Parallels H-Sphere 3.4.1 Administrator Guide

Parallels H-Sphere 3.4.1

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Preface

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Typographical Conventions

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

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

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

Preformatted On-screen computer

output in your commandline sessions; source code in XML, C++, or other programming

languages.

Preformatted Bold

What you type, contrasted with on-screen

computer output.

cd /root/rpms/php

ls -al /files

total 14470

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

About This Guide

Parallels H-Sphere Administrator guide aims at hosting providers and explains how to configure and administer Parallels H-Sphere control panel.

Introduction To Parallels H-Sphere

Parallels H-Sphere is a comprehensive hosting automation system that allows you to provide a heterogeneous operating system environment to your customers across multiple servers. It can manage hosting servers located in various data centers.

Parallels H-Sphere can have a multiple server layout, called a cluster. The main server in the cluster is the actual Parallels H-Sphere Control Panel, a web application with graphical interface, which centralizes all hosting management tasks, controls all hosting servers and services, manages users, domains, events, and processes. Through Parallels H-Sphere web interface, you can configure and manage these and other subsystems, other servers (on page 18), user accounts and domains, etc. All system data, such as billing, domain, and other info, is stored in the Postgres system database. The Control panel consists of many subsystems, the major of them described below.

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DNS Management

All DNS is managed by Parallels H-Sphere.

A typical Parallels H-Sphere setup requires one service domain name (example.com) which is used as:

- the control panel domain (cp.example.com:8080 or cp.example.com:8443),
- web server domain (web1.example.com, web2.example.com),
- name server domain (ns1.example.com, ns2.example.com), etc.

It can also be used for third level hosting (on page 106) and instant access domain aliases (on page 95), as well as to host the corporate (promotional) website. (on page 103)

The most typical configuration is to have two DNS servers, each on a separate box. In case of one-server installations, you can put two DNS servers on one box (on page 51). By default, Parallels H-Sphere randomly assigns primary and secondary DNS servers for each domain to balance server load. If you want, you can assign master and slave roles to DNS logical servers.

Parallels H-Sphere creates a zone file for each domain name on both name servers, and allows end users to create custom DNS records through a web interface.

You can find more info on DNS Server Configuration in *Understanding DNS Server Configuration* documentation in System Administrator Guide.

Server Management

We differentiate between physical and logical servers.

Physical servers (on page 36) are actually or virtually separate computers with their own operating systems (Linux, FreeBSD Unix, or Windows). They can be emulated with VPS, VMWare or other software packages.

Logical servers (on page 39) are programs that run on physical servers and process client requests. For instance when we talk about web, mail, DNS, mysql and other servers, we mean logical servers. A physical server can have one or more logical servers running.

Logical servers of the same nature and purpose make a server group (on page 71). In case of multiserver installations, logical servers of the same group are located on different physical servers, and Parallels H-Sphere randomly chooses from them to create user accounts, which evens server load and disk space usage.

In most instances, Parallels H-Sphere operates with logical servers, not physical servers. We work with logical servers when we add IPs (on page 48), configure system SMTP relays (on page 58), assign mail server roles, assign name server roles (on page 51), etc.

User Signup

To use hosting services, users (site owners and resellers) need to sign up for a hosting plan.

Parallels H-Sphere offers fully automated user signup (on page 464) through the signup wizard. Depending on the billing type and signup settings, accounts may not be created until moderated by administrator (on page 471). For instance, an account may not be immediately created because it was blacklisted by Signup Guard (on page 475) or because the user doesn't pay with a credit card.

Depending on the plan, access to the signup wizard can be unrestricted (available "from the street") or allowed only from the admin control panel. Registration "from the street" can be performed by anybody without admin's interaction. Registration from the admin control panel goes through exactly the same steps, but can be performed only by the administrator. The latter is the only way to sign users up for publicly unavailable plans.

Billing And Plan Management

Parallels H-Sphere comes with a complete billing solution. When users sign up, buy or use hosting resources, it calculates user charges based on the prices you have specified and charges them to users' credit cards. When credit card charges don't apply, customer payments are added manually in the admin control panel. For more, see Introduction to Billing and Introduction to Plans.

Merchant Gateway Management

Parallels H-Sphere can work with credit card processors and web based payment systems to collect payments from customers. To enable a connection with either of these, you need to configure a connection with the corresponding server.

CREDIT CARD PROCESSORS. Parallels H-Sphere offers complete automation with credit card processing. To charge an amount to a customer's credit card, Parallels H-Sphere connects to the merchant gateway server and sends an http request. Next, it waits for a response, and once the success confirmation is received, respective changes are made to the account balance.

