the icon ⏷ next to the **Save** option.

2. Locate the copy that you want to download and click the 💾 (Download) icon.

3. Select the directory on your computer where you want to save the file and click **OK**.

➢ *To upload a site copy:*

1. In the Web Presence Builder editor's main menu, click the icon ⏷ next to the **Revert** option.

2. Click the 📤 (Upload) icon next to the slot to which you want to upload the copy.

3. Browse to the site snapshot file in the SSB format and select it.

4. If you want to restore a site from the uploaded snapshot, select it and click **Load**.

➢ *To remove a site copy:*

1. In the Web Presence Builder editor's main menu, click the icon ⏷ next to the **Save** option.

2. Locate the site copy that you want to remove and click the corresponding ✖ (Remove) icon.

Publishing a Website to the Internet

When your website design and content are ready to be published to the Internet, click **Publish** in the top right corner of the main menu. Web Presence Builder will publish your website automatically to the location specified by your hosting provider.

Publishing a Website Copy to Facebook

After publishing a site on the Internet, you can drive more visitors to it by publishing a site copy to the popular social network site - Facebook (www.facebook.com).

A site copy on Facebook will show most of the content from your site; however, the following changes will be applied to its design and layout:

- Headers, sidebars, and footers will not be shown.
- The navigation menu will be shown only at the top of the site pages.
- Page width will be limited to 520 pixels. For pages wider than 520 pixels, a horizontal scrollbar will be shown.
- The font face, size, and color will be changed to comply with the Facebook design, unless these font properties were specifically selected by the site owner in the Web Presence Builder editor.
- Image galleries, online store, and links for sharing on social media sites will not be shown.

➢ *If you want to add a site copy to Facebook, do the following:*

1. In the main menu, click the **Settings** tab > **Social Media** tab.

2. Leave the checkbox **Show a copy of my site on Facebook** selected.

3. Click the link **Add your site copy to Facebook**. The Facebook home page opens in a new browser window or tab.

4. To log in to your Facebook account, type your e-mail address and password, and click **Log In**.

5. If you do not have a Facebook page where you want to show a site copy, create one. To do this, click **Create It Now**, and follow the onscreen guidelines. After your page is created, return to the **Parallels Web Presence Builder at Facebook** page, which is shown in another browser window or tab.

6. Click **Add Parallels Web Presence Builder Application**. This application provides synchronization between the website on your hosting account and its copy on Facebook.

7. To confirm that you want to add the application to your page, click **Add Parallels Web Presence Builder**.

Now your site copy is added. To see it, click the **Website** link in the Facebook navigation pane on your left.

Whenever you make changes to your site and republish it through the Web Presence Builder editor, your site copy on Facebook will be updated accordingly.

➢ *To remove a site copy from Facebook, do the following:*

1. In the Web Presence Builder editor's main menu, click the **Settings** tab > **Social Media** tab.

2. Clear the checkbox **Show a copy of my site on Facebook**.

3. Click **Yes** to confirm.

4. Go to your Facebook page and remove the Web Presence Builder application from there.

Viewing Site Visits Statistics, Comments, and New Orders on the Dashboard

After publishing a site, you can access the Dashboard from the Web Presence Builder's main menu to perform the following tasks:

▪ View statistics on website visits. The statistics are provided by Google Analytics and are available after you specify the code for Google Analytics in website settings, as described in the section Settings and Tools for Webmasters (on page 630).

▪ View new comments left by site visitors on your website pages. The comments are visible on the Dashboard after you set up the commenting functionality, as described in the sections Blog (on page 620) and Commenting (on page 623).

▪ View new orders from customers visiting your online stores. The new orders are visible on the Dashboard after you set up an online store, as described in the section Online Store (on page 627).

> ➢ *To view website visits statistics:*

1. On the main menu, click **Dashboard**.

2. If you access the dashboard for the first time, confirm association of your site with your Google Account:

   a. Click **Log In to Google Analytics**.

   b. Log in to your Google Account.

   c. Confirm that you want to allow access to your account.

3. Under the **Website Visits Statistics** chart, click the link **See more charts**, or click the icon.

   The **Overview** section shows the following statistics for the past 30 days:

   ▪ A detailed chart for the metric currently selected under **Profile report**.

   ▪ The total number of visits during the past 30 days.

   ▪ The number of new visits.

   ▪ Average time spent on a site by users.

   ▪ The total number of page views.

   ▪ The number of page views per each visit.

   ▪ The percentage of new visits.

   The **Traffic sources overview** section shows the addresses of websites from which your visitors were coming during the past 30 days. The **(direct)** item shows the percentage of visitors who accessed your site by typing its address directly in their browsers.

   The **Visitors' locations** section shows the geographic locations of the visitors for the past 30 days.

➢ *To view comments from your site visitors:*

1. On the main menu, click **Dashboard**.

2. Under **Comments,** click the link **See them**, or click the icon.

3. To go to the webpage where the comment was left, click **Link to the comment**.

4. To go to the Disqus site for moderating the comments, click **Manage Comments**.

➢ *To view orders submitted by the customers visiting your online stores:*

1. On the main menu, click **Dashboard**.

2. Under **Orders,** click the link **See them**, or click the icon, and then click the **Orders** tab.

3. To go to the Ecwid site for processing the orders, click **Manage Orders**.

Deleting Websites

When you delete a site from the Web Presence Builder editor, only the current site draft opened in the editor and saved site copies (snapshots) are removed. The site copy published to your hosting account is not removed.

➢ *To delete a current site copy from the editor:*

In the Web Presence Builder editor's main menu, select **More** > **Remove Site**.

FTP Access to Your Websites

One of the most convenient ways to update your website content is to upload it through FTP. FTP (File Transfer Protocol) is a standard network protocol that allows transferring files between two hosts (say, your computer and a Panel server). Panel acts as an FTP server, while users should use some FTP client to access the directories on the server. Panel provides all main FTP features:

- *Authorized access to the server.* Learn more in the section **Changing FTP Access Credentials** (on page 639).
- *Multiple user accounts* for collaborative work. Learn more in the section **Adding FTP Accounts** (on page 640).
- *Anonymous FTP access*: The access without authorization that may be used, for example, to share software updates. Learn more in the section **Setting Up Anonymous FTP Access** (on page 642).

In this chapter:

Changing FTP Access Credentials

> ➢ *To change FTP account username or password:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the webspace where the website is hosted.

2. Click the **Websites & Domains** tab.

3. Click **Web Hosting Settings**.

4. Type a new username or password.

5. Click **OK**.

Adding FTP Accounts

If you are working on your website together with someone else or host subdomains for other users, you might want to create separate FTP accounts for them.

➢ *To create an additional FTP account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. Click **FTP Access**.

4. On the **Additional FTP Accounts** tab, click **Create Additional FTP Account**.

5. Specify the following:

   - **FTP account name**. Type an arbitrary name.

   - **Home directory**. Select the directory to which the user will be taken when he or she connects to the FTP account.

   - **FTP password**.

   - **Hard disk quota** (on Windows hosting). To limit the amount of disk space on the server that the FTP user can occupy, clear the **Unlimited** checkbox next to the **Hard disk quota** box, and type the amount of disk space in megabytes.

   - **Read permission** (on Windows hosting). To allow the FTP user to view the contents of the home directory and download files from it, select the **Read permission** checkbox.

   - **Write permission** (on Windows hosting). To allow the FTP user to create, view, rename and delete directories in the home directory, select the **Write permission** checkbox.

     On Window hosting, if you do not grant any permissions, a connection to the FTP account will be made, but the contents of the home directory will not be shown to the user.

6. Click **OK**.

➢ *To change the properties of an additional FTP account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. Click **FTP Access**.

4. On the **Additional FTP Accounts** tab, click the required FTP account name in the list.

5. Make the required changes and click **OK**.

➢ *To remove an additional FTP account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. Click **FTP Access**.

4. On the **Additional FTP Accounts** tab, select the checkbox corresponding to the FTP account you want to remove and click **Remove**.

5. Confirm removal and click **OK**.

Setting Up Anonymous FTP Access

If your site is hosted on a dedicated IP address (not shared by other users or sites), you can set up a directory within the site, where other users will be able to anonymously download or upload files through FTP. Once anonymous FTP is switched on, the users will be able to log in to the directory at an address like ftp://ftp.your-domain.com with the "anonymous" username and any password.

➢ *To allow anonymous FTP access:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. Click **FTP Access**.

4. Click the **Anonymous FTP** tab.

5. Do the following:

    a. To activate anonymous FTP service, click **Switch On**.

    b. To set up a welcoming message to be displayed when users log in to FTP site, select the **Display login message** checkbox and type the message text in the input field as desired.

    Note that not all FTP clients display welcoming messages.

    c. To allow visitors to upload files to the `/incoming` directory, select the **Allow uploading to incoming directory** checkbox.

    d. To allow users to create subdirectories in the `/incoming` directory, select the **Allow creation of directories in the incoming directory** checkbox.

    e. To allow downloading files from the `/incoming` directory, select the **Allow downloading from the incoming directory** checkbox.

    f. To limit the amount of disk space that can be occupied by uploaded files, clear the **Unlimited** checkbox corresponding to the **Limit disk space in the incoming directory** option, and specify the amount in kilobytes.

    This is the hard quota: The users will not be able to add more files to the directory when the limit is reached.

    g. To limit the number of simultaneous connections to the anonymous FTP server, clear the **Unlimited** checkbox corresponding to the **Limit number of simultaneous connections** option and specify the number of allowed connections.

h. To limit the bandwidth for anonymous FTP connections, clear the **Unlimited** checkbox corresponding to the **Limit download bandwidth for this virtual FTP domain** option and enter the maximum bandwidth in kilobytes per second.

6. Click **OK**.

➢ *To change settings for anonymous FTP service or switch it off:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. Click **FTP Access**.

4. Click the **Anonymous FTP** tab.

5. Perform the operation you need:

- Adjust the settings as required and click **OK**.
- To switch off the anonymous FTP service, click **Switch Off**.

Mail

You can create and remove mail accounts right from the Control Panel, set up mail forwarding, protection from spam and viruses, and so on. For details on mail service configuration, refer to the section **Configuring Mail** (on page 645).

If you want to use some of your e-mail addresses to distribute news and promotions, or set up group discussions, consider setting up mailing lists. These are e-mail addresses to which a number of users are subscribed. Learn more in the section **Using Mailing Lists** (on page 653).

In this section:

Adding Mail Accounts

➢ *To create an e-mail address:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Mail** tab.

3. Click **Create E-mail Address**.

4. Type the left part of the e-mail address before the @ sign, and, if you have several domain names on your account, select the domain name under which the e-mail address will be created.

5. Leave the **Mailbox** checkbox selected.

   Clearing this checkbox makes sense only if you want to use this address as a mail forwarder, which will forward all incoming mail to another address.

6. Specify the mailbox size or use the default size defined by the provider's policy or your service plan.

7. Specify a password consisting of five or more Latin characters.

8. Click **OK**.

➢ *To remove an e-mail address:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Mail** tab.

3. Select a checkbox corresponding to the e-mail address you want to remove and click **Remove**.

4. To confirm removal, click **Yes**.

Configuring Mail

Panel allows you to configure mail services on two levels:

- *Configuring mail account settings*. These settings affect mail account only. Say, where to forward received messages or what to do with potential spam. Learn more about possible operations on mail accounts in the section **Configuring Mail Account** (on page 646).

- *Configuring global mail settings.* These are subscription-wide settings that affect all mailboxes within a subscription. Say, what webmail system Panel should use, or what to do with mail sent to nonexistent users. These settings may be unavailable in your hosting plan. To get the details on how to change global mail settings, refer to the section **(Advanced) Configuring Global Mail Settings** (on page 652).

In this section:

Configuring Mail Account

If the provider's policy allows setting up mail accounts and services through the Control Panel, then you can set up and use the following types of e-mail services:

- Mailboxes associated with your domain names.

- E-mail aliases: additional e-mail addresses that are associated with a user's primary (or main) e-mail address. E-mail aliases can be used as temporary disposable addresses that can be published on the Internet. When spam starts coming to an address that was set up as an e-mail alias, you can remove that alias and create another one.

- E-mail forwarding: for each e-mail account, you can set up e-mail forwarding service that will send copies of all incoming messages to another e-mail address.

- Automatic response: for each e-mail account, you can switch on automatic response service, which will send a predefined e-mail message in reply to any incoming e-mail message. This is useful for sending "out of office" or "on vacation" notices when you are away.

- Protection from spam: for each e-mail account, you can set up checking of all incoming messages by antispam filter. In addition, you can specify what to do with messages identified as spam: Remove them, move to a special folder, or just add some text to the message subject.

- Protection from viruses: Panel can check all incoming and outgoing mail for viruses.

In this section:

Setting Up Mail Forwarding

> ### *To set up e-mail forwarding for an e-mail address:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Forwarding** tab.

3. Select the **Switch on mail forwarding** checkbox.

4. Specify one or several e-mail addresses to which e-mail must be forwarded. When specifying e-mail addresses, separate them with white spaces, commas, semicolons, or type each of them on a new line.

