
Parallels

Parallels Business Automation Standard

Provider's guide

Release 4.5



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CHAPTER 1

Preface

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About This Guide

This Guide describes the most important and frequently-used Parallels Business Automation - Standard working scenarios including initial settings for the system.

Note: The PDF-version of this Guide is an overview of the Parallels Business Automation - Standard overall functionality and is not to be used as a thorough howto. For details see context-sensitive HTML help (the **Help** link at the upper right corner of every screen).

Audience

This guide is addressed to Hosting Service Providers and helps both to evaluate the product and get acquainted with Parallels Business Automation - Standard.

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.

<i>Italics</i>	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 <i>wildcard character</i> search.
Monospace	The names of commands, files, directories, and domain names.	The license file is located in the <code>http://docs/common/licenses</code> directory.
Preformatted	On-screen computer output in your command-line sessions; source code in XML, C++, or other programming languages.	<pre># ls -al /files total 14470</pre>
Preformatted Bold	What you type, contrasted with on-screen computer output.	<pre># cd /root/rpms/php</pre>
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 a mistake 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.

CHAPTER 2

Meet the Parallels Business Automation - Standard

Parallels Business Automation - Standard is an end-to-end solution for hosting service providers (HSPs) and Internet Data Centers covering full life-cycle of HSP/IDC operations. Parallels Business Automation - Standard allows HSPs to drastically decrease the cost of operating hosting business while increasing revenues, developing new reseller channels, and improving usage of hardware and personnel resources.

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Parallels Business Automation - Standard Advantages

Parallels Business Automation - Standard includes everything a company needs to run a successful and profitable hosting business from advanced technology and tools to manage your servers and overall infrastructure to billing, sales channel management, and e-commerce application:

▪ *The full range of services supported:*

-
- | | |
|--|---------------------------------------|
| ▪ Domain registration | ▪ Parallels Plesk Sitebuilder support |
| ▪ Plesk Domain hosting | ▪ Dedicated servers for resellers |
| ▪ Virtuozzo Container hosting | ▪ Dedicated or Co-location |
| ▪ Parallels Plesk Control Panel and Parallels Plesk Sitebuilder licenses | ▪ Miscellaneous |

- *Complete infrastructure management:*

- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ Powerful Container management ▪ IPs allocation and DNS administration ▪ Flexible self-provisioning | <ul style="list-style-type: none"> ▪ Server-/client-side backups ▪ Integrated trouble ticketing and External Helpdesks support ▪ Maintenance automation and more |
|--|---|

- *Integrated complete billing solution:*

- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ Customizable online store ▪ Country-specific accounting ▪ Automated recurring invoicing ▪ Private label resellers | <ul style="list-style-type: none"> ▪ Discounts, promotions, coupon codes ▪ Taxation with tax exemption ▪ Automated upgrades/downgrades ▪ Customizable notifications and more |
|--|--|

- *Credit Cards processing through over 30 payment gateways (new added monthly):*



-
- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ integrated with fraud screening ▪ flexible manual approval rules ▪ refunds, reversals, credits | <ul style="list-style-type: none"> ▪ sensitive data is encrypted ▪ delayed capture ▪ CVV/AVS verification and more |
|--|---|

- Bank transfer payments for German (DTAUS), Spanish (Norma 19), and Netherlands (ClieOp3) standards: flexible batch management with approval queues.
- *Domain registrations through over 25 domain registrars (new added monthly):*



- *Wide range of Operating Systems and Applications for Container hosting:*
 - Centralized management
 - Automated upgrades
 - Over 50 applications
 - Redhat, Fedora, Suse, Debian
 - Open-source and commercial applications
 - Game servers and more



- *Easy customization and integration:*
 - Customizable PHP based store
 - Notifications customization
 - Customizable menu items
 - Colors, logos, page content
 - Create your own plug-ins
 - Application templates creation guide
 - Powerful API
 - Advanced multi-language support
 - XML data export/import tools
- *Everything in one box!*

Parallels Business Automation - Standard Users

The following Account types exist within Parallels Business Automation - Standard:

- **Provider Account** (only one Account of such type can exist). This Account is registered during Parallels Business Automation - Standard installation and it always has the ID=1. All registered persons that have role in Provider Account are considered as Provider staff members with particular access permissions to Parallels Business Automation - Standard Provider Control Center. The number of Provider staff members that can concurrently log in to the Provider Control Center is defined by the Parallels Business Automation - Standard license.
- **Reseller Account**. Reseller Accounts are registered using the **Account Director > Reseller Manager**. The number of Reseller Accounts is defined in the Parallels Business Automation - Standard License. All registered persons that have role in Reseller Account are considered as Reseller staff members with particular access permissions to Parallels Business Automation - Standard Reseller Control Center.
- **Customer Account**. Customer Accounts are being registered using the **Account Director > Customer Manager**. Customer Accounts can be of two types: **personal** or **business**. All persons associated with Customer Account have access to Parallels Business Automation - Standard Control Panels.

Browsers Compatible with Parallels Business Automation - Standard

The following browsers are fully compatible with Parallels Business Automation - Standard web-based tools:

- Firefox 3.6 and above
- Microsoft Internet Explorer 7 and above
- Safari 5.0 and above for Mac
- Google Chrome 8.0 and above

Note 1: Pop-up blocking in your browser should be disabled.

Note 2: Session and permanent cookies in your browser should be enabled.

Connecting to Parallels Business Automation - Standard Browser-Based Tools

To connect to the Parallels Business Automation - Standard tools, enter into your browser the Management Node hostname and append the tool index (`http://hostname/index`). If no tool index is specified, then nothing to be appended to open the tool:

Tool	Tool index
Public Site	
Old Online Store	hspc
New Online Store	shop
Provider Control Center	pcc
Reseller Control Center	rcc
Control Panel	cp
My Control Panel	mycp

The SSL protocol can be enabled separately for each of Parallels Business Automation - Standard web-based tools. The SSL configuration is available both in Provider and Reseller Control Centers.

Note: To connect to the My Control Panel, it is necessary to create a Container subscription, log in to the Control Panel, then create a user (if System Administrator Control Panel Application is installed inside Container) or a mailbox in multiple domains (if Workgroup Administrator Control Panel is installed inside Container). After this you can log in to the My Control Panel with the e-mail address as a login and a user regular password.

Parallels Business Automation - Standard Interface Features

Navigation

To use one or another Parallels Business Automation - Standard component or tool, please use the *namespace tree* located in the left pane.

Control Centers specific:

You can hide/display the namespace tree by clicking on the *slider* at the vertical bar that separates the left and the right parts of the screen.

When you start your Parallels Business Automation - Standard session, the path (chain of links) appears at the top of the screen. These links provide the "*breadcrumb navigation*" and show you the path to your actual location within the Parallels Business Automation - Standard. By clicking on these links, you can be one or more (depending on your location) levels up.

Main Screen

The right pane of Parallels Business Automation - Standard screen serves for operating components selected from the namespace tree. The main screen shows the Parallels Business Automation - Standard Directors' or Managers' *dashboards*, lists of objects, single objects' properties, or other related data.

Each Parallels Business Automation - Standard component (Director or Manager) has its own *dashboard*. Moreover, the Parallels Business Automation - Standard has its dashboard that may be considered as 30,000-foot view of tools and operations. So, a dashboard is the Parallels Business Automation - Standard component 'front-page' that provides you with the most important statistics and a place to start including:

- Shortcuts to the lists of objects.
- Information about the number of objects with separate counters for the objects in different states like Active Accounts, Accounts on Hold, Running Containers, etc.
- Shortcuts for the creation of new objects that fall into the functionality of Parallels Business Automation - Standard component selected.

To facilitate operating the lists of objects you can use:

- *Search* particular item within the list or *filter* the items by a particular property. The Search and filter bar is located at the top of each list.
- *Hide/Show* search and filter bars, action bars, tables and create/edit forms sections. Their hide/show status is retained throughout the session.
- *Change Sorting Order*. To this effect, click on the column-heading you want to sort by. In this case, the special pointer (small triangle) appears at the top of each column. This triangle indicates current sorting order: peak-up or peak-down for ascending and descending order respectively. Repeating click on the same link in column-heading changes sorting order from ascending to descending (and conversely) within single property.
- *Change List Size*. It is possible to set the listing to 20, 40, or 80 items per page. Appropriate links are above the list, to the right. Special links for viewing pages (page numbers, next,last) are also provided and you can find them both at the beginning and the end of the list.
- *Export lists to Excel*. Parallels Business Automation - Standard allows you to export data from any list in Parallels Business Automation - Standard to Excel, thus facilitating data operations. The information is exported from the whole list, not only from the visible part. For example, if you have set the listing to 40 items per page and the whole list includes 100 entries, you will get an excel format document covering 100 items. The  *Export to Excel* icon is located above and under the lists.
- *Set columns visibility*. You can choose the columns to be displayed in the list tables by clicking on the  icon above and under the list and enabling/disabling the corresponding entries in the drop-down menu. You are also allowed to set the columns order by drag-and-dropping the column titles.

In order to immediately bring the screen content in correspondence with actual state of affairs, you can *Refresh* the screen using the button located at the upper right corner of the screen.

The *Help* button located at the upper right corner of each screen shows the context-sensitive HTML help.

Screen ID is located at the upper-right corner of each screen. Screen ID allows to refer to a screen for customization purposes or in the problem report. In addition, each screen ID is a clickable link that leads the the Screens Viewer and allows getting a screen alias immediately.

Adding a Comment to the Parallels Business Automation - Standard Object

You can add a free-form comment to almost any of Parallels Business Automation - Standard object. To this effect click on the **Add comment** link at the upper-right corner of an object view form.

CHAPTER 3

General Configuration of Parallels Business Automation - Standard

When you log in to the Parallels Business Automation - Standard Provider or Reseller Control Center first time, the Setup Wizard helps you to make the most important initial settings.

Please check the initial configuration of the Parallels Business Automation - Standard installation:

- Submit/edit the company name and sender e-mail address (messenger) used in notifications.
- Set data retention rules both for system events (on page 284) and logs (on page 293).
- Make the regional settings including the interface language, set the first day of week (monday or sunday), the default time zone to bound system events and logs, select the system-wide currency.
- Set up secure communications (turn on SSL, generate CSR, install signed secure certificate).

In addition, to facilitate the operations (like domain registration) performed on behalf of the default Provider account created in Parallels Business Automation - Standard (for Provider Control Center users only), it is necessary to check and adjust if needed, the contact information containing in the default Provider account.

Note: The special Getting Started checklist is provided for Resellers.

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Checking Provider Account Contacts

Please fill all the fields in the default Accounts' profile (contacts, etc.). This is necessary for successful domains registration since the information from an Account profile is being transferred to a Registrar if you, for example, decide to register a domain (on page 259) for one of your own accounts.

Note: Editing the Account profile and contacts does not mean creation of new Parallels Business Automation - Standard Users. In other words, it does not affect login credentials.

To edit the Provider Account contacts, click the topmost item in the Navigation tree (in the left pane) and select the **Company Profile** tab and then click the **Contacts** tab.

Setting Up Access Permissions for Parallels Business Automation - Standard Users

To log in to Parallels Business Automation - Standard, a registered user must have a role in one of accounts registered in Parallels Business Automation - Standard. This role gains a user particular access permissions to particular Parallels Business Automation - Standard tools. It is possible to set permissions only if a user is associated with a particular account. Users that are not associated with an account cannot log in to Parallels Business Automation - Standard tools.

In Parallels Business Automation - Standard, editable access permissions are set for Control Center users only. Customers that have access to Control Panel can gain only one role (Customer Administrator) that allows working in Control Panel, and in this case the set of tools available depends on the applications included in customer's subscription, but not on the role.

For the clean installation, there is a set of default roles both for Provider and Reseller staff members (i.e., registered users under Provider or Reseller account).

Provider can edit access permissions for every role and add new roles both for Provider staff members and Reseller staff members.

Resellers can only view the access permissions set for each Reseller staff role.

Basic Notions

Users

Users (staff members, customers, and resellers) permissions are identified by Accounts. Each person is associated with one Account and may have different sets of access permissions within that Account. An Account can have multiple Users associated with it. *Staff members* are users registered within the Provider Account.

User Roles

Roles are assigned to a User within the Account. A Role defines a set of access permissions to the Parallels Business Automation - Standard tools. In the Parallels Business Automation - Standard there are three customizable roles for Provider staff members and three for Reseller staff members. The set of permissions in each Role is defined by Provider. Customers get the default and non-customizable role of Control Panel Administrator.

Permissions

Permissions are assigned per Role, not per individual user. Permissions are assigned separately to Roles available for HSP staff members and Resellers.

How Permissions Control is Organized

Only Provider can edit access permissions from the Parallels Business Automation - Standard Provider control Center. And the Reseller Control Center allows Resellers to view permissions set for Reseller staff members roles (Operations Administrator, Sales and Marketing, Accountant, etc.) by Provider.

Resellers can read this section to get acquainted with the Parallels Business Automation - Standard security model and the mechanism of roles assignment.

Account is the basic Parallels Business Automation - Standard security notion. All operations performed within the system are connected with different Accounts. A person registered within an Account can gain the certain access permissions to Parallels Business Automation - Standard tools, depending on the type of Account.

The following Account types exist in Parallels Business Automation - Standard system:

- **Provider Account** (only one Account of such type can exist in your Parallels Business Automation - Standard system). This Account is created during the Parallels Business Automation - Standard installation. All persons associated with Provider Account are considered as Provider staff members with particular access permissions to Parallels Business Automation - Standard Provider Control Center. The number of Provider staff members that can concurrently log in to the Provider Control Center is defined by the Parallels Business Automation - Standard license.
- **Reseller Account**. Reseller Accounts are registered using the Account Director > Reseller Manager. The number of Reseller Accounts is defined in the Parallels Business Automation - Standard License. All persons associated with Reseller Account are considered as Reseller staff members and can be granted a particular role (i.e., access permissions) within Parallels Business Automation - Standard Reseller Control Center.
- **Customer Account**. Customer Accounts are registered using the Account Director > Customer Manager. Customer Accounts can be of two types: **personal** or **business**. All persons associated with Customer Account have access to Parallels Business Automation - Standard Control Panels.

Access permissions per user role can be set in the Configuration Director > Security Manager.

Roles per account can be assigned registered persons in the Configuration Director > Security Manager > All Users. Select a user and then select the Accounts tab.

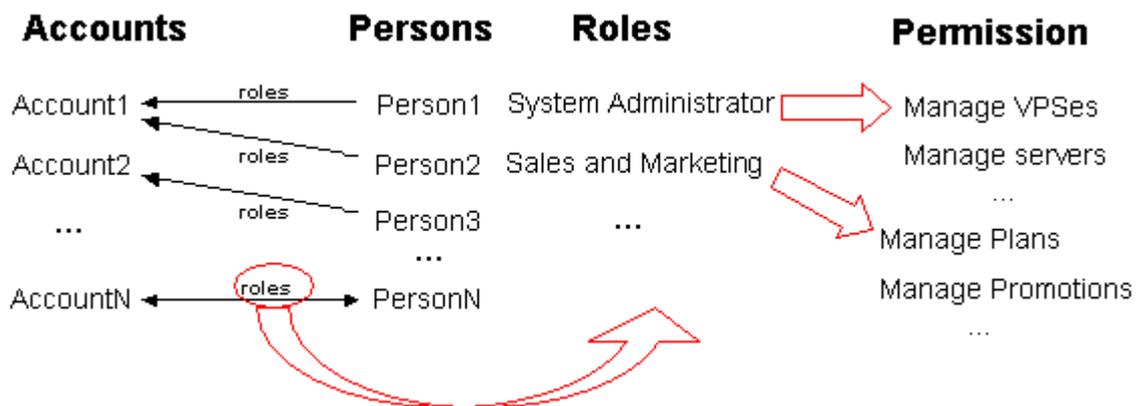


Figure 1: PBAs Security Model

Setting Up Messenger and S/MIME Signing for E-mail

Parallels Business Automation - Standard provides an opportunity to automatically generate and send e-mail notifications to Provider Administrator and other HSP staff members (for example, about resources overusage or nodes outages) or to HSP Customers (for example, if Subscription period is about to expire). The set of events that can be followed by e-mail notifications is read-only and defined in the Event Manager (on page 284). The component that automatically generates and sends e-mail notifications is called 'Messenger'. Notifications themselves may be configured for a certain number of events that take place within Parallels Business Automation - Standard system and tracked by the Event Manager.

Each message (including automatically generated ones) shall have the 'From' field. For automatically-sent messages (or notifications) the 'From' field should contain the sender name and e-mail of a messenger. In addition, you can enable or disable e-mail notifications sending and select the e-mail messages encoding (character set). Finally, you can configure e-mail messages S/MIME signing. To set the messenger, go to the **Configuration Director > Miscellaneous Settings > E-Mail Setup**.

Selecting Regional Settings

To make regional settings, go to the Configuration Director > Miscellaneous Settings > Regional Settings.

The regional settings include:

- The language;
- The default time zone;
- The calendar settings (the first day of week);
- The system-wide currency.
- Selecting languages available for your customers to switch the interface.

Language

The **language** setting allows you to set the system-wide language of the Parallels Business Automation - Standard interface.

Default Time Zone

In respect to registration of the events that happen within the system, the Parallels Business Automation - Standard database is bound to GMT. This means that automatically-generated notifications and system messages (for example, about subscriptions expiration dates) may occur to be hardly understandable for the customers that reside in the other time zones.

Thus, the Parallels Business Automation - Standard provides an opportunity of setting different *time zones* for different Customers (or Resellers). This can be done during creation of a new Account or later. The special time zone can be set for each user associated with an Account. After this, all the time-related data (in Action Log, Event Manager, or automatically-generated notifications) will be bound to the User's time zone, without the need for him (or her) to recalculate time.

However, if most of your prospect customers will reside in the single time zone, it is quite reasonable to set default time zone for the newly registered persons.

First Day of Week

You can select the day a week starts. For example, this setting is used when setting the weekly time interval in the Billing Reports (on page 223) view.

Currency

You can set the system-wide currency (for all financial documents and Hosting Plan prices). Resellers can set the own currency and enter the cross rate between the Provider currency and Reseller currency. This feature is very useful for selling through international channels as well as having separate branches in different countries around the world.

Note: Parallels Business Automation - Standard is a single-currency system. In other words automatic currency recalculations are not available. If you change the system-wide currency, you will have the unified currency sign, fractional part format, etc., however you will need to recalculate all prices manually. For example, most of domain-registration Plug-Ins support US Dollar only as an accounting currency. Thus, in order to update domain-registration prices correctly the system-wide currency should be US Dollar by prices update, otherwise the new prices will not be used in Parallels Business Automation - Standard billing.

Available Languages

Check the boxes next to language names to allow your customers to switch the interface into these languages. The list of languages in this section is comprised of the languages shipped within separate language packs with Parallels Business Automation - Standard kit and installed during the Parallels Business Automation system configuration.

Customizing the Onscreen Help in Control Panel

Each screen of the Parallels Business Automation - Standard Control Panels is provided with a short onscreen help topic.

If needed, you can edit the onscreen help topics for each screen of the Control Panels your customers use. To this effect, login to the Control Panel (*yourcompany.com/cp*) using one of the logins of your Provider Account (as a staff member). In this case, on almost every Control Panel screen (excluding dashboards) a special "question-mark" icon appears at the upper right corner of the screen.

Click  at the screen you want to add a help topic for. The popup window with the help bar text appears. Type the text and click the **Update** button.

From the Provider Control Center you can hide or show the onscreen help and show/hide in the source HTML of each Parallels Business Automation - Standard screen the special metatags used to mark the Parallels Business Automation - Standard screen elements (called controls). Usage of these metatags is described in details in the *Parallels Business Automation - Standard SDK*.

Securing the Parallels Business Automation - Standard Tools Using SSL

Secure Sockets Layer (SSL) provides a level of security and privacy for those wishing to conduct secure transactions over the Internet. Introduced to the Internet market by Netscape Communications, the SSL protocol protects HTTP transmissions over the Internet by adding a layer of encryption. This insures that your transactions are not subject to "sniffing" by a third party.

SSL provides visitors of your website with the confidence to communicate securely via an encrypted session. For companies wishing to conduct secure e-commerce, such as receiving credit card numbers or other sensitive information online, SSL is essential.

Important: SSL Setup for Resellers

SSL certificate is generated per vendor domain name. For provider, this domain name is Management Node hostname, by default.

Resellers use the same domain as their provider until a reseller URL is not hidden (on page 189). Thus, if a reseller with not hidden URL tries to generate an SSL Certificate request, the same domain as provider's one will be used. This can corrupt provider's SSL settings. That is why Parallels Business Automation - Standard does not allow SSL setup for resellers with not hidden URL - the **SSL Setup** item is not available in RCC menu in this case.

To make SSL Setup available for a reseller, provider should do the following:

1. Hide reseller URL (on page 189) to provide a reseller with own domain name, which makes it possible to generate an SSL Certificate for this reseller.
2. Make sure that Reseller Administrator permissions allow managing SSL. To this effect, go to the **Configuration Director > Security Manager > Setup**, select **Reseller Permissions** tab, and then select Reseller Administrator role. Open the **Configuration Director > Miscellaneous** settings item and make sure that the **SSL Setup** check box is selected. After this, SSL setup will become available for all resellers in Reseller Control Center.

Getting the SSL Certificate

For SSL to work a valid signed SSL certificate is required. Certificates are a standard way of binding a public key to a name. Public key encryption is a technique that uses a pair of asymmetric keys for encryption and decryption. Each pair of keys consists of a public key and a private key. The public key is made public by distributing it widely. The private key is never distributed; it is always kept secret. Data that is encrypted with the public key can be decrypted only with the private key. Conversely, data encrypted with the private key can be decrypted only with the public key. This asymmetry makes public key cryptography so useful.

You can generate a self-signed certificate and use it for some time until the certificate “signed” by a trusted external authority: VeriSign (<http://www.verisign.com>) or Thawte (<http://www.thawte.com>) will be ready.

Note: Netscape and Mozilla browsers automatically detect whether a website uses encryption of transmitted data or not (as for Internet Explorer, please encourage your website visitors who use IE to use Internet Explorer 5.0 or later). Thus, if you use a self-signed certificate, your website visitors will be notified that your website uses encryption, but the authority that signed a certificate is not recognized. So if you intend to conduct e-commerce at your website, it is better to obtain an SSL certificate signed by VeriSign or Thawte

To obtain the SSL certificate:

1. Generate Certificate Request in the Configuration Director > Miscellaneous Settings > SSL Setup > Certificate Request tab.
2. After the Certificate request is generated, you can do one of the following:
 - Copy the Certificate Request and send it to the Certificate Authority to obtain the signed Certificate and import it later;
 - Generate self-signed Certificate and use it for some time.
3. Restart Apache on your Management Node. Please note that in this case your Management Node will be not available for some time. So if you already have customers by the moment of importing the SSL Certificate, your customer's Containers will also become offline till Apache on your Management Node restarts.

Enabling SSL for Parallels Business Automation - Standard Tools

You can enable the SSL protocol separately for the Provider Control Center and Reseller Control Center, Control Panels, website, and your online store.

To enable the SSL protocol, go to the Configuration Director > Miscellaneous Settings > SSL Setup. Select the the Enable SSL tab. You can enable the SSL protocol by checking the Enable SSL in Parallels Business Automation > Standard Web Tools boxes next to the name(s) of the web tools (Control Centers, Control Panels, store, etc.).

CHAPTER 4

Managing Parallels Business Automation - Standard Services and Data Center

The tools for your Data Center management are collected under the Service Director.

In spite of the fact that Parallels Business Automation - Standard operates the virtual-server farm, a *Data Center* should be understood in common sense, i.e., as a centralized storage facility to retain database information related to decision-making processes.

In general, Parallels Business Automation - Standard Data Center activity includes the following:

- Servers (Nodes) management.
- DNS and IP addresses management.
- Service level management.

The hardware configuration to run Parallels Business Automation - Standard includes one computer for Management Node and two or more computers for Hardware Nodes.

A *Management Node* is a computer (or a specially configured Virtuozzo Container) used for management. It runs services for web-based management interface and the database containing information about customers and services. The Management Node also establishes connection with domain registrars and payment gates.

A *Hardware Node* is a computer that runs the software (Virtuozzo, Plesk, etc.) that provides services for customers or a third-party software (server lease, collocation or dedicated hosting).

Dedicated third-party servers can be grouped into *racks*. A rack in Parallels Business Automation - Standard is a logical container, it is just a record in the Parallels Business Automation - Standard database. Logical racks can follow the actual servers grouping at your Data Center.

The Parallels Business Automation - Standard Data Center management tools allow managing the following servers:

- Servers that run Parallels Plesk Control Panel that can be used for Plesk Domains or Clients provisioning for customers and sold as dedicated servers. Plesk servers can also be installed inside Virtuozzo Containers.
- Servers that run Parallels Virtuozzo Containers that can be used for Virtuozzo Containers provisioning for customers and sold as dedicated servers.
- Servers that run Parallels Server Bare Metal that can be used for Virtual Machines provisioning.
- Servers that run Parallels Plesk Sitebuilder allowing a HSP to sell Sitebuilder services.

- Third-party servers (server lease, collocation, dedicated servers). These servers cannot be managed directly from the Parallels Business Automation - Standard web-based interface, but in this case, the Parallels Business Automation - Standard takes care of all the billing matters including creation of dedicated subscription, charging a customer, issuing the renewal order, sending notifications, etc.

In Parallels Business Automation - Standard, the Virtuozzo, Plesk, or Sitebuilder servers are called *Nodes*. And third-party servers are called *Servers*.

Nodes and third-party servers can be registered and managed using the Service Director and, depending on a server designation, using the Plesk Manager, Virtuozzo Manager, Parallels Server Manager, Sitebuilder Manager, or Servers Manager for Plesk, Virtuozzo, Parallels Server Bare Metal, Sitebuilder, or third-party servers respectively.

Virtual Plesk Nodes (Parallels Plesk Control Panel installed inside a Virtuozzo Container) are registered automatically as the Plesk nodes, after the Plesk Virtual Node subscription is activated.

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Registering Virtuozzo or Plesk Nodes

When a Virtuozzo or Plesk node is registered in Parallels Business Automation - Standard, this means that a connection is established to this node and a certain data exchange is possible between a node and the Parallels Business Automation - Standard database. To make a node registration possible, a node must be up and running and available over a network.

Beginning with PBAS 4.1 Virtuozzo 4.6 is fully supported without compatibility mode.

A registered node may become unavailable because of outages on a node itself or network connection loss. When a registered node becomes available, the connection is re-established automatically.

It is possible to break the connection to a node (i.e., unregister it) by one click. In this case connection to a node will remain established, but events on a node will stop synchronizing with Parallels Business Automation - Standard database and thus, creation of new Containers or Plesk Clients/Domains from Parallels Business Automation - Standard web-based interface will become impossible.

Registered Virtuozzo nodes allow a wider range of operations: manage applications installed, operate Containers (create new, start, stop, delete, etc.), manage Containers backups, manage trial Containers creation settings, adjust traffic shaping and allow name-based Containers creation (on page 35). Registered Plesk nodes allow viewing and adding new Plesk Clients or Domains and setting permissions for trial Plesk Domains creation.

If Plesk Virtual node is registered, it is necessary to:

- Make sure that Virtuozzo node that hosts Container for a Plesk Virtual node is registered in PBAS.
- After Plesk Virtual node registration, go to Service Director > Plesk Manager > Nodes, select the node and:
 - Select Virtuozzo node name for a Plesk Virtual node from **Hardware Node** list.
 - Enter the ID of Virtuozzo Container where Plesk is installed into the **CTID** field.

To view the list of Virtuozzo or Plesk nodes connected to Parallels Business Automation - Standard, click **Nodes** either on **Virtuozzo Manager** or **Plesk Manager** submenu under the **Service Director**.

The list of nodes displays the following:

- **ID** - Numerical identifier, assigned to the Hardware Node.
- **Shortname** - Hardware node friendly name.
- **IP Address** - Current IP address assigned to a node.
- The number of subscriptions on a Hardware Node:
 - For Virtuozzo Nodes - the **Accts** column shows the number of Containers on a node. If the number of Containers is limited, then the current number and the maximal allowed number of Containers will be shown, e.g., "40 of 100" means that a node runs 40 Containers of the 100 allowed.

- For Plesk Nodes - **Domains** and **Clients** columns show the number of Plesk domains existing on a Node.
- **New Accts** - Whether it is allowed to create more subscriptions on a Node. Green tick indicates that yes, red cross - that not.
- **Platform** - the software installed on a node.
- **Version:**
 - For Virtuozzo nodes the full version of the VzAgent running on a node.
 - For Plesk nodes - the OS installed and the full version of Plesk Server Administrator installed on a node.
- **Reg. Status** - The current Hardware Node status in respect to its manageability via your Control Center web-based interface:
 - **Registered** - the connection with a Hardware Node was established successfully, a Hardware Node is fully manageable;
 - **Conflicts** - the data found on a node does not correspond to the data existing in Parallels Business Automation - Standard database or some other problems occurred during registration. To resolve the data conflicts, you can use the special tool provided in Parallels Business Automation - Standard - Conflicts Resolver (on page 296).
 - **Unregistered** - the connection with a Hardware Node is not established but a Hardware Node configuration is stored in the Parallels Business Automation - Standard database. Such a Hardware Node cannot be managed from Parallels Business Automation - Standard web-based interface.
- **Availability** - Current status of a node in respect to establishing connection to it. Unavailable node usually means some kind of hardware or network problems on a node.
For Virtuozzo node:
 - **SLM** - Whether a Virtuozzo node uses a SLM resource management type (Yes) or old-style UBC or UBC combined with SLM (No).
 - **VSwap** - Whether a Virtuozzo node uses a new VSwap memory management type.For Plesk node:
 - **Physical** - Whether a Plesk node is a physical server (Yes) or is installed inside a Virtuozzo Container (No).
- **Owner** - An Account which owns a Hardware Node, if any.

To register a new node, click the **New Node** button. [Click here](#) to read more about nodes registration.

Plesk Nodes Specific Settings

A Plesk node properties are grouped under several tabs:

Summary

Availability. Current status of a node in respect to establishing connection to it. Unavailable node usually means some kind of hardware or network problems on a node.

Registration Status:

- **Registered** - the connection with a Hardware Node was established successfully, a Hardware Node is fully manageable;
- **Conflicts** - the data found on a node does not correspond to the data existing in Parallels Business Automation - Standard database or some other problems occurred during registration. To resolve the data conflicts, you can use the special tool provided in Parallels Business Automation - Standard - Conflicts Resolver (on page 296).
- **Unregistered** - the connection with a Hardware Node is not established but a Hardware Node configuration is stored in the Parallels Business Automation - Standard database. Such a Hardware Node cannot be managed from Parallels Business Automation - Standard web-based interface.
- **Upgrading** - the status informs that recently Plesk upgrade took place at a node. In this case PBAS executes tasks to adjust Plesk subscriptions data. This status occurs automatically as soon as PBAS detects upgrade at a Plesk node. Applicable to Plesk nodes only.

Allow new accounts. Whether new Parallels Business Automation - Standard accounts are allowed to create subscriptions on this node. Green tick - yes, red cross - no. You can change this setting under the **General Settings** tab.

Accounts. The number of accounts that currently have subscription(s) on this node.

Plesk Domains. The number of Plesk domains currently existing on this node. Domains are sorted by hosting plans, such as: the name of hosting plan - the number of domains based on this hosting plan.

Plesk Clients. The number of Plesk clients currently existing on this node. Clients are sorted by hosting plans, such as: the name of hosting plan - the number of clients based on this hosting plan.

General Settings

Here you can:

- Transparently log in to the Plesk Admin Control Panel for the node - just click on the **Login to Plesk** link.
- View or hide Plesk Administrator password. To view password, click on the **Show Password** link. To hide the password again, click on the **Hide Password** link.

To change password, and other settings click the **Edit** button:

Attention: The Plesk node General Settings form includes some advanced settings: network configuration and Plesk virtual node (Container) related settings. We do not recommend to change these settings if you are not absolutely sure what must be entered instead of the existing values.

- **Hardware Node name.** Here you can edit the Plesk node friendly name (this is not a hostname, this name is just used in Parallels Business Automation - Standard to refer to the node).
- **Allow new accounts.** Check this box to allow creating clients or domains on this node for new Parallels Business Automation - Standard accounts, i.e., for accounts that do not have any subscriptions on this node yet. To disallow this, clear the box.
- **Maximum number of domains.** If you want to limit the allowable number of domains to be created on the node, then enter the maximal allowed number of domains into this field. Leave the field empty to impose no limitations on the number of domains on this node.
- You can type a new Plesk Administrator password for this node into the two fields below (type and retype the password).
- **Synchronize DNS.** This box defines whether the changes made to DNS configuration on the Plesk node will be automatically synchronized with Parallels Business Automation - Standard DNS (and conversely) or not. We recommend to keep this box checked.
- **Synchronize domains and clients.** This setting enables or disables automated synchronization of Plesk domains and clients on the node with Parallels Business Automation - Standard database. If the box is cleared, then synchronization is disabled and manual creation of Plesk client or domain on the Plesk node will not be noticed by Parallels Business Automation - Standard. We strongly recommend to keep this box checked.
- **Network settings:**

-
- **Hostname.** Plesk node hostname. If you are not sure what hostname must be entered, leave this field as is. If the field contents was unintentionally deleted and you do not know what to enter instead, you can enter the Plesk node IP address. Later you can change the IP into the correct hostname. Do not enter the incorrect hostname into this field, because this will break the transparent logging in to the Plesk Admin Panel from Parallels Business Automation - Standard interface.
 - **IP address.** Plesk node IP address. Here you can reassign another IP address to the Plesk node. To do this, just enter this new IP into this field. **Important:** A new IP address must be from the set of IPs assigned to the node and this IP address must be shared. After IP address reassignment, all Plesk domains existing on the node and all domains created in future on this node will be moved to this new IP address.
 - **Plesk Container Properties.** This group of fields appear only for virtual Plesk nodes, i.e., the nodes that are installed inside a Virtuozzo Containers:
 - **Hardware Node.** The friendly name of Virtuozzo node that hosts the Container running Plesk Server Administrator. You may need to re-specify Hardware Node if Plesk Container was migrated on another Hardware Node.
 - **Container ID.** Numerical identifier of Container that runs Plesk Server Administrator. For example, you may need to re-specify the Container ID if a Container was migrated to another Hardware Node and started there with another ID.
 - **Owner.** The name of account owning the Plesk node. If no owner is specified, then the node is assigned to Provider account. Otherwise, the name of owning Reseller account is shown. Please note that if any clients or domains have been already created on the node, then it is not possible to reassign the node to another account, because this will cause a lot of conflicts in billing.
 - **Hardware.** The Plesk node hardware configuration. You can adjust any parameter.
 - **Comment.** Free-form comment.
 - **Maintenance.** If you need to take a certain hardware node offline for maintenance or upgrade you can bring a Hardware Node into a special maintenance mode that temporarily disables management of Plesk domains hosted on this Hardware node from the Control Panel:
 - You can check the **Do not allow customers to manage their domains from CP** box to disable Plesk domains management from Control Panel.

Note: This setting affects domains hosted on the selected Hardware Node only. Note that you can compose a Mass Mailer (on page 282) for customers on that specific Hardware Node.

- In the **Warning Message** field you can type the text of the system message to be shown to your customers when domains management is disabled but they try to perform an operation under domain(s) You can leave this field empty to use the default system message.

Accounts

Accounts registered in Parallels Business Automation - Standard accounts that own Plesk clients or domains hosted on this node are enlisted under this tab.

Plesk Domains

Plesk domains existing on the node are shown here.

Plesk Clients

Plesk clients existing on the node are shown here.

Virtuozzo Nodes Specific Settings

The most wide management opportunities are provided in Parallels Business Automation - Standard for servers that run Virtuozzo (Virtuozzo nodes). For example, you can set up the traffic shaping for a Virtuozzo node or allow creation the name-based Containers.

Managing Parallels Server Nodes

PBAS allows establishing connection to servers that run Parallels Server Bare Metal and provisioning Virtual Machines to customers.

Note: PBAS supports registration of PSBM slave nodes only.

To view the list of Parallels Server nodes connected to Parallels Business Automation - Standard, open **Service Director** submenu and then click **Nodes** either on **Parallels Server Manager** submenu.

To register a new Parallels Server Node, click **New Node**.

The list of Parallels Server nodes displays the following:

- **ID** - Numerical identifier, assigned to the Hardware Node.
- **Shortname** - Hardware node friendly name.
- **IP Address** - Current IP address assigned to a node.
- **New Accounts** - Whether it is allowed to create more subscriptions on a Node. Green tick indicates that yes, red cross - that not.
- **Platform** - the software installed on a node. Parallels Server.
- **Version** - the full version of the VzAgent running on a node.
- **Reg. Status** - The current Hardware Node status in respect to its manageability via your Control Center web-based interface:
 - **Registered** - the connection with a Hardware Node was established successfully, a Hardware Node is fully manageable.

- **Unregistered** - the connection with a Hardware Node is not established but a Hardware Node configuration is stored in the Parallels Business Automation - Standard database. Such a Hardware Node cannot be managed from Parallels Business Automation - Standard web-based interface.
- **Availability** - Current status of a node in respect to establishing connection to it. Unavailable node usually means some kind of hardware or network problems on a node.

Registering Parallels Server Nodes

➤ *To register a new Parallels Server node:*

1. Open **Service Director** submenu and then click **Nodes** either on **Parallels Server Manager** submenu. The list of registered Parallels Server nodes (if any) is displayed.
2. Click the **New Node** button. Parallels Server node registration wizard starts.
3. Enter the connection settings:
 - a Type the node hostname or IP address into the **Hostname (IP Address)** field.
 - b Enter the user `root` password to the Parallels server into the **Parallels Server root password** field.
4. Click **Next**. PBAS establishes connection to the node and fetches its parameters. The node configuration settings pre-filled with node parameters is displayed. Adjust the node parameters:
 - a **Hardware node name** - Hardware Node alphanumeric identifier, any combination of letters and (or) digits you consider convenient to refer to a Hardware Node within your Parallels Business Automation - Standard system. A Hardware Node short name will be used both in the lists of Parallels Business Automation - Standard objects (Hardware Nodes and Containers) and other Hardware Nodes related operations (for example, assigning IP Pool to a Hardware Node).
 - b To allow creation new Virtual Machines at the node, tick the **Allow New Virtual Machines** check box.

Note: Information about Virtual Machines created at the node before registration in PBAS is not passed. Take into account the node current load before allowing new Virtual Machines creation.

 - c Enter the maximal number of Virtual Machines allowed at the node into the **Maximum number of virtual machines (leave empty for the unlimited type)** field.
 - d The **Hostname** field is pre-filled with IP address or hostname of the node. You can adjust the node hostname.
 - e You can adjust the Operating system installed at the node. The OS name fetched during establishing connection to the node is shown in the **OS** field.
 - f Operating system build number is shown in the **OS release** field. If needed, you can adjust it.
 - g If needed, adjust the node hardware configuration shown in the **Hardware** section of the form.
 - h If needed, type a free-form comment into the **Comment** field.
5. Click **Save**.

Managing Virtual Machines

Virtual Machines are managed under **Service Director > Parallels Server Manger > Virtual Machines**.

The current implementation of PBAS - PSBM integration brings several limitations of Virtual Machines management:

- A Virtual Machine can be created from online store only, upon a sales order.
- Virtual Machines created at a PSBM node before registration of this node in PBAS are not visible from PBAS and information about these Virtual Machines is not passed. PBAS Conflict Resolver does not support Virtual Machines conflicts resolution.
- Virtual Machines templates are not managed in PBAS. A Virtual Machine template is to be entered manually. Thus, it is very important to specify the exact template name in a Virtual Machine hosting plan.
- Virtual Machines resources management tools are not supported by now. Thus, a Virtual Machine resources allocation cannot be billed and/or changed.
- Virtual Machines traffic is not calculated.

Customers that subscribed for Virtual Machine hosting plan can manage Virtual Machine using Parallels Power Panel. Transparent logging in to Parallels Power Panel is possible directly from PBAS Customer Control Panel, following the link **Parallels Power Panel** located at the **System** zone of the Control Panel.

The list of Virtual Machines displays the following:

- **ID** - Virtual Machine ID assigned in PBAS.
- **Name** - Virtual Machine hostname.
- **IP Addresses** - IP addresses (both IPv4 and IPv6) allocated for a Virtual Machine.
- **Account** - The name of account that owns Virtual Machine.
- **Status** - Virtual Machine current status.
- **Node** - Hostname or IP address of PSBM server that runs a Virtual Machine.

To operate Virtual Machines, select Virtual Machine by putting a tick into check box next to its (their) name(s) and use controls:

Start - Start Virtual Machine.

Stop - Stop Virtual Machine.

Restart - Restart Virtual Machine.

Synchronize - Set Virtual Machine administrator password and IP address. This operation is needed if password and/or IP allocation has been changed and it is necessary to pass them to a Virtual Machine. Virtual Machines are synchronized every hour by a scheduled task, the statuses are updated. This control allows synchronizing Virtual Machines on demand.

CHAPTER 5

Managing Parallels Automation Services

PBAS allows establishing connection to servers that run Parallels Operations Automation (POA) and Parallels Plesk Automation (PPA) to provide the services to customers.

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Parallels Automation Integration Guidelines

This section describes what should be done to integrate POA or PPA with PBAS and then to start providing the services using PBAS.

Important: If SSL is used in PBAS Control Panel, then to avoid the connection problems when using the Internet Explorer and Firefox browsers, it is necessary to enable SSL in POA.

I. Configuring PA Node

- For POA: Log in to POA Control Panel. Configure POA node (on page 42).
- For PPA: Log in to PPA Control Panel. Configure PPA node (on page 45).

II. Registering PA Node in PBAS.

Log in to PBAS Provider Control Panel, **Service Director > Parallels Automation Manager > Nodes**

- Register POA node (on page 43)
- Register PPA node (on page 46)

III. Creating Service Template(s) in POA.

Log in to the PA node Control Panel

- Create Service Template.

IV. Synchronizing POA Service Templates.

In PBAS Provider Control Center go to **Service Director > Parallels Automation Manager > Nodes**. Select the POA node. Switch to the **POA Service Templates** tab. Synchronize service templates (on page 50).

V. Creating POA Hosting Plan.

In PBAS Provider Control Center go to **Billing Director > Product Manager > Hosting Plans**. Create POA hosting plan (on page 143).

Managing Parallels Automation Nodes

Before registering a node, it is necessary to configure it in a way that allows connecting to PBAS:

- Configure POA (on page 42) node
- Configure PPA (on page 45) node

PA service templates that allow selling PA resources via PBAS are configured at POA side and then synchronized with PBAS (on page 50).

The list of PA nodes displays the following:

- **ID.** The node numeric identifier assigned in PBAS. Click to view the node settings.
- **Shortname.** The node friendly name used in PBAS to refer to the node. Click to view the node settings.
- **POA Manager API address.** POA API URL. Configured in POA and later used in PBAS during POA node registration.
- **Frontend hostname.** URL to POA UI server.
- **Platform.** POA software installed at the node.
- **Reg. Status.** Current status of the POA node in respect to PBAS DNS:
 - **Registered.** PBAS is registered at POA node as DNS server.
 - **Unregistered.** PBAS is not registered at POA node as DNS server. To register, install DNS plug-in for PBAS to POA (on page 42) or PPA (on page 45) node. Then return to PBAS, select the PA node from the list of PA nodes, go to the **General Settings** tab, and click **Connect**.
- **Availability.** The node status in respect to the ability of PBAS to connect to POA:
 - **Available.** PBAS can establish a network connection to POA node.
 - **Not available.** PBAS cannot establish a network connection to POA node.
- **Owner.** PBAS account that owns POA node.

To register a new POA node (on page 40), click the **New Node** button.

Registering PA Node

PA nodes are registered in PBAS using the same wizard. However nodes pre-configuration differs for POA and PPA platform.

Please click the link below to get the needed help page displayed:

- I'm registering POA node (on page 40)
- I'm registering PPA node (on page 44)

Registering POA Node

Shortly, POA node registration consists of the steps:

1. Configure POA node (on page 42):
 - a Configure system properties.

- b** Install DNS plug-in.
 - c** Configure POA API.
2. Register POA node in PBAS (on page 43).
 3. Set up PBAS as primary DNS set (on page 47).

POA Node Pre-Configuration Before Registration

In this section we do not provide the paths to POA components, but mention only the settings that require configuration. For more information refer to POA documentation.

➤ *To configure POA system parameters:*

1. Log in to POA Provider Control Panel.
2. Go to **System > Settings**. Select **System Properties** from the **Core** group of options.
3. Click **Edit**. Set the **System Properties** as follows:

Ability to add domains from customer CP	<input checked="" type="checkbox"/> Enabled
Domain registrar status default value	Ready
Allow to use services from different subscriptions on domain	<input checked="" type="checkbox"/> Enabled
Allow to move domains between subscriptions	<input type="checkbox"/> Disabled
Customers management from POA UI	<input type="checkbox"/> Disabled
Allow using of several dots in domain name	<input checked="" type="checkbox"/> Enabled
IDN Domains Support	<input checked="" type="checkbox"/> Enabled
Ability to remove domains from customer CP*	<input type="checkbox"/> Disabled
*Recommended setting.	
External login URL	For POA 5.5 this field must be left empty. For POA versions below 5.5, specify PBAS Customer Control Panel URL: http://<PBAS_hostname>/c p

Stay in POA Control Panel. Now we install DNS plug-in for PBAS.

➤ *To install DNS plug-in:*

For POA 5.0.1 with hotfix (<http://kb.parallels.com/en/9440>) installed:

1. Go to **Infrastructure > Hardware Nodes**.
2. Select the POA system node. This node has **Yes** in the **System** column. Click on the system node ID or hostname. The node details are displayed.
3. Select the **Packages** tab. The list of packages installed at POA node is displayed.

4. Click the **Install Package** button.
5. Select the **PBASDNS** package. Click the **Install** button.

For POA 5.2 and later versions:

1. Go to **Service Controllers**. The list of service controllers is displayed.
2. Click the **Install Service Controller** button.
3. Select **PBASDNS** Service Controller. Follow the wizard.

Stay in POA Control Panel. Now we configure API connection.

➤ *To configure API:*

1. Go to **System > Settings**. Select **Public API** from the **Integration** group of options. The **Public API Summary** is displayed.
2. Click the **Edit** button. Adjust settings:
 - a Check the **SSL** box.
 - b Check the **HTTP Authentication** box. This is optional, but strongly recommended.
 - c Set **Accept connections** to **Only from allowed networks**.
3. Click the **Submit** button.
4. Select the **Allowed Networks** tab. Click the **Add** button. Fill the form:
 - a Type the PBAS node IP address into the **IP Address** field.
 - b Type the 255.255.255.255 mask into the **Netmask** field.
5. Click the **Submit** button.
6. Select the **Summary** tab.
7. Make sure that POA API is running: if the **Start** button is shown, click it to start API. If only **Stop** button is shown, this means that API is already running.
8. Write down or save in a file the **Access Point URL** shown at the **Summary** screen. This URL will be needed to register POA node in PBAS.

POA node pre-configuration is finished. Proceed with POA node registration in PBAS.

POA Node Registration

Before registering POA node it is necessary to configure POA (on page 42).

➤ *To register POA node in PBAS:*

1. Log in to PBAS Control Center.
2. Go to **Service Director > Parallels Automation Manager > Nodes**. The list of registered POA nodes (if any) is displayed.
3. Click the **New Node** button. POA node registration wizard starts.
4. Enter the connection parameters:
 - a Enter the POA API URL you have got as **Access Point** after POA API configuration (on page 45) into the **POA Manager API address** (Example `https://HOSTNAME:8440/RPC2`) field.

- b** Enter the POA UI node (frontend hostname) into the Frontend hostname (Example `http://HOSTNAME:8080`) field.
 - c** Enter the POA node administrator login into the POA user field.
 - d** Enter the POA node administrator password into the POA password field.
5. Click **Next**. POA node settings are displayed:
 - a** Enter the friendly name for POA node into the **Hardware Node name** field. This name will be used in PBAS to refer to the POA node.
 - b** If needed, you can adjust POA API URL and POA frontend hostname.
6. The **DNS resource regex (case-insensitive)** field is pre-filled with POA resource class name. This regex is used to detect DNS resource on POA side by resource class. In most cases this field should not be changed.
7. Enter a free-form description of POA node into the **Comment** field.
8. Click **Save**.

To POA Integration Guidelines (on page 39)

Registering PPA Node

Shortly, PPA node registration consists of the steps:

1. Configure PPA node (on page 45)
 - a** Configure system properties.
 - b** Install DNS plug-in (if needed).
 - c** Configure POA API.
2. Register PPA node in PBAS (on page 46).
3. Set up PBAS as primary DNS set (on page 47).

PPA Node Pre-Configuration Before Registration

In this section we do not provide the paths to PPA components, but mention only the settings that require configuration. For more information refer to PPA documentation.

➤ *To configure PPA system parameters:*

1. Log in to PPA Control Panel.
2. Go to **System > Settings**. Select **System Properties** from the **Core** group of options.
3. Click **Edit**. Set the **System Properties** as follows:

Ability to add domains from customer CP	<input checked="" type="checkbox"/> Enabled
Domain registrar status default value	Ready
Allow using of several dots in domain name	<input checked="" type="checkbox"/> Enabled
Allow to move domains between subscriptions	<input type="checkbox"/> Disabled
Customers management from POA UI	<input type="checkbox"/> Disabled
IDN Domains Support	<input checked="" type="checkbox"/> Enabled
Ability to remove domains from customer CP*	<input type="checkbox"/> Disabled
*Recommended setting.	
External login URL	Leave this field empty.

Stay in PPA Control Panel. Now we shall check if it is needed to install DNS plug-in for PBAS.

➤ *To check the DNS plug-in and install it if needed:*

1. Go to **Infrastructure > Service Nodes**. The list of servers involved in PPA deployment is displayed.
2. Select the PPA management node by clicking on the management node ID or hostname. The node details are displayed.
3. Select the **Packages** tab. The list of packages installed at PPA node is displayed.
4. Search for the **PBASDNS** package. If it is found in the packages list, this means that it is already installed; in this case skip the further steps and proceed with API configuration later in this topic.
5. If the package is not found, click the **Install Package** button.
6. Select the **PBASDNS** package. Click the **Install** button.

Stay in PPA Control Panel. Now we configure API connection.

➤ *To configure API:*

1. Go to **Public API Manager**. The **Public API Manager Summary** is displayed.
2. Click the **Edit** button. Adjust settings:

- a** Check the **SSL** box.
 - b** Check the **HTTP Authentication** box. This is optional, but strongly recommended.
 - c** Set **Accept connections** to **Only from allowed networks**.
3. Click the **Submit** button.
4. Select the **Allowed Networks** tab. Click the **Add** button. Fill the form:
 - a** Type the PBAS node IP address into the **IP Address** field.
 - b** Type the 255.255.255.255 mask into the **Netmask** field.
5. Click the **Submit** button.
6. Select the **Summary** tab.
7. Make sure that PPA API is running: if the **Start** button is shown, click it to start API. If only **Stop** button is shown, this means that API is already running.
8. Write down or save in a file the **Access Point URL** shown at the **Summary** screen. This URL will be needed to register PPA node in PBAS.

PPA node pre-configuration is finished. Proceed with PPA node registration in PBAS.

PPA Node Registration

Before registering PPA node it is necessary to configure PPA (on page 45).

➤ *To register PPA node in PBAS:*

1. Log in to PBAS Control Center.
2. Go to **Service Director > Parallels Automation Manager > Nodes**. The list of registered PA nodes (if any) is displayed.
3. Click the **New Node** button. PA node registration wizard starts.
4. Enter the connection parameters:
 - a** Enter the PPA API URL you have got as **Access Point** after POA API configuration (on page 45) into the **POA Manager API address** (Example `https://HOSTNAME:8440/RPC2`) field.
 - b** Enter the PPA UI node (frontend hostname) into the **Frontend hostname** (Example `http://HOSTNAME:8443`) field.
 - c** Enter the PA node administrator login into the **User** field.
 - d** Enter the PA node administrator password into the **Password** field.
5. Click **Next**. PA node settings are displayed:
 - a** Enter the friendly name for PA node into the **Hardware Node name** field. This name will be used in PBAS to refer to the PA node.
 - b** If needed, you can adjust PA API URL and PA frontend hostname.

6. The DNS resource regex (case-insensitive) field is pre-filled with PA resource class name. This regexp is used to detect DNS resource on PA side by resource class. In most cases this field should not be changed.
7. Enter a free-form description of PA node into the **Comment** field.
8. Click **Save**.

To PA Integration Guidelines (on page 39)

Setting PBAS DNS as Primary for Parallels Automation Services

To provide PA services, it is required to set up PBAS as primary DNS. This is done by means of the **DNS Hosting** resource configuration.

In this section, we do not provide the paths to PA components, but mention only the settings that require configuration. For more information refer to PA documentation.

In POA, there is no pre-configured Service Templates. Thus, you will need to create the DNS Hosting resource, configure it properly, and add it to Service Templates.

In PPA, the default Service Templates are shipped. So, in this case, you will need to adjust the existing DNS Hosting resource or create a new one and add it to the Service Templates you are planning to use with PBAS.

How DNS settings are synchronized between PA and PBAS

As soon as PBAS is set as primary DNS, every 2 minutes PBAS checks for the changes in domain zones at PA side and synchronizes all the changes.

However, the periodical check is not enough if there is the need for bulk synchronization of all DNS data kept at PA side.

To synchronize the PA node, go to **Service Director > Parallels Automation Manager > Nodes**, select the PA node, then select the **General Settings** tab and click **Synchronize DNS**.

To synchronize domain zones per PA subscription, go to **Service Director > Parallels Automation Manager > Subscriptions**, select the subscription and click **Synchronize DNS**.

The required configuration of Activation Parameters for the DNS Hosting resource (other parameters are not critical, you may leave defaults):

- **Auto host domains:** Yes.
- **First nameserver:** PBAS name server.

If you already have created Service Templates in PA with DNS Hosting resource misconfigured, and have synchronized the Service Templates with PBAS, then there are three ways to fix it:

1. **Replace the existing DNS Hosting resource with a correct new one in Service Templates.**

In PA:

- a Add new DNS Hosting resource and configure it as required.
- b Drop the old DNS Hosting resource from Service Templates.

- c** Add the new DNS Hosting resource configured correctly to Service Templates.
In PBAS:
 - d** Propagate the changes to PBAS: Go to **Service Director > Parallels Automation Manager > Nodes**, select the PA node, then select the **Service Templates** tab and click **Synchronize service templates**.
 - e** Renew hosting plans: Go to **Billing Director > Product Manager > Hosting Plans**, select the PA hosting plan, then select the **Billable Resources** tab. Click **Edit**. When the **Billable Resources** list is displayed for editing, just click **Save**.
- 2. Change the existing DNS Hosting resource.** Changes will be propagated to all Service Templates that use this resource.
In PA:
 - a** Open the list of all **Resources** available in the PA installation.
 - b** Select the DNS Hosting resource. Configure its **Activation Parameters** as required.In PBAS: No actions needed, changes are applied automatically.
- 3. Change the existing DNS Hosting resource per Service Template.** Changes will be applied only to the Service Template you have adjusted.
In PA:
 - a** Open the list of all **Service Templates**.
 - b** Select the Service Template and then select the **Resources** tab.
 - c** Click on the DNS Hosting resource name. Configure its **Activation Parameters** as required.In PBAS: No actions needed, changes are applied automatically.

PA Node Settings

PA node settings are grouped as follows:

- **Summary.** The node status and statistics on subscriptions/service templates. Read-only.
- **General Settings.** The node connection settings. Here you can edit connection settings, unregister the node or delete information about the node from PBAS.
- **Service Templates.** View service templates available at the node, synchronize service templates with PBAS.
- **Resources.** All resources available in the frame of service templates at the POA node.

PA Node Summary

The PA node **Summary** displays the status and statistics on subscriptions/service templates:

- **Availability.** The node status in respect to the ability of PBAS to connect to PA:
 - **Available.** PBAS can establish a network connection to POA node.
 - **Not available.** PBAS cannot establish a network connection to POA node.
- **Registration Status.** Current status of the PA node in respect to its ability to connect to PBAS:
 - **Registered.** PBAS is registered at POA node as DNS server.

- **Unregistered.** PBAS is not registered at POA node as DNS server. To register, install DNS plug-in for PBAS to POA (on page 42) or PPA (on page 45) node. Then return to PBAS, select the PA node from the list of PA nodes, go to the **General Settings** tab, and click **Register**.
- **Subscriptions.** The number of subscriptions at PA node.
- **Service Templates.** The number of service templates at PA node.

PA Node General Settings

POA node General Settings display the connection settings:

- **Hardware Node ID.** The node numeric identifier assigned in PBAS.
- **Hardware Node name.** The node friendly name used in PBAS to refer to the node. Click to view the node settings.
- **User.** PA node administrator login. If the **Login to PCP** button is available, click to transparently log in to the Node administrator panel.
- **API address.** PA API URL. Configured in PA and later used in PBAS during PA node registration.
- **Frontend hostname.** The URL to PA UI server.
- **DNS resource regex (case-insensitive).** POA resource class name. This regexp is used to detect DNS resource on POA side by resource class. In most cases this field should not be changed.
- **Reseller Service Template.** The name of the Reseller Service Template created at PA node. Reseller service template defines the set of PA resources available for reseller.
- **Comment.** A free-form description of POA node.

Buttons (viewing the node settings):

- **Cancel.** Back to the list of POA nodes (when editing the node settings - back to view screen).
- **Synchronize DNS.** Synchronize all the zone files stored at the PA node with PBAS. All the DNS records except for NS are synchronized.
- **Register.** This button is shown only if the node is in the **Unregistered** status. Use this button to manually reconnect the node to PBAS.
- **Delete.** Disconnect and delete all the information about POA node from PBAS.
- **Edit.** Edit the node settings. When editing the node settings, the **Update** button is used to save the node settings.

PA Node Service Templates

PA service templates are created at PA node and then synchronized with PBAS. To PA Integration Guidelines (on page 39).

Synchronized service templates are used to create POA hosting plans (on page 143) in PBAS.

To fetch the service templates from PA node to PBAS, click the **Synchronize service templates** button. After a service template is synchronized, it appears in the PBAS Service Templates list.

Service templates automated synchronization is scheduled under **Service Director > Parallels Automation Manager > Setup**.

Resources included in the POA service templates are shown under the **Resources** tab.

Important: The **DNS Hosting** resource should be configured to point at PBAS name servers as primary DNS set.

To view the list of resources included in a service template, click on this service template ID or name. The list of resources is shown under the **Resources** tab, but filtered according to the service template you have selected.

POA Node Resources

The PA resources available with PA service templates synchronized with PBAS are shown under the **Resources** tab.

For more details about PA resources, refer to POA or PPA documentation.

Managing PA Subscriptions

POA subscriptions are managed in the same way as other subscriptions in PBAS. To get all the options applicable to subscriptions, go to **Account Director > Subscription Manager > Subscriptions** and filter the list down to POA subscriptions. For more details, refer to PBAS online help (on page 204).

In addition, POA subscriptions are grouped under **Service Director > Parallels Automation Manager > Subscriptions**.

To synchronize subscriptions with hosting plans, click **Synchronize subscriptions**. Subscriptions automated synchronization is scheduled under **Service Director > Parallels Automation Manager > Setup**.

In some cases, for example if the subscription has been added to PBAS by Conflict Resolver (on page 299), DNS data is not properly synchronized with PBAS. It is possible to synchronize the subscription DNS data stored at PA side, with PBAS:

1. Click on the subscription name in the list. The subscription details open.
2. Click **Synchronize DNS**.

The list of PA subscriptions displays the following:

- **ID.** Subscription ID assigned in PBAS. Click to view subscription summary.
- **Subscription name.** The name of hosting plan or domain name.
- **Account Name.** Name of the account that owns the subscription.
- **Node name.** Friendly name of PA node, where the subscription is created.
- **Service Template Name.** The name of service template used for hosting plan the subscription is based on.
- **Status.** Subscription current status:
 - **Active.** Subscription is available for PBAS and can be synchronized or managed.
 - **Offline.** Subscription is not available for PBAS and cannot be synchronized or managed.

Parallels Automation Setup

PA Setup is accessible under Service Director > Parallels Automation Manger > Setup.

Here you may adjust the PA - PBAS data synchronization schedule and subscriptions naming convention (by the hosting plan name or by the domain name).

The following data is synchronized with PA:

- Statuses of subscriptions,
- Resource usage,
- Service Templates.
- DNS

Synchronization setup allows scheduling synchronization between PA and PBAS.

Note: DNS data is synchronized every 2 minutes. DNS synchronization schedule cannot be changed.

To change the settings, click **Edit**.

- **Subscriptions synchronization period (hours).** How often (in hours) PA subscriptions are synchronized with PBAS.
- **Subscriptions usage statistic synchronization period (hours).** How often (in hours) PA subscriptions resources usage is synchronized with PBAS.
- **Service templates synchronization period (hours).** How often (in hours) PA service templates are synchronized with PBAS.
- **Subscriptions are named.** Select one of the following:
 - **By the hosting plan name.** PA subscriptions are named by the title of the hosting plan they are based on.
 - **By the domain name.** PA subscriptions are named by the domain name registered for the subscription.

Sitebuilder Management

Sitebuilder (<http://www.parallels.com/en/products/sitebuilder/>) is an easy to use web application designed to create and manage websites. Parallels Business Automation - Standard provides integration with Parallels Plesk Sitebuilder 2.1.1, 3.0.1, 4.x for Unix/Linux and Parallels Plesk Sitebuilder 2.0.5, 3.2.1, 4.x for Windows.

Important: Sitebuilder for Windows sites publishing

- Sitebuilder for Windows sites are published on Plesk hosting only.
- Sitebuilder for Windows sites are published into the `/sitebuilder/` folder created over the document root folder. The index file containing auto-redirect to the `/sitebuilder/` folder is created automatically and placed to Plesk Domain document root. These settings are PBAS defaults, they cannot be changed; PBAS default publishing settings always override Sitebuilder publishing settings.

This chapter describes the **Sitebuilder Manager** integrated in Parallels Business Automation - Standard Control Center. Sitebuilder Manager is used to administer Sitebuilder nodes, plans and sites and provide Sitebuilder services as an add-on within hosting plans. After nodes registration, Sitebuilder sites can be designed and published using the Parallels Business Automation - Standard Control Panel (see Parallels Business Automation - Standard Subscriber's guide for details). For more details about Sitebuilder services provisioning in Parallels Business Automation - Standard, please see the next topic (on page 54).