Merchant Gateway Manager allows you to set up different merchant gateway accounts for different types of credit cards. For instance, you can process VISA cards with Authorize.Net, and MasterCard, with Verisign PayFlowPro. This way you can maximize your profits by processing every type of credit card with the gateway that offers the lowest rate for this type of card. For more, see Merchant Gateway Manager (on page 181).

WEB BASED PAYMENT SYSTEMS. Parallels H-Sphere partially automates payments through web based payment gateways, including WorldPay (on page 248), PayPal, 2CheckOut (on page 238), GestPay (on page 242), PaySystems, and PayNova (on page 243). Once you have registered an account with one of these gateways, you enter the account details in Parallels H-Sphere. Every time a user chooses to pay, Parallels H-Sphere passes account ID, amount payable, and possibly other details to the gateway. The user is then taken to the gateway's web interface to enter the credit card number and complete the transaction. When you receive the payment, you need to credit this user's account (on page 424) through the Parallels H-Sphere admin interface, as in processing check payments (on page 463). As a result, Parallels H-Sphere doesn't store credit card numbers of customers using web payment systems. For more, see Web Payment Systems Manager (on page 236).

User/Account/Domain Management

On the user side, Parallels H-Sphere operates with three different tiers: users, accounts, and domains.

USERS. A user, for the most part, is nothing but a login and password to enter Parallels H-Sphere control panel. One user can have many accounts (control panels) created under the same or different plans, and switch between them without having to log in every time.

ACCOUNTS. Parallels H-Sphere primarily operates with accounts, not users. One account equals one license and one control panel with its own billing and interface settings. This means an account has its own balance, billing profiles, invoices, etc. The unique thing about each account is the numeric account ID. One user can have many accounts created under different plans and platforms, for instance an account under a Unix plan for SSH access (on page 467) and an account under a Windows plan for ODBC or ColdFusion hosting.

DOMAINS. Domains represent the third tier in the end-user side hierarchy. Your customers can have as many domains as they want under their one control panel license, unless you limit the domains they can have. In terms of a web server, a domain is little more than a correspondence to a web-site. Domains within one account share one control panel (one menu tree with the same look and feel), and, having no traffic usage or disk quota of their own, are billed in bulk with the same invoices.

Understanding Accounts, Domains, and Users (on page 285)

Resellers

The Reseller feature allows you to sell your hosting services through resellers. Unlike in other control panels, resellers in Parallels H-Sphere do not resell your plans. Rather, they sell your hosting resources such as disk space, traffic, mailboxes, etc. at retail prices, and are charged for them at wholesale prices. In other words, you set wholesale prices and allow your resellers to group your resources into their own plans and define their own retail prices for them. More on Billing Resellers (on page 392)

With the reseller admin CP, each reseller gets a private label hosting system, which leaves you completely invisible to the end customer even at user signup and domain registration. Resellers can have their own independent control panel URL, DNS server names, company information, and all other parameters visible from the user's control panel. They will appear to end customers as totally independent hosting companies. Furthermore, reseller control panels are inaccessible by IP, which excludes the possibility of accidental or intentional visits to your control panel URL.

Through their admin interface, resellers can customize the default look and feel of their users' control panels. They can change colors, replace all control panel images with those of their own, edit many texts, change the default control panel language and the currency of end user payments, etc. in exactly the same manner as it is done by the master admin.

Domain Management

There are several options to setting up a domain in Parallels H-Sphere:

- REGISTER A NEW DOMAIN. Parallels H-Sphere allows automatic registration of standard second level domains right from the user control panel. It supports the registration of all TLDs supported by Enom or OpenSRS in real time. You can configure Parallels H-Sphere to associate different TLDs with different registrars using the Domain Registrar Manager (on page 155). TLDs with non-automatic registration, including most regional domains, can be requested by the end user and then manually registered by the admin through the Email Domain Registrar (on page 176).
- TRANSFER an existing domain. Users can transfer domains they have been using outside Parallels H-Sphere. After the transfer, users will need to update their info on the root DNS servers.
- Set up a THIRD LEVEL DOMAIN. Users can set up domains based on the service domain, such as userdomain.servicedomain.com.
- Set up a WEBSITE WITHOUT A REGULAR DOMAIN NAME. Such websites have all basic functionalities and are accessible from the web at automatically generated addresses based on the service domain, such as 123.unnn.servicedomain.com.
- PARK A DOMAIN. This allows you to use Parallels H-Sphere DNS server for mapping IPs and domain names serviced and hosted elsewhere.
- Create an ACCOUNT WITHOUT ANY DOMAIN. The user will be given disk space on the web server with FTP access, but no DNS to set up a website.

SSL

Parallels H-Sphere recognizes the following uses and types of SSL certificates:

WEBSITE SSL - users can install SSL certificates one per website right from their user control panels. For instance, a user can set up a certificate on user.com to have the user.com website secured with SSL. This can be installed only on websites with dedicated IPs.