5. Click **OK.**

6. If you do not want to keep copies of forwarded messages in the mailbox, go to the **Mail** tab > *e-mail address*, clear the **Mailbox** checkbox, and click **OK**.

> ### *To switch off mail forwarding:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Forwarding** tab.

3. Clear the **Switch on mail forwarding** checkbox, and click **OK.**

Creating Mail Aliases

> ### *To add or remove additional e-mail addresses (e-mail aliases) for a mail account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **E-mail Aliases** tab.

3. Do any of the following:

   - To add an address, type it into the **E-mail alias** box, and click **OK.**
   - To remove an address, click the **Remove** link to the right of the address you want to remove.

Setting Up Auto-Reply

➢ *To set up automatic reply for an e-mail address:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Auto-Reply** tab.

3. Select the **Switch on auto-reply** checkbox, and specify the following settings:

   ▪ **Auto-reply message subject**.

   ▪ **Message format**. We recommend that you leave the option Plain text selected because some of your recipients might be unable to see the text formatted with HTML.

   ▪ **Encoding**. We recommend that you leave the UTF-8 encoding selected to ensure that the letters in your message are displayed properly.

   ▪ **Message text**.

   ▪ **Forwarding address**. If you want to forward incoming messages to another e-mail address, type an e-mail address in this box.

   ▪ **Attached files**. If you want to attach a file to your message, click **Browse** and select a file.

4. Click **OK**.

➢ *To switch off automatic reply for an e-mail address:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Auto-Reply** tab.

3. To switch off automatic reply, clear the **Switch on auto-reply** checkbox, and click **OK.**

Protecting from Spam

➢ *To switch on spam filtering for a mailbox:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Spam Filter** tab.

3. Select the checkbox **Switch on spam filtering for this e-mail address**.

4. Specify what to do with messages classified as spam.

- If you want to filter mail with the software on your local computer, select the option **Mark spam messages by adding the following text to message subject**, and then specify how spam filter should mark the messages recognized as spam. "X-Spam-Flag: YES" and "X-Spam-Status: Yes" headers are added to the message source by default, and if you want, the spam filter will also add a specific text string to the beginning of the subject line and to the message body.

- If you are sure that your spam filter is accurate, you may want to set the filter to automatically delete all incoming messages recognized as spam. To do this, select the option **Delete all spam messages**.

- If you are accessing your mailbox over IMAP protocol and want the spam filter to move all messages considered spam to the IMAP folder called Spam, select the option **Move spam to the Spam folder**.

  Because all messages are automatically removed from the Spam folder after 30 days, you will need to review the contents of the Spam folder on a regular basis to make sure you do not miss any important messages, and move all non-spam messages back to the Inbox folder.

  When the option **Move spam to the Spam folder** is selected, you can train the spam filter and improve its accuracy by moving spam messages from Inbox to Spam, and non-spam messages from Spam to Inbox.

5. If you want to adjust spam filter sensitivity, click **Show Advanced Settings**, and type a number of points that a message must score to be considered spam.

SpamAssassin performs a number of different tests on contents and subject line of each message. As a result, each message scores a number of points. The higher the number, the more likely a message is spam. For example, a message containing the text string "BUY VIAGRA AT LOW PRICE!!!" in subject line and message body scores 8.3 points. By default, the filter sensitivity is set so that all messages that score 7 or more points are classified as spam.

- If you receive lots of spam messages with the current setting, to make filter more sensitive, try setting a lesser value in the **Spam filter sensitivity** box; for example, 6.

- If you are missing your e-mails because your spam filter thinks they are junk, try reducing filter sensitivity by setting a higher value in the **Spam filter sensitivity** box.

Note: To further improve spam filter accuracy, you may want to train your spam filter on e-mail messages you receive, as described further in this section.

6. If you want to be sure that you will not miss e-mail from specific senders, type e-mail addresses or domain names into the **White list** field.

Place each address in one row, or separate addresses with a coma, a colon, or a white space. You can use an asterisk (*) as a substitute for a number of letters, and question mark (?) as a substitute for a single letter. For example: address@mycompany.com, user?@mycompany.com, *@mycompany.com. Specifying *@mycompany.com will add to the white list all e-mail addresses that are under the mycompany.com mail domain.

7. If you do not want to receive e-mail from specific domains or individual senders, type e-mail addresses or domain names into the **Black list** field.

Place each address in one row, or separate addresses with a coma, a colon, or a white space. You can use an asterisk (*) as a substitute for a number of letters, and question mark (?) as a substitute for a single letter. For example: address@spammers.net, user?@spammers.net, *@spammers.net. Specifying *@spammers.net will block the entire mail domain spammers.net.

8. If you use a Windows-based customer account, then you can also specify trusted languages and character sets. E-mail messages written in the specified languages and with the defined character sets will pass the spam filter and will not be marked as spam.

9. On Windows-based customer accounts, you can also specify IP addresses of computers or networks from which e-mail must always be accepted. When specifying network addresses, type an address and add a network mask after a slash. For example, 192.168.10.10/24.

10. Click **OK**.

You can improve accuracy of spam detection if SpamAssassin spam filter on the server is switched on for your account and you are accessing your mailbox over IMAP protocol.

> ➢ *To improve accuracy of spam detection:*

1. Access your mailbox with webmail or a mail client program on your computer.

2. Review the messages in your **Inbox** folder. Move all spam messages to the **Spam** folder. This will make the SpamAssassin spam filter recognize spam more efficiently.

Protecting from Viruses

To defend your system from viruses, do not open suspicious e-mail attachments, enable antivirus protection on the server side, if this service is provided by your hosting company, and be sure to have a firewall and antivirus software installed on your personal computer. Also keep your operating system up-to-date and timely install security hot fixes and patches.

➢ *To switch on antivirus protection for a mailbox:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Antivirus** tab.

3. Select the checkbox **Switch on antivirus protection for this e-mail address**.

4. Choose the desired mail scanning mode. You can switch on scanning for incoming mail, outgoing mail, or both.

5. Click **OK**.

When an infected message comes, you will be notified by e-mail. If Kaspersky Antivirus is used by your provider, then you might be able to configure it at the **Mail** tab > *e-mail address* > **Antivirus** tab.

➢ *To switch off antivirus protection for a mailbox:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > *e-mail address* > **Antivirus** tab.

3. Clear the checkbox **Switch on antivirus protection for this e-mail address**.

4. Click **OK**.

(Advanced) Configuring Global Mail Settings

You can configure the following mail service settings that apply to all domains created under a subscription:

- Mail service status. You can switch the mail service on or off. If the mail service is switched off, then e-mail messages cannot be sent or received.

- Mail bounce settings. When somebody sends an e-mail message to an e-mail address that does not exist under your domain, the mail server, by default, accepts mail, processes it, and when it finds out that there is no such a recipient under the domain, it returns the mail back to sender with an error message. You can choose to:
  - Continue returning all such mail back to senders (**Bounce with message** option),
  - Forward all such mail to the specified e-mail address (**Forward to address** option),
  - Forward all such mail to another mail server with the specified IP address using the option **Redirect to external mail server with IP address** (available only for Windows hosting),
  - Reject such mail without accepting it and without notifying senders (**Reject** option).

- Webmail. If your service plan provides the option to choose which webmail program to use for your account, then you can select it in the global mail settings.

➢ *To configure the mail service settings:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab, and then click **Change Settings**.

3. Select the required options, and click **OK**.

Using Mailing Lists

Mailing list is a group e-mail address to which a number of users are subscribed. Mailing lists are used for sending e-mail messages to multiple recipients at once. E-mail messages sent to mailing list subscribers can include anything from plain text to colorful newsletters and promotions with embedded images and links, and attached multimedia and presentation materials.

How it all works: you create a mailing list e-mail address in the Panel, and subscribe users to it. Then you send your message to the mailing list address, and all subscribers receive it.

> ➢ *To set up a mailing list and subscribe users to it:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > **Mailing Lists** tab.

3. Click **Create Mailing List**.

4. Type the mailing list address and, if you have several websites, select the website under which the mailing list will be created.

5. To subscribe users to the mailing list, type their e-mail addresses, one address per line.

6. To notify the mailing list administrator about mailing list creation, select the checkbox **Notify administrator on the mailing list creation**.

7. Click **OK**.

> ➢ *To subscribe or unsubscribe users:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > **Mailing Lists** tab.

3. Click the mailing list address.

4. Do any of the following:

   - To subscribe users to the mailing list, type their e-mail addresses into the **Subscribers** field, one address per line.

   - To unsubscribe users, remove their addresses from the **Subscribers** field.

5. Click **OK**.

> ➤ *To remove a mailing list:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Mail** tab > **Mailing Lists** tab.

3. Select a checkbox corresponding to the mailing list you want to remove and click **Remove**.

4. To confirm removal, click **Yes**.

> ➤ *To switch off the mailing lists service and all mailing lists created under the currently selected subscription:*

1. Go to the **Mail** tab > **Mailing Lists** tab.

2. Click **Switch Off the Service**.

> ➤ *To switch on the mailing lists service for the currently selected subscription:*

1. Go to the **Mail** tab > **Mailing Lists** tab.

2. Click **Switch On the Service**.

Scheduling Tasks

If you need to run scripts on your hosting account at specific time, use the task scheduler in the Panel to make the system automatically run the scripts for you.

In this section:

Scheduling Tasks (Linux)

If you need to run scripts on your hosting account at specific time, use the task scheduler in the Panel to make the system automatically run the scripts for you.

During installation of the Panel, the following tasks are automatically created:

- `autoreport.php` – delivers daily, weekly and monthly reports on domains (three separate tasks)
- `backupmng` – initiates scheduled backing up of domains once every 30 minutes
- `statistics` – generates statistics on resource usage by domains
- `mysqldump.sh` - creates a backup copy of three MySQL databases: psadump, MySQL, and Horde databases

As all these tasks are related to statistics, databases, and reports, it is strongly recommended that you neither change nor remove them.

➤ *To schedule a task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Click **Schedule New Task**.

4. Leave the **Switched on** checkbox selected.

5. Specify when to run your command:

   - **Minute** - enter the value from 0 to 59
   - **Hour** - enter the value from 0 to 23
   - **Day of the month** - enter the value from 1 to 31
   - **Month** - enter the value from 1 to 12, or select the month from a drop-down box
   - **Day of the week** - enter the value from 0 to 6 (0 for Sunday), or select the day of the week from a menu.

   You can schedule the time using the UNIX crontab entry format. In this format, you can:

   - Enter several values separated by commas. Two numbers separated by a hyphen mean an inclusive range. For example, to run a task on the 4th, 5th, 6th, and 20th of a month, type 4-6,20.
   - Insert an asterisk to specify all values allowed for this field. For example, to run a task daily, type * in the **Day of the month** text box.

   To schedule the task to run every Nth period, enter the combination */N, where N is a value for this field (minute, hour, day, month). For example, */15 in the **Minute** field schedules the task to start every 15 minutes.

You can type the contracted names of months and days of the week, which are the first three letters: Aug, Jul, Mon, Sat, and so on. However, the contracted names cannot be separated with commas or used together with numbers.

6. Specify which command to run. Type it into the **Command** input box.

For example, if you want to run the backup creation task at the specified time and have the backup file sent to your e-mail, you need to specify the following command in the **Command** input box:

```
/usr/local/psa/admin/sbin/backupmng
```

7. Click **OK**.

➢ *To receive notifications when the tacts are started:*

1. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

2. Click **Settings** and specify the notification policy.

➢ *To temporarily suspend execution of a scheduled task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Locate the task that you want to suspend and click the corresponding link in the **Command** column.

4. Clear the **Switched on** checkbox and click **OK**.

➢ *To resume execution of a scheduled task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Locate the task whose execution you want to resume and click the corresponding link in the **Command** column.

4. Select the **Switched on** checkbox and click **OK**.

➢ *To cancel a task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Select a checkbox to the left of the task that you want to cancel and click **Remove**.

4. Confirm removal and click **OK**.

Scheduling Tasks (Windows)

If you need to run scripts on your hosting account at specific time, use the task scheduler in the Panel to make the system automatically run the scripts for you.

During installation of the Panel, the following tasks are automatically created:

- Update antivirus database – updates Parallels Premium Antivirus database.
- Statistics calculation - generates statistics on resource usage, such as traffic and disk space.

As all these tasks are related to site statistics, databases and reports, it is strongly recommended that you neither change nor remove them.

➢ *To schedule a task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Click **Schedule New Task**.

4. Leave the **Switched on** checkbox selected if you want your scheduled task to be active immediately after the creation.

5. Type a name for your task in the **Description** field.

6. In **Scheduler notification**, specify whether the scheduler should notify you when it runs this task. The following options are available:
   - **Switched off** - do not notify you.
   - **Send to the default e-mail** - send the notification to your default e-mail address.
   - **Send to the e-mail I specify** - send the notification to the e-mail specified in the corresponding field. After selecting this option, you need to type the required e-mail address in the field on the right.