Important: When preparing Parallels Plesk Sitebuilder for integration with Parallels Business Automation - Standard, please only install Parallels Plesk Sitebuilder itself and a Parallels Plesk Sitebuilder license. Do not configure anything additionally in Parallels Plesk Sitebuilder Administrator Control Panel. For example, **DO NOT ADD HOSTS**. When a Sitebuilder node is connected to Parallels Business Automation - Standard, everything is done automatically. Thus, any additional configuration on a Sitebuilder node side may cause problems. For example, if host(s) is(are) manually specified in a Sitebuilder node Administrator Control Panel, publishing sites from Parallels Business Automation - Standard fails. To avoid this, always do minimal configuration on Sitebuilder nodes that are planned to be connected to Parallels Business Automation - Standard.

Sitebuilder **Nodes** (on page 58) are registered and modified in **Service Director > Sitebuilder Manager > Nodes** panel of Sitebuilder Manager. On the **Nodes** panel, you can search the existing nodes by name or ID, view the list of nodes, modify nodes and register new ones.

On the **Plans** (on page 59) panel you can search plans by name or ID, add, remove or modify Sitebuilder plans.

On the **Sites** (on page 60) panel, you can search and view the sites on the Sitebuilder server.

On the **Setup** (on page 57) panel, you can view available Sitebuilder modules and templates.

Sitebuilder Services Provisioning

There are two types of sites in Sitebuilder: trial web sites and regular web sites:

- A trial web site is a site with limited functionality. Trial sites cannot be published. They are created for users who use Sitebuilder for the first time. Also trial site has a time life of 30 days. If the trial web site is not transferred into regular web site upon expiration of its time-life this trial site is terminated.
- A regular web site is a site with a full functionality and ready for publishing.

Parallels Business Automation - Standard automatically transfers trial Sitebuilder sites into regular after a customer pays the corresponding order.

Sitebuilder integration with Parallels Business Automation - Standard allows the following scheme for Sitebuilder services provisioning:

- After Sitebuilder Manager is set up and Sitebuilder nodes are registered and synchronized, you can create Sitebuilder service offerings called *Plans*.
- Plans then can be included in hosting plans to be sold at your online store. Hosting plan types the Sitebuilder service can be included are: Virtuozzo Container, Plesk Client, Plesk Domain, Plesk Virtual Node. Sitebuilder services can be included in a hosting plan either during creation or later, under the **Sitebuilder** tab within a hosting plan properties.
- By design, the Sitebuilder service is always included in a Hosting Plan price. You can only set the fees for additional Sitebuilder sites, over the number included in a Sitebuilder plan. Thus, you can take the Sitebuilder service price into account when setting both setup and recurring fees for the Hosting Plan you want to include Sitebuilder services in.
- When a customer subscribes for a hosting plan with Sitebuilder service, two variants of Sitebuilder site hosting are available:
 - If a customer has already passed the Sitebuilder site creation Wizard on one of your registered Sitebuilder nodes, he/she already has a trial Sitebuilder site with the unique code (called *site alias*) assigned. In this case, when a customer buys hosting with Sitebuilder services, he/she can check the box next to a Sitebuilder service offering, enter a Sitebuilder site alias when subscribing to a hosting plan and assign this Sitebuilder site to his/her subscription. Later, after an order is paid and subscription is activated, a customer can host this Sitebuilder site on his/her Container or Plesk domain.
 - If a customer has no Sitebuilder sites by the moment of hosting plan purchase, he/she can check the box next to a Sitebuilder service offering and get a trial Sitebuilder site anyway, without the need for entering a site alias or passing a Sitebuilder Wizard. In this case, a trial and empty Sitebuilder site will be created automatically (the same option is available from Control Panel). The main designation of such empty site is to reserve a site alias for a customer and let customer save time and get Sitebuilder site already on a hosting plan purchase stage. A customer can later pass the Sitebuilder Wizard for this special empty Sitebuilder site.

- A Sitebuilder site remains trial till a customer pays for hosting. After payment is received, a customer Sitebuilder site automatically becomes regular and a customer can host this site on his/her hosting (Container or Plesk domain) and publish it as soon as his/her subscription is activated. If a customer does not pay for hosting, a trial Sitebuilder site keeps remaining trial and if an order is not paid by the date a trial site lifetime expires (30 days after creation), this site is removed.

Notes about Sitebuilder site troubleshooting by a customer:

Only actually existing sites with valid site aliases are shown in Provider Control Center. Corrupted and deleted sites are shown in customer Control Panel and a customer can decide whether to permanently delete such a site.

If a Sitebuilder site creation has failed (for example, due to technical problems on a Sitebuilder node), then the site status (shown in Control Panel only) is Pending and a customer can recreate this site from the Control Panel or delete it and get the refund for the Sitebuilder services.

If a Sitebuilder site becomes not available due to its deletion on a Sitebuilder node, and this is not a customer fault or intention, then the site status (shown in Control Panel only) is Conflicts and a customer can delete the information about this site from Parallels Business Automation - Standard database and get the refund for the Sitebuilder services.

Sitebuilder Installation:

Sitebuilder requires installation on a dedicated physical or virtual node. For Sitebuilder installation instructions, please refer to the Sitebuilder original documentation.

➤ *After installation, do the following to setup and configure Sitebuilder Manager:*

1. Register Sitebuilder node(s), assign logins/passwords and URLs. In case the nodes are to be transferred to Resellers, associate the nodes with them.
2. Configure the message to be shown on the **Publish** screen of the Sitebuilder Wizard on a node. This message must help customers that do not yet have hosting for their Sitebuilder sites to get to your shop and buy hosting compatible with their sites.
3. Synchronize nodes, if required. Generally, synchronization is performed automatically after registration, however, if you enable or disable some templates or modules on a node using the native Sitebuilder Administrator Control Panel, you must synchronize a node with Parallels Business Automation - Standard database to make the newly enabled templates or modules available.
4. Create Sitebuilder plans and synchronize them to Sitebuilder nodes. In respect to Sitebuilder plans, such synchronization allows you to compare the set of templates/modules declared in a plan with an actual set of templates/modules available on each of Sitebuilder nodes registered in Parallels Business Automation - Standard. After such synchronization, you can see the match between plans and nodes and can decide upon the templates/modules that miss on nodes to provide services declared in plans.
5. Go to **Provider Control Center > Billing Director > Product Manager > Hosting Plans** and associate Sitebuilder with hosting plans as follows:
 - Click on a hosting plan.
 - Click on the **Sitebuilder** tab.
 - Under the **Sitebuilder** tab, click the **Edit** button.
 - Check the **Sitebuilder enabled** box to enable Sitebuilder services for the selected hosting plan.

- Select a Sitebuilder plan to be included into the hosting plan.
- Click the **Save** button to confirm or the **Cancel** button to return to the previous menu.

Note: If a reseller clones a Provider's plan, Sitebuilder settings for this hosting plan are reset to default (not enabled by default).

Connecting Sitebuilder Nodes

The connection to a Sitebuilder node is established using the special management interface called Remote Admin. Thus, for successful Sitebuilder node registration in Parallels Business Automation - Standard, the Remote Admin must be installed on a node before you start registering it. For more details about the Remote Admin installation, please refer to the Sitebuilder documentation.

Note: The Sitebuilder administrator account login and password are used by Parallels Business Automation - Standard also for establishing connection to a Sitebuilder node API (Remote Admin).

By default, Sitebuilder has only one administrator account: For Sitebuilder 2.x or 3.x administrative user name `root` and the password `sitebuilder`; for Sitebuilder 4.x administrative user name `admin` and the password `admin`. These login and password are used for initial logging in to the Sitebuilder Admin Panel.

For security purposes, before registering a Sitebuilder node, we strongly recommend to log in to the Sitebuilder Admin Panel on this node and change the default administrator login/password.

Parallels Business Automation - Standard allows granting access to a single Sitebuilder node both to a Provider account and a number of reseller accounts at the same time. In Provider Control Center a node registered for several accounts looks like a separate node assigned to a single reseller account. In Reseller Control Center such Sitebuilder node behaves like a dedicated node assigned to reseller. To grant access to a Sitebuilder node to a reseller account, log in to the Sitebuilder Admin Control Panel and create a reseller. Then get back to the Provider Control Center and register this Sitebuilder node as a new one but with URLs that use this reseller domains. At the same time, assign this Sitebuilder node to a corresponding reseller account registered in Parallels Business Automation - Standard.

To register a Sitebuilder Node, open the **Service Director** submenu and select the **Sitebuilder Manager**. Click **Nodes** on the **Sitebuilder Manager** submenu.

Setting Up Sitebuilder

The **Sitebuilder Manager Setup** informs you about all Sitebuilder add-ons (programs like guestbook or photo gallery called modules and web page templates) available at all Sitebuilder nodes registered.

The list of modules (or templates) displays the following:

- **Modules (or Templates)** - depending on the tab you select. - The list of modules or templates named according to the Sitebuilder naming convention. You cannot change these names, they are shown exactly as were fetched. Please, refer to the Sitebuilder documentation to know more about each module or template.

Note: You can see the palette and style of each template using the **Preview** link placed in brackets next to each template name.

- Sitebuilder nodes friendly names you have assigned them during registration in Parallels Business Automation - Standard. The green tick next to a node name means that a given module or template is available on a node. Red cross next to a node name means that a module or a template is disabled on a node. The synchronization status is shown for the moment of the latest synchronization for each node.

The process of fetching the information about templates and modules available on a Sitebuilder node is called synchronization. Normally, each node is synchronized automatically right after registration (on page 56).

Important notes about Sitebuilder Nodes Synchronization:

After a Sitebuilder node is registered, its synchronization is performed as follows:

Manually. Using the **Synchronize** button at a node **General Settings** or **Configuration** screen. Please keep in mind that when you edit a Sitebuilder node configuration and save it, the changes are not automatically synchronized with a node, but just saved in the Parallels Business Automation - Standard database. To synchronize changes, you need to click the **Synchronize** button. This is done intentionally to save your time, because if a Sitebuilder node runs many sites, synchronization may take long (an hour or more). So the idea was to let you start synchronization when you really need this.

Automatically. By means of a periodical task. The periodical task synchronizes the status of all registered Sitebuilder nodes every 5 minutes and performs sites synchronization for all registered Sitebuilder nodes every 8 hours. You can change the nodes status synchronization period in **Action Log - Tasks Queue**.

Please note that Parallels Business Automation - Standard does not provide tools that allow enabling/disabling templates or modules on Sitebuilder nodes. Thus, if you want to enable or disable some templates or modules, you must do this using the original Sitebuilder Admin Control Panel.

After the composition of enabled templates/modules on a Sitebuilder node have been changed, there are two ways to synchronize Sitebuilder node to refresh the data about a node in Parallels Business Automation - Standard database and make a newly enabled templates/modules available for Sitebuilder plans you create in Parallels Business Automation - Standard:

1. Synchronize either templates or modules for all Sitebuilder nodes registered by one click. To this effect, click the **Modules** or **Templates** tab to synchronize modules or templates respectively and then click the **Synchronize** button.
2. Per node as this described later in this guide.

Managing Sitebuilder Nodes

Sitebuilder Nodes are managed under the **Service Director > Sitebuilder Manager** in the Nodes panel. You can register a new node (on page 56), edit or remove a node.

The list of Sitebuilder nodes displays the following:

- **ID.** A node numerical identifier assigned to a node on registration in Parallels Business Automation - Standard automatically.
- **Name.** A node friendly name. An arbitrary alphanumeric identifier assigned manually to a node. Used just to recognize a node when working in Parallels Business Automation - Standard web-based interface.
- **Vendor.** The name of the account that owns a node. A node can be assigned either to a Provider administrative account. or to a reseller account. After a node is assigned, the Sitebuilder services provided by this node can be sold on behalf of the owning account. i.e., either in the provider store, or in the store that belongs to the reseller account a node is assigned to.
- **Sites.** The number of Sitebuilder sites hosted on a node.
- **Wizard URL.** The URL to the Sitebuilder five-step website creation wizard on a node.
- **Availability.** The status a node currently has:
 - **Available.** A node is online, up and running. Ready to provide Sitebuilder services having been managed via the Parallels Business Automation - Standard web-based interface.
 - **Not available.** A node either is offline or down. The connection with a node is broken and Sitebuilder services provisioning using this node is not possible.

To view or adjust a node settings, click on a node ID or name.

Managing Sitebuilder Plans

A Sitebuilder plan is an add-on that can be included in hosting plans as an additional service offering. When you enable Sitebuilder for a hosting plan, you set both the setup and monthly fee, the number of websites included and price per additional website, over the included set.

Sitebuilder services can be included as a special offering in the following hosting plan types:

- Virtuozzo Container - several websites can be provided.
- Plesk Client - several websites can be provided.
- Plesk Domain - one website can be provided.

Note: For hosting plans that allow creating several Sitebuilder websites, the number of websites is limited only by a disk size and the number of websites stated for a given Plesk Client or Container.

Sitebuilder plans can be added to hosting plans either during creation (if Sitebuilder services are available, the Sitebuilder related step is included into a hosting plan creation wizard) or later, under the **Sitebuilder** tab in hosting plan settings.

The list of Sitebuilder plans displays the following:

- **ID.** A plan numerical identifier assigned to all objects in Parallels Business Automation - Standard automatically.
- **Name.** The title a plan is referred to in Parallels Business Automation - Standard. A plan name can be changed under the General tab in a plan settings.
- **Pages.** The maximal number of pages allowed for websites created under a plan.
- **Modules.** The number of Sitebuilder programs (modules) included in a plan. You can view the list of modules included and/or include/exclude modules to/from a plan, under the Modules tab in a plan settings.
- **Templates.** The number of Sitebuilder website style templates included in a plan. You can view the list of templates included and/or include/exclude templates to/from a plan, under the Templates tab in a plan settings.
- **Sites.** The number of websites created under a plan.

To add a plan Click the **New Sitebuilder Plan** button.

Managing Sitebuilder Sites

All Sitebuilder websites created on all Sitebuilder nodes registered in Parallels Business Automation - Standard are shown under the **Sites** item on the **Sitebuilder Manager** submenu. You can view, activate/deactivate sites on the Sitebuilder server.

You can search sites by **ID**, **Code**, **Domain**, **Account ID**, and **Subscription**.

Sites can be filtered by **Type** and status (**Active/Inactive**). The information about the sites created on a Sitebuilder node using the original Sitebuilder Admin Control Panel or using other tools different from Parallels Business Automation - Standard is fetched during node synchronization.

The list of Sitebuilder sites displays the following:

- **ID**. The numerical identifier assigned automatically to a site in Parallels Business Automation - Standard.
- **Site Alias**. A site code assigned by Sitebuilder. This code is called *site alias* in terms of Sitebuilder.
- **Node**. The friendly name of Sitebuilder node a site is hosted on.
- **Vendor**. The name of Sitebuilder administrator or reseller (registered directly on a Sitebuilder node) that officially provides a site.
- **Plan**. The name of Parallels Business Automation - Standard Sitebuilder plan, under which a site was created. N/A means that a site was created outside Parallels Business Automation - Standard (e.g., using the Sitebuilder Admin Control Panel) and is not related to any of Sitebuilder plans existing in Parallels Business Automation - Standard.
- **Domain**. The hostname of Container or Plesk domain or client a site is hosted on. N/A means that a site was created, but not reassigned to Parallels Business Automation - Standard hosting yet.
- **Account name**. The name of Parallels Business Automation - Standard account owning a site.
- **Trial**. A site type. In Sitebuilder all sites are trial first. A trial site has a valid code and can be filled with content using Sitebuilder wizard, but cannot be published. To be published, a Sitebuilder site must have the regular type. Parallels Business Automation - Standard automatically turns trial sites into regular after the corresponding order is paid. Red cross in this column means that a site is regular, green tick means that a site is trial.
- **Status**. A site status in respect to Sitebuilder services. Can be one of the following:
 - **Active**. Sitebuilder can be launched for this site and all operations over a site are available.
 - **Disabled**. Sitebuilder cannot be launched for a site. Site management is suspended.

Important: Troubleshooting Sitebuilder Sites

If a Sitebuilder site provisioning has failed because of some temporal problems at a Sitebuilder node (node unavailability, temporarily dns problem, etc.) it is possible to manually restart site provisioning. In this case, a site settings are synchronized with its configuration (templates, modules, etc.) stored in a customer subscription. To this effect, click the **Republish** button at a site details screen.

To view site settings click on a Site ID or Site Alias. The site details appear on the screen. You can deactivate a site by clicking the **Deactivate** button.

Note: For Sitebuilder versions starting from 3.x.x the selected sites deactivation is not supported. Thus for sites created on Sitebuilder 3.x.x the **Deactivate** button is not shown. For such sites it is possible to deactivate a Sitebuilder user, which deactivates all sites this user owns.

To view details on Account owning a site, click the account information link. You will be taken to **Top > Account Director > Customer Manager**. To view detailed information about a Subscription that includes a Sitebuilder site, click the subscription information link.

Managing Dedicated Servers

Dedicated servers that run some third-party software (different from Virtuozzo or Plesk) are managed separately in Parallels Business Automation - Standard using a special set of tools for dedicated hosting services provisioning including the following:

- Creation of hosting plans for dedicated hosting offerings. Such a hosting plan defines the following server properties:
 - Both setup and recurring fees for service.
 - The scheme for traffic accounting by classes.
 - Number and prices for static IP addresses that can be assigned to a server.
 - Server configuration and available upgrades for a customer can be outlined using custom attributes (for RAM, disk space, etc.) assigned to a hosting plan.
 - In addition, it is possible to sell different application licenses at a separate fees.
- Dedicated servers registration in Parallels Business Automation - Standard, which allows saving the most general properties of a server in the Parallels Business Automation - Standard database and, when the corresponding order is placed and paid by a customer, creating a dedicated subscription for a particular server.
- Dedicated servers grouping by Data centers and racks in each Data Center. In addition it is possible to group servers by switches used.

Dedicated servers management tools are grouped under **Servers Manager** of the **Service Director**.

Registering Data Centers

Data Centers registration in Parallels Business Automation - Standard serves for accounting purposes and does not provide any connection to a Data Center facilities. When you register a Data Center, a record in Parallels Business Automation - Standard database is created. After this, you can register racks and switches by your Data Centers and finally, register dedicated servers located in each Data Center.

➤ *To register a Data Center:*

1. Click **Data Centers** on the **Servers Manager** submenu. The list of Data Centers registered (if any) appears on the screen.
2. Click the **New Data Center** button.
3. Fill the form that appears:
 - a** Type the Data Center name into the **Identification** field. This is the name the Data center will be referred to in Parallels Business Automation - Standard database. You can enter any alphanumeric name (number of words and upper/lower case is not critical).
 - b** You can specify the Data Center location (country, city, address) in a free form in the **Location** field.
 - c** And into the **Comment** field you can enter some additional information about the Data Center.
4. Click the **Save** button.

Registering Racks in Data Centers

You may have considerable number of servers in your Data Center, and in order to facilitate servers management, you can save in the Parallels Business Automation - Standard database your racks capacity, location, and load.

From Parallels Business Automation - Standard standpoint, a rack is a logical container used for accounting purposes. A rack may be considered as an object within Parallels Business Automation - Standard. This means that if you do not have any material racks at your Data Center, you can group your Hardware Nodes into logical racks just for better manageability. On the other hand, the set of racks you create in Parallels Business Automation - Standard may follow the actual configuration of a Data center.

To view/edit the racks configuration, or add/delete a rack, click **Racks** on the **Servers Manager** submenu and select a rack from the list.

➤ *To register a new rack:*

1. Click **Racks** on the **Servers Manager** submenu. The list of racks registered (if any) appears on the screen.
2. Click the **New Rack** button.
3. Fill the form that appears:
 - a** Type the name of the Rack into the **Identification** field. This is the name the rack will be referred to in Parallels Business Automation - Standard database. You can enter any alphanumeric name (number of words and upper/lower case is not critical).

- b** You can enter a rack capacity into the **Capacity** field. This is an optional Parallels Business Automation - Standard rack attribute representing the maximal number of servers this rack can contain. Similarly to a material rack capacity, this attribute is measured in Units (U). An Parallels Business Automation - Standard logical rack does not have any capacity restrictions.
 - c** You can specify the rack actual location by selecting the Data Center a rack is located in from the **Data Center** drop-down menu.
 - d** You can register servers located on this rack right away. To this effect, click the **Add** button on the **Dedicated Servers** part of the form and select one or more servers from the list that appears in the popup window. As you click on a server name, it appears in the list. Add servers and close the popup list. In case of mistake or if you want to re-group servers, you can remove a server from the list and detach it from the rack, To this effect, select a server. To select several servers in series, hold down **SHIFT**, and then click the first and last server names of the group. To select several servers that are nonadjacent in the list, hold down **CTRL**, and click a server name. To remove the selected servers from the rack, click the **Remove** button.
 - e** **Comment** - any comment you consider useful.
4. Click the **Save** button.

Registering Switches

To facilitate traffic accounting and servers allocation, you can save the information about switches located in your Data Centers in Parallels Business Automation - Standard database.

➤ *To register a new switch:*

1. Click **Switches** on the **Servers Manager** submenu. The list of switches registered (if any) appears on the screen.
2. Click the **New Switch** button.
3. Fill the form that appears:
 - a** Type the name of the switch into the **Identification** field. This is the name the switch will be referred to in Parallels Business Automation - Standard database. You can enter any alphanumerical name (number of words and upper/lower case is not critical).
 - b** Type the number of ports in the switch into the **Total number of ports** field.
 - c** Type the switch manufacturer name into the **Brand** field.
 - d** Enter the switch model specification into the **Model** field.
 - e** You can specify the switch actual location by selecting the Data Center a switch is located in from the **Data Center** drop-down menu.
 - f** You can register servers connected to the switch right away. To this effect, click the **Add** button on the **Dedicated Servers** part of the form and select one or more servers from the list that appears in the popup window. As you click on a server name, it appears in the list. Add servers and close the popup list. In case of mistake or if you want to re-group servers, you can remove a server from the list and detach it from the rack, To this effect, select a server. To select several servers in series, hold down **SHIFT**, and then click the first and last server names of the group. To select several servers that are nonadjacent in the list, hold down **CTRL**, and click a server name. To remove the selected servers from the rack, click the **Remove** button.

- g** Comment - any comment you consider useful.
 - h** In the fields located in the **SNMP Settings** part of the form, you can enter the SNMP (Simple Network Management Protocol) data for the switch:
 - Read-Only Community String.** The switch SNMP community string, i.e., a string used as a switch password that allows a read-only access to a switch over the network.
 - IP address for SNMP management.** The switch IP address.
4. Click the **Save** button.

Registering Dedicated Server

Dedicated servers cannot be physically managed using the Parallels Business Automation - Standard web-based interface. However, you can save the detailed information about a server (location in a rack, form factor, switch used, IP address(es) assigned) in Parallels Business Automation - Standard database for accounting purposes.

Dedicated servers are accounted by racks and switches used, but not by Data Centers they are located in. However, a server location can be defined by a rack and a switch since racks and switches are bound to particular Data Centers.

After a server is registered, you can create dedicated subscription in accordance with the order placed by a customer.

➤ *To register a server designated for dedicated hosting service provisioning:*

1. Click **Dedicated Servers** on the **Servers Manager** submenu. The list of dedicated servers registered (if any) appears on the screen.
2. Click the **New Dedicated Server** button.
3. Fill the form that appears:
 - a** Type the name of the server into the **Identification** field. This is the name the server will be referred to in Parallels Business Automation - Standard database. You can enter any alphanumerical name (number of words and upper/lower case is not critical).
 - b** Enter the server size in Units into the **Form factor** field.
 - c** You can optionally specify the administrator login and password in **Administrator login name** and **Administrator password** fields.
 - d** If you already have registered the rack the server is located, you can add the information about the rack the server belongs to the other information. To this effect, select the needed rack from the **Rack** drop-down menu.
 - e** If you already have registered the switch the server uses, you can add the information about this switch. To this effect, select the needed switch from the **Switch** drop-down menu and type the number of port the server is connected into the **Port:** field.
 - f** The **Subscription** part of the form serves for activating a subscription for this server. Dedicated subscriptions can be activated only manually (on page 66). By default, when you register a new server, the option button is set to **Not assigned**. You can register as many unassigned dedicated servers as you need. When you get an order and a pending subscription for a dedicated hosting, you can set the option button to **Assign dedicated server to existing subscription**, click the **Select** button and chose the subscription. After this, when you save changes, a subscription will be automatically activated.

- g** Comment - any comment you consider useful.
4. Set up the dedicated server configuration. The dedicated server configuration is set up as a selection from a pre-configured custom attributes. Dedicated server configuration can also be adjusted on a subscription activation.
 5. One or more IP addresses from your IP pools can be assigned to the dedicated server. To make IP addresses assignment possible, your IP addresses must be registered in the Parallels Business Automation - Standard database (on page 76). To assign IP addresses, enter them as a comma separated list.
 6. Review the dedicated server configuration. To finalize registration, click **Finish**.

Activating Dedicated Server Subscription

To activate the Dedicated subscription go to the **Service Director > Servers Manager > Dedicated Servers**.

Dedicated server subscriptions can be activated only manually.

Say, you have created and offered in your store the dedicated hosting plan for such a server. When a customer places and pays an order for this hosting plan, the subscription is automatically created in Parallels Business Automation - Standard. This subscription is in the Pending state, because it awaits for particular dedicated server assignment.

In hosting plans, dedicated servers configuration is defined by custom attribute values specified for a hosting plan (on page 147).

A dedicated server configuration can be adjusted under the **Resources** tab. When you assign a dedicated server to a subscription, Parallels Business Automation - Standard automatically checks every item of a corresponding order in respect to an ordered server configuration and in case an ordered configuration does not match an assigned server configuration, Parallels Business Automation - Standard warns you. In this case, you can check the available dedicated servers configuration, if needed, upgrade or downgrade one of them to match the ordered configuration, then adjust the dedicated server registration parameters in Parallels Business Automation - Standard or register a server and after this, try to activate a dedicated subscription once again.

Dedicated server configuration is specified by means of custom attributes (on page 147). Advanced custom attributes system and dedicated servers configuration auto-check during subscription activation considerably facilitates dedicated hosting provisioning:

- All third-party servers in your data center can be accounted and registered in Parallels Business Automation - Standard database in accordance with servers actual location and configuration.
- Automated server configuration check during dedicated subscription activation facilitates dedicated servers assignment and servers accounting.
- Automated billing for dedicated hosting upgrade: You can specify a dedicated server configuration in hosting plan and allow a customer to select each parameter within a certain range during initial purchase and later order upgrade or downgrade for his/her dedicated server by selecting one or another option in a corresponding custom attribute (disk space, RAM, etc.).

If a hardware Node was not registered yet, then register it:

- Select a Hardware Node and edit its **General Settings**: assign an owner account and create a subscription (or assign a server to existing subscription). If an assigned server configuration does not match an ordered configuration, Parallels Business Automation - Standard allows assigning a server anyway, but leaves a server in Not Synchronized status till a server configuration will be brought in correspondence with an ordered configuration.
- Assign IP addresses. Select the **Network** tab and enter the IP addresses as a comma separated list.

Managing Nodes by Groups

Servers (also referred as *nodes*) registered in Parallels Business Automation can be united into groups for better management. Such grouping provides an additional way to assign nodes for services provisioning (per hosting plan) and allocate IP addresses. IP addresses allocation is associated with nodes groups by assigning an IP pool to a nodes group, in the same way as an IP pool can be allocated to a type of hosting. In addition, you can group nodes by location (datacenters, etc.).

Nodes are grouped by types. Only nodes of the same type can be included in a group. It is possible to create as many nodes groups as needed. First you create a group and then add (remove) nodes into (from) it.

➤ *To add a nodes group:*

1. Open the **Service Director** submenu, expand the **Manager** folder that corresponds to type of nodes you want to group (Plesk, Virtuozzo, Parallels Server, Dedicated Servers). Select **Node Groups**.
2. Click **New Node Group**. Fill the form:
 - a Type a group name into the **Name** field. This is the name the group will be referred to when associating with hosting plan or IP pool.
 - b Type a short description of the group into the **Description** field.
 - c Enter a free-form comment into the **Comment** field.
3. Click **Save**.

As a group is created, you can add or remove nodes, or remove this group. Removing a group cancels nodes logical grouping.

➤ *To add node to group:*

1. Click on a group name.
2. Switch to the **Nodes** tab.
3. Click **Add Nodes**. The list of all the nodes that belong to the type you have selected appears on the screen.
4. Select the nodes you want to add by checking the box next to nodes' names.
5. Click **Add Nodes**.

Selling Licenses

Parallels Business Automation - Standard allows selling Parallels Plesk Control Panel, Parallels Plesk Sitebuilder, Parallels Virtuozzo Container, and some other types of licenses as a part of services included in the following types of hosting plans:

- Dedicated node.
- Dedicated Plesk server.
- Virtuozzo Container (in case a hosting plan includes the Plesk Server Administrator application). A Virtuozzo Container behaves like a Plesk server, but is not registered in Parallels Business Automation - Standard as a Plesk node.
- Plesk Server in Virtuozzo Container (Plesk Virtual Node). A Virtuozzo Container behaves like a Plesk server, and is registered in Parallels Business Automation - Standard as a Plesk node.
- Miscellaneous.

The special plug-in for licenses issuing (Parallels Key Administrator) that can be installed similarly to the other plug-ins makes it possible to request licenses on a customer order. The plug-in can be configured both for working in online and offline mode.

The requisites and keys necessary for Parallels Key Administrator (Parallels KA) to work online are issued by Parallels. Depending on a HSP needs, Parallels can issue a special key for a particular license class or for a number of license classes.

Tools for license services management are grouped under the **Service Director > License Manager**. The list of licenses classes available for the Parallels partner is shown under the **License Manager > Licenses**.

Managing Key Administrator Plug-Ins

To use the Parallels Key Administrator services, please, contact your vendor and complete a client agreement to get the Parallels Key Administrator *client login*. Using this login, you can log in to the Parallels Key Administrator GUI and manage your licenses and this login is also used to set up the Key Administrator plug-in that allows requesting licenses online.

Note: There can be different Parallels Key Administrator client logins that allow issuing licenses of different classes. If you have different client logins and if you want to sell different license classes using the Parallels Business Automation - Standard tools, then you should configure several KA plug-in configurations.

The KA plug-in can be configured both for online licenses issuing and manual licenses upload. You can configure a number of KA plug-ins. However, to sell licenses, it is required to configure at least one plug-in, because configuring a KA plug-in is the only way to define the set of license classes you will sell.

Immediately after a KA plug-in configuration is saved, Parallels Business Automation - Standard starts executing a special task that fetches the list of license classes. Only after the list of license classes is fetched a KA plug-in is considered as configured and gets a 'Configured' status, i.e., ready for use.

The list of license classes is available for every KA plug-in below the **License Classes and Properties** tab.

For offline KA plug-in configurations the list of license classes is taken from the Parallels Business Automation - Standard database and thus, it is the same for any offline KA plug-in configuration. This list of license classes includes the full set of license types the Parallels KA provides, so after the list of license classes is fetched, it is necessary to do a post-configuration and select the license classes to sell in accordance with the client agreement completed with Parallels Key Administrator.

For online KA plug-in configurations the list of license classes is requested online directly from the KA server and since a client requisites are passed to KA, the returned list of license classes corresponds to a client permissions stated in a client agreement. Thus, for online KA plug-ins additional check and post-configuration of the license classes list is possible but not necessary.

To add a new KA plug-in configuration, click the **New plug-in** button.

The list of KA plug-ins displays the following:

- **ID.** A numerical identifier assigned to a KA plug-in configuration in the Parallels Business Automation - Standard database.
- **Plug-in name.** The KA plug-in configuration name assigned in Parallels Business Automation - Standard. A pug-in is referred
- **Configured.** This column shows whether a KA plug-in is ready for use or not:
 -  - A plug-in is ready for use, all the necessary data is entered and saved, the list of license classes is fetched.
 -  - A plug-in is not ready for use. Either some data is missing in a plug-in configuration, or (for online plug-ins) no connection with KA server, or the list of license classes is not fetched.

Selecting License Classes to Provide

A 'License Class' is a particular version of a particular licensed product. For example, Plesk 7.5 Reloaded (TM). Licenses are issued in the frame of a license class, starting from a single license and up to a license pack that includes several identical licenses.

After all the data necessary for new Parallels Key Administrator (KA) plug-in configuration is saved, Parallels Business Automation - Standard starts executing a special task that fetches the list of license classes allowed for this particular plug-in. Only after the list of license classes is fetched a KA plug-in is considered as configured and gets a 'Configured' status, i.e., ready for use. The list of license classes appears under the **License Classes and Properties** tab within a plug-in configuration settings.

The set of license classes is read-only in respect to the number of license classes, their composition and each class properties.

For offline Parallels Key Administrator (KA) plug-in configurations the set of license classes available is taken from the Parallels Business Automation - Standard database and in this case, the license classes list normally includes all license classes available at Parallels KA. For offline KA plug-ins you must manually select the license classes to sell, in accordance with the client agreement you have completed with Parallels KA.

For offline KA plug-in configurations the set of license classes available can be changed (for example, new classes can be added to the list) by installing a simple upgrade. The upgrade is developed and conducted by Parallels.

For online KA plug-in configurations the set of license classes available is fetched online after a plug-in is configured from the KA server and in this case, the set of license classes will automatically correspond to your KA client agreement, because it is checked by your client login and password. Online KA plug-in configuration allows updating the list of license classes online. In this case, if Parallels Key Administrator has started supporting new license classes, they appear in the list, and if some license classes support has been discontinued, such license classes are removed from the list. Existing configuration of license classes availability stays without changes. To update the list of license classes online, use the **Reconfigure** button located below the list of license classes.

You can enable a license class to make it possible to include the corresponding licenses in hosting plans and sell them. Please note that only enabled license classes can be included in hosting plans.

Each license class can include a variety of license types (for example, different number of domains for Plesk licenses), additional features, and additional keys. Additional keys are complementary licenses that can be sold together with license that belongs to a license class. A license class configuration with all its features and additional keys (if any) is visible from hosting plan settings, under the **Licenses** tab or at the 'Licenses' step in a hosting plan creation wizard.

➤ **To make licenses of a particular class available for sale:**

1. Select **Service Director > License Manager > Plug-Ins**. The list of all configured KA plug-ins appears on the screen.
2. Click on the name of the KA plug-in you would like to configure license classes for.

3. As the KA plug-in settings appear on the screen, click on the License Classes and Properties tab.

Note: If you have selected a KA plug-in configured to get licenses online, the list of license classes can be updated online. To this effect, click the **Reconfigure** button located at the bottom of the list. Offline KA plug-ins do not have such a button.

4. Scroll the list of license classes that appears on the screen up to the end and click the **Edit** button.
5. To allow a license class for selling, check the box next to a license class name. To disable a license class for hosting plans, clear the box next to a license class name.
6. To save changes, click the **Update** button.

Managing Licenses

Licenses provisioning scheme is the following:

Customer orders a hosting plan with license in store and pays the order.

After this, subscription creation starts. At the same moment, a license file image called *license request* is added to the Parallels Business Automation - Standard database. A license request contains all the information about an ordered license. A license request is submitted to Parallels Key Administrator to get a license key and after this, a license file(s). In the course of an order completion, License(s) provisioning is the last thing, it starts after all the other services included in a subscription are ready for use.

Online licenses issuing is a quick procedure in case the Parallels Key Administrator (KA) server is available. A KA plug-in sends a license request to the (KA) server. In return, the KA server issues a license key (a license alphanumeric identifier) and sends it to the plug-in. Then, using an issued license key, the KA server generates a license file and sends it to Parallels Business Automation - Standard. Finally, the KA plug-in tries to install a license into a customer subscription. In case installation fails, provider can install a license file for a customer manually.

In case licenses are uploaded manually, provider can view license requests in the list. Then provider clicks on a license request ID and gets a license request details displayed. After this, a license key(s) and file(s) can be uploaded manually to the Parallels Business Automation - Standard database. Finally, provider manually installs a license into a customer subscription.

Licenses are displayed in a list below a tab where the name of KA plug-in used to issue these licenses is shown. If you use several KA plug-ins, then licenses are collected into a several lists below several tabs, grouped by plug-ins used for issuing.

To upload or request a new license (on page 74), click the **New License** button.

The list of licenses displays the following:

- **ID.** The numerical identifier assigned to a license in the Parallels Business Automation - Standard database. ID is assigned from the moment when a license request appears.
- **Key Number.** A license identifier issued by Parallels Key Administrator. If a license key number is not shown, this means that only a license request presents. A license key can be issued by a license request.
- **Subscription.** If a license is assigned to a customer subscription, then this subscription name is shown. If no subscription shown, then a license is unused. If the **Not Assigned** is displayed in the Subscription column, this means that a license has been ordered for a subscription of Dedicated Server type, but this subscription is still in the Pending state awaiting for manual assignment of a dedicated server.
- **License Class.** The name and version of a licensed software. There may be a variety of license types for a particular software product, for example Plesk licenses with different number of domains or clients or Virtuozzo licenses with different number of Containers. That is why software type is called as License Class.
- **Status.** A license current status tells what has been done to a license and what can be done to it at the moment. A license possible statuses are:
 - **Pending.** Only a license request is stored in the Parallels Business Automation - Standard database. There is neither a license key, nor a license file. First, a license key is to be obtained. To get a license key, click on a license request ID. After a license request details appear on the screen, click the **Issue License** button.
 - **Issued.** A license key is issued and is stored in the Parallels Business Automation - Standard database. There is no license file yet. To get a license file, click on a license ID. After a license details appear on the screen, click the **Retrieve** button.
 - **Retrieved.** A license file(s) (together with a license key) is in the Parallels Business Automation - Standard database. A license file is ready for passing to a customer or for sale, if there is no order for a license. However, a license file is still at the Management Node. It is possible to download it at your local computer. To this effect, click on a license ID. After a license details appear on the screen, click the **Download to Desktop** button. After a license file is downloaded, it can be manually passed to a customer or installed into a customer subscription. In addition, there is an intermediate status **Retrieving**. It means that a license retrieval is in process. Normally, this status occurs for a very short time. However, if something impedes a license retrieval process, for example, connection between KA plug-in and KA server is broken, then a license may stay in the **Retrieving** status for some time.
 - **Terminated.** A license is cancelled at the Parallels KA side. This status only means that a license is marked as terminated at the Parallels KA side. There is no online tools for licenses termination in customers subscriptions.
 - **Uploaded.** A license is manually uploaded into the Parallels Business Automation - Standard database using the offline KS plug-in.
 - **Installed.** A license is installed in a customer subscription. There is an additional status **Installing**. It means that a license is in process of installation into a customer subscription.

-
- **Expired.** A license has been issued using the Monthly bill type and its expiration period is over. Expired licenses cannot be used anymore.
 - **Activated.** This status occurs for licenses (some Sitebuilder and Virtuozzo versions) that require activation after a license key is issued. Such licenses can be retrieved only after activation.
 - **Bill Type.** How a license is to be paid. Can be one of the following:
 - **Monthly.** License is purchased for the period of one month with one-month Parallels's Software Update Service (SUS), i.e. the ability of upgrading a license. Monthly payment is required, if a subscription is not renewed in time, license(s) are deactivated and cannot be sold to customers.
 - **Purchase.** Licenses are purchased for an unlimited period with one-time payment and one year SUS. In this case, licenses never expire.

Uploading Licenses

A new licence is added in the two steps.

After you click the **New License** button at the screen showing the list of Licenses, first you select the product you would like to get a new license for, in other words, you select a License Class. Then you select a license capacity.

Selecting a License Class

The list of License Classes that appears at the screen corresponds to the set of License classes allowed for the KA plug-in you use to request a license.

1. Set the option button to the product you would like to get a new license for. It is possible to select only one License Class, but several licenses of this class can be ordered.
2. Enter the number of licenses of the selected License Class you want to request into the **Number of Licenses** field located below the list of License Classes.
3. Click the **Next** button.

Specifying a new license capacity

Licenses of each License Class have a particular configuration settled by the issuer - the Parallels Key Administrator. For offline KA plug-ins licenses configuration is fetched from the Parallels Business Automation - Standard database, and for online KA plug-ins it is taken online from the Parallels Key Administrator server.

Depending on a License class (i.e., a licensed product), a license configuration differs.

Some licenses are a single file without any additional features, other licenses may be of a different *capacity* (for example, Parallels Plesk Control Panel license may be for different number of domains, Virtuozzo licenses may be for different number of Containers) and include a number of *additional features*, a license may also include *additional license keys* (gameserver or anti-virus) and a number of *additional features* may be available both as a standalone services and in the frame of one of another additional license key. Additional license keys are separate licenses, but they are included in a basic license and shipped together with it.

Additional keys and features are sold as included or complementary services in the frame of a license. Prices and conditions for licenses and additional keys/features are specified per hosting plan.

1. The settings related to the basic license are grouped at the **License Properties** bar. Specify a license capacity (if any variants are at your choice).
 - a** Set the option button to a needed capacity.
 - b** If any additional features are available for the license, check the boxes next to the features names to request the license with these features. If you do not need a feature in the license, leave the box next to its name clear.

2. If any additional licenses are available with the basic license, then the options related to each additional license key is brought to a separate bar and a licensed product name if written on this bar.
 - a** To include an additional license key into a basic license, check the box next to the licenses product name. If you do not include an additional license into the basic one, leave the box clear.
 - b** If any additional features are available with the additional license key, these features are specified below the licensed product name. To include an additional feature in the basic license you are going to request, check the box next to a feature name, otherwise - leave this box clear. If an additional license has its own capacity, then set the option button to the needed capacity in the same way as for the basic license.
3. To request a new license, click the **Issue License** button.

Allocating IP Addresses

Note: This section describes the IP addresses management available from the Provider Control Center. The special paragraph is devoted to IP addresses management for Resellers, using the Reseller Control Center.

The IP addresses assets assigned to the Parallels Business Automation - Standard cluster are managed by groups (IP pools).

It is possible to allocate IP addresses of the types:

- IPv4 - standard 32 bit IP address of xxx.xxx.xxx.xxx format.
 - IPv6 - new 128 bit IP addressing of xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx format. A group of xxxx represents the 16-bit hexadecimal value, for example, 4FDE:0000:0000:0002:0022:F376:FF3B:AB3F.
-

Note: Only leased IP addresses are shown in the list.

The list of IP addresses displays the following:

- **IP Address.** The IP address itself.
- **Alloc. type.** The type of the service the IP address is allocated. The allocation rule by the service type is defined per IP pool.
- **Occupied By.** The name of the service that uses the IP address. To view more details about the service, click its name.
- **Last assigned.** The latest date, when the IP address has been assigned to the service.

It is by design that in PBAS interface IPv6 addresses are always shown compressed and letters in lower case. At the same time, IPv6 addresses can be entered in PBAS in any format: compressed or not; in upper case or in lower case. Anyway, the IPv6 address will be shown compressed and in lower case.

For example, the IPv6 address 4FDE:0000:0000:0002:0022:F376:FF3B:AB3F will be shown as 4fde::0002:0022:f376:ff3b:ab3f.

Provider can add IP pools using the **Service Director > IP Manager > IP Pools**.

The IP Manager allows you to automate the configuration of IP address properties such as addresses of the DNS servers and default gateways for Containers.

You can define only *static* allocation within each IP pool. Static IP addresses are allocated permanently and can be released only manually.

Using the IP Manager you can track the usage of IP addresses in the frame of services provided. The list of *leases* is provided for each IP pool. This list shows which Containers are using particular IP addresses.

To restrict usage of certain IP addresses within an IP pool, you can create *exclusions* that cover a single IP address or series of IP addresses.

IP pools can be *assigned* to specific resellers or hardware nodes or types of hosting:

- *Assigning an IP pool to a specific type of hosting* means that IP addresses from this IP pool will be used for provisioning of particular type of services. This assignment is exclusive, i.e., it is not possible to assign an IP pool to several types of hosting. You can allocate an IP pool for:
 - Virtuozzo Containers.
 - Name-based Virtuozzo Containers.
 - Plesk Domain or Client hosting.
 - Virtual Machines
 - Dedicated servers.
- *Assigning an IP pool to a reseller* means that customers of this reseller will use IP addresses from the IP pool assigned.
- *Assigning an IP pool to a Hardware Node* means that IP addresses from the IP pool assigned will be allocated, for example, to Containers hosted on this Hardware Node only. This is extremely useful if you have different network segments in your infrastructure. In this case, you can assign particular IP pools to corresponding Hardware Nodes in segment. In case Containers will be migrated from one Hardware Node to another, IP addresses will be reassigned automatically.
- Assigning an IP pool to a group of nodes means that IP addresses from the IP pool assigned will be allocated, for example, to Containers hosted on nodes included in this group.

Creating IP Pools

An IP pool is a sequential range of IP addresses within certain network. IP pool's range cannot intersect one another, thus one IP address belongs to one and only one IP pool.

Each IP Pool can have Exclusions specified: single IP address or series of IP addresses. The range of Exclusion should be within the range of the corresponding IP pool. Creation of Exclusion allows imposing restrictions within and IP Pool range. Exclusions should not intersect one another.

The total number of IP addresses should be equal to or greater than the number of Containers your Parallels Business Automation - Standard system is intended to run.

The list of IP pools displays the following:

- **ID** - The IP pool numeric identifier assigned in PBAS.
- **Name** - The IP pool friendly name assigned in PBAS.
- **Account** - An IP pool can be allocated to accounts. If this column is empty, then IP addresses from this pool may be used by any account in PBAS. If only provider account is shown here, then only Provider account may use these IPs, if a reseller account is shown - then this reseller may use IPs from the pool.
- **First IP** - The starting IP address in the pool.
- **Last IP** - The ending IP address in the pool.
- **IP Pool Type** - The type of the services that may allocate IP addresses from the IP pool.
- **Enabled** - Whether IP addresses may be allocated from the IP pool:
 -  - yes, IPs can be allocated.
 -  - no, IPs allocation is forbidden.

- **Leases** - How many IP addresses from the IP pool are already allocated.
- **Total** - How many IP addresses does the IP pool include.
- **IP Pool version** - The type of IP addresses: IPv4 or IPv6.

To add a new IP pool click the  **New IP Pool (New IPv6 Pool)** button.

Depending on the type of IP pool, the screen form differs. To get the instructions select one of the following:

- I configure IPv4 IP pool.
- I configure IPv6 IP pool.

Supervising Service Level

The Service Level Manager provides a mechanism for checking the current resource utilization throughout Containers and Hardware Nodes. Using the **Service Director > Service Level Manager**, you can:

- View the both the current resources consumption and the resources usage history for every Container or every Hardware Node. Go to the **Service Director - Service Level Manager**. Select **Virtuozzo Container** or **Hardware Nodes**. For every Container or Hardware Node you can view the current resources usage (the **Current Values** tab) or resource usage history (**Statistics** tab). This feature is very useful if, for example your customer believes that some resource was under-delivered. In this case you can settle a customer's doubts by checking the total resource usage during a particular period and daily or hourly consumption for a given period of time.
- View traffic usage statistics for third-party dedicated servers.
- Set the thresholds in percents for disk space and traffic that when exceeded are reported into the list of Containers that are approaching limits. To this effect, go to the **Service Level Manager - Setup**. To view the list of Containers that have exceeded the threshold percentage of promised disk space and traffic, select **Container approaching limit**.

Note: When traffic or disk space usage for a Container approaches the limits set in the Service Level Manager, the corresponding event is registered by the Parallels Business Automation - Standard Event Manager (namely, *Traffic is nearly used up* and *Disk space is nearly used up*, to find these events, filter the list by the Subscription object type). Thus, you can attach an action to such events, for example, e-mail notification or SMS message to your staff member.

- Finally, you can configure traffic accounting by classes in the **Service Director > Service Level Manager > Traffic Classes**.

Configuring Traffic Classes

The Parallels Business Automation - Standard service level management tools allow you to track the inbound and outbound network traffic for Plesk clients and domains, Containers, and physical dedicated servers. In order to provide the ability to distinguish between domestic and international traffic, a concept of network classes is introduced. It is important to fully understand this notion, because network classes IDs are used in the values of some network traffic parameters. A network class is a range of IP addresses for which traffic is counted and charged.

Parallels Business Automation - Standard allows having up to 15 different network classes specified. Each class can contain one or more IP address ranges.

Classes 1 and 2 have special meanings. Class 1 defines the IP address range for which no accounting is done. Usually, it corresponds to the Virtuozzo Hardware Node subnet (the Node itself and its Containers). Setting up Class 1 is not required; however, its correct setup improves performance.

Class 2 is defined to match any IP address. It must be always present in the network classes definition file. Other classes should be defined after Class 2. They represent exceptions from the "matching-everything" rule of Class 2.

Traffic classes IDs are assigned automatically and cannot be changed later.

Important: A traffic class configuration must be passed to a Hardware Node and stored there in a special network configuration file, so a Hardware Node could 'know' what traffic data must be accounted and passed to Parallels Business Automation - Standard. The procedure of passing a traffic class to a Hardware Node is called 'Synchronization'. Virtuozzo for Unix allows accounting traffic by all the traffic classes, and Plesk as well as Virtuozzo for Windows allow accounting the overall traffic only, i.e., by the Class 2. Please keep in mind that a traffic class must be synchronized with a Node to make traffic accounting by this class possible. Traffic classes synchronization can be initiated using the **Synchronize traffic classes** button at the traffic classes list screen, or its current synchronization state can be checked at the **Synchronization details** tab within a traffic class details.

The tools for traffic classes management are grouped under the **Service Director - Service Level Manager - Traffic Classes**.

The order of traffic accounting follows the order of traffic classes in the list shown at the **Traffic Classes** screen.

Note: Traffic accounting by classes can be set for all hosting plan types (except Miscellaneous and Domain Registration). For all types of Virtuozzo Unix hosting plans (Container, Dedicated Virtuozzo server, Plesk server in Container) and dedicated hosting all traffic classes are applicable. For Plesk (Dedicated Plesk Server, Plesk Client, Plesk Domain) and Virtuozzo for Windows hosting plan types only Class 2 is applicable.

➤ *To add a network class:*

1. Click **Traffic Classes** on the **Service Level Manager** submenu. The list of all traffic classes appears on the screen.

2. Click the **Add Traffic Class** button.
3. Fill the form that appears:
 - a** Enter the traffic class friendly name into the **Traffic Class Name** field.
 - b** To perform the traffic accounting by the class and make it possible to define the traffic accounting by this class for hosting plans, you need to enable the traffic class by checking the **Enabled** box.
 - c** You can add a free-form comment into the **Description** field.
4. Click the **OK** button. The newly created traffic class properties appear on the screen. They display all the data entered for the class plus one more property - the **used** field. This field shows whether a class is used in hosting plan(s) or not (green tick -yes, used, red cross - not used). If a traffic class is used in at least one hosting plan, it cannot be deleted.
5. Click the **IP Ranges** tab to define the range(s) of IP addresses to be accounted.
6. Click the **Add IP range** button.
7. Fill the form that appears:
 - a** Type the starting **IP** address into the **IP range** and the netmask in the bit form into the **Range prefix** field.
 - b** You can add the detailed description of the IP range into the **Description** field.
8. Click the **OK** button.

CHAPTER 6

Setting Up Domains Registration

This chapter advises how to start registering domains online and make the most general settings necessary for a successful domain registration. The daily tasks connected with the domain management are described later in this guide (on page 253).

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How to Start Registering Domains Online

Parallels Business Automation - Standard allows establishing connection with Internet Registrars via the pluggable modules (plug-ins).

To *configure domain registration plug-ins*, please register your reseller account with the corresponding Registrars and obtain all the necessary pre-requisites. After this, you can go to the Service Director > Domain Manager > Plug-Ins and configure domain plug-ins.

To *register a domain manually*, from the Provider Control Center, select Service Director > Domain Manager > Domains > New Domain button.

You can assign both the default domain and the domain used for trial subscriptions (for customers to create subdomains), as well as use the other advanced domain settings.

Configuring Domain Registration Plug-Ins

For the fresh Parallels Business Automation - Standard installation, Parallels Inc. offers a set of plug-ins for establishing a connection with the domain registrars, so you just have to key in the necessary information into simple forms. Please note that in this case, you should open the Account with the registrars where you want to register your domains and receive your own logins, private keys and other data, depending on the Registrar's internal rules.

Domain registration plug-ins are shipped as RPM modules independent from Parallels Business Automation - Standard functionality.

After installation, a plug-in becomes available in Parallels Business Automation - Standard as a selectable type for a new domain registration plug-in configuration. To add a domain registration plug-in based on one of a standard configurations, it is enough to go to **Service Director > Domain Manager > Plug-ins**, click **New Plug-in**, enter a new plug-in configuration name and select a configuration type. After this, a plug-in configuration form appears on the screen. The only thing to do after this - fill the form and save the configuration. The number of plug-ins that can be added on the basis of the same standard configuration is not limited.

Note1: The Parallels Business Automation - Standard installation owner defines the set of domain registration plug-ins available for each reseller.

The list of domain registration plug-ins (to domain registries and registrars) shipped with Parallels Business Automation - Standard is available at the Parallels official website (<http://www.parallels.com/en/products/hspcomplete/templates/domain>).

Note2: If you are planning to use OpenSRS services for the online domain registration, then Port 55000 for OpenSRS (horizon.opensrs.net) should be opened on the Management Node. In the case if you intend to use eNom services for the online domain registration, then Port 80 for eNom should be opened on the Management Node (the host should be agreed with eNom).

Please, make sure that the RPM packages necessary for online domains registration are installed (refer to the Parallels Business Automation - Standard Installation Guide).

You can view the Plug-in lookup state in the **Domain lookup mode** field of the Plugin Setup window. The mode may be as follows:

- registrar API is used for lookup (green indicator)
- WHOIS lookup is used; all plug-in's TLDs are assigned to some WHOIS (green indicator)
- WHOIS lookup is used; and some TLDs are not assigned to any WHOIS (yellow indicator); TLDs which are not assigned to WHOIS servers are listed in 'Comment' field
- WHOIS lookup is used; no TLDs are assigned to WHOIS servers (red indicator)

Note: Many registrars accept requests from known hosts only and require that you specify the client IP address (i.e., your Management Node IP address) in your account profile. Please, clarify this issue with registrars' support before you start using a domain plug-in.

Important: The ability for resellers to use the own configuration of domain plug-ins is defined in Reseller Configuration (on page 183). Reseller Configuration can be assigned in reseller account General Settings.

Top Level Domains Assignment

You have already configured (on page 82) one or more domain registration plug-ins.

Before activating domain plug-ins and start registering domains, it is necessary to correctly configure the set of Top Level Domains (TLDs, like .com, .net, org, etc) available for domains registration for each domain plug-in, i.e., specify what TLDs supported by each registrar.

Since the set of TLDs supported by one or another Registrar can change (new TLDs can be added or some TLDs can be cancelled by a Registrar), TLDs can be manually added or removed for each domain registration plug-in. Provider can change the TLDs set for domain plug-ins in an arbitrary manner. Thus, Provider is finally responsible for correct TLDs assignment.

The same TLD can be assigned to a number of domain registration plug-ins, which allows saving in Parallels Business Automation - Standard the conditions of domain registration in the same TLD offered by a number of registrars.

A registrar that will actually provide domain registration in one or another TLD can be selected per domain registration hosting plan. When you change registrar in a hosting plan, customers who have already registered domains with a previous registrar keep using their domains on the same conditions and new customers start registering domains with a newly set registrar. Thus, changes in a domain registration hosting plan is not followed with creation of a hosting plan version.

➤ *In a few words, the scheme of TLDs assignment in Parallels Business Automation - Standard is the following:*

1. Go to Service Director > Domain Manager > Plug-Ins.
2. Select a plug-in.
3. Select the Prices tab from a plug-in settings.

Note: For plug-ins that support the online prices update, the **Update Prices** button is shown below the list of TLDs. You can click this button and get the prices online. For other plug-ins you must know out the actual registrar prices and enter them manually.

4. Click the **New TLD** button.
5. Enter a new TLD name and select a plug-in (i.e., a registrar). (Select a plug-in you want to add TLD(s) for. Click **Next**).
6. Specify the conditions of domains registration. Click **Update**.

Note: You can add the same TLD(s) to several Registrars and then select an active registrar in hosting plan settings.

For the registrars that do not support the online prices update it is only possible to manually enter your retail prices:

Contact a Registrar and know out the prices. Then go to **Operations Director > Domain Manager > Plugins**, select the plug-in and then select the **Prices** tab. Click on the TLD name and type your own retail prices.

Setting Registrar Prices

Prices for domain registration are set per registrar. After you set registrar prices, a TLD is considered as configured for a given registrar and you can select the corresponding plug-in as supporting registry for a TLD in hosting plans.

To set prices for a TLD, select a plug-in, select the **Prices** tab, and then click on a TLD name or click the **New TLD** button.

➤ **To set the registrar prices:**

1. Select registration periods available and set prices:
 - a** To allow domain registration period, check the box next to the period name. To mark a period as not supported, clear this box. Only supported registration periods are shown in domain registration hosting plans TLD settings. As you check the box next to a registration period the fields where you can enter prices become activated.
 - b** For each supported period, enter a registrar's one-time fee for domain registration into the **Registration cost** field and enter the registrar's recurring fee into the **Renewal cost** field.
2. Adjust the domains **Transfer Settings**. To allow transferring domains registered in the selected TLD and enable the form fields where you can enter your retail price for the transfer, check the **Allow domain transfers** box. To disallow transfer, clear this box. As you allow transfer, the fields where you can enter transfer prices become activated:
 - a** Enter the registrar's one-time fee for domain transfer service into the **Transfer cost** field.
 - b** **Transfer includes domain renewal**. To renew domain registration under this registrar right after a domain is transferred, select the renewal period from the **Period** drop-down menu. In case of transfer, your prices set in hosting plan for domain renewal will be applied.
3. Set the domain **Renewal Limitations**:
 - a** If the registrar allows domain renewal at any moment without respect to the time remaining before registration period is over, set the option button to **Renewal is allowed at any time**.
 - b** If the registrar regulates domain renewal time frame, check the relevant box to select the condition:
 - If the registrar allows domain renewal only after a particular time has passed after domain registration, check the **not earlier than _ days after domain registration date** box and enter the period in days.
 - If the registrar allows domains renewal only when a particular time remains before registration period is over, check the **not earlier than _ days before domain registration date** box and enter the period in days.

- If the registrar allows domains renewal after a domain registration period is over only during several days, check the **not later than_ days after domain expiration date** box and enter the period in days.
4. Specify the DNS zone startup settings:
 - a** **Create DNS zone before domain registration.** This option is required for correct domain registration processing for some registrars, which start checking a customer name servers right after a domain registration request is received. In this case, if a customer have his/her name servers not configured properly by the moment of domain registration order placement, a registrar sends an error response. If this option is enabled (the box is checked) then a zone file is created in Parallels Business Automation - Standard before sending a domain registration request to a registrar. Name servers synchronization process starts automatically and Parallels Business Automation - Standard periodically checks name servers in respect to their readiness to resolve a domain. A zone file is checked several times with a certain period and these settings can be adjusted specially. In case the check fails a corresponding record specifying the number of failed attempt and the period when the next check is to be performed is added to the Action Log. In case a check is successful (i.e., name servers are ready to serve a domain), the registration request is sent to registrar. As soon as you check this box the fields where you can enter DNS startup and check limit become activated.
 - b** **DNS zone startup time limit.** This option limits the overall time that can be used for name servers readiness check. If the time is over and name servers are not ready (zone file is still not created), then domain registration request is sent without respect to a zone file creation. Please enter the time limit in minutes.
 - c** **The number of attempts to check DNS zone.** The overall number of attempts Parallels Business Automation - Standard performs to check the name server readiness. The checks frequency is calculated automatically, in a nonlinear way, taking in account some specific features of the synchronization process.
 5. **Use your contacts for customer's domains registration.** Here you can specify what contact information will be asked during domain registration at a given Registrar in a TLD you have selected. The value of contact data required and its format considerably differs depending on Registrar. Some Registrars require a rather specific data. To simplify domain registration procedure for your customers, you can replace Registrar's contacts form with your own one (a so called *base contacts*) that have a standard format.

You can create your contacts (up to 10 for one account name) under **Domain Manager > Setup > Contacts** tab. All of the contacts created by you are included in the drop-down menus next to contacts' names.

The number and names of contacts offered here may vary depending on a Registrar. The most typical set is Owner Contact, Administrative Contact, Billing Contact, and Technical Contact.

To create a new contact, click the **Create new** button. A new contact will be available for selection for all contact types right after you save it.

To create a new contact on the basis of an existing one, select a contact you want to base upon from the drop-down menu. The **Create copy** button activates. Click the **Create copy** button. The contact form appears. Adjust the contact data in the form and save changes. The new contact will be added with an new name (the auto-incremented numeric prefix added to the name of contact).

To hide the contact type from a customer, and thus make this contact a read-only, check the **Force** box next to the contact type name.

6. To save changes, click the **Update** button.

Selecting Both the Default Domain and the Domain for Trial Containers Hostnames

After you register at least one domain for HSP Company (Provider Account) within your Parallels Business Automation - Standard system, you should set default domain so that your prospect customers could register for their subscriptions the subdomains in this domain.

In this case, you should have the list of all domains (Domains screen) displayed. After domain(s) registration, the list of all domains will be displayed automatically. Otherwise, please click the Domains link on the Navigation tree or Registered Domains link at Domain Manager dashboard.

The list of domains displays the following:

- **Domain.** The name of a domain;
- **Account.** The name of an Account a domain was registered for;
- **Added by.** This column shows the name of a User (staff member or a Customer) that had added a domain, and consequently, points to the origin of domain Order (Provider Control Center or HSPstore). Since several Users can be associated with an Account, this additional information helps you to manage domains;
- **Registrar.** The Internet Registrar, a company that registered a domain;
- **Exp. date.** The date a domain registration period expires;
- **Zone Created.** Whether an appropriate zone file is created for this domain. In other words, the green tick in this column indicates that a domain is successfully registered in Parallels Business Automation - Standard (appropriate Order is completed, and a domain is manageable). Red cross - that a domain is not registered (domain Order is not paid yet, and a zone file is not created).

Click on the domain name registered for Provider Account. Domain details will be displayed.

In order to set the default domain, its General Info (namely, Policy settings) should be edited appropriately. Thus, click the Edit button.

Default domain will be offered to your customers in online store to create subdomains. In case your prospect customer does not have registered domain or does not intend to register new domain, he (or she) will definitely use the default offered. Therefore, in order to set domain as default, you should allow customers (at least Provider's ones) to register subdomains in this domain. To this effect, please set the radio button to one of the positions that allow registering subdomains.