SHARED SSL uses wildcard certificates to secure third level domains. For instance, if provider.com is a service domain offered for third level hosting, you can set up a wildcard certificate on provider.com to secure domains like user1.provider.com and user2.provider.com. More>> (on page 140)

CP SSL - you can secure your control panel with a regular SSL certificate. At this point, CP SSL is installed from the command line on the CP server.

RESELLER CP SSL - you can configure your Parallels H-Sphere to let resellers secure their control panels with regular SSL certificates. More>> (on page 394)

RESELLER SHARED SSL - resellers can install wildcard certificates to secure their customers' websites. More>> (on page 400)

DELEGATED SHARED SSL - you can allow your resellers to offer their customers your service domain for third level hosting and wildcard certificate installed on it.

MAIL SSL - you can install SSL on the service DNS zone to secure mail sent and received by your customers' mail clients (such as Outlook Express). Mail SSL is enabled globally in the system for all end users, including those under resellers. It is available only to master admin. More>> (on page 144)

Support Center

Parallels H-Sphere Support Center includes Ticket Center, Knowledge Base, and Custom Jobs modules.

TICKET CENTER. Trouble tickets can be created either from any place in the user control panel or from email messages. Parallels H-Sphere periodically polls support mailbox, converts incoming messages into trouble tickets, and puts them in the general queue where they can be picked up, assigned to other administrators, answered, and closed. Depending on how they were created, answered tickets are emailed back to the customers or show up in the ticket center of end users' control panels. Support personnel can exchange notes on tickets - the notes are invisible to customers. More on Providing Customer Support

KNOWLEDGE BASE. Administrators can add common questions and answers to a centralized location, group them by categories, and perform search by keywords. The knowledge base is integrated with the ticket center to suggest answers to typical questions. More on Knowledge Base (on page 525)

CUSTOM JOBS. Parallels H-Sphere also offers an interface to track additional services offered to resellers or end users, such as web design and development, installation, migration, and alike. The list of custom jobs and their status can be viewed from the customer's interface. More on Custom Jobs (on page 531)

Look and Feel Management

Parallels H-Sphere comes with a few skins users can choose from. Different skins offer different navigation schemes:

- XP Reloaded default left-menu skin since Parallels H-Sphere 3.1.
- XPressia pages are accessible from the horizontal JavaScript navigation bar AND icons on the home page.
- Left Menu although this skin has a quick access page linking to the most frequently used pages, the principal navigation is through the left side menu.
- No Menu pages are accessible from clicking navigation icons on the home page.

Each of the skins has a text based variation where navigation icons are replaced with text links.

As administrator, you can configure interface settings, including images and icons (on page 110), default skins and colors (on page 115), interface texts (on page 114), and notification e-mails (on page 122).

The administrator can also allow users to choose preferred skins and languages.

Parallels H-Sphere Licensing

Parallels H-Sphere 3.4 uses a unified Parallels key administration system for licensing.

You will need a new license key if you are going to:

- Purchase or lease Parallels H-Sphere 3.4 or higher
- Upgrade earlier Parallels H-Sphere versions to the latest version
- Upgrade the number of accounts

Purchasing and Leasing Parallels H-Sphere

Before installing Parallels H-Sphere, go to http://www.parallels.com/store/hsphere/ to purchase or lease Parallels H-Sphere.

Every new license purchase includes 12 months of Software Update Service (SUS) that entitles you to version upgrade licenses throughout the life of your SUS. You will be required in order to receive further upgrades. All leased license keys (monthly) include SUS.

After a fresh installation, when you first log into the Parallels H-Sphere control panel, you will see the prompt to enter the license from the file. Add the purchased license as described below. After the license has been added successfully, you will see the license details on the **License Info** page.

Upgrading to Parallels H-Sphere 3.4 or higher

Before upgrading earlier Parallels H-Sphere versions to 3.4 or higher, **make sure to upgrade your key** at https://www.parallels.com/hsphere/key_upgrade/

Parallels H-Sphere keys can be updated to support newer versions of the software when they are SUS enabled. When the SUS feature of your key is up-to-date, you can perform the upgrade of the key without extra costs. In case you run out of this service, please contact our sales representatives in order to renew/reinstate it.

Warning: Old Parallels H-Sphere licenses are incompatible with Parallels licenses! Also, no backward compatibility is provided for Parallels licenses on Parallels H-Sphere 3.1 Patch 1 and earlier.

Important: When you upgrade Parallels H-Sphere from 3.1 Patch 1 or earlier, you would lose your older license and would not be able to enter your control panel unless you apply a new license. So you *must upgrade your license* before the upgrade.