7. Specify which command or executable file to run. Type it into the **Path to executable file** input box. If you need to run the command with certain options, type them in the **Arguments** field.
   - For example, if you want to run the statistics calculation task to count disc space and see more detailed information for the example.com and example.net domains, you need to specify the following path in the **Path to executable file** input box:

     ```
     C:\Program Files\Parallels\Parallels
     Panel\admin\bin\statistics.exe
     ```

     and the following options in the **Arguments** field:

     ```
     --disk-usage --process-domains=example.com, example.net –
     verbose
     ```

- If you want to run your own PHP script using the task scheduler, you need to specify the following path in the **Path to executable file** input box:

```
C:\Program Files (x86)\Parallels\Parallels
Panel\Additional\PleskPHP5\php.exe
```

and specify the script location in the **Arguments** field:

```
C:\Inetpub\vhosts\mydomain.tld\httpdocs\myscript.php
```

8. Select the appropriate priority in the **Task priority** field. Task priority can be set to **Low**, **Normal** or **High**.

9. Specify when to run your command by selecting the appropriate checkboxes in the **Hours**, **Days of month**, **Months** or **Days of week** fields.

10. Click **OK** to schedule the task or click **Run Now** to schedule the task and immediately run it.

➢ *To temporarily suspend execution of a scheduled task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Choose a task that you want to suspend and click the corresponding link in the **Description** column.

4. Clear the **Switched on** checkbox.

5. Click **OK**.

➢ *To resume execution of scheduled task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Choose a task whose execution you want to resume and click the corresponding link in the **Description** column.

4. Select the **Switched on** checkbox.

5. Click **OK**.

➢ *To cancel a task:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Scheduled Tasks** (in the **Advanced Operations** group).

3. Select a checkbox to the left of the task that you want to cancel and click **Remove**.

4. Confirm removal and click **OK**.

Using Databases

If your website incorporates custom data processing applications or is designed to generate web pages dynamically, you will likely need a database for storing and retrieving data. You can either create a new database for your site or import the data from your previously backed up MySQL, PostgreSQL, or Microsoft SQL database. Note that when you install an application from the Applications Catalog, all required databases and database user accounts are created automatically.

In this section:

Managing Databases

Panel allows you to perform a number of database management operations:

- Create and remove databases.
- Import existing databases.
- Create additional database user accounts for collaborative work.

For the details on these operations, refer to the particular sections of this chapter.

In this section:

Creating Databases

Creating and Removing Databases

> ➢ *To create a new database on a customer account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Click the **Websites & Domains** tab.

3. Click **Databases** (in the **Advanced Operations** group).

4. Click **Add New Database**.

5. Enter a name for the database.

   We recommend that you choose a name that starts with a Latin alphabet symbol and comprises only alphanumeric and underscore symbols (up to 64 symbols).

6. Select the database type that you are going to use: MySQL, PostgreSQL or Microsoft SQL Server. Click **OK**.

7. To set up database administrator's credentials, click **Add New Database User**.

8. Type a user name and a password that will be used for accessing the contents of the database.

9. Click **OK**.

> ➢ *To remove a database with its contents:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Databases**.

3. Select a checkbox corresponding to the database that you want to remove.

   If the required checkbox appears grayed out, this means that this database is used by a web application and you can remove it only by removing the respective application.

4. Click **Remove**.

5. Confirm removal and click **OK**.

Accessing Databases

After you created a database and assigned a database user to it, you can access it from Panel using the **Webadmin** link on the **Websites & Domains tab** > **Databases** > database page. In this case, Panel automatically uses the corresponding database user credentials.

If you want to access your database using some other tools (like SQL Server Management Studio) or to give some applications access to it, you will need to provide these tools and applications with the following:

- To connect to *MySQL* and *PostgreSQL*, you will need to provide the host name (or IP address) and the database user login and password.

- To connect to *Microsoft SQL Server*, you will also need to specify the Microsoft SQL Server instance. For *Microsoft SQL Server 2008*, Panel uses the `MSSQLSERVER2008` named instance. Therefore, the host can be specified as `mydomain.com\MSSQLSERVER2008` or `123.123.123.123\MSSQLSERVER2008`. For *Microsoft SQL Server 2005*, Panel uses the default instance (`MSSQL 2005`), and you do not need to specify the instance name.

Importing Databases

> ➢ *To import an existing database:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Databases** (in the **Advanced Operations** group) > **Add New Database**.

3. Enter a name for the database. We recommend that you choose a name that starts with a Latin alphabet symbol and comprises only alphanumeric and underscore symbols (up to 64 symbols).

4. Select the database type that you are going to use: MySQL, PostgreSQL, or Microsoft SQL Server. Click **OK**.

5. To set up database administrator's credentials, click **Add New Database User**.

6. Type a user name and a password that will be used for accessing the contents of the database. Click **OK**.

7. Click the **Webadmin** icon in the **Tools** group. An interface to phpMyAdmin, phpPgAdmin, or ASPEnterpriseManager database management tool will open in a separate browser window. The database management tools allow to operate database user accounts and execute SQL queries through the web browser.

If you have a MySQL database:

a. Click **Query window** in the left frame, click the **Import files** tab,

b. Select the text file that contains the data and click **Go**.

c. Click the **Insert data from a text file** link.

If you have a MS SQL database:

a. Click the name of your database in the left frame

b. Click **Query** (the magnifying glass button)

c. Copy the text of your script into the text area and click **Run Query**.

To manage your databases and their contents, use your favorite MySQL, PostgreSQL, or Microsoft SQL Server client or the web-based database management tool accessible from the Panel (the **Websites & Domains** tab > **Databases** > *database name* > **Webadmin**).

Creating Database User Accounts

If you collaborate with other people on managing a website and wish to give them access to the database, you should create separate user accounts for them.

➢ *To create a database user account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Databases** > *database name*, and click **Add New Database User**.

3. Type a user name and a password that will be used for accessing the contents of the database. Click **OK**.

➢ *To change a password for a database user:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Databases** > *database name* > *database user name*.

3. Type a new password and click **OK**.

➢ *To specify whose user account credentials should be used by default for managing a database through the Webadmin tool:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Databases** > *database name*.

3. Select a checkbox corresponding to the user account you need.

4. Click **Default for DB Webadmin**.

➢ *To remove a database user account:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **Databases** > *database name*.

3. Select a checkbox corresponding to the user account that you want to remove.

4. Click **Remove**, then confirm removing and click **OK**.

Accessing External Databases (Windows)

If your applications need to access external databases for storing data, then you need to create ODBC connections through the Panel.

➢ *To create an ODBC connection to an external database:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Websites & Domains** tab > **ODBC Data Sources** (in the **Advanced Operations** group).

3. Click **Add New ODBC DSN**.

4. Specify the ODBC connection name and description in the corresponding fields.

5. Select the required driver in the **Driver** field.

6. Click **OK**.

7. Choose the appropriate options on the driver configuration screen. Typically, you should specify the path to the database, user credentials and other connection options, depending on the selected driver.

8. Click **Test Connection** to check whether the connection will function properly with provided settings. Click **Finish** to complete the creation.

➢ *To change settings of an ODBC connection:*

1. Go to the **Websites & Domains** tab > **ODBC Data Sources** (in the **Advanced Operations** group).

2. Click the required connection name in the list.

3. Change the settings as needed.

4. Click **Test Connection** to check whether the connection will function properly with new settings. Click **Finish** to save changes.

➢ *To remove an ODBC connection:*

1. Go to the **Websites & Domains** tab > **ODBC Data Sources** (in the **Advanced Operations** group).

2. Select the checkbox corresponding to a connection you want to remove.

3. Click **Remove**, confirm the removal and click **OK**.

Backing Up and Recovering Websites

Unfortunately, data loss events are quite common problem today. The reasons of these events may vary: Hardware failures, hacking attacks, and so on. To minimize the consequences of data loss, Panel provides the back up / restore feature. During the backup Panel saves your account configuration along with all websites content into a number of files. You can restore the backup at any time later to recover corrupted data, or just to return Panel to stable state.

This chapter describes how to perform the following operations in your Panel:

- Back up all data related to your account and sites. Learn more in the section **Backing Up Account and Websites** (on page 669).
- Back up databases (Windows). Learn more in the section **Backing Up Databases (Windows)** (on page 671).
- Schedule backups. Learn more in the section **Scheduling Backups** (on page 672).
- Restore data from backup archives. Learn more in the section **Restoring Data** (on page 675).

In this section:

Backing Up Data

Depending on your needs, Panel can perform two types of backup:

- *Customer account configuration*. Such backups have small size and are convenient for restoring account settings in case of configuration problems.
- *Customer account configuration and websites content*. This type of backup requires more disk space and system resources because the Panel also saves the content of all websites. Such full backups are the best way to prevent data loss.

You can perform backup manually at any time, or schedule it for a specific time. For example, make the full backup once a day at night time when the number of site visits is minimal. To get the details on scheduling backups, refer to the section **Scheduling Backups** (on page 672).

Storing Backups

There are two ways of storing backups in Panel:

- *On the Panel-managed hosting server*. All backup files are stored on your Panel server along with other account content. Note that in this case backup files occupy the disk space provided by your subscription.
- *On a remote FTP server*. All backup files are stored on a remote FTP repository. In this case, backup files do not occupy the disk space provided by your subscription. The instructions on how to configure Panel to save backups to an FTP account are provided below in this section.

Creating Password-protected Backups

Since Panel 11.0, you are able to secure sensitive data in your backups by protecting them with a password. Protection makes it impossible for an attacker to reveal backup data if the security of your external backup storage is compromised.

You can specify a backup password in the following circumstances:

- In your FTP repository settings (**Websites & Domains** > **Backup Manager** > **Personal FTP Repository Settings**).
- When downloading a backup file from the Panel internal repository to some external location.

When uploading these backups back to Panel and restoring them, you will be prompted to provide the password you used for protection.

Important:
If you forget the password you used for backup protection, it cannot be recovered. Therefore, it is strongly recommended to keep a list of your passwords and corresponding backup file names in a safe place.

Configuring Panel for Working with an FTP Repository

If you are going to use an FTP server for storing backup files, you should specify its settings in **Account** tab > **Back Up My Account and Websites** > **Personal FTP Repository Settings**:

- FTP server's IP address or host name.
- Directory on the server where you want to store backup files.
- User name and password for access to the FTP account.
- Password that Panel will use for protecting backup files.

In this section:

Backing Up Account and Websites

➢ *To back up all data related to your account and all your subscriptions:*

1. Go to the **Account** tab > **Back Up My Account and Websites** > **Back Up**.

2. Specify the following:

- Backup file name prefix and description. You cannot specify an arbitrary file name, however, you can set the Panel to add a prefix to backup file names. Note that the Panel automatically adds the date and time of backup file creation (in Universal Time) to backup file names.

- Splitting of the backup file. To create a multivolume backup, select the corresponding checkbox and specify volume size in megabytes.

- Location where to store the backup file. Select the repository where you would like to store the backup file.

- E-mail notification on backup completion. If you want to be notified of the backup completion, type your e-mail address.

- What data to back up. You can back up only the account settings or account settings and all data.

- **Suspend domains until backup task is completed.** Select this option to prohibit users from making changes to content or settings of websites while they are being backed up.

  Note: If you select this option, then, after restoring the data from this backup file, you will need to manually switch on every domain alias for every site that needs to have domain aliases. This can be done at **Websites & Domains** tab > *domain alias name* > **Switch On**.

3. Click **Back Up**.

When backing up is finished, the backup file will be saved to the repository you selected.

➢ *To back up all websites related to a subscription:*

1. If you are subscribed to several hosting packages and have access to several webspaces associated with your account, in the **Subscription** menu at the top of the screen, select the required webspace.

2. Go to the **Account** tab > **Back Up Websites** > **Back Up**.

3. Specify the following:

- Backup file name prefix and description. You cannot specify an arbitrary file name, however, you can set the Panel to add a prefix to backup file names. Note that the Panel automatically adds the date and time of backup file creation (in Universal Time) to backup file names.

- Splitting of the backup file. To create a multivolume backup, select the corresponding checkbox and specify volume size in megabytes.

- Location where to store the backup file. Select the repository where you would like to store the backup file.

- E-mail notification on backup completion. If you want to be notified of the backup completion, type your e-mail address.

- What data to back up. You can choose to back up:

  - Only settings of websites.

  - All settings and data with or without mail accounts and messages in mailboxes.

  - Only mail accounts with messages.

- **Suspend domains until backup task is completed.** Select this option to prohibit users from making changes to content or settings of websites while they are being backed up.

  > **Note:** If you select this option, then, after restoring the data from this backup file, you will need to manually switch on every domain alias for every site that needs to have domain aliases. This can be done at **Websites & Domains** tab > *domain alias name* > **Switch On**.

4. Click **Back Up**.

When backing up is finished, the backup file will be saved to the repository you selected.

Backing Up and Restoring Databases (Windows)

If you are using a Windows-based customer account, then you can back up and subsequently restore databases, database user accounts, and data used by your websites.

You can:

- Back up your domain databases with all data and user accounts.
- Restore databases from backup files.
- Download, upload and remove database backup files.
- Recover users who became orphaned after the restoration.

Important: Panel does not back up stored procedures, views, and triggers. The backup utility ignores them and, therefore, they cannot be restored.