In addition, you can allow registering hostnames for trial Containers. If the Use domain for trial Container checkbox marked, then this domain will be offered to your customers in HSPstore.

You certainly can set several domains as default ones and allow several domains to be used for trial Containers. At the same time you can set several domains both as default ones and available for trial Containers.

To confirm settings, click the OK button. Changes will be immediately applied to subscription cycle at your HSPstore.

Allowing Domain Transfer Per Registrar TLDs

Domains transfer can be allowed or disallowed as a system-wide option, in store settings.

However, if you allow domains transfer in general, you still can narrow the set of domains allowed for transfer by selecting particular TLDs which transfer is allowed for. You can select TLDs allowed for transfer for each domain registration plug-in.

To select TLDs allowed for transfer, go to the **Service Director > Domain Manager > Plug-Ins**. Select a plug-in and then click the **TLDs** tab. Select a TLD from the list that appears and check the **Allow domain transfers** box. As you allow transfer, the fields where you can enter transfer prices become activated:

- Enter the registrar's one-time fee for domain transfer service into the **Transfer cost** field.
- **Transfer includes domain renewal**. To renew domain registration right after a domain is transferred, select the renewal period from the **Period** drop-down menu. In case of transfer, your prices set in hosting plan for domain renewal will be applied.

Configuring Default Records for Zone Files (DNS Templates)

Using the DNS template, you can set the pre-defined configuration of resource records in a zone file created on domains registration in Parallels Business Automation - Standard.

Note: Default SOA records are bound to TLDs and configured in **Domain Manager > Setup -SOA Defaults**.

DNS templates are bound to Domain Registration hosting plans. When you add a hosting plan (any type except for One-Time Fee Item type), you should always select the corresponding DNS template.

To add a DNS template, please go to the **Service Director - Domain Manager > DNS Templates**.

To facilitate configuration of services on a domain, DNS Template types have been introduced. Now you can create DNS templates that can be used in a particular hosting plan types.

One of the DNS templates within each type should be marked as default. The default DNS template is applied to zone files in case no DNS template has been specially assigned.

The DNS template of the Common type is applied to hosting plan types that do not have a special type of DNS template.

The list of DNS templates displays the following:

- **ID.** The numerical identifier automatically assigned to a DNS template in Parallels Business Automation - Standard.
- **DNS Template.** The DNS template name assigned by you. This name is used in Parallels Business Automation - Standard to just refer to a DNS template.
- **Account.** The name of an account a DNS template has been added by.
- **Type.** The type of hosting plan a DNS template is used for.
- **Default.** The green tick in this column means that a DNS template is the default one and is to be applied to zone files if no other DNS templates are specified. Red cross - that a DNS template is not the default one and is to be applied in accordance with a manual assignment to a hosting plan. The default DNS template is also can be used while restoring a domain zone file from the Parallels Business Automation - Standard database. To use the default DNS template for zone files restoring, set this in **Domain Manager > Setup**.

Specifying Name Server Sets

For the fresh Parallels Business Automation - Standard installation, by default you have two Provider name servers grouped into one set - the default name servers set.

You can use the default name servers set or you can add more name servers and create more name servers sets.

It is possible to install and configure name servers directly from the Provider Control Center web-based interface.

The *default name servers set* can be selected in the **Service Director > Domain Manager > Setup**.

Name servers set are specified per Domain-Registration Hosting Plan.

Registering Name Servers

To manage name servers and name servers sets, select **Domain Manager** from the **Service Director** submenu and then click **Name Servers** on the **Domain Manager** menu.

➤ *To add more name servers:*

1. Click the **Name Servers** tab. The list of name servers appears on the screen.
2. Click the **New Name Server** button. The wizard that helps to add a name server starts.
3. Type the name server name and select the type:

- a** Type the name server friendly name (not hostname) into the **Title** field.
- b** Set the radio button to the type of name server:

Non-manageable name server. If you want to register a third-party name server that answers the Parallels Business Automation - Standard DNS requests, but does not support automated zone files synchronization. For example, you can use this type of registration for your secondary name server.

Name server to be managed over SSH. If you want to register the physical name server and if you want changes made to a domain (e.g., if more hostnames were added) to be automatically synchronized with appropriate zone files on this name server.

Important: If you register a name server managed by SSH, please make sure that hostname of this name server is resolved correctly on your Management Node. In this case, you can enter an IP address instead of a hostname, but this is not recommended.

4. Click the **Next** button and follow the wizard.

Managing Name Server

Name Server Properties:

- **Title.** Name server reference name.
- **Status.** Server current status.
- **Hostname.** Name server hostname.
- **IP Address.** Name server IP address.
- **Account.** The name of the account that owns the name server.
- **Name server is managed by Parallels Business Automation - Standard:**
 -  - yes, managed.
 -  - no, not managed.

For SSH-managed name servers:

- **Use IP address instead of hostname for SSH connection:**
 -  - IP is used.
 -  - hostname is used.
- **Path to named configuration file.** The path to the named configuration file on the name server
- **SSH protocol version.** Version of SSH protocol.
- **Establishing Connection Timeout.** The connection timeout interval in seconds into the field.

Button	Click To
Cancel	Get back to the list of name servers (when viewing name server information) or to exit the edit mode without saving changes (when editing).
Check Status	Update name server status.
Change NS Type	Change name server type (manageable or not) and settings (on page 91).
Delete	Delete information about name server from PBAS.
Edit	Edit name server settings (keeping its type unchanged).

Changing Name Server Type

➤ *Change name server type:*

1. Fill the form:
 - a** Type the name server new name into the **Title** field.

- b** To make name server available for zones addition/update, check the **Name server is available** box. To temporarily disallow zones synchronization, clear this box.
 - c** Select the name server new type:
 - **Non-manageable name server.** If you want to register it as a third-party name server that answers the Parallels Business Automation - Standard DNS requests, but does not support automated zone files synchronization. For example, you can use this type of registration for your secondary name server.
 - **Name server to be managed over SSH.** If you want to register it as the physical name server and if you want changes made to a domain (e.g., if more hostnames were added) to be automatically synchronized with appropriate zone files on this name server.
 - a** Check the respective box to register the name server with domain registrar(s) , if available.
2. Click **Next** to proceed.
 3. Fill the form:
 - If you have selected non-manageable server type, click to get the instruction.
 - If you have selected name server managed over SSH, click to get the instruction.
 4. Click **Save** to apply and save your changes.

Registering Internationalized Domain Names

An Internationalized Domain Name (IDN) is a standard for the domains that can contain characters other than the 36 basic ASCII ones permitted to date (a-z, 0-9, and -). This includes Latin letters with umlauts, accents and other diacritics, but it goes further than that and allows using completely different alphabets, such as the Greek and Cyrillic ones, as well as Chinese letters and characters.

Parallels Business Automation - Standard does not call for any specific configuration to start registering IDNs. A domain name entered as a Unicode string is converted into a permitted ASCII domain name.

A system called Internationalizing Domain Names in Applications (IDNA) (<http://ietf.org/rfc/rfc3490.txt?number=3490>) was adopted as the chosen Internet standard for IDNs. The IDNA algorithm transforms domain names which include letters that are not available in ASCII into the format that can be handled by normal name servers. This transformation algorithm is based on the Punycode ASCII encoding of normalized (Nameprep) Unicode strings.

Note: The IDNA standard requires that the user who would like to view an IDN, has an IDN compatible application (browser, mail client, etc). The lists of such applications are available over the web.

Nameprep is the process of normalization, case-folding, etc. applied to a text before it is suitable to represent a domain name. Nameprep is defined in RFC 3491 (<http://ietf.org/rfc/rfc3491.txt?number=3491>).

Punycode defined in RFC 3492 (<http://ietf.org/rfc/rfc3492.txt?number=3492>) is the special encoding of Unicode strings into the limited character set supported by the DNS. The encoding is applied separately to each component of a domain name which is not represented solely within the ASCII character set, and a reserved prefix 'xn--' is added to the translated Punycode string.

Thus, an IDN always has two forms: one with special characters and the other in pure ASCII also called ACE (ASCII Compatible Encoding) or Punycode.

This ACE string is then entered into the DNS. The introduction of IDN means that in this case the entry in DNS is no longer identical with the domain name.

Not all the world's Top Level Domains (TLDs) are going to take on all these special letters and characters! Each registry responsible for a TLD is to decide for itself which subset to admit for the domains under it. In doing so, it strikes a balance between the limitations imposed by the standard and the particular needs of its local Internet Community. So please, keep this in mind when enabling INDs registration in Parallels Business Automation - Standard as system-wide option and then selecting TLDs per domain registration plug-ins.

Note: Some letters are not included in the IDNA Standard, such as the German 'ß' (called 'scharfes s' or 'eszett'), which should be written as 'ss' instead. The eszett is a letter that is totally unique to the German alphabet. Unlike other letters, it has no upper case form, because it never occurs at the beginning of a word. The eszett is always normalized as 'ss' and thus, is typically shown as 'ss' in registered domain names. For example, weiß.com will not be transformed to xn--wei-abc.com. Rather, it must be written as weiss.com and therefore is classified as a normal domain.

You can enable registering IDNs globally, as a system-wide setting, in **Service Director - Domain Manager - Setup**.

Adjusting DNS General Settings

➤ *To adjust DNS general settings:*

1. Open the **Service Director** submenu and select **Domain Manager**.
2. Click on the **Setup** on the **Domain Manager** submenu.
3. Click the **General** tab. The **Domain Manager General** setup form appears on the screen.
4. Click the **Edit** button. The screen reloads with the **General** setup for editing;
5. Fill the form:
 - a Select the default name servers set from the **Default name servers set** drop-down menu. This is the set to be used by default to register domains for Containers, for web hosting. Thus, only manageable name server sets are available as default ones.

Note: The default name servers set is used only if the active domain-registration plug-in is configured to use **Provider DNS**. If the active plug-in is configured to use the **Registrar DNS**, then this setting is ignored.

- b Use **DNS Template for switching to DNS Hosting**. Parallels Business Automation - Standard supports DNS hosting (when a domain zone file is created at Parallels Business Automation - Standard name servers). Put a tick in this box to use the default DNS template for zone files creation in such cases.
- c **Default MX priority**. This option is used for mail setup for owners of subdomains registered in **Provider default domain** (i.e., a domain does not belong to a customer). For example, when a customer buys Container and registers for this Container a domain in **Provider's default domain**, the corresponding MX record pointing to a customer's Container is created in the **Provider default domain zone file**. This allows receiving e-mail for a customer. And the **Default MX priority** allows setting the priority for this mail exchanger. Typically this is a low priority, so the number specified should be not very small (for example, 255).
- d **Default record TTL**. The default time-to-live assigned to resource records in zone files.

The next two options allow controlling the reverse DNS records (PTR) creation for Plesk Domains and Containers. PTR (pointer) records are the reverse of A records: whereas the latter maps names to addresses, PTR addresses map addresses to names.

Note: These two options are available for **Provider Control Center** only and affect **Provider** and all **Resellers**.

- e **Import PTR records from Plesk.** It is possible to switch the primary DNS synchronization source from Plesk DNS to Parallels Business Automation - Standard and conversely. This is done per Plesk hosting plans, on the Permissions Setup step. When Plesk DNS is set as a primary source (the Manage DNS permission is enabled) all the DNS records are imported from Plesk to Parallels Business Automation - Standard DNS. There can be many PTR records in Plesk zones since shared IP addresses are widely used. If you do not want to import all these PTR records into Parallels Business Automation - Standard, you can clear this box and this will override the 'Mange DNS' permission for all Plesk zones.
- f **Create PTR records for Containers.** For Containers PTR records are added automatically if this option is enabled.

PTR records are created automatically for every IP address assigned to a Container. If a Container has several domains assigned, then PTR records are created only for default domain, so every IP has only one PTR record.

PTR record that points to a Container default domain name is created for default IP address only.

For non-default IP addresses PTR record is auto-generated according to the rule: an IP address converted into four hex values is appended before default domain name to get a unique record. For example, for IP address 10.26.141.37 the domain name in PTR record will look as 0a1a8d25.domain.com, where domain.com is a Container default domain name. This rule ensures that IP points to unique domain name, which allows avoiding possible rejection of mail by anti-SPAM systems.

Note: A records for non-default IP addresses are created similarly as PTR records: an IP address converted into four hex values is appended before default domain name to get a unique A record.

For security reasons, on IP address release, all PTR records created for this IP address are removed automatically.

To enable or disable this option, check or clear the box respectively. Note that is this option is disabled, then management of PTR records from Control Panel becomes disabled as well.

Note: PTR records can be created by customers only for IPs that have reverse zones configured. You should create reverse zones for IPs under **Service Director > Domain Manager > Domains**, Reverse DNS tab. Please make sure that reverse zones are configured before enabling PTR records management for customers.

- g **Manage PTR records for Containers in Control Panel.** This option is used to allow/disallow customers adding PTR records for Containers from Control Panel. If this option is enabled, then Reverse DNS link appears within the **Domain Management** section under the **System** tab for Container subscriptions. Customer can add/edit/delete as many PTR records as needed for IPs that are allocated to his/her Container(s). To enable or disable this option, check or clear the box respectively.
- h **Name Server Synchronization Timeout.** The period of time in seconds allowed for name servers synchronization. If synchronization takes longer, the NS synchronization task fails by timeout. The default timeout is 180 sec. Please note that if you have many domains, synchronization may fail by timeout. In this case, the timeout should be increased.

- i **Available periods.** Select domain registration periods that will be shown on the Prices form for each TLD. To make a period available, check the box next to a period name. To disallow a period, clear the box next to this period name.
- j **Allow customers to enter International Domain Names (IDN).** Parallels Business Automation - Standard supports Internationalized Domain Names (on page 93) registration and here you can allow or disallow your customers to register IDNs. To allow IDNs registration, check this box. To disallow IDNs, clear this box.
- k **Domain Data Consistency.** These options allow auto-fixing domains expiration date mismatch between PBAS and Registrar. If a domain expiration date is unknown for a transferred domain, Parallels Business Automation - Standard automatically sets this date to one year starting from domain transfer moment. To ensure the correctness of domains registration expiration date stored in Parallels Business Automation - Standard database, you can configure the auto-check of domain expiration date at Registrar. If this option is enabled, Parallels Business Automation - Standard will run a periodical task trying to contact a Registrar and get the domain expiration date confirmation. If a Registrar does not reply, Parallels Business Automation - Standard will try to check a domain expiration date via whois.

To configure the domain expiration date validation, put a tick into the **Run domains real expiry date checking** box and enter how frequently (in days) the check is to be performed. In addition, you can set the order of domain expiration date auto-fixing in case this date is incorrect and does not considerably differ from a correct date (not greater than one month).

To configure the periodical checking of the domains status, put a tick into the **Run domains status checking every** box and enter how frequently (in days) the check is to be performed.

Note: The domains that have the status "transferred away", will be shown under the **Service Director > Domain Manager > Domains**, the **Domains required attention** tab (on page 266), and you may terminate the remaining domain subscriptions there.

To enable this auto-fix, put a tick into the **Autofix if expiry date mismatch is less or equal to** box and enter the maximal difference in days into the relevant field.

To limit the number of domains checked by a single task, enter how many domains are checked into the **Number of domains to check at a time** field.

6. Click the OK button.

Managing Contacts Used for Domain Registration

The composition and format of contact data required for domains registration differs depending on Registrar. Some Registrars require a rather specific data. To simplify domain registration procedure for your customers, you can replace Registrar's contacts form with your own one (a so called *base contacts*) that have a standard format.

Base contacts usage is provided by a special methods used in plug-in. For more information about domain plug-ins API, please see the Parallels Business Automation - Standard SDK.

Provider contacts are managed under **Domain Manager > Setup > Contacts** tab.

Customer contacts are managed under the **Contacts** tab within an account properties.

To replace Registrar contacts with your own contacts form, go to **Domain Manager > Plug-Ins >** select a plug-in, then click the **Prices** tab. Select a TLD. The number and names of contacts offered here may vary depending on a Registrar. The most typical set is Owner Contact, Administrative Contact, Billing Contact, and Technical Contact.

The contacts list displays the following:

- **ID** - contact numerical identifier assigned in Parallels Business Automation - Standard database.
- **Contact name** - contact name a contact is referred to.
- **Company name** - the company name specified in the contact. Available for business contacts only (i.e., contacts for enterprises).
- **First name** - first name specified in a contact.
- **Last name** - last name specified in a contact.
- **Type** - a contact type (Business - for enterprise, Personal - for person).

To edit or remove an existing contact, click on a contact name and after a contact view form appears on the screen, click the **Edit** button to edit, **Delete** - to remove a contact.

To create a new contact, click the **Create** button. A new contact will be available for selection for all contact types right after you save it.

The form for a new contact creation is standard and the same for every contact. Form fields are pre-filled with the contact data fetched from your Administrative account:

- **Account Type**. Select the account type (Business or Personal). This selection defines the contact type.
- **Company name**. Available only if you select the Business account type. Enter the name of company.
- **Contact name**. The contact name for reference.
- **E-mail**. Contact e-mail.
- **Name**. Enter the first and last names of the contact person.
- **Address**. Enter the postal address (without city).

- **City.** Enter the city name.
- **State (US or Canada).** If you select USA or Canada country, select the state.
- **State (other countries).** You can optionally specify the state or province for countries other than USA or Canada.
- **Country.** Select country.
- **Zip/postal code.** Enter the zip code.
- **Phone.** Enter the contact phone number.
- **Fax.** Enter the fax number.

To save the contact, click the **Update** button.

Specifying Whois Servers

You can form a *list of Whois servers in Parallels Business Automation - Standard* and after this bind each of top level domains to one of more Whois servers.

Note: It is possible to set up the whois with HTTP protocol enabled.

To add a whois server, select **Service Director - Domain Manager - Setup - Whois Servers**.

To assign a whois server to a TLD, go to the **Service Director - Domain Manager - Setup** and then select the **TLDs** tab. Select the TLD and assign one or more whois servers (from the set formed before in *Parallels Business Automation - Standard*) to a given TLD.

Setting Up HTTP Whois Search

➤ *To set up the whois search for a plug-in, you need to:*

1. Contact your Registrar support and ask them to register the IP address of the computer that runs *Parallels Business Automation - Standard* (your Management Node). Without this registration all requests sent by the plug-in will be rejected by the Registry.
2. In the *Parallels Business Automation - Standard* Control Center register a separate whois server for Registrar and configure it properly:
 - a** Select **Service Director - Domain Manager - Setup**.
 - b** Click the **Whois Servers** tab on the **Setup** menu.
 - c** Click the **New Whois Server** button.
 - d** On the **New Whois Server** form that appears check the **Use http protocol** box. Some fields will become unavailable (Port, Command prefix, Command suffix, Drop TLD in request). Enter a new whois server friendly name into the **Title** field. And into the **Whois server** you must enter the URL to whois query.

A domain name will be added to the query automatically.

Set the option button to **Use 'domain not found' pattern**. Enter the usual pattern for a whois server into the field next to this option, e.g. *Domain does not exist*.

3. Click the **Save** button.

Viewing Incoming and Outgoing Domain Registration E-mails

You may need to view the domain registration log e-mails. This gives ability to review history of sent messages as well as troubleshoot processing of incoming messages triggering domain registration within the Parallels Business Automation - Standard (such as messages sent by domain registrar modules communicating via email-based protocol). The e-mail senders/recipients are:

- Billing
- Event Manager
- Mass Mailer
- Domain registration plug-ins that use e-mail to communicate with Internet Registrar.
- Trouble tickets

The log can be viewed at **Configuration Director - Logging and Errors - E-mails Log**. Here you can view the inbox mail at the **Incoming Mail** tab and the outbox mail at the **Outgoing Mail** tab. For your convenience it has been designed with the following columns:

- **ID** - unique ID assigned to the e-mail;
- **Subject** - the subject of the e-mail;
- **Accepted/Sent for Incoming Mail and Outgoing Mail** respectively - the date of the message acceptance/dispatch;
- **Status** - the status of the message;

By now the e-mails are assigned the following statuses:

- **Processed** - the e-mail has been processed all right;
 - **Error** - the e-mail processing has failed;
 - **Skipped** - the e-mail has arrived to the right address but the system does not know how to handle it or chooses not to process it;
 - **Unknown** - the handler has failed to assign any of the above statuses to it. The handler does not how to respond to the e-mail.
- **Handler** - Parallels Business Automation - Standard module processing this e-mail.

CHAPTER 7

Setting Up Billing System

This chapter describes how to set up Parallels Business Automation - Standard Billing System: prices and discounts, credit terms, taxation, fraud protection, credit card processing and other billing features and tools.

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Understanding the Parallels Business Automation - Standard Billing System

Parallels Business Automation - Standard billing system is supported by the **Billing Director** that provides financial management of the following client categories: Resellers and Customers. For settlement purposes, Accounts are created for each category. Parallels Business Automation - Standard billing provides a single-currency settlement and accounting system. A system-wide currency can be selected per Control Center (one currency for Provider and another currencies for Resellers, the exchange rate can be set per Reseller). In order to change the system-wide currency, select **Configuration Director - Miscellaneous Settings - Regional Settings**.

Hosting Plan is the basic account unit that used for calculation of money equivalent of services provided. A subscription period can be selected by customers from offered by Hosting Service Provider (one month, three months, six months, and year). Services provided in accordance with a Hosting Plan are paid in advance, in accordance with resource-specific quotes. Resources overusage is paid either in advance or at the end of subscription period.

Note: In Parallels Business Automation - Standard billing, the billing cycle equals to one month by default. This means that statements and resource overusage invoices are generated for each subscription each month. There are no mentions about billing cycles in Parallels Business Automation - Standard web-based interface.

Invoices are generated in accordance with Subscription terms. Account balance is calculated on the basis of actual resource usage and payment(s) received. Account balance is calculated every hour (by default).

Current Account balance is regularly compared with customer credit limit. Depending on Billing Manager settings and Account balance, the following operations can be performed:

- Notification about negative Account balance can be generated and sent to a customer;
- Negative balance and credit limit control, generating reports on Accounts in debt;
- Suspending subscriptions associated with Accounts in debt in the case of credit limit overrun;
- For Virtuozzo Container subscriptions, changing a Container parameters (available resources limitation) in the case of resource overusage.

Basic Notions

Subscriptions

A Subscription holds terms of contract between Hosting Service Provider and a customer. Changes in Provider prices do not affect terms of Subscription. This means that prices for the Hosting Plan purchased remain changeless up to the end of subscription period.

However, if additional Applications or Containers were purchased, or a Subscription was upgraded to a higher version of the same hosting plan, then Subscription terms may change.

Documents

In respect to the Parallels Business Automation - Standard Billing Director, this notion means all financial documents that exist within the system. The documents may be created by a customer or may be generated automatically. The following documents' types exist:

- Orders - the documents that include information about Hosting Plans or additional services ordered by customers. Orders are generated automatically, after a subscriber orders one or another service;
- Payments - off-line and online payments for hosting services. An Order can be paid by several payments;
- Invoices - invoices are generated automatically after placing Orders or can be added manually. Invoices can be paid by parts;
- Credit Invoices - documents that add a certain amount to an account balance and include the itemization of services or other goods refunded or paid to an account owner.
- Adjustments - adjustments are used for Accounts' balance adjustment. For example, Credit Adjustment is applied if a customer was overcharged (to increase the Account balance), and Debit Adjustment is applied if a customer ordered additional services (increase the billed sum and decrease Account balance).
- Payment Requests - financial documents generated after a customer requests an arbitrary payment to increase his/her account balance.

Each financial document has its total sum and a balance, which allows both applying several payments to one Invoice, and applying single payment to several Invoices.

Balance

Your hosting company balance is the sum of all your customers and resellers account balances. A customer or a reseller account balance is calculated as a total sum of all payments and credit adjustments with a total amount of Invoices, Orders, and Debit Adjustments deducted.

Positive account balance means that an account owner has a certain overpayment, so Provider owes money to a customer. Negative account balance means that a customer or a reseller owes money to Provider. Zero account balance means that neither Provider, nor a customer do not owe money to each other.

Your hosting company balance does not reflect your earnings. It just shows whether your customers owe money to you or you owe money to your customers.

Reports

Billing Manager reports (Collected Cash, Revenue Report, Aged Account/Receivable, etc.).

Notifications

E-mail notifications generated automatically in connection with certain events within Parallels Business Automation - Standard system.

Calculations for the Services Provided

The scheme of pre-pay for services provided is implemented within the Parallels Business Automation - Standard. However, you can provide services on credit as well. To this effect, make the relevant changes to the Billing Manager - Payments Processing. In the case of resource overusage (i.e., a subscriber exceeds the quote of paid resources stated by Subscription) the Invoice for overusage cost is being generated within the system. Only the resources marked as **Billable** and (at the same time) **Metered** are taken into account during Invoice generation.

System-Wide Billing Settings

The Parallels Business Automation - Standard provides the powerful and flexible billing system that allows:

- System-wide currency in the Configuration Director - Miscellaneous Settings - Regional Settings.
- Re-defining the starting numerical identifiers (IDs in Parallels Business Automation - Standard database) for accounts, financial documents (orders, invoices, payments, and adjustments), statements, subscriptions, and Containers (Containers) in the Configuration Director - Miscellaneous Settings - Objects Opening ID.
- Setting the starting reference numbers and both prefixes and suffixes for financial document numbers (invoices, orders, payments, adjustments, and payment requests) in the Billing Director - Settings - Documents numbering. This setting allows adjusting the Parallels Business Automation - Standard accounting to suit specific accounting requirements.
- Adding subscription periods in the Billing Director - Settings - Subscription Periods.
- Setting the mode of credit adjustments automated generation and invoices handling under Billing Director - Settings - Invoice Settings.
- Creating different discount categories to be assigned to customer and reseller accounts (applied to services purchased for an account) and, in addition used to set up a special partner discounts to be assigned to resellers - applied to prices a reseller pays provider for resold services) in the Billing Director - Discount Manager.
- Creating and using Different credit terms that can be assigned per account and define the order of settlements in the Account Director - Subscription Manager.
- Flexible taxation (on page 112) with ability to use the EU Tax Exemption Code in the Billing Director - Taxation Manager.
- Ability to automatically apply unused customer payments. This setting can be allowed as a system-wide one in the Commerce Director - Payment Processing - General Configuration and later enabled or disabled for each particular offline payment.
- Configuring and enabling the fraud screening filters in the Commerce Director - Anti-Fraud Manager.
- Configuring the recurring billing in the Commerce Director - Payment Processing and Commerce Director - Online Payments - Setup with the fine-grained transactions approval tools.

Invoice Settings

Without respect to an accounting plug-in used, the additional accounting setup is available both from Provider and Reseller Control Centers. This setup affects the *automated adjustments generation and invoices handling*.

Click **Settings** on the **Billing Director** and then click **Invoice Settings**. Click **Edit** on the **Invoice Settings** screen. Check or clear the boxes next to the settings names to enable or disable an option:

- **Issue credit invoice instead of credit adjustment.** Adjustments are issued just to change accounts balance. Credit and debit adjustments increase or decrease an account balance respectively. Credit adjustments are issued automatically if a customer downgrades his/her subscription or releases some services or resources included in his/her current hosting plan. Adjustments do not itemize services or resources they are issued for and thus, adjustments are not included in billing reports and are not accounted like invoices and payments. If you want to account the automatically generated adjustments properly, you can replace them with credit invoices that have the same sense as credit adjustments, but are accounted properly (IDs are continuous with all other invoices, a document is accounted in billing reports). Please note that this setting affects automatically generated adjustments only.
- **Allow invoices deletion.** Check this box if you want to allow deleting invoices from Parallels Business Automation - Standard. If you want to disallow deleting invoices, clear this box.
- **Add tax for delay penalty invoices.** Check this box to add taxes to invoices generated for overdue payments.
- **Allow to generate Adjustments manually.** Check this box to allow to add adjustments manually. If this box is cleared, then adjustments are generated only automatically, for example in case of refunds.
- **Enable consolidated invoicing.** This box enables consolidated invoices per vendor. Consolidated invoice includes several orders or invoices. Additional options for consolidated invoices become enabled as soon as this box is checked. Consolidated invoice is generated on billing date set for customer or reseller account.

Important: Consolidated invoice is generated only if billing day is set for account. There are more **specific features** in consolidated invoices processing. **Click here to read more...** (on page 106)

- **Include overusage fees to consolidated invoices.** Check this box to include resource overusage invoices issued at the end of billing cycle to consolidated invoice.
- **Include domains and SSL certificates renewal fees to consolidated invoice.** Check this box to include domains and SSL certificates renewal fees to consolidated invoice. If this box is unchecked, then SSL and domains renewal will not be included in consolidated invoice.

Note: The option **Include domains and SSL certificates renewal fees to consolidated invoice** is ignored when consolidated invoice is generated for resold hosting plans that were copied from Provider. Resellers are billed for renewal of resold domains and SSL certificates without respect whether this option is enabled or not: it is assumed that Reseller's customers have already paid for domain and SSL renewal.

- Generate consolidated invoice before billing day (in days). Enter how many days before billing date a consolidated invoice should be generated. Default setting is 1 day.

Important notes about consolidated invoice generation before billing day:

Consolidated invoice is generated at the end of billing period; depending on the invoice settings, consolidated invoice can be generated one or several days before billing day.

Exclusion: Separate consolidated invoices for resold hosting plans that were copied from Provider are generated for Reseller accounts exactly on Reseller billing day. In this case the setting "Generate consolidated invoice before billing day (in days)" is ignored.

Consolidated invoice settings should be adjusted with invoice overdue period and renewal period under **Account Director > Subscription Manager > Credit Terms**.

The period before billing date when consolidated invoice is generated must be shorter than invoice overdue period. Consolidated invoice stays open till billing day, it should not become cut-off till payment is applied. If invoice overdue date comes before billing date, consolidated invoice will be switched to Cutoff status before billing day, and payment will not be applied.

The period before billing date when consolidated invoice is generated must be shorter than all renewal periods. Renewal orders should be generated *before* consolidated invoice, to be included into it.

Consolidated Invoices Processing

Consolidated invoice allows collecting a number of invoices into a single invoice. This optimizes payments and allows provider to reduce cost if commission is withdrawn for transactions.

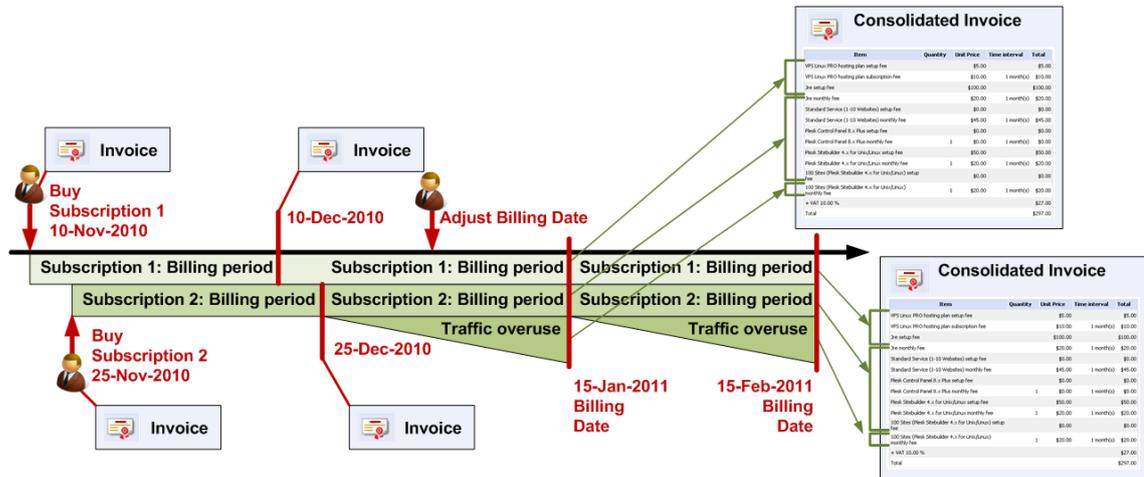
Important: When consolidated invoice generation is enabled, subscriptions never expire. Customers can use unpaid services. To avoid financial loss, consolidated invoices payment should be properly controlled.

To generate consolidated invoices correctly, all subscriptions that belong to an account must be adjusted to the same billing date. This adjustment is made automatically as soon as consolidated invoices generation is enabled.

Note: Subscription end date is not adjusted for Domain Registration and SSL Certificate subscriptions, because all renewal processes in this case are handled by Registrar. Please see more information below, in the paragraph **Documents included in consolidated invoice**.

If billing day is not set for some account, consolidated invoice for this account will not be generated. Orders and invoices will be processed and paid as usual.

The figure below illustrates how subscription billing period is adjusted to a billing day.



To adjust billing day, recurring orders are generated for the period starting from the moment when billing day is set and up to the closest billing day. Such orders are normally not included in consolidated invoice.

When at least two of subscriptions end dates are adjusted to the billing day, consolidated invoice starts being generated. Other subscriptions are included in consolidated invoice in course of adjustment to billing day. Consolidated invoice is generated at the end of billing period. Depending on the invoice settings, consolidated invoice can be generated one or several days before billing day.

Consolidated invoices processing scheme allows *avoiding undesired expiration of subscriptions*. Orders are included in consolidated invoice and processed on a last billing day *before* subscription expiration date.

Documents included in consolidated invoice:

- Invoices for recurring orders.
Recurring orders stay in Open status without respect to customer account positive balance or credit limit; payments are not auto-applied, waiting for consolidated invoice generation. When consolidated invoice is generated, orders are switched into Paid status, then processed in several hours, and subscription is renewed. Consolidated invoice is paid on billing day.
- Invoices for domain renewal, SSL renewal, and invoices for resource overusage are included in consolidated invoice if these options are enabled.

Special case for domain and SSL subscriptions renewal. Since domain and SSL subscriptions end date is not adjusted to the billing day the end date for such subscriptions may occur between billing days. In this case, if a domain or a SSL subscription expires before billing day, then the renewal order is not included in consolidated invoice and not paid. As a result, the subscription expires. To avoid such situations, renewal order must be paid manually before subscription expiration.

- Invoices for resold services. Consolidated invoice for resold services will be generated monthly and exactly on reseller billing day. This invoice will collect amounts for all delegated hosting plans (renewal, overusages) sold by this reseller. If billing day not defined, invoices for reseller will be generated immediately as it works without consolidated invoice enabled. Invoice for own reseller's subscriptions renewal will be generated separately from vendor invoice and in different date.

Documents not included in consolidated invoice:

- Invoices for sale orders placed on initial purchase, excluding resold services.
- Invoices for upgrade orders: hosting plan change, add new resources, buy new application, excluding resold services.
- Invoices for recurring orders generated during subscriptions end date adjustment to a single billing day.
- Invoices generated for orders paid manually before billing day.

Important notes about consolidated invoice generation before billing day:

Consolidated invoice is generated at the end of billing period, depending on the invoice settings, consolidated invoice can be generated one or several days before billing day.

Exclusion: Invoices for resold hosting plans are generated for Reseller account exactly on Reseller billing day. In this case the setting "Generate consolidated invoice before billing day (in days)" is ignored.

Consolidated invoice settings should be adjusted with invoice overdue period and renewal period under **Account Director > Subscription Manager > Credit Terms**.

The period before billing date when consolidated invoice is generated must be shorter than invoice overdue period. Consolidated invoice stays open till billing day, it should not become cut-off till payment is applied. If invoice overdue date passes before billing date, consolidated invoice will be switched to Cutoff status before billing day, and payment will not be applied.

The period before billing date when consolidated invoice is generated must be shorter than all renewal periods. Renewal orders should be generated *before* consolidated invoice, to be included into it.

Summary: Consolidated invoice processing specific features:

- The period before billing date when consolidated invoice is generated must be shorter than invoice overdue period. Otherwise consolidated invoice will be switched to Cutoff status before billing day, and payment will not be applied.
- Consolidated invoice is generated only for subscriptions that have periods adjusted for same billing date.
- During subscription periods adjustment, additional invoices are generated. These invoices are not consolidated.

[Back to Receivables Setup \(on page 104\)](#)

Pricing and Discounts

This section contains information on how to manage prices and discount.

Use the links below for reference on the following:

- [How the total price for services is calculated \(on page 109\).](#)
- [How to set credit terms for your customers \(on page 110\).](#)

Managing Prices

Prices for services you sell in your online store are set using the **Billing Director - Product Manager**, per hosting plan. Retail prices for domain registration are also set per hosting plan. Original registrar prices can be set per domain registration plug-in, per TLD using **Service Director - Domain Manager**. Setting registrar prices is not necessary, but it may facilitate specifying retail prices since registrar fees pre-fill the domain registration pricing form when you set retail price for a hosting plan.

- To create a Hosting Plan (on page 140), go to the **Billing Director -Product Manager - Hosting Plans**. Setup and recurring fees for Container hosting plans are set per plan individually (the **Billing Rates** tab in a hosting plan properties).
- Retail prices for domains registration are set per hosting plan. Registrar prices are entered per domain registration plug-in, **Service Director > Domain Manager > Plug-Ins**, select a plug-in and then select the **TLDs** tab, chose a TLD and specify prices. Several domain plug-ins support the online prices update, and the most of them do not. Registrar prices are entered for reference only, they pre-fill the price-related fields in a hosting plan creation form, to facilitate retail prices setup.
- You can add a custom sellable services (custom attributes to a hosting plan) in the **Billing Director -Product Manager - Custom Attributes**. Custom attributes can be attached to hosting plans during creation or later.

The Parallels Business Automation - Standard provides the discounts management tools:

- **Discounts** that can be attached to accounts:
 - Discount categories (on page 176). This is just the discount percent attached to a customer or a reseller account and applied to purchases made for an account.
 - Partner discount specially attached to a reseller account. One of a pre-set discount categories mentioned earlier can be assigned to a reseller account as a partner discount. This discount is applied to amounts a reseller owed provider for re-sold services.
- **Promotions**. The discounted subscription periods for one or a several hosting plans. Each promotion has a sales period during which a hosting plan being promoted will include a certain discount valid during a certain discount period. To promote hosting plans, you can create different promotions under **Billing Director - Discount Manager - Promotions** and define per promotion the list of hosting plan to be promoted. You can create both public promotions and promotions activated by a coupon code. If a coded promotion is applied to a hosting plan, a customer will be asked for a coupon code on the order review page at your online store. Promotion plug-ins are available:
 - Percent discount applied to fees.
 - Free domain.

Note: Free domain promotion is not applicable directly to Domain Registration hosting plans. If a Domain Registration hosting plan is attached for example, to a Virtuozzo Container hosting plan as DNS Settings, and free domain promotion is configured for this Virtuozzo Container plan, then promotion is applied to a domain. In this case, if customer orders several domains, promotion waives domain registration fee for only one domain (selected randomly).

- Free subscription period.

- Finally, if taxation is enabled, the total price for services you offer in your online store is calculated in accordance with the corresponding tax zone and if you use the tax exemption, with the personal customer's VAT number. For more details on taxation, see earlier in this guide (on page 112).

Setting Credit Terms

Credit terms regulate financial relations of Provider and customer or reseller in case a reseller purchases something for their own:

- **Order validity period** - the maximal period of time an open Order can stay in Parallels Business Automation - Standard. The order validity period starts when an initial order or a renewal order is created. After validity date an Order becomes cancelled automatically. It is not possible to re-open a cancelled order.
- **Invoice due period** - the period of time during which an Invoice should be paid. The due period starts right after an invoice is generated. If an invoice is still not paid by the end of due period, such invoice becomes overdue and the overdue period for an invoice starts.
- **Invoice overdue period** - the period that starts after an Invoice due period is over. An Invoice is considered as overdue, however, the charged services are still provided during overdue period. After the overdue period is over, an unpaid invoice becomes cut-off and disabled for payment. However, the cut-off invoices can be reopened and paid.
- **Charge rate** - the penalty amount (percents of Invoice sum). Applied on yearly basis. Penalty is calculated during an invoice overdue period. For example, if charge rate is set to 365%, then daily charge equals to 1% of Invoice total sum per day. Charge rate is used to calculate the Overdue invoices amount.
- **Minimal charge** - minimal penalty amount, regardless actual penalty calculated in accordance with charge rate. Minimal charge is used for Overdue invoices amount calculation in case the charge rate amount is too small.
- **Credit Limit** - the maximal amount an account can owe a vendor. While a credit limit is not overdrawn, a customer orders are completed automatically, before payment is applied. When a credit limit is overdrawn, ordered services are provided only after a corresponding order is paid. A special event is provided in Parallels Business Automation - Standard when credit limit becomes overdrawn - event ID 23 'Account credit limit has been overdrawn'. Both customer and vendor receive notifications when such an event happens. The actions over subscription (put on hold, etc.) can be set specially in the Event Manager. Credit limit can be also set per customer account and in this case the credit limit set in credit terms will be overdrawn by the value set in account properties.
- **Subscription expiration and termination terms:**

Grace period - the period that starts after a Subscription period expires. The grace period can be considered as additional chance for a debtor to renew his (or her) Subscription. During Grace period, a Provider already has the right to suspend services. After Grace period runs out, a Provider terminates Subscription. By default, the minimal Grace period is one day.

Expiration period - the period of time an expired subscription is stored in the database. After an expiration period is over, a subscription is deleted, i.e., all the data related to a subscription is lost.

Renewal order period - The period of time remaining before a subscription expiration date when a renewal order is generated. By default, the minimal duration of the order renewal period is one day.

Subscription Termination Terms - the period of time a terminating subscription remains in the **Account Director > Subscription Manager > Subscriptions > Termination Queue**. It is possible to explicitly set the method of subscriptions termination for each of the available subscription periods and for trial subscriptions, three variants of termination method are available for each. To select the termination method, set the option button to one of the variants:

- **Terminate manually.** In this case a subscription will stay in the **Termination Queue** in the **Terminating** state until manual termination. This variant completely disables automated termination for a subscription.
- **Terminate automatically in a period.** This option allows specifying a particular period of time in days, months, or years during which a terminating subscription will stay in the **Termination Queue**. When this period is over, a subscription is terminated automatically. After the option button is set to this variant, select a termination period units (days, months, or years) from the relevant drop-down menu and then enter a period duration into the field next to the drop-down.
- **Terminate immediately.** This option allows terminating a subscription automatically, right after a subscription termination is requested. In this case, a subscription is even not placed into the **Termination Queue**.

Note: Please pay attention to selecting the default credit terms. This credit terms will be used for all accounts created by your customers during registration in your online store.

To add credit terms, go to the **Account Director > Subscription Manager > Credit Terms**.

Configuring Taxation

You can set different tax rates that can be applied automatically to orders total amount depending on a customer tax zone. The tax zone can be bound to a buyer's country (state) of residence or to a customer's account. In addition, you can create the default tax zone to define the tax rate for any of the countries you did not created a special tax zone. Tax zones can include several tax rates and it is possible to set the order of these tax rates application.

If taxation is enabled, you can configure the HSPstore to show prices taxed in accordance with a particular tax zone defined for HSP account. Or you can just show the net prices and the notification saying that the prices are taxed depending on the customer's individual Tax Zone.

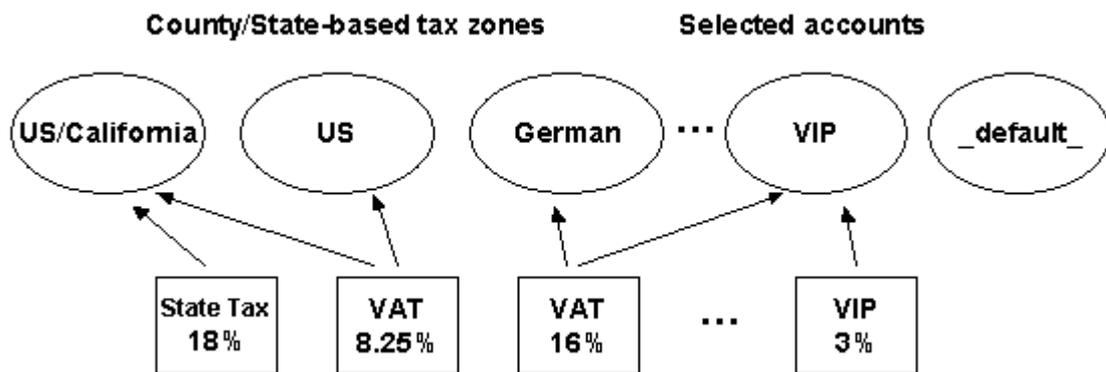


Figure 2: Configuring taxation.

It is also possible to use tax exemption for foreign customers, i.e., customers that specified in their account profile a country of residence other than your HPS company resides. To use tax exemption, it is necessary to enter the HSP VAT Number into the **Billing Director > Taxation Manager > Setup** form and enable tax exemption.

When tax exemption is enabled, the foreign customers can enter their own VAT Number into a customer account profile either from the Control Panel or during account creation in your HSPstore. In addition, you can manually enter VAT Numbers for your customers (in **Account profile > Financial Info** tab).

Note: Tax exemption affects business accounts only. Personal accounts (with a single contact) are subject to the relevant taxation settings.

To make taxation more secure and strict, you can set the orders processing in such a way that no transactions will be allowed until you manually verify and approve either both the customer's address (i.e., the tax zone) and VAT Number or one of them.

Note: For EU customers the VAT Numbers are always checked in respect to the correspondence of the VAT Number entered by a customer to the country of residence specified in a customer account profile. You can set the automated approval mode VAT Number for EU customers in case the check had shown that the code does correspond to the customer country of residence.

You can configure taxation in the **Billing Director > Taxation Manager**.

Configuring Fraud Protection

Parallels Business Automation - Standard provides a flexible rules-based anti-fraud system that allows configuring a wide range of checks and approvals. It is possible to configure specific checks for any stage of order placing, starting from a customer registration and up to an order confirmation.

Anti-fraud checks are configured by composing various sets of rules under pre-defined anti-fraud filters provided (for account registration, order placing, payment, etc.). Each rule uses one anti-fraud plug-in with pre-defined check result and defines an action or amount of fraud points to be scored in case an actual check result matches a result defined in a rule. The threshold fraud score is assigned to every anti-fraud filter and if the overall fraud score produced by rules included in a fraud filter exceeds a filter threshold score, a given operation (account registration, transaction, etc.) is declined.

The anti-fraud plug-ins include IP, e-mail, phone, and other black lists, open proxy check, payment method token validation, and a set of built-in plug-ins like phone/country, IP country, IP city check, and USA Phone.

To configure anti-fraud plug-ins, go to the Commerce Director > Anti-Fraud Manager > Anti-Fraud Plug-ins.

To configure anti-fraud filters, go to the Commerce Director > Anti-Fraud Manager > Anti-Fraud Filters.

Adjusting Anti-Fraud Plug-ins General Settings

The settings that are common for each plug-in (behaviour on check errors and availability for resellers) are grouped under the **General Configuration** tab in a plug-in properties. A plug-in availability for resellers can be also adjusted by using the controls provided for the list of anti-fraud plug-ins.

The most of non-configurable plug-ins have only **General Configuration** tab under their properties. You can both define the availability for resellers and check errors processing mode for such plug-ins and use these plug-ins in anti-fraud filters. Some of non-configurable plug-ins, for example, Phone Country, have a second tab called **Plug-In Configuration**, but this tab provides only the read-only list of data (for Phone Country this is the country codes formats), without the ability to change or add samples.

Managing Accounts and Documents Held Up by Anti-Fraud Filters

The Anti-Fraud Manager allows sorting out suspicious orders and accounts and collecting them in a separate Checklist, where these documents and accounts can be checked and approved manually. This makes anti-fraud checks more reliable and provides additional security.

When an order is held up by an anti-fraud filter, it is silently moved to the **Anti-Fraud Manager > Checklist** with **Need Approval** status.

A customer who have placed this order is not informed about anti-fraud check result. However, in this case, there is no payment step in store. A customer is informed that an order processing is in progress and offered to log in to the Control Panel and pay an order there. Meantime, provider or reseller can check an order and approve it allowing further processing, i.e., payment. If an order is not approved, it cannot be paid from the Control Panel as well. The system message says that an order is in process and offers to contact vendor in case of problems.

To send documents or accounts in the **Anti-Fraud Manager > Checklist** or let an order or an account pass this check, the additional actions are provided. You can use these actions in anti-fraud filters' rules.

- **Need Approval.** In case a rule condition is fulfilled, an order is placed into the Anti-Fraud Manager Checklist and waits for manual approval. No points are scored.
- **Approve.** In case a rule condition is fulfilled, an order passes a rule with Approved result. No points are scored.

For example:

- To send a suspicious account into the **Anti-Fraud Manager > Checklist**, go to the **Anti-Fraud Manager > Anti-Fraud Filters**, select the **Account Registration** filter. Add a new rule with a negative condition, for example, select the **Country Black List** plug-in and select the **Customer country is included in the Country Black List** condition. Click **Next**. On the next screen, select the **Need Approval** action. All accounts with this country specified as a customer country of residence will be placed into the Anti-Fraud Manager Checklist. Do not forget to activate both the filter and the rule.
- To send suspicious documents into the **Anti-Fraud Manager > Checklist**, add rules with the **Need Approval** action into the order-related filters.

The Anti-Fraud Manager Checklist consists of two lists, one for accounts, under the **Accounts** tab and another is for documents, under the **Documents** tab.

The list of accounts checklist displays the following:

- **ID.** An account numerical identifier assigned automatically in Parallels Business Automation - Standard.
- **Account Name.** An account name.
- **Result.** The result of anti-fraud check:
 - **Need Approval**
 - **Error**
 - **Rejected**
 - **Postponed**

- **Approved**
- **Balance.** An account current balance, i.e., the difference between the paid amount and the amount a customer owes you.

The list of documents check list displays the following:

- **ID.** A document numerical identifier assigned automatically in Parallels Business Automation - Standard.
- **Type.** A document type (order, invoice, payment request, etc.)
- **Account Name.** The name of an account that have issued a document.
- **Filter.** The anti-fraud filter that have held up a document.
- **Result.** The result of anti-fraud check:
 - **Need Approval**
 - **Error**
 - **Rejected**
 - **Postponed**
 - **Approved**
- **Balance.** A document balance, for invoices - an unpaid part of a document amount.
- **Total.** A document total amount.
- **Document Date.** A document issuing date.

To approve an account or allow the further document processing, check the box next to an account or a document ID and click the **Approve** button.

Configuring Credit Card Payment Plug-ins

Parallels Business Automation - Standard offers a wide range of built-in modules (plug-ins) that provide an ability for you to accept online payments at your online store and process them with different online payment gateways. You just need to set up your Merchant Account at a payment gateway and then enter your Merchant data into the corresponding plug-in configuration form in Parallels Business Automation - Standard. The plug-ins set includes both plug-ins to real payment systems and the Dummy Plug-in (for testing purposes).

The following transaction types are implemented in Parallels Business Automation - Standard:

- *Sale* - a single-step transaction without pre-authorization. Money are just withdrawn from a card.
- *Credit* - refund after funds have been settled, i.e. a transaction data have been passed from a payment gateway to an acquiring bank.
- *Preauth* - a purchase amount is reserved at a card and authorization is needed to withdraw money and finish a payment.
- *PreauthReversal* - a transaction is cancelled on the 'Preauth' stage, i.e., pre-authorized funds are released.
- *Capture* - the reserved amount was withdrawn after authorization.
- *Capture Reversal* - a transaction was cancelled on the 'Capture' stage, but before funds are settled.

What Payment Plug-Ins are Available

Payment plug-ins are shipped as RPM modules independent from Parallels Business Automation - Standard functionality.

The full list of payment plug-ins shipped with Parallels Business Automation - Standard is available at Parallels official website <http://www.parallels.com/en/products/hspcomplete/templates/payment/>.

How to Configure a Payment Plug-In

After installation, a plug-in becomes available in Parallels Business Automation - Standard as a selectable type for a new payment plug-in configuration. To add a payment plug-in based on one of a standard configurations, it is enough to go to Commerce Director, proceed to Online Payments > Payment Plug-ins, click New Plug-In, enter a new plug-in configuration name and select a configuration type. After this, a plug-in configuration form appears on the screen. The only thing to do after this - fill the form and save the configuration. The number of plug-ins that can be added on the basis of the same standard configuration is not limited.

Activating Payment Plug-Ins and Making Them Available for Resellers

To use the configured payment plug-ins you should activate them for your store. In addition, it is possible to flexibly set payment plug-ins availability for Resellers: after a Provider allows a plug-in usage for a Reseller, this Reseller can register their own Merchant account and use a plug-in for their own e-commerce business.

In respect to payment plug-ins availability for resellers, each plug-in can be disabled or enabled globally (for all resellers) or a plug-in availability can be set as undefined and then a plug-in availability can be set in reseller account properties, under the **Payment Plugins** tab.

The list of payment plug-ins displays the following:

- **Name.** The title a Plug-In is referred to in Parallels Business Automation - Standard (typically, the plug-in name follows the name of a payment gateway or payment system).
- **Active.** If a plug-in is activated, then this payment system is available at your online store. You can activate and use any and up to all payment Plug-ins at the same time. Active (currently enabled) Plug-in can be selected by clicking on Plug-in title and then, after the Plug-in configuration appears, on the **Mark as Active** button. Green tick in this column indicates that a payment system plug-in is currently active.

Security With CVV and AVS

The Parallels Business Automation - Standard credit card payment Plug-ins provide the following security features:

- **Card Verification Value code (CVV2) verification.** CVV code is a three- or four-digit code which provides a cryptographic check of the information embossed on the card. The CVV code is not part of the card number itself. The CVV code helps ascertain that the customer placing the order actually possesses the credit/debit card and that the card account is legitimate. Each credit card company has its own name for the CVV code, but it works similarly for all popular card types. (VISA refers to the code as CVV2, MasterCard calls it CVC2, and American Express calls it CID);
- **Address Verification Service (AVS).** As part of every transaction processed, the customer's address and zip code (Billing Address) are sent to your processing network for AVS verification. The processing network returns an AVS "code" indicating whether the customer-provided information matches the information on file for the customer at their processing bank;
- **Disabling automatic funds capture.** This allows performing some additional credit card verification procedures prior to funds capture. In this case, pre-authorizing of a transaction will be performed and you will have to post-authorize the transaction manually from the payment gateway interface. This might be useful to avoid chargebacks if you have too much fraud on your site.

Note: For most of payment plug-ins available in Parallels Business Automation - Standard you can configure the list of credit card types to accept both in HSPstore and Control Panel. This list can be configured per payment plug-in. If a payment plug-in does not support this feature then such payment plug-in will accept all types of credit cards.

Configuring Bank Transfer Payment Plug-ins

Bank transfer payment plug-ins implemented in Parallels Business Automation - Standard allow direct debiting of bank accounts starting from corresponding orders and invoices issuing, and finally, generating batch files to be submitted to a bank and transactions approval.

Bank transfer payment plug-ins are shipped as RPM modules independent from Parallels Business Automation - Standard functionality.

The following bank transfer payment plug-ins are shipped with Parallels Business Automation - Standard:

- Dummy
- DTAUS
- Norma19
- Clieop3
- SEPA

After installation, a plug-in becomes available in Parallels Business Automation - Standard as a selectable type for a new payment plug-in configuration. To add a payment plug-in based on one of a standard configurations, it is enough to go to **Commerce Director**, proceed to **Bank Transfers > Payment Plug-ins**, click **New Plug-in**, enter a new plug-in configuration name and select a configuration type. After this, a plug-in configuration form appears on the screen. The only thing to do after this - fill the form and save the configuration. The number of plug-ins that can be added on the basis of the same standard configuration is not limited.

To generate a batch file, you should go to **Commerce Director > Bank Transfers > Documents**, select documents prepared for a particular bank (it is clearly shown how documents were created for which bank), then adjust the selection (exclude some documents from a batch) and generate a batch file. When a batch file is generated, it is being automatically saved on your local computer. Then you can manually submit a batch file to a bank.

After the batch file is approved (bank transfer performed), you should manually process documents included in a batch to start the purchased services provisioning.

Using Specific Accounting

By default the Parallels Business Automation - Standard billing system uses the standard accounting that follows the USA accounting basics.

Some additional accounting features can be added using the special accounting plug-ins and/or a couple of system-wide settings mostly related to refunds and valid for all accounting plug-ins where refunds are in use.

Enabling a Specific Accounting Plug-in

1. Click **Plug-ins Activation** on the **Accounting Manager** submenu.
2. Accounting plug-ins can be enabled per account (Provider or reseller ones). Select an account from the accounts list that appears on the screen.
3. Select an accounting plug-in to be enabled for this account from the drop-down menu and save the changes.

The current Parallels Business Automation - Standard version provides the following additional accounting plug-ins:

- Greek accounting.
- Italian accounting (specific accounts registration, invoicing, and taxation rules)
- Russian accounting (factures management, ability to add custom parameters to accounts, specific taxation rules).
- Ukrainian accounting.

Accounting plug-ins are included in the Parallels Business Automation - Standard distribution and are installed in the same way as the other plug-ins.

Note: A new accounting scheme is applied immediately after activation. We do not recommend to switch the accounting scheme several times or change the default accounting into a custom one without the need.

In Provider Control Center, to change the accounting scheme for Provider account, click **Plugins Activation** on the **Accounting Manager** submenu, select your Provider account (ID 1) from the list that appears and, as the accounting plug-in setup form appears, select a new accounting plug-in from the relevant drop-down menu. Similarly, a special accounting can be enabled for any of resellers (per account).

Russian Accounting Options

Additional accounting plug-ins do not affect the basic accounting implemented in Parallels Business Automation - Standard. Orders, Invoices, and other documents that managed under Billing Director > Receivable > Documents are created anyway. When you use one or another accounting plug-in, you get some additional billing options.

Russian accounting plug-in provides the following options:

- **Taxation.** When you enable the Russian accounting, the Russian VAT tax zone with 18% tax rate is created automatically. You can view this tax zone under Billing Director > Taxation Manager > Tax Zones. The VAT line is then added to all the orders automatically as soon as you use the Russian accounting. The default name of this tax zone is RU VAT Tax. Use online help to know more about tax zones management.

- **Specific attributes for accounts.**

Special attributes. The following attributes are added to Provider account in PCC or reseller accounts in corresponding RCC (these attributes can be adjusted under the second item of the left menu in PCC or RCC, where the name of account administrator is shown):

- Accountant First and Last name
- Bank Account
- Bank Corr. Account
- Bank Name
- BIC
- INN
- KPP
- Leader First and Last name

Two attributes are added to all customer accounts created when Russian accounting is enabled:

- INN
- KPP

These attributes can be viewed or edited under a special tab that appears for the Russian accounting - **Ext. Attributes**. To view or adjust these attributes, go to the **Account Director > Customer Manager > Customers**, select a customer account, then select the **Ext. Attributes** tab.

Note: You can add custom extended attributes. Please see the Parallels Business Automation - Standard SDK, the 'Customizing Parallels Business Automation - Standard' chapter.

Factures creation. In addition, under the **Ext. Attributes** tab for every customer account, you can enable or disable creation of invoices specific for Russian accounting. These invoices are called 'factures', not in its original meaning, but as a loantranslation of the Russian word 'schet-faktura'. However, in default English localization factures are called 'invoices'. You can customize this string as this described in Parallels Business Automation - Standard SDK the 'Customizing Parallels Business Automation - Standard' chapter. To create invoices-factures, check the **Create invoices** box.

- **Documents specific for Russian accounting.** When you use the Russian accounting, the following documents are created:
 - **Schet.** A document created when customer places an order or renews subscription. In other words, schet is in some sense similar to order in the basic accounting. Schet is issued by the amount to be paid including setup and subscription fees.
 - **Facture,** in default English localization called Invoice. Invoice-facture is issued on subscription activation, by the amount of setup fee only and then, every month by the amount of a subscription fee and at the end of a subscription period. In case a subscription period is longer than 1 month, a monthly invoice-facture is issued by the amount of pro-rated price for one month. This monthly invoice-facture is called in Russian accounting as "otgruzochaya" and represents a special type of facture used in Russian accounting.

Russian specific documents are managed under the **Billing Director > Accounting Manager**. To get the relevant menu items in the PCC/RCC left menu, after you have enabled the Russian accounting, refresh the browser window. After this, two items appear in the left menu under the Accounting Manager:

- **Accounting Documents.** Here you can manage Russian accounting specific orders called Schets and Factures (both approved and not approved) called invoices.
- **Not Approved Invoices.** Here you can review and approve invoices-factures. An approved invoice-facture becomes visible for a customer in **Control Panel > My Account > Billing Documents**.

A special forms provided for russian accounting documents. You can print them one-by-one. However, PDF printing as well as mass print is not supported.

- **Currency exchange rate and factures generation setup for all accounts.**

By default, the Russian accounting plug-in recalculates prices set in a system-wide currency in Parallels Business Automation - Standard into a Russian rubles (RUR) for all documents specific for Russian accounting, namely, schets and invoices-factures. The exchange rate can be set in **Accounting Manager > Accounting Plug-in Setup**.

In addition, the invoices-factures creation can be enabled globally for all accounts on the the Accounting Plug-in Setup screen. To create invoice-facture for each customer order select **Enable** from the **Set the "create invoices" attribute for all your accounts** menu. To disable invoices-factures creation for all accounts, select **Disable**. Note thes this setting can be overridden by per account option (see above).

CHAPTER 8

Managing Payment Methods

Parallels Business Automation - Standard supports two payment methods:

- Credit card. A customer pays by a credit card and a payment is being processed in real time by one of the credit card systems available in Parallels Business Automation - Standard via configurable plug-ins.
- Bank transfer. A customer pays using a bank account and appropriate order is being created. Bank Account orders then can be grouped into a batch to generate a batch file to be submitted to a bank.

This chapter describes how to manage customer credit cards and bank accounts saved in Parallels Business Automation - Standard.

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Configuring Encryption for Payment Methods

Both credit cards and bank accounts private data must be stored encrypted. To use credit cards, it is not necessary to store cards data in Parallels Business Automation - Standard, but if you are planning to process delayed payments, credit cards data must be saved. As for bank accounts data, it is always must be saved in Parallels Business Automation - Standard to make it possible to generate batch files containing the transactions data to be submitted to a bank.

The payment methods private data saved in Parallels Business Automation - Standard is encrypted with public key and after this, to perform transaction, you need a secret key to decrypt it. Parallels Business Automation - Standard allows generating two key pairs - to use the second one if the first key pair is lost. If you already have a key pair saved somewhere, you can upload it.

To upload or generate a new key pair, go to **Commerce Director > Payment Processing > Secure Storage**. Select the **Keys Management** tab.

To enter a secure key temporarily, select the **Secure Key** tab. In this case, you can define the period of time the key will be still stored in the Parallels Business Automation - Standard so that you could process several transactions instead of one.