> To upgrade the license:

- 1. Click License Info in the Parallels H-Sphere control panel menu.
- 2. Add the purchased license key. You have two ways of adding the license key:
 - Under License Code Activation in the Activate Code field, enter the Key Activation
 Code and click Activate.
 - Under License File in the License Key File field, click Upload, then click Browse to choose the license key file (you could add the license key either zipped or in XML format), then click Submit.

After that, you will get the details of the applied key in the page:

- Key Number: license key identifier
- **Key Version**: a number which is incremented each time you upgrade your license. When you add the license for the first time, its value will be 0001.
- Auto Update Date: the date when Parallels H-Sphere will try to automatically update the license.
- Expiration Date: 10 days after the Auto Update Date are given to the Parallels H-Sphere administrator to update the license manually if the automatic update fails or not possible.
- H-Sphere Version: Parallels H-Sphere version the license is applicable to.
- Accounts: the number of accounts this license is provided for.
- Physical Servers, Resellers, Staff Members: the license may restrict the number of physical servers, resellers, or administrator accounts in the Control Panel.
- Sitebuilder Support: Parallels H-Sphere now comes with Parallels SiteBuilder integration (reserved for future implementation).
- Sharepoint Support, SiteStudio Support, MS Exchange Support, VPS Support: support for legacy Parallels H-Sphere features.

Upgrading Parallels H-Sphere Accounts

If you want to upgrade the number of accounts that your key holds, you can do that through our online store at http://www.parallels.com/store/hsphere/upgrades.

Getting Started

This document explains what you need to do in order to set up your hosting system with minimum required configuration, considering the following:

- We presume that you have purchased Parallels H-Sphere license, installed Parallels H-Sphere system, configured and tested it.
- A standard Parallels H-Sphere installation sets up a service dns zone (on page 93), reseller CP alias, and an instant alias template (on page 95), creates a www.user account for hosting your corporate site (on page 103).

Follow the given instructions step by step to configure your control panel.

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Step 7. Configure Support Center	
Step 8. Configure Look and Feel	

Step1. Disable Global Resources

Skip this step if you're not going to disable any resources, hosting platforms or logical servers.

You can globally disable resources, hosting platforms, CP designs, dedicated of virtual private servers, etc. if you don't offer them to your customers.

- 1. Go to Plans > Globals in your Admin CP.
- 2. On the page that shows, uncheck the resources and/or hosting platform you want to be entirely disabled in the system and submit changes. This will affect all your plans and those of resellers. However, only new singups, but not your current accounts, are subject to such changes.
- > To disable resources and platforms only for specific plans:
- 1. Go to Plans > Manage menu and click to edit the existing plan via Plan Edit Wizard.
- 2. Go through Plan Edit Wizard and submit it step by step without changing prices.

Step 2. Set up a Domain Registrar

Domain registrars need to be added and configured to allow customers to register second level domains directly from their control panels.

- 1. Select Domain Registrar in the Settings menu.
- 2. Select a domain registrar in the Add New Registrar drop down box and click Add.
- Enter this domain registrar properties. Check with Domain Registrar Manager (on page 155) for detailed instructions.
- 4. In the Set Active drop down box, select this domain registrar.
- 5. In the TLD drop down box, select the top level domain you would like to associate with this registrar.
- **6.** Click the **Activate** button.
- 7. Click Define Terms/Prices button for the new record that appeared.

Enter prices for each time period and click Submit Query.

Step 3. Configure Mail Notification Addresses

- > To subscribe your staff to receive copies of user e-mail notifications:
- 1. Go to the Settings menu > Notifications > Notification Recipients.
- 2. On the page that appears add subscribers to mailing lists you choose.

Step 4. Set up Payment Settings

On this step you can configure Parallels H-Sphere to process credit cards, accept check payments and perform online web payments for the services you provide.

- ➤ To configure credit card processing through Merchant Gateway Manager (on page 181):
- Go to the Settings menu -> Payment Settings -> CC Brands and add necessary CC brands.
- 2. Go to the Settings menu ->Payment Settings -> Merchant Gateway and add necessary merchant gateway from the drop down menu and click Add.
- **3.** In the **Set Active** drop down box, select this merchant gateway. You can have only one active merchant gateway at a time.
- **4.** In the **Payment Type** drop down box, select the CC brand you would like to process with this merchant gateway.
- 5. Click the Activate button.
- ➤ To configure Web Payment Processor (on page 236), like PayPal or 2CheckOut:
- 1. Go to the Settings menu -> Payment Settings -> Merchant Gateway.
- 2. Select the payment system from the drop-down menu and click Edit:
- 3. Enter your account settings. Once you enter correct settings, the web payment system will appear in the list as Active
- > To configure Processing Check Payments (on page 463):
- 1. Go to the Settings menu -> Payment Settings -> Merchant Gateway.
- 2. Enable Accept Checks.