➤ *To back up databases:*

1. Go to the **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository**.

2. Using the **Database** menu, select the databases you want to back up.

3. Click **Back Up**.

4. Specify the name of the backup file and click **OK**.

5. If you want to download the resulting backup file, click the file name on the next page after the backup process was finished. Specify the location where you want to save the file and click **Save**.

6. Click **OK**.

➤ *To restore a database:*

1. Log in to Control Panel.

2. Go to **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository**, select the checkbox corresponding to the backup file you want to restore and click **Restore**.

   If you do not have the backup file on your server, you can upload the backup file to the server repository from your local machine.

3. Confirm the restoration by selecting the corresponding checkbox and click **OK**.

➤ *To upload a backup file to a backup repository:*

1. Go to Control Panel > **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository,** and click **Upload Backup File**.

2. In the **Database name** menu, select the database in whose repository you want to upload the backup file.

3. Click **Browse...** and select the required backup file.

4. Leave the **Restore database backup immediately upon uploading** check box selected if you want the database contents to be restored immediately after the backup file is uploaded.

5. Click **OK**.

The database backup file will be uploaded to the backup repository of the specified database.

Scheduling Backups

> ➢ *To schedule backing up of data:*

1. Go to the **Account** tab > **Back Up My Account and Websites** > **Scheduled Backup Settings**.

2. Select the **Activate this backup task** checkbox and specify the following:

    ▪ When and how often to run the backup.

    ▪ A prefix that should be added to the backup file name.

    ▪ Splitting of the backup file. To create a multivolume backup, select the respective checkbox and specify volume size in megabytes. Note that volume size cannot exceed 4095 megabytes.

    ▪ Location where to store the backup file. Select the repository where you would like to store the backup file.

    ▪ Maximum number of backup files stored in the repository. Type a number if you want to recycle backup files: When this limit is reached, the oldest backup files are removed.

    ▪ E-mail notification on backing up errors. If you want to send an e-mail notice when something goes wrong during backing up, type the e-mail address you need.

    ▪ What data to back up. You can back up only account settings, or account settings and all related data.

    ▪ **Suspend domains until backup task is completed.** Select this option to prohibit users from making changes to content or settings of websites while they are being backed up.

3. Click **OK**.

Managing Backup Files

In this section:

Uploading and Downloading Backup Files

Downloading Backup Files from Panel

To download a backup file from the Panel repository, choose the corresponding backup file name in **Account** tab **> Back Up My Account and Websites** and specify the location for the file. Before starting the download, Panel will prompt you to enter the backup password.

Uploading Backup Files to Panel

To upload a backup file to the Panel repository, use the **Account** tab **> Back Up My Account and Websites > Upload Files to Server Repository** wizard. Before starting the upload, Panel will prompt you to enter the following backup parameters:

- *Backup file location*.
- *Password*.
  This is the password that you used for protecting the backup data. If you did not use password-protection, leave the corresponding field blank.

  Note: If the password you provide is incorrect, Panel will warn you, but will upload the backup to the server anyway. During the backup restoration, you will be prompted to enter the password again.

Removing Backup Files

To remove a backup file from the Panel repository, select a checkbox corresponding to the backup file you want to remove in **Account** tab **> Back Up My Account and Websites** and click **Remove**.

Uploading and Downloading Database Backup Files (Windows)

➢ *To upload a backup file to backup repository:*

1. Go to the **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository** and click **Upload Backup File**.

2. Select the database in whose repository you want to upload the backup file to in the **Database name** menu.

3. Click **Browse...** and select the required backup file.

4. Leave the **Restore database backup immediately upon uploading** checkbox selected if you want the database contents to be restored immediately after the backup file is uploaded.

5. Click **OK**.

The database backup file will be uploaded to the backup repository of the specified database.

➢ *To download a backup file from backup repository:*

1. Go to the **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository.**

2. In the **Database** menu, select the database whose backup files you want to browse. Leave **All domain databases** selected if you want to browse backup files of all databases on a domain.

3. Click the icon corresponding to the database backup file you want to download.

4. Select the location where you want to save the backup file and click **Save**.

The backup file will be downloaded from the backup repository.

➢ *To remove a backup file from backup repository:*

1. Go to the **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository.**

2. In the **Database** menu, select the database whose backup files you want to remove. Leave **All domain databases** selected if you want to browse backup files of all databases on a domain.

3. Select a checkbox corresponding to the database backup file you want to remove. Click **Remove**, confirm removal and click **OK**.

Restoring Data

In this section:

Restoring Backups

You can restore data from backup files kept in:

- *The Panel internal repository*.
  To restore backup files from Panel repository, choose the backup file name you want to restore on the **Account** tab > **Back Up My Account and Websites** > **Server Repository** tab.

- *An external FTP repository*.
  To restore backup files from Panel repository, choose the backup file name you want to restore on the **Account** tab > **Back Up My Account and Websites** > **Personal FTP Repository** tab.

After you choose the backup file, Panel will start the restoration wizard. You will be prompted to specify the following restoration parameters:

- **Types of data to be restored.**

- **Suspend website until restoration task is completed.** Select this if you want to avoid possible conflicts that may occur when users modify site content or settings while they are being restored.

- **Send an e-mail notice when restoration task is completed.** Type your e-mail address if you want the control panel to notify you when restoring is completed.

- **Conflicts resolution policy.** Specify what to do if any conflicts occur during restoration.

- **Backup security settings.** If the backup was protected with a password, enter the password into the **Password** field. Note that Panel is unable to check whether the password you enter is wrong: The backup will be successfully restored but the data will be corrupted. If you wish to reset user passwords, clear the **Provide the passwords** option.

If any errors or conflicts occur during restoration of data, the wizard will prompt you to select an appropriate resolution. Follow the instructions provided on the screen to complete the wizard.

Restoring Databases (Windows)

➢ *If the database already exists and you only need to restore its contents:*

1. Go to the **Websites & Domains** tab > **Backup Manager** > **Database Backup Repository**.

2. Select the required backup file from the list and click **Restore Selected**.

   If you do not have the backup file on the server, you can upload the backup file to the server repository from your local machine. For more information, refer to the section Uploading, Downloading, and Removing Database Backup Files.

3. Confirm the restoration by selecting the corresponding checkbox and click **OK**.

   If you are restoring an MS SQL database, there is a possibility that some database users will be orphaned. In order to provide the ability to access and use the database for these users, you need to repair them. For more information, refer to the section Recovering Orphaned Database Users.

Post-Restoration Database Repair

If you are restoring an MS SQL database, there is a possibility that some database users will be orphaned. In order to provide the ability to access and use the database for these users, you need to repair them.

➢ *To check if a database has orphaned users and to repair them:*

1. Go to **Websites & Domains** tab > **Databases** (in the **Advanced Operations** group) > *database name*.

2. If you see a warning saying that there are several orphaned users that should be repaired in order to function properly, you have orphaned users who need to be repaired.

3. To repair orphaned users, click the **Repair now** button corresponding to the users you want to repair.

4. Provide password for the users and click **Repair**.

   If a user is supposed to be a system user without a password, run repair with empty password field.

Appendix A: Properties of Hosting Plans and Subscriptions

Properties of a hosting plan and subscription are grouped as follows:

- **Resources**

  These are hosting resources provided with a plan. Includes validity period, policy on overusing resources, system resources like disk space and traffic, and service resources like websites, subdomains, mailboxes, databases and so on. For example, the Domains resources sets the number of domains that a customer can register and manage in Panel.

- **Permissions**

  Includes provided services and privileges.

  Note: Some permissions prevent settings of the following services from syncing (on page 211). See the details in the **Permissions** section.

- **Hosting Parameters** (service plan only)

  Includes parameters of the provided hosting service. .

- **PHP Settings**

  Includes the customizable PHP settings.

- **Mail** (service plan only)

  Includes parameters of the provided mail service.

- **DNS** (service plan only)

  Specifies if the DNS zones of the subscription's domains should be master or slave.

  Note: In case the **DNS zone management** privilege is provided, this parameter is not synced, and subscribers can set up this parameter on a per-domain basis.

- **Performance** (service plan only)

  Includes parameters that affect performance of all services provided with the plan.

- **Logs & Statistics** (service plan only)

  Includes settings of how statistics and logs of the plan's subscriptions should be stored

  Note: **Hosting, Mail**, **DNS**, **Performance**, **Logs & Statistics** parameters are fully visible and editable in the Server Administration Panel only for service plans. For subscriptions, these parameters are available only in the Control Panel. To view or modify the parameters of a particular subscription, go to **Subscriptions** and click **Control Panel** to the right of the subscription name. Also note that the availability of these parameters to a subscriber depends on the permissions.

- **Applications**

  Lets you select which applications should be available to subscribers.

In this section:

Visibility of Hosting Features in the Control Panel

Since version 10.4, Panel hides from customers those hosting features that are not provided in their subscription. The visibility of GUI elements responsible for a certain feature is determined by permissions and resource limits of a subscription. Note that when you (as the administrator) log in to the customer's Control Panel, you see GUI elements regardless of customer's permissions. The table below explains GUI visibility logic.

	Visible to a Customer	Visible to the Administrator
Resource Limit > 0 Permission = True	Yes	Yes
Resource Limit > 0 Permission = False	No	Yes
Resource Limit = 0 Permission = True	No	No
Resource Limit = 0 Permission = False	No	No

For example, when the number of **Domains** in a subscription is 10 and the **Domains management** permission is off, a customer does not see the **Add New Domain** button in the Control Panel. Nevertheless, this button is available to the administrator that logs in to the customer's Control Panel.

Resources Without Numerical Limits

If the resource type is logical or in other words, it can be just switched on or off (say, a scripting language support), its visibility is controlled by a certain permission only. For example, if the **Hosting settings management** permission is granted, a customer is able to toggle the support of various scripting languages for their site. If the permission is not granted, the customer sees the list of languages that are switched on for their site in the read only mode. The disabled languages *are not shown* in the list.

Resources

Resources (located at **Service Plans** > select a plan > **Resources** tab) define what system resources are provided with the subscription.

Overuse policy

Defines what happens if the subscription's usage of disk space and traffic reaches limit values:

- **Overuse is not allowed** will suspend the subscription only if you select the checkbox **Suspend subscription when its disk space or traffic usage goes beyond the limit**. If you do not select it, websites will not be suspended; only a notice will be sent to the subscribers.

  You can set up sending of notifications as soon as usage of disk space or traffic reaches a particular value (the **Notify upon reaching** options), in order to prevent subscriptions from suspension. The notifications will be sent according to the server notifications policy.

- **Overuse is allowed** will let the subscription operate properly.

  The option **When limit on usage of a resource is reached, send e-mail according to the server notification settings** triggers sending notifications according to the server notifications policy.

Note: The overuse policy does not apply to the limits set on size of mailboxes. Therefore, even if you enable overuse, be sure to allocate enough disk space to mailboxes.

Disk space

The total amount of disk space allocated to the subscription. It includes disk space occupied by all files related to the subscription: content of websites, databases, applications, mailboxes, log files, and backup files.

Traffic

The amount of data that can be transferred from the subscription's websites and FTP/Samba shares during a month.

Notify upon reaching

Available only if overuse is not allowed. This sets the soft quota for disk space or traffic usage in order to prevent subscriptions from suspension. When the quota is reached, the Panel sends notifications to users' e-mail addresses specified in **Settings** > **Notifications**: **Resource usage limits exceeded by subscription**.

Sites published with Web Presence Builder

The number of websites that can be published with Web Presence Builder.

Domains

The total number of domain names that the subscriber will be able to host within the subscription. This includes websites, web forwarding configurations that point to websites hosted on other servers, and domain names on which a website or web forwarding is not yet set up (domains with no hosting).

Mobile sites

The total number of websites that can be hosted with the UNITY Mobile online service, which optimizes sites for viewing on mobile devices. UNITY Mobile hosts the optimized site copies on their own servers.

How it works:

1. A user creates a website with the domain name `example.com` and clicks the link **Create Mobile Site** in the Control Panel.

2. The user is prompted to specify a domain name for access to the mobile site copy. The user specifies `mobile.example.com`.

3. The Panel connects to the UNITY Mobile hosting servers, sets up an account with UNITY Mobile for the domain name `mobile.example.com`.

4. The user's browser opens the UNITY Mobile website, where the user is automatically logged in to their account and prompted to import their website from the Panel-managed server.

5. After the site is imported and optimized for mobile viewing, it becomes accessible by the address mobile.example.com. The Panel's DNS server keeps a CNAME record pointing to the site on a UNITY Mobile server.

   The user can now perform the following operations on mobile site using links in the Control Panel:

   - Open site editor.

   - Change mobile site name.

   - Remove mobile site.

For more information about UNITY Mobile services, visit their website at
http://www.unitymobile.com.

For instructions on managing mobile sites through the Control Panel, refer to the Customer's Guide, section Setting Up Mobile Sites.

Subdomains

The total number of subdomains that the subscriber will be able to host within the subscription.

Domain aliases

The total number of additional alternative domain names that the subscriber will be able to use for their websites.

Mailboxes

The total number of mailboxes that the subscriber can host within the subscription.

Mailbox size

The amount of disk space that is allocated to each mailbox in a subscription for storing e-mail messages and auto-reply attachment files.