Managing Recurring Payments

Recurring Billing tools provided in Parallels Business Automation - Standard allow you to charge your customers on a recurring basis, automatically. Recurring billing makes it possible to set up regularly scheduled payments, such as subscription fees.

The order of payment methods usage for recurring payments in Parallels Business Automation - Standard is the following:

1. Check the payment amount in respect to the maximal amount to be paid recurrently.(Commerce Director - Payment Processing - General Configuration).
2. Check the payment amount in respect to the minimal amount to be paid online. (Commerce Director - Payment Processing - General Configuration).
3. Check for credit cards allowed for recurring payments and in OK status.
4. If no applicable credit cards found, check for the applicable bank accounts (allowed for recurring payments and in OK status).

For recurring billing to work, customers credit card or bank account data must be stored in Parallels Business Automation - Standard database, so billed amount can be automatically withdrawn from a customer credit card or bank account without the need for you to enter a payment method requisites.

Thus, the first thing to do to set up the recurring billing, is making it possible to store credit cards and bank accounts in Parallels Business Automation - Standard, i.e., secure storage configuration (on page 123).

Then, you need to make sure that payment methods data will be saved in Parallels Business Automation - Standard:

- Special setup is needed. Credit cards are not necessarily must be stored in Parallels Business Automation - Standard to make payments (some payment plug-ins redirect payers to payment gateway web payment pages and a payment can be submitted directly, beside Parallels Business Automation - Standard). But to use recurring billing with credit cards, you must set credit cards processing to save credit cards data in Parallels Business Automation - Standard database (Commerce Director > Payment Processing > Secure Storage > General Settings).
- No need for additional settings. Bank accounts data is being always saved as soon as the secure storage is configured, since one-step payments by bank accounts are not possible. Bank accounts requisites are to be included in transaction requests (batch files) that can be generated only manually, and it takes some time to compose a batch, so if a bank account requisites were not saved - a transaction request cannot be submitted to a bank.

Finally, to make recurring billing more secure, you can impose some restrictions for payments being processed recurrently: amounts to be processed, number of attempts to pay a document recurrently, etc. (Commerce Director > Payment Processing > General Configuration).

How a Payment Method Can be Added

A credit card or a bank account can be saved in the Parallels Business Automation - Standard system in one of the following ways:

1. From Provider or Reseller Control Center, by a staff member:
 - From Account properties - **Payment Settings**.
 - From the general list of payment methods (**Commerce Director > Online Payments or Bank Transfers**).
 - When your staff member enters a credit card or bank account requisites when changing payment method for a document.
2. From Control Panel, by a customer (**Account Summary > Payment Methods**).
3. From your online store, when a customer pays an Order.

Note: For most of credit card plug-ins available in Parallels Business Automation - Standard you can configure the list of credit card types to accept both in HSPstore and Control Panel. This list can be configured per payment plug-in. If a payment plug-in does not support this feature then such payment plug-in will accept all types of credit cards.

Managing Credit Cards

Provider can add, remove, suspend customer credit cards in Parallels Business Automation - Standard. The types of credit cards to accept are set per credit card plug-ins.

How to Start Accepting Credit Cards

The Parallels Business Automation - Standard provides the set of plug-ins, which allow establishing connection with payment gates and accept online payments in the HSPstore.

To configure the payment plug-ins, you need to register an account (or sign up) at corresponding online payments processing center and obtain the necessary data (merchant ID, the processor URL, etc.). After this, you can go to the **Commerce Director > Online Payments > Payment Plug-ins** and fill the simple form to enable a plug-in.

The types of credit cards to accept can be selected per payment plug-in (if a plug-in configuration allows this).

To process online payments and use the recurring billing, you need the credit cards data to be saved in the Parallels Business Automation - Standard database. Thus, it is necessary to *enable credit cards data encryption*:

The credit cards private data saved in Parallels Business Automation - Standard is encrypted with public key and after this, to perform transaction, you need a secret key to decrypt it. Parallels Business Automation - Standard allows generating two key pairs - to use the second one if the first key pair is lost. If you already have a key pair saved somewhere, you can upload it. To generate or upload the key pair, go to the **Commerce Director > Payment Processing > Secure Storage** and select the **Keys Management** tab.

To secure transactions, you can enable the SSL protocol (on page 26) for your online store.

Note: To simplify PCI DSS compliance, we recommend to use tokenized payments by means of Sage Pay, PayPal Adaptive, or Authorize.Net CIM payment plug-ins.

You can also *configure fraud screening*. To configure and enable fraud screening, go to the **Commerce Director > Anti-Fraud Manager**. Fraud screening includes both pre-configured (country-code) and configurable (black e-mail, phones, etc.) checks.

Managing Bank Accounts

Parallels Business Automation - Standard provides the ability of storing bank accounts data in the Parallels Business Automation - Standard database and batch processing of bank transfers. When a customer places an order at your online store and selects a bank account as a payment method, this bank account is automatically saved. The corresponding order is recognized by Parallels Business Automation - Standard billing system by a payment method type and placed into the queue of documents awaiting for grouping into a batch.

All documents intended to be paid by bank accounts are then automatically recognized by bank account types and can be grouped into batches automatically, by one click.

Starting with the version 4.5.1, PBAS supports The **Single Euro Payments Area (SEPA)** standard. The bank accounts intended to be used for SEPA Direct Debit, should be processed manually by provider. Read more about SEPA payments... (on page 130)

All bank accounts saved in Parallels Business Automation - Standard database can be found under the **Commerce Director > Bank Transfers > Bank Accounts**. In addition, bank accounts registered for a Particular Parallels Business Automation - Standard account are displayed in an Account properties, under the **Payment Settings** tab.

It is also possible to save new bank accounts manually and change bank account settings that define an account status in Parallels Business Automation - Standard (availability for payments).

Note: Your customers will be offered to use their bank accounts saved in Parallels Business Automation - Standard database, to pay for the services ordered.

How to Start Accepting Bank Transfers

To accept bank accounts payments in your online store, you need the following Parallels Business Automation - Standard configuration:

- Encryption (on page 123) for bank accounts private data to make it possible to store bank accounts in Parallels Business Automation - Standard database.
- Bank account payment plug-ins (on page 118) set up and activated.
- The SSL protocol enabled (on page 26) for your online store.

Bank Transfers Setup

Bank Transfers Setup allows adjusting the PBAS general behavior in respect to bank transfers.

To set up bank transfers:

1. Click **Bank Transfers** on the **Commerce Director** submenu
2. Select **Setup** from the **Bank Transfers** submenu.
3. Click the **Edit** button.
4. Adjust the settings:
 - a** **Bank transfer plug-ins behaviour on applying a bank account to a document.** Select one of the following:
 - **No actions.** The order will be placed, but no further actions performed. The order can be found among **To Be Batched** documents (**Commerce Director > Bank Transfers > Documents**). Further processing of the order is up to Provider.
 - **Provision services and create a corresponding invoice.** Services will be provided, the order will be completed and the corresponding invoice created. However, the invoice will not be placed in the batch. The invoice can be found among **To Be Batched** documents (**Commerce Director > Bank Transfers > Documents**).
 - **Automatically add invoice to an open batch (create a new batch if needed).** Services will be provided, the order will be completed, the corresponding invoice created and placed in the batch.
 - b** **Bank transfer plug-ins behaviour on batch file generation.** Select one of the following:
 - **No actions.** No further actions performed. This option may be selected if manual approval of services provisioning is needed or services were provided on applying a bank account to a document.
 - **Provision services and create a corresponding invoice.** The order will be completed, services provisioned, and the invoice created. The payment should be applied to the invoice.
 - **Provision services, create a payment and apply it to the newly created invoice.** The order will be completed, and the payment will be automatically applied to the invoice, thus, no manual operations are needed to provide the services.
 - c** **Charge customer for transaction decline.** To charge customers for bank transfer decline, put a tick in tis check box and then specify the penalty amount and how this charge will be billed:
 - **Amount of transaction decline penalty.** Enter the penalty amount.
Select one of the following ways how the penalty will be billed:
 - **Increase the reopened document total by the amount of transaction decline penalty**
 - **Issue a new invoice to the amount of transaction decline penalty**
 - d** **Automatically close batch and approve all pending transactions after the specified period of time expires.** Specify the period of time after which all the batched will be closed.
 - e** **Automatically cancel declined documents after the specified period of time expires.** Enter how many days the cancelled documents will be still treated as valid.

- f** Allow customers to register more than one bank account. Restricting the ability for the customers to create multiple bank accounts. If a customer has no bank accounts, it is allowed to create one. This option provides the additional protection against fraudulent payments with multiple bank accounts. If this option is disabled, all the controls for bank accounts creation will be hidden both from the Store and from the Customer Control Panel, for those of the customers who already have one or more bank accounts. Provider may disable a customer's bank accounts and be sure that no more of them will be added.

Managing Bank Accounts Used for SEPA Direct Debit

The **Single Euro Payments Area (SEPA)** Direct Debit (SDD) Schemes allow a creditor (biller) to collect funds from a debtor's (payer's) account, provided that a signed mandate has been granted by the payer to the biller.

To set up the SEPA bank accounts, provider should manually enter the mandate sign date for the bank account. As the signed mandate arrives, provider goes to **Commerce Director > Bank Transfers > Bank Accounts**, opens the bank account settings for editing, enters the mandate sign date, and marks the bank account as **Verified**. After this, the bank account may be used for payments.

SEPA payments workflow:

For the first payment the signed mandate is provided (I) and then the transaction is processed in a usual way (II):

I. Making first payment with SDD and providing the signed mandate.

- The customer orders services and uses the SEPA payment. The customer provides the bank account details (Bank Code and Account Number (IBAN)) and places the order. The Payment Method of the Bank Account type is created in PBAS with the status Unchecked.
- PBAS automatically sends the notification to the customer with the mandate PDF form attached. Mandate ID is generated automatically and inserted in the mandate form and also saved for the new bank account.
- The customer signs the mandate and sends its signed copy to Provider.
- Provider receives the signed mandate and then manually enters the mandate sign date for the customer's Bank Account and marks Customer's Bank Account as Verified.

II. SDD transactions processing.

- The customer applies the SEPA Bank Account to the payables. PBAS automatically sends notification to the customer, telling that the payment will be collected using SEPA Direct Debit and the payment due date.
- Provider generates the batch according to the SDD CORE rules. Then provider should manually send the batch to the bank. Provider's Bank processes the received Batch and requests Customer's Bank to make a transfer. Customer's Bank charges Customer's account and credits Provider's account. The bank generates the response batch, which contains the statuses of the SEPA payment transactions.
- Provider receives the response batch and imports it to PBAS (on page 131). PBAS automatically processes the batch, marking the failed payments and releasing the successful ones.

Managing Bank Responses

Provider generates the batch according to the bank rules. Then provider should manually send the batch to the bank. Provider's bank processes the received batch and requests customer's bank to make a transfer. Customer's bank charges customer's account and credits Provider's account. The bank generates the response batch, which contains the statuses of the transactions.

Provider receives the response batch and imports it to PBAS. PBAS automatically processes the batch, marking the failed payments and releasing the successful ones.

The list of bank responses displays the following:

- **ID.** The response numeric identifier assigned in PBAS. Click to view the details of the file upload.
- **Filename.** The name of the response file.
- **Plug-in.** The bank transfer plug-in used to parse the file.
- **Creation Time.** The time when the response has been uploaded to PBAS.
- **Status:**
 - **Uploaded.** The file is uploaded, PBAS is parsing it or has already parsed and now trying to process the related documents.
 - **Error.** The response processing has failed. Click on the response ID to know the details of the error.
 - **Processed.** The file has been successfully parsed, all the related documents were successfully processed according to the bank response.

➤ *To import the bank response:*

1. Save the bank response to your local computer.
2. Go to **Commerce Director > Bank Transfers > Responses**. The list of already uploaded bank responses (if any) is displayed.
3. Click  **Upload File**. The Upload File form is displayed. Fill the form:
 - a** If several bank plug-ins support the bank responses parsing, then select the plug-in compatible with this bank from the **Parse by Plug-in** menu.
 - b** Click **Browse** next to the **Response file** field and locate the file.
4. Click **Next**. The list of bank responses is displayed, with the new bank response added to the list. The status of the new response is **Uploaded**. Refresh the screen to see the progress.

Adding Bank Account Manually

To add a bank account manually, do one of the following:

- Open the list of bank accounts in **Commerce Director > Bank Transfers > Bank Accounts**. Click the **New Bank account** button. Select an account type and fill the form that appears.
- Go to the **Account Director** and select a customer or a reseller account. Click the **Payment Settings** tab on the account properties set and then click the **New Payment method** button. Select the payment method type (Bank account) and fill the form.

Changing Bank Account Attributes in Parallels Business Automation - Standard Database

➤ *To edit a bank account attributes:*

1. Select a bank account by clicking on its ID or Name (i.e., on a bank account number).
2. Click the **Edit** button on a bank account screen that appears.

You can change the following attributes:

- **Account holder name** - the name of person who officially holds a bank account.
- **Status**. A bank account status can be changed into one of the following:
 - **Unchecked**. An account is active and available for payments, but it was just saved in Parallels Business Automation - Standard database and no successful transactions were yet performed using this account. After a successful transaction an unchecked bank account status automatically becomes OK.
 - **OK**. An account is active and available for transactions. At least one successful transaction was performed using this account.
 - **Disabled**. An account is temporarily not available for payments. A bank account can be disabled either manually, by editing its profile or automatically, if
 - **Expired**. A bank account is not available for payments since its registration period has expired. This status can be assigned by Provider only manually.
 - **Error**. A bank account is unavailable for payments since its data is incorrect or Provider suspects that an account data can be incorrect. In this case, Provider manually assigns the Error status to an account.
- **Allow payment by this payment method**. Whether a bank account can be selected as a payment method or not. Green tick in this column means that an account is allowed for payments, red cross - that payments using this account are not possible. This is a separate setting and it is not related to an account status as well as status is not related to this one.
- **Use this payment method for recurring billing**. If an account is used for recurring billing, it is automatically selected as a payment method for recurring payments like automatically generated renewal orders, for example. Green tick in this column means that an account is used for recurring payments, red cross - that not. Parallels Business Automation - Standard automatically selects for recurring payments the first account found in database that has the OK status and allowed for payments.
- **Customer IP**. A customer host IP address. When a bank account is added, this IP address is taken from a customer account profile. This IP address is detected and saved when a customer logs in to store or registers in store with this account. You can change a customer IP address for a bank account.

Viewing Transaction Log

The transaction log includes the detailed data about all online transactions (successful or failed) performed within Parallels Business Automation - Standard.

To view transaction log for online payments, go to the **Commerce Director > Online Payments > Transaction Log**.

To view transaction log for bank transfers, go to the **Commerce Director > Bank Transfers > Transaction Log**.

Removing a Payment Method

A payment method (credit card or bank account data) can be removed from the Parallels Business Automation - Standard database only manually. This can be done in one of the following ways:

1. From Provider Control Center, by HSP staff member:
 - From Account properties - **Payment Settings**.
 - From the general list of payment methods (**Commerce Director > Online Payments** or **Bank Transfers**).
2. From Control Panel, by a customer (**Account Summary > Payment Methods**).

To remove a payment method data, select a payment method and click the **Delete** button.

CHAPTER 9

Managing Hosting Plans

A hosting plan is a set of services you can sell. Depending on a hosting plan type, different types of services can be included in a plan.

When HSP creates hosting plans, they can make a hosting plan available for Resellers. In this case, Resellers can copy such hosting plans and set own prices. In addition, Resellers can create own hosting plans.

Hosting plans are managed under the **Billing Director > Product Manager > Hosting Plans**.

The list of hosting plans displays the following:

- **ID** - Numerical identifier, automatically assigned to a hosting plan in Parallels Business Automation - Standard database.
- **Title** - A hosting plan name used to refer to a plan in Parallels Business Automation - Standard. In HSPstore, hosting plans are referred by their titles.
- **Active** - Whether this plan is enabled for use (create subscriptions from Provider Control Center and/or sell).
- **Sell** - Green tick in this column indicates that services, based on this hosting plan can be sold by the Hosting Provider or by Resellers, red cross - that not.
- **Type** - a type of hosting services provided by a hosting plan.
- **Category** - Hosting Plan Categories are used to logically group hosting plans.
- **Trial** - whether a free trial subscription period is available for a hosting plan or not. Green tick means that a trial period is available, red cross - that not.
- **Subscriptions**. The total number of active subscriptions based on a hosting plan.

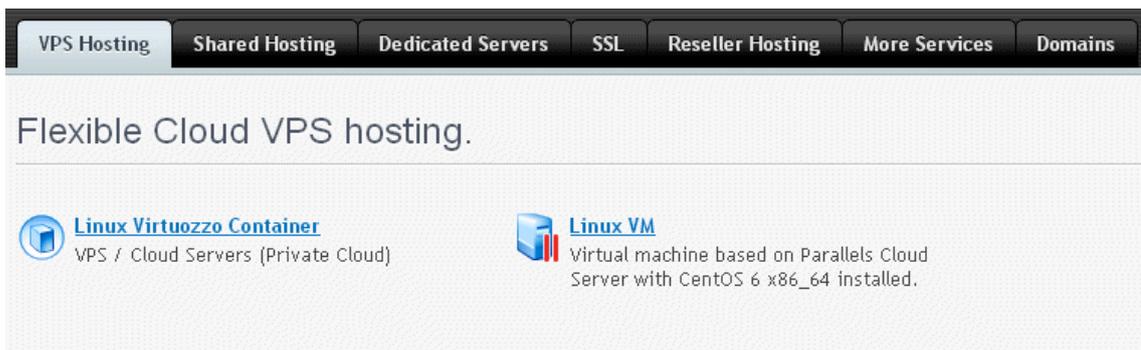
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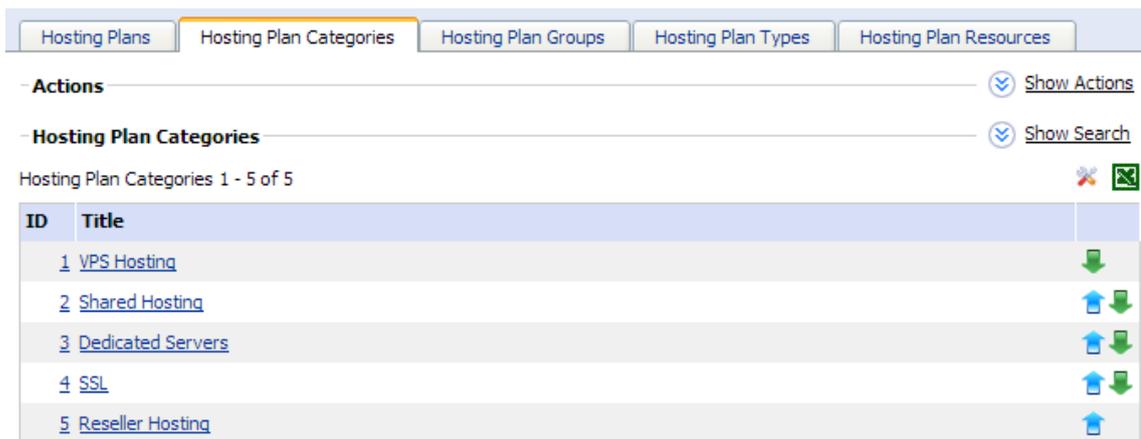
Hosting Plans Categories

Hosting Plan Categories are the sets of Hosting Plans of one or the same purpose (for example, Shared Hosting, Dedicated Servers, Reseller Hosting, etc). You may create as many Hosting Plan Categories as needed.

In Store, Hosting Plan Categories are displayed as tabs with a Category name shown on each tab. When the customer selects a Category, the Category short and long descriptions are shown, and then the names of Hosting Plans or Hosting Plan Groups (on page 136) in a Category:



To change the order of Categories tabs in Store, use the ordering arrows in the right column of the Categories list. The order of the Categories from the top to the bottom of the list corresponds to their order in Store from left to right:



➤ **To create Hosting Plan Category:**

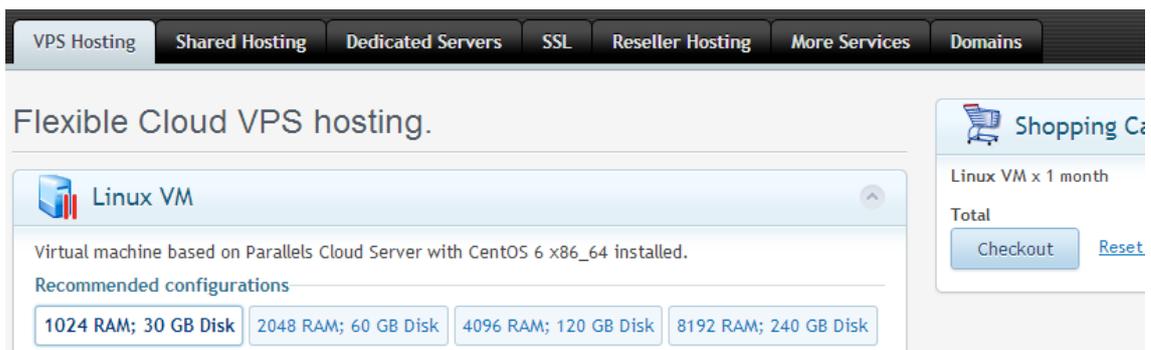
1. Go to the Billing Director > Product Manager > Hosting Plans. Select the Hosting Plan Categories tab.
2. Click the New Hosting Plan Category button. Fill the form that appears:
 - a Type the name of new Hosting Plan Category into the Title field. This name will be shown in Store on the Category tab.

- b** To add Hosting plans to the Category, click the **Add** button next to the Hosting plans list. From the Hosting Plans list that opens in the popup window, select plans by clicking on their names one-by-one; as you click, the plan name appears in the Hosting Plans list. When ready, close the popup.
 To remove some Hosting Plan from the Category, select it in the list by clicking on its name (use the CTRL key to select several plans), then click **Remove**.
 - c** To add Hosting Plan Groups (on page 136) to the Category, click **Add** next to the Hosting plan groups list. Add the groups in the same way as Hosting Plans.
 - d** Enter the Category descriptions. In Store, the short description will be shown as the Category screen heading. The long description will be shown in Store as the Category screen description.
3. Click the **Save** button to add new Hosting Plan Category.

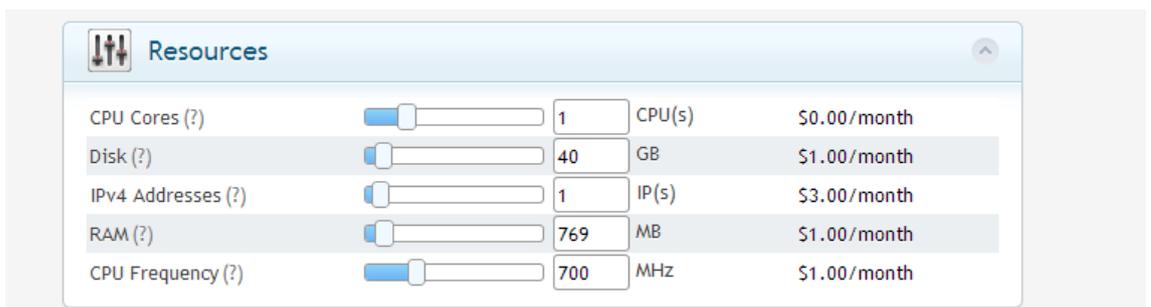
Hosting Plan Groups

Hosting Plan Groups allow grouping hosting plans of one type in a package. For example, this may be several plans of the Virtuozzo Container type with the different allowed range of the resources. Typical use case is that you create several Virtuozzo Container Hosting Plans, each of them presenting several basic configurations of the Container, for example, "Light", "Normal", "Power".

In Store, the customer may select the **VPS Hosting** category, then select the **Linux VM** group. The Recommended configurations are shown:



After this, the customer may select one of the basic recommended configurations and if needed, adjust it in the desired way within the range allowed:



How to start using the Hosting Plan Group in Store:

When a hosting plan Group is ready, go to the **Billing Director > Product Manager > Hosting Plans**. Select the **Hosting Plan Categories** tab and add the Hosting Plan Group to the category (on page 135).

➤ To add a Hosting Plan Group:

1. Go to the **Billing Director > Product Manager > Hosting Plans**. Select the **Hosting Plan Groups** tab.
2. Click **New Hosting Plan Group**. Fill the form that appears:
 - a** Enter the Plan Group title in the **Title** field. This title will be shown in Store as clickable link on the **Hosting Plan Category** screen the Group belongs. Note that a Group may belong to a several **Categories** at once.
 - b** To add Hosting plans to the Group, click the **Add** button next to the **Hosting plans** list. From the **Hosting Plans** list that opens in the popup window, select plans by clicking on their names one-by-one; as you click, the plan name appears in the **Hosting Plans** list. When ready, close the popup.

To remove some Hosting Plan from the Group, select it in the list by clicking on its name (use the CTRL key to select several plans), then click **Remove**.
 - c** Enter the Group descriptions. In Store, the short description will be shown as the Group grid heading. The long description will be shown in Store as the Group grid description.
3. Click **Save** to save the Group settings.

Hosting Plan Types

The set of hosting plan types is read-only in respect to its composition, however Provider can rename the hosting types in a way that, for example, seems more descriptive. The names of hosting plan types are shown on the first step of hosing plan creation wizard.

To rename or view the hosting plan types available, go to the **Billing Director > Product Manager > Hosting Plans > Hosting Plan Types** tab. Then select the type and edit its name.

You can also make use of the multilingual conversion option to switch the language of the hosting plan type into the one you need.

Parallels Business Automation - Standard supports multi-lingual customization for a wide range of fields (website texts, hosting plan names and description, notification templates). You can enter and save texts in any of the languages installed over Parallels Business Automation - Standard. To select the language, click one of the buttons with language names tiled below the field you want to enter the text and enter the text in the language selected. For example, click **English** - and edit the English text, then click **German** (the English content will be saved and replaced with the German content in the same field) and edit the German text, and so on, for all languages you want to use in your store.

To restore the default hosting plan type name, click the **Reset to Default** button.

Note: It is possible to create the trial-only hosting plans (for the types of hosting the trial period is allowed for) and so-called one-time-fee hosting plans, which allow selling services or other goods without subscription creation and thus, without renewals.

Hosting Plan Resources

The **Hosting Plan Resources** list includes all the resources that can be sold by means of the given PBAS installation, depending on the scope of services configured (Virtuozzo, Plesk, POA). The list is pre-configured and consists of Virtuozzo and Plesk resources. When new services become available in PBAS, for example, POA node is registered, then the names of POA resources are added to the list. If Plesk node with new Plesk version is registered, then the names of new Plesk resources are also fetched and added.

Here you can change resources names and add custom multilingual descriptions of resources. The default multilingual descriptions are saved, you can reset description to default text at any moment. If a resource description is not localized, then the default English description is shown in store and Control Panel.

The main benefit of this option is the ability of showing custom description in store though the changes are also applied to hosting plans billable resources names shown in PCC/RCC.

➤ *To customize resources description:*

1. Go to **Billing Director > Product Manager > Hosting Plans**.
2. Select the **Hosting Plan Resources** tab.
3. The list of resources displays the following:
 - **Short name.** The original resource name used in corresponding service (Virtuozzo, Plesk). This name is not customizable.
 - **Name for Store and CP.** A short but descriptive resource name shown in store and Control Panel to customers.
 - **Description for Store and CP.** Resource description shown as a hint in store and Control Panel.
1. Select a resource, click **Edit** and enter description. To reset the text to the default, click **Reset to Default**.

Parallels Business Automation - Standard supports multi-lingual customization for a wide range of fields (website texts, hosting plan names and description, notification templates). You can enter and save texts in any of the languages installed over Parallels Business Automation - Standard. To select the language, click one of the buttons with language names tiled below the field you want to enter the text and enter the text in the language selected. For example, click **English** - and edit the English text, then click **German** (the English content will be saved and replaced with the German content in the same field) and edit the German text, and so on, for all languages you want to use in your store.

Note: It is also possible to customize applications description. Virtuozzo applications description can be customized under **Service Director > Virtuozzo Manager > Applications**, select an application pack, then select an application, click **Edit** and enter description into the **Public Description** and **Description for users** fields. Plesk applications description can be customized under **Service Director > Plesk Manager > Applications**, select an application click **Edit** and enter description into the **Description** field.

Creating Hosting Plans

Hosting plans creation in Parallels Business Automation - Standard is rather simple: select the hosting type and follow the corresponding wizard.

To create a hosting plan, go to the **Billing Director > Product Manager > Hosting Plans** and click the **New Hosting Plan** button.

Several steps (1st, 2nd, and the two final ones) are common for all types of hosting plans. Namely:

The first step. Hosting plan type selection.

The second step. General settings (on this stage you define the hosting plan general attributes and availability for resellers):

- **Title** - Convenient alphanumeric identifier to refer to a Hosting Plan in common lists, Subscriptions, and documents (Orders and Invoices). For better manageability, Hosting Plans can be grouped by categories. Such grouping can be performed on an arbitrary basis, the same category may include Hosting Plans of different types. You can enter both the plan name and description in different languages.

Parallels Business Automation - Standard supports multi-lingual customization for a wide range of fields (website texts, hosting plan names and description, notification templates). You can enter and save texts in any of the languages installed over Parallels Business Automation - Standard. To select the language, click one of the buttons with language names tiled below the field you want to enter the text and enter the text in the language selected. For example, click **English** - and edit the English text, then click **German** (the English content will be saved and replaced with the German content in the same field) and edit the German text, and so on, for all languages you want to use in your store.

- **Hosting plan category** - optional attribute that allows grouping hosting plans.
- **Availability permissions:**

The **Active** box defines if any services can be provided in the frame of a hosting plan or not, including offering this plan for sale in the online store and the ability for Provider or Reseller to manually create subscriptions on the basis of such a Hosting Plan from Provider or Reseller Control Centers. This is the most general setting. This checkbox overrides absolutely all other availability settings:

If you clear the **Active** box, this Hosting Plan will be immediately removed both from all online stores. Thus, you can easily and quickly suspend existing Hosting Plan or set availability permissions on creation stage and activate a Hosting Plan at any moment you consider reasonable.

If you check the **Active** box, but remove the hosting plan from the online store (clear the **Sell this hosting plan in my HSPstore** box) you still can manually create subscriptions (Virtuozzo Container or Plesk client/shared) on the basis of this Hosting Plan.

Setting sales permissions including permission to sale it for particular vendor (Provider only, particular Reseller, or all Resellers) and availability of trial period for the Hosting Plan.

Note: Creation of *Plesk Virtual Node* hosting plans is possible for Provider only (i.e., from the Provider Control Center only). Resellers can buy such hosting plans and then manage the purchased node.

To sell this hosting plan in your online store, check the **Sell this hosting plan in my HSPstore** box. To allow Reseller(s) to create hosting plans on the basis of the hosting plan you are now creating, please check the **Resellers can create a copy of the current hosting plan** box and then adjust the availability of the hosting plan for resellers (set the option button either to **All resellers** or to **Selected reseller only** and select this reseller). If you allow Reseller(s) to sell this Hosting Plan with certain trial period, a Reseller in future can decide alone upon providing trial period for his (or her) customers that subscribe for this Hosting Plan. If you did not allow any trial period, then a Reseller cannot establish it on an arbitrary basis.

- *For Virtuozzo Container and Plesk client/shared hosting plan types only: Availability of trial period* (the period of time a customer can use services for free, to try it) for a Hosting Plan. It is possible to set the trial period separately for Provider customers and Reseller customers:

To set the trial period for Provider: After you check the **Sell this hosting plan in my HSPstore** box, the trial period related box below becomes active (i.e., you now can check or clear it). Check the **Customers may try this hosting plan** box and then select the trial period from the relevant drop-down menu below.

To set the trial period for Resellers: Just check the **Customers of the reseller may try this hosting plan** box and select the trial period from the relevant drop-down menu.

Note 1: You can create the trial-only hosting plans of Virtuozzo Container and Plesk client/domain type.

Note 2: Resellers that copy the Provider's hosting plan can set the trial period no greater than allowed by Provider. If a Reseller copies the trial-only Hosting Plan, they can offer this plan at store only as trial-only, and use the trial period no greater than allowed by Provider. In this case, a Reseller cannot convert a trial-only Hosting Plan copied from Provider into a pay one.

- Define, whether the hosting plan will be available from the Control Panel Upgrade Center, for customers to upgrade their subscriptions to this hosting plan. If you clear the **Allow upgrade to this plan from Control Panels** box, this hosting plan will not be shown in the list of available upgrade offerings. Your customers will be able to only buy this Hosting Plan in your online store.
- Set the default rules of **Renewal order generation**. These rules will be inherited by all subscriptions based on this hosting plan. Later the default renewal settings can be changed per subscription, both from the Control Center and by a customer, from Control Panel:

Do not generate renewal orders automatically. Select this option to disable the automated generation of renewal orders at all. Only manual subscription renewal will be possible.

Generate renewal orders and try to pay them automatically. Select this option to renew subscriptions automatically. Renewal orders will be generated in accordance with renewal order generation period set in Credit Terms assigned to a customer account and paid automatically using customer payment methods (credit card or bank account) with recurring payments allowed.

Generate renewal orders automatically but pay them manually. Select this option to generate renewal orders in accordance with renewal order generation period set in Credit Terms assigned to a customer account, but allow to pay renewal orders only manually.
- Descriptions of a Hosting Plan that can be used in the HSPstore.

Optional step: Attaching custom attributes

If at least one group of custom attributes (on page 147) was created and enabled for the selected type of hosting, you can optionally attach some additional services (custom attributes) to a hosting plan:

Custom attributes are shown by groups. The group name comes first and the group type (exclusive or selectable) is shown in brackets directly after the group name:

- *Selectable group.* When subscribing to a Hosting Plan a customer can select one or more (or all) additional services from the set available.
- *Exclusive group.* When subscribing to a Hosting Plan a customer can select only one additional service from the set available.

Note: You can change the group type from selectable into exclusive and conversely in the **Billing Director > Product Manager > Custom Attributes**.

Check the boxes next to the custom attributes names to add the custom services provided to customers within the Hosting Plan.

You can specify whether the price for a custom service will be included in the Hosting Plan fee or will be offered at the special rate:

- To set both the setup and monthly fee for a custom service check the box only in the **Enabled** column next to the custom attribute name.
- To include the custom service in the Hosting Plan price check both the **Enabled** and **Included** boxes next to the custom attribute name.

Note: Customers can drop or buy custom attributes that are available for a hosting plan (i.e., custom attributes that are "Enabled" for a Hosting plan) in the same way as Applications, using the Upgrade Center in the Control Panel.

- *Optionally: Adding custom questions* to be asked at the HSPstore when a customer subscribes for a hosting plan. Please, select the number of questions from the Create... drop-down menu and click the Display button. The specified number of fields appear. Type questions into the relevant fields and click the Next button.

Creating POA Hosting Plan

Before creating POA hosting plan, it is required to register a specially pre-configured POA node in PBAS and synchronize POA service templates with PBAS.

POA hosting plan provides Parallels Operations Automation services. The scope of services depends on service templates and resources available at POA node registered in PBAS.

To create the POA hosting plan, go to the **Billing Director > Product Manager > Hosting Plans** and click the **New Hosting Plan** button.

Select the POA type of hosting. Enter the hosting plan title and other general settings as this described earlier in this guide (on page 140), then follow the wizard:

1. Specify the PA node settings:
 - a From the **POA Node** menu select POA node that will be used to provide services for the hosting plan. The friendly names of POA nodes registered in PBAS are shown.
 - b Create **webservice automatically during the subscription creation**. To suspend the webservice creation at PA side, clear this check box.

Why you may need this: If the domain name is passed from PBAS to PA, then on PA side a webservice is created automatically for the domain, by default. However, if for some reasons the hosting plan includes several Webservice resources of the different types (for example, Apache and IIS), and the domain name is still passed to PA, then the webservice creation at PA side may fail and as a result, the subscription provisioning fails.

How does it affect a customer: If you suspend the webservice creation at PA side, then the subscription will be provisioned, but a customer should create the webservices of the needed types manually, from the Customer Control Panel. In this case, please make sure that the customer is notified about this.

Click Next.

2. Select service template from the **Service Template Name** menu. Service template defines the set of resources that will be available for the hosting plan. Click Next.
3. Enter the billing rates:

Specify the setup fees for all subscription periods in the **Setup fee** fields. The setup fee is to be once paid by a customer for subscription creation.

Type the subscription fees for all subscription periods in the **Recurring fee** fields. The recurring fee is to be paid by a customer for a subscription period.

In respect to subscription periods for provider and reseller(s), the appropriate checkboxes become enabled in accordance with availability settings made in hosting plan General Settings. Check the relevant checkbox(es) to set subscription periods to be offered at your online store and/or available for resellers. Please note that dedicated hosting plans cannot be resold, so there is no options for resellers in such hosting plans.

Select the upgrade calculation fees.

Note: When Reseller copies one of hosting plans owned by provider, they can sell this plan only in the frame of subscription periods a provider have defined for resellers. Hosting plan general availability for resellers can be set in a plan General Settings, and subscription periods available for resellers are to be set in a plan Billing Rates.

Click the **Next** button.

4. Set the billable resources rates (monthly fees):

You can set values for each parameter within the allowable range in the **Included amount** fields. The included value defines the limit of resource usage included in the hosting plan price. And in the **Cost for additional resource allocation** field you can enter the price for resource overusage or resources upgrade.

Note: Do not forget to indicate the price for additional units. It is important for correct recalculating of customer account balance in case of Hosting Plan upgrade.

To set the resource value to unlimited, check the **Do not limit this resource** box on the corresponding resource form.

You can also use the upgrade by blocks option which allows you to limit the resources upgrade options in CP to certain values calculated on the basis of the upgrade block amount. Thus, once the option is set, the upgrade in CP will be effected by blocks and new resource value available in CP will equal current resource value plus N times upgrade block units. The number of upgrade block units can be set in the **Upgrade block** field.

It is possible to select the resources shown to customers. This allows showing the resources you want to sell and allow customers to adjust their values, and hide other resources, for example the ones related to a service configuration and vital for its functionality. To show a resource to customers in Control Panel during upgrade, put a tick in the **Show in CP** check box. To show a resource to customers in store, put a tick in the **Show in Store** check box. For example, during Virtuozzo Container hosting plan creation the advanced resources are hidden by default, others are marked as shown both in CP and Store. Please check all the resources list and make your selection.

5. Specify DNS Settings:

a Select the domain registration hosting plan that will define the terms of domain registration for the hosting plan from the **Domain Registration Hosting Plan** drop-down menu.

b And from the **DNS Template** drop-down menu, please select the DNS template (on page 89) that will define the standard set of resource records to be placed into the zone file for all domains registered in the frame of the Hosting Plan you are creating.

c Select name servers set to be used for domains registration within this hosting plan from the **Name servers set** drop-down menu.

6. Add custom questions to be asked in Online Store when a customer subscribes for a hosting plan as this described earlier in this guide (on page 140).

7. Review the hosting plan parameters and finish its creation.

Upgrading Hosting Plans

➤ *To change a Hosting Plan properties:*

1. Open the **Billing Director** submenu on the Navigation tree and select the **Product Manager**.
2. Click **Hosting Plans** on the **Product Manager** dashboard. The list of all Hosting Plans appears on the screen.
3. Click on the Hosting Plan title. The selected Hosting Plan properties appear on the screen. The Hosting Plan properties (i.e., the set of tabs) differ depending on the Hosting Plan type.
4. Click on the different tabs to select the Hosting Plan properties you want to change and then click the **Edit** button.

You can easily include or delete applications for Virtuozzo Container or Plesk Domain Hosting Plan types and change Plesk domain administrator permissions for the Plesk Domain Hosting Plans.

The full set of applications (all installed on the Management Node or included in the Plesk server Applications Vault) is available.

Note: When you change a Hosting Plan properties, a new version of this Hosting Plan is created. Subscriptions based on the old version of a Hosting Plan can be upgraded to a new version.

➤ *To add or remove applications for the Virtuozzo Container or Plesk Domain Hosting Plans:*

1. Select a Hosting Plan as this described above.
2. Select the **Applications** tab and click the **Edit** button.
3. Select applications to be available within a Hosting Plan:
 - Make an Application available within a Hosting Plan by checking the box next to an Application name (in the **Enabled** column). In this case, an Application will be offered in the store within the separate Price List, at a special fee, and a customer can buy it or not. In this case, the price for Application(s) selected will be added to Hosting Plan price (fees) in the Order total. And the applications that were not selected by a subscriber will remain available and can be installed by a customer from the Control Panel (after the corresponding invoice is paid).
 - Include an Application in a Hosting Plan price by checking both the boxes next to an Application name in the **Enabled** column and in the **Included** column. In this case, an Application is included in Hosting Plan and a subscriber cannot unselect such an Application when buying a Hosting Plan. However, a customer can uninstall such an application from the Control Panel. In this case, the application remains available and can be re-installed by a customer from the Control Panel at any moment without any additional charges.

Note: **Enabled** - is the determining setting. If this box is not checked, the relevant box in the **Included** column is disabled.

4. Click the **Save** button.

➤ *To change the Plesk domain administrator permissions:*

1. Select a Hosting Plan as this described above.
2. Select the **Permissions and Settings** tab and click the **Edit** button.
3. Check or clear the boxed next to the action name to allow or disallow an action respectively.
4. Click the **Save** button.

Adding Custom Services to a Hosting Plan

Hosting Plans *custom attributes* in Parallels Business Automation - Standard are additional services that can be provided in the frame of a hosting plan or special attributes used to specify a dedicated server configuration. A custom attribute consists of one option or a group of options that represent services or other parameters offered by a custom attribute.

Thus, a custom attribute can include some support services or allow selecting a particular disk size, RAM, or operating system for a dedicated server.

In addition, you can create Hosting Plans of a special Miscellaneous type designated for selling custom services (defined by custom attributes) only.

You can define one of the two ways a customer selects a custom attribute options:

Selectable. When subscribing to a Hosting Plan a customer can select one or more (or all) options available.

Exclusive. *Useful for dedicated server hosting plans.* When subscribing to a Hosting Plan a customer can select only one option from set available for a custom attribute. This selection type is convenient for custom attributes that define a dedicated server configuration. For example, you can create several attributes, each *defining a particular property of a dedicated server configuration* (hardware or software): Hard Disk, RAM, Processor, Operating System, etc.

The order of options as it is shown on the Parallels Business Automation - Standard screen can be used for resources upgrade and downgrade control:

Parallels Business Automation - Standard considers an attribute options listing order as resource-demanding sorting. The first option in list - less valuable, the last one - the most valuable. If subscriber changes an option into a less valuable, this will be considered as resource downgrade Order. You can allow or forbid resources downgrade for a subscriber.

Custom Attributes grouping:

To facilitate custom attributes management, you can group them into categories (for example, such categories as Hardware, Software, Miscellaneous). To create categories for custom attributes, go to the **Billing Director > Product Manager > Custom Attributes** and select the **Custom Attributes Categories** tab.

How to attach a custom attribute to a hosting plan:

1. Go to the **Billing Director > Product Manager > Custom Attributes**. Select a custom attribute, click the **Edit** button on an attribute screen and make the corresponding group available for the type of hosting which the hosting plan you want to attach an attribute belongs to.
2. Configure the hosting plans listing for the corresponding hosting plan type in the **Commerce Director > Store Manager > Configure Store > Plan Listing** tab. Make sure that the desired custom attribute is selected to be shown within Hosting Plans description.

3. From the set of Hosting Plan properties, select the **Custom Attributes** tab and attach the desired custom attribute to a Hosting Plan. In this case, you can also set the fee for this particular Hosting Plan. Since the process is quite similar to the last-but-one step of hosting plan creation wizard, please for more details refer to the beginning of this chapter (on page 140).

Note: All Hosting Plan custom attributes created by you will be available for all of your Resellers. They can select them and customize. As soon as Reseller had customized an attribute, it becomes an internal attribute used by this Reseller only (as if a Reseller gets the own copy of an attribute), and such customization does not affect configuration of your list of attributes. Summarizing, Resellers can use your custom attributes as a kind of templates, but this does not restrict the ability for a Reseller to create new custom attributes, which initially are at their disposal.

Managing Hosting Plans by Versions

The hosting plans versioning system implemented in Parallels Business Automation - Standard allows changing Container or Plesk hosting plans parameters without any corruption to any of subscriptions based on a hosting plan being changed.

In case you change a hosting plan parameters, a new version of this hosting plan is created automatically. Later you can upgrade one or several or all subscriptions based on an the previous versions of a hosting plan to the latest version of this hosting plan. To view subscriptions based on all versions of a hosting plan (and if needed, upgrade subscriptions to the latest plan version) go to the **Billing Director > Product Manager > Hosting Plans**, select a hosting plan and then click the **Subscriptions** tab.

When you open the list of hosting plans in the **Billing Director > Product Manager > Hosting Plans**, you can see only the latest versions of hosting plans. In other words, if you click on a hosting plan ID and drill to a plan details, you will view all the latest parameters. Previous versions of a hosting plan are not shown, but they are near and figuratively speaking, the previous versions are "piled" under the latest ones and if needed, you can get to the previous plan versions via the corresponding subscription.

How you can see the previous versions of a hosting plan? Open the list of hosting plans, select one (of Container or Plesk type). Then select the **Old Versions** tab from the set of plan properties. You can see the list of all the previous versions of the hosting plan selected. In addition, in the **Usage** column you can see if there are any active subscriptions based on each version. You can delete the unused old versions of the hosting plan by one click.

How hosting plan versions are numbered? Each version of hosting plan is identified by a unique numerical identifier - ID. However, to facilitate recognizing of the original hosting plan, an additional identifier was introduced - a *series key*. A series key equals to the ID of an original hosting plan. When a new version of a hosting plan is created, it gets a new ID. And the series key stays the same for all versions of the same hosting plan. Thus, the series key is kind of a common attribute that characterizes a family of hosting plans of the same origin.

The billing component of the upgrade operation is the following. The order for the latest hosting plan version is generated. In this case, it is possible to generate the zero order so that services provisioning starts automatically and immediately. In case a customer owes provider or conversely as a result of upgrade, the relevant order balance correction is appended, to get the zero order balance. In case of the usual order generation, the existing subscription fee is refunded and the new fee is charged.

The technical component of the upgrade consists in compatibility checks. Parallels Business Automation - Standard checks the resource parameters and applications compatibility in the old and new hosting plan version. If some applications exist in the old version of the hosting plan but absent in the latest version, then the upgrade procedure will be cancelled with corresponding error message.

Note: If a Reseller upgrades subscriptions of their customers to the latest version of a given hosting plan, the corresponding Provider invoices are generated as if a Reseller sells a hosting plan.

Creating a Hosting Plan on the Basis of an Existing One

If you want to add a new hosting plan that mostly alike an existing one but differs in some parameters, or you need a basis for a new hosting plan, you can create a copy of any of existing hosting plans, give this copy a new name and shape the set of services in a way you need.

To this effect, go to the **Billing Director > Product Manager > Hosting Plans**, select a hosting plan you want to copy and make a hosting plan clone.

Promoting Hosting Plans

Promotions are discount periods for sale of one or a several Hosting Plans which are periodically announced by Hosting Service Provider or Reseller. Each Promotion has a sales period (between Start date and End date) during which a Hosting Plan being promoted will include a certain discount valid during a certain Discount Period.

You can create promotions that include:

- Just a discount.
- Both a discount and waiving domain registration fee.

It is possible to create both the public promotions and promotions activated by a coupon code. Coupon codes allow your customers to gain additional discount at your HSPstore. A customer will be asked for a coupon code on the order review page at your HSPstore. You can create a coded promotion or add a code to an existing public promotion. Similarly, you can remove a code from the coded promotion to make it public.

In Parallels Business Automation - Standard promotions are being applied not per hosting plan, but from a promotion side, i.e., the list of hosting plans a promotion is applied to is the part of promotion properties. To apply a promotion to a Hosting Plan, go to the **Billing Director > Discount Manager > Promotions**. Create a promotion or select the existing one. Add hosting plans to the list of promoted plans.

Any hosting plan can have one public promotion and unlimited number of coupon-code promotions applied at the same time.

Calculations for the Hosting Plan Change

If your customer upgrades his (or her) Hosting Plan to another one (or to the same one, but to the longer subscription period) then the following is taken into account:

- The period of time a customer have used the old Hosting Plan. For example, if a customer had subscribed for one month and had used a Hosting Plan during 5 days, then the amount for the unused subscription period will be refunded at the pro-rated price.
- The new Hosting Plan billing rates and whether the setup fee is charged or not. The new Order is being created, and (depending the setup fee settings) this Order includes the subscription fee for the new Hosting Plan and may either include the full setup fee for the new Hosting Plan or (if the new Hosting Plan setup fee is higher) the difference between the new Plan and the old Plan setup fees, or may not include the setup fee at all.

Summarizing, if a customer upgrades his (or her) Hosting Plan:

- A customer is refunded (the credit adjustment for unused subscription period is issued).
- The Order for the new Hosting Plan is created.
- After the Order is paid, the customer's subscription is changed: now it includes the new services and starts from the date of upgrade.

Managing Online Store

Starting with the version 4.3.3, PBAS is shipped with two stores:

- **The old store** used in previous versions, fully functional with all the options used before version 4.3.3. After upgrading to version 4.3.3, the old store remains in use, by default.
- **The new store** which is faster, dynamic, customizable, with the tabbed screen and shortened purchase wizard. To read more about new store configuration, [click here](#) (on page 155).

The store simple settings are made via web interface in **Commerce Director > Store Manager**:

- **> Configure Store** (on page 162):
 - Open or close store. (on page 162)
 - Adjust a store URL (on page 162) used to redirect customers from the Control Panel.
 - For the old store: Adjust hosting plans listing. For the new store: Sort hosting plans by Categories (on page 135) to show plans under tabs in store, Sort hosting plans by Groups (on page 136), to get composite offerings with recommended configurations.
 - Enter referrer question.
- **> Reseller Stores** (on page 163):
 - Open or close a reseller store.
- **> For old store only: File Manager** (on page 164):
 - Upload a default stylesheet file.
 - Upload website header and footer.
 - Upload site logotype.
 - Upload favicon, preloader icon, and adjust preloader.
 - Add offline payments conditions description.

User Agreement can be entered under the Account Director > Customer Manager > Terms and Conditions.

Reseller Agreement (on page 182) can be entered in the Account Director > Reseller Manager > Terms and Conditions.

Advanced store setup is done by store files customization, which requires PHP and HTML knowledge.

The ability of accepting offline payments is set in store configuration file. Offline payments are allowed by default. You can disable this in the store configuration file `settings.ini`. On the server where Parallels Business Automation - Standard is installed, go to the `/var/opt/hspc-frontend/includes` directory. Open the `settings.ini` file and edit it: `set OFFLINE_PAYMENT = Off`.

The other advanced option is the ability of *selling billable resources in store*. Customers can adjust the billable resources configuration (in the frame of maximal allowed value) when buying a hosting plan. In this case, the additional resources ordered over the included value are billed in accordance with 'Price for additional' set in a hosting plan, and corresponding lines are added to a customer order. This option is enabled by default. If you want to disable it, please contact support.

The online marketing campaigns setup is made in store configuration file. The 'Affiliates' site page template is shipped with the store installation. You only need to paste the texts.

Site pages menu can be customized in the `header.ini` file.

By default, the old store is installed into the

`/var/opt/hspc-frontend`

directory.

For the old store, the files directory structure is the following:

Directory	Contains files
<code>/var/opt/hspc-frontend</code>	*.php files for store pages and the stylesheet (*.css) file.
<code>images/</code>	Images used in store and other site pages (buttons, icons, purchase steps numbers, etc.)
<code>includes/</code>	Configuration files.
<code>templates/</code>	*.inc files that contain HTML templates for website and store pages.

<p>vendor/Account_ID/</p>	<p>Directory where customized files must be placed. Account ID is replaced with actual ID of store owner account (provider - always 1 - and reseller accounts 2 and greater). This directory is created automatically for provider account and all reseller accounts.</p> <p>Note 1: The vendor/1/ directory is created for provider by default. Directories for resellers are created during reseller account creation. Custom files uploaded using the Store Manager > File Manager are placed in these directories.</p> <p>Note 2: The customization.xml file located in the vendor/ directory defines what store files and directories can be customized using the web interface - the File Manager integrated into the Store Manager.</p>
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New Store Configuration Basics

The new store is installed automatically in its default location on PBAS Management Node `/var/opt/hspc-store` and does not affect the old store settings.

The new store can also be deployed on a standalone server. For details, refer to PBAS SDK.

Customization. For details, refer to PBAS SDK. The following options are available for the new store:

- Change the layout, styles, images.
- Integration with third-party applications, for example, with Kayako Chat.
- Add new pages.
- Add new languages.

More settings are available in the Store configuration file: `/var/opt/hspc-store/settings.ini`. Use this file to get the hints about the new Store parameters. Custom settings should be placed to the special customization directory.

Important: The changes made to the original file `/var/opt/hspc-store/settings.ini` are reset to defaults during PBAS updates installation. Always put your custom settings in the update-safe directory: `/var/opt/hspc-store/customization/vendor/<VENDOR_ID>/custom.ini`, where `<VENDOR_ID>` is the ID of vendor account. For provider the directory is created automatically during new store deployment: `/var/opt/hspc-store/customization/vendor/1/custom.ini`.

To start using the new store:

- Configure Hosting Plans Presentation (on page 156):
 - Tabbed view for the store screen.
 - Hosting plans grouping in cloud-like offerings.
 - Resources and applications presentation per hosting plan.
 - Dependencies for an application and its components to display this application with "components" as add-ons in the store.
 - And more.
- Configure Domain Registration (on page 159):
 - Show the **Domains** tab, to sell domains registration without hosting.
 - Enable additional domain registration options.
- Open Store (on page 161)
- Switch Between Old and New Store (on page 161)
- Add referral question (configures similarly as for the old store)
- Enable New Store Options for Resellers (on page 162)

Hosting Plans Presentation

The new store has the tabbed screen, and hosting plans are grouped under the tabs.

- **Configure tabs for the store screen.** Create Hosting Plan Categories (on page 135). Categories are displayed in store as tabs with a Category name shown on each tab. Go to **Billing Director > Product Manager > Hosting Plans, Hosting Plan Categories** tab. Create Categories and add hosting plans into them.

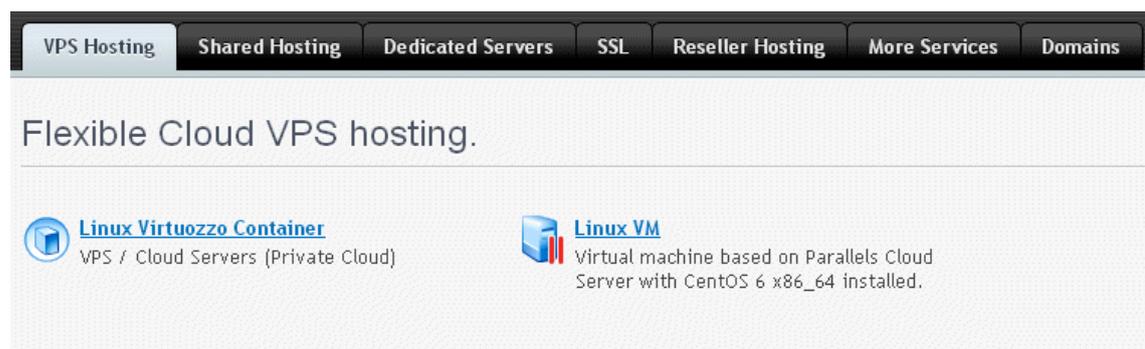
Note: If no Categories are created, then the tabs shown in the store will be named by hosting plan types; hosting plans will be sorted by tabs according to their types.

- **Default tabs.** There are two default tabs in the store that do not depend on the Plan Categories you created:

More Services. The hosting plans that are not added in any of the Categories are shown in the store under this tab. If all the plans are sorted by categories, then the More Services tab is not shown.

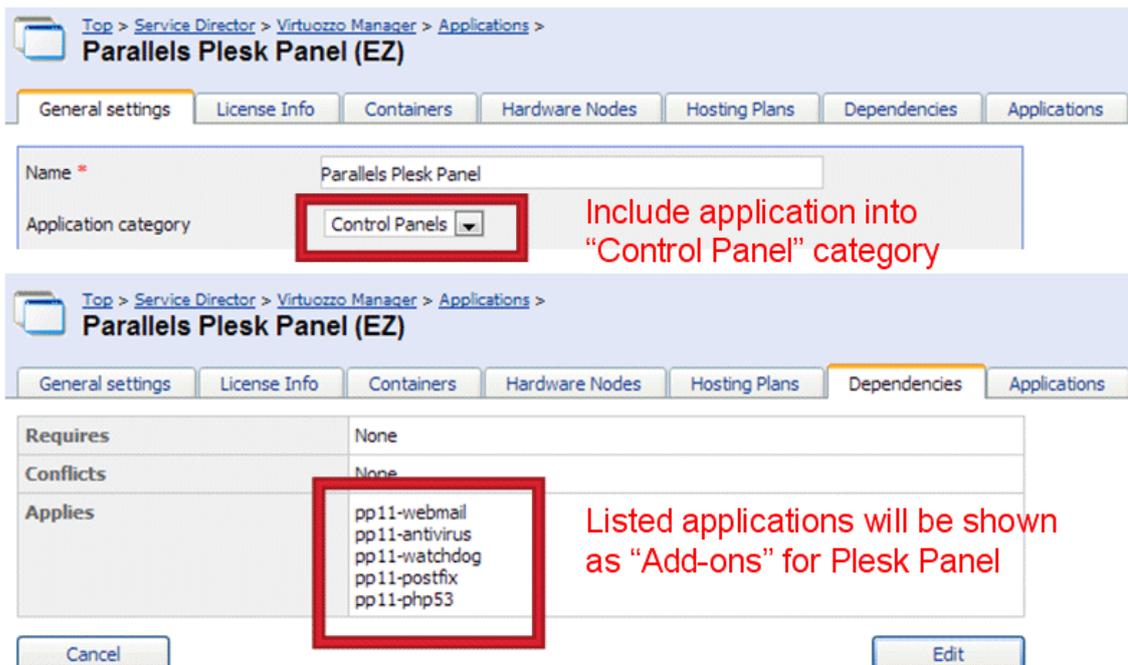
Domains. Domain registration without hosting may be offered under this tab. If there is the Domain Registration hosting plan available for sale in the Store, then such plan is offered here. If no Domain Registration hosting plans are available for sale, the **Domains** tab is hidden. For the domain plans, that are sold with hosting, do not forget to leave the **Active** option switched on. Read more about Domains Registration features (on page 159).

The screenshot below demonstrates how does the Store screen look if you create Hosting Plan Categories, such as: VPS Hosting, Shared Hosting, Dedicated Servers, SSL, Reseller Hosting, More Services, Reseller Hosting, Domains:



- **Adjust the tabs order in the store.** Sort the Hosting Plan Categories using arrows in the list. Sorting from top to the bottom will result in sorting of tabs in store from the left to the right. Default tabs are always shown at the right side.
- **Adjust the hosting plans resources presentation** in Store for **any type** of hosting plan:
 - Rename the resources, and add a custom multi-lingual description, which will be shown in Store as tooltip. This is done globally, for all the resources available for your PBAS installation. Go to **Billing Director > Product Manager > Hosting Plans** and select the **Hosting Plan Resources** tab.

- Adjust the order the resources are shown in Store of and show/hide them from Store or/and Customer CP. This is done per hosting plan. **Billing Director > Product Manager > Hosting Plans**. Select a hosing plan. Then select the **Billable Resources** tab. To move the resources up or down the list, use the  arrows. To show resources in Store or CP, click **Edit** and put the  tick in **Show in CP** or **Show in Store** check boxes. To hide resources, clear the tick.
- **Adjust the hosting plans applications presentation in Store for Container** hosting plans:
 - Rename the applications and add a custom multi-lingual description, which will be shown in Store as tooltip. Go to **Service Director > Virtuozzo Manager > Applications**, select the application. On the **General** tab, click **Edit** and enter the name and description for the application.
 - Show/hide applications from Store or/and Customer CP. This is done per hosting plan. **Billing Director > Product Manager > Hosting Plans**. Select a hosing plan. Then select the **Applications** tab. To show applications in Store or CP, click **Edit** and put the  tick in **Show in CP** or **Show in Store** check boxes. To hide applications, clear the tick.
 - Display Control Panels and their add-ons in a separate section in Store. Use the new functionality of the **Application Category: Control Panels**. Go to **Service Director > Virtuozzo Manager > Applications**, select the application. On the **General** tab, click **Edit** and select the **Application Category: Control Panels**. The applications that will be treated as add-ons should have **Application Category: Applications**. To select the add-ons, select the Control Panel application, switch to the **Dependencies** tab. Click **Edit**, add the applications that will be shown as add-ons to the **Applies** list, as shown on screenshot below:



In the Store, it will look as follows:

Applications

Operating System
Centos 5 x86

Control Panel
Parallels Plesk Panel (?) Nginx - \$35.00 (?) Pp11 - \$0.00 (?)

Panel Addons

Application Name	Setup fee	Monthly fee
<input type="checkbox"/> Antivirus (?)	\$1.00	\$2.00

Important: A Virtuozzo Container Hosting plan should be configured correctly to get the add-ons presentation displayed in the Store:

Hosting plan should contain the OS package compatible with the Control Panel application and its add-ons. Go to Billing Director > Product Manager > Hosting Plans. Select the hosting plan that will contain the Control Panel application, switch to the Container Properties tab. Click Edit, then move the compatible OSES from the Available list to the Selected list.

Add the Control Panel application and its add-ons to the hosting plan. Select the hosting plan as described above, then switch to the Applications tab. Put the ✓ tick in the Enabled box next to the Control Panel application and its add-ons, set the prices, do not forget to put the ✓ tick in the Show in CP or/and Show in Store box.

You may also offer various Control Panel versions with various add-ons, for various OSES. As soon as the customer selects the Operating System in the store, the compatible Control Panel application is displayed.

- **Configure cloud-like offerings.** You can configure a cloud-like offerings, when it looks as if several typical configurations are suggested for some type of hosting, as shown on the screenshot below:

VPS Hosting Shared Hosting Dedicated Servers SSL Reseller Hosting More Services Domains

Flexible Cloud VPS hosting.