Step 5. Create Plans

Now that your control panel is configured, you can create hosting plans.

- 1. Go to Plans -> Create and click Select next to the plan to start the wizard.
- **2.** Enter the name of the plan at the top of the page.
- 3. Select the resources (features) you would like to include in the plan. Make sure to leave **Service Domain** unchecked.
- **4.** In the last section of the wizard, make sure to enter **Credit limit**, e.g. 10 and click **Next** to proceed.
- **5.** Enter prices and free units for each type of resource and click the **Create** button at the bottom of the page.
- 6. Go to Plans -> Manage and turn this plan ON for signups.

Now your control panel is ready for signing up users (on page 464). Please read all documentation before using Parallels H-Sphere as a production system.

Step 6. Create Billing Periods

Each plan can have several billing periods with different price discounts for each. You can't delete billing periods, but you can change their duration. For instance, if you create a billing period for 1 year and you find out you don't need it, you can change it to 3 months.

> To create a billing period for a plan:

- 1. Go to Plans -> Manage and click Settings in the Advanced section.
- 2. Scroll down to the Payment Intervals and click Add.
- **3.** Specify the duration of the billing period. For instance, to make it 3 months long, select MONTH and enter 3 in the **Size** box.
- **4.** Optionally, enter discounts. For instance, if you want to cancel any setup fee for this billing period, enter 100 in the **Setup Discount** field.
- **5.** Click **Submit**. This will add the billing period to the list.

Step 7. Configure Support Center

Support Center is the web-based means of providing customer support.

- To configure your Support Center:
- 1. Go to Plans -> Create menu and choose Administrator Plan Wizard.
- 2. Enter TechSupport Admin as the name of the plan, check to include TroubleTicket Admin and Allow assignment of trouble tickets and submit.
- 3. Go to Plans -> Manage and turn this plan ON for signups.
- **4.** Go to **Signup** menu, click to sign up for **Tech Support Admin** and create Tech Support Admin account using the signup wizard.
- 5. Go to Settings > Tech Support and configure your Support Center (on page 522). It is required to collect customers' e-mails and convert them into trouble tickets.

Step 8. Configure Look and Feel

Go to **Settings** -> **Look and Feel** menu and enter information to all necessary sections. These settings will affect all your customers' control panels.

- Corporate Logos (on page 110): enter Banner HTML Code for the banner to show up in your users CPs and the location and sizes of the logos. Click the help [?] icon for details.
- Company Info (on page 131): enter the company info that will show in customer email notifications and the address will be used by customers to send checks.
- Default language (on page 118): choose CP interface language. It can be overridden by individual customers.
- Regional options (on page 108): enter preferred currency symbol. The language and the regional settings will affect all your customers' control panels.
- Default CP design (on page 115): set designs to be available by users and the default design for Users CPs.

Server Configuration

This chapter provides you with the instructions on how you can configure physical and logical servers in Parallels H-Sphere.

In this chapter:

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Logical Servers	39
Adding IPs	48
DNS Servers	
Mail Server Settings	
SPF and SRS	54
AntiSpam and AntiVirus	56
System SMTP Relays	58
Advanced Web Server Settings	
Server Groups	71
Load Balanced Server Clusters	74
Platform Change	77
Updating Physical Boxes From CP Interface	
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Physical Servers

Physical servers (also referred to as boxes) are represented by physically or virtually separate computers with their own operating systems (Linux, FreeBSD Unix, or Windows). Physical servers can be emulated with VPS, VMWare or other software packages.

Separate physical servers are required for:

- Windows web hosting
- MS SQL user database hosting
- Windows real media hosting
- PostgresSQL user database hosting
- VPS hosting

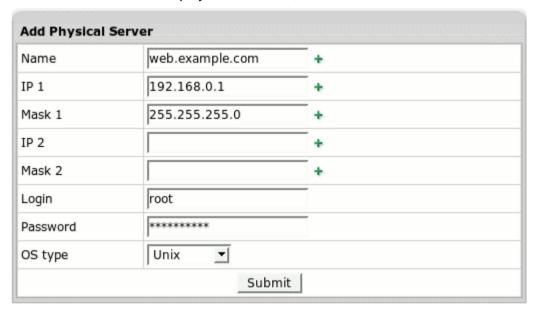
In this section:

Adding Physical Servers	37
Physical Server Controls	38
Deleting a Physical Server	39

Adding Physical Servers

Important: note that this document provides instructions on how to add physical servers via the control panel. It is just a step in the procedure of adding servers and services to the Parallels H-Sphere cluster. You can read about this in a separate guide.