Total mailboxes quota (available only for Windows hosting)

The total amount of disk space in megabytes available for all mailboxes within the subscription.

Mailing lists

The total number of mailing lists that the subscriber can host within the subscription.

Additional FTP accounts

The maximum number of FTP accounts used to access the files and folders created within a subscription. This number does not include an account that is always created during the subscription creation.

Databases (Unix hosting)

The total number of databases that can be created on the Panel database servers and used by the subscription's websites.

MySQL databases and **Microsoft SQL Server databases** (Windows hosting)

The maximum number of MySQL and Microsoft SQL Server databases respectively that can be created on the Panel database servers and used by the subscription's websites.

MySQL databases quota and **Microsoft SQL databases quota** (Windows hosting)

The maximum amount of disk space (in megabytes) that the subscription's MySQL or Microsoft SQL Server databases can occupy respectively.

Validity period/Expiration Date

The term for a subscription.

In service plan properties, it is **Validity period**: it is used only when a subscription is created: the Panel derives the subscription expiration date from it.

In subscription properties, it is **Expiration date**: At this date, the subscription will be suspended, meaning that all sites within the subscription will be suspended, their Web, FTP and mail services will no longer be accessible to the Internet users, and the subscriber and their users will not be able to log in to the Control Panel.

Subscriptions are not renewed automatically, so to bring a subscription's services back to operation, you will need to manually activate the subscription.

Java applications

The total number of Java applications that can be hosted on the subscription's websites.

Web users

The total number of personal Web pages that the subscriber can host for other users under their websites. This service is mostly used in educational institutions that host non-commercial personal pages of their students and staff. These pages usually have addresses like http://example.com/~webuser.

FrontPage accounts (Windows hosting)

The maximum number of Microsoft FrontPage accounts that the subscriber can create within the subscription.

Shared SSL links (Windows hosting)

The total number of shared SSL links that the subscriber can use within the subscription.

ODBC connections (Windows hosting)

The total number of ODBC connections that the subscriber can use within the subscription.

ColdFusion DSN connections (Windows hosting)

The total number of ColdFusion DSN connections that the subscriber can use within the subscription.

Permissions

Permissions (located at **Service Plans** > select a plan > **Permissions** tab) define what privileges and services are provided with the subscription.

DNS zone management

Allows the subscriber to manage the DNS zones of their domains.

Note: If this permission is granted, then the DNS service settings are not synced.

Hosting settings management

Allows modifying parameters of hosting service provided with the subscription: changing hosting account features and switching on or off support for programming and scripting languages, custom error documents, SSL support, and (Windows only) Microsoft FrontPage support. In addition, it allows you to toggle the following permissions: **Hosting performance settings management** and **Common PHP settings management**.

Note: If this permission is granted, then the mentioned hosting parameters are not synced.

Common PHP settings management

Allows the subscriber to adjust common PHP settings individually for each website (subdomain) in their subscription.

Note: If this permission is granted, then the common PHP settings are not synced.

Setup of potentially insecure web scripting options that override provider's policy. Allows the subscriber to override the hosting security policy, if it is applied by the provider.

Management of access to server over SSH (Linux\Unix hosting)

Allows the subscriber to access the server shell over SSH under their system user account. Also, lets the subscriber set up such hosting parameter as **SSH access to server shell under the subscription's system user**.

Note: If this permission is granted, then the mentioned hosting parameter is not synced.

Management of access to server over Remote Desktop (Windows hosting)

Lets the subscriber access the server via Remote Desktop protocol.

Anonymous FTP management

Provides the anonymous FTP service, which lets the subscriber set up a directory shared over FTP protocol and available to anonymous users. A subscription should reside on a dedicated IP address in order to provide this service.

Scheduler management

Allows the subscriber to schedule running of scripts or utilities.

Spam filter management

Lets the subscriber customize filtering settings of the SpamAssassin spam filter.

Antivirus management

Lets the subscriber change settings of the server-side protection of incoming and outgoing mail from viruses.

Data backup and restoration using the server repository

Lets the subscriber back up and restore their websites, and use the storage on the server for keeping backups.

Data backup and restoration using a personal FTP repository

Lets the subscriber back up and restore their websites, and use external FTP servers for storing their backups.

Web statistics management

Lets the subscriber select which Web statistics engine should be used, and whether reports should be accessible via a specific password-protected directory.

Note: If this permission is granted, then the mentioned hosting parameter is not synced.

Log rotation management

Lets the subscriber adjust the cleanup of processed log files for his or her sites. Also, lets the subscriber remove log files.

Note: If this permission is granted, then the **Logs & Statistics** parameters (on page 691) are not synced.

Access to Application Catalog

Provides the subscriber with access to prepackaged applications that can be installed on websites. If you select this option, be sure to select the **PHP support** checkbox on the **Hosting Parameters** tab.

You can view a list of applications available from your provider by doing the following:

1. Set up your own website by using a plan or a custom subscription that grants access to the Application Catalog.

2. Go to the Server Administration Panel > **Subscriptions**, and click the **Control Panel** link corresponding to your domain name. The Control Panel will open in a new browser window or tab.

3. In the Control Panel, go to the **Applications** tab > **All Available Applications**.

There is also a page in the Server Administration Panel, where you can view and update installed applications, and purchase license keys for commercial applications at Parallels Online Store: **Tools & Utilities** > **Application Vault**.

For instructions on installing applications and license keys, refer to the Customer's Guide, section Installing Applications.

Domains management

Lets the subscriber add domains, create websites and set up web forwarding.

Subdomains management

Lets the subscriber set up additional websites accessible by *<subdomain>.<domain>* addresses.

Domain aliases management

Lets the subscriber set up additional alternative domain names for their websites.

Additional FTP accounts management

Lets the subscriber manage FTP accounts for accessing the subscription's files and folders.

Java applications management

Lets the subscriber install Java applications on their websites.

Mailing lists management

Lets the subscriber use mailing lists provided by the GNU Mailman software.

Note: If this permission is granted, then the **Enable mailing lists** parameter (on page 689) is not synced.

Hosting performance settings management

Allows the subscriber to adjust performance PHP settings individually for each website (subdomain) in their subscription. In addition, lets the subscriber set up the limits on bandwidth usage and number of connections to their websites.

Note: If this permission is granted, then the following settings are not synced: PHP performance settings, **performance** settings (on page 690) for bandwidth usage and the number of connections.

IIS application pool management (Windows hosting)

Provides the subscriber with a dedicated IIS application pool and the means to manage it: enable or disable it, and set up the maximum amount of CPU power that the pool may use.

Note: If this permission is granted, then the **Logs & Statistics** parameter (on page 691) called **Use dedicated pool** is not synced.

Additional write/modify permissions management (Windows hosting)

Lets the subscriber toggle such a hosting parameter as **Additional write/modify permissions**. These permissions are required if a subscriber's web applications use a file-based database (like Jet) located in the root of `httpdocs` folder. Please note that selecting this option might seriously compromise the websites' security.

Note: If this permission is granted, then the mentioned hosting parameter is not synced.

Shared SSL management (Windows hosting)

Provides the shared SSL service, and lets the subscriber set up shared SSL links for their websites within the subscription.

Hard disk quota assignment

Lets the subscriber set up such hosting parameter as **Hard disk quota**.

Note: If this permission is granted, then the mentioned hosting parameter is not synced.

Database server selection

Lets the subscriber select a database server of each type for creating their databases, as opposed to always using the default database server.

Access to advanced operations: Website Copying and Website Maintenance Mode

Specifies whether the website copying and maintenance mode are available to the subscriber in the **Control Panel > Websites & Domains > Show Advanced Operations**. If denied, the **Website Copying** and **Website Maintenance Mode** links are not available to the subscriber.

Password-protected directories management

Specifies whether the protected directories feature is available to the subscriber in the **Control Panel > Websites & Domains > Show Advanced Operations**. If denied, the **Password-protected directories** link is not available to the subscriber.

Ability to manage auxiliary user accounts

Specifies whether the subscriber can manage auxiliary user accounts on the **Control Panel > Users** tab. If denied, the **Users** tab is not available to the subscriber.

Allow activating APS apps using license keys from the Panel license pool

If granted, users will be able to install certain APS apps without the need to purchase app licenses from vendors. In this case, app license keys will be taken from the Panel license pool. Note that you cannot limit the number of app installations a user is allowed to perform. This permission is relevant only if your Panel license comes in a bundle with APS app licenses. Learn more about license bundles (on page 254).

Hosting Parameters

These parameters define the hosting service provided with the plan. The parameters can be found in **Service Plans** > select a plan > **Hosting Parameters** tab.

Note: Unless specifically noted, the parameters are not synced if the **Hosting management** permission is selected.

Enable hosting

Defines if the hosting service is actually provided with the plan.

Clear this option to make up a service plan that provides only mail service. Subscribers of such a plan will be able to have 'domains without hosting' which will serve mailboxes.

Hard disk quota

Hard quota imposed on disk space in addition to the soft quota (set with the option **Notify upon reaching** (on page 679)). Hard disk quota will not allow writing more files to the web space when the limit is reached: users will get an "Out of disk space" error at an attempt to write files.

Note: (Linux/Unix hosting) Confirm that your operating system supports hard disk quota before you set any value other than **Unlimited**. In case you define a hard quota when it is not supported, you will get a synchronization conflict on all the plan's subscriptions.

SSL support

Allows setting up SSL encryption on websites hosted within the subscription.

Web statistics

Selects a statistics engine that will create reports on how the subscription's websites are visited: how many people visited a site, and which web pages they viewed.

The **accessible via password protected directory /plesk-stat/webstat** option allows a subscriber view website statistics at URLs like https://example.com/plesk-stat/webstat using their system user account login and password.

Note: This parameter is not synced if the **Web statistics management** permission is selected.

Custom error documents

Allows subscribers to design and use their own error pages that the web server returns with HTTP error codes.

SSH access to server shell under the subscription's system user (Linux/Unix hosting)

Allows subscribers to upload securely web content to the server through SSH.

Note: This parameter is not synced if the **Management of access to server over SSH** permission is selected.

Scripting

Support for programming and scripting languages that should be interpreted, executed or otherwise processed by a web server: Microsoft ASP.NET framework, PHP hypertext preprocessor (PHP), Common Gateway Interface (CGI), Perl, Python, Fast Common Gateway Interface (FastCGI), Microsoft or Apache Active Server Pages (ASP), Server Side Includes (SSI), ColdFusion, and Miva scripting required for running Miva e-commerce solutions.

To learn more about adjustable PHP settings, see the section **PHP Settings** (on page 689).

Additional write/modify permissions (Windows hosting)

This option is required if subscriber's web applications use a file-based database (like Jet) located in the root of `httpdocs` folder. Please note that selecting this option might seriously compromise the Web site security.

Allow web users to use scripts

Allows scripting at web pages available at URLs like http://example.com/~<username>/<webpage>, where *<username>* refers to a web user.

Web users are individuals who do not need their own domain names. This service is popular with educational institutions that host non-commercial personal pages of their students and staff.

FrontPage support (Windows hosting). The options in the **FrontPage support** group allow subscribers to connect to the server and create websites with Microsoft Frontpage.

PHP Settings

You can adjust the following PHP settings on the **Service Plans** > select a plan > **Hosting Parameters** tab:

- **PHP handler type**.
  Learn how to choose the PHP handler that suits you best in the section **Select PHP Handler** (on page 216).

- **PHP version** (only on Windows).

Since Panel 10.4, you have the ability to adjust PHP configuration individually for each hosting plan or subscription. For this purpose, Panel exposes a number of PHP configuration settings on the **PHP Settings** tab. To learn more about custom per-subscription PHP configuration, refer to the section **Customize PHP Configuration** (on page 217).

Mail

These parameters (located at **Service Plans** > select a plan > **Mail** tab) define the mail service provided with the plan.

Webmail

Provides the webmail service, which allows users of mailboxes within the subscription to work with their mail using a web-based mail application.

Enable mailing lists

Turns on the mailing lists service provided by the GNU Mailman software on the subscription's websites.

Note: This parameter is not synced if the permission **Mailing lists management** is selected.

Policy on mail for non-existent users

Defines how mail server should treat e-mail messages sent to e-mail addresses that are supposed to be registered under the subscription's domains but actually do not exist. The following options are available:

- **Bounce with message** returns the mail back to sender with a notice.
- **Forward to address** forwards the mail to another e-mail address.
- **Reject** silently rejects the mail without accepting it. This setting can decrease mail server load caused by a large amount of spam, which is often directed at randomly generated user names. However, this might be useful to spammers because scanning your mail server for valid e-mail addresses will speed up in such a case.
- **Redirect to external mail server with IP address** (on Windows hosting), forwards the mail to the specified mail server.

DNS

These parameters (located at **Service Plans** > select a plan > **DNS** tab) define how the DNS service running on the Panel-managed server will serve DNS zones for websites hosted on the plan.

Master

A master or primary name server stores locally the zone file it serves, while a secondary server only retrieves a copy of this file from the primary.

Slave

A slave or secondary server retrieves a copy of the zone file from the primary name server.

Performance

These system parameters (located at **Service Plans** > select a plan > **Performance** tab) define performance of all services provided with the plan.