Linux VM
Virtual machine based on Parallels Cloud Server with CentOS 6 x86_64 installed.
Recommended configurations

1024 RAM; 30 GB Disk 2048 RAM; 60 GB Disk 4096 RAM; 120 GB Disk 8192 RAM; 240 GB Disk

Shopping Cart
Linux VM x 1 month
Total
Checkout Reset

Create Hosting Plan Groups (on page 136) to configure such presentation of hosting plans in your store. To show Groups in the store, include hosting plan groups in Hosting plan Categories. Plan groups will be shown in store together with standalone plans. However, when a Plan Group is selected, then hosting plans included in the Group are presented as Recommended configurations. Customers may select a recommended configuration and then adjust the resources allocation. Go to **Billing Director > Product Manager > Hosting Plans**, select **Hosting Plan Groups** tab, add Groups and then add plans into Groups. Then select the **Hosting Plan Categories** tab and add Groups into Categories.

- **Ask customers for additional information about the package configuration.** For example, you may ask for the Operating System for dedicated server. Questions are configured per hosting plan. To add a question, go to **Billing Director > Product Manager > Hosting Plans**, select the hosting plan, then switch to the **Questionnaire** tab. The question will be shown in the Store on the package configuration step:

Configuration	Price	Price
<input checked="" type="radio"/> 2.33 GHz Intel Core 2 Quad	\$0.00	\$0.00
<input type="radio"/> 2.66 GHz Intel Core 2 Quad	\$0.00	\$5.00

Operating System	Price	Price
<input type="radio"/> CentOS 6 x86_64	\$0.00	\$0.00
<input type="radio"/> Windows Server 2008 R2	\$0.00	\$20.00
<input checked="" type="radio"/> Other	\$0.00	\$0.00

Dedicated Server configuration

Questions

Custom operating system

Please install Parallels Cloud Server 6.0 there.

Domains Registration Features

If you are planning to sell domains registration only with the hosting packages, you may hide the **Domains** tab at all, and Domain Registration hosting plans will be offered only as up-sell service for the hosting packages.

➤ *To hide the Domains tab in the Store and Offer the Domains as Upsell to Hosting Only:*

1. Exclude all Domain Registration plans from sales:
 - a Go to **Billing Director > Hosting Plans**. Filter the list of hosting plans down to the Domain Registration type. Make sure that all Domain Registration hosting plans have **✗ No** in the **Sell** position.
 - b To exclude a hosting plan from standalone sales, open the plan settings, select the **General** tab, click **Edit** and then clear the **Sell this hosting plan in my store** check box.
2. Add the Domain Registration plans to the Hosting packages:
 - a Make sure that the Domain Registration hosting plans you are going to offer as upsell, have **✗ No** in the **Sell** position and **✓ Yes** in the **Active** position.

- b Open the Hosting plan settings, select the DNS Settings tab. Click Edit and select the Domain Registration hosting plan.

➤ *To Show the Domains tab in the Store and sell Domains Registration without Hosting:*

1. Configure the Domain Registration plan you will sell without hosting. Such plan should have Yes in the Active position and Yes in the Sell position:

The screenshot shows the Parallels Hosting Plans management interface. At the top, there are navigation tabs: 'Hosting Plans', 'Hosting Plan Categories', 'Hosting Plan Groups', 'Hosting Plan Types', and 'Hosting Plan Resources'. Below the tabs, there is an 'Actions' section with a 'New Hosting Plan' button. The main section is titled 'Hosting Plans' and contains a table with the following data:

ID	Title	Active	Sell	Type	Category	Trial	Subscriptions
33	Domain Registration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Domain Registration	All	<input checked="" type="checkbox"/>	32354

2. The default Domain Registration hosting plan is shown under the Domains tab in the store as the widget:

The screenshot shows the 'Check Domain For Registration' widget. It includes a text input field for a domain name, a 'Check Domain' button, and a list of domain extensions with checkboxes: biz, co.uk, com, ltd.uk, net (checked), nl, org (checked), tele, uk, pdp, and o"on.il. Below the widget, there is a note: 'Also you can switch to [bulk registration](#), [transfer domains mode](#) or [use existing domain, registered elsewhere](#).'

Important: It is very important that you mark the Domain registration hosting plan you want to sell as *default*. In this case, even if you mark as Sell more Domain Registration hosting plans, you will still get the default plan offered in the Store.

To select the default Domain Registration Hosting plan, go to **Commerce Director > Store Manager > Configure Store, Plan Listing** tab, click **Edit** and select the default Domain Registration plan.

Note: Additional domain registration options may be enabled for the **Domains** tab by means of the parameters in the store configuration file `settings.ini`. For details, refer to PBAS SDK.

For the hosting plans that include the **DNS Settings**, the domain registration widget is shown in store at the plan configuration screen, if the Domain Registration hosting plan selected. If the Domain plan is not selected, then the widget is hidden and customer may register a subdomain in Provider default domain.

Opening the New Store

The new store is opened and closed together with the old store, in **Commerce Director > Store Manager > Configure Store, the General Settings** tab, the **Status** field.

To stop using one of the stores, additional configuration is needed (on page 161).

Switching Between the Old and the New Store

To switch between the old and the new stores change the Store URL so that the links used in Provider/Reseller Control Centers and Customer Control Panel point to the new store. Go to **Commerce Director > Store Manager > Configure Store, the General Settings** tab. Enter the new store URL: (depending on security settings, specify `http://` or `https://`): Default URL to the new store: `<PBAS_Node_Hostname>/shop`.

How to stop using one of the stores. Both stores are closed together, so it is not possible to close or open one of them. To stop using one of the stores, you need to configure redirect from one store to another. For details, refer to Knowledgebase Article (<http://kb.parallels.com/116379>).

Redirects from the existing website to the new store. Redirects must be updated to work with the new store. For details, refer to PBAS SDK.

Redirect URLs for affiliates generated when the old store has been used. Old redirect URLs are not updated automatically when you switch to the new store.

Enable New Store for Resellers

After upgrade to version 4.3.3, the Store URL for new resellers keeps being generated basing on the old URL: `https://<Management_Node_Name>/hspc`, even if the Store URL specified in Provider Control Panel (Commerce Director > Store Manager > Configure Store) points to the new store (`https://<Management_Node_Name>/shop`). Thus, Provider should notify resellers that the new store is available, so that the resellers may correct the Store URL manually.

The ability of Store tabs configuration is granted to resellers by means of special permissions granted with Reseller Config (Account Director > Reseller Manager > Reseller Config).

After upgrade to version 4.3.3, the new settings appear for Reseller Config:

- Reseller only uses Provider hosting plan categories and groups (Default permission). Disallow a reseller to change the tabs and hosting plans groups presentation in the new store.
- Reseller manages own hosting plan categories and groups (If this permission is granted, it cannot be withdrawn). Allow a reseller to change the tabs and hosting plans groups presentation in the new store. These permissions enable a reseller to configure the own hosting plans presentation in the new online store: add new tabs and compose offerings that consist of several recommended configurations by means of Plan Groups. This permission is applicable to the new Store only.

By default, after upgrade to version 4.3.3, for all the existing reseller configurations the Plan Categories and Groups management is disabled.

Configuring and Opening Store

The store General Settings screen displays the following:

- Status. Whether Provider store is
 -  Open (available for customers over the Internet) or
 -  Closed (not available over the Internet).
- Allow offline payment in store and CP. Whether offline payments are allowed in HSPstore and Control Panel:
 -  - Not allowed
 -  - Allowed
- Site Settings. The Store URL (the location where Store is currently installed). This is the URL used to redirect customers to online store from Control Panel. By default, both the old and the new stores are installed on PBAS Management Node (depending on security settings, specify `http://` or `https://`):

- Default URL to the old store: <PBAS_Node_Hostname>/hspc
- Default URL to the new store: <PBAS_Node_Hostname>/shop

➤ *To adjust Store General Settings:*

1. Click the **Edit** button
2. To open the store, check the **Store is open** box. To close store, clear this box.
3. To allow offline payments in store and Control Panel, check the **Allow offline payment in store and CP** box. To disallow offline payments, clear this box.
4. Enter the store URL into the **Store URL** field.
5. To save the changes, click the **Save** button.

Managing Resellers' Stores

All stores that belong to resellers are shown under the **Store Manager > Reseller Stores**. Provider can open/close reseller stores and adjust some other general settings.

The list of reseller stores displays the following:

- **Acc. No.** A Numerical ID of a reseller account assigned to it in Parallels Business Automation - Standard database.
- **Reseller.** A reseller account name.
- **Open.** Whether a store is currently open or closed:
 -  - store is available over the Internet for customers, i.e., is open.
 -  - store is not available over the Internet for customers, i.e., is closed.

To manage a reseller store, click on reseller account ID or reseller account name. To adjust a reseller store configuration, click the **Edit** button.

A reseller store settings include the following tabs:

General Settings

- **Status.** Whether reseller store is
 -  **Open** (available for customers over the Internet) or
 -  **Closed** (not available over the Internet).

- **Site Settings.** The URL to the location where a reseller Store is currently installed. When store is moved to other location, the Store URL changes accordingly.

Plan Listing

Adjust hosting plans presentation at reseller store. The same settings as for provider store.

Referrals

Add a referral question in the same way as this is done for provider store.

Revenue per Referrer

View the revenue report based on referrers statistics. The same settings as for provider store.

Security Settings

Generate or manage existing secure keys used for authorization when reseller store connects to the Parallels Business Automation - Standard server via the XML API. The same settings as for provider store.

For the Old Store: Customizing Store Using File Manager

Important: File Manager can be used to customize the old store only.

The File Manager integrated into the Store Manager is a quick-start tool for store customization. It allows performing a basic and simple customization of the store and go live as soon as possible.

Using the File Manager, provider can quickly upload some basic templates and images, and resellers can use the store File Manager as a place to start and a default tool to perform their own customization.

File Manager allows customizing the basic Store files and uploading a static content of vendor's website:

- **In the store root/ directory:**
 - Upload a default stylesheet file
 - Upload a favicon image - your marketing icon in your customers' browser address bars, favorites and tabs.
- **In the store templates/ directory:**
 - Upload website header and footer
 - Edit or upload an HTML website header
 - Add offline payment conditions description. To add or adjust the offline payments description, edit this file and save the changes.
 - Customize website pages preloader (a special popup that appears while site pages are being loaded).

- **In the store images/ directory:**
 - Upload site logotype `logo.gif`.
 - Upload the icon used by site pages preloader `loading.gif`.

In addition, it is possible to use SSI.

Customized default files are shown on Store pages and you can preview the Store by entering your server name (vendor management node hostname or reseller hiding hostname) into your browser.

To preview the site content, enter into your browser your server name with the following path appended:

/hspc/path_to_file

where `path_to_file` must be replaced with an actual path to a file starting from customization root. For example, if you have created a custom `/site` directory and uploaded a `content.html` file, then to preview this content you must enter into your browser:

`http://your_server_name/hspc/site/content.html`

where `your_server_name` must be replaced with actual hostname of your Parallels Business Automation - Standard server.

You can add a standard store templates to your site pages using SSI.

For example, you can include the standard header and footer into your site page (index.html or index.shtml - you can use both extensions):

```
<html>
<head>
<title>My Index Page</title>
</head>
<body>
<!--#include virtual="templates/header.inc" -->
My Page Content
<!--#include virtual="templates/footer.inc" -->
</body>
</html>
```

Important notes regarding SSI: to preview SSI config please explicitly enter the page URL in your browser, do not use the link shown at the File Manager screen, because Apache does not actually process this content. Please remember that you cannot include customizable files that have not been customized yet, i.e., the files that are shown in *italic* font at the File Manager screen. To make it possible for a file to be included, you must edit it so it will be saved in your personal customization directory. Running executable modules using SSI directives is not possible.

By default, the File Manager screen shows the names of Store files and directories that can be customized. These names are not a real links, but only hints showing the Store files and directories names. Such a 'symbolic' links are shown in *italic* font. The italic font a file or directory is shown means that a file or directory have not been customized yet, so there is no real files in the customization directory `/var/opt/hspc-frontend/vendor/accountID`.

Note: The set of Store files available for customization is defined by vendor. Please refer to the Parallels Business Automation - Standard SDK (HTML or PDF document) for details.

To copy a default file into your customization directory, check the box next to a file name (directories cannot be edited) and click **Edit**. To save a default file in your customization directory, you do not need to change a file content. Just click **OK** and a file will be considered as customized and saved.

As soon as you customize the default files or edit them, the custom files or copies of default files are saved in the personal directory `/var/opt/hspc-frontend/vendor/accountID`. Customized files are shown in normal font.

Default files are not affected by customization performed using the File Manager. You can restore defaults simply by deleting custom files or directories. As the defaults are restored, files' and directories' names become shown in italic font again.

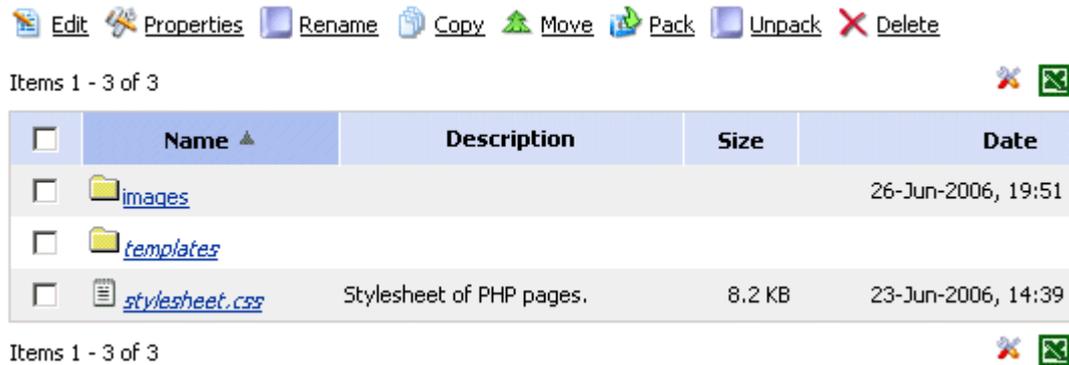


Figure 3: File Manager. Images are customized. Other files are default.

Since the original default files cannot be renamed or customized, a default file with its original name (shown in italic font) appears each time you rename it.

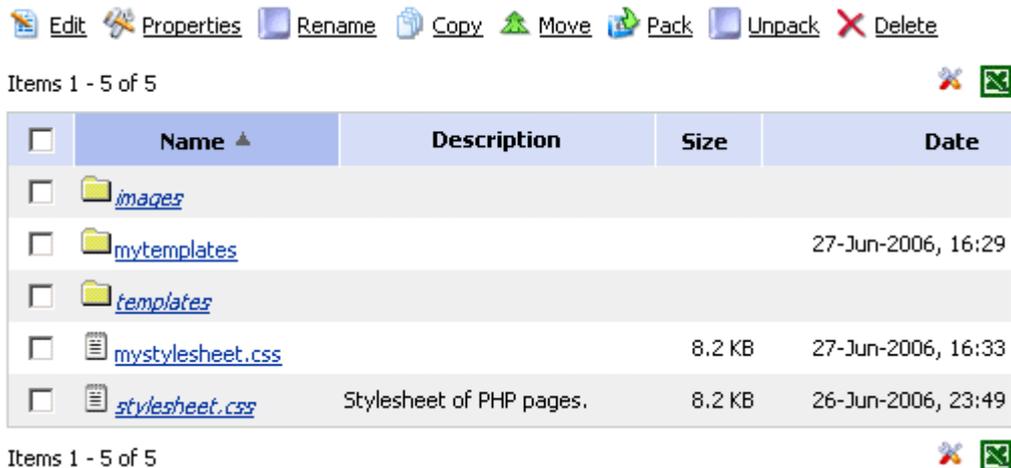


Figure 4: File Manager. Default file and directory have been renamed.

Files and directories names are built in the Store code and thus, it is critical for Store functionality that you follow the files and directories naming convention. As soon as you change the default name of customized file or directory, the File Manager detects that there is no customized file with correct name and immediately switches to the default file that always stays named correctly. At the screen it looks like a not customized default file or directory (name shown in italic font) has appeared, as this is shown on the screenshot above.

In respect to options and controls provided, the store File Manager is similar to an ordinary file manager, except for access permissions setup. Permissions are not needed here. User apache is set as files/directories owner by default and this ownership cannot be changed.

The list of files and directories displays the following:

- **Name.** The name of a file or directory.
- **Size.** A file size. For files without default location specified in customization.xml the Size and Date are not shown.
- **Description.** A file short description.
- **Date.** The date a file or directory has been modified the last time.

To open a specific directory click a directory name. The path at the top of the list shows the current location. To view a file contents, click on its name.

The buttons at the top of the files and directories list serve for the following actions:

- **Make Directory.** Add a new directory to your website under your current working directory;
- **Upload File.** Upload a file to your system;

➤ *To perform an action with a file or a directory:*

Check the box next to a file or a directory name and use controls:

- **Edit.** Edit a file contents.
- **Properties.** View file or directory size, file type, etc.
- **Rename.** Rename and/or move file or directory. Select a file or directory and click **Rename**. Enter the path and name of the new location of the file or directory, and click **OK** to save changes;
- **Copy.** Copy a file or a directory to another location. Select an object for copying then click **Copy**. You will be offered to select the destination and copying options.
- **Move.** Move a file or a directory to another location. Select an object for moving then click **Move**. You will be offered to select the destination and moving options.
- **Pack.** Pack a file or a directory. Select file(s) by selecting check-box to the left of file name. Then click **Pack**. You will be offered to select the packaging options.
- **Unpack.** Extract a file or a directory from an archive. Select file(s) then click **Unpack**. You will be offered to select the packaging options.
- **Delete.** Remove a file or directory.

➤ *To create a directory:*

1. Click the **Make Directory** button.
2. Fill the form that appears on the screen:
 - a** Type the directory name into the **Directory name** field.
 - b** Select the correct set of permissions using checkboxes. If you are not sure about permissions setup, then leave the default permissions.
3. Click the **OK** button.

➤ *To upload a file:*

1. Change the location to the directory you want to upload a file into.
2. Click the **Upload File** button.
3. Fill the form:
 - a** Enter the file name and location on your local computer in the **File to Upload** field. Or click the **Browse...** button to locate the file.
 - b** You can rename the file on uploading. Type the new file name in the **New file name** field.

Note: You can upload up to 15 files at once. To upload several files, select the number of files from the **Upload_files at once** drop-down menu and click the **Display** button. The required number of fields to enter file name(s) to be uploaded appears on the screen.

- c** Specify the rules to be applied to the files to be uploaded in case other files are already exist in the destination directory. Set the option button to one of the following:
 - **Do not upload if a file with the same name exists in the destination directory** - to prevent overwriting existing files with a new ones in case exiting files have same names as new ones.
 - **Skip all the files that exist in the destination directory.** to prevent overwriting existing files with a new ones in case exiting files have same names as new ones.
 - **Overwrite all the files in the destination directory** - to overwrite files existing in destination directory in case these files have the same names as filed being uploaded.
4. Click the **OK** button to upload a file.

CHAPTER 11

Managing Accounts

There are three basic types of accounts:

- *Provider account* - the only one account of Parallels Business Automation - Standard installation owner - provider. Provider account always has the numerical identifier (ID) of 1. Registered users associated with Provider account are called staff members. If a staff member has a Role (on page 21) assigned in the provider account (which gives a particular access permissions to Provider Control Center tools) this user can log in to the Provider Control Center. Provider account profile can be edited from Provider Control Center > top menu item (account name). Click on the account name and select the **Company Profile** tab or **Contacts** tab.
- *Reseller accounts* - the accounts of the provider clients that re-sell provider services. Registered users that are associated with reseller account and have the Role assigned in a reseller account are called reseller staff members and can log in to the Reseller Control Center with access permissions defined by a Role assigned. Reseller Accounts are managed under **Account Director > Reseller Manager > Resellers**.
- *Customer Accounts* - the accounts of the provider or Resellers' customers. Registered users that are associated with customer accounts and have the Role assigned in a customer account can log in to the Control Panel. Customer accounts are managed using **Account Director > Customer Manager > Customers**. Customer accounts can be of the two types:
 - Personal Accounts are created for personal customers. Such Accounts hold customer personal info, billing settings, and contacts.
 - Business Accounts are created for companies. Such Accounts hold special contact information (special Administrative, Billing, and Technical contacts) in addition to all data included in personal Accounts.

Users are registered using the **Configuration Director > Security Manager**.

Roles for account users can be assigned in the **Configuration Director > Security Manager > Setup**.

Under the **Account Director** you can also manage customers' subscriptions (on page 204) and configure the built-in trouble ticket system (on page 280) or switch to one of the external helpdesks integrated with Parallels Business Automation - Standard.

Users

Users are registered persons. *Staff members* are users registered within the Provider or Reseller Account. A user can be assigned to only one account.

User Roles

Roles keep the set of pre-defined access permissions. Roles are assigned to users within Accounts.

Permissions

Permissions are assigned per Role, not per individual user.

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Creating Accounts

Customer accounts can be created both from the Control Center and by customers, from your online store. Reseller accounts can be created only manually, from the Control Center.

To create a new Customer Account, go to **Account Director > Customer Manager** and click the **New Account** button. Fill the form that appears.

The **New Account** Form includes the following sections:

General Info:

- **Account type** - select by setting the radio button to personal or business. In the case if you select business Account type, the Company name should be indicated;
- **Status** - select from drop-down menu the current status (Active or On Hold) of the Account being created. Active status means that full range of operations may be performed within Parallels Business Automation - Standard on behalf of this Account. On Hold status means that an Account is out of service. Active status is offered by default.

Customer Administrator:

Account cannot be created without registration at least one User associated with this Account. Since Customer Accounts provide only one Role, Customer Administrator name, e-mail address, and password should be entered. This e-mail and password should be used to log in Parallels Business Automation - Standard Control Panels on behalf of this Account.

Please, pay attention on the **Time Zone** menu. Since the Parallels Business Automation - Standard database is bound to GMT, Parallels Business Automation - Standard logs may occur to be hardly-understandable for persons those reside in the other time zone. Thus, you can select the needed time zone, so that the User being registered (in this case, Customer Administrator) may understand logs (and other system messages) without the need to recalculate time.

Billing Information:

- **Discount category** - a discount to be applied to Invoices generated for this Account.
- **Credit Terms** - settlement order for this Account: due period, credit limit, subscription expiration terms, etc. Credit terms are created under **Account Director > Subscription Manager**.
- **Credit Limit** - maximal debt allowed for this Account. Credit Limit is normally defined in the frame of Credit Terms. However, if needed you can define a special credit limit for this particular account. To this effect, clear the **Use value of Credit Limit defined in Credit Terms** box and enter the special credit limit value into the **Credit Limit** field.
- **Billing Day** - the day of month when a customer is charged.

Tax exemption

To get tax exemption, your customers can enter their own VAT Number either from the Control Panel or during account creation in your HSPstore. In addition, later you can manually enter the VAT Number for your customers (**Account profile > Financial Info** tab).

To make accounting more secure you can set the manual approval mode for VAT Number and address. Three statuses can be assigned to a customer address or VAT Number:

- *'Not Checked'* status is assigned by default to customer's address and VAT Number. In this case, if you have set taxation to secure mode, transaction is not allowed.
- *'Approved'* status allows transaction and further processing of customer's order.
- *'Rejected'* status forbids order processing.

Address and Phone:

Customer contacts to send Invoices and solve other problems connected with services provided.

Click the **Next** button to proceed. For business Customer Accounts, it will be offered to indicate special contacts for administrative, billing, and technical issues.

By default the Customer Administrator named on previous step is responsible for administrative issues. You can assign separate persons responsible for billing and technical issues. However, if you consider it reasonable to set one contact for all, check **Same as administrative contact** checkbox(es). Click the **Save** button to create new Account. The list of all Customer Accounts will be displayed.

Mass Operations Over Accounts

To view the list of all accounts that belong to Provider customers, go to **Account Director > Customer Manager > Customers**.

Provider may also view and manage the accounts that belong to Resellers' customers under **Account Director > Customer Manager > Reseller Customers**. The scope of operations available is the same as for Provider's customers:

- Use the  **Search** to view the idle accounts that have no subscriptions and no documents:
 - Filter the list to **Idle accounts** to view the list of them.
- Use the controls for mass operations over accounts. To apply the operation, put a tick in the check box next to the account(s) name(s):
 -  **Delete idle**. Delete the selected idle accounts. If the non-idle accounts will also be selected, then anyway, only idle accounts will be deleted.
 -  **Activate**. Activate the selected accounts.
 -  **Put on hold**. Put on hold the selected accounts.

The list of accounts displays the following:

- **ID**. The numeric identifier of the account assigned to it in PBAS.
- **Account Name**. The name of the account. For personal accounts this is the name of the account administrator. For business accounts this is the name of the company.
- **Balance**. The current balance of the account.
- **Status**. The account current status.
- **Users**. Click on the  **Users** icon to view the list of the account users.
- **Vendor**. The name of the vendor account.

Entering User Agreement

The User agreement is a legal contract between a vendor and a customer.

Customers are offered to accept a User Agreement in your store. If a customer does not accept a User Agreement, he/she is not allowed to proceed with purchase.

In Parallels Business Automation - Standard there are two entries where it's required to accept a User Agreement:

- Store: New account registration page.
- Store: Order placement page.

Accordingly, there are two User Agreement forms in Provider and Reseller Control Center: Account Director > Customer Manager > Terms and Conditions:

- User agreement (for registering new subscriber). This agreement is offered when a new customer registers an account in store, 'Sign in/Register' page.
- User agreement (for placing order). This agreement is offered when a customer places an order in store, 'Checkout' page.

The link to a User Agreement is shown at the bottom of a store page:

[I accept the terms of this User Agreement.](#)

Customers can accept a User Agreement by checking the box next to the **I accept the terms of this User Agreement** link or click on this link and view an Agreement text before accepting it. A user Agreement text opens in a popup window.

➤ *To enter a User Agreement text:*

1. Select **Account Director > Customer Manager > Terms and Conditions** and then click on one of the tabs to select the type of agreement you want to enter.
2. Click **Edit**. Fill the form:
 - a** Enter the text that will be shown as an agreement text title into the **Title** field.
 - b** Enter or paste the text of the User Agreement into the **Body** field.

Please note that:

Parallels Business Automation - Standard supports multi-lingual customization for a wide range of fields (website texts, hosting plan names and description, notification templates). You can enter and save texts in any of the languages installed over Parallels Business Automation - Standard. To select the language, click one of the buttons with language names tiled below the field you want to enter the text and enter the text in the language selected. For example, click **English** - and edit the English text, then click **German** (the English content will be saved and replaced with the German content in the same field) and edit the German text, and so on, for all languages you want to use in your store.

3. To save the agreement text, click the **Update** button.

Assigning a Tax Zone

You can set different tax rates (on page 112) that can be applied automatically to orders total depending on the customers' country of origin (buyer's tax zone) indicated in his (or her) Account profile.

In general, taxation in Parallels Business Automation - Standard is a system-wide setting that affects Provider (or Reseller) accounting in general. You can create several tax rates, then add several tax zones (each including the specific combination of tax rates). After this, taxes will be calculated in accordance with the buyer's country indicated in his (or her) account profile.

However, if needed, you can assign the individual tax zone to accounts. To this effect, open the account details and edit its **General Settings**.

Note: You can create the default Tax Zone to define the tax rate for any of the countries you did not create the special Tax Zone.

You can enter your own VAT Number (if you have such) and enable (or disable) the tax exemption depending on your needs.

Your customers can enter their own VAT Number either from the Control Panel or during account creation in your HSPstore. In addition, you can enter the VAT Number for your customers (**Account profile** -> **Financial Info** tab).

To make accounting more secure you can set the manual approval mode for VAT Number and address. Three statuses can be assigned to a customer address or VAT Number:

- "*Not Checked*" status is assigned by default to customer's address and VAT Number. In this case, if you have set taxation to secure mode, transaction is not allowed.
- "*Approved*" status allows transaction and further processing of customer's order.
- "*Rejected*" status forbids order processing.

Granting a Discount

Discounts in PBAS are separate objects included in the Billing Director settings. A discount includes the percentage of discount given and the scope of fees this discount is applied to:

- Setup fees. This is the minimal sum to be paid when a customer subscribes for services, without respect to a subscription period selected.
- Subscription fees. This is the sum being paid for services provided during a subscription period.
- Application fees. This is the price for optional or additional Applications being installed in customer's Container.
- Resource overusage. In the case if a customer exceeds the resource-usage limits allowable for Container purchased (for example, disk space or traffic), the resource-overusage Invoice is being issued at the end of subscription period.
- Domain Registration. The price for a new domain registration.

Thus, at first you should create one or more discounts in the **Billing Director > Discount Manager > Discount Categories** and then you can go to an account profile (**Financial Info** tab) and assign a discount.

The discounts that can be assigned to customer accounts are called **Discount Categories**. Discount categories assigned to reseller accounts as a 'partner discount' are applied to amounts a reseller pays provider for resold services.

Adjusting Account Balance

To change an account balance, you can enter the credit or debit adjustments. To add an arbitrary payments, your customers and resellers can enter Payment Requests (on page 195).

Adjustments are used for Accounts' balance adjustment. For example, Credit Adjustment is applied if a customer was overcharged (to increase the Account balance), and Debit Adjustment is applied if a customer ordered additional services (increase the billed sum and decrease Account balance).

Automated applying of credit adjustments can be set in the same way as for offline payments: when you add a credit adjustment, you can check the **Apply this payment automatically to future orders and invoices** box.

And when you add a debit adjustment, the list of payments and credit adjustments with unused positive balance is offered (if any), so you can select the document to pay a debit adjustment right away.

Note: Credit adjustments are not accounted in the collected cash report.

To add an adjustment, do one of the following:

- Go to the **Billing Director > Receivable > Documents > Adjustments** tab.
- Go to the **Account Director > Customer Manager > Customers**, select an account and then select the **Billing History** tab.

Viewing the Account Billing History

All the documents that affect the account balance (invoices, both debit and credit adjustments, payments) can be viewed in the account profile, under the **Billing History** tab.

Managing the Set of Events a Customer Receives E-Mail Notifications

For each account (both customer or reseller ones) you can define the set of events for which e-mail notifications are sent to an account owner or unsubscribe it from the event notifications at all. To this effect, go to the **Account Director > Customer Manager** (for customer accounts) or to the **Reseller Manager** (for reseller accounts). Select an account and then select the **Notifications** tab.

In addition, you can define the set of events a customer can enable or disable e-mail notifications for using the Control Panel. This can be done per event, in the **Configuration Director > Event Manager > Events**, select an event, select the **General Settings** tab within an event settings and check or clear the **Customer can control receiving notifications for this event** box to allow or disallow customers to disable/enable receiving notifications about an event.

Managing Account Contacts by Versions

Accounts data (customer name, address, contact phone, fax, etc.) is saved by versions. As soon as an account data has been changed, a new version of account data is created. All the previous versions are saved. The previous versions of account contacts can be viewed and managed under the **Contacts** tab within an account properties.

There is a special sub-form entitled as **Contact Versions** at the **Contacts** screen. Using the **Version** drop-down menu, you can select a contact data version to use, view, or edit. To this effect, select the version and click the **Display** button.

How an account contacts versions are used

Billing. Select contact version to use in documents.

The number of an account data version (existing by the moment a document has been issued) is stored in documents data.

Thus, it is possible to select what version of an account contacts to use in billing documents:

- Contacts stored for an account by the moment a document has been issued or
- The latest version stored in account.

This can be done by means of a new version placeholders.

Note: By default, version placeholders are used in billing documents printable forms. This means that by default the contacts stored in account by the moment of a document creation are used.

To change placeholders in documents print forms Go to **Configuration Director > Miscellaneous settings > Printable Forms**. Printable forms are documents templates mostly composed of placeholders. Printable forms define what information is to be included in a billing document listing. To change placeholders, click on the printable form of a document you need to change. As a selected printable form details appear on the screen, click the **Edit** button. All the version placeholders have the 'version' word in their names. For example, @@customer_version.address1@, @@customer_version.address2@, @@customer_version.admin_email@. To use the latest contacts, change version placeholders into an ordinary one and save the changes.

Fraud screening. Control customers contacts change.

Using account contacts versioning, provider can control how many times and in what way customers change their account contacts.

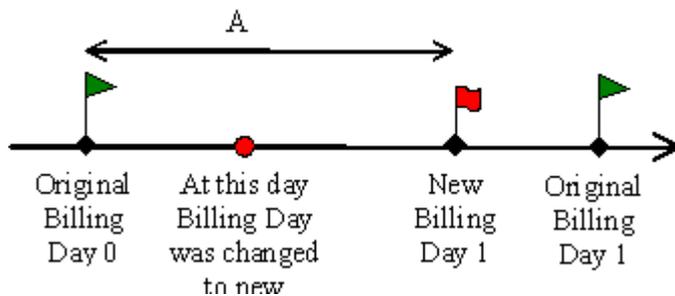
Changing a Customer Billing Day

You can change the customers billing date on customer's request. The customer billing date is changed on Account basis (i.e., it affects all subscriptions associated with customer Account). Open the **Account Director** submenu, select **Customer Manager** and click **Customers**. The list of customer Accounts appears on the screen. Select the Account you need. As soon as the Account properties appear on the screen, click the **Financial Info** tab and select **Edit**. In the **Billing day** field, type the new billing date (the day of a month ranging from 1 to 31). Click **Update** to save changes.

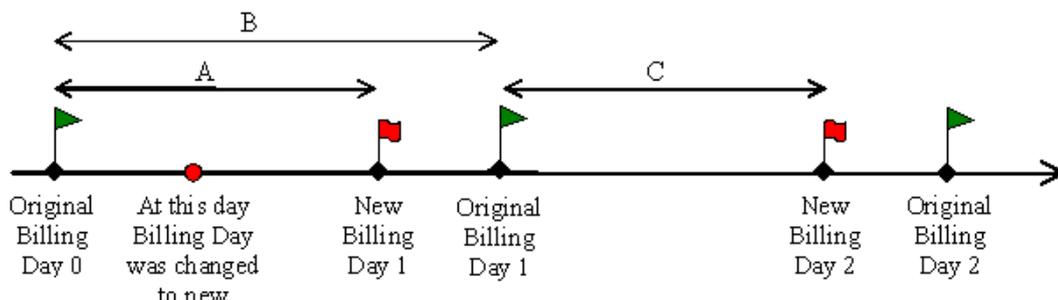
If the billing day was set to 31st and there are only 30 days in the next billing month - customer will be billed on the last day of the next month - on 30th. If there are 31 days in the month - customer will be billed on 31st day.

A renewal Order will be generated in advance - before the Billing day. This is controlled by Notification Period set in the customer's Credit Terms.

A Subscription end date will be aligned according to the new Billing Day after 1-2 billing cycles (the billing cycle equals to one month, by default).



Traffic usage will be prorated. We assume that a customer consumes the monthly traffic evenly. We assume that customer was supposed to use $(A/\text{month}) \times (\text{Monthly Traffic})$ of the network traffic up to the new billing date.

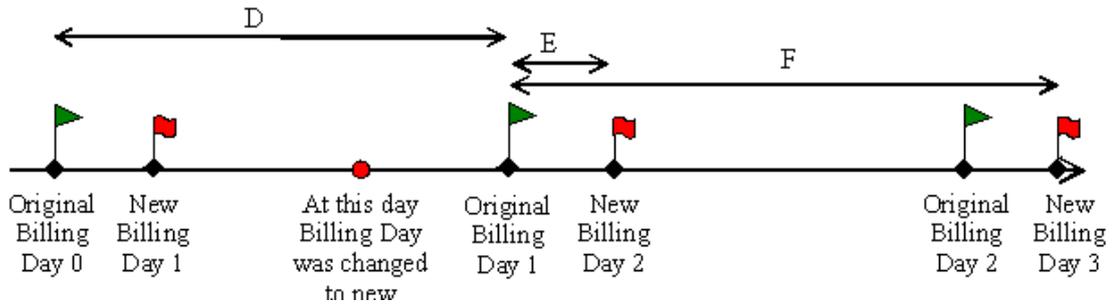


Monthly subscription fee also will be prorated. When customer signs up - he (or she) prepays the period B.

- After changing the billing day - on New Billing Day 1 - a customer will be charged the prorated fee $(C/B) \times (\text{Subscription Fee})$ for the next period. If C is too short ($C/B < \text{month}$), then we immediately charge a customer for the next month.

- On the New Billing Day 1 Parallels Business Automation - Standard will generate the Invoice for the traffic over-usage occurred between Original Billing Date 0 and New Billing Day 1. We assume that customer was supposed to consume $(A/\text{month}) \times (\text{Monthly Traffic})$.
- Then on New Billing Day 2 a customer will be charged the full subscription fee for the period the t corresponds to the New Billing day 2 and traffic over-usage occurred between New Billing Day 1 and New Billing day 2.

Application charges will be calculated in the same way as subscription fee.



- On the Original Billing Day 1 Parallels Business Automation - Standard will generate the invoice for the traffic over-usage occurred between Original Billing Day 0 and Original Billing Day 1. Also it will charge the customer's card prorated subscription fee: $(F/D) \times \text{SubscriptionFee}$
- On the New Billing Day 2 Parallels Business Automation - Standard will generate the invoice for the traffic over-usage occurred between New Billing Date 2 and Original Billing Date 1. We assume that customer was supposed to consume $(E/\text{month}) \times \text{MonthlyTraffic}$.
- On the New Billing Day 3 Parallels Business Automation - Standard will perform usual charges.

Application charges will be calculated in the same way as subscription fee.

CHAPTER 12

Managing Resellers

Resellers are companies that resell HSP services and in general, act as HSP Companies themselves. However, a Reseller does not have nodes run Parallels Business Automation - Standard. Resellers get access to the special set of Parallels Business Automation - Standard tools (Reseller Control Center) and provide services using Internet connection with HSP Management Node.

Provider can create reseller accounts manually or accept online reseller applications. In addition, provider can create a pre-defined configurations of reseller accounts. Such configurations define the number of customers a reseller can have and some DNS settings including domain registration plug-ins availability.

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Assigning Partner Discount to Reseller Account	187
Assigning Discount to Reseller Account	188
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Creating Hosting Plan for Reseller	190

Entering Reseller Agreement

To enter the Reseller Agreement, to be read by all Resellers before submitting Partner Application, go to the **Account Director > Reseller Manager > Terms and Conditions**.

The resellers signup page called Partners can be enabled or disabled by editing the store configuration file `/var/opt/hspc-frontend/templates/header.inc` file.

The Partners page template is in the `/var/opt/hspc-frontend/partners.php` file.

Managing Pre-Defined Reseller Configurations

To facilitate reseller accounts management, provider can create a number of pre-defined reseller configurations that later can be easily and quickly assigned to resellers.

Reseller configuration allows setting the number of customer accounts a reseller can have, the new store management permission, and specify the set of domain plug-ins a reseller is allowed to use.

Reseller configuration can be assigned both during reseller account creation and later, under the **General Settings** tab within a reseller account properties.

Reseller configurations are created under **Account Director > Reseller manager > Reseller Config.**

➤ *To add a reseller configuration or edit an existing one:*

1. Click the **New Reseller Config** button or, to edit an existing configuration, click on a reseller configuration name and then click the **Edit** button.
2. Adjust a reseller configuration:
 - a** Enter a reseller configuration name into the **Title** field. This is the name you will recognize a configuration and select it when assigning to a reseller account.
 - b** Enter the maximal number of accounts a reseller is allowed to have the **Maximum number of customer accounts reseller can have** field.
 - c** To allow a reseller to register own whois servers, check the **Allow reseller to have his own whois servers** box.
 - d** This option is applicable to the new store only. Specify whether the reseller is allowed to configure **Hosting Plan Categories** (on page 135) and **Groups** (on page 136). This enables a reseller to configure the own hosting plans presentation in the new online store: adding new tabs, and compose offerings that consist of several recommended configurations by means of **Plan Groups**:
 - **Reseller only uses Provider hosting plan categories and groups (Default permission).** Disallow a reseller to change the tabs and hosting plans groups presentation in the new store.
 - **Reseller manages own hosting plan categories and groups (If this permission is granted, it cannot be withdrawn).** Allow a reseller to change the tabs and hosting plans groups presentation in the new store.
 - a** Adjust the domain plug-ins assignment. Reseller will be able to configure the allowed plug-ins with own credentials.

For each type of plug-in a separate sub-form is provided:

Allowed Domain Plug-ins - for domain registration plug-ins.

Allowed SSL Plug-ins - for SSL certificate plug-ins.

Allowed Payment Plug-ins - for credit card and bank transfer plug-ins.

Allowed Anti-Fraud Manager Plug-ins - for anti-fraud plug-ins

Allowed License Plug-ins - for plug-ins that allow licenses provisioning to customers.

The allowed set of plug-ins of each type is configured in the same way:

Set the option button to one of the following:

- **All of the available plug-ins.** Select this to allow a reseller to use all plug-ins installed at your Parallels Business Automation - Standard Management Node.
 - **Selected plug-ins only.** Select this to allow a reseller to use a particular plug-in or plug-ins. To select the plug-ins allowed for use, click the **Add** button. The list of all plug-ins installed at the current moment will be shown in a popup window. To select plug-in(s) and allow a reseller to use it (them), click on plug-in name(s), one-by-one. The names of plug-ins you have selected will appear in the **Selected** menu. To remove a plug-in from the allowed set, click on its name in the **Selected** menu and then click the **Remove** button.
 - **All of the plug-ins except the selected ones.** Select this to specify the plug-ins the reseller is not allowed to use. Select the disallowed plug-ins, in the same way as this is described earlier.
3. To save your changes, click the **Save** button.

Creating Reseller Account

- *To create a new reseller account, click the **New Reseller Account** button and follow the wizard:*

1. General Info

General Info:

- **Company name.** Enter the reseller company name.
- **Status.** Select the current reseller account status:
 - **Active** status means that full range of operations may be performed within Parallels Business Automation - Standard system on behalf of this Account.
 - **On Hold** status means that an Account is out of service. Active status is offered by default.

Operations Administrator:

An Account cannot be created without registration of at least one user associated with this Account. However, you can assign a registered user as this account administrator.

- **Existing user.** Check this box to assign a registered user as the new reseller account administrator. If you check this box, there is no need to enter the other info except for e-mail.
- **Address and phone.**
- **Name.** Enter an account administrator full name.
- **Language.** Select the interface language to be used in Parallels Business Automation - Standard on this user logging in.
- **Skin.** Select the Parallels Business Automation - Standard skin to be used in Parallels Business Automation - Standard on this user logging in.
- **Time Zone.** Select a user time zone. Since the Parallels Business Automation - Standard database is bound to GMT, Parallels Business Automation - Standard logs may occur to be hardly-understandable for persons those reside in the other time zone. You can select the needed time zone, so that the user being registered (in this case, Reseller account Administrator) may understand logs (and other system messages) without the need to recalculate time.
- **E-mail.** Enter an e-mail a reseller account administrator will use to log in the Reseller Control Center.
- **Password.** Enter and re-enter the password a reseller account administrator will use to log in to the Reseller Control Center.
- **Reseller Config.** Select one of pre-defined Reseller Configurations (on page 183). This allows defining how many customer accounts this reseller can manage, selecting available plug-ins, etc.

Billing Information:

- **Discount category** - a discount to be applied to Invoices generated for this Account.
- **Partner discount.** - a discount to be applied to amounts a reseller pays provider for resold services. Select one of the pre-defined discount categories. Discount categories can be configured using the **Billing Director > Discount Manager**.
- **Credit Terms** - settlement order for this Account: due period, credit limit, subscription expiration terms, etc. Credit terms are created under **Account Director > Subscription Manager**.
- **Credit Limit** - maximal debt allowed for this Account. Credit Limit is normally defined in the frame of Credit Terms. However, if needed you can define a special credit limit for this particular account. To this effect, clear the **Use value of Credit Limit defined in Credit Terms** box and enter the special credit limit value into the **Credit Limit** field.
- **Billing Day** - the day of month when a customer is charged.

Taxation

To get tax exemption, your customers can enter their own VAT Number either from the Control Panel or during account creation in your HSPstore. In addition, later you can manually enter the VAT Number for your customers (Account profile -> **Financial Info** tab).

To make accounting more secure you can set the manual approval mode for VAT Number and address. Three statuses can be assigned to a customer address or VAT Number:

- *'Not Checked'* status is assigned by default to customer's address and VAT Number. In this case, if you have set taxation to secure mode, transaction is not allowed.
- *'Approved'* status allows transaction and further processing of customer's order.
- *'Rejected'* status forbids order processing.

Address and Phone:

Enter the Reseller contacts to send Invoices and solve other problems connected with services provided.

Click the **Next** button to proceed.

2. Contacts

Enter the special contacts for administrative, billing, and technical issues. These contacts are not used for logging in Parallels Business Automation - Standard tools. This is only a contact data and names, e-mail addresses and other data used to send notifications and to compose notifications content.

By default the Reseller Administrator named on the previous step is responsible for administrative issues. You can assign separate persons responsible for billing and technical issues. However, if you consider it reasonable to set one contact for all, check **Same as administrative contact** checkbox(es). Click the **Save** button to create a new reseller account.

Click the **Next** button to proceed.

3. Hiding

Parallels Business Automation - Standard allows hiding Reseller's URL in such a way that Reseller website seems absolutely independent from HSP server (and other Resellers).

Important: Resellers hiding is necessary for reseller store to work in case a reseller uses provider store installation. Thus, you are not allowed to proceed until the reseller hiding is set.

Reseller's own domain name

- **Domain.** Enter a reseller domain name used for reseller store. If you do not sure about a domain name to enter, use the default one. By default, a reseller hiding URL is formed of a reseller account administrator name written in one string in lowercase and your default domain.
- **Add into DNS.** Check this box to create a domain zone file in the Parallels Business Automation - Standard DNS, i.e., provide the DNS hosting for the reseller domain.

Name servers

- Select a name servers set. Please select a name servers set to be used for the domains owned by the reseller. The ability for a reseller to have own name servers set is defined in a Reseller Configuration (on page 183).

Reseller's own IP address

Set the option button to one of the following:

- **Share provider's IP address.** Use your IP address for the reseller domain.

- Add new IP address to Parallels Business Automation - Standard server. Add a new dedicated IP address for a reseller domain.
 - IP address. Enter a reseller IP address.
- The composition of the rest of the fields depends on the type of Parallels Business Automation - Standard installation:

If Parallels Business Automation - Standard is installed inside a Virtuozzo Container:

- Hardware node root password. Indicate the root password of the server that hosts the Virtuozzo Container with Parallels Business Automation - Standard installed. This is necessary to make your Management Node installed inside one of Container hosted in this Hardware Node accessible over the network.

If Parallels Business Automation - Standard is installed on a physical server, you can register a new IP address in the same way as for Linux conventional network interface :

- Netmask. Enter a network mask.

Interface. Select a network interface the IP address is to be assigned to.

Click the **Save** button to add a new reseller account.

Assigning Partner Discount to Reseller Account

The partner discount allows a reseller to re-sell services at the same price as provider, but pay provider for a sold services at a discounted price in accordance with the partner discount assigned. A partner discount is applied to:

- Setup fees. This is the minimal sum to be paid when a customer subscribes for services, without respect to a subscription period selected.
- Subscription fees. This is the sum being paid for services provided during a subscription period.
- Application fees. This is the price for optional or additional Applications being installed in customer's Container.
- Resource overusage. In the case if a customer exceeds the resource-usage limits allowable for Container purchased (for example, disk space or traffic), the resource-overusage Invoice is being issued at the end of subscription period.
- Domain Registration. The price for a new domain registration.

Partner discounts are selected from a pre-set discount categories created using the **Billing Director > Discount Manager > Discount Categories**.

To assign a partner discount to a reseller, go to the **Account Director > Reseller Manager > Resellers**. Select a reseller account and then click the **Financial Info** tab.

Assigning Discount to Reseller Account

Any of discount categories existing in the Control Center can be assigned to any of Reseller accounts. And this discount works similarly as for any customer accounts, i.e., to all purchases made for a reseller account.

To assign a discount category to a Reseller account, go to the **Account Director > Reseller Manager > Resellers**. Select a reseller account and then click the **Financial Info** tab.

If you want to create a special discount category for Resellers, you can do this in the **Billing Director > Discount Manager > Discount Categories**.

Hiding Reseller's URL

Parallels Business Automation - Standard allows hiding Reseller's URL in such a way that Reseller website seems absolutely independent from HSP server (and other Resellers).

Reseller hiding is included into a reseller account creation wizard. A reseller account cannot be saved without hiding configured. If a Reseller does not have a domain, then a temporal domain is created in HSP domain.

Important: Resellers hiding is necessary for reseller store to work in case a reseller uses provider store installation.

You can assign an IP address from your Management Node IP pool to a domain delegated by a reseller so that your Management Node (i.e., the Reseller Control Center and reseller store) will be accessible by a new reseller's URL.

To change a reseller's URL hiding, go to the **Account Director > Reseller Manager > Resellers**. Select a reseller account and then click the **Hiding** tab.

➤ *To edit a reseller hiding options:*

1. Click the **Edit** button at a Reseller Hiding screen.
2. Adjust the hiding settings:

Reseller's own domain name

- **Domain.** Enter a reseller domain name used for reseller store. If you do not sure about a domain name to enter, use the default one. By default, a reseller hiding URL is formed of a reseller account administrator name written in one string in lowercase and your default domain.
- **Add into DNS.** Check this box to create a domain zone file in the Parallels Business Automation - Standard DNS, i.e., provide the DNS hosting for the reseller domain.

Name servers

- Select a name servers set. Please select a name servers set to be used for the domains owned by the reseller. The ability for a reseller to have own name servers set is defined in a Reseller Configuration (on page 183).

Reseller's own IP address

Set the option button to one of the following:

- **Share provider's IP address.** Use your IP address for the reseller domain.
- **Add new IP address to Parallels Business Automation - Standard server.** Add a new dedicated IP address for a reseller domain.
 - **IP address.** Enter a reseller IP address.
- The composition of the rest of the fields depends on the type of Parallels Business Automation - Standard installation:

If Parallels Business Automation - Standard is installed inside a Virtuozzo Container:

- **Hardware node root password.** Indicate the root password of the server that hosts the Virtuozzo Container with Parallels Business Automation - Standard installed. This is necessary to make your Management Node installed inside one of Container hosted in this Hardware Node accessible over the network.

If Parallels Business Automation - Standard is installed on a physical server, you can register a new IP address in the same way as for Linux conventional network interface :

- **Netmask.** Enter a network mask.
- **Interface.** Select a network interface the IP address is to be assigned to.

Creating Hosting Plan for Reseller

To make a hosting plan available for a particular reseller or several resellers, during Hosting Plan creation, or later, go to the **Billing Director - Product Manager - Hosting Plans**, select a hosting plan and then click the **General Settings** tab. Check the **Resellers can create a copy of the current hosting plan** box. After this, set the radio button to the **Selected Reseller only** and click the **Select** button. The popup window containing the list of all Resellers appears. Select the Reseller from the list.

CHAPTER 13

Managing Receivables

This chapter advises how to handle customers orders, invoices issued for your customers, adjustments, and customers payments, - all documents that contribute in your hosting company balance.

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Understanding Parallels Business Automation - Standard Billing Workflow

The scheme of pre-pay for services provided is implemented within the Parallels Business Automation - Standard system. However, you can provide services on credit as well (create a subscription manually from Provider Control Center and set "Apply changes immediately" in the Commerce Director > Payment Processing).

➤ Initial Purchase



➤ Upgrade



Figure 5: HSPcomplete billing - basic workflow.

If a subscriber exceeds the quote of paid resources stated by Subscription, the Invoice for resource overusage is being automatically generated.

Viewing and Operating Receivables

Your hosting company balance is the sum of all your customers and resellers account balances. A customer or a reseller account balance is calculated as a total sum of all payments and credit adjustments with a total amount of Invoices, Orders, and Debit Adjustments deducted.

Positive account balance means that an account owner has a certain overpayment, so Provider owes services (or money) to a customer. Negative account balance means that a customer or a reseller owes money to Provider. Zero account balance means that neither Provider, nor a customer do not owe money to each other.

Your hosting company balance does not reflect your earnings. It just shows whether your customers owe money to you or you owe money to your customers. Your actual revenue is shown in Billing Reports (on page 222).

To view the total balance, select **Receivable** from the **Billing Director** submenu and then click **Balance** on the **Receivable** submenu.

The balance information is grouped under the three tabs:

- **Total Receivable** shows the following:
 - **Total balance.** The sum of all your customers and resellers account balances
 - **Accounts total balance.** The sum of all customer accounts balances.
 - **Reseller's total balance.** The sum of all reseller accounts balances
- **Balance per Account.** All customer accounts listing with balance shown for each account.
- **Balance per Reseller.** All reseller accounts listing with balance shown for each account.

When you are browsing an account profile, you can view balance under the **Financial Info** tab. You can adjust accounts balance by entering credit adjustments or credit invoices (increase) or debit adjustments (decrease).

To view receivables, go to the **Billing Director - Receivable - Documents**. For your convenience, documents are grouped into separate lists, by types:

- **Orders** - the documents that include information about Hosting Plans or additional services ordered by customers. Orders are generated automatically, either when a subscription renewal is needed (for an automated renewal the special settings can be configured for a subscription) or after a customer places an order in an online store or in the Control Panel Upgrade Center.
- **Invoices** - invoices are generated automatically after paying the corresponding Orders, or manually. Manual creation of invoices is possible in two cases:
 - When a Provider creates an **Abstract Invoice** that is not bound to any order, for example to charge a customer for some additional services.

- When a Provider creates a so-called **Credit Invoice** that allows increasing a customer account balance by refunding customer previous payments with explicit specification of services that were refunded or discounted. Credit invoices work in the same way as credit adjustments, but are accounted in billing reports and have the same numeration (IDs) as all the other invoices. Credit invoices balance is always a negative value since credit invoices are typically issued for refunds, though credit invoices increases accounts balance.
- **Payments** - off-line and online payments for hosting services. An Order can be paid by several payments;
- **Adjustments** - adjustments are used for Accounts' balance adjustment. For example, Credit Adjustment is applied if a customer was overcharged (to increase the Account balance), and Debit Adjustment is applied if a customer ordered additional services (increase the billed sum and decrease Account balance).
- **Payment Requests** - requests from customers that want to put some amount on their account balance, without respect to existence of any unpaid documents. Payment Requests allow customers to enter a credit card or a bank account payment that can be used in future. For a payment to be added, a Payment Request must be manually approved by Provider. Having been approved, a credit card payment request originates a new online payment and a bank account payment request originates an offline payment.

On each document details page you can download its PDF printable version by clicking on the **Download PDF** button.

Orders and Invoices can be paid both offline and online, both manually from the Provider Control Center and by a customer (by a credit card or a bank account) from the Control Panel.

The documents intended to be paid by credit cards or bank accounts call for specific processing and thus, they are not only enlisted in the list of all receivables, but also grouped separately, in the Commerce Director -Online Payments (on page 197) or Bank Transfers (on page 200) lists under the Commerce Director.

Processing Offline Payments and Changing Payment Method

Orders intended to be paid offline are collected in the **Billing Director > Receivable > Documents > Orders** list.

You can enter an offline payment from the **Billing Director > Receivable > Documents > Payments**. When you enter a payment, you will be automatically offered to apply this payment to the unpaid order (or invoice or debit adjustment, if such exist for a given account)

In some cases to fasten the Order payment process (or if you have an arrangement with the Account holder), you can select the payment method and pay an Order online or apply existing payments. To this effect select an order and click the **Details** tab. Then click the **Change Payment Method** button. The list of all payment methods available appears on the screen. You can pay by the credit card (use the existing one if any or enter a new one), a bank account or you can pay offline using both the new offline payment or credit adjustment or the existing ones.

Increasing Accounts Balance by Online Payment or Bank Transfer

The Parallels Business Automation - Standard Control Panel provides an opportunity for your customers to enter abstract online payments, which can be kept for future payments in case there are no unpaid documents on a customer account at the moment. Customers can enter such payments to apply them in future to invoices or renewal orders or to pay some document in part (for example a renewal order). If any unpaid documents exist, such payment will be automatically applied to these documents, one-by-one, till a payment amount is used up or all documents are paid.

All the online payments entered in such a manner result in creation of a specific financial document visible from the Control Center only - a *Payment Request* that can be found in the **Billing Director > Receivable > Documents > Payment Requests**.

Depending on the Payment Processing settings (whether online payments require manual approval to be processed or are processed automatically), the newly entered Payment Requests stay in the Open state awaiting for manual approval or being processed immediately and then become Completed and followed by the corresponding Online Payment put on a relevant Account balance.

To approve a Payment Request manually, go to the **Commerce Director > Online Payments > Documents**, (if a payment was by a credit card) or to **Commerce Director > Bank Transfers > Documents** (if a payment was by a bank transfer) and look in the **Documents for Approval** queue. Open the needed document and approve its further processing. A credit card payment request will become an online payment and a bank transfer payment request will become an online payment.

In case a Provider or Reseller do not want to allow a transaction at all, any Payment Request in the Open state can be terminated. To this effect, click on the Payment Request ID to open a document details and then click the **Terminate** button. Please note that the terminated Payment request cannot be re-processed.

The processed Payment Requests can be refunded. The **Refund** button appears on a Payment Request details screen after the document is approved and processed.

If needed, such an arbitrary payment can be entered for an account from the Control Center, by a Provider (or Reseller) staff member. To this effect, a Payment Request should be entered, and in this case, without respect to Payment Processing settings, a Payment Request is processed immediately.

Editing Orders and Invoices

You may wish to apply certain changes to your orders or invoices: add or edit comments, add supplementary charges, configure taxation settings or offer discounts.

➤ *To edit orders/invoices:*

1. Go to **Billing Director > Receivable > Documents**, select an order or invoice by clicking on the **Document Type** or its **ID**.
2. On the opened **Details** tab click **Edit** under the details table. You can change/add/remove the following information on the edit form:
 - **Comments.** Usually this is the title of the document, e.g. Order on Misc HP purchase.
 - **Details.** This is an opportunity to configure additional charges apart from those incorporated into the hosting plan, e.g. for the installation assistance. The document details form also allows you to enter the discounts you wish to apply to this document, e.g.

Discount for the Miscellaneous Hosting Plan	10%	-20\$
---	-----	-------
 - You can vary the number of the details to create by choosing the appropriate number from the **Create details** drop-down menu and clicking **Display** to refresh the section.
 - **Taxation.** You are offered the following taxation options:
 - Amounts include all taxes, the taxes are calculated automatically and the document amount is split into the net and tax amounts.
 - Amounts do not include taxes, the tax amount is calculated and added automatically.
 - Do not include taxes.
 - Add custom tax. Provide the tax name/description in the field below and specify the tax amount in the relevant field.

Issuing Invoices Manually

In general invoices in Parallels Business Automation - Standard billing are generated automatically, when orders are being paid or in case a subscriber uses resources (e.g., traffic) over the limits stated in his (or her) subscription.

However, it is possible to issue invoices manually, for example, to bill a subscriber for some custom or additional services that cannot be provided in the frame of a subscription upgrade or if there is the need to adjust a customer account balance.

Generally, an invoice issued for a customer account decreases this account balance by an invoice total amount.

However, if it is necessary to increase an account balance, an invoice can be used as an accountable replacement of a credit adjustment. Such an invoice is called a *credit invoice*.

To add an arbitrary invoice or a credit invoice, open the **Billing Director** submenu and select **Receivable**. Click **Documents** on the **Receivable** submenu. As the lists of receivables appear on the screen, select the **Invoices** tab.

Reopening Cutoff Invoices

After the period of time during which an Invoice should be paid is over, and an invoice is still not paid, such an Invoice becomes overdue and penalty (overdue charge) is imposed; in this case an additional Overdue Invoice is issued, however, the charged services are provided during some time called the *overdue period*. When the overdue period is over, an invoice becomes *cutoff*.

Both the due and overdue periods are defined in the Credit Terms (on page 110) assigned to an Account.

The cutoff invoices are disabled for payment. However if needed, a cutoff invoice can be reopened and paid. To reopen a cutoff invoice, please go to the **Billing Director > Receivable > Documents**. Select an invoice you want to reopen and after an invoice details appear, click the Reopen Invoice button.

After an invoice is reopened, you can pay it at this described earlier in this guide (on page 194).

Processing Documents Paid by Credit Cards

Parallels Business Automation - Standard provides the flexible tool for credit-card paid orders and invoices control and processing. All the orders intended to be paid by credit cards are grouped in the single repository under **Commerce Director > Online Payments > Documents**.

If a Subscription was created for some customer by HSP staff member from Provider Control Center, then an order will be placed in the **Billing Director > Receivable > Documents** list.

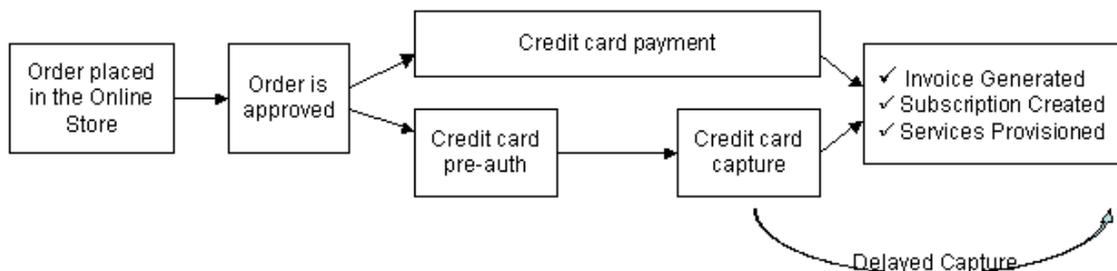


Figure 6: Credit cards processing.

Setting Transactions Approval and Processing Mode

The settings made for credit cards affect credit cards only. Bank transfers are processed manually or in accordance with the special settings, but without the direct connection with bank, so the batch processing is not subject to online payments processing.

You can set the mode of online payments processing in the **Commerce Director > Online Payments > Setup**:

- **Payment processing and subscription creation are performed automatically.** The least secure setting. All online Orders will be both charged and processed automatically and placed in the **Processed Documents** list in the **Commerce Director > Online Payments > Documents**;
- **Payment processing and subscription creation require manual approval.** The most secure option. If this checkbox marked, and a customer uses a credit card at your HSPstore to pay for services ordered, the new credit card properties are always being saved (without respect to the 'Credit Card Processing' setting) and the appropriate Order will be always placed into the 'For Approval' list. Thus, you can view the new Orders that were intended to be paid using new credit cards and examine the new credit cards properties. This allows you to keep the non-trusted users out of Parallels Business Automation - Standard and prevent the fraudulent transactions.
- **Payment processing occurs automatically, but subscription creation requires manual approval.** In this case, the needed sum will be automatically withdrawn from customer credit cards, but all new Orders will be placed in **Documents for Approval** list, and your staff member will need to approve Orders manually to provide services to a customer;

Note: Manual approval both for credit card and Order processing option cannot be enabled unless online-payment Plug-in supports automatic payments ('Automatic payments supported' is ticked on a plug-in details view screen). Automatic payment feature is a Plug-in feature and it cannot be enabled or disabled using Parallels Business Automation - Standard web interface. On the other hand, if this option is enabled, it is impossible to select a payment Plug-in that does not support pending payments.