- To add a new physical server to Parallels H-Sphere:
- 1. In your admin control panel, go to E. Manager -> Servers -> Add P.Server.
- 2. Click Add Physical Server at the bottom of the page that appears.
- 3. Enter the name of the physical server, its IP and associated net mask:



Specify Login and Password parameters:

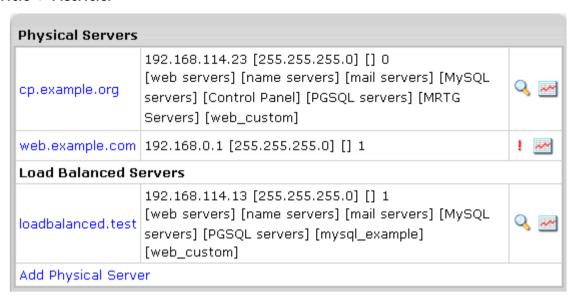
- For Windows servers, these are login (hsadmin by default) and password chosen when installing the Winbox.
- For Unix servers, enter login: root and root password for this server.

 Don't enter IP2 and Mask2, they are not implemented for Linux and for Windows.
- 4. Click Submit.
- 5. Add server groups (on page 71) (types) of logical servers to be placed on this physical server. For example, if you add only web servers and mail servers groups, you won't be able to add any DNS servers to this physical server.
- **6.** Go to **E.Manager** -> **Servers** -> **P.Servers** to see the newly added server in the list of all physical servers in the system.

To finish adding this physical server to Parallels H-Sphere, add to it also logical servers (on page 39) (services that you plan to place on it). Further steps are described in a separate guide on *Adding servers and services to Parallels H-Sphere*.

Physical Server Controls

To see all physical servers in your Parallels H-Sphere cluster, go to E. Manager -> Servers -> P.Servers:



From this page you can:

- choose Apache version (on page 59) for all Unix boxes and configure settings for Unix web boxes (on page 59)
- ! means that this physical server hasn't been physically added to the system
- view system information for this server

You can disable monitoring information for this server to preserve resources of the system. To do this, click the physical server title on the page E. Manager -> Servers -> P.Servers. Scroll down and click the button against Enable server info monitoring:



When this service is enabled, you can also view, from the **System Information** page, which packages and services are installed on the system and perform system service management (on page 90).

See also:

Load balanced server clusters (on page 74)

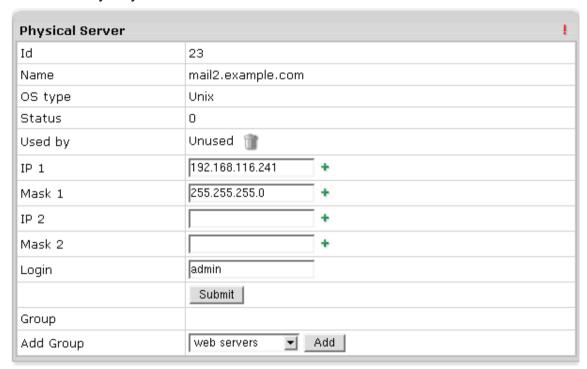
Updating physical boxes from the CP interface (on page 80)

Physical server installation/update profiles (on page 82)

Deleting a Physical Server

A physical server can be deleted only if it's free of logical servers.

- > To delete a physical server:
- 1. Go to E.Manager -> Servers -> P.Servers.
- 2. Click the name of the physical server you've decided to delete.
- 3. In the Used by section, find the Delete icon. It appears only if the server isn't used by any services:



Logical Servers

By logical servers we mean the software that runs on physical servers and processes client requests.

In this section:

Adding Logical Servers	40
Enabling User Signup on Logical Servers	
Removing Logical Servers	
Setting Logical Server Additional Options	

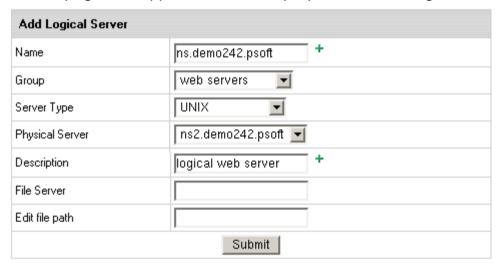
Adding Logical Servers

Important: for correct system performance, we don't recommend that you have more than one logical server of the same type (web, mail, dns etc.) per each physical box. As an exception, two logical dns servers are permissible under one- server installation. As soon as the second box is added to the system, one of the name servers should be moved to that box.

Before you begin adding a logical server to Parallels H-Sphere, make sure to have the physical server added to Parallels H-Sphere configuration.