Use dedicated IIS application pool (Windows hosting)

Enables the use of dedicated IIS application pool for web applications within the subscription. Using dedicated IIS application pool dramatically improves the stability of web applications due to worker process isolation mode. This mode gives each site hosted on the server a possibility to allocate a separate process pool for execution of its web applications. This way, malfunction in one application will not cause stopping of all the others. This is especially useful when you are using shared hosting package. The **Maximum CPU use (%)** option limits the amount of the server CPU that the pool can use.

Maximum bandwidth usage

Defines the maximum speed (measured in KB per second) that a domain can share between all its connections.

Connections limited to

Defines the maximum number of simultaneous connections to web server for all websites within the subscription. This setting is intended for preventing the websites from Denial of Service (DOS) attacks and excessive usage of bandwidth.

Logs & Statistics

These parameters (located at **Service Plans** > select a plan > **Logs & Statistics** tab) define how statistics and logs of the subscription should be stored.

Retain web and traffic statistics

Sets a period (in months) for which reports on the subscription's web statistics (generated by selected web statistics component) and traffic statistics (generated by the Panel) should be available.

Log rotation

Enables automatic cleanup and recycling of web server log files. You can also switch on compression of processed log files and sending them to a specific e-mail address.

Applications

Depending on your service plan, a number of prepackaged applications may be available to you from the Panel. You can install them on your own sites and provision them to your customers.

When setting up a hosting plan, you can select which of the apps should be provisioned to the customers:

- To provide all available applications, on the **Permissions** tab, select the option **Access to Application Catalog**.
- To provide only selected applications, on the **Permissions** tab, select the option **Access to Application Catalog**, and then go to the **Applications** tab and select the option **Provide only applications that I select**. Use the button **>>** to add the selected applications to the plan.

Additional Services

If your provider configured the Panel to provide custom additional services, then the **Additional Services** tab is shown in hosting plan properties. On this tab, you can select the services that you want to provide to subscribers.

Appendix B: Properties of Reseller Plans and Subscriptions

Properties of a reseller plan are grouped as follows:

- **Resources**

  Includes policy on overusing and overselling of resources, the number of customer accounts a reseller can create, system resources like disk space and traffic, and service resources like websites, subdomains, mailboxes, databases, and so on.

- **Permissions**

  Reseller permissions either denote the operations available to a reseller in the Panel, or define which services and privileges can be enabled in the service subscriptions of the reseller's customers. If a particular permission in a reseller subscription is Off, then a service subscription will not provide the corresponding service or a privilege. A disabled permission also means that a reseller is prohibited to perform the designated action in Control Panel. For example, if a reseller subscription does not provide a privilege to use Scheduler (**Scheduler management** is **Off**), then none of the reseller's subscribers will be able to use it, and neither will the reseller themselves when they go to the Control Panel.

- **IP addresses**

  Defines IP addresses that will be allocated to resellers. It is important that a reseller has at least one IP address allocated to them, otherwise, they will not be able to create a single service subscription.

In this section:

Resources

Overuse policy

Defines what happens to the reseller subscription if the total disk space and traffic usage by the reseller's service subscriptions (own reseller's service subscriptions and those belonging to the reseller's customers) reaches the limit values defined by the reseller plan.

▪ **Overuse is not allowed** will suspend the reseller subscription and all their customers only if you select the checkbox **Suspend reseller when their disk space or traffic usage goes beyond the limit**. If you do not select it, reseller subscriptions and their customers will not be suspended; only a notice will be sent to recipients specified in **Settings** > **Notifications**: **Resource usage limits exceeded by reseller account** option.

   You can also set up sending notifications as soon as usage of disk space or traffic reaches a particular value (the **Notify upon reaching** options), in order to prevent subscriptions from suspension. The notifications will be sent to users and/or e-mail addresses specified at **Settings** > **Notifications**: **Resource usage limits exceeded by reseller account** option.

▪ **Overuse is allowed** will let the subscription operate properly.

   The option **When limit on usage of a resource is reached, send email according to server notification settings** triggers sending notifications to users and/or e-mail addresses specified at **Settings** > **Notifications**: **Resource usage limits exceeded by reseller account** option.

Note: The overuse policy does not apply to the limits set on size of mailboxes. Therefore, even if you enable overuse, be sure to allocate enough disk space to mailboxes.

Overselling policy

Defines whether a reseller can sell more resources than allocated to them with the plan.

If overselling is allowed, a reseller is governed by actual resource usage instead of initial resource allocation. Overselling is a marketing strategy based on the following scheme: a reseller, who was allotted, for example, ten gigabytes of disk space, allocates five gigabytes of disk space for each of their customers, assuming that none of them will actually use all of their allocated disk space.

Customers

Defines the total number of customer accounts that a reseller can create.

Other Resources

Note: Other resources have the same meaning as the ones defined in the hosting plans and subscriptions. The only difference is that a reseller does not use the provided resources directly, but redistributes them by means of service subscriptions they create for their customers or for hosting their own websites.

Permissions

Reseller-specific privileges (the ones that do not affect service subscriptions they create for their customers) are as follows:

Ability to use remote API

Defines if a reseller can remotely manage websites through custom applications. The remote API is an interface that can be used for developing custom applications integrated with websites, which could be used, for instance, for automating setup of hosting accounts and provisioning of services for customers purchasing hosting services from your site. To learn more, refer to the Parallels Plesk Panel API documentation available at the PTN portal (http://www.parallels.com/ptn/documentation/ppp/).

Access to the Panel

Defines if a reseller can use the Panel graphical user interface.

Customer account creation

Defines if a reseller can create user accounts and subscriptions for their customers in the Panel.

Allow overselling

Defines if a reseller can set up overselling policy, meaning that a reseller can themselves define if overselling is allowed to them or not.

Other Permissions

Note: Meanings of the other permissions are the same as in the service subscriptions.

IP Addresses

These parameters define IP resources provided with the plan.

Allocate shared IP addresses

Defines shared IP addresses that will be available to a reseller.

Allocate dedicated IPv4 addresses and **Allocate dedicated IPv6 addresses**

Defines that a specified number of dedicated IP addresses of the corresponding type should be allocated to a reseller. The IPs are provisioned automatically: the required amount is taken from the number of free dedicated IP addresses in your IP pool.

Appendix C: Event Parameters Passed by Event Handlers

This section describes the parameters that can be used with handlers that you set up for specific Panel events.

> **Important:** All variables used for passing the parameters on Linux systems must be typed in upper case (for example, `NEW_USERNAME`), and on Windows systems, in lower case (for example, `new_username`).

In this section:

Administrator information updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	Required
Company name	OLD_COMPANY_NAME	NEW_COMPANY_NAME	
Phone number	OLD_PHONE	NEW_PHONE	
Fax	OLD_FAX	NEW_FAX	
E- mail	OLD_EMAIL	NEW_EMAIL	
Address	OLD_ADDRESS	NEW_ADDRESS	
CIty	OLD_CITY	NEW_CITY	
State/Province	OLD_STATE_PROVINCE	NEW_STATE_PROVINCE	
Postal/Zip code	OLD_POSTAL_ZIP_CODE	NEW_POSTAL_ZIP_CODE	
Country	OLD_COUNTRY	NEW_COUNTRY	

Service stopped

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Service name	OLD_SERVICE	NEW_SERVICE	Required

Service started

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Service name	OLD_SERVICE	NEW_SERVICE	Required

Service restarted

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Service name	OLD_SERVICE	NEW_SERVICE	Required

IP address created

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
IP address	OLD_IP_ADDRESS	NEW_IP_ADDRESS	Required
IP mask	OLD_IP_MASK	NEW_IP_MASK	
Interface	OLD_INTERFACE	NEW_INTERFACE	
IP type (shared or dedicated)	OLD_IP_TYPE	NEW_IP_TYPE	

IP address updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
IP address	OLD_IP_ADDRESS	NEW_IP_ADDRESS	Required
IP mask	OLD_IP_MASK	NEW_IP_MASK	
Interface	OLD_INTERFACE	NEW_INTERFACE	
IP type (shared or dedicated)	OLD_IP_TYPE	NEW_IP_TYPE	

IP address deleted

Parameter name and description	Environment variable name	Notes
IP address	OLD_IP_ADDRESS	Required

Session settings updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Allowed period of inactivity for all Parallels Plesk Panel users	OLD_SESSION_IDLE_TIME	NEW_SESSION_IDLE_TIME	

Customer account created

Parameter name and description	Environment variable name	Notes
Login name	NEW_LOGIN_NAME	Required
Password	NEW_PASSWORD	
Contact name	NEW_CONTACT_NAME	Required
Company name	NEW_COMPANY_NAME	
Phone	NEW_PHONE	
Fax	NEW_FAX	
E- mail	NEW_EMAIL	
Address	NEW_ADDRESS	
City	NEW_CITY	
State/province	NEW_STATE_PROVINCE	
Postal/zip code	NEW_POSTAL_ZIP_CODE	
Country	NEW_COUNTRY	

Customer account updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Password	OLD_PASSWORD	NEW_PASSWORD	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	Required
Company name	OLD_COMPANY_NAME	NEW_COMPANY_NAME	
Phone	OLD_PHONE	NEW_PHONE	
Fax	OLD_FAX	NEW_FAX	
E- mail	OLD_EMAIL	NEW_EMAIL	
Address	OLD_ADDRESS	NEW_ADDRESS	
City	OLD_CITY	NEW_CITY	
State/province	OLD_STATE_PROVINCE	NEW_STATE_PROVINCE	
Postal/zip code	OLD_POSTAL_ZIP_COD E	NEW_POSTAL_ZIP_COD E	
Country	OLD_COUNTRY	NEW_COUNTRY	

Customer account deleted

Parameter name and description	Environment variable name	Notes
Login name	OLD_LOGIN_NAME	Required

Customer account status updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	Required

Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Status	OLD_STATUS	NEW_STATUS	

Customer's interface preferences updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	Required
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Page size	OLD_LINES_PER_PAGE	NEW_LINES_PER_PAGE	
Interface skin	OLD_INTERFACE_SKIN	NEW_INTERFACE_SKIN	

Customer GUID updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Customer type	OLD_CLIENT_TYPE	NEW_CLIENT_TYPE	
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
GUID	OLD_GUID	NEW_GUID	

Reseller account created

Parameter name and description	Environment variable name	Notes
Login name	NEW_LOGIN_NAME	Required
Contact name	NEW_CONTACT_NAME	Required
Password	NEW_PASSWORD	
Company name	NEW_COMPANY_NAME	
Phone	NEW_PHONE	

Fax	NEW_FAX	
E- mail	NEW_EMAIL	
Address	NEW_ADDRESS	
City	NEW_CITY	
State/province	NEW_STATE_PROVINCE	
Postal/zip code	NEW_POSTAL_ZIP_CODE	
Country	NEW_COUNTRY	

Reseller account updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	
Password	OLD_PASSWORD	NEW_PASSWORD	
Company name	OLD_COMPANY_NAME	NEW_COMPANY_NAME	
Phone	OLD_PHONE	NEW_PHONE	
Fax	OLD_FAX	NEW_FAX	
E- mail	OLD_EMAIL	NEW_EMAIL	
Address	OLD_ADDRESS	NEW_ADDRESS	
City	OLD_CITY	NEW_CITY	
State/province	OLD_STATE_PROVINCE	NEW_STATE_PROVINCE	
Postal/zip code	OLD_POSTAL_ZIP_CODE	NEW_POSTAL_ZIP_CODE	
Country	OLD_COUNTRY	NEW_COUNTRY	

Reseller account deleted

Parameter name and description	Environment variable name	Notes
Login name	OLD_LOGIN_NAME	Required

Reseller account status updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	Required
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Status	OLD_STATUS	NEW_STATUS	

Reseller's interface preferences updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	Required
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Ability to log in to the account from multiple computers (or browsers) at once.	OLD_ALLOW_MULTIPLE_SESSIONS	NEW_ALLOW_MULTIPLE_SESSIONS	
Interface language	OLD_INTERFACE_LANGUAGE	NEW_INTERFACE_LANGUAGE	
Interface skin	OLD_INTERFACE_SKIN	NEW_INTERFACE_SKIN	

Reseller's IP pool updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
IP address	OLD_IP_ADDRESS	NEW_IP_ADDRESS	Required
Status	OLD_STATUS	NEW_STATUS	

Disk space limit for reseller account reached

Parameter name and description	Environment variable name	Notes
Contact name	OLD_CONTACT_NAME	Required
Disk space limit	OLD_MAXIMUM_DISK_SPACE	

Traffic limit for reseller account reached

Parameter name and description	Environment variable name	Notes
Contact name	OLD_CONTACT_NAME	Required
Traffic usage limit	OLD_MAXIMUM_TRAFFIC	

Disk space limit for subscription reached

Parameter name and description	Environment variable name	Notes
Subscription's domain name	OLD_DOMAIN_NAME	Required
Disk space limit	OLD_MAXIMUM_DISK_SPACE	

Traffic limit for subscription reached

Parameter name and description	Environment variable name	Notes
Subscription's domain name	OLD_DOMAIN_NAME	Required
Traffic usage limit	OLD_MAXIMUM_TRAFFIC	