- **Enable or disable the automated funds capture** for transactions performed. You can enable or disable this feature separately for new orders and both for renewal and upgrade orders - to enable automated funds capture, check the relevant boxes. Disabling the automated funds capture allows performing some additional credit card verification procedures prior to funds capture. In this case, pre-authorizing of a transaction will be performed and you will have to post-authorize the transaction manually. This might be useful to avoid chargebacks if you have too much fraud on your site.

Note: Disabling automated funds capture makes sense only if the payment plug-in supports preauthorization (the option **Preauthorization enabled** is available at the plug-in setup screen and this option is ticked). In this case, transactions will be processed as follows: payment gateway gets transaction request and preauthorizes it; then transaction status is returned to PBAS. If preauthorization finished successfully, the document is placed to **Commerce Director > Online Payments > Documents > Waiting for Capture** list; open order details and capture money. If preauthorization is not finished and Auth Call is needed, the document is placed to **Commerce Director > Online Payments > Documents > Waiting for AuthCall** list; open order details and submit authorization code to release transaction and capture money.

- Select the CVC code storage policy. The CVC code is a three- or four-digit code, which provides a cryptographical check of the information embossed on the card. The CVC code is not part of the card number itself. The CVC code helps ascertain that the customer placing the order actually possesses the credit/debit card and that the card account is legitimate. To select the CVC, set the option button to one of the following:
 - **Do not save the Credit Card validation code (CVC).** You can check this box if you do not to save the CVC codes together with the other credit card data.
 - **Save the Credit Card validation code (CVC) for future transactions.** You can check this box to save the CVC codes together with the other credit card data.

Note: If you enable the CVC saving it will be necessary for you to enter the CVC code when saving a credit card in PBAS database (the CVV2 or CVC2 code field will appear at the **New Credit Card** form both in Control Center and in online store).

- **Keep the Credit Card validation code (CVC) till first successful transaction.** Set the option button to this if you want the CVC code to be saved only till a successful payment is performed by a credit card. For example, if you add a credit card manually and do not pay with this card right away, the CVC code will be stored till the first successful payment.

Processing Documents Paid by Bank Transfers

All receivables are grouped in a common list, including documents intended to be paid by bank transfers.

However, the special set of tools for bank transfers management is provided. For example, from the common list of receivables it is possible to view or pay (by changing a payment method) any of documents that are not included in a batch file yet. But in order to generate a batch file you should turn to the **Batches** module under the **Billing Director > Bank Transfers**.

To start accepting bank transfer payments, you need to configure bank transfer plug-ins (on page 118) properly.

The scheme of bank transfers processing implemented in Parallels Business Automation - Standard is the following:

1. Customer places an order in the online store or upgrades his (or her) subscription from the Control Panel or places a payment request to increase account balance or pays a resource overusage invoice and selects the bank account payment method.
2. The document is automatically placed into the **Documents to be Batched** list under the **Commerce Director > Bank Transfers > Documents**.
3. Parallels Business Automation - Standard automatically sorts documents by bank account types (Norma 19 or DTAUS), and you can compose a batch in one click. If an open batch exists, and some more documents intended to be paid by the same bank account type appear, Parallels Business Automation - Standard offers to append these documents to an existing batch. You can also manually add or remove documents to or from an open batch.
4. After a batch is composed, you can generate a batch file to be submitted to a bank to process a transfer. When a batch file is already submitted to a bank, you can start services provisioning before an official bank response is received. It is possible to set the automated services start after batch file is generated or manual approval, transaction decline penalty, and automated approval of pending transactions (**Commerce Director > Bank Transfers > Setup**).
5. When you receive the bank response, you can manually approve the documents or check the automatically processed documents and if needed, close invoices or payments in case a transaction was declined by a bank.

Refunding Documents Paid by Credit Cards

The processed orders (i.e., money captured and the subscription is created) can be refunded via the corresponding invoice. To refund the processed order (such orders have the "Complete" status), go to the **Commerce Director > Online Payments Documents > Processed Documents** list and select an order. As the order details appear, in the **General Information** part of the form click on the order ID and then click the **Payment History** tab. The corresponding invoice(s) appear. Click on the invoice ID and as the invoice details appear, click on the **Refund** button.

When you refund the completed invoice, you can select an action that will follow the refund. To select an action under the corresponding subscription, account, or credit card used to pay an invoice, set the option button to one of the variants available for each object:

- Action to be applied to subscription:
 - Leave unchanged
 - Put on hold
 - Terminate
- Action to be applied to account:
 - Leave unchanged
 - Put on hold
 - Delete
- Action to be applied to credit card:
 - Leave unchanged
 - Disable credit card

Recreating Orders With Updated Tax Rates

If you use taxation in Parallels Business Automation - Standard (on page 112) and by the moment when the customer's order is already calculated but not paid yet (i.e., the corresponding invoice was not generated), the taxes have been changed, it is possible to recalculate the order (i.e., recreate it). If recalculation is needed, you will be prompted when trying to approve or pay an order and the **Recreate** button will appear on the screen showing an order details.

Managing Statements

A Statement reflects the current balance for particular Customer Account. A Statement is being generated once a month.

To view the list of all Statements, select **Billing Director > Receivable > Documents > Statements**.

To view a Statement details, click on its ID or Date.

Statement details include three tabs:

General Settings

Statement General Settings include the following information:

- Account name and Statement generation date;
- Start and End date. The start and end date of the accounting period the statement was generated (by default, the accounting period is one month);
- Beginning balance. Account balance by the start date;
- Current charges. The total sum billed during the statement period;
- Payments. Total paid during the statement period;
- Non-overdue charges. Unpaid charges that were not past due yet

To view the Statement Invoice in printed form, click the **Show for Printing** button. The Statement in printed form will be displayed in popup window.

Documents

The list of all financial documents used to generate this Statement. You can drill to documents' properties by clicking on their ID or type.

Notifications

Click the **Send** button to send Notification. Similarly to Invoice notifications, the fields of the Form displayed are filled automatically: e-mail address to send a Notification and Account name are taken from Parallels Business Automation - Standard database (Account properties), the notification subject is filled by the Billing Manager. If needed, you can adjust it.

If all fields contain the correct information, click the **Send** button to confirm the address and send the Statement.

Printing out Documents

For your convenience Parallels Business Automation - Standard is shipped with an ability to print out receivable documents in the PDF format on a mass scale. This means that multiple documents can be selected by the provider and printed out in a batch after being automatically converted to PDF. Complete batch history is saved, so one can reprint a particular batch if needed.

To select documents for printing, use **Billing Director > Receivable > Print Documents**.

Note: Different PDF generators can be plugged into Parallels Business Automation - Standard for creating PDF documents from print forms. By default, the *htmldoc* PDF generator is used in Parallels Business Automation - Standard. To plug a different PDF generator, go to **Configuration Director > Miscellaneous Settings > PDF Generator Setup**.

CHAPTER 14

Managing Subscriptions

Subscriptions are generated automatically after a customer pays for the services ordered. Depending on a customer needs, you can:

- Enable the automated renewal-order generation (on page 207) (or you can generate the renewal order on demand at any moment).
- Re-send to a customer a subscription notification (on page 211)
- Restart a subscription grace period (on page 208).
- Synchronize (on page 212) a customer system with subscription terms.
- Activate a dedicated server subscription (on page 66).
- Upgrade dedicated server subscriptions (on page 211).

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Understanding Subscription Types and Statuses

A subscription type corresponds to the type of hosting plan it was based upon. In Parallels Business Automation - Standard, you can view the general list of subscriptions and separate lists - for server subscriptions (dedicated, Virtuozzo Container types and Plesk Shared or Client) and for domain subscriptions (just domain registration); to this effect, click the corresponding tabs above the subscriptions list.

➤ *To view a subscription state or manage a subscription:*

1. Open the **Account Director** submenu and select the **Subscription Manager**.
2. Click **Subscriptions** on the **Subscription Manager** submenu. The list of all subscriptions appears on the screen. To drill to a subscription details or manage a subscription, click on a subscription ID.

The list of subscriptions displays the following:

- **ID.** A subscription numerical identifier assigned automatically or - this setting is available for Provider only - in accordance with the subscription starting ID set manually.
- **Subscription name.** The Container or dedicated server hostname or domain name for Plesk subscription, or just domain name for domain-registration subscriptions.

Note: Miscellaneous subscriptions provide custom and non-hosting services like additional support etc, so there cannot be any hostnames in this case. Thus, in order not to leave blank cells for miscellaneous subscription types in the **Subscription name** column the name of hosting plan a subscription is based upon is shown. The link in this column leads not to a hosting plan settings, but to the subscription properties, similarly to the other subscription types.

- **Hosting Plan Type.** The type of hosting provided by a hosting plan a subscription is based upon (Dedicated, Virtuozzo Container, Plesk Client, etc.). You can filter the list of subscriptions down to the particular hosting type.
- **Hosting Plan.** The name of a hosting plan a subscription is based upon.
- **Account Name.** The name of an account owning a subscription.
- **Status.** Subscription current status. A subscription statuses are changed automatically and depend on the services provisioning:
 - **Pending** - An Order was paid, appropriate Invoice was generated. Services were not provided in full scale, for certain reasons. You should process an order manually (click the **Process Order** button on the order details screen) to retry services provisioning.
 - **Active** - An Order was paid, an Invoice was generated. Ordered services were provided;
 - **On Hold** - all operations in respect to a subscription are temporarily suspended. A Subscription can be brought into 'On Hold' status automatically, for example in the case if renewal Order was not paid and in rare cases, if a customer Account was brought into 'On Hold' state;

- **Graced** - A subscription had expired, and a renewal Order was not paid yet. However before a a subscription will be deleted, a customer may be granted with some additional time called grace period (e.g., several days) to pay an order and renew a subscription. The grace period duration can be defined in Credit Terms. A customer or a provider can upgrade a graced subscription to another hosting plan in the same way as for an active subscriptions.
- **Expired** - A subscription had expired. However in this case, the grace period can be restarted by Provider.
- **Deleted** - all operations in respect to a Subscription are impossible. To delete a subscription, click the **Terminate** button at **Subscription General Settings**.
- **Terminating** - this status occurs in case the delayed subscription termination (termination period) is configured. Termination period is set in Credit Terms and defines how long the expired subscription or a subscription that have been manually terminated by provider or reseller stays in database.
- **Start Date**. The starting day of a subscription period.
- **End Date**. The last date of subscription period.
- **Trial**. Whether the services included in a subscription are provided for free during the trial period, or not: green tick in this column means that a subscription is trial, red cross - non-trial. The trial period can be set per hosting plan (for all hosting types excluding dedicated hosting and Plesk server in Container). Provider can create the special trial-only hosting plans.

Renewing Subscriptions

It is not possible for your customer to subscribe for a year and pay each month, for example. When a customer purchases a hosting plan, he (or she) prepays for a certain subscription period. When subscription period expires in a few days, and the renewal order is still absent, a customer receives an e-mail notification.

You can determine, how many notifications will be sent to a customer (you can set up to 20 different notification periods i.e., the periods of time before subscription expiration date when a customer receives a notification). This can be done by customizing the Credit Terms associated with customer Account.

Your customers can make the renewal settings for their subscriptions via the Control Panel. But a customer may yet miss the subscription expiration date. To avoid the undesirable termination of a subscription, you can enable the automated creation of the renewal order. Moreover, if needed, you can create the renewal order at any moment.

Note: Your customers can have several accounts and several subscriptions registered for each account. You can view all the subscriptions registered for a given account by selecting the **Account Director > Customer Manager > Customers** - and then select an account. Click the **Subscriptions** tab among the account properties. And you can view the list of all subscriptions existing in your Parallels Business Automation - Standard system in the **Subscription Manager > Subscriptions**.

In respect to renewing a subscription, you have two main options:

- Enable the automated generation of a renewal order. In this case, the renewal order will be generated before the subscription expiration date, in accordance with the renewal order period defined in the credit terms and for the subscription period and fee defined by you in the subscription renewal settings. To adjust a subscription renewal settings, click the **Edit** button on a subscription properties screen.
- Generate a renewal order manually. And in this case, you can do one of the following:
 - Generate the renewal order in accordance with the existing subscription period, i.e., just repeat the previous order (period and price).
 - Generate the renewal order for another pre-defined subscription period. To this effect, you should click the **Generate Renewal Order** button and select one of the pre-defined subscription periods, which are currently available for the Hosting Plan a given subscription was created.
 - Generate the renewal order for the custom period at the pro-rated price calculated for the pre-defined subscription period selected. In this case, you should click the **Generate Renewal Order** button, select one of the pre-defined subscription periods as this described above and select the custom date of subscription expiration.

Managing Subscription Grace Period

In case a subscription had expired (or a grace period is about to expire), you can restart the grace period manually. To this effect, go to the **Account Director > Subscription Manager > Subscriptions**. Select the subscription and then click the **General Settings** tab. Then click the **Restart Grace Period** button.

Terminating Subscriptions

Subscriptions are terminated either automatically, when subscription period, grace period, and expiration period are over and a subscription has not been renewed, or manually:

- Subscription period is a pre-paid period a customer uses the purchased services.
- Grace period starts when subscription period is over. Subscription is in the Graced status. Services are still available and a customer can pay the renewal order.
- Expiration period starts when the grace period is over. Subscription status becomes Expired. Services are not available and a customer cannot pay the renewal order any more. However, provider or reseller can restart the grace period manually, which activates services and gives a customer an opportunity to pay a renewal order.
- When expiration period is over a subscription is terminated and all the data connected with this subscription is removed from database and cannot be restored.

Thus, subscription termination is reasonable only if neither a customer, nor provider or reseller does not need a subscription data any more.

Provider or reseller can terminate a subscription manually at any moment (go to **Account Director > Subscription Manager > Subscriptions**, select a subscription and click the **Terminate** button on a subscription **General Settings** screen). If such termination happens accidentally, there is no way back and a subscription data will be lost.

To prevent the undesired subscription data loss, provider or reseller can configure the **delayed subscription termination** and after this, all subscriptions that must have been terminated stay 'alive', and collected under **Subscription Manager > Termination Requests**.

In addition, customers can send subscription termination requests from Control Panel. A customer can click the **Request Termination** button at a subscription details screen and a corresponding request will appear in Provider or Reseller Control Center, under **Subscription Manager > Termination Requests**. Provider or reseller can schedule subscription termination and issue a termination invoice of an arbitrary amount.

Note: It is possible to set the termination delay period with ability to manually destroy or activate subscriptions. After the termination period is over the terminating subscriptions are destroyed automatically. In addition, the manual termination mode can be set. In the manual mode, subscriptions termination or activation can be performed only manually.

The following actions are possible for terminating subscriptions:

- **Destroy** - for all terminating subscriptions without respect to the status a subscription have had before termination. This button in its turn, offers the two options:
 - **Delete target system.** Finally removes a subscription from the database together with all the data related to this subscription kept on the node where a subscription had been hosted. This operation cannot be undone.
 - **Keep target system** Removes a subscription data from the Parallels Business Automation - Standard database, but leaves the system (Plesk domain or client, or Container) on the node.

- **Activate** - only for subscriptions that have had the Active status before termination. This button activates a subscription back.
- **Restart Grace Period** - for subscriptions that have had the Graced or Expired statuses before termination. This button brings a subscription into the Graced status.

The delayed subscriptions termination is set using Credit Terms (on page 110). Please note that since Credit Terms are assigned per account, the subscription termination terms depend on the Credit Terms assigned to an account.

➤ *To configure the delayed subscription termination:*

Create a new Credit Terms with Termination Period (on page 110) or with a manual subscription termination configured. Or adjust the existing Credit Terms.

Changing Account for Subscription

You may need to move a subscription to a different account for a number of reasons. This can be done with the help of a special wizard. To invoke the wizard, go to **Account Director > Subscription Manager > Subscriptions**, select a subscription and click the **Change Account** button on a subscription **General Settings** screen.

➤ *To assign a subscription to a different account:*

1. In the **Select New Account** section select the new account you wish to assign the subscription to by clicking on the **Browse** button. Press **Next** to continue through the wizard.
2. On the opened screen you are offered the following configuration options:
 - Select a hosting plan for the subscription. If the new account belongs to the same vendor, the current hosting plan is checked by default. To change the hosting plan, check another one on the list.
 - Change your billing settings: select a different billing period in the drop-down menu and set another subscription end date. You can set the subscription expiration date to the current date by clicking on the **NOW** button.

Click **Next** to proceed to the final wizard page.

3. On the last page you can review the old configuration (**Current Settings**) and the new one (**New Settings**). In case you want to make any changes to the new settings, you can return **Back**. To save the changes, click **Finish**.

Upgrading Dedicated Third-Party Subscriptions

After the Third-Party Dedicated subscription is activated, a customer can use the Parallels Business Automation - Standard Control Panel to upgrade the subscription by ordering more network traffic per month or more IP addresses.

Traffic cannot be counted via the Parallels Business Automation - Standard web-based interface. A customer can account network traffic on his (or her) dedicated node and then pass this data to Provider. Provider takes care of adding the traffic statistics to Parallels Business Automation - Standard database. If the traffic statistics were entered in Parallels Business Automation - Standard database, the traffic usage statistics diagram for the third-party node can be viewed in the Control Panel and in case a customer overuses traffic, traffic-overusage invoices will be generated. A customer can order additional traffic via the Control Panel Upgrade Center and in this case Provider will receive a e-mail notification and the corresponding order will be placed. Then Provider can increase the traffic quote manually, after a customer pays the corresponding order.

And additional IP addresses can be easily assigned to a Hardware Node via the Provider Control Center web-based interface. When a customer orders additional IP address(es) in the Control Panel Upgrade Center, Provider receives a e-mail notification and the corresponding order. After this, Provider goes to the **Service Director > Servers Manager > Dedicated Servers**, selects the Hardware Node and edits its network configuration (adds or releases one or more IP addresses).

Sending Subscription Notification

When a Subscription is created, an automatically generated notification is being sent to a customer's e-mail address indicated in his (or her) Account profile.

To make sure that a customer will receive the notification, you can re-send the subscription-creation notification at any moment and to any e-mail address. Before re-sending, you can edit the notification message (on page 284). To this effect, please select the **Subscription has been created** event from the Event Manager Settings.

To send the subscription creation notification, go to the **Account Director > Subscription Manager > Subscriptions**. Select a subscription and then click the **General Settings** tab. Then click the **Send Invitation** button.

Synchronizing Customer System With Subscription

In some cases, a customer's system parameters (Plesk domain, Plesk client, or Virtuozzo Container) can differ from the corresponding subscription parameters. This can happen accidentally.

Such a situation is not really critical for Parallels Business Automation - Standard, but as a result, the subscription parameters stored in the Parallels Business Automation - Standard database become different from the actual configuration of the customer's system created in accordance with this subscription.

Customers pay for services they use in accordance with the information stored in their subscriptions. If the actual service provided does not match the subscription, the customer is either billed for the services he/she does not use or uses some additional services for free.

A Plesk or Container subscription mismatch can be fixed by one click. To this effect, go to the **Account Director > Subscription Manager - Subscriptions**, select the subscription with which the customer's system is to be synchronized, then choose the **General Settings** tab from the set of subscription properties, and click the **Synchronize (Container, Plesk Client, Plesk Domain - depending on the subscription type)** button. The customer's system parameters will be automatically brought into correspondence with the subscription parameters.

Note: For Virtuozzo for Linux 2.6.2 Containers the automated Container restart is possible in some cases of subscription mismatch.

Managing Resold Subscriptions

All subscriptions created for resellers and resellers' customers can be viewed and managed from **Provider Control Center > Account Director > Subscription Manager > Resold Subscriptions**.

The list of subscriptions displays the following:

- **ID.** A subscription numerical identifier assigned automatically or - this setting is available for Provider only - in accordance with the subscription starting ID set manually.
- **Subscription name.** The Container or dedicated server hostname or domain name for Plesk subscription, or just domain name for domain-registration subscriptions.

Note: Miscellaneous subscriptions provide custom and non-hosting services like additional support etc, so there cannot be any hostnames in this case. Thus, in order not to leave blank cells for miscellaneous subscription types in the **Subscription name** column the name of hosting plan a subscription is based upon is shown. The link in this column leads not to a hosting plan settings, but to the subscription properties, similarly to the other subscription types.

- **Hosting Plan Type.** The type of hosting provided by a hosting plan a subscription is based upon (Dedicated, Virtuozzo Container, Plesk Client, etc.). You can filter the list of subscriptions down to the particular hosting type.
- **Hosting Plan.** The name of a hosting plan a subscription is based upon.
- **Account Name.** The name of an account owning a subscription.
- **Status.** Subscription current status. A subscription statuses are changed automatically and depend on the services provisioning:
 - **Pending** - An Order was paid, appropriate Invoice was generated. Services were not provided in full scale, for certain reasons. You should process an order manually (click the **Process Order** button on the order details screen) to retry services provisioning.
 - **Active** - An Order was paid, an Invoice was generated. Ordered services were provided;
 - **On Hold** - all operations in respect to a subscription are temporarily suspended. A Subscription can be brought into 'On Hold' status automatically, for example in the case if renewal Order was not paid and in rare cases, if a customer Account was brought into 'On Hold' state;
 - **Graced** - A subscription had expired, and a renewal Order was not paid yet. However before a a subscription will be deleted, a customer may be granted with some additional time called grace period (e.g., several days) to pay an order and renew a subscription. The grace period duration can be defined in Credit Terms. A customer or a provider can upgrade a graced subscription to another hosting plan in the same way as for an active subscriptions.
 - **Expired** - A subscription had expired. However in this case, the grace period can be restarted by Provider.
 - **Deleted** - all operations in respect to a Subscription are impossible. To delete a subscription, click the **Terminate** button at **Subscription General Settings**.
 - **Terminating** - this status occurs in case the delayed subscription termination (termination period) is configured. Termination period is set in Credit Terms and defines how long the expired subscription or a subscription that have been manually terminated by provider or reseller stays in database.

- **Start Date.** The starting day of a subscription period.
- **End Date.** The last date of subscription period.

Trial. Whether the services included in a subscription are provided for free during the trial period, or not: green tick in this column means that a subscription is trial, red cross - non-trial. The trial period can be set per hosting plan (for all hosting types excluding dedicated hosting and Plesk server in Container). Provider can create the special trial-only hosting plans.

Similarly to a provider customers' subscriptions, resold subscriptions are grouped by tabs into the common list (**All Subscriptions**), subscriptions in the 'Pending' status (**Pending Subscriptions**), subscriptions in the 'On Hold' status (**Subscriptions On Hold**), subscriptions in the 'Graced' and 'Expired' status (**Graced&Expired**), and subscription in the 'Terminating' status (**Termination Queue**). The number of subscriptions in each list is shown at each tab in the brackets.

To view a subscription details or manage it, click on a subscription ID or name. Depending on a subscription type (Container, Plesk, Miscellaneous, etc.), the set of tabs that compose a subscription details, varies.

Provider can change a resold subscription configuration only in respect to its general configuration and domain assignment, because resources configuration, system parameters (for Container and Plesk subscriptions), custom attributes are subject to a hosting plan owned by a reseller, and Provider cannot change reseller's hosting plans.

Thus, the following parameters of a resold subscription can be changed:

General Settings:

View mode:

- **Change Account.** Change account into any of provider customer or reseller customer or reseller account.
- For subscriptions in the 'Active' status: **Put on Hold.** Change a subscription status into 'On Hold'.
- For subscriptions in the 'On Hold' status: **Activate.** Change a subscription status into 'Active'.
- **Change Hosting Plan.** Change hosting plan into one of the reseller active hosting plans.
- **Change End date.** Change subscription end date.
- If a renewal order is not generated: **Generate renewal order** - issue a renewal order in the same way as this is done for provider customers' subscriptions. If a renewal order is already issued, it is possible to apply payments to an order or process it.
- For Virtuozzo Container subscription types: **Synchronize Container** - synchronize a Container parameters with subscription terms.
- **Send Invitation.** Initiate sending an e-mail notification about a subscription creation to a subscription administrator.
- **Terminate.** Terminate a subscription, which results in changing a subscription status into 'Terminating' and placing a subscription into a Termination queue tab within resold subscriptions.
- Click the **Edit** button and: change a subscription name, adjust the next billing period, set the custom subscription fee (applied only to a hosting plan subscription fees, and not to additional resources or applications purchased), change settings of automated renewal order generation.

Domains

- Select a domain and manage it:
 - Reassign a domain to another subscription.
 - Enable/disable DNS hosting.
 - Edit domain zone.
 - View list of subscriptions that contribute into a domain zone file (also known as DNS Records Suppliers). View default records assigned to a subscription by means of DNS template (specified in a hosting plan a subscription is based on), restore default DNS records from DNS template, enable/disable a DNS Record Supplier for a domain, synchronize a zone file with a DNS Record Supplier.

Orders

- Manage orders placed for a subscription. Pay orders, generate renewal order, adjust renewal orders generation settings, cancel open or pending orders.

Managing Subscription Attributes

If it is needed to add some custom or specific information to a subscription profile, it is possible to do this by configuring editable fields within a subscription settings.

Such additional fields are called *extended attributes*. Extended attributes can be added to subscription using Parallels Business Automation API. For details refer to the Parallels Business Automation SDK.

Having been added, extended attribute(s) are grouped within a subscription properties, **Account Director > Subscription Manager > Subscription**, select subscription, switch to **Ext.Attributes** tab.

CHAPTER 15

Managing Payables in Reseller Control Center

Payable section of the Billing Director in the Reseller Control Center is designed for management of Reseller's financial documents connected with settlements with HSP. As soon as Reseller receives payment for services provided, or orders HSPs services, an Invoice from HSP is automatically issued. The Invoice total sum is calculated in accordance with Reseller's partner discount (if any) assigned to a Reseller by HSP.

Payable section includes the same items as Receivable. Financial Documents management is similar to Receivable.

Within Payable screen you can view the list of all documents or select specific document type: orders, invoices, payments or adjustments. In addition, you can view the balance. Similarly to Receivable, three subsections of Payable section are available within the Navigation tree:

- Balance;
- Documents;
- Statements.

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Viewing Balance of Reseller Account Payable

All Reseller Account balance statistics in the Reseller Control Center are calculated automatically by the Billing Manager. Payable Balance reflects the current state of Reseller Account. In this case, the positive balance means that a certain overpayment exists in respect to Invoices issued by HSP. Negative balance means that total balance of HSP Invoices exceeds total sum of payments made by Reseller. Zero balance indicates that the total sum of your payments equals the total sum of HSP Invoices.

To view Reseller Account balance in the Reseller Control Center click on the **Balance** link on **Payable** submenu.

Payable-balance screen displays the following:

- **Total balance** - Reseller Account balance calculated on the basis of existing financial documents (Invoices, Adjustments, and Payments) generated by HSP and paid by Reseller. Positive value means that total sum of Reseller payments exceeds the total sum of Invoices and Debit Adjustments issued by HSP. Zero balance means that your payments sum equals to the total sum of Invoices and Debit Adjustments issued by HSP. Balance below zero means that the total sum of unpaid Invoices and/or Debit Adjustments issued by HSP exceeds the total sum of payments received from you by HSP.
- **Events**. Last and next Statement generation date (statements are generated one time per month). Statement is a detailed reference about account balance and operations during a billing period.

Increasing Reseller Account Balance

A reseller can increase their account balance by an arbitrary amount. In this case, the amount offered by default equals to the amount a reseller owes to Provider.

➤ *To increase a reseller account balance:*

1. Select **Billing Director > Payable > Balance**.
2. Click the **Make Payment** button.
3. On the opened screen select the payment method, enter the payment total.
4. Click the **Make Payment** button. At this moment the Payment Request is sent to Provider. After a Provider approves a Payment Request, the reseller payment will be accepted and resulted in a new online (if credit card payment method was used) or offline (if bank account payment method was used) payment counted for reseller. After this, such a payment can be applied to Provider invoices.

Managing Financial Documents Issued by HSP

The Documents section within the Billing Manager Payable allows Reseller to view his (or her) Orders and Payments, view Provider Adjustments, and pay Provider Invoices.

➤ *To view the list of all payables:*

1. Click **Documents** on the **Payable** submenu.
2. Similarly to receivables, two variants of working with documents are available: you can get the particular document by clicking on its name or ID in the general list, or you can work with particular category of documents (Orders, Invoices, Payments or Adjustments, - click appropriate tab).

The list of payables displays the following:

- **ID and Type** (click to drill to document properties);
- The date a document was issued by HSP;
- **Total sum**;
- **Balance** (unpaid part for Orders, Invoices, and Debit Adjustments, or unused part for Payments and Credit Adjustments);
- **Added by**. The name of a person who initiated creation of the given financial document. Let us consider an Invoice, for example. Say, a customer visited your online store, ordered services, and paid for these services. In this case, HSP automatically issues an appropriate Invoice for you (the sum paid by your Customer minus Reseller partner discount (if any)). Then, in this column you will see the name of a customer (as it indicated in appropriate Customer Account profile).

Managing Orders

To view the list of all Orders placed by you, click on the same tab at the top menu. To drill to Order details, (or to pay or cancel an Order), click in its name or ID.

Order details are grouped into two sets (click on appropriate tab in the top menu to view):

- **General information (Details)** includes the following additional information: Order validity date, subscription name (for server subscriptions), comment (typically, short description of services ordered), the name of customer that placed an Order (click to see details), and itemization of services ordered. For open Orders, here you can pay it online or cancel it manually (i.e., before validity date).
- **Payment History** - An Invoice generated in accordance with the given Order. Here you pay this Invoice online (if needed).

Let us consider online payment. Hosting Service Provider selects and enables an actual online-payment system to be used for settlements between Reseller and HSP. Thus, after clicking the **Pay Online** button, you will be offered to proceed with online payment (the name of processing center, for example, VeriSign or WorldPay should be displayed as a button title). On the next step, you will be offered either to select a one of your credit cards saved at HSP side (if any) or to enter a new credit card. In the case if a payment was processed successfully, Confirmation screen will be displayed.

Paying HSP Invoices

As soon as Reseller obtains payments from his (or her) customers for services provided, HSP automatically issues appropriate Invoice (the sum paid by a Reseller's customer minus Reseller partner discount, if any).

In addition, there is one more case when HSP automatically issues Invoices with nonzero balance for a Reseller. It depends on the order of applying Subscription-changes set by HSP (apply changes immediately or only after payment received). If changes are being applied immediately, then if a Reseller orders a new Container or upgrades existing Subscription, the following actions are performed:

- Appropriate Order is being created;
- Services are provided immediately, on credit;
- In accordance with an Order, and Invoice is being automatically issued.

Invoice properties include three tabs:

- **Details.** The same info as showed in the general list, but you can drill to Account properties and Subscription details by clicking on their names. In addition the services ordered are itemized. To view the Invoice in printed form (for open Invoices only), click the **Show for Printing** button. To pay an open Invoice online, click the **Pay Online** button. The procedure of is similar to Orders (see above in this Section);
- **Paid by.** The list of documents (if any) applied to an Invoice. You can drill to the properties of these documents by clicking on ID or name;
- **Notifications.** Here you can view the e-mail Invoice notifications sent to you by HSP.

Please note that when processing Payables, you also can pay an Order or an Invoice in part. To this effect, you should pay offline (for example by check) and explicitly indicate a document this payment should be applied to. In addition, you can allow its automatic applying to Orders or Invoices (to this effect, mention that while entering this Payment a HSP staff member should mark the **Auto payment** checkbox). In this case, if you order services at HSP, you will be offered to use existing payment(s) with positive balance. In the case if offline payment sum exceeds the total sum of the paid document, the positive balance of your offline payment will be displayed in the common list (Payments tab) as soon as HSP staff member enters this payment.

Viewing Payments

The list of Payments within Payable section includes all payments (online and offline) applied to Provider Invoices. To view all payments, click on the **Payments** tab at the top menu. To view detailed info about a Payment, click on its ID. Payment properties include two tabs:

- **Details.** Here you can see the same info as in the general list. However, you can drill to the detailed info about your staff member that was logged in Parallels Business Automation - Standard when this Payment was added. In addition, you can see, whether this payment was set to 'Auto Payment' (green tick indicated that yes).
- **Paid Documents.** This tab allows viewing the list of documents (Invoices or Orders) the given Payment was applied to by HSP staff member.. In this case, you can drill to properties of each paid document (if any) by clicking on its Name or ID.

In this case, you cannot apply payments with nonzero balance (only Provider staff member does). You only can view details and track payments balance.

Viewing Adjustments

The list of Adjustments within **Payable** section includes Adjustments to Reseller Account balance made by HSP staff members. Similarly to payments, this is just for your information. Thus, you can track the Adjustments balance.

Viewing Statements Issued by HSP

A Statement reflects the current balance for your Reseller Account. Statement is generated regularly (and automatically) once a month. To view the list of all Statements generated for Reseller Account, click **Statements** on the **Payable** submenu. In this case, Statements' details are the same as for Payables (on page 202).

CHAPTER 16

Viewing Billing Reports

This chapter advises how to view and manage billing reports.

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Accounting Reports

The detailed accounting reports provide the following information:

- The Revenue Report provides all the revenue information.
- Revenue per Plan provides the information about revenue per each hosting plan.
- Revenue per Promotion summarizes revenues per promotion (applied to hosting plans) a provider or a reseller has been got for a selected period of time.
- Revenue forecast allows generating the revenue forecast for selected period os time on the basis of existing subscriptions.
- The Collected Cash report provides information about the amount collected.
- Sign-Up/Go-Away Report presents the rate of new and lost subscriptions for selected period of time.
- The Aged Account/Receivable report groups all the invoices issued for your customers' accounts and sorts these invoices by their age (both non-overdue and overdue).

All reports include the **Total** presentation and **Details**. The **Total** tab allows viewing the total revenue report for a particular period of time or for all hosting plans (for Sign-Up/Go-Away report). The **Details** tab presents revenue report by particular billing documents. Some reports (for example, Revenue per Promotion and Revenue per Plan) include a third tab **Revenue per Promotion** or **Revenue per Plan** where you can filter the report down to a particular promotion or hosting plan.

To view the revenue summary, go to the **Billing Director > Report Manager**.

The Reports summary screen is roughly divided into two parts:

<p>The revenue both for previous and current months and total amount are shown in the right part of the screen:</p> <ul style="list-style-type: none">▪ Revenue. The total sum of all invoices (both paid and unpaid) minus the total sum of credit adjustments applied to invoices for the given period of time.▪ Cash Collected. The total sum of all payments (both online and offline) received for the given period of time.▪ Non Overdue. The total sum of all unpaid, non-overdue invoices issued for the given period of time.▪ Overdue. The total sum of all overdue invoices issued for the given period of time.	<p>And in the left part you can find links to all the three types of revenue reports mentioned above.</p>
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Taxation Reports

You can view the detailed reports on collected taxes amount in **Billing Director > Report Manager > Tax Reports**.

The tax report consists of the three listings of documents sorted by: taxed documents and two lists of not taxed documents (tax exempted and just not taxed).

CHAPTER 17

Managing Containers

This Chapter focuses on Containers (Containers) management including Container creation (and other operations with Containers), and Containers upgrade.

To list/manage Containers, go to the **Service Director > Virtuozzo Manager > Container**.

The list of Containers displays the following:

- **ID** - Unique numeric identifier, assigned to the Container in Parallels Business Automation - Standard
- **Hostname** - Container hostname
- **IP Address** - Current Container IP address
- **Node** - Hardware Node on which Container is currently hosted. You could change it by using Migrate operation
- **Account** - The name of an Account a Container is associated with
- **Trial** - Whether a customer can try this Container for free during certain period of time. Trial period is being set during Container creation by your staff member. Green tick in this column indicates that trial period is allowed, red cross - that not.
- **Status** Container status. Click the "Refresh" button at the top of the screen to make sure the status displayed up-to-date. All Container statuses are described in details later in this guide.

To operate Containers (on page 240), use controls at the bottom of the screen.

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Managing Both OS and Application Templates for Containers

Parallels Business Automation - Standard provides the special applications management tool that simplifies applications provisioning into Containers and applications versioning management. These tools are grouped under the **Service Director > Virtuozzo Manager > Applications**.

Managing Standard Templates

Standard templates are those introduced in Virtuozzo before EZ templates (see page 227).

Basic Notions

This Section includes definitions of the basic notions connected with Applications management in Parallels Business Automation - Standard.

What is a Template

A Template is a set of packages prepared to be installed inside Container. Usually it is just a set of RPM packages for RedHat-like systems.

There are two types of templates in Parallels Business Automation - Standard:

- OS template is an operating system snapshot taken immediately after installation.
- Application template is a set of repackaged RPMs optionally accompanied with configuration scripts

In respect to templates management (both Application Templates and OS templates), Parallels Business Automation - Standard interface follows actual templates location. For better understanding, let us consider how templates are stored on Management Node and Hardware Nodes.

All templates are stored on Management Node in template root directory `/vz/template`. This directory is being automatically created during the first installation of template (OS template or Application template - it does not matter).

On Hardware Nodes, all templates are stored in the same way (`/vz/template` is root template directory). The only difference is that the special `/vz` partition is created on Hardware Nodes.

Base Directory

Base directory groups templates of the same applications with different original versions or different template versions.

For example, if you click the **Applications** link at the **Application Director** dashboard, you will see the list of Application groups, i.e., base directories. Each base directory may include several versions of the same Application - package sets.

Note: The Application Director allows managing Applications both by groups (base directories) and versions (separate package sets).

Package Set

A package set is a separate version of an Application.

Application

An application is a particular software product included in a package set.

Application Categories

For better manageability, Applications can be grouped into Categories. Three default Application categories exist: Applications, Access tools, and Control Panels. You can create as much additional Application Categories as you consider convenient.

To create a new Application Category, select **Service Director > Virtuozzo Manager > Setup > Application Categories** tab. Then click the **New Category** button.

Enter the Category name, type the description. Click the **Save** button to add a new Application category.

In order to group Applications into Categories, you need to get back to an Application details (namely, **General Settings**).

Managing EZ Templates

This chapter familiarizes you with EZ templates developed on the basis of Virtuozzo standard templates and providing significant technology enhancements over their counterpart.

EZ Templates Overview

In respect of their functionality and behaviour, EZ templates are identical to Virtuozzo standard templates, i.e. they also provide a way of sharing resources among lots of Containers by making use of Virtuozzo File System (VZFS) and thus enabling huge savings in terms of disk space and memory. However, EZ templates demonstrate a number of distinctive features as compared to their counterpart:

- **Important:** The EZ templates technology allows you to use the original OS vendor's packages and to receive the updated RPM packages from a central repository right after their release without having to wait until they are packaged into templates by Parallels and delivered to you.
- EZ templates do not carry all the necessary package files inside themselves. They contain only information about what packages should be installed on the Hardware Node to make the templates fully operational and from what network repository these packages should be downloaded.
- The dependencies of RPM packages included in an EZ template are automatically resolved during the packages installation on the Hardware Node. So, if the specified RPMs require other packages to be installed, these packages are also downloaded from the repository and installed on the Node. In case an RPM package has requirements that conflict with existing software on the Node or any dependencies for the package being installed cannot be satisfied, the RPM installation process fails without making any changes to the system.

Note: You can find more information on the EZ templates in the *Virtuozzo User's Guide Version 3.0*.

EZ Templates Repository

One of the basic concepts in the EZ template technology is the concept of 'repository' where RPM packages for the given EZ template are stored. A repository is a prepared directory or web site containing software packages and index files for Linux operating systems and/or any of their applications. An example of such a repository is the repository located at the <http://mirrors.usc.edu/pub/linux/distributions/fedora/> web site and storing RPM packages for the Fedora Core releases. Using repositories gives you the following advantages:

- RPM packages included in the given EZ template do not contain versions, but only names (e.g. bash, crontabs). So, you always update any RPM package included in the EZ template to its latest version available in the repository.
- As a result of the fact that a list of RPM packages does not provide their versions, EZ templates do not have versions either (e.g. redhat-as4-x86). Thus, you install any EZ template on the Hardware Node only once and, after that, use the installed template to update the RPM packages inside any Container where it is applied.

Importing Templates from Hardware Nodes

After you have installed the templates to a Hardware Node, you need to register these templates in the Parallels Business Automation - Standard database to be able to use the templates in the Hosting Plans. Importing templates from Hardware Nodes to the Parallels Business Automation - Standard database is a quick and easy way of templates installation to the HSPC Management Node from a Hardware Node you have so far managed.

➤ *To register a template on a Management Node:*

1. Go to **Service Director > Virtuozzo Manager > Nodes > <Node>**.
2. Click **OS Templates** or **Applications**. The list of all OS templates installed on the Hardware Node appears on the screen.
3. Click on the **Register OS Templates From Node** or **Register Applications From Node** button and confirm your action on the dialogue screen.
4. Click **Refresh** at the top of the page to update the system information. Now you will be able to create Hosting Plans that use this OS template for Container creation with provisioning this Container on the Hardware Node you have registered the OS template for.

Note: You can only import OS templates for Virtuozzo for Windows versions no older than the 3.5 release.

You can also use the **Register OS Templates/Applications From Node** operation to update the actual status of all the templates installed on a Management Node.

Important: You can import to the Management Node the Virtuozzo for Windows templates only in the .efd format.

Removing Application Template from Hardware Node

If you want to uninstall an Application, you can get an error message, because some Containers may use this Application at this moment. However, you can force the uninstall. Please, be attentive, in this case you may get some problems with your Containers.

Application Template Properties

Two types of Applications can be managed in Parallels Business Automation - Standard as templates:

- Commercial applications. Applications packaged by Parallels. Parallels can have an agreement with the ISV to distribute the application and in this case customers will obtain the license from Parallels. If Parallels does not have an agreement with ISV - application could be installed into Container, but customers should contact the ISV to obtain the license;
- Open source applications packaged and supported by Parallels. To provision these applications into the customer's Containers, HSPs should obtain the license for support of the open source applications from Parallels.

Click **Service Director > Virtuozzo Manager > Applications** to view the list of all applications available (i.e., uploaded or installed). The list displayed includes not the Applications themselves, but BaseNames - general names of templates' groups that may include several versions of the same Application.

To install a new Application (or an Application upgrade), click the **Install Application** button and follow the wizard.

Click on the Application group name to view the list of Application versions available.

Application group details include the following tabs: Package Sets, Containers, Hardware Nodes, Upgrade Containers, and Upgrade Hosting Plans. We describe the designation of each tab in details.

Application Package Sets (Versions)

The **Package Sets** tab allows you to operate with particular version of Application (let us refer to it as to a package set) including installation and upgrading Containers and Hosting Plans. The common list of package sets includes the following information about each version of selected Application:

- ID and name (in this case, this is the actual name of an Application);
- Version - the version of Application template;
- Is this Application available for installing inside Containers (green tick in **Enabled** column) or not (red cross);
- Status. An Application may have the following statuses:
 - Uploaded - the first step of installation was passed. Parallels Business Automation - Standard system examined the Application template and stores the Application template properties in the database;
 - Scheduled - an Application was scheduled for installation (i.e. the installation process was placed in the queue);
 - Installing - Installation is in process;
 - Installed - Application installed.

Caution: In the case if you uploaded the Application template from your Management Node, and this template remains in **Uploaded** state, do not delete the RPMs. Otherwise, it will be impossible to install a template later.

In order to install another version of the selected Application, click on **Install Package Set** button and follow the wizard.

To view detailed information click on Application template ID or name.

Application Template General Settings

General Settings - include Application template version, package name (RPM package name without suffices), current status (see description of this attribute above), enabled or not (see description of this attribute above), information about compatible OS templates (Operating Systems on those this Application works), disk space required (for different file systems), and description.

The **General Settings** screen displays the following:

- **Version.** The application template version. Note that version number is not available for EZ templates and thus a zeros are shown.
- **Package.** The name of the package set the application template is included.
- **Status:**
- **Registered.** A template RPM is absent on a Management Node, but this template configuration file exists in Parallels Business Automation - Standard database.

Note: A template in a Registered state cannot be synchronized with other Hardware Nodes since a template RPM is missing and a template cannot be installed. To make a template installation on Hardware Node(s) possible, a template RPM must be installed on a Management Node first. Then a template status becomes Installed and its distribution on Hardware Nodes becomes possible.

- **Installed.** Both a template configuration file and a template RPM exist on a Management Node. A template can be distributed onto any of registered Hardware Nodes.
- **Synchronized.** A template configuration file and a template RPM exist on a Hardware Node. A template RPM is unpacked, i.e., a template is installed on a Hardware Node.

Note: If a template was installed on a Hardware Node manually, then Management Node knows nothing about this and keeps a template status as not synchronized. To let the Management Node know about an actual template status, go to the **Service Director - Virtuozzo Manager - Nodes**, and select the Hardware Node. Click on **Applications or OS templates tab**. Check the box next to a template name and click the **Update Synchronization State** button.

- **Enabled.** Green tick - the template is enabled, i.e. allowed for installation into Containers and can be included in hosting plans. Red cross - the template is disabled.
- **Force jump option when upgrading to this template.** This is the Virtuozzo option used to skip application previous versions (if any) when upgrading an application to a given version. For example, you want to upgrade an application to a newer version. But the version you want to upgrade to is not the next in respect to a current one, i.e., some other versions of this application were released (and are available) before the newest version. Probably it is better to install previous upgrades and then upgrade an application to the newest version, but if you are sure that it is safe to install the latest upgrade, you can enable the jump option for this application.
- **Compatible OS templates.** The list of OSs the application is compatible with. You can edit this list.
- **Disk space usage.** Disk space used by the application for different file systems.
- **Descriptions.** Application description

Finally, the **General Settings** tab allows deleting (uninstalling) the package set (The **Delete** button at the bottom of the screen). Please, note that in this case the package set will be deleted from the Management Node (and, consequently, from all Hardware Nodes this package set was synchronized with).

Note: If you intend to uninstall an Application, you can get an error message, because some Containers may use this Application at this moment. However, you can force the uninstall. Please, be attentive, in this case you may get some problems with your Containers.

Application Template License Info

The **License Info** tab provides the information about Application vendor (full contact info) and License type (commercial or open source). The text shown is taken from the application template configuration file.

The screen displays the following:

- **Type.** The license type: commercial, GNU, etc.
- **Vendor.** The company that sells the application.
- **Website.** Application vendor website URL.
- **Summary.** License short description.
- **Description.** License Agreement text (if any).

You can click the **Edit** button and change License Info.

Applications Provisioning Inside Containers

The **Containers** tab under the application properties allows viewing the list of Containers with at least one version of particular Application installed. You can view Container properties (by clicking on its ID or hostname) and perform all operations under Container as described in this guide (on page 240). Thus, if you click on Container ID or hostname, you will be automatically redirected to Container details, **Applications** tab. Here you can also install new Applications inside Container or uninstall existing Applications.

Upgrading Containers

Hosting Plans upgrade options for a package are the same as for single package set. However, Container sample, i.e., the list of Containers displayed in popup window described earlier in this guide (on page 229) is different. In this case, you will be offered to select Containers with at least one package set from the available ones being installed. Again, you can select a particular package set to be installed in Containers selected for upgrade (special drop-down menu provided).

Synchronizing Templates With Hardware Nodes

The Hardware Nodes tab under on the application properties page allows viewing the list of all Hardware Nodes an Application is synchronized with. If at least one version of a particular Application is not synchronized with a Hardware Node, the red cross will be displayed in Synchronized column. To synchronize a package set (i.e., synchronize missing package sets) with Hardware Node, check the box next to a Hardware Node name and click the Synchronize button.

Important: You can upload to the Management Node the Virtuozzo for Windows templates only in the .efd format.

To create Containers, OS templates and Applications templates must be installed on a Virtuozzo node that hosts Containers. Templates installation is called synchronization. Templates are distributed on Hardware Nodes as RPM packages, unpacked, and installed.

➤ *To register a template on a Hardware Node:*

1. Go to Service Director > Virtuozzo Manager > Nodes > <Node>.
2. Click OS Templates/Applications. The list of all OS/applications templates installed on the Hardware Node appears on the screen.
3. Click the Synchronize button.
4. Click Refresh at the top of the page to update the system information.

Note: You can only synchronize OS templates for Parallels Virtuozzo Containers for Windows versions no older than the 3.5 release.

A template status in the templates list table tells about a template availability and existence on a Hardware Node:

- **Registered.** A template RPM is absent on a Management Node, but this template configuration file exists in Parallels Business Automation - Standard database.

Note: A template in a Registered state cannot be synchronized with other Hardware Nodes since a template RPM is missing and a template cannot be installed. To make a template installation on Hardware Node(s) possible, a template RPM must be installed on a Management Node first. Then a template status becomes Installed and its distribution on Hardware Nodes becomes possible.

- **Installed.** Both a template configuration file and a template RPM exist on a Management Node. A template can be distributed onto any of registered Hardware Nodes.
- **Synchronized.** A template configuration file and a template RPM exist on a Hardware Node. A template RPM is unpacked, i.e., a template is installed on a Hardware Node.

Note: If a template was installed on a Hardware Node manually, then Management Node knows nothing about this and keeps a template status as not synchronized. To let the Management Node know about an actual template status, go to the **Service Director > Virtuozzo Manager > Nodes**, and select the Hardware Node. Click on **Applications** of **OS templates** tab. Check the box next to a template name and click the **Update Synchronization State** button.

Upgrading Hosting Plans

Hosting Plans tab provides the information about Hosting Plans that use the application version. You can view and edit the Hosting Plan properties by clicking on the plan name. In this case you are redirected to the **Billing Director > Product Manager**. Here you can add new applications and view all the applications installed.

Upgrade options for a Hosting Plan are the same as for a single package set.

However, Hosting Plans sample, i.e., the list of Hosting Plans displayed in popup window for selection, is different. In this case, you will be offered to select Hosting Plan(s) that include at least one package set from available ones. Again, you can select a particular package set to be included in Hosting Plan(s) selected for upgrade (special drop-down menu provided).

To add a new (not upgrade) Application to a Hosting Plan, please go to the **Billing Director > Product Manager > Hosting Plans**.

Applications Included in Application Template

The applications included in the Application template are shown under the **Applications** tab.

OS Templates

To view the list of all OS templates available, select **Service Director > Virtuozzo Manager > OS Templates**.

The common list of OS templates (package sets) includes the same information about each OS template as for Applications package sets (on page 229).

In order to view the list of package sets available, click on OS template ID or name.

Package sets management and upgrade options are the same as for Application templates.

Managing Container Applications Upgrades

Container applications are managed and billed by package sets. A package set includes all versions of a particular application (i.e., the set of application templates). This means that if an application is included in a hosting plan, then absolutely all versions of this application a HSP can offer are available for customer who subscribes for a hosting plan, without the need for a customer to pay any additional fee for a new version of an application since all versions are included in the setup and recurring fee set for an application package set. So, after an application package set is purchased, all further actions within a package set (upgrades or downgrades) are not billed. Customers can also downgrade applications to earlier versions, and this does not result in any special chargebacks or fees.

When a new version of one or another application appears, this is registered as an Parallels Business Automation - Standard system event tracked by the Event Manager. If an e-mail notification action is attached to this event, an e-mail notification is automatically sent to all customers subscribed for the corresponding package set. Customers can select whether to install a new version or not.

Note: You can allow customers to disable or enable e-mail notifications for particular events. If notifications management is allowed for some event, a customer can see the **Notification Settings** icon in the **My Account** zone of the Control Panel. A customer can click on this icon, get the list of events allowed and check or clear box(es) next to event names to receive e-mail notifications for an event or not. To allow a customer to subscribe or unsubscribe for e-mail notifications on a particular events, go to the **Configuration Director > Event Manager > Events**, select an event, on an event settings menu click the **General Settings** tab and check the **Customer can control receiving notification for this event** box. You can also edit the set of events a customer receives notifications on per account basis.

Creating More Application Templates

Parallels Business Automation - Standard is shipped with several OS templates and a number of Application templates that can be installed using Application Director.

However, if you need more Applications to be available for installation inside Containers, or an update needed to already installed Application template, you can use special command-line tool (vzpkgcreat utility) to create the needed templates or template-upgrades.

For detailed instructions on templates creation, please refer to the appropriate document ("Creating Application Templates" guide) available together with the other Parallels Business Automation - Standard documentation at the **Documentation** screen within your Provider Control Center.

Setting Up Both Trial Containers and Containers Backups Creation

To improve the efficiency and reliability of Parallels Business Automation - Standard, you can create the trial Containers for your customers and create Containers backups.

You can set up the conditions both the trial Containers and backup settings on per Hardware Node basis. To this effect, go to the **Service Director > Virtuozzo Manager > Setup > Trial Container Setup** tab.

Note: You can create backups both for Containers on Parallels Virtuozzo Containers for Linux and Windows platforms. Backups can be stored either on the remote server or on a server that hosts a Container.

Keeping Container Root Passwords in Parallels Business Automation - Standard Database

For technical support purposes, Parallels Business Automation - Standard provides a special option that allows storing Container root passwords internally in Parallels Business Automation - Standard database. If this option is enabled, Containers root passwords are not removed after a Container creation, but remain available for Provider.

If a Container password is stored in Parallels Business Automation - Standard database, then provider, if needed, can get it directly from the Parallels Business Automation - Standard database using command line tools or include Container root passwords in e-mail notifications using a special placeholder.

Important: The option of keeping Container passwords in PBAS database is not available for resellers. Only provider can enable or disable it. If the option is enabled, then passwords for all Containers are kept in database, including resellers' Containers.

To store (or do not store) Container root passwords, go to the **Service Director > Virtuozzo Manager > Setup** and select the **General Settings** tab. Then click **Edit** and check or clear the **Keep Container passwords in the database** box to store or do not store Container root passwords respectively. Save the changes.

Note: By default, Containers root passwords are not stored in Parallels Business Automation - Standard database.

Backups Management

- *To view the list of all Container backups (or manage backups):*

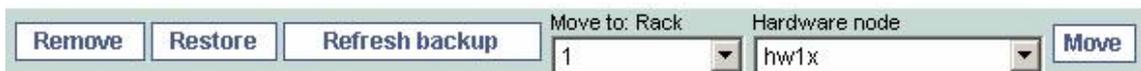
Select Service Director > Virtuozzo Manager > Backups.

The list of backups displays the following:

- Backup Container ID and Hostname;
- Backup creation date;
- Location (Hardware Node name);
- Size;
- Backed up Container current status.

You can view the detailed information about backed up Container by clicking of its ID or hostname.

From interface standpoint, Container Backups management is rather similar to Container management. Different operations under Container backups can be performed using the Action Bar at the bottom of the screen.



The Action Bar includes controls for Container backups management. You can remove, restore, refresh (replace old backup with a new one), or move backups from one Hardware Node to another.

In order to perform an operation under backup, you should select it (check the checkbox opposite backup ID) and click the appropriate button at the Action Bar. In the case if you intend to move backup to another Hardware Node, you should select a Backup, and then select the target Rack and/or Hardware Node from pull-down menus and after this, click the **Move** button.

Note: You can perform group operations by selecting several backups.

Backups management on per-Container basis is possible by viewing Container details (via Backups tab).

Creating Container

Containers can be created in one of the following ways:

- Automatically, after a Container Hosting Plan has been purchased in online store.
- Manually, from Provider Control Center.

➤ *To create a new Container:*

1. Select **Service Director > Virtuozzo Manager > Containers**.
 2. Click the **New Container** button.
 3. Follow the wizard:
 4. Select the Container owner and platform:
 - To select the owner, set the option button to one of the following:
 - **New Account** - to create a new customer account. Next step of the wizard will be the account creation.
 - **Account** - to assign the Container to one of the existing customer accounts. Click **Select** and choose the account.
 - **Reseller** - to assign the Container to one of the existing reseller accounts. Click **Select** and choose the account.
 - **Hosting provider** - to assign the Container to your own account.
- If you select any type of the account except for the Provider, the order will be placed automatically.
5. Click the **Next** button. Specify the subscription period (if before you have selected any type of the account except for the Provider) and the Container settings:
 - **Subscription period**. Select it from the drop-down menu. In addition, you can specify a certain trial period for the new Container (i.e., the period of time a customer can use this Container for free);
 - **Hardware Settings**, i.e., the order of assignment of the new Container to a Hardware Node (automatically or manually).

In case of automatic assignment, the Parallels Business Automation - Standard automatically checks the following:

- less loaded Hardware Node will be selected (by weighted assessment);
- total number of unused licenses for selected Container class on the selected Hardware Node will be checked. If no unused licenses will be detected, then the next from less loaded Hardware Node will be checked;
- if there are no Hardware Nodes with the needed Container Class licenses, then the Parallels Business Automation - Standard will create a new Container on the less loaded Hardware Node and notify a Provider Administrator about exceeding the allowable number of Container Class Licenses;

In case of manual assignment of the new Container to a Hardware Node, the Provider Administrator can select one of the Hardware Nodes. In this case, Parallels Business Automation - Standard automatically checks the following:

- Hardware Node resources. If the Hardware Node is loaded and cannot provide the required resources, then Container registration will be blocked with appropriate status message displayed.
 - Container Class Licenses number will be checked. In the case if no unused Licenses detected, the Parallels Business Automation - Standard system will create new Container and notify a Provider Administrator about exceeding the allowable number of Container Class Licenses
- Select the hosting plan that will define the Container configuration and QoS settings . Click the Select button next to the **Select Hosting Plan** field and select the hosting plan from the list that appears in the popup window. On the further steps of the wizard you will be offered to adjust the Container configuration defined by the hosting plan you have selected.
 - **Other Settings.** Type the Container root password. If necessary, add a comment.
 - Finally, you can enter a free-form comment into the **Comment** field.
 6. Click the **Next** button. You will be offered to edit the Container QoS parameters within the allowable range defined by the hosting plan you have selected before. To change or view the full list of QoS parameters, click the **Show Advanced Options.** button (click **Hide Advanced Options** to be back to the basic QoS parameters). After you make the necessary changes, click the **Next** button to proceed with Container domain(s) creation.
 7. Assign the domain to the new Container. Select one of the options:
 - **Host new domain registered elsewhere.** Type the domain name into the **Domain** field. To create the zone file for the domain in PBAS DNS, put a tick in the **Enable DNS Hosting** check box.
 - **Use an existing domain or create a new subdomain.** Type the subdomain name in the **Domain** field and select the domain from the drop-down menu. To create the zone file for the domain in PBAS DNS, put a tick in the **Enable DNS Hosting** check box.
 - **Do not assign any domain for the Container.** The new Container will get its name anyway, but it will not be resolved by DNS. You may type any identifier in the Container name field. If you leave this field empty, then the new Container will get its numeric ID (CTID, in Virtuozzo terms) as a name.
 8. Click the **Next** button. The form for IP addresses allocation appears on the screen. Define the IP addresses assignment by selecting one of the following:
 - **Assign static IP addresses automatically.** In this case, PBAS will check the maximal allowed number of IP addresses for the selected Hosting Plan. Exceeding of maximal number of IP addresses is not allowed and in this case you will get an error message.
 - **Assign static IP addresses automatically from the following IP Pools.** Select particular IPv4 and IPv6 pools that will be used for IP addresses allocation.
 - **Assign static IP addresses manually** Type IP addresses as a comma separated list.

9. Click the **Next** button. The list of all Applications available in the Parallels Business Automation - Standard appears on the screen, the applications included in the hosting plan you have selected for this Container are checked.
10. Check the boxes next to Applications' names to select the Applications to be installed inside the new Container.

If you do not see some of the Applications (that were installed as you can recall), please, check the following:

(i) Whether the OS template defined in the hosting plan selected for this Container is compatible with the missing Applications. Note that Parallels Business Automation - Standard Control Panels and the most of the other applications are not available for SuSe or Debian Containers. For such Containers only the Parallels Power Panel and SSH are available.

(ii) Whether the default prices were set for all Applications installed. All Applications used in custom Containers must have the preset default prices since these prices are used for Customer Account Balance recalculation in case of Container upgrade. Though, if an Application was installed without setting the default prices, you can do this in Product Manager Settings (see page 109).

11. Click the **Next** button. The review screen appears.
12. The review screen shows you all the Container parameters. You can click the **Back** button to return to any of the Container creation steps.
13. Click the **Finish** button. The Container creation procedure starts. The list of all Containers appears on the screen. At the bottom of the screen you can see the **Status Bar**. You can click on the **Show** link at the **Status Bar** to see the system messages and view the Container creation progress in real-time.

Operating Container

You can operate any Container directly from the Container listing screen by using controls above the list and at the bottom of the screen. You can select more than one Container environment to operate by checking several boxes next to Container IDs.

- **New Container** button at the top of the screen - Creates a new Container, either based on some hosting plan, or completely custom.
- **Start** - Starts selected Container(s). The Start operation can be performed under Containers in the Stopped or in the Booting status. In the first case the previously stopped Container becomes Running. In the latter case, an Administrator forces Container start to provide hosting services on credit.
- **Stop** - Stops (shuts down) selected Container(s). The Stop operation is used for temporal stopping of Containers that were in the Running state.
- **Restart** - Restarts the selected Container(s) in the same way as physical server restarts.
- **Backup** - If backups are allowed, saves a Container private area on one of the Hardware Nodes (server-side backup).
- **Repair** - The Repair (on page 244) operation restarts selected Container(s) in Repair Mode, allowing you to fix any problems. The Repair mode allows getting the file access to a Container data if a Container is out of order.
- **Create** - Creates the private file area on disk, prepares the ordered environment for running, often performed automatically). The Create operation is used for Containers in the Ordered state. In this case a Container becomes Stopped after creation.
- **Synchronize** - Synchronizes the selected Container(s) configuration with the respective hosting plan parameters.
- **Destroy** - Selected Container(s) will be physically deleted from disk. The logical information about these Containers will still be kept for accounting purposes.
- **Recreate** - Recreate the selected Container(s) with the same configuration. To recreate a Container with the ability of selecting another host OS (on page 245), click on the Container name to get its settings displayed and then click **Recreate**.
- **Migrate** - Selected Container(s) will be physically moved to the Hardware node selected (see page 242).

Note: In Reseller Control Center the Move option is not available if Containers selected for migration are hosted on servers that do not belong to a Reseller.

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To configure a virtual environment, just click on its name, and a screen with configuration settings will open.

➤ *To operate Containers:*

1. Select **Service Director > Virtuozzo Manager > Container**.
2. Select the Container to operate: check the box at the Container you want to operate (to select all Containers check the checkbox at the column heading).
3. Click the relevant button at the Action bar located above the list and at the bottom of the screen. The operation starts.