Default domain (the first domain added to a subscription/webspace) created

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required

Default domain (the first domain added to a subscription/webspace) updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required

Default domain (the first domain added to a subscription/webspace) deleted

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required

Subscription owner changed

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	

| Subscription's domain name | `OLD_DOMAIN_NAME` | `NEW_DOMAIN_NAME` | |
| Owner's login name | `OLD_LOGIN_NAME` | `NEW_LOGIN_NAME` | |

Default domain, status updated

This event cannot be tracked for the main site of a subscription. It can only be tracked for additional websites.

| Parameter name and description | Environment variable name | | Notes |
	Previously used value	New value	
Website's domain name	`OLD_DOMAIN_NAME`	`NEW_DOMAIN_NAME`	Required
Website status	`OLD_STATUS`	`NEW_STATUS`	

Default domain, DNS zone updated

| Parameter name and description | Environment variable name | | Notes |
	Previously used value	New value	
Domain name	`OLD_DOMAIN_NAME`	`NEW_DOMAIN_NAME`	Required

Default domain, GUID updated

| Parameter name and description | Environment variable name | | Notes |
	Previously used value	New value	
Domain name	`OLD_DOMAIN_NAME`	`NEW_DOMAIN_NAME`	Required
Globally unique identifier (GUID)	`OLD_GUID`	`NEW_GUID`	Required

Subdomain created

Parameter name and description	Environment variable name	Notes
Subdomain name	NEW_SUBDOMAIN_NAME	Required
Parent domain name	NEW_DOMAIN_NAME	Required
FTP account login	NEW_SYSTEM_USER_TYPE	
Subdomain owner's login name	NEW_SYSTEM_USER	
Hard disk quota	NEW_HARD_DISK_QUOTA	
SSI support	NEW_SSI_SUPPORT	
PHP support	NEW_PHP_SUPPORT	
CGI support	NEW_CGI_SUPPORT	
Perl support	NEW_MOD_PERL_SUPPORT	
Python support	NEW_MOD_PYTHON_SUPPORT	
ColdFusion support	NEW_COLDFUSION_SUPPORT	
Apache ASP support	NEW_APACHE_ASP_SUPPORT	Only on Linux platforms.
ASP support	NEW_ASP_SUPPORT	Only on Windows platforms.
Hard quota on disk space	NEW_HARD_DISK_QUOTA	
Miva scripting support	NEW_MIVA_SUPPORT	
FastCGI support	NEW_MOD_FASTCGI_SUPPORT	
SSL support	NEW_SSL_SUPPORT	

Subdomain of a default domain updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Subdomain name	OLD_SUBDOMAIN_NAME	NEW_SUBDOMAIN_NAME	Required
Parent domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required

FTP account login	`OLD_SYSTEM_USER_TYPE`	`NEW_SYSTEM_USER_TYPE`	
Subdomain owner's login name	`OLD_SYSTEM_USER`	`NEW_SYSTEM_USER`	
Hard disk quota	`OLD_HARD_DISK_QUOTA`	`NEW_HARD_DISK_QUOTA`	
SSI support	`OLD_SSI_SUPPORT`	`NEW_SSI_SUPPORT`	
PHP support	`OLD_PHP_SUPPORT`	`NEW_PHP_SUPPORT`	
CGI support	`OLD_CGI_SUPPORT`	`NEW_CGI_SUPPORT`	
Perl support	`OLD_MOD_PERL_SUPPORT`	`NEW_MOD_PERL_SUPPORT`	
Python support	`OLD_MOD_PYTHON_SUPPORT`	`NEW_MOD_PYTHON_SUPPORT`	
ColdFusion support	`OLD_COLDFUSION_SUPPORT`	`NEW_COLDFUSION_SUPPORT`	
Apache ASP support	`OLD_APACHE_ASP_SUPPORT`	`NEW_APACHE_ASP_SUPPORT`	Only on Linux platforms.
ASP support	`OLD_ASP_SUPPORT`	`NEW_ASP_SUPPORT`	Only on Windows platforms.
Hard quota on disk space	`OLD_HARD_DISK_QUOTA`	`NEW_HARD_DISK_QUOTA`	
Miva scripting support	`OLD_MIVA_SUPPORT`	`NEW_MIVA_SUPPORT`	
FastCGI support	`OLD_MOD_FASTCGI_SUPPORT`	`NEW_MOD_FASTCGI_SUPPORT`	
SSL support	`OLD_SSL_SUPPORT`	`NEW_SSL_SUPPORT`	

Subdomain of a default domain deleted

Parameter name and description	Environment variable name	Notes
Parent domain name	`OLD_DOMAIN_NAME`	Required
Subdomain name	`OLD_SUBDOMAIN_NAME`	Required

Default domain, alias created

Parameter name and description	Environment variable name	Notes
Domain alias name	NEW_DOMAIN_ALIAS_NAME	Required
Synchronization of DNS zone with a primary domain	NEW_DNS	
Domain alias switched on or off	NEW_STATUS	
Web service for domain alias is on or off	NEW_DOMAIN_ALIAS_WEB	
Mail service for domain alias is on or off	NEW_DOMAIN_ALIAS_MAIL	
Support for accessing web applications in Java for domain alias visitors (on or off)	NEW_DOMAIN_ALIAS_TOMCAT	

Default domain, alias updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain alias name	OLD_DOMAIN_ALIAS_NAME	NEW_DOMAIN_ALIAS_NAME	Required
Synchronization of DNS zone with a primary domain	OLD_DNS	NEW_DNS	
Domain alias switched on or off	OLD_STATUS	NEW_STATUS	
Web service for domain alias is on or off	OLD_DOMAIN_ALIAS_WEB	NEW_DOMAIN_ALIAS_WEB	
Mail service for domain alias is on or off	OLD_DOMAIN_ALIAS_MAIL	NEW_DOMAIN_ALIAS_MAIL	

| Support for accessing web applications in Java for domain alias visitors (on or off) | OLD_DOMAIN_ALIAS_TOMCAT | NEW_DOMAIN_ALIAS_TOMCAT | |

Default domain, alias deleted

Parameter name and description	Environment variable name	Notes
Domain alias name	OLD_DOMAIN_ALIAS_NAME	Required
Domain ID number	OLD_DOMAIN_ID	

Default domain, alias DNS zone updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain alias name	OLD_DOMAIN_ALIAS_NAME	NEW_DOMAIN_ALIAS_NAME	Required

Reseller account limits updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	
Login name	OLD_LOGIN_NAME	NEW_LOGIN_NAME	Required
Maximum number of domains	OLD_MAXIMUM_DOMAINS	NEW_MAXIMUM_DOMAINS	
Maximum amount of disk space	OLD_MAXIMUM_DISK_SPACE	NEW_MAXIMUM_DISK_SPACE	
Maximum amount of traffic	OLD_MAXIMUM_TRAFFIC	NEW_MAXIMUM_TRAFFIC	

Maximum number of Web users	OLD_MAXIMUM_WEBU SERS	NEW_MAXIMUM_WEBUSER S	
Maximum number of databases	OLD_MAXIMUM_DATA BASES	NEW_MAXIMUM_DATABAS ES	
Maximum number of mailboxes	OLD_MAXIMUM_MAIL BOXES	NEW_MAXIMUM_MAILBOX ES	
Mailbox quota	OLD_MAXIMUM_MAIL BOX_QUOTA	NEW_MAXIMUM_MAILBOX _QUOTA	
Maximum number of mailing lists	OLD_MAXIMUM_MAIL _LISTS	NEW_MAXIMUM_MAIL_LI STS	
Maximum number of Java applications	OLD_MAXIMUM_TOMC AT_WEB_APPLICATI ONS	NEW_MAXIMUM_TOMCAT_ WEB_APPLICATIONS	
Account expiration date	OLD_EXPIRATION_D ATE	NEW_EXPIRATION_DATE	

Subscription limits updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required
Maximum amount of disk space	OLD_MAXIMUM_DISK_ SPACE	NEW_MAXIMUM_DISK_S PACE	
Maximum amount of traffic	OLD_MAXIMUM_TRAFF IC	NEW_MAXIMUM_TRAFFI C	
Maximum number of web users	OLD_MAXIMUM_WEBUS ERS	NEW_MAXIMUM_WEBUSE RS	
Maximum number of databases	OLD_MAXIMUM_DATAB ASES	NEW_MAXIMUM_DATABA SES	
Maximum number of mailboxes	OLD_MAXIMUM_MAILB OXES	NEW_MAXIMUM_MAILBO XES	
Mailbox quota	OLD_MAXIMUM_MAILB OX_QUOTA	NEW_MAXIMUM_MAILBO X_QUOTA	
Maximum number of mailing lists	OLD_MAXIMUM_MAIL_ LISTS	NEW_MAXIMUM_MAIL_L ISTS	
Maximum number of java applications	OLD_MAXIMUM_TOMCA T_WEB_APPLICATION S	NEW_MAXIMUM_TOMCAT _WEB_APPLICATIONS	
Expiration date	OLD_EXPIRATION_DA TE	NEW_EXPIRATION_DAT E	

Panel user logged in

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	

Panel user logged out

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Contact name	OLD_CONTACT_NAME	NEW_CONTACT_NAME	

Panel user failed to log in

Parameter name and description	Environment variable name	Notes
User name	COMP_LOGIN_NAME	

Panel user failed to log in through API

Parameter name and description	Environment variable name	Notes
User name	COMP_LOGIN_NAME	

Mail account created

Parameter name and description	Environment variable name	Notes
E-mail address	NEW_MAILNAME	Required (in the format address@example.com)

Mail account updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
E-mail address	OLD_MAILNAME	NEW_MAILNAME	Required (in the format address@example.com)
Mailbox	OLD_MAILBOX	NEW_MAILBOX	
Password	OLD_PASSWORD	NEW_PASSWORD	
Mailbox quota	OLD_MAILBOX_QUOTA	NEW_MAILBOX_QUOTA	
Autoresponders	OLD_AUTORESPONDERS	NEW_AUTORESPONDERS	

Mail account deleted

Parameter name and description	Environment variable name	Notes
E-mail address	OLD_MAILNAME	Required (in the format address@example.com)

Mailing list created

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required
Mailing list e-mail address	NEW_MAIL_LIST_NAME	Required
Mailing list switched on	NEW_MAIL_LIST_ENABLED	

Mailing list deleted

Parameter name and description	Environment variable name	Notes
Domain name	OLD_DOMAIN_NAME	Required
Mailing list e-mail address	OLD_MAIL_LIST_NAME	Required
Mailing list switched on	OLD_MAIL_LIST_ENABLED	

Hosting settings created

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required
IPv4 address	NEW_IP_ADDRESS	
IPv6 address	NEW_IPV6_ADDRESS	
IP type	NEW_IP_TYPE	
System user's login name	NEW_SYSTEM_USER	
System user's password	NEW_SYSTEM_USER_PASSWORD	
Access to the server over SSH (on Linux systems) or Remote Desktop (on Windows systems)	NEW_SYSTEM_SHELL	

MS FrontPage support	NEW_FP_SUPPORT	
MS FrontPage over SSL support	NEW_FPSSL_SUPPORT	
MS FrontPage authoring	NEW_FP_AUTHORING	
MS FrontPage admin login	NEW_FP_ADMIN_LOGIN	
MS FrontPage admin password	NEW_FP_ADMIN_PASSWORD	
SSI support	NEW_SSI_SUPPORT	
PHP support	NEW_PHP_SUPPORT	
CGI support	NEW_CGI_SUPPORT	
Perl support	NEW_MOD_PERL_SUPPORT	
Apache ASP support	NEW_APACHE_ASP_SUPPORT	Only on Linux systems
ASP support	NEW_ASP_SUPPORT	Only on Windows systems
SSL support	NEW_SSL_SUPPORT	
Web statistics program	NEW_WEB_STATISTICS	
Custom error documents	NEW_CUSTOM_ERROR_DOCUMENTS	
Hard quota on disk space	NEW_HARD_DISK_QUOTA	

Hosting settings updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required
IPv4 address	OLD_IP_ADDRESS	NEW_IP_ADDRESS	
IPv6 address	OLD_IPV6_ADDRESS	NEW_IPV6_ADDRESS	
IP type	OLD_IP_TYPE	NEW_IP_TYPE	
System user	OLD_SYSTEM_USER	NEW_SYSTEM_USER	
System user's password	OLD_SYSTEM_USER_PASSWORD	NEW_SYSTEM_USER_PASSWORD	

Access to the server over SSH (on Linux systems) or Remote Desktop (on Windows systems)	`OLD_SYSTEM_SHELL`	`NEW_SYSTEM_SHELL`	
FP support	`OLD_FP_SUPPORT`	`NEW_FP_SUPPORT`	
FP- SSL support	`OLD_FPSSL_SUPPORT`	`NEW_FPSSL_SUPPORT`	
FP authoring	`OLD_FP_AUTHORING`	`NEW_FP_AUTHORING`	
FP admin login	`OLD_FP_ADMIN_LOGIN`	`NEW_FP_ADMIN_LOGIN`	
FP admin password	`OLD_FP_ADMIN_PASSWORD`	`NEW_FP_ADMIN_PASSWORD`	
SSI support	`OLD_SSI_SUPPORT`	`NEW_SSI_SUPPORT`	
PHP support	`OLD_PHP_SUPPORT`	`NEW_PHP_SUPPORT`	
CGI support	`OLD_CGI_SUPPORT`	`NEW_CGI_SUPPORT`	
Perl support	`OLD_MOD_PERL_SUPPORT`	`NEW_MOD_PERL_SUPPORT`	
Apache ASP support	`OLD_APACHE_ASP_SUPPORT`	`NEW_APACHE_ASP_SUPPORT`	Only on Linux systems
ASP support	`OLD_ASP_SUPPORT`	`NEW_ASP_SUPPORT`	Only on Windows systems
SSL support	`OLD_SSL_SUPPORT`	`NEW_SSL_SUPPORT`	
Web statistics	`OLD_WEB_STATISTICS`	`NEW_WEB_STATISTICS`	
Custom error documents	`OLD_CUSTOM_ERROR_DOCUMENTS`	`NEW_CUSTOM_ERROR_DOCUMENTS`	
Hard disk quota	`OLD_HARD_DISK_QUOTA`	`NEW_HARD_DISK_QUOTA`	

Hosting settings deleted

Parameter name and description	Environment variable name	Notes
Domain name	`OLD_DOMAIN_NAME`	Required

Standard or frame forwarding hosting created

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required
IPv4 address	NEW_IP_ADDRESS	
IPv6 address	NEW_IPV6_ADDRESS	
Forwarding type	NEW_FORWARDING_TYPE	
URL	NEW_URL	

Standard or frame forwarding hosting updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required
IPv4 address	OLD_IP_ADDRESS	NEW_IP_ADDRESS	
IPv6 address	OLD_IPV6_ADDRESS	NEW_IPV6_ADDRESS	
Forwarding type	OLD_FORWARDING_TYPE	NEW_FORWARDING_TYPE	
URL	OLD_URL	NEW_URL	

Standard or frame forwarding hosting deleted

Parameter name and description	Environment variable name	Notes
Domain name	OLD_DOMAIN_NAME	Required

Forwarding type	OLD_FORWARDING_TYPE	

Web user account created

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required
Web user name	NEW_WEBUSER_NAME	Required
SSI support	NEW_SSI_SUPPORT	
PHP support	NEW_PHP_SUPPORT	
CGI support	NEW_CGI_SUPPORT	
Perl support	NEW_MOD_PERL_SUPPORT	
Python support	NEW_MOD_PYTHON_SUPPORT	
Apache ASP support	NEW_APACHE_ASP_SUPPORT	Only on Linux systems
ASP support	NEW_ASP_SUPPORT	Only on Windows systems
Hard disk quota	NEW_HARD_DISK_QUOTA	

Web user account updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required
Web user name	OLD_WEBUSER_NAME	NEW_WEBUSER_NAME	Required
SSI support	OLD_SSI_SUPPORT	NEW_SSI_SUPPORT	
PHP support	OLD_PHP_SUPPORT	NEW_PHP_SUPPORT	
CGI support	OLD_CGI_SUPPORT	NEW_CGI_SUPPORT	
Perl support	OLD_MOD_PERL_SUPPORT	NEW_MOD_PERL_SUPPORT	

Python support	`OLD_MOD_PYTHON_SUPPORT`	`NEW_MOD_PYTHON_SUPPORT`	
Apache ASP support	`OLD_APACHE_ASP_SUPPORT`	`NEW_APACHE_ASP_SUPPORT`	Only on Linux systems
ASP support	`OLD_ASP_SUPPORT`	`NEW_ASP_SUPPORT`	Only on Windows systems
Hard disk quota	`OLD_HARD_DISK_QUOTA`	`NEW_HARD_DISK_QUOTA`	

Web user account deleted

Parameter name and description	Environment variable name	Notes
Domain name	`OLD_DOMAIN_NAME`	Required
Web user name	`OLD_WEBUSER_NAME`	Required

Web application installed

Parameter name and description	Environment variable	Notes
Health monitor parameter (the same value for new and old)	`NEW_SITEAPP_NAME`	Required
Domain or subdomain	`NEW_SITEAPP_DOMAIN_TYPE`	Required
URL relative to the domain/subdomain, by which the application is accessible on the Web	`NEW_SITEAPP_INSTALL_PREFIX`	Required

Web application reconfigured

Parameter name and description	Environment variable		Notes
	Previously used value	**New value**	
Health monitor parameter (the same value for new and old)	`OLD_SITEAPP_NAME`	`NEW_SITEAPP_NAME`	Required
Domain or subdomain	`OLD_SITEAPP_DOMAIN_T YPE`	`NEW_SITEAPP_DOMAIN_T YPE`	Required
URL relative to the domain/subdomain, by which the application is accessible on the Web	`OLD_SITEAPP_INSTALL_ PREFIX`	`NEW_SITEAPP_INSTALL_ PERFIX`	Required

Web application uninstalled

Parameter name and description	Environment variable	Notes
Health monitor parameter (the same value for new and old)	`OLD_SITEAPP_NAME`	Required
Domain or subdomain	`OLD_SITEAPP_DOMAIN_TYPE`	Required
URL relative to the domain/subdomain, by which the application is accessible on the Web	`OLD_SITEAPP_INSTALL_PREFIX`	Required

Web application upgraded

Parameter name and description	Environment variable		Notes
	Previously used value	**New value**	

Health monitor parameter (the same value for new and old)	OLD_SITEAPP_NAME	NEW_SITEAPP_NAME	Required
Domain or subdomain	OLD_SITEAPP_DOMAIN_T YPE	NEW_SITEAPP_DOMAIN_T YPE	Required
URL relative to the domain/subdomain, by which the application is accessible on the Web	OLD_SITEAPP_INSTALL_ PREFIX	NEW_SITEAPP_INSTALL_ PERFIX	Required

License key updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
License key number	OLD_LICENSE	NEW_LICENSE	Required
License key type (Parallels Plesk Panel, additional)	OLD_LICENSE_TYPE	NEW_LICENSE_TYPE	
License key name (for additional keys)	OLD_LICENSE_NAME	NEW_LICENSE_NAME	

License key expired

Parameter name and description	Environment variable name	Notes
License key number	OLD_LICENSE	Required

Database server created

Parameter name and description	Environment variable name	Notes
Database server's IP address	NEW_DATABASE_SERVER	Required

Database server updated

Parameter name and description	Environment variable name		Notes
	Previously used value	**New value**	
Database server's IP address	`OLD_DATABASE_SERVER`	`NEW_DATABASE_SERVER`	Required

Database server deleted

Parameter name and description	Environment variable name	Notes
Database server's IP address	`OLD_DATABASE_SERVER`	Required

Database created

Parameter name and description	Environment variable name	Notes
Database server's IP address	`NEW_DATABASE_SERVER`	Required
Database name	`NEW_DATABASE_NAME`	Required

Database deleted

Parameter name and description	Environment variable name	Notes
Database server's IP address	`OLD_DATABASE_SERVER`	Required
Database name	`OLD_DATABASE_NAME`	Required

Database user account created

Parameter name and description	Environment variable name	Notes
Database server's IP address	NEW_DATABASE_SERVER	Required
Database identification number	NEW_DATABASE_ID	Required
Database user name	NEW_DATABASE_USER_NAME	Required
Database user password	NEW_DATABASE_USER_PASSWORD	

Database user account updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Database server's IP address	OLD_DATABASE_SERVER	NEW_DATABASE_SERVER	Required
Database identification number	OLD_DATABASE_ID	NEW_DATABASE_ID	Required
Database user name	OLD_DATABASE_USER_NAME	NEW_DATABASE_USER_NAME	Required
Database user password	OLD_DATABASE_USER_PASSWORD	NEW_DATABASE_USER_PASSWORD	

Database user account deleted

Parameter name and description	Environment variable name	Notes
Database server's IP address	OLD_DATABASE_SERVER	Required
Database identification number	OLD_DATABASE_ID	Required

Database user name	OLD_DATABASE_USER_NAME	Required
Database user password	OLD_DATABASE_USER_PASSWORD	

Parallels Plesk Panel component updated or added

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Parallels Plesk Panel component name	OLD_PLESK_COMPONE NT_NAME	NEW_PLESK_COMPONENT_N AME	Required

Reseller plan created

Parameter name and description	Environment variable name	Notes
Reseller plan ID	NEW_TEMPLATE_ID	Required

Reseller plan updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Reseller plan ID	OLD_TEMPLATE_ID	NEW_TEMPLATE_ID	Required

Reseller plan deleted

Parameter name and description	Environment variable name	Notes
Reseller plan ID	`OLD_TEMPLATE_ID`	Required

Service plan of reseller created

Parameter name and description	Environment variable name	Notes
Plan ID	`NEW_DOMAIN_TEMPLATE`	Required

Service plan of reseller updated

Parameter name and description	Environment variable name	Notes
Plan ID	`OLD_DOMAIN_TEMPLATE`	Required

Service plan of reseller deleted

Parameter name and description	Environment variable name	Notes
Plan ID	`OLD_DOMAIN_TEMPLATE`	Required

Service plan of administrator created

Parameter name and description	Environment variable name	Notes
Plan ID	`NEW_ADMIN_TEMPLATE`	Required

Service plan of administrator updated

Parameter name and description	Environment variable name	Notes
Plan ID	OLD_ADMIN_TEMPLATE	Required

Service plan of administrator deleted

Parameter name and description	Environment variable name	Notes
Plan ID	OLD_ADMIN_TEMPLATE	Required

FTP account created

Parameter name and description	Environment variable name	Notes
Domain name	NEW_DOMAIN_NAME	Required
Home directory	NEW_HOME_DIRECTORY	Required
System user name	NEW_SYSTEM_USER	
System user password	NEW_SYSTEM_USER_PASSWORD	

FTP account updated

Parameter name and description	Environment variable name		Notes
	Previously used value	New value	
Domain name	OLD_DOMAIN_NAME	NEW_DOMAIN_NAME	Required
Home directory	OLD_HOME_DIRECTORY	NEW_HOME_DIRECTORY	Required

System user name	`OLD_SYSTEM_USER`	`NEW_SYSTEM_USER`	Required
System user password	`OLD_SYSTEM_USER_PAS SWORD`	`NEW_SYSTEM_USER_PASSW ORD`	

FTP account deleted

Parameter name and description	Environment variable name	Notes
Domain name	`OLD_DOMAIN_NAME`	Required
Home directory	`OLD_HOME_DIRECTORY`	Required
System user name	`OLD_SYSTEM_USER`	
System user password	`OLD_SYSTEM_USER_PASSWORD`	

Server health status changed

Parameter name and description	Environment variable		Notes
	Previously used value	**New value**	
Health monitor parameter (the same value for new and old)	`OLD_HEALTH_PARAMETER`	`NEW_HEALTH_PARAMETER`	Required
Parameter status	`OLD_STATUS`	`NEW_STATUS`	Required

Update available

Parameter name and description	Environment variable name	Notes
Update version	COMP_PATCH_VERSION	

Update installed

Parameter name and description	Environment variable name	Notes
Update version	COMP_PATCH_VERSION	

Appendix D: Supported Payment Gateways

Business Manager supports the following payment gateways:

On-site payment gateways

- Authorize.Net
- BluePay
- ECHO
- eWAY
- InternetSecure
- First Data Global Gateway (former LinkPoint)
- Moneris
- Payflow Pro
- Sage Pay
- PSiGate
- QuantumGateway
- Velocity Pay
- Banca Sella Direct
- Wirecard
- BBVA

Off-site payment gateways

- PayPal
- WorldPay
- ASSIST
- ATOS

Nordea Also, the following payment gateways are supported but unstable:

On-site payment gateways

- CyoGate
- EchoInc
- eProgressingNetwork
- Merchant Commerce and Payment Services (MCPS)

- Merchant Partners
- PagoPorInternet
- Planet Payment
- QuickCommerce
- RTware
- SagePayments
- SecurePay AU
- SecurePay US
- USA ePay

Off-site payment gateways

- 2CO (credit cards)
- 2CO (recurring)
- MultiBanco

Appendix E: Supported Formats for Bank Transfer Batches

Business Manager supports the following batch file formats:

- DTAUS. This format is supported by German banks.
- Norma19. This format is supported by Spahish banks.
- Clieop3. This format is supported by Netherlandic banks.

Appendix F: How Business Manager Syncs with Hosting Panels

The following table lists operations that cause Business Manager to send updates to a corresponding hosting panel.

	Service Plan	Service Plan Add-on	Subscription	Primary or Additional Contact
Update name or properties	v	v		
Personal information				v
Upgrade			v	
Downgrade			v	
Add/remove add-on			v	
Delete			v	v

Appendix G: Supported Domain Name Registrars

Business Manager supports integration with the following domain name registrars:

- eNom
- Register.com
- OpenSRS
- DistributeIT
- Nominet
- Namecheap
- EuroDNS
- Dotster
- RRPproxy
- ResellOne
- Openprovider
- Wild West Domains / GoDaddy