Note: If you have more than one Hardware Node, then you can migrate a Container from one Hardware Node to another. To migrate a Container from one Hardware Node to another, select a Container as described above, then select the Rack and the target Hardware Node from the relevant menus at the Action bar and click the **MOVE** button.

Migrating Container

The Virtuozzo Hardware Node is the system with higher availability requirements in comparison with a typical Linux system. If you need to upgrade a Hardware Node hosting several Containers, then shutting it down for hardware upgrade will make all these Containers unavailable at once. You can also run a awkward situation when you are short of space for new Containers. To facilitate hardware upgrades and load balancing between several Hardware Nodes, Virtuozzo provides you with the ability to migrate Containers from one physical box to another.

Important: Migration of Containers is only possible between nodes that use the same VZAgent protocol version. To recall the VZAgent version at a node, go to **Service Director > Virtuozzo Manager > Nodes**, select the node, then select the **General Settings** tab. Look in the **Network Settings** section, the **Protocol** field.

Migrating Containers is possible if Virtuozzo for Linux is installed on two or more Hardware Nodes, so you are able to move a Container to another Node. Migration may be necessary if a Hardware Node is undergoing a planned maintenance or in certain other cases. In Virtuozzo 3.0, you can choose one of the following ways to migrate a Container:

- Migrating a Container by using the standard migration technology. In this case there is a short downtime needed to stop and start the Container during its migration from the Source Node to the Destination Node.
- Migrating a Container by using the zero downtime migration technology. In this case the 'stop' and 'start' operations are not performed and the migrated Container is restored on the Destination Node in the same state as it was at the beginning of the migration. This greatly reduces the migration time and puts it on the same footing as the delay caused by a short interruption in the network connectivity.

➤ *To migrate one or more Containers:*

1. Select **Service Director > Virtuozzo Manager > Container**.
2. Select the Container(s) to migrate: check the box next to the Container you want to migrate (to select all Containers check the box at the column heading) and click **Migrate**.
3. In this window, you should do the following:
 1. Select the destination Hardware Node in the drop-down menu. Note that only those Hardware Nodes are displayed that are already registered in PBAS.
 2. If you want to make use of the Zero downtime migration, please check the corresponding checkbox.
 3. In the **Migration Type** option, select either the **Live** or **Lazy migration** to migrate the Container by using the zero downtime migration technology. The latter enables you to additionally speed up the migration process and can be efficiently used if your Container is running a number of memory-consuming applications. This decreases the size of the image file storing all Container private data and transferred to the Destination Node by leaving the main amount of memory in a locked state on the Source Node and swapping this memory from the Source Node on demand. Thus, the migrated Container can be started before the whole memory is transferred to the Destination Node, which drastically reduces the service delay of the corresponding Container. When a process tries to access a page of memory that has not yet been migrated, the request is intercepted and redirected to the Source Node where this page is stored.

Note: You can find more information on the Containers migration in the [Virtuozzo User's Guide](#).

4. You can additionally **Change Container IP addresses after migration according to IP pools assignment rules on destination node** to match the IP addresses pool configuration on the target Hardware Node. You can leave out this option if you do not want to change the Container(s) IP address(es) for some reason, e.g. if you have fallen short of spare IP addresses on the target Node.
4. Click **Migrate** to initiate the operation.

Repairing Container

The repair operation is used to recover a Container (for example, if a Container fails to start). A Container can be brought to the Repairing status from the Stopped status only. A Container in Repairing status can be only brought in Stopped status again or Destroyed. All the other operations are not available in this case, so you have the file access only.

When Container passes in the Repairing state, the special temporal Container with the same hostname as the broken one is being created. The private area (containing private, non-shared data) of the broken Container is being mounted to the special `/repair` directory in the temporal Container.

➤ *To bring a Container in the repair mode:*

1. Select **Service Director > Virtuozzo Manager > Container**.
2. Select the Container to repair: check the checkbox next to the Container you want to repair.
3. Click the **Repair** button. The operation starts. At the very bottom of the screen you can see the **Status Bar**. You can click on the **Show** link at the **Status Bar** to see the system messages and view the operation progress in real-time. You can refresh the screen to see the actual Container status.

Note: You can access the Container in the **Repair** state via ssh.

➤ *To access a Container in the Repair state via ssh:*

1. Select **Service Director > Virtuozzo Manager > Container**.
2. Click on the Container ID or hostname. The Container properties appear on the screen.
3. Select the **General Settings** tab. The Container general settings appear on the screen.
4. Click the **Edit** button. The screen reloads with the Container general settings for editing.
5. Reset the Container root password: type and retype the Container root password.
6. Click the **Update** button.
7. In the command line, type: `ssh root@VE_IP_address`. Replace the `VE_IP_address` with the actual IP address you want to enter.
8. When prompted, type the password you have set for the user root.
9. As soon as you log in, change the working directory into the `/repair`. You have entered the broken Container.
10. Recover Container data.

➤ *To start a Container from the repairing mode:*

1. Select **Service Director > Virtuozzo Manager > Container**.
2. Select the repairing Container: check the checkbox at the Container you want to start.

3. Click the **Stop** button at the Action bar located at the bottom of the screen. The operation starts. You can refresh the screen to see whether the Container status had changed into Stopped.
4. Select the Container again: check the checkbox at the Container you want to start.
5. Click the **Start** button.

Recreating Container With Ability to Change OS

You are about to recreate the Container. The list of OSes compatible with all the applications installed at the Container is validated automatically. If no compatible OSes are found, then you are offered to recreate the server with the same OS as before.

Warning: The Container will be first destroyed and then created with the same set of applications, - all the other data inside the server will be lost. Please backup your data inside the server if you want to proceed. To get back to the Container settings, click **Cancel**.

➤ *If you want to proceed, fill the form:*

1. If available, select a new host OS from the **Select operation system** menu.
2. Type and retype a new root password for the Container.
3. To proceed with recreation, click **Destroy and Recreate**.

Managing Plesk Clients and Domains

Plesk is comprehensive Virtual or Physical Webserver management software formally known as Plesk Server Administrator (PSA). For more information about Plesk, please see on the Web (<http://www.parallels.com/en/products/plesk>).

Parallels Business Automation - Standard allows:

- Establishing connection with Plesk boxes by means of the simple registration of Plesk Hardware Node in the Parallels Business Automation - Standard.
- Creating and selling Plesk hosting plans (on page 140).
- Accepting and processing orders on Plesk services using the Parallels Business Automation - Standard billing.
- Creating Plesk domains and Plesk Clients manually, from the Control Center on the basis of existing Plesk Domain or Plesk Client hosting Plans.
- Provisioning Plesk services on Plesk servers.
- Managing Plesk Applications vault. Parallels Business Automation - Standard automatically fetches the information about Plesk applications on all registered Plesk nodes and Provider can manually add new applications and register both new applications and existing ones in Parallels Business Automation - Standard, which allows selling these applications in the frame of Plesk domain hosting plans.
- Moving all Plesk domains existing on a Plesk node to another IP address by reassigning a Plesk node IP address.

Connection to Plesk nodes is established via the special agent software - Plesk Agent. Thus, before registering the Plesk node in Parallels Business Automation - Standard, it is necessary to install the Plesk Agent to a Plesk node. And when you register a Plesk node in Parallels Business Automation - Standard, you need to install the Plesk agent to the Plesk Node and after this, go to the Infrastructure Manager and specify the IP address of the Plesk node you are registering and the Plesk node administrator's password.

Customers that have subscribed on Plesk hosting at your shop get the Parallels Business Automation - Standard Control Panel to manage their domains, but with the Plesk functionality and real access to the Plesk server. Customers subscriptions can be managed from the Control Center using the Parallels Business Automation - Standard billing (renewal settings, paying orders, putting subscription on hold, notifications, etc.).

Note: Parallels Business Automation - Standard and Plesk use different name servers. Plesk domains purchased in Parallels Business Automation - Standard store are managed by Parallels Business Automation - Standard DNS servers, while DNS files are created and stored on Plesk DNS server according to Plesk internal DNS templates. Certain DNS records are initially created and stored on the Parallels Business Automation - Standard DNS server, according to the DNS template specified for the corresponding Parallels Business Automation - Standard hosting plan. Changes to domain zone files in the Plesk panel are partly applied to the DNS files stored on Parallels Business Automation - Standard DNS server. DNS files created on Plesk and Parallels Business Automation - Standard DNS files get automatically synchronized, except for SOA, PTR, and NS records, which are stored on Parallels Business Automation - Standard name server and are not modified.

You can set up the conditions for Plesk Domains in **Service Director > Plesk Manager > Setup**.

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Setting Up Trial Plesk Domains Creation

- *To view (or change) current settings for trial Plesk domains:*
 1. Select **Service Director > Plesk Manager > Setup**.
 2. Click the **Edit** button. Here you can define Hardware Nodes on which creation of trial (or non-trial Plesk domains) is allowed.
 3. Change the trial Plesk domains settings:
 - a** Set the option button to one of the following:

- Allow trial Plesk domains creation on all Hardware Nodes. In this case, set the radio button to **All the Hardware Nodes**.
 - Allow trial Plesk domains creation on selected Hardware nodes only. In this case, set the radio button to **Selected Hardware Nodes** and click the **Add** button. The list of all registered Hardware Nodes will be displayed in popup window. Select Hardware Nodes by clicking on their names. In this case, the names of selected Hardware Nodes will appear in **Selected** menu. In the case of mistake, you can unselect a Hardware Node. To this effect, click on the name of this Hardware Node in **Selected** menu (its name will be highlighted) and click the **Remove** button.
 - Allow trial Plesk domains creation on all Hardware Nodes except selected. IN this case, set the radio button to **Allow the hardware nodes except selected** and select the Hardware Nodes in the same way as described in the item above.
 - Finally, for the sake of reliability of your Parallels Business Automation - Standard system, you can ease the restrictions imposed: you can allow creation of trial Plesk domains on other (i.e., restricted) Hardware Nodes if the allowed Hardware Nodes are over-committed or unavailable. To this effect, check the appropriate checkbox.
- b** Available settings for non-trial Plesk domains creation are absolutely similar.
4. Click the **Update** button to save changes.

Plesk Applications Vault Management

Application vault is the location at Plesk server where you store all site application packages that can be easily deployed at any domain hosted on the server.

The Plesk - Parallels Business Automation - Standard interface (Plesk agent) automatically fetches the information about all site applications available at all Plesk servers registered in Parallels Business Automation - Standard. The information about available applications is updated periodically by Plesk agent. Provider can make a Plesk application available for selling in the frame of Plesk hosting plans and set both the setup and recurring fees for an application.

The scheme of Plesk Applications management in Parallels Business Automation - Standard is the following:

- Plesk agent gets the names of site applications from all Plesk nodes registered in Parallels Business Automation - Standard and shows these applications' names in a single list under **Service Director - Plesk Manager - Applications**. The list of applications displays the following:
 - **ID**. An application numeric identifier assigned in database.
 - **Name**. An application SHort name.
 - **Description**. An application short description.
 - **Instances**. How many running application instances is by now at all Plesk nodes. If you click on an application name, you'll see an application details screen, and then, you can select the **Nodes** tab to view the list of Plesk nodes an application is installed and see how many application instances is now at each Plesk node. This information is automatically fetched from Plesk nodes approximately once in hour.

- In this case no applications are moved to Parallels Business Automation - Standard Management Node, the applications only become visible in Parallels Business Automation - Standard by their names. All applications stay at Plesk server, thus Applications vault management tools provided in Parallels Business Automation - Standard just allow setting up the automated applications provisioning in the frame of Parallels Business Automation - Standard hosting plans. Applications are recognized by their names, thus it is very important to make sure that all applications are registered in Parallels Business Automation - Standard by the same names as at Plesk server.
 - Provider can:
 - Add a description to any of existing applications.
 - Make an application available for selling in the frame of Plesk client or Plesk domain hosting plans, i.e., register an application in Parallels Business Automation - Standard.
 - View the Plesk nodes an application is installed. This information is provided by Plesk agent.
 - Manually add an application and make it available for selling in the frame of hosting plans. Please note that Plesk agent does not check whether the application name is correct. If you make a typo in application name and as a result its name will become different from the name on Plesk server, it will be not possible to provide this applications for customers, because Parallels Business Automation - Standard will not find such an application on Plesk server. Thus, if you manually register an application, make sure that you enter the correct name. Plesk agent will later automatically update an application status and get the information about Plesk nodes an application is installed. Manual registration of applications is useful if, for example, you have already started an application installation on Plesk server and want to add and register this application in Parallels Business Automation - Standard without waiting for automated Plesk agent update.
- *To view the names of applications automatically collected by Plesk agent from registered Plesk nodes:*
1. Select **Applications** under the **Plesk Manager**. The list of registered applications appears. Registered applications are applications available for sale in the frame of hosting plans.
 2. Click the **Get Site Applications from Plesk Nodes** button. The list of all applications available on all registered Plesk nodes appears. The list displays the following:
 - **Name.** An application name as it is registered at Plesk server.
 - **Description.** An application short description.
 - **Installed.** Green tick means that an application is registered in Parallels Business Automation - Standard and can be sold in the frame of a hosting plan. Red cross means that an application is available at one of Plesk servers, but is not available for sale, i.e., this application will be not shown in the list of applications during Plesk domain or client hosting plan creation or under the **Applications** tab within a hosting plan properties.
- *To make an application available for Plesk domain or client hosting plans:*
- To register applications from the set of automatically recognized by Plesk agent and thus, surely existing on at least one of the Plesk nodes registered in Parallels Business Automation - Standard:
 - To register particular applications, check the box next to an application name and click the **Register Selected** button.

- To register absolutely all applications, without respect to any selections, click the **Register All** button.
 - To manually add an application, click **Applications** on the left menu. As the list of registered applications appear, click the **Add New Plesk Site Application** button:
 - Into the **Name** field, enter the application name (make sure that the application name you enter is exactly the same as at Plesk node).
 - Add a free-form description of this application into the **Description** field.
 - Click the **Save** button.
- *To see on what Plesk nodes an application is actually installed:*
1. Select **Applications** under the **Plesk Manager**. The list of registered applications appear.
 2. Click on the name of application you want to see the nodes for.
 3. As the selected application details appear on the screen, select the **Nodes** tab. The list of all Plesk nodes registered in Parallels Business Automation - Standard appears. The application availability is shown in the **Installed** column. Green tick next to a node name in the **Installed** column means that the application is installed on a node. Red cross means that an application is not installed on a node.

Note: Applications availability on the Plesk nodes is detected automatically by Plesk agent polling.

Creating a Plesk Domain

Both Providers and Resellers can create Plesk Domains directly from Provider (or Reseller) Control Center by selecting the corresponding Hosting Plan and customer account.

To make it possible to create Plesk domains manually, please register at least one Plesk Node and create at least one Hosting Plan of Plesk Domain type.

- *To create a Plesk Domain:*
1. Select **Service Director > Plesk Manager**.
 2. Click **Domains** on the **Plesk Manager** submenu. The list of all Plesk Domains appears on the screen.
 3. Click the **New Plesk Domain** button. Follow the wizard, enter all the necessary data, click **Next** to go to the next step:
 4. Select the Account to create a Plesk domain for and the platform (Unix or Windows):
 - a Set the option button to the type of the account:
 - To **Account** to select the customer account.
 - OR
 - To **Reseller** to select the Reseller account.

CHAPTER 19

Managing Domains

Domains can be registered or transferred both from the Control Center (by Provider or Reseller) and from Store or Control Panel, in accordance with orders placed by customers.

Domain name length allowed for registration via Parallels Business Automation - Standard is from 1 character and up to 63 characters.

The list of domains displays the following:

- **ID.** A domain numerical identifier assigned automatically in Parallels Business Automation - Standard database.
- **Domain.** Domain name.
- **Account.** The name of an account a domain is registered for.
- **Added by.** The name of a registered person (user) a domain has been registered.
- **Registrar.** The name of domain registration plug-in a domain has been added into Parallels Business Automation - Standard. **Registered Elsewhere** means that a Registrar is unknown and thus the automated domain renewal is not possible for a domain.
- **Exp. Date.** A domain registration expiration date. For domains registered elsewhere the expiration date is unknown and thus stated as "Unlimited".
- **Status.** A domain current status:
 - **Unregistered** - domain is not registered yet and thus is not available for service.
 - **Registered** - domain is considered as registered and thus can be used for services. This status can be used both for domains with Registrar known and domains registered elsewhere. In the latter case, it is supposed that a domain is really registered since a user that has added a domain has stated this.
 - **Registering** - domain registration in progress.
 - **Transferring** - domain transfer in progress.
 - **Error** - error occurred during domain registration or transfer.
 - **Renewing** - domain renewal in progress.
 - **Zone is starting** - Domain zone is being configured in PBAS. This status occurs if DNS zone startup is set to "Before domain registration" for this TLD (on page 84). This option is designed to meet the requirements of some registrars, which start checking a customer name servers right after a domain registration request is received. In this case, if a customer have his/her name servers not configured properly by the moment of domain registration order placement, a registrar sends an error response. If domain zone is started before sending domain registration request to Registrar, a domain normally gets the statuses: **Unregistered > Zone is starting > Registering > Registered**.
 - **Terminating** - information about domain is being removed from Registrar. This status occurs after a domain termination request is sent from PBAS to Registrar. The status is shown till the response about successful termination is received from Registrar.

- **Terminated** - information about domain is removed from Registrar, domain registration terminated. This status occurs for a very short time and then a domain becomes "Registered elsewhere".

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Configuring Domain Registration Plug-Ins

For the fresh Parallels Business Automation - Standard installation, Parallels Inc. offers a set of plug-ins for establishing a connection with the domain registrars, so you just have to key in the necessary information into simple forms. Please note that in this case, you should open the Account with the registrars where you want to register your domains and receive your own logins, private keys and other data, depending on the Registrar's internal rules.

Domain registration plug-ins are shipped as RPM modules independent from Parallels Business Automation - Standard functionality.

After installation, a plug-in becomes available in Parallels Business Automation - Standard as a selectable type for a new domain registration plug-in configuration. To add a domain registration plug-in based on one of a standard configurations, it is enough to go to **Service Director > Domain Manager > Plug-ins**, click **New Plug-in**, enter a new plug-in configuration name and select a configuration type. After this, a plug-in configuration form appears on the screen. The only thing to do after this - fill the form and save the configuration. The number of plug-ins that can be added on the basis of the same standard configuration is not limited.

Note1: The Parallels Business Automation - Standard installation owner defines the set of domain registration plug-ins available for each reseller.

The list of domain registration plug-ins (to domain registries and registrars) shipped with Parallels Business Automation - Standard is available at the Parallels official website (<http://www.parallels.com/en/products/hspcomplete/templates/domain>).

Note2: If you are planning to use OpenSRS services for the online domain registration, then Port 55000 for OpenSRS (horizon.opensrs.net) should be opened on the Management Node. In the case if you intend to use eNom services for the online domain registration, then Port 80 for eNom should be opened on the Management Node (the host should be agreed with eNom).

Please, make sure that the RPM packages necessary for online domains registration are installed (refer to the Parallels Business Automation - Standard Installation Guide).

You can view the Plug-in lookup state in the **Domain lookup mode** field of the Plugin Setup window. The mode may be as follows:

- registrar API is used for lookup (green indicator)
- WHOIS lookup is used; all plug-in's TLDs are assigned to some WHOIS (green indicator)
- WHOIS lookup is used; and some TLDs are not assigned to any WHOIS (yellow indicator); TLDs which are not assigned to WHOIS servers are listed in 'Comment' field
- WHOIS lookup is used; no TLDs are assigned to WHOIS servers (red indicator)

Note: Many registrars accept requests from known hosts only and require that you specify the client IP address (i.e., your Management Node IP address) in your account profile. Please, clarify this issue with registrars' support before you start using a domain plug-in.

Important: The ability for resellers to use the own configuration of domain plug-ins is defined in Reseller Configuration (on page 183). Reseller Configuration can be assigned in reseller account **General Settings**.

Understanding Domains Management in Parallels Business Automation - Standard

Generally, a domain management can be splitted into the two groups:

- Domain operations at Registrar, for example, domain registration, renewal, transfer, registrant contacts management, etc.
- DNS zone management that provides the scope of a domain application.

Speaking about Parallels Business Automation - Standard, there is the third aspect of domains management:

- Configuring services that require a domain for hosting subscriptions like Plesk domains and Virtuozzo Containers.

We now describe how Parallels Business Automation - Standard follows this approach to domains management.

Domain operations at Registrar are performed in Parallels Business Automation - Standard using domain registration plug-ins (on page 82) that provide communication with a number of Internet Registrars. If it is not necessary to support domain operations at Registrar from Parallels Business Automation - Standard or there is no need in such operations, it is possible to add a domain into Parallels Business Automation - Standard as 'Registered Elsewhere'. In the latter case, a domain registrant just renews a domain and performs other operations at Registrar manually, on his/her own responsibility.

Any domain in Parallels Business Automation - Standard can use DNS hosting or not.

Domains Registered or Transferred Via Parallels Business Automation - Standard Plug-Ins

Billing Issues. Such domains can be purchased separately, in the frame of one of the Domain Registration hosting plans or together with one of hosting packages (any hosting plan type except for One-Time Fee Item). On such purchase, a special Order is placed and a special Domain Registration Subscription is created when this Order is completed. Creation of a special domain subscription allows synchronizing an actual domain expiration date at Registrar with Domain Registration subscription expiration date in Parallels Business Automation - Standard, which provides the automated renewal order generation. Such domains are billed according to retail prices set in a corresponding Domain Registration hosting plan.

DNS Issues. DNS hosting for such domains is a free service that can be enabled or disabled at any moment by provider or customer. Note that after DNS hosting is disabled the corresponding DNS zone is removed from Parallels Business Automation - Standard! As soon as DNS hosting is enabled, it becomes possible to manage zone manually from Parallels Business Automation - Standard web based interface.

Services Configuration. Such domains can be assigned to one of the existing subscriptions owned by a customer (domain registrant). This operation allows configuring a specific services on a subscription a domain has been assigned to. For example, to create a website on a particular domain for a particular Virtuozzo Container, it is necessary to assign this domain to a corresponding Container subscription. When such domain is purchased together with a hosting package, a domain is automatically assigned to a newly created hosting subscription, which allows to configure services right after a subscription is created.

Automated DNS Management. Each subscription a domain can be assigned to, may have a specific requirements to DNS zone configuration. As soon as a domain is assigned to a subscription, its DNS zone starts being managed automatically. Automated DNS zone management is normally set up by DNS template associated with a subscription.

Note: For Plesk domain subscriptions DNS template can be ignored depending on DNS management permissions set for a Plesk domain. For example, if the **Manage DNS** permission is on, Plesk becomes a primary source for DNS synchronization and DNS zone is imported from Plesk DNS.

Termination Issues. After a corresponding Domain Registration Subscription is terminated a termination request is sent to a Registrar and a domain is considered as **Domains Registered Elsewhere**. The latter is done to prevent misconfiguration of services on a hosting subscription a domain may be assigned to before Domain subscription termination.

Domains Registered Elsewhere

Billing Issues. Such domains can be purchased only together with a hosting package (any hosting plan type except for One-Time Fee Item) or added to an existing subscription. If DNS hosting service is enabled for a domain, then such domain is billed according to the prices and limits set in hosting plan a domain is assigned to (the '*Number of domains with DNS hosting provided (numdnshosting)*' billable resource).

DNS Issues. DNS hosting for such domains is a billed service (see above). Note that after DNS hosting is disabled the corresponding DNS zone is removed from Parallels Business Automation - Standard. As soon as DNS hosting is enabled, it becomes possible to manage zone manually from Parallels Business Automation - Standard web based interface.

Services Configuration. Such domains shall be assigned to one of the existing subscriptions owned by a customer (domain registrant). This operation allows configuring a specific services on a subscription a domain has been assigned to. For example, to create a website on a particular domain for a particular Virtuozzo Container, it is necessary to assign this domain to a corresponding Container subscription.

Automated DNS Management. Each subscription a domain can be assigned to, may have a specific requirements to DNS zone configuration. As soon as a domain is assigned to a subscription, its DNS zone starts being managed automatically. Automated DNS zone management is normally set up by DNS template associated with a subscription.

Note: For Plesk domain subscriptions DNS template can be ignored depending on DNS management permissions set for a Plesk domain. For example, if the **Manage DNS** permission is on, Plesk becomes a primary source for DNS synchronization and DNS zone is imported from Plesk DNS.

Termination Issues. After a subscription a domain is assigned to is terminated such domain is removed from Parallels Business Automation - Standard DNS and Parallels Business Automation - Standard database.

Additional DNS Management Options

To facilitate configuration of services, DNS Template types have been introduced. Now you can create DNS templates (on page 89) that can be used in a particular hosting plan types.

In any case, a domain can be assigned to only one subscription. A domain can be moved from one subscription to another by a customer from the Control Panel or by Provider, from the Control Center under a domain properties. Please note that when a domain is moved between subscriptions, its DNS records automatically added before are fully rewritten in accordance with a new subscription DNS settings.

To help controlling the automated DNS zone management, a new tab has been introduced within a domain settings - **DNS Records Suppliers** (on page 270). The subscriptions a domain is assigned to are listed under this tab. A domain can have three DNS record suppliers, as maximum: Domain Registration subscription, hosting subscription (all hosting types excluding One-Time Fee Item and Domain Registration), and a DNS template that can be assigned manually to add a particular record into a domain zone file.

Registering a Domain from Control Center

➤ *To register a domain:*

1. Open the **Service Director** submenu on the Navigation tree and select **Domain Manager**.
2. Open the **Domain Manager** submenu on the Navigation tree and select **Domains**. The list of all domains registered in Parallels Business Automation - Standard appears on the screen.
3. Click the **New Domain** button. The domain registration wizard starts. Roll-back is possible on any step of the wizard. Just follow instructions.
4. Select the account a domain is to be registered for. If you want to register a domain for one of your customers or resellers, set the option button to an account type and click the **Select** button next to this account type. Choose an account from the list that appears in the popup window. To add a domain for your provider account, set the option button to your account name.

Note: Only domain registered for HSP Company (for Provider Account) can be set as default. Please, make sure that at least one domain is registered within your Parallels Business Automation - Standard system for Provider Account.

5. Set the option button to what you are going to do:
 - Register a new domain(s)
 - Transfer an existing domain
 - Add registered domain.

Selecting Both the Default Domain and the Domain for Trial Containers Hostnames

After you register at least one domain for HSP Company (Provider Account) within your Parallels Business Automation - Standard system, you should set default domain so that your prospect customers could register for their subscriptions the subdomains in this domain.

In this case, you should have the list of all domains (Domains screen) displayed. After domain(s) registration, the list of all domains will be displayed automatically. Otherwise, please click the Domains link on the Navigation tree or Registered Domains link at Domain Manager dashboard.

The list of domains displays the following:

- **Domain.** The name of a domain;
- **Account.** The name of an Account a domain was registered for;
- **Added by.** This column shows the name of a User (staff member or a Customer) that had added a domain, and consequently, points to the origin of domain Order (Provider Control Center or HSPstore). Since several Users can be associated with an Account, this additional information helps you to manage domains;
- **Registrar.** The Internet Registrar, a company that registered a domain;
- **Exp. date.** The date a domain registration period expires;
- **Zone Created.** Whether an appropriate zone file is created for this domain. In other words, the green tick in this column indicates that a domain is successfully registered in Parallels Business Automation - Standard (appropriate Order is completed, and a domain is manageable). Red cross - that a domain is not registered (domain Order is not paid yet, and a zone file is not created).

Click on the domain name registered for Provider Account. Domain details will be displayed.

In order to set the default domain, its General Info (namely, Policy settings) should be edited appropriately. Thus, click the Edit button.

Default domain will be offered to your customers in online store to create subdomains. In case your prospect customer does not have registered domain or does not intend to register new domain, he (or she) will definitely use the default offered. Therefore, in order to set domain as default, you should allow customers (at least Provider's ones) to register subdomains in this domain. To this effect, please set the radio button to one of the positions that allow registering subdomains.

In addition, you can allow registering hostnames for trial Containers. If the Use domain for trial Container checkbox marked, then this domain will be offered to your customers in HSPstore.

You certainly can set several domains as default ones and allow several domains to be used for trial Containers. At the same time you can set several domains both as default ones and available for trial Containers.

To confirm settings, click the OK button. Changes will be immediately applied to subscription cycle at your HSPstore.

Promoting Domains Registration

You can create the special promotions to waive the domain registration fee in the **Billing Director - Discount Manager - Promotions**. Such promotions allow setting up the minimal subscription period to apply the promotion, the period of time to waive the domain-registration fee if the promotion was applied, and maximal amount to be waived.

In addition, you can create the coded promotions that can be activated by a coupon code entered by a customer in the HSPstore.

Transferring or Registering Domains in Parallels Business Automation - Standard

This section describes how to provide the automated renewing of domains registered elsewhere (on page 257) and added to the Parallels Business Automation - Standard with DNS hosting or without DNS hosting.

To provide the automated domain registration renewal, it is necessary to transfer a domain under one of Internet Registrars with plug-ins configured in Parallels Business Automation - Standard. In this case, a domain subscription is created, so a customer could pay a domain renewal order using the Parallels Business Automation - Standard billing system and renew a domain registration automatically, via one of Parallels Business Automation - Standard domain registration plug-ins.

The possible usage scenario for Register/Transfer of domains registered elsewhere is:

A customer adds a domain into Parallels Business Automation - Standard and states that this domain is registered at some registrar. At some moment, domain registration expires. Customer decides to renew it, but with the ability of further automated renewal using one of the Parallels Business Automation - Standard plug-ins. In this case, Provider registers a domain. The corresponding order is generated in Parallels Business Automation - Standard and Domain subscription is added. Transfer is performed similarly. After registration/transfer is finished, a domain starts being billed by prices set in corresponding hosting plan.

Registration or transfer can be performed automatically or manually, depending on a domain plug-in ability of automated domains registration. To make the Parallels Business Automation - Standard registration/transfer options more clear, we shortly describe the options mentioned in the the step-by-step procedures below:

- **Request registrar for domain transfer/registration.** In this case a domain transfer or registration request is automatically sent to the Registrar you want to transfer a domain to or register a domain at. This Registrar sends the whois query and defines the Registrar a domain is currently managed. After this the receiving Registrar requests the former Registrar whether a domain should be really transferred. After a domain transfer is agreed, a domain is rendered pending and transfer starts. A domain status in Parallels Business Automation - Standard becomes Transferring. At the same time, the Parallels Business Automation - Standard domain plug-in checks all the pending domains and requests a receiving Registrar (typically, once a day) about the transfer progress. As the transfer is finished, the domain status automatically becomes Registered in the Parallels Business Automation - Standard.
- **Transfer/Register domain to your registrar account manually.** In this case you should first log in to a Merchant Interface at a Registrar you want to transfer a domain to or register a domain at and manually perform all the operations necessary for transferring a domain under your Merchant Account. After this, you can go to the Parallels Business Automation - Standard Provider Control Center and select this option.

Note: Not all Registrars support automated domain registration/transfer. Please, clarify this issue with the Registrar you want to transfer a domain to before sending the domain transfer/registration request.

➤ *To register/transfer a domain:*

1. Open the **Service Director** submenu on the left menu and select **Domain Manager**.
2. Click **Domains** on the **Domain Manager** submenu. The list of all domains appears on the screen.
3. Select a domain marked as 'Registered elsewhere' by clicking on its name.
4. Select the **General Information** tab within a domain properties.
5. Click the **Register/Transfer** button.
6. Select the further operation by setting the option button to one of the following:
 - **Register domain.** To register a domain using one of the plug-ins configured in Parallels Business Automation - Standard. Select a Domain Registration hosting plan. Only the corresponding hosting plans are offered, i.e., with the corresponding TLD available.
 - **Transfer an existing domain.** To transfer a domain. Select a Domain Registration hosting plan. Similarly to domain registration options, only the corresponding hosting plans are offered, i.e., with the corresponding TLD available and domain transfer allowed.
7. Click the **Next** button.

➤ *For transfer, fill the following form:*

- **Domain Properties**
 1. Review the hosting plan a domain will be billed by, check prices, check the Registrar. Note that a Registrar and transfer fee as well as domain renewal period after transfer are defined in hosting plan. If something is wrong, click **Back** and select another hosting plan.
 2. To perform the transfer without charging the transfer fee, check the **Do not charge customer for transfer** box. In this case, the zero order will be generated and processed immediately. Renewal orders will be generated according to billing rates set in the hosting plan. To charge customer for transfer operation, leave this box clear.
 3. **Domain expiration date (including renewal period).** You can set the domain subscription expiration period the same as an actual domain expiration at Registrar. This allows synchronizing domain registration periods at Registrar and in Parallels Business Automation - Standard, so that the next subscription renewal in Parallels Business Automation - Standard happens exactly after a domain expires at Registrar. Further renewal orders will be generated for the period set in a hosting plan for transferred domains renewal. Click the button to get the calendar and select the date.
- **Transfer options**
 1. Select the transfer mode.
 - Set the option button to **Request registrar for domain transfer/registration** to perform the transfer/registration automatically.
 - Set the option button to **Transfer domain to your registrar account manually** if you would prefer to transfer a domain to your Reseller account at a Registrar manually.

- **DNS information**

In the **DNS information** part of the form, you can specify where the domain zone is to be stored. To enable DNS hosting for the domain(s) leave the **Do not host my domain in the Provider DNS, I will manage it manually elsewhere** box clear. To disable DNS hosting, check this box and specify the name servers where the domain zone is to be stored.

1. Click the **Next** button. Set domain owner contacts:

You can create your contacts (up to 10 for one account name) under **Domain Manager > Setup > Contacts** tab. All of the contacts created by you are included in the drop-down menus next to contacts' names.

The number and names of contacts offered here may vary depending on a Registrar. The most typical set is Owner Contact, Administrative Contact, Billing Contact, and Technical Contact.

To create a new contact, click the **Create new** button. A new contact will be available for selection for all contact types right after you save it.

To create a new contact on the basis of an existing one, select a contact you want to base upon from the drop-down menu. The **Create copy** button activates. Click the **Create copy** button. The contact form appears. Adjust the contact data in the form and save changes. The new contact will be added with a new name (the auto-incremented numeric prefix added to the name of contact).

2. Review the domain settings and if everything is correct, click the **Finish** button to confirm the domain transfer.

For registration, fill the following form:

- **Domain Properties**

1. Review the hosting plan a domain will be billed by, check prices, check the Registrar. Note that a Registrar and subscription fee are defined in hosting plan. If something is wrong, click **Back** and select another hosting plan.
2. Select domain registration period from the **Registration period** drop-down menu.
3. To perform the domain registration without charging the domain registration fee, check the **Do not charge customer for registration** box. In this case, the zero order will be generated and processed immediately. Renewal orders will be generated according to billing rates set in the hosting plan. To charge customer for domain registration, leave this box clear.

Registration options

4. Specify the order of domain registration by setting the option button to one of the following:
 - **Request registrar for domain registration** to perform the transfer/registration automatically.
 - **Register domain to your registrar account manually** if you would prefer to register a domain for your Reseller account at a Registrar manually.
5. **Domain expiration date (including renewal period)**. Similarly as for transfer (see above), click the  button to get the calendar and select the date.

- **DNS information**

Set DNS hosting options similarly as for domain transfer (see above).

1. Click the **Next** button.
2. Set the domain owner contacts similarly as for domain transfer (see above).
3. Review the domain settings and if everything is correct, click the **Finish** button to confirm the domain registration.

Sorting Out Domains Transferred Away

When a domain is transferred from Provider Domain Registrar Account to some other Registrar, which is not related to PBAS, such a domain should stop being billed in PBAS, because the service for the domain is provided beyond PBAS. However, the subscription related to this domain remains active. As a result, the renewal orders are generated in PBAS for such subscriptions, and customers may be charged automatically for the service they do not already use.

To automatically sort out the domains transferred away, the periodical domains status check should be configured. Go to **Service Director > Domain Manager > Setup** and enable the check.

The domains that are transferred away are shown under the **Service Director > Domain Manager > Domains**, the **Domains required attention** tab.

The domain subscriptions that remain after the domain has been transferred away, must be terminated manually.

To terminate the domain subscription, select the domain by putting a tick into the check box next to the domain ID. To terminate several subscriptions at a time, select them all. Then click  **Terminate subscription**.

To check a domain status, select the domain in the same way as described above. To recheck several domains, select them all. Then click **Recheck Domain**.

The list of domains displays the following:

- **ID.** A domain numerical identifier assigned automatically in PBAS. Click to get the domain details displayed.
- **Domain.** Domain name. Click to get the domain details displayed.
- **Registrar.** The name of domain registration plug-in a domain has been added into PBAS. Click to get the plug-in information displayed.
- **Account.** The name of an account a domain is registered for. Click to get the account information displayed.
- **Exp. Date.** A domain registration expiration date. For domains registered elsewhere the expiration date is unknown and thus stated as "Unlimited".
- **Domain Status.** A domain current status.
- **Subscription ID.** The ID of the domain subscription. Click to get the subscription details displayed.
- **Subscr. Status.** The current status of the domain subscription.
- **Whois.** The link to whois search for the domain, if whois has been configured for the TLD. If whois is not configured, then the non-clickable link **Not Configured** is shown.

Domain General Information

Domain General Information includes the following data and controls:

Domain Properties:

- **Domain ID.** Numeric identifier of the domain assigned in PBAS.
- **Status.** Domain current status:
 - **Unregistered** - domain is not registered yet and thus is not available for service.
 - **Registered** - domain is considered as registered and thus can be used for services. This status can be used both for domains with Registrar known and domains registered elsewhere. In the latter case, it is supposed that a domain is really registered since a user that has added a domain has stated this.
 - **Registering** - domain registration in progress.
 - **Transferring** - domain transfer in progress.
 - **Error** - error occurred during domain registration or transfer.
 - **Renewing** - domain renewal in progress.
 - **Zone is starting** - Domain zone is being configured in PBAS. This status occurs if DNS zone startup is set to "Before domain registration" for this TLD (on page 84). This option is designed to meet the requirements of some registrars, which start checking a customer name servers right after a domain registration request is received. In this case, if a customer have his/her name servers not configured properly by the moment of domain registration order placement, a registrar sends an error response. If domain zone is started before sending domain registration request to Registrar, a domain normally gets the statuses: **Unregistered > Zone is starting > Registering > Registered**.
 - **Terminating** - information about domain is being removed from Registrar. This status occurs after a domain termination request is sent from PBAS to Registrar. The status is shown till the response about successful termination is received from Registrar.
 - **Terminated** - information about domain is removed from Registrar, domain registration terminated. This status occurs for a very short time and then a domain becomes "Registered elsewhere".

- **Account.** The name of account that owns the domain. Click to view account details.
- **Added by.** The name of account user that added the domain. Click to view user details.
- **Order.** Number of Order placed for domain registration (or transfer). Click to view Order details.
- **Subscription.** Numeric identifier of subscription created according to the provisioned domain Order.
- **Used by Subscriptions.** Numeric identifier(s) of subscription(s) where this domain is used.

Domain Dates (shown only for domains registered using domain plug-in available from PBAS; for domains registered elsewhere this information is not available):

- **Registration date.** Domain registration date.
- **Update date.** The date when the domain registration date have been updated from Registrar.
- **Expiry date.** Domain subscription expiration date according to PBAS billing. Domain expiration date in PBAS may differ from the date at Registrar. For example, customer purchased domain in PBAS for 3 years and payed for all 3 year period. At the same time at Registrar side a domain may be autorenewed yearly.
- **Real expiry date.** Domain expiration date checked out from Registrar.
- **Real expiry date checked on.** The latest date when domain registration date have been checked out from Registrar.

Included Services:

- **DNS Hosting.** Whether domain zone file is kept by PBAS name servers (this service is called DNS hosting).
- **WHOIS Privacy.** Whether domain owner information is not shown by WHOIS query.

Policy (only for domains registered for Provider account):

- **Who can register subdomains in this domain?** Whether the domain is offered in store for subdomains registration or Provider uses this domain for internal needs.
- **Domain for trial subscriptions.** Whether this domain can be used for trial subscription.

Registration information (shown only for domains registered using domain plug-in available from PBAS; for domains registered elsewhere such information is not available):

- **Registrar.** The name of PBAS domain registration plug-in used to register the domain.
- **Registrar Lock.** Whether transfer of the domain is blocked from the current Registrar.

Domain extended data (the fields in this frame are registrar specific and contain additional information related to the domain)

Button	Click To
Cancel	Get back to the list of domains (when viewing domain information) or to exit the edit mode without saving changes (when editing).
Log in to CP	Transparently log in to Customer Control Panel on behalf of domain owner.

Set Lock	Set registrar lock for a domain. Registrar lock blocks domain transfer from the current registrar. If registrar lock is set, then Unset Lock button is shown and used to release domain from registrar lock.
Check expiry date	Request registrar for the domain expiration date. Update the domain expiration date and show it on the screen.
Send Auth Code	Email the domain Authorization Code required when transferring domains from one registrar to another to the domain owner. The button is available for domains registered in particular plug-ins. Visibility of this button in CP can be managed. See more information below this table.
Mark domain as Registered	Start services provisioning manually by assigning the domain the Registered status. Use this button if the domain was transferred manually and the transfer was successfully finished or the domain was successfully registered, but there is no information about this in Parallels Business Automation - Standard.
Edit	Edit domain properties.
OK	Exit the Edit mode and save the changes made to domain General Information. Shown in Edit mode only.

About sending Auth Code. The ability of requesting the Auth Code is implemented in PBAS for the plug-ins: eNom, OpenSRS, MIT, Nominet, ESNIC. The **Send Auth Code** button is always shown in PCC/RCC > Domain Manager > Domains, a domain General Information tab; depending on the Interface settings, in CP > select All My Domains from subscription selector > select a domain, the General Information tab. For the domains registered via other plug-ins, the **Send Auth Code** button is not shown anywhere in PBAS, without respect to the Interface Settings. The visibility of the **Send Auth Code** button in CP is set under Configuration Director > Miscellaneous Settings > Interface Settings. It is possible to show this button only in PCC/RCC and request Auth Code for domain owners only on demand, or allow to request Auth Code for non-debtor accounts only, or always show this button in CP.

Managing DNS Records Suppliers

DNS records can be supplied by up to three sources: either the Parallels Business Automation - Standard subscription with its inherent DNS template (domain subscription and a hosting package a domain is assigned to) or the custom DNS template created and assigned to the domain.

These DNS records sources are called *DNS Records Suppliers* and can be managed at **Service Director > Domain Manager > Domains > Domain > DNS Records Suppliers**.

Managing a Domain Zone File

The DNS data is represented as DNS records in a zone data file, and these files are handled by the name server. There are a number of different kinds of DNS records, each suited to a specific kind of data.

The set of records in a zone file defines a domain properties and allows locating over the Internet all of the sub-names and/or computers containing under the organizational domain name.

Updating Domain Owner Contacts

Parallels Business Automation - Standard provides the ability of automated domain owner contact information (on page 97) update from Control Centers and Control Panel for all domain plug-ins that support such an update.

The composition and format of contact data required for domains registration differs depending on Registrar. Some Registrars require a rather specific data. To simplify domain registration procedure for your customers, you can replace Registrar's contacts form with your own one (a so-called base contacts) that have a standard format.

Provider contacts are managed under **Domain Manager > Setup > Contacts** tab.

Customer contacts are managed under the **Contacts** tab within an account properties.

All domains registered using plug-ins that allow the automated whois/contact information updates have the special tab under the domain settings - the **Contact Info** tab. Provider, Reseller or a customer can open a domain settings, select this tab, click the **Edit** button and adjust the domain owner profile. After the changes are saved, the new contact information is automatically sent to the corresponding registrar. This allows keeping the domain owner profile up to date at registrars servers and ensures the correct response on the whois queries in respect to a domain ownership.

CHAPTER 20

Managing SSL Certificates

The main purpose of SSL certificate is to establish the identity of website through a trusted third party (the issuer of the certificate). Certificates are issued by Certificate Authorities.

The certificate plug-ins implemented in PBAS support the ability of private key and CSR generation. The ability for customers to generate Certificate Signing Request in online store is set up in SSL hosting plans.

Note: Internationalized domain names (IDNs) are not supported for SSL certificates generation.

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Configuring SSL Certificates Plug-Ins

The ability of establishing connection to Certificate Authority (CA) is implemented in PBA via a pluggable module (plug-in) that stands as a template and thus allows creating a number of configurations.

Parallels Business Automation - Standard provides a number of SSL plug-ins, so you just have to key in the necessary information into simple forms. Please note that in this case, you should open the Account with the CAs you want to provide SSL certificates from; receive your own logins and other data.

SSL plug-ins are shipped as RPM modules independent from Parallels Business Automation - Standard functionality.

After installation, a plug-in becomes available in Parallels Business Automation - Standard as a selectable type for a new SSL plug-in configuration. To add an SSL plug-in based on one of a standard configurations, it is enough to go to **Service Director > SSL Manager > Plug-ins**, click **New Plug-in**, enter a new plug-in configuration name and select a configuration template. After this, a plug-in configuration form appears on the screen. The only thing to do after this - fill the form and save the configuration. The number of plug-ins that can be added on the basis of the same standard configuration is not limited.

The Parallels Business Automation - Standard installation owner defines the set of domain registration plug-ins available for each reseller.

Important: The ability for resellers to use the own configuration of SSL plug-ins is defined in Reseller Configuration (on page 183). Reseller Configuration can be assigned in reseller account **General Settings**.

Managing SSL Certificates

Provisioning

SSL certificates provisioning flow is the following:

- Customer places SSL certificate order.
- Provisioning starts. The SSL plug-in sends the certificate issue request to Certificate Authority (CA).
- CA sends the approver e-mail to customer. The purpose of this is confirmation of customer domain and finally, approving of SSL certificate issuing. Approver e-mail address is specified for Certificate Signing Request (CSR) and the address should be in the domain specified for CSR. Approver e-mail is typically not related to customer account contacts, thus PBAS does not know about approver e-mail processing.
- Approver e-mail contains confirmation link. Customer clicks this link to be redirected to CA page, where customer confirms domain name and approves certificate. CA starts SSL certificate issuing.
- Depending on the SSL plug-in settings, the plug-in starts checking certificate status either right after the request is sent to CA or one or more days later. Check is performed every hour (by design, cannot be changed) and lasts one or more days depending on the plug-in settings and certificate status.
- Certificate status check stops the error is passed by CA (certificate status becomes **Error**) or check period is over, or success (certificate status becomes **Issued**). The certificates provisioning log is available under **Service Director > SSL Manager > Transactin Log**.
- The ready SSL certificate is sent to customer to his/her approver e-mail address.

Note: If certificate gets the **Error** status, go to **Service Director > SSL Manager > SSL Certificates** and select a certificate (click on its ID). Here you can re-send certificate issuing request or re-check certificate availability at CA. This option is available only if SSL certificate is in **Error** status.

For **Issued** SSL certificate it is possible to resubmit CSR, re-generate private key and re-issue SSL certificate. In this case, new certificate will be issued on renewal date only. Contacts are also updated on certificate renewal only.

All SSL certificates are shown under **Service Director > SSL Manager > SSL Certificates**.

The certificates list displays the following:

- **ID.** Certificate numerical identifier. Click to view the certificate details or re-issue, or edit certificate details.
- **Domain Name.** Domain name the certificate is issued for.
- **Account.** Name of the account the certificate is ordered or issued for.
- **Purchase date.** The date when the certificate has been ordered.
- **Expiry date.** The date when the certificate expires. Auto-renewal settings are configured per SSL plug-in.
- **Status.** Certificate current status (passed by the SSL plug-in, updated in real time):
 - **Ordered.** Certificate order is placed, certificate issue request is not sent to CA yet.

- **Pending.** Certificate issue request is sent to CA. Waiting for approval from customer.
- **Issued.** Certificate successfully issued.
- **Error.** Error occurred during certificate issuing. Click on the Details link to know the source of problem.
- **Expired.** Certificate is expired.

Editing or Re-Issuing Certificate

To upload new SSL certificate or resubmit CSR, or change other details, click the **Edit** button. New certificate is issued on renewal date only.

For certificates that have **Error** status it is possible (depending on the kind of error):

- If certificate availability check fails, the **Recheck availability** button is shown. Customer order is **Completed** in this case, but certificate is absent. Click the button to recheck certificate availability and try to fetch it. If certificate availability check period is not over, then the plug-in starts periodical check every hour till check period is over. If check period is over, the plug-in checks certificate availability only one time.
- If certificate issuing fails, then the **Try issuing again** button is shown. Customer order is **Pending** in this case. Click the button to resend certificate issuing request to CA.
- The **Cancel order** button is used to cancel the uncompleted certificate. This does not cancel order.

For certificates in **Pending** status:

- The **Resend approver email** button is shown. It allows resending approver e-mail to customer.

For certificates in **Issued** status (issued using SSL plug-in that sends SSL certificate to customer by e-mail only, for example such as OpenSRS):

- The **Resend certificate email** button is shown. It allows requesting Certificate Authority to resend SSL certificate to customer by e-mail.

For Active VeriSign SSL products it is possible to request VeriSign Web site malware scan:

- If you use VeriSign Trust Seal at your website, then malware scan is daily initiated for your website by VeriSign. To request a not scheduled scan, click **Request on demand scan**. Successful malware scan is required to keep the VeriSign Trust Seal at your website. If successful malware scan is not available, then VeriSign Secure Seal is displayed instead.

SSL certificate **General** settings screen displays the following (the fields shown for Issued SSL certificate):

SSL Certificate Properties:

- **Domain.** Domain name the certificate is issued for.
- **Status.** Certificate current status:
 - **Ordered.** Certificate order is placed, certificate issue request is not sent to CA yet.
 - **Pending.** Certificate issue request is sent to CA. Waiting for approval from customer.
 - **Issued.** Certificate successfully issued.

- **Error.** Error occurred during certificate issuing. Click on the **Details** link to view problem details.
- **Expired.** Certificate is expired.
- **Canceled.** Certificate provisioning has been canceled by provider due to an Error occurred during certificate issuing.

- **SSL Product.** The type of SSL certificate.
- **SSL Plugin.** The name of SSL plug-in used to issue the certificate.
- **Approver Email Address.** The e-mail submitted by customer for CSR. Customer receives confirmation link to this e-mail and later - the certificate.
- **Server Software Type.** The type of web server.
- **Account.** The name of the PBAS account the certificate is ordered or issued. Click the link to view the account details.
- **Subscription.** Numerical identifier of PBAS SSL subscription. Click the link to view the subscription details.
- **Subscription period.** SSL certificate subscription period.

SSL Certificate Dates:

- **Purchase date.** The date when the certificate has been ordered.
- **Expiry date.** The date when the certificate expires.

SSL Certificate Signing Request:

The information used for CSR generation, CSR itself and SSL certificate text:

- **Common Name (domain name).** Domain name the certificate is issued for.
- **Email Address.** The e-mail submitted by customer for CSR. Customer receives confirmation link to this e-mail and later - the certificate.
- **Organization Name.** Name of organization that will use SSL certificate.
- **Organizational Unit Name.** Name of organizational unit that will use SSL certificate.
- **Locality (City).** Customer city.
- **Country.** Customer country.
- **Bits.** RSA private key length.
- **Private Key.** RSA private key body.
- **Certificate Request (CSR).** CSR body.
- **The contact data from the SSL certificate body are current.** The field shows whether the contacts submitted for CSR generation was not changed (Yes, current), or was updated (No, not current).
- **SSL Certificate body.** SSL certificate text.

Extended Attributes:

The information asked from the customer depending on SSL product type. The data varies depending on certificate type. Typically, organization name and contacts are asked. Additionally, specific data can be asked.

For VeriSign SSL products the VeriSign Trust Seal with Seal-in-Search can be enabled. This is done by means of extended attributes.

The VeriSign Trust Seal is a dynamic, animated graphic that displays on Web pages secured by VeriSign SSL Certificates and Web sites authenticated by VeriSign. When users click the VeriSign seal, it opens a VeriSign-generated verification page containing information about your organization, the status of your malware scan, and SSL Certificate details (if you are an SSL customer).

To get the VeriSign Trust Seal script, click **Edit** and then put a tick in the check boxes:

- **Seal in search** - Initiates request to VeriSign for Trust Seal script with Seal-In-Search. If you tick this check box, the **Trust seal** check box will be ticked as well and it's not possible to disable it till **Seal in search** is enabled. This happens because Seal-in-Search is a part of VeriSign Trust Seal. Seal-in-Search displays the VeriSign Trust Seal next to trusted links in search results.
- **Trust seal** - Initiates request to VeriSign for Trust Seal script. This option can be enabled without Seal in search enhancement.

The VeriSign Trust Seal script is sent to the e-mail where your VeriSign SSL certificate have been sent.

For more details about VeriSign Trust Seal, look at the VeriSign website (<http://www.verisign.com>).

Managing Certificate Contacts

The contacts submitted for SSL certificate are taken from customer account profile: administrative, technical, and billing contacts.

The account contacts used for SSL certificate are *copied only once* at the moment when customer places SSL certificate order. From this moment, SSL contacts become a kind of a contacts snapshot used for SSL only.

Changes made to the customer account contacts do not affect SSL contacts. Similarly, changes made to SSL contacts do not affect account contacts.

Contacts update for SSL certificate is supported on certificate renewal only. If contacts are updated during subscription period, this update is saved in PBAS database only. On SSL certificate renewal, the latest SSL contacts version is sent to Certificate Authority.

Viewing SSL Certificates Transaction Log

SSL certificates transaction log shows the results of certificate status checks performed by SSL plug-ins.

Transaction log displays the following:

- **ID.** Numerical identifier of task. Click to view details.
- **Account name.** Name of the PBAS account the task has been performed.
- **Certificate ID.** Numerical identifier of SSL certificate assigned in PBAS.
- **Domain Name.** Domain name the certificate is issued for.
- **Operation.** The name of operation performed over a certificate.
- **Date.** The date and time when the operation has been performed.
- **Status.** Short description of operation result (if relevant) and current status of the certificate:
 - **OK.** Certificate issued successfully.
 - **Error.** Error occurred during certificate issuing. To get details, click on operation ID.
 - **Not issued yet.** Certificate issuing is in progress.
 - **Retrying.** Certificate re-issuing is in progress.

CHAPTER 21

Support and Administration

This chapter describes the tools that are used to provide support and administration, that is Trouble ticket system, Problem Viewer, Screens Viewer, Mass Mailer, as well as settings and operations related to these tools.

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Using the Problem Viewer

The Problem Viewer provides the maximum of a problem details that is possible without access to the Parallels Business Automation - Standard code. To this effect, you need to get the problem ID and submit it to the Problem viewer.

To use the Problem Viewer, select **Configuration Director > Logging and Errors > Problem Viewer**.

Trouble Ticket System

Parallels Business Automation - Standard provides an integrated trouble ticketing system that allows reporting and answering customers' problems directly through the interface and by e-mail.

If you do not want to use the built-in trouble ticket system or you need some additional helpdesk features not supported by the built-in system, you can use one of the external helpdesks integrated with Parallels Business Automation - Standard:

- Cerberus Helpdesk or
- Kayako SupportSuite.

The API provided (see the Parallels Business Automation - Standard SDK for details) allows you to integrate more external helpdesks.

It is possible to switch between the Parallels Business Automation - Standard trouble ticket system to an external helpdesk system on-the-fly in the **Account Director > Support Manager > Setup > General** tab.

Configuring Parallels Business Automation - Standard Trouble Ticket System

The Provider Control Center allows processing problem reports that came from provider's customers, posting tickets for their customers accounts, and viewing trouble tickets posted by customers of your resellers.

The Reseller Control Center allows resellers to process trouble tickets posted by their customers and post trouble tickets to their provider.

Parallels Business Automation - Standard allows using either the built-in Ticket System or an external HelpDesk.

How It Works

Provider or reseller can configure the Trouble Ticket System in such a way that customers are able to submit trouble tickets both directly from the Control Panel web-based interface and send problem reports via e-mail. E-mail reports are automatically converted into corresponding trouble tickets.

Trouble tickets are managed and grouped by the following attributes:

- One attribute defined by a customer. This is the problem subject or *category*.
- Two attributes defined by provider:
 - *Priority* of problem (e.g., normal, high, etc.). Note that when you enable the Trouble Ticket System, you should select the default priority that will be assigned to all new tickets posted by customers. Later you can view the ticket details and assign another priority to a ticket.

- *Queue* to place a problem report (e.g., new, on hold, etc.). Similarly to priorities, you should select the default queue to place all new tickets posted by customers. Later you can move a ticket to another queue.

Assigning Problem Reports Watchers

After a problem report is posted, provider or reseller can assign a trouble ticket to one of their staff members and set one or more problem watchers from their staff members. In case a ticket status changes, a watcher receives an e-mail notification sent to a staff member contact e-mail specified in his/her Parallels Business Automation - Standard user profile. In addition, it is possible to specify several internal e-mail addresses to send watcher notifications.

Trouble Ticket System Initial Setup

To use the Trouble Ticket System, you should make some initial settings, which are necessary for the Trouble Ticket System to work, namely:

- Create and enable one or more ticket categories (roughly pre-defined problem subjects) . Customers will select one or another category when placing a problem report from the Control Panel. Thus, it's better to have at least six categories, one per each zone of the Control Panel: for example: system, site, account/billing, etc.
- Create and enable at least one ticket priority.
- Create and enable at least one ticket queue.

To set up the Trouble Ticket System, please go to the **Account Director > Support Manager > Setup**. The Trouble Ticket System settings are grouped under several tabs:

- **General**. Here you can enable or disable the Trouble Ticket System or allow adding new tickets for your customers. In addition, you can switch the Trouble Ticket System to an external Helpdesk.
- **Queues**. Click to add a queue or reassign the default queue.
- **Categories**. Click to add a category or enable/disable the existing ones.
- **Priorities**. Click to add a priority or reassign the default priority.
- **Mail Gates**. Click to configure one or more mail addresses to receive trouble tickets via e-mail.

Configuring E-Mail Notifications About Rejected E-Mail Problem Reports

A problem report posted via e-mail can be rejected if:

- A Mail Gate a report was addressed to appears to be disabled by the moment a report was received.
- A Mail Gate is active, but The Trouble Ticket System is disabled globally.
- A Mail Gate is active and the Trouble Ticket System is enabled, but set to disallow posting new problem reports by customers.

The corresponding events for all the three cases were added. You can go to the **Configuration Director > Event Manager** and configure e-mail notifications for each event.

Managing Trouble Tickets

To view or process the trouble tickets, go to the **Select Account Director > Support Manager > Trouble Tickets**.

In Provider Control Center trouble tickets are grouped into two lists, under two tabs:

- **To Provider.** This is the list of problem reports posted by provider's customers and resellers. Provider can move these tickets between queues, change and categories and priorities, add comment (both visible or invisible for customer), close or reopen tickets, and reassign trouble tickets to staff members.
- **To Resellers.** This is the list of problem reports posted by customers of resellers. Provider can just view these tickets and supervise the tickets processing.

In Reseller Control Center trouble tickets are also grouped into two lists, under two tabs:

- **From Customers.** The list of trouble tickets posted by reseller customers. Reseller can process these tickets in the same way as provider manages trouble tickets posted by his customers.
- **To Provider.** This is the list of trouble tickets posted by reseller to provider. Reseller can add and process tickets in the same way as customers from the Control Panel.

Using the Screens Viewer

Each of the Parallels Business Automation - Standard screens has the unique numerical identifier that consists of five numbers divided with point. The screen ID is shown at the upper-right of each screen.

Your customers may specify the screen ID in their problem reports (e.g., "... the problem occurred in System zone, mail management, screen ID is the following..."). And you can just submit the screen ID to your Screens Viewer and get the path to the needed screen. This helps you to locate the problem and solve it more quickly. To locate a screen, go to the **Configuration Director > Logging and Errors > Screens Viewer**.

Using the Mass Mailer

Using the Mass Mailer you can send the massive e-mail notifications to your resellers and customers.

Note: If needed, you can re-send the mass mail.

To send a mass mail, go to the **Marketing Director > Announcement Manager > Mass Mailer**.

Managing Parallels Business Automation - Standard Objects Description Templates

A description template is a piece of text describing one of Parallels Business Automation - Standard objects (a financial document like an order or an invoice, an account, or a subscription) in HTML or text format composed from plain text and placeholders.

Placeholders are special expressions, which, having been inserted in the text, are replaced with the actual values when a template is used for an actual object description.

A description template can be inserted into e-mail notifications in the same way as the other placeholders. In addition, a description template is used for printer-friendly formatting of documents (shown after clicking the **Show for Printing** button below a document details) and generating an object description in PDF format to be attached to an e-mail notification, so a customer could have a description well formatted for printing. That is why description templates in Parallels Business Automation - Standard are called *Print Forms*.

Note: If a subscription is not yet created for an **Open** order, the subscription name is not shown in printable view when you click **Show for Printing** though the `@@order.subscription_name@` placeholder is used in a Printable Form.

The print form benefit `an@@order.subscription_name@d` its main difference from an ordinary placeholder is that you can edit it, change formatting, and create as many print forms as you need. Print forms are automatically fetched by the Event Manager for the corresponding e-mail notifications. For example, you have created the print form for an invoice description. Then, when you go to Event Manager, select some event that involves an invoice and try to attach an e-mail notification as an action to this event, you will see that the placeholder for the corresponding print form is shown in the list of placeholders (so you can paste it into a message body) and this print form can be attached to an e-mail notification as a PDF file.

To facilitate creation of new print forms and give you a place to start, the default set of print forms describing the basic financial documents is provided. The default print forms can be edited, but cannot be deleted since they are used by default to generate the printer-friendly formatting of financial documents like orders, invoices, adjustments, etc.

To create a print form or manage the existing ones, go to the **Configuration Director > Miscellaneous Settings > Print Forms**.

Managing Events

Parallels Business Automation - Standard provides an opportunity of tracking particular events that happen within the system and configure actions to be performed in connection with each event including both e-mail and Instant Messaging (SMS) notifications and other actions (including scripts execution).

The tools for events management are grouped under the Configuration Director > Event Manager.

The Event Manager submenu provides the following options:

- **Event Log.** All events (from the set of events tracked in Parallels Business Automation - Standard) happened. Here you can view the events listing, look at a particular event details, know out a subscription an event is connected with, and, since the Parallels Business Automation - Standard allows attaching different actions to each event replay an action that already was performed when an event have happened.

The list of logged events displays the following:

- **ID.** Event type numerical identifier assigned automatically in Parallels Business Automation - Standard.
- **Object.** The type and unique ID of an object involved in the event.
- **Event type.** The event name, which shortly describes the event point.

Note: You can narrow the list of events down to specific event type or object type events or those having a particular status using the filter option. You can also search the event by its unique object ID.

- **Completed.** This is the date of the event completion.
- **Status.** The status of the event (processing or completed).
- **Actions.** The list of all actions that can be attached to events.

Note: Resellers cannot add custom scripts as actions attached to events. Only provider can configure this. To add custom script for reseller, log in to RCC as provider (in PCC, go to Account Director > Reseller Manager > Resellers, select reseller account, switch to the General Settings tab, then click Login to RCC).

- **Events.** The list of events tracked by Parallels Business Automation - Standard with the ability of attaching actions to these events.
- **Instant Messaging.** Here you can configure such actions as SMS notifications to be attached to different events. You can configure the instant messaging plug-in and specify mobile phone numbers to send notifications.
- **Notification Settings.** Here you can enable or disable sending financial notifications to your customers.

For the fresh Parallels Business Automation - Standard installation, you have the list of Events with default Action (and e-mail notification) assigned to each Event. You can customize default Actions or add new ones. SMS notifications can be configured separately in order to send SMS messages to HSPc and their staff members mobile phones.

Selecting Different Events for Different Types of Objects

In addition, it is possible to set a specific action for a particular object type involved in an event. For example, in respect to events that happen with subscriptions (e.g., a subscription period has ended, or a subscription was created), you can set a special action for each type of subscription (dedicated, Plesk, Virtuozzo Container, etc.) as well as for a subscriptions in general, without respect to a subscription type.

Setting Conditions for Events Execution

You can also limit an action execution by certain conditions, which can be configured by clicking the **Edit Conditions** button on an action view screen accessed via **Configuration Director - Event Manager - Actions - Action name**. In this case, the action set for a subscription in general will be performed in all cases satisfying the condition set (if any) and actions attached to a specific types of subscription will be performed only if such is defined. For example, you can set an e-mail notification for a subscription-related event in general, a script execution or an action for each particular type of subscription or an action execution on a subscription conditioned by a certain due period.

Note 1: Mind that the conditions set for an action will jointly limit this action execution. To apply several conditions one by one to an action, you need to create more similar actions and limit each of them by the appropriate condition.

Note 2: When setting conditions for events that involve traffic and disk space usage limitations, for example, "64 The disk space is nearly used up" or "65 The traffic is nearly used up", the values of traffic or disk space used is ALWAYS SET IN KB.

Notifications and scripts can be configured using **Configuration Director > Event Manager > Events**. Here you can also look at the list of events being tracked. Note that you can repeat any action connected with a particular event. To this effect open the event details (click on an event name) and repeat one or all of the actions.

You can also allow customers to disable or enable e-mail notifications for particular events. To this effect, go to the **Configuration Director > Event Manager > Events**, select an event and edit event settings.

To view the events history, go to the **Configuration Director > Event Manager > Event Log**.

Note: The number of Events to be stored in the Event Log may be set in **Configuration Director > Miscellaneous Settings > Data Retention**.

Service Logging In to Resellers and Customers Tools

If needed, you can log in to the Reseller Control Center or Control Panel on behalf of your customers directly from the Provider Control Center without the need to open your browser and enter login /password.

The most general way to log in to any of resellers/customers tools, is opening the customer or reseller account details (in the Account Director - Customer Manager or Reseller Manager) and click the Login to CP or Login to RCC button respectively.

The logging button is also available both at Container - General Settings and Domain properties - General Settings screens.

Using the Maintenance Mode for your Hardware Nodes

If you need to take a certain hardware node offline for maintenance or upgrade you can bring a Hardware Node into a special maintenance mode that temporarily disables management of Containers or Plesk domains hosted on this Hardware node from the Control Panel.

To bring a node into the maintenance mode, go to the Service Director > Plesk Manager > Nodes or Virtuozzo Manager > Nodes. Select a Hardware Node and edit its general settings.

Note that you can compose a Mass Mailer (on page 282) for customers on that specific Hardware Node.

Managing the User Password Strength

You can set up the length and other strengthening features for passwords used to log in to Parallels Business Automation - Standard Control Centers and Control Panels. The password enhancement also sets the rules for Container users passwords.

The idea is simple: try to prevent users from choosing passwords that could be guessed by "Crack" by filtering them out. To set the passwords strength, go to the Configuration Director > Security Manager > Setup.

Updating Parallels Business Automation - Standard

The Up2date Manager is a useful and simple tool that allows you to check whether your Parallels Business Automation - Standard version is up-to-date and receive information about the available Parallels Business Automation - Standard updates and hotfixes.

The Up2date Manager examines the Parallels Business Automation - Standard version at your side and connects to the Parallels Business Automation - Standard update server. If there are any updates available for the Parallels Business Automation - Standard version you are currently using, you will immediately get the information about the latest updates. Keeping your Parallels Business Automation - Standard version up-to-date helps you to increase the system stability and performance.

Having been switched on, the Up2date Manager once a week automatically connects to the Parallels Business Automation - Standard update server and collects information about available updates and presents this information to you. However, If needed, you can run this check manually at any time.

In addition, the Up2date Manager provides two more options:

- Available plug-ins. The list of all plug-ins available with the currently installed Parallels Business Automation - Standard version.
- Service Monitor (on page 289). Monitor the status of services critical for Parallels Business Automation - Standard functionality.

➤ **To view the available Parallels Business Automation - Standard updates:**

1. Open the Configuration Director submenu on the Navigation tree and select the Up2Date Manager. The Up2date Manager dashboard appears on the screen.

In the right part of the Up2date Manager dashboard you can see the list Parallels Business Automation - Standard updates available for the Parallels Business Automation - Standard version you are using, the last check date, and whether the automated up-to-date check is enabled or not. And in the left part of the Up2date Manager dashboard there are shortcuts used to switch on or off the automated updates check and to check for updates manually.

The Up2date Manager dashboard displays the following:

Up2date Manager	
-----------------	--

Up2date status	Whether you use the latest Parallels Business Automation - Standard version or updates are available.	<p>Check Now</p> <p>Disable (or Enable) - Depending on the current Up2date Checker Status</p>	<p>Click on this link to check for available updates immediately. You can do this without respect to Up2date Checker status.</p> <p>Click on this link to turn on or turn off the automated weekly upgrades check.</p>
Available version	The latest Parallels Business Automation - Standard version available at the update server.		
Installed version	The currently installed Parallels Business Automation - Standard version.		
Date of Last Check	The date when updates were checked last time.		
Up2date Checker Status	Whether the automated updates check is performed (Enabled) or not (Disabled).		

Available Plug-ins		
Ready for install.	The total number of plug-ins available.	Plug-ins. The link to the list of plug-ins available.
Ready for upgrade.	How many plug-ins can be upgraded. In other words, for how many plug-ins updates are available.	

Service Monitor		
-----------------	--	--

Running	How many of vital services are running	Services. The link to the list of services
Stopped	How many of vital services are stopped	History. The link to the vital services check history.

Monitoring the Vital Services Status

Parallels Business Automation - Standard allows tracking in a real time the status of all the services that are critical for Parallels Business Automation - Standard viability:

- Web server
- MySQL servers
- DNS server
- Parallels Business Automation - Standard Task Manager
- Virtuozzo Collector

All these services must be up and running for Parallels Business Automation - Standard to work (support database, process orders, etc.). The service monitor controls the status of these services and if one of them stops, tries to immediately start them automatically. If the Service Monitor fails to start one of these services, it issues the system warning visible at any screen of Parallels Business Automation - Standard Control Center, so that the Control Center administrator could know about the outage and fix it.

➤ *To view the status of Parallels Business Automation - Standard vital services:*

1. Open the Configuration Director submenu and select the Up2date Manager.
2. Click Service Monitor on the Up2date Manager submenu. The list of services with their statuses appears on the screen.
3. Click the Check Now button to perform the check and refresh the screen.

Checking Parallels Business Automation - Standard Database Integrity

The Parallels Business Automation - Standard Integrity Checker allows checking the Parallels Business Automation - Standard database integrity. For example, possible inconsistencies in HSP balance calculation, accounts profile, subscriptions details (e.g., possible accidental mismatches in hosting plans assignment, subscriptions ownership, payables issuer data, etc).

The main benefit of integrity checks is the opportunity of early tracking and fixing the data mismatches before they take effect.

Thus, the Integrity Checker does not globally check the Parallels Business Automation - Standard database, but prevents some potential but possible data mismatches and bugs investigated during the years of Parallels Business Automation - Standard development.

The Integrity Checker includes two pre-defined sets of checks:

- *Basic Check* checks for the critical data mismatches. The check takes from 1 sec. to 1 min.
- *Extended Check* checks for both critical and non-critical data mismatches. Check takes from 1 to 15 min.

Both checks are scheduled for execution in Parallels Business Automation - Standard Task Manager and also can be ran manually at any moment.

By default, the automated checks execution is:

- Once a day for the Basic Check
- Once a week for Extended Check.

You can view and edit the checks schedule in the Tasks Queue (on page 292).

Note: Since integrity checks are executed regularly and automatically, we recommend you to regularly view the Integrity Checker reports to be aware of check results and not to miss any errors detected.

➤ *To run the integrity checks manually:*

1. Click **Support** on the left menu.
2. Select the Integrity Checker tab.
3. To run the Basic Check, click the **Run Check** button. To run the Extended Check, click the **Run Extended Check** button.

The list of existing check reports (if any) shown on the Integrity Checker screen displays the following:

- **ID.** The check report numerical identifier assigned automatically in Parallels Business Automation - Standard.
- **Report Date.** The date and time the check was performed and report generated.

- **Status.** The check general result:
 -  - The check has been finished without warnings and errors. Please note that the OK check result guarantees the database integrity only in respect to the Parallels Business Automation - Standard known issues that were taken into account during checks coding. Thus, the OK status is a good thing, but does not guarantee that everything is absolutely consistent. More checks - more guarantees.
 -  - The check has produced warnings. Warnings mean that something is wrong but not so critical. It can be a malicious alarm as well. You can contact support and pass them the check result or just ignore warnings.
 -  - The check has found at least one error. Some critical data inconsistencies were found. This does not mean that these errors will result in serious problems immediately, but sooner or later this can happen. Thus, if errors were found, we recommend you to contact support and pass them the check results as soon as possible.
- **Errors.** The number of warnings produced during checking.
- **Warnings.** The number of warnings produced during checking.
- **Check Method.** The type of check performed (**Normal Check** - the Basic Check has been run, **Extended Check** - the Extended Check has been run).
- **Elapsed Time.** The time a check execution has taken.

To view the Integrity Checker report, click on the report ID or date. The report details display the same information as shown in the reports list (the number of warnings/errors, if any, the check date and time taken, check method) and in the **Report** field the listing of checks performed with their results is shown.

The Integrity Checker error reports can look not very clear for a person who do not have programming skills. This 'raw' format was introduced intentionally, because reports are mostly addressed to the Parallels Business Automation - Standard technical staff. Thus, if you are not sure what does the Checker report mean, please contact support and send this report to them and they will explain the problem to you and try to solve it as soon as possible.

Setting the Statistics Storage Period

You can set how long both the resources usage statistics and events history will be stored in the Parallels Business Automation - Standard database in the **Configuration Director > Miscellaneous Settings > Data Retention**. The resource usage statistics retention cycle defines the timeframe for resource usage reports you can view.

The outdated statistics is removed automatically, once a day. In addition, at any moment you can manually remove the outdated statistics (use the **Tasks** tab on the **Data Retention** screen).

In respect to the resource usage statistics (on page 78), you can set:

- For how many last days to store the hourly statistics.
- For how many last months to store the daily statistics.
- For how many last years to store the monthly statistics.
- For how many last years to store the yearly statistics.

In respect to the action log, events history, and sent e-mail notifications you can set the period to store the data.

Tasks Management

All tasks performed or scheduled in Parallels Business Automation - Standard are collected under the **Action Log > Tasks Queue** tab. Click the **Action Log** item on the namespace tree to view tasks.

Note: You can set the tasks retention cycle in **Configuration Director > Miscellaneous settings > Data Retention**.

The tasks list displays the following:

- **ID.** The task numerical identifier assigned automatically in Parallels Business Automation - Standard.
- **Description.** A task name or short description.
- **Status.** A task current status (refresh the screen to see the actual data):
 - **Error** - a task was terminated with error. You can click on a task ID to get its details and follow the link to the corresponding record in the Action Log or to a problem report.
 - **Pending** - a task is scheduled for execution. There are several reasons for pending status:
 - Temporal lack of resources required for task execution.
 - A task depends on some other task(s) that are not finished yet. In this case, you can view the tasks that block a task execution on a task details screen.
 - A task is periodical and its execution time has not come yet.
- **Success** - a task was executed successfully.
- **Timeout** - a task execution time (timeout) is over and a task was terminated.

- **In progress** - a task is being executed at the moment.
- **Periodic**. Shows whether a task is executed many times, with a particular period, or this is a single task. Green tick in this column means that a task is periodic, red cross means that a task is single.
- **Scheduled**. The date and time when a task must be executed.

You can view a task details by clicking on its ID. Some settings of pending tasks can be adjusted. And tasks in any other status cannot be changed. Task details include the following:

- **ID, Status, and Description** (the same as in the tasks list).
- **Code**. The code to be executed in the frame of a task.
- **Priority** (for non periodical tasks).
- **Period**. The execution period in seconds for periodical tasks only. You can modify the execution period for periodic tasks.
- **Scheduled**. The date and time a task must be executed. You can adjust the execution time for pending tasks. To start a task immediately, click the **Now** button next to the execution time fields to set the date/time to the current moment and click the **Update** button.

Viewing Log Files

During the normal course of work, it is often necessary to track all the actions performed within your Parallels Business Automation - Standard system. To view action logs, click **Action Log** on the left menu.

The Parallels Business Automation - Standard logs are stored on the Management Node in the `/var/log/hspc/hspc.log` file.

You can set the log level and log messages format in the **Configuration Director > Logging and Errors > Log Settings**.

Log Level Settings

There are several possible logging levels that you can choose to be collected in the `/var/log/hspc/hspc.log` file on the Management Node.

The 'lowest' logging level, collects only messages about serious system problems, whereas the 'highest' level collects all logging related messages. When you specify a particular logging level, the messages for that level and all the levels below it are collected.

➤ *To set the log level:*

1. Click the **Edit** button on the **Log Settings** screen.
2. Select the logging level from the **Log Level** drop-down menu:
 - **DEBUG** - the lowest logging rank and is intended to turn on all logging.
 - **INFO** - informational messages that highlight the progress of the application at coarse-grained level.
 - **WARN** - messages about potentially harmful situations.

- **ERROR** - error events that might still allow the application to continue running.
 - **FATAL** - very severe error events that will presumably lead the application to abort.
3. You can adjust the log messages format. To this effect, enter the format pattern (<http://search.cpan.org/~mschilli/Log-Log4perl-1.04/lib/Log/Log4perl/Layout/PatternLayout.pm>) into the **Log Pattern** field.

Note: The %X{key} placeholder can be used in pattern only one time. If you are not sure about a new log pattern, then leave the default: [%d] [%p] [%P] [%M] %m %X{last_report}%n

Using the Action Log

➤ To view the *Parallels Business Automation - Standard system logs*:

1. Click **Action Log** or follow the **Configuration Director > Logging and Errors > Action Log** path on the left menu. The list of all actions performed in the *Parallels Business Automation - Standard system* appears on the screen.

Note: The stored-logs time frame, i.e., the data retention cycle (on page 292) can be set in **Configuration Director > Miscellaneous Settings > Data Retention**.

The **Action Log** screen is rather informative and easy-to-surf. The list of actions displays the following:

- **Action ID.** The numerical identifier assigned automatically to an action within the *Parallels Business Automation - Standard*.
- **Result.** The Action status: In Progress, Success, or Failed.
- **Object Name.** The name of an action object (Hardware Node, Container, template, etc.).
- **Action.** The action performed;
- **Initiator.** Initiator of action (User name and e-mail address);
- **Initiator's IP address;**
- **The date and time an action was started.**

To view the detailed information about every object involved in particular action, click on its name.

To see the total number of actions performed click on the **Summary** tab.

Click on appropriate link to view the list of actions of particular type. If no actions of certain type were performed, then the corresponding link is disabled.

Thus, you can view the reports about all the actions performed using links on the **Summary** screen or different **Filter** settings at the common list. You can start from any of the links on the **Action Log Summary** screen and proceed with any kind of actions without rolling back to **Summary**.

Parallels Business Automation - Standard Profiling

Profiling statistics allows the support and testing team to measure time needed to access the requested web page. This provides the opportunity to check the performance, spot slow pages needing improvements and as a result further improve the system's quality of service.

The profiling system is switched off by default as it has been designed only for the internal use of the Parallels Business Automation - Standard team. You are not recommended to use it as it is likely to put an additional load on your system resources and disk space.

XML-Based Data Import and Export

Import-Export Manager allows importing and exporting data to/from Parallels Business Automation - Standard database as XML files.

The following data can be exported:

- Accounts
- Documents
- Subscriptions
- Hosting plans

The following data can be imported:

- Accounts
- Subscriptions
- Financial documents
- Hosting plans
- Traffic classes
- Traffic statistics.

Note:The structure of XML files is described in details in Parallels Business Automation - Standard SDK, which is available .

To import or export the data, please go to the **Migration Director > Import-Export Manager**.

The Import-Export Manager either generates the XML file describing the objects you want to export or accepts the XML file describing objects you want to import and creates the corresponding objects in Parallels Business Automation - Standard.

Resolving Data Conflicts

The Parallels Business Automation - Standard provides special tools for fixing the data synchronization problems between the Parallels Business Automation - Standard database and Virtuozzo, Plesk, and PA (POA&PPA) nodes.

How conflicts occur?

Conflicts can occur in two cases:

1. New node registration. You are registering a Hardware Node that carries the information that is either absent or differs from the data in the Parallels Business Automation - Standard database.

Strictly speaking, in this case the situation (a conflict) is just the Parallels Business Automation - Standard offer to import Virtuozzo Containers or Plesk domains found on a node being registered. When you register a Virtuozzo or Plesk server, Parallels Business Automation - Standard fetches the configuration of a node itself and Containers or Plesk domains/clients existing on a node. And you can assign Containers or Plesk domains to an Parallels Business Automation - Standard account, select one of Parallels Business Automation - Standard Hosting plans, and create subscriptions, so that Container or Plesk domain could be managed and billed by Parallels Business Automation - Standard tools.

Note: Registration conflicts do not affect a Hardware Node availability. And such conflicts can occur only if you are registering a node that runs Virtuozzo or Plesk and already hosts Virtuozzo Containers or Plesk clients/domains. In general, you can establish connection with a node and start creating Virtuozzo Containers or Plesk domains right after the registration is finished. And conflicting Containers or Plesk domains can be imported later.

Servers that run some third-party software can be just registered and offered as a simple dedicated subscription for automated billing, in this case Parallels Business Automation - Standard does not concerned in the data a node carries, so there are no registration conflicts occur with third-party servers.

2. Data mismatch with a registered node.

The information in the Parallels Business Automation - Standard database and on a Hardware Node has become different. For example, a Plesk domain or a Container was deleted on a hosting node and Parallels Business Automation - Standard database on a Management Node still contains the record about this subscription. Or conversely: a subscription exists on a node, but there are no records about it in the database on the Management Node. The data on a Hardware Node and a Management Node is being periodically checked. If data mismatch takes place, a conflict occurs, and you can see it in a Hardware Node properties (for Container conflicts) or in a Plesk client/domain properties. You can resolve a conflict by recreating either Container or Plesk domain/client or deleting it.

To resolve the conflicts, go to the **Migration Director > Conflicts Resolver**.

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Resolving Container Subscriptions Registration Conflicts

The Parallels Business Automation - Standard includes the special tool for fixing synchronization problems between the Management Node and Hardware Nodes - Conflicts Resolver.

When you register the Virtuozzo Hardware Node that already hosts Containers, it may occur that the information about Containers hosted on this Hardware Node either is absent in Parallels Business Automation - Standard database or does not correspond to the data containing in the database. For example, a Container IP address is already used by another Container hosted on a Hardware Node or a Container was actually deleted on a Hardware Node, but information about it is still stored in the database. And this is the reason why a Container cannot be correctly moved into Parallels Business Automation - Standard. After you resolve a conflict, you can assign a Container to one of the customer accounts, select a hosting plan, and create a subscription, so that a Container can be billed using the Parallels Business Automation - Standard hosting automation solution.

To view the list of conflicts, go to the **Migration Director > Conflicts Resolver > Containers** and then select the conflict to resolve.

Synchronizing the Plesk Subscription on a Node and in Parallels Business Automation - Standard Database

There are two types of Plesk-related conflicts:

- A Plesk client or domain exists on a Hardware Node being registered, but there is no information about it in the Parallels Business Automation - Standard database.
- A Plesk client or domain is still registered in the Parallels Business Automation - Standard database, but it was actually deleted from a Hardware Node. This can happen in case a Hardware Node was registered if (for example, manually,

When you register the Plesk Hardware Node that already hosts Plesk clients/domains, it may occur that the information about Plesk clients/domains hosted on this Hardware Node either is absent in Parallels Business Automation - Standard database or does not correspond to the data containing in the database. You can resolve such a conflict by registering

Secondly, Plesk conflicts can occur with already registered node, if a subscription is recorded in the Parallels Business Automation - Standard database, but is actually deleted on a node, or conversely. You can resolve such a conflict either by re-creating a Plesk domain/client or deleting it.

Note: To register a Plesk domain or a client in Parallels Business Automation - Standard, it is necessary that this Plesk domain/client must be in the Active state on the corresponding node. Otherwise, the Parallels Business Automation - Standard will be unable to fetch the Plesk domain configuration, and you will see the system message telling that Parallels Business Automation - Standard is not able to read the domain configuration. In this case, please check the Plesk domain status, activate it if needed, and then try to import it again.

To resolve the Plesk domains or clients conflicts, go to the **Migration Director > Conflicts Resolver > Plesk Domains** or **> Plesk Clients** respectively.

Resolving Parallels Automation Conflicts

The PA conflicts resolver allows handling the following types of problems:

- The subscription is absent in PBAS. Such a conflict may occur is, for example a subscription has been manually created at PA side.
- The subscription and service is absent in PA. This may happen, for example if the subscription and service were deleted at PA side, but still present in PBAS.

The conflicts may be resolved in the following ways:

- Create a subscription (and service, if needed) at the side where this subscription is absent.
- Delete the subscription data and service if such subscription is not needed any more.

To view the list of conflicts, go to the **Migration Director > Conflicts Resolver > PA subscriptions**.

The PA conflicts are grouped under two tabs, by type of the problem:

- **Not registered** - the subscriptions absent in PBAS, but existing at PA side. For more information, [click here](#) (on page 300).
- **Absent in PA** - the subscriptions registered in PBAS, but absent at PA side. For more information, [click here](#) (on page 301).

The list of conflicts is refreshed automatically every hour. To refresh the conflicts list right away, click **Synchronize conflicts**.

Resolve PA Subscriptions not Registered in PBAS

The list of PA subscriptions not registered in PBAS displays the following:

- ID - the conflict numeric identifier in PBAS.
- PA ID - the subscription ID at PA side.
- Subscription name - the name of the subscription at PA side.
- Account Name - the name of the account at PA side.
- Vendor - the name of the vendor account that has provided the subscription.
- Service Template Name - the name of the PA service template the subscription is based on.
- Node name - the hostname of the PA node, where the subscription is hosted.
- Detected - the date and time, when the conflict has been detected.

To refresh the list of conflicts, click **Synchronize conflicts**.

To resolve the single conflict, click on its ID.

To resolve several conflicts at once, select then by putting ticks in the boxes next to the conflicts. Then click **Interactive Resolution**.

Important: Mass resolution is only possible for the conflicts that have the following common properties:

- are related to the same vendor
- are based on the same service template
- all the customers that own the conflicting subscriptions are already registered in PBAS
- none of the customers that own the conflicting subscriptions is registered in PBAS

The conflict(s) resolution form provides the following options:

Conflicts:

The conflict or the list of the selected conflicts. Here you can see the conflicts summary.

Owner:

- **Create new account(s) according PA account.** Select this to create a new account in PBAS using the data of the existing PA account.

Note: In case of mass resolution of conflicts, it is only possible to create new accounts in PBAS. ONLY customer accounts can be created.

- **Use existing.** Associate the PA subscription with one of the account that already exist in PBAS. Click **Select**. The list of PBAS accounts that can be used is shown in the popup window. To select the account, click on its name; the popup window closes, and the selected account name appears in the field below **Use existing**.

Note: If the PA subscription belongs to PA Reseller Account, then is is only possible to link the PA reseller to an existing PBAS Reseller Account.

Solution:

- Register subscription(s) in Parallels Business Automation - Standard. - Add the information about PA subscription(s) to PBAS.
- Delete subscription(s) from the Hardware Node. - Delete the subscription from the PA Hardware Node.

Resolve PA Subscriptions Registered in PBAS but Absent in PA

The list of PA subscriptions registered in PBAS, but absent in PA, displays the following:

- ID - the conflict numeric identifier in PBAS.
- Subscription ID - the subscription ID in PBAS.
- Subscription name - the name of the subscription in PBAS.
- Account Name - the name of the account in PBAS.
- Vendor - the name of the vendor account that has provided the subscription.
- Plan Name - the name of the PBAS hosting plan the subscription is based on.
- Node name - the hostname of the PA node.
- Detected - the date and time, when the conflict has been detected.

To refresh the list of conflicts, click **Synchronize conflicts**.

To resolve the single conflict, click on its ID.

To resolve several conflicts at once, select them by putting ticks in the boxes next to the conflicts. Then click **Interactive Resolution**.

The conflict(s) resolution form provides the following options:

Conflicts:

The conflict or the list of the selected conflicts. Here you can see the conflicts summary.

Solution:

- Create subscription(s) on PA side. Create a new subscription at PA side and associate it with the data that exists in PBAS.
- Terminate the PA subscription(s). Delete the subscription and service at PBAS side.

CHAPTER 23

Marketing and Affiliate Programs

This chapter describes how you can add new affiliate programs and assess the efficiency of adverts placed at your partners' websites and linked to your HSPstore.

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Managing Campaigns

Campaigns allow you to involve your existing customers into marketing programs aimed at attracting new clients and sales growth.

Campaigns management tools are grouped under **Marketing Director > Campaign Manager**.

When you add a new Campaign, your customers in Control Panel can see a kind of invitation to join a Campaign. A customer who joined a Campaign becomes an *affiliate*.

Affiliates get a redirect URL to your store and place it, for example, at their web page; then visitors of this web page follow the redirect URL and visit your online store. If new visitors place and pay order in your store, the affiliate that attracted a new client gets a commission.

Campaigns commission is accumulated separately from an affiliate PBAS account balance. To make the commission monetary, an affiliate can transfer the commission to his/her PBAS account balance or to an external payment system (for example credit card).

- To add, delete, activate or disable campaigns, select **Campaigns**.
- To view affiliates statistics, activate or put on hold affiliates, manage affiliates commission transactions to external payment systems, select **Affiliates**.
- To handle requests for commission transfer to external payment systems, select **Payment Requests**.
- To view campaigns revenue report, select **Report**.
- To set the limitations of the commission amount transferred to external payment systems, select **Setup**.

Configuring Campaigns

Campaigns are handled under Marketing Director > Campaign Manager > Campaigns.

The list of campaigns displays the following:

- **ID.** Campaign numeric identifier assigned in PBAS.
- **Campaign Name.** The name of the Campaign shown to customers.
- **Hits.** How many visits to your online store were initiated by a Campaign redirect.
- **Participated Accounts.** How many of your customers have become affiliates of a Campaign.
- **Status.** Campaign status:
 - **Active.** Hits and orders are counted; affiliates that have their customer accounts in Active status get commission for completed orders.
 - **On Hold.** Hits and orders are not counted; affiliates do not get commission for completed orders.
 - **Deleted.** Campaign is deleted. Hits and orders are not counted; affiliates do not get commission for completed orders.

➤ *To change a Campaign(s) status:*

- Put a tick in the check box(es) next to Campaign(s) ID and click the control:
 - **Delete.** To delete the selected Campaigns.
 - **Activate.** To activate the Campaign(s) that are On Hold.
 - **Put on Hold.** To put on hold the Campaign(s) in Active status.

When adding a Campaign description, Terms and Conditions, and Campaign banner message, you can use the multi-language editor. Parallels Business Automation - Standard supports multi-lingual customization for a wide range of fields (website texts, hosting plan names and description, notification templates). You can enter and save texts in any of the languages installed over Parallels Business Automation - Standard. To select the language, click one of the buttons with language names tiled below the field you want to enter the text and enter the text in the language selected. For example, click **English** - and edit the English text, then click **German** (the English content will be saved and replaced with the German content in the same field) and edit the German text, and so on, for all languages you want to use in your store.

➤ *To add a new Campaign:*

1. Click the **New Campaign** button.
2. Fill the form that appears:
 - a** Type the Campaign name (which will be later used for your reference and shown to customers in CP) into the **Campaign Name** field.
 - b** Select the status the Campaign will get right after creation from the **Status** list.
 - c** Enter the redirect URL into the **Redirect To** field. To count the orders placed, this should be your store URL, for example, <https://mystore.com>. Please specify the protocol (http or https). The banner URL will be generated automatically after the campaign settings are saved.
 - d** Type the Campaign description to be shown to customers in CP into the **Description** field.

- e Type the **Terms and Conditions** a customer should accept before joining the Campaign.
- f Enter the campaign banner HTML code into the **Advertising banner message source code field**. Banner code must contain the `%campaign_uri%` placeholder needed to insert your store URL in the banner. For example, `Special offer`.

- g Specify the affiliate commission settings:

Available Payout Methods. Select how an affiliate will monetize the commission:

- **Convert to account balance.** Affiliate's commission will be transferred to his/her PBAS customer account. In this case no information about the ability of transferring commission to external payment system will be shown in CP.

OR

- **Pay via external payment system or convert to account balance.** Affiliate will be offered the selection between external payment system or his/her PBAS account.

Default commission rate. The amount to be paid to affiliate if hosting plan is purchased. This rate will be calculated for all purchased hosting plans included in Campaign if no custom commission rate (on page 306) is set. Custom commission rate per plan can be configured after the Campaign is created, under the **Included Plans** tab. Select and specify how the default commission rate will be calculated:

- **Percent.** Enter the hosting plan price percent to be paid to affiliate.

OR

- **Fixed.** Enter the fixed amount to be paid to affiliate.

Commission hold period. How many time passes starting from hosting plan purchase before an affiliate gets commission to his/her Campaign balance:

- **Approve commission immediately.** Add commission to an affiliate Campaign balance right after a hosting plan is purchased.

OR

- **Approve commission after [] days after the payment is received.** Enter how many days passes after hosting plan purchase before an affiliate will get commission to his/her Campaign account balance.

- h You can attach a promotion to a campaign so customers that came from a partner website will automatically get a promotion applied to their subscriptions. To this effect, you must have one or more promotions created. To attach a promotion, click the **Select** button next to the **Select Promotion** field and select a promotion to be attached from the list that appears in the popup window. To attach no promotions, select **Not assigned**.

- i **Include the following Hosting Plans into this Campaign.** Specify hosting plans included in the Campaign. After an included hosting plan is purchased by a customer that came to provider store by campaign redirect, an affiliate gets commission. Select one of the options:

All of the available Hosting Plans. Include all the hosting plans available for sale in your store.

Selected Hosting Plans only. Include particular hosting plans. To select plans, click the **Add** button. The list of all the available hosting plans appears in popup window. Select hosting plans by clicking on their names. In this case, the names of selected hosting plans will appear in the **Selected** menu. In case you select a wrong hosting plans, you can cancel the selection. To this effect, click on this hosting plans name in the **Selected** menu (its name will be highlighted) and then click the **Remove** button.

All of the Hosting Plans except the selected ones. Include in the Campaign all the available hosting plans except for the selected ones. Select the hosting plans in the same way as described above.

- j** Allow this Campaign to the following Accounts. Select the account that will be able to join the Campaign and become affiliates in the same way as you have selected hosting plans (see item i above).
3. Click the **Save** button. The list of campaigns with a new campaign added appears on the screen.

Adjusting Campaign General Settings

The **General Settings** tab of Campaign displays all the settings you have entered during a campaign creation.

Any of the Campaign settings may be adjusted here. To make changes, click **Edit**, make changes, click **Save**.

Note: Campaigns are saved by versions. If you make changes for a Campaign, its old version is saved. A new changed version of a Campaign starts being used. To view all the previous Campaign versions, select the **Old Versions** (on page 307) tab. Please keep in mind that by default, the latest Campaign version is always used.

A Campaign general settings are described in details in the **Configuring Campaigns** (on page 303) topic.

Managing Campaign Affiliates

All the affiliates joined the Campaign are grouped under the **Affiliates** tab.

The Campaign affiliates list displays the following:

- **ID.** Customer account numeric identifier.
- **Account Name.** Customer account name.
- **Redirector URL.** The redirect URL generated for the affiliate. Affiliates get the advertising banner source code that contains this redirect URL to your online store and promote it, for example, in their blog or web page - or share on social networks. Visitors then follow the redirect URL to your online store.
- **Status.** The Campaign status in respect to the given affiliate:
 - **Active.** Campaign is active for the affiliate. Affiliate can see the Campaign in Control Panel, **Account** tab > **Campaigns List**. If orders are completed by new customers that came by the Campaign redirect, compensation is counted for affiliate.
 - **On Hold.** Campaign is on hold for the affiliate. Affiliate cannot see the Campaign in Control Panel, **Account** tab > **Campaigns List**. If orders are completed by new customers that came by the Campaign redirect, compensation is not counted for affiliate.

➤ *To put the Campaign on hold for an affiliate:*

Put a tick in the check box next to an affiliate name and click Put On Hold link.

➤ *To activate the Campaign for an affiliate:*

Put a tick in the check box next to an affiliate name and click Activate link.

Setting Custom Compensation Rate for Hosing Plans Included in Campaign

The list of all the hosting plans included in the Campaign is displayed under the Included Plans tab.

After an included hosting plan is purchased by a customer that came to provider store by the Campaign redirect, an affiliate gets commission. The default commission rate for all the hosting plans included in the Campaign is set under the **General** tab. Here you can set the custom commission rate per included hosting plan.

It is not possible to change the set of included plans under this tab. Hosting Plans can be included to the Campaign or dropped from the Campaign under the **General** tab.

The list of included hosting plans displays the following:

- **ID.** Hosting plan numeric identifier.
- **Title.** Hosting plan title shown to customers.
- **Active.** If the plan is active, then if it is marked as "Sell in my store" - it is sold in store. If the plan is not active, it is hidden from store without respect to other settings:
 -  - Yes, the plan is active.
 -  - No, the plan is not active.
- **Type.** Hosting plan type. For details, click here (on page 138).
- **Category.** If a hosting plan is included to some category, its name is shown. Categories (on page 135) help grouping plans in online store.
- **Custom rate.** Whether a custom compensation rate is applied or the default rate is used:
 -  - Yes, the custom rate is used.
 -  - No, the default rate is used.
- **Rate.** Compensation rate used now for a hosting plan. Percentage rate is shown with the % sign. Fixed rate is shown with the currency sign.

➤ *To set the custom commission rate or reset it to default for one or several hosting plans:*

1. To configure custom rate for a particular plan, click on its name. To configure commission rate for several plans, put a tick in the check box next to the plan(s) name(s) and click **Configure**. The forms that allow setting custom compensation rate for each of the selected hosting plans are shown. Hosting plan name is displayed at the top of each form.
2. Fill the form(s):
 - To use custom rate, put a tick in the **Use custom compensation rate for this Hosting Plan** check box. After this the controls used to specify the rate type and amount are activated.

Select and specify how the default commission rate will be calculated:

- **Percent.** Enter the hosting plan price percent to be paid to affiliate.

OR

- **Fixed.** Enter the fixed amount to be paid to affiliate.
- To skip the custom rate and apply the default one, clear the **Use custom compensation rate for this Hosting Plan** check box. You will see the default rate amount applied to the hosting plan after the changes are saved.

3. To save the changes, click **Update**.

Campaign Old Versions

Campaigns are saved by versions. If you make changes to a Campaign General settings (on page 305), its old version is saved. A new changed version of a Campaign starts being used.

Please keep in mind that by default, the latest Campaign version is always used. Old versions of Campaigns are kept for reference and cannot be modified.

The list of Campaign Old Versions displays the following:

- **ID.** ID of the Campaign version. Click to view version details.
- **Campaign Name.** The name of Campaign version. Click to view version details.
- **Promotion.** If the promotion had been assigned for a version, promotion name is shown.
- **Status.** Active status is always shown.

Managing Affiliates

Affiliates are your customers that have joined one or more of your Campaigns.

It is not possible to add an affiliate from Provider Control Center. Your customers can see a Campaign invitation in their Control Panel and join a Campaign. After this, customers become affiliates and you can see them in Provider Control Center under **Marketing Director > Campaign Manager > Affiliates**.

The list of affiliates displays the following:

- **ID.** Customer account numeric identifier assigned in PBAS. Click to view affiliate details.
- **Account Name.** The name of customer account that have become an affiliate. Click to view affiliate details.
- **Joined Campaigns.** How many campaigns an affiliate had joined. To view the list of these campaigns, click on account name and then select the **Campaigns** tab.
- **Orders.** How many orders were placed in your online store by clients that came by of Campaign(s) redirect.
- **Orders Total.** Total amount of orders placed in your online store by clients that came by of Campaign(s) redirect.
- **Completed Orders.** How many orders were placed and completed in your online store by clients that came by of Campaign(s) redirect.
- **Completed Orders Total.** Total amount of orders placed and completed in your online store by clients that came by of Campaign(s) redirect.
- **Approved Commission.** Total amount of commission transferred to customer account balance or to his/her external payment system.
- **Status.** Customer Account status:
 - **Active.** If customer account is Active, it gets affiliate commission for his/her Campaign if Campaign is in Active status.
 - **On Hold.** Customer does not get commission for his/her Campaigns. However customer account can be activated back; then customer again gets affiliate commission..
 - **Deleted.** Customer account is deleted no commission is paid.

Affiliate General Information

The most full information about the affiliate is displayed under the General tab:

- **Customer account information:** account name, current status, contacts. For more details about customer account details, click here (on page 172).
- **Affiliate activity statistics:**
 - **Joined Campaigns.** How many Campaigns the affiliate have joined. Click the number to switch to the Campaigns (on page 309) tab.
 - **Orders.** How many orders were placed by customers that came to provider store by the affiliate Campaign redirect. Click the number to switch to the Sales (on page 310) tab.
 - **Orders Total.** Total amount of all placed orders.
 - **Completed Orders.** How many of the placed orders were completed. Click the number to switch to the Sales (on page 310) tab.

- **Completed Orders Total.** Total amount of completed orders.
- **Approved Commission.** Total amount of commission approved by provider.
- **Orders placed statistics for every of the active Campaign** is shown. Name of the Campaign is shown to the left.
- **Other campaigns.** If some orders have been placed in frame of the Campaigns which are not active at the moment, then total order statistics for such campaigns is shown.
- **Affiliate Balance:**
 - **Total amount available.** Total commission amount available.
 - **Amount available for withdrawal.** Commission amount available for transfer to an external payment system.
 - **Total amount received for all campaigns.** Total commission amount ever received for all the campaigns the affiliate have joined.
 - **Total amount withdrawn.** Total commission amount transferred to affiliate customer account balance and to affiliate external payment system.
 - **Total amount converted to account balance.** Total commission amount converted to affiliate customer account balance. Click the number to switch to Credit Adjustments (on page 311) tab.
 - **Total amount paid via external payment system.** Total commission amount transferred to affiliate external payment system. Click the number to switch to Payment Requests (on page 310) tab.

Campaigns Affiliate Have Joined

The list of campaigns the affiliate have joined is shown under the **Campaigns** tab:

- **ID.** Campaign numeric identifier assigned in PBAS.
- **Campaign Name.** The name of the Campaign shown to customers. Click to view the Campaign details.
- **Redirector URL.** The redirect URL generated for the affiliate. Affiliates get the advertising banner source code that contains this redirect URL to your online store and promote it, for example, in their blog or web page - or share on social networks. Visitors then follow the redirect URL to your online store.
- **Status.** Campaign status in respect to this affiliate:
 - **Active.** Hits and orders are counted; the affiliate if his/her customer accounts is in Active status, gets commission for completed orders.
 - **On Hold.** Hits and orders are not counted; affiliate does not get commission for completed orders.

Here you can put on hold or activate the affiliate in one or several or all the Campaigns the affiliate takes part.

➤ *To put the Campaign on hold for an affiliate:*

Put a tick in the check box next to campaign(s) name(s) and click **Put On Hold** link.

➤ *To activate the Campaign for an affiliate:*

Put a tick in the check box next to campaign(s) name(s) and click **Activate** link.

Affiliate Sales

The list of all sales connected to the affiliate activity is shown under the **Sales** tab:

- **Doc. Num.** Reference number of order placed. Click to view order details.
- **Campaign.** The name of campaign. Click to view campaign details.
- **Added by.** The name of new customer account created by visitor redirected by a campaign URL. Click to view account details.
- **Hosting Plan.** The name of hosting plan purchased. Click to view hosting plan details.
- **Sale date.** The date when hosting plan has been sold.
- **Complete date.** The date when order has been completed. If the field is blank, then the order is not completed yet.
- **Commission.** Commission amount.
- **Status.** Sale status:
 - **Pending.** Commission is not released yet and is not available for withdrawal or order is not completed yet.
 - **Complete.** Commission has been released and is available for withdrawal.

Affiliate Payment Requests

All payment requests placed by the affiliate are shown under the **Payment Requests** tab.

Payment requests are placed by affiliates when they want to transfer commission to an external payment system. Provider reviews requests and manually processes them.

Money transfer to an external payment system (for example bank account or credit card) is done outside PBAS. If money are transferred, provider just marks a payment request as completed. If money cannot be transferred, provider cancels a request. Provider can also decline a request.

Payment requests list displays the following:

- **ID.** Payment request numeric identifier assigned in PBAS. Click to view a payment request details or process it.
- **Account Name.** The name of customer account that have become an affiliate. Click to view a payment request details or process it.
- **Amount.** Payment request amount.
- **Open Date.** Payment request creation date.
- **Complete Date.** Payment request processing date (completed, canceled, or declined)
- **Status.** Payment request status:
 - **Pending.** A request is not processed yet.
 - **Complete.** The requested amount is transferred.
 - **Canceled.** The amount cannot be transferred. Customer Campaign balance has been refunded.
 - **Declined.** The amount cannot be transferred. Customer Campaign balance is not refunded.

Affiliate Credit Adjustments

When affiliate transfers commission to his/her account balance, money are transferred by means of credit adjustment.

The list of all credit adjustments issued to transfer affiliate commission to his/her account balance is shown under the **Credit Adjustments** tab.

Similarly to the options available for customer account **Billing History**, here you can increase or decrease customer account balance by adding new documents.

Managing Affiliates Payment Requests

Payment requests are placed by affiliates when they want to transfer commission to an external payment system. Provider reviews requests and manually processes them.

Money transfer to an external payment system (for example bank account or credit card) is done outside PBAS. If money are transferred, provider just marks a payment request as completed. If money cannot be transferred, provider cancels a request. Provider can also decline a request.

Payment requests are handled under **Marketing Director > Campaign Manager > Payment Requests**.

Not processed requests have the **Pending** status. To process a request, click on account name. when request details are displayed, click the button to process:

- **Process.** You are going to mark the Payment Request as processed. This confirms that the commission is successfully transferred to external payment system. Please type the comment to ensure the transaction is processed. Your comment will be visible to the customer.
- **Cancel.** You are going to cancel the Payment Request. In this case the commission will be refunded to the customer Campaign balance. You can type the comment to inform customer why transaction to external payment system cannot be completed. Your comment will be visible to the customer.
- **Decline.** You are going to decline the Payment Request. In this case no commission refund is performed. You can type the comment to inform customer why the requested transaction to external payment system is declined. Your comment will be visible to the customer.

Requests in other statuses are already processed and cannot be reverted. ONLY a customer can place another request instead of the canceled one.

The list of payment requests displays the following:

- **ID.** Payment request numeric identifier assigned in PBAS. Click to view a payment request details or process it.
- **Acc. No.** Customer account numeric identifier assigned in PBAS. Click to view a payment request details or process it.
- **Account Name.** The name of customer account that have become an affiliate. Click to view a payment request details or process it.
- **Amount.** Payment request amount.
- **Open Date.** Payment request creation date.
- **Complete Date.** Payment request processing date (completed, canceled, or declined)
- **Status.** Payment request status:
 - **Pending.** A request is not processed yet.
 - **Complete.** The requested amount is transferred.
 - **Canceled.** The amount cannot be transferred. Customer Campaign balance has been refunded.
 - **Declined.** The amount cannot be transferred. Customer Campaign balance is not refunded.

Viewing Campaigns Report

Campaigns report allows viewing statistics per Campaign. The report is available under Marketing Director > Campaign Manager > Report.

To view the dated report, click on the campaign name and then select the time frame using the calendar shown on the screen. You will see the daily statistics for the selected period.

The overall Campaigns report is presented as the list of your Campaigns with various statistics shown per each Campaign:

- **ID.** Campaign numeric ID assigned in PBAS.
- **Campaign Name.** The Campaign name visible for customers.
- **Hits.** How many clients visited your online store page by Campaign redirect URL. Hits are counted by visitors' unique IP address. If several visitors from the same IP address have come, then only one hit is counted.
- **Orders.** How many orders were placed in your online store by clients that came by Campaign redirect.
- **Conversion rate.** The (Placed Orders)/(Hits) rate. For example 2 hits and 2 placed orders will result in 100% rate. If 2 hits produced 3 orders, the rate will be 150%. In this case, all placed orders are taken into account, both not completed and completed ones.
- **Orders Total.** Total amount of orders placed in your online store by clients that came by Campaign redirect. This includes both completed and not completed orders.
- **Completed Orders.** How many completed orders were placed in your online store by clients that came by Campaign redirect.
- **% Completed.** The (Completed Orders)/(Placed Orders) rate.
- **Completed Orders Total.** Total amount of completed orders placed in your online store by clients that came by Campaign redirect.
- **Approved Commission.** Total amount of monetized affiliate commission, that is the commission amount transferred to customers' accounts' balance or to external payment system(s).
- **Status.** Campaign current status:
 - **Active.** Hits and orders are counted; affiliates that have their customer accounts in Active status get commission for completed orders.
 - **On Hold.** Hits and orders are not counted; affiliates do not get commission for completed orders.
 - **Deleted.** Campaign is deleted. Hits and orders are not counted; affiliates do not get commission for completed orders.

Setting Up External Payments Limitations

To set up external payment amount limitations, go to **Marketing Director > Campaign Manager > Settings**. Click **Edit** and fill the form:

- Since some online payment processing centers accept payments starting from a particular amount, or withdraw a commission for money transfer, you can avoid transactions rejects and possible financial loss by setting the minimal amount allowed to be transferred to external payment system. Please enter this amount into the **Minimum amount can be payed via external payment system** field. To skip any limitations, leave this field empty.
- Enter the payment instructions to be shown to customers into the **Payment instructions** field. For example, instruction may include the information about payment system identifiers or a minimum payment amount.

Click **Save** to save the settings.

Configuring your Store to Collect Referrals Statistics

Referrals allow you to collect useful information about the efficiency of your advertising media. Thus, you can place at your HSPstore a question like “How did you know about us?” and enlist your advertising media (TV, Internet, etc.). The question will be displayed at the **Place Order** page at the HSPstore. Thus, as your customers will provide responses, you can collect useful statistics. To add the referral question and the list of referrals, go to the **Commerce Director > Store Manager > Configure Store** and select the **Referrals** tab.

Similarly to referrals, this allows you to collect the detailed information regarding efficiency of your web adverts. However, Parallels Business Automation - Standard provides the specialized marketing tools.

Customizing the Parallels Business Automation - Standard Tools Appearance

A skin defines the appearance of the Parallels Business Automation - Standard tools. A skin is a combination of palette and images.

Skins Customization allows you to change interface style and palette, so that you can set any combination of colors you like for the most of interface elements.

To facilitate creation of new skins, we provide the default base skins which serve as the parent ones for any of the new skins you create:

- **Panel Theme.** Customer Control Panel default skin used only for Customer Control Panel UI customization (on page 316).
- **WinXP.** Three variations of the Windows XP style palette and images used only for Provider Control Center UI customization (on page 317).

The default skins are read-only, you can only use them as the parent ones for the new skins, but it is not possible to customize these default skins. When you create new skins, you always select the parent one: this can be either one of the default skins or one of the newly created ones.

As for the custom skins you create, you can allow or disallow using these skins as the parent ones (by checking or unchecking the **Allow inheritance** box in the skin properties).

To allow applying a custom skin to the Parallels Business Automation - Standard tools, please make it active (check the **Active** box in the skin properties)

All the skins created from the Provider Control Center (i.e., owned by Provider) are reachable but read-only for Resellers. The "Active" provider's skins can be applied. If a Reseller wants to customize and apply a skin owned by Provider, this can be done:

- Only for the "Allow inheritance" Provider's skins, without respect to whether a skin is active or not.
- By creating the own new skin on the basis of this skin, activating and applying it.

A skin is part of a user personal settings. This means that when you apply a skin, this setting will be saved in the Parallels Business Automation - Standard database and the skin selected will be applied each time the same login/password is used to log in to the Control Center. **Skins application:** click to read more (on page 319).

To create a skin go to the **Marketing Director > Brand Manager > Skins.**

Customizing Customer Control Panel Skin

Control Panel (CP) skins are customized via CSS file created automatically for every new CP skin.

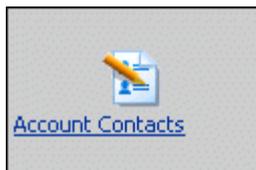
Files and images for new Control Panel skin can be updated from PBAS UI after a new skin is created. Default set of images is already uploaded to the skin folder; every image can be replaced with a custom one.

Control Panel customization is stored in specially created folders that are unique for a given skin. Thus, the custom skins are not overwritten during PBAS upgrades.

For instructions on CP skins customization, refer to PBAS Control Panel Skin Customization Guide.

➤ *To create a new Skin for Customer Control Panel:*

1. Click **Skins** on the **Brand Manager** submenu, The list of all skins appears.
2. Click the **New Skin** button.
3. Fill the form that appears:
 - a** Type the skin name into the **Title** field.
 - b** You can check the **Enabled** box to allow applying a skin as this described above.
 - c** You can check the **Allow inheritance** box to allow using this skin as the parent one for the future skins.
 - d** Select the **Panel Theme** skin or one of the skins based on the **Panel Theme** from the **Parent skin** drop-down menu. This skin will be used as a basis for new skin.
4. Click the **Next** button. The folders to store skin customization are created at PBAS Management Node:
 - The path to CSS file is shown in the **Path to the Cascading Style Sheets (.css) file for skin customization** field. Click to view the CSS file.
 - The path to files/images folder is shown in **The folder to store image files for skin customization** field.
 - To customize images, click **Edit** on the **Images** bar. The images gallery opens. Images designation is specified as a clickable link, for example, **Account Contacts**:



To upload a custom image instead of the default one, click on the link below the image. To exit the images gallery, click **Back**.

Control Panel customization is stored in specially created folders that are unique for a given skin. Thus, the custom skins are not overwritten during PBAS upgrades.

Customizing Provider Control Center Skin

Creating Skins

➤ *To create a new Skin for Provider Control Center:*

1. Click **Skins** on the **Brand Manager** submenu, The list of all skins appears.
2. Click the **New Skin** button.
3. Fill the form that appears:
 - a** Type the Skin name into the **Title** field.
 - b** You can check the **Enabled** box to allow applying a skin as this described above.
 - c** You can check the **Allow inheritance** box to allow using this skin as the parent one for the future skins.
 - d** Select one of the XP-style skins that will be used as the basis for a new one from the **Parent skin** drop-down menu.
4. Click the **Next** button. The list of all interface elements of the Control Panel with corresponding colors (palette) appears. The current palette colors (with hex values) for each interface element are shown in **Old value** fields. The **New value** fields will reflect the newly selected colors (with appropriate hex values). To change the color of particular interface element:
 - a** Set the radio button to the element you want to change color for (for example, **Page background color** or any other).
 - b** Click on the color tile you like in the palette. The **New value** field will change its color into selected one.
5. If you are sure that you would like newly set colors, click the **Save** button. Palette changes will be applied and the new skin summary appears.
6. You can click the **Edit** button at the **Images** bar to change the images set. The tile of images that correspond to the parent skin appears.

Note: Since Parallels Business Automation - Standard images set are pretty big, please use **Filter** to customize images by groups.

7. To replace or customize an image, click on its name. The popup window will be displayed:
 - To change the image, set the radio button to the image itself and click on the image. After this, you can save it in the **gif**-format and change using appropriate tools.
 - To upload a new image instead of the existing one, set the radio button to **Upload New Image** and indicate the path (type in or use the **Browse** button). Click the **Update** button to upload new image.

8. Click the **Next** button to apply changes. The confirmation screen appears.

➤ *To customize one of the existing Skins (non-default one and owned by you):*

1. Open the list of skins as this described above.
2. Click on the Skin ID or name in the list.
3. Click the **Edit** button at the **General Information**, **Palette**, or **Images** to change the skin title/availability, colors used, or set of images respectively.

Customize the skin in the same way as this described above for new Skin creation.

Uploading Files and Images

The Brand Manager allows uploading files and images to be used in skins you create.

➤ *To upload a file or image:*

1. Click **Brand Manager** on the **Marketing Director** submenu.
2. On the **Brand Manager** submenu, click **Images and Files**. The list of all files uploaded appears.
3. Click the **Upload File** button.
4. Fill the form that appears:
 - a** Type the path to a file into the **File** field or click the **Browse** button and locate the file.
 - b** You can type the title to be displayed on the file opening into the **Title** field.
5. Click the **Save** button.

Applying Skins

Skins are applied per user.

Only XP-style skins can be applied to provider's and reseller's users.

Only the Panel Theme based skins can be applied to customers.

➤ *To apply a skin to Provider staff member:*

1. Go to **Configuration Director > Security Manager > Staff Members**. Click on the staff member name. The user personal information appears on the screen.
2. Click the **Edit** button.
3. Select a skin from the **Skin** drop-down menu.
4. Click the **Update** button.

➤ *To apply a skin to Reseller user:*

1. Go to **Account Director > Reseller Manager > Resellers**. Click on the reseller account name and then select the **Users** tab. Click on the user name. The user personal information appears on the screen.
2. Click the **Edit** button.
3. Select a skin from the **Skin** drop-down menu.
4. Click the **Update** button.

➤ *To apply a skin to Customer account user:*

1. Go to **Account Director > Customer Manager > Customers**. Click on the customer account name and then select the **Users** tab. Click on the user name. The user personal information appears on the screen.
2. Click the **Edit** button.
3. Select a skin from the **Skin** drop-down menu.
4. Click the **Update** button.

Note: Only "Active" skins are shown in the **Skin** menu. If you do not see the desired skin, please check whether it is currently active or not.

CHAPTER 24

Integration and Customization Opportunities

Two customization-related guides are shipped with Parallels Business Automation - Standard:

- SDK. API and screens customization.
- Templates Creation Guide. Making custom applications available for installation inside Virtuozzo Containers, i.e., how to create application templates).

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Parallels Business Automation - Standard API and Customization

The Parallels Business Automation - Standard SDK helps you to:

- Customize the Parallels Business Automation - Standard in accordance with your needs.
- Integrate the Parallels Business Automation - Standard into your existing corporate and services infrastructure.
- Re-brand the existing services infrastructure.

The API provided allows you to:

- Create accounts, access permissions.
- Get information about hosting plans and promotions.
- Create orders, add credit cards, process payments.
- Create custom e-commerce solutions.

You can customize any of Parallels Business Automation - Standard screens in a way that suits your needs:

- Editing the context help for any of the Parallels Business Automation - Standard screens.
- Editing the on-screen help bars for the Control Panels your customers use.
- Adding custom menu items in the Control Panels.
- Template-based customization of screens involved in the purchasing wizard at your online store.
- Screen ID based customization of any of the Parallels Business Automation - Standard screens.

Application Templates Creation

The Parallels Business Automation - Standard Templates Creation Guide outlines the principles of applications provisioning for Virtuozzo Containers and describes the procedure of conversion of an original application packages into the Parallels Business Automation - Standard-compatible packages.

Parallels Business Automation - Standard Internal Licensing

The Parallels Business Automation - Standard License is a file that contains specific data.

For Parallels Business Automation - Standard tools to work the Parallels Business Automation - Standard license file is needed on the Management Node. This license can be easily installed via the Parallels Business Automation - Standard Provider Control Center web-based interface.

PBAS license can be of two types:

- **Lease.** Issued for 1 month. Should be updated monthly. A lease license is updated automatically online, however manual update is also possible. Generally, the license remains the same, only a license version is incremented with each update. Lease license may also include a **Shared Revenue Contract**; According to this Contract, PBAS monthly fee is calculated depending on provider monthly revenue.
- **Purchase.** Issued for a year or longer period. No updates performed. When a purchase license expires, a new license is issued.

Note: The trial Parallels Business Automation - Standard license is shipped together with the Parallels Business Automation - Standard distribution.

To provide hosting services, the licenses that are specific for each hosting type (Virtuozzo, Plesk) should be installed on appropriate Hardware Nodes.

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Installing License Certificates

The Parallels Business Automation - Standard distribution includes the trial Parallels Business Automation - Standard License that is auto-installed. The trial License has the limited validity period, but it allows making the initial configuration of the Parallels Business Automation - Standard.

The permanent Parallels Business Automation - Standard license is installed manually from Provider Control Center.

Note: To provide hosting services, the licenses that are specific for each hosting type (Virtuozzo, Plesk) should be installed on appropriate Hardware Nodes.

To install PBAS license:

1. Open **Configuration Director > License Manager > Parallels Business Automation - Standard Licenses** submenu on the Navigation tree. The PBAS license settings are displayed.
2. Click **Install License**. The Install License form is displayed. Fill the form:
 - Click **Browse** next to the **Path to the license certificate** field. Locate the license file.
 - OR
 - Paste the license file content into the box.
3. Click **OK**.

The licenses usage statistics displays the following:

- **License.** The PBAS Management node license and the licensed features, such as the number of staff members concurrently logged in PBAS, and the maximum allowed number of reseller and customer accounts. Click on the license name to view the details.
- **Status.** The current status of the license. Read more about PBAS license statuses (on page 324).
- **Expires.** The date when the license expires.
- **Unused.** The number of unused items of the license. Applicable only to the number of the staff members and accounts. For example, how many accounts still can be added, how many staff members still can log in PBAS.
- **In Use.** How many items of the license are used at the moment:
 - **Concurrently Logged Staff Members.** How many users with the permission to log in PCC are now logged in.
 - **Reseller Accounts.** The number of reseller accounts in the **Active** status.
 - **Customer Accounts.** The number of **Active** customer accounts having at least one **Active** subscription. The resellers' customer accounts are not counted for this position.
- **Total.** The total number of items in a license.

PBAS License Details

To view PBAS license details:

1. Open **Configuration Director > License Manager > Parallels Business Automation - Standard Licenses** submenu on the Navigation tree. The PBAS license settings are displayed.
2. Click on **Management Node** license. The PBAS license details are displayed:

License Type: Lease	License Type: Purchase
<ul style="list-style-type: none"> ▪ License ID - License Key ▪ Owner - License Owner ▪ Owner ID - License Owner ID ▪ Hardware ID - PBAS Management Node HWID ▪ Expires - The date when PBAS license expires. ▪ License Update Date - The last date os license update. ▪ License Type - Type of license. ▪ Shared Revenue Contract - whether Shared revenue contract is active*: <ul style="list-style-type: none"> ▪ Active - Revenue Shared Contact is in force. ▪ Disabled - Revenue Shared Contact is disabled. ▪ Status - License current status: <ul style="list-style-type: none"> ▪ Active - License is valid and in use, all PBAS services are available. ▪ Ready for Update - License should be updated. Lease licenses are updated monthly, automatically online. If automated update is delayed (for example is License server is not available), then license gets this status. License in this status can be also updated manually: go to Configuration Director > License Manager > Parallels Business Automation - Standard Licenses and click Update License. ▪ Graced - License has expired, but valid till grace period lasts. Grace period starts after license expires and provides the ability to renew license. ▪ Inactive - License not valid (expired or broken). Most of PBAS services are not available. Update the license. 	<ul style="list-style-type: none"> ▪ License ID - License Key ▪ Owner - License Owner ▪ Owner ID - License Owner ID ▪ Hardware ID - PBAS Management Node HWID ▪ Expires - The date when PBAS license expires. ▪ License Type - Type of license. ▪ Shared Revenue Contract: <ul style="list-style-type: none"> ▪ Disabled - Always disabled for Purchase license type. ▪ Status - License current status: <ul style="list-style-type: none"> ▪ Active - License is valid and in use, all PBAS services are available. ▪ Graced - License has expired, but valid till grace period lasts. Grace period starts after license expires and provides the ability to renew license. ▪ Inactive - License not valid (expired or broken). Most of PBAS services are not available. Upload new valid license.

* - The process of PBAS fee calculation is automated. When Shared revenue contract is Active, the Revenue Shared Report is generated monthly and sent to Parallels. The report can be viewed under **Billing Director > Report Manager > Revenue Shared Report**.

CHAPTER 26

Getting Technical Support

Parallels provides installation assistance for Parallels Business Automation - Standard. Assistance with installation is offered via e-mail. The full information about Parallels Business Automation - Standard support and Parallels Business Automation - Standard documentation in HTML format is available at our website (<http://www.parallels.com/en/products/hspcomplete/docs/>).

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An Overview of Parallels Technical Support

Parallels Support will attempt to answer any relevant questions you may have before the installation process is initiated. This includes the following:

- Pre-requisites list;
- Hardware compatibility;
- Software compatibility.

Questions for Technical Support

In most cases, support team must rely on customer observations and communications with the customer in order to diagnose and solve the problem. Therefore, the detailed problem report is extremely important. Please, do mention the following:

- Symptoms of the problem;
- When the problem began including the circumstances of the failure;
- Any changes you made to your system;
- Other information that may be relevant to your situation, such as the installation method;
- Specific hardware devices that may be relevant to your problem.

How to Send Support Questions

Please, send your questions to support team by <http://www.parallels.com/support/request/>.

If you need to contact us - information about phone numbers, contact persons and office addresses is available on the contact page at <http://www.parallels.com/en/contact/>.

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