> To add a new logical server to Parallels H-Sphere:

- 1. Go to your admin control panel.
- 2. Go to E.Manager -> Servers -> Add L.Server.
- 3. On the page that appears, enter the properties of the logical server:

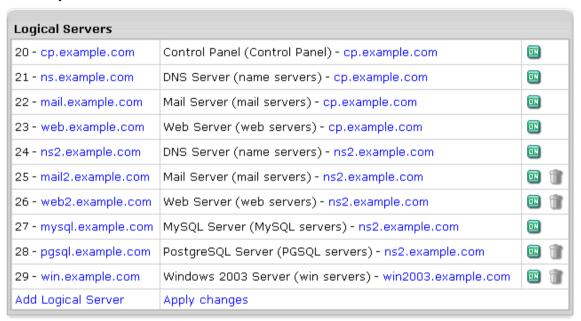


- Name: The domain name of the logical server;
- Group: The group of logical servers you are adding this server to.
- Type: The type of the server.
- Physical Server: The box where the logical server is installed. If nothing is available in the dropdown box, add this server group to the physical server (on page 71) first.
- **Description**: The note that will help you identify this server among others.
- File Server: redundant parameter, not in use any longer.
- File Path: redundant parameter, not in use any longer.
- **4.** Click **Submit** to create a logical server. You will proceed to the page where you can configure other parameters for this logical server:
 - a Enable user signup (on page 39) on this server
 - **b** Automatically generate custom DNS records (on page 99) by clicking **Generate** in front of **Generate custom DNS records for this logical server**
 - c Add IP range (on page 48) available for hosting on this server
 - **d** Configure additional options (on page 39) specific to this logical server type (Web, mail, DNS, Windows, ...)
- **5.** Add DNS records (on page 99) for this logical server.
- 6. If you are adding a web server, select Shared SSL Manager in the E.Manager menu, click the Edit icon next to the domain name and enter the certificate key and certificate file in the Install completely new certificate key and file pair boxes. Then click the Upload button. This will update the shared SSL certificate installation on all servers, including the newly installed one.
- **7.** For each type of logical servers, configure specific additional options (on page 39).

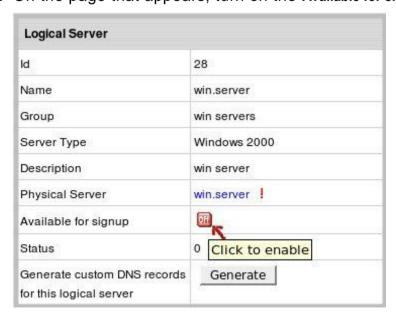
Enabling User Signup on Logical Servers

By default, customer signup is disabled on new logical servers. Sometimes you may want to keep it disabled to provide dedicated servers to individual customers or to prevent them from getting overloaded. In most cases, however, you would need to turn it on.

- > To enable user signup:
- 1. Go to E.Manager -> Servers -> L.Servers.
- 2. You will be taken to the list of all logical servers in the system. Click the server you would like to edit:



3. On the page that appears, turn on the Available for signup option.



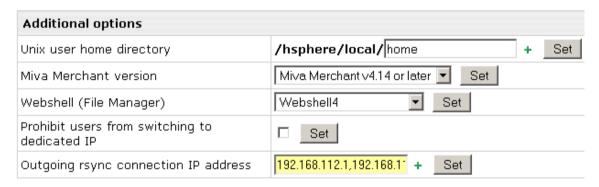
Removing Logical Servers

- To remove a logical server:
- Make sure no accounts, mail domains, web sites or other resources are run on it.
- 2. Delete all the IPs designated to it (E.Manager -> L.Servers -> 'selected logical server' page)
- 3. Click the Delete icon which will then appear in the Usage field

Setting Logical Server Additional Options

Once a logical server is added, you can set additional options for it. To set additional options, click the logical server name in the list of all logical servers and scroll down to the bottom of the page.

Web server additional options

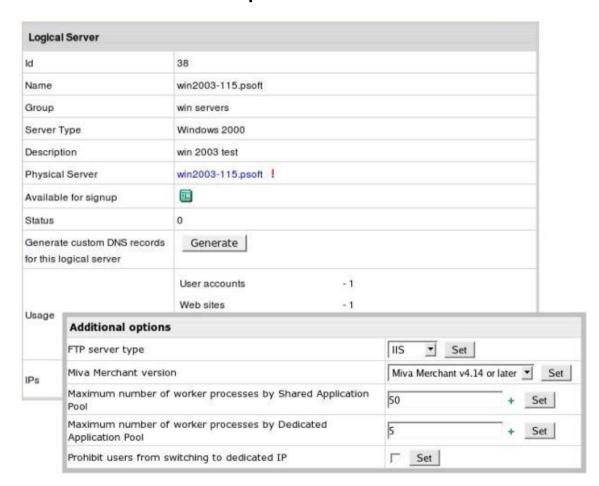


You can set the following for the webserver:

- Miva Merchant version: this option allows setting correct extensions prior to installation: .mv for v. 4.12 and older and .mvc for v.4.14 and later.
- Unix user home directory: enter home directory if necessary.
- Webshell (File Manager): this option allows choosing between Webshell4 and Webshell5 (CGI Mode)
- Prohibit users from switching to dedicated IP: disables switching to dedicated IP for all
 users
- Choose External Horde DB Server: set MySQL logical server for Horde Webmail Frontend. If you set LOCAL, Parallels H-Sphere will use the default server.
- Outgoing rsync connection IP address: Usually, rsync would connect from the Web server's shared IP, but for non-default rsync allow host parameters you can set the outgoing rsync connection IP(s) (delimited with comma) in the logical server options.

Make sure to click **Set** to apply changes.

Windows server additional options



You can set the following parameters for the Windows server:

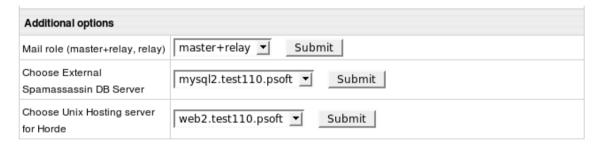
- FTP Server Type: you can choose between IIS and FTP
- Miva Merchant version: this option allows setting correct extensions prior to installation: .mv for v. 4.12 and older and .mvc for v.4.14 and later.
- Maximum number of worker processes by Shared Application Pool: once you set the restriction, users won't be able to exceed it in their User CP.
- Maximum number of worker processes by Dedicated Application Pool: once you set the restriction, users won't be able to exceed it in their User CP.
- Prohibit users from switching to dedicated IP: disables switching to dedicated IP for all users, if necessary

DNS server additional options

Additional options in DNS logical server allow assigning master and slave roles to DNS logical servers and limiting resellers to particular DNS logical servers.

For detailed information, read about DNS Servers (on page 51).

Mail server additional options



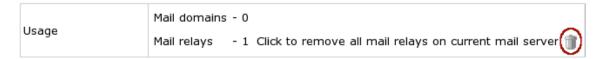
Additional options in mailserver allow to choose:

- Mail server role at the system level
- External Spamassassin DB Server If you set LOCAL, Parallels H-Sphere will use default server.
- Unix Hosting server for Horde If you set LOCAL, Parallels H-Sphere will use default server.

REMOVING MAIL RELAYS ON A CHOSEN MAIL SERVER

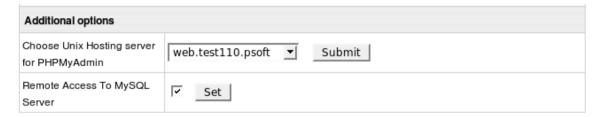
If your mail server has none of mail domains, you can remove all its mail relays in one click on the Mail Servers Settings page. Firstly, make sure the

CleanMailRelaysForMailServer cron is enabled in Background Job Manager



Once you removed all mail relays, you can remove the corresponding logical server.

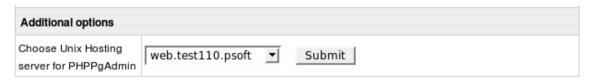
MySQL server additional options



You can set the following for the MySQL server:

- Unix Hosting server for PHPMyAdmin that will host your users' built-in phpMyAdmin control panel. If you set LOCAL, Parallels H-Sphere will use default server.
- Remote Access To MySQL Server

PostgreSQL server additional options



 Unix Hosting server for PHPPgAdmin that will host your users' built-in phpPgAdmin control panel. If you set LOCAL, Parallels H-Sphere will use local server.

VPS server additional options:



Additional VPS server options allow to choose between FreeVPS and OpenVZ solutions.

See also Changing Parallels H-Sphere VPS Solution in System Administrator guide.

Load Balancer File Server (Filer) Settings

Load Balancer Server Settings	S
File Server Type	NET_APP <u>▼</u>
File Server	192.168.117.130:/vol/vol0 +
File Path	/vol/vol0/hsphere +
File server Volume ID	vol0 +
	Submit

Once the physical server for this logical server (master server only!) is configured in the load balanced server cluster, the following **Load Balancer File Server Settings** should be set in **Logical Server** options:

- File Server Type: file storage OS type, like UNIX for generic Linux NFS;
- File Server: file storage volume location, like 10.9.8.7:/vol/vol0;
- File Path: (optional) file storage path to Parallels H-Sphere directory, like /vol/vol0/hsphere.
- File server Volume ID: file storage volume ID, like vol0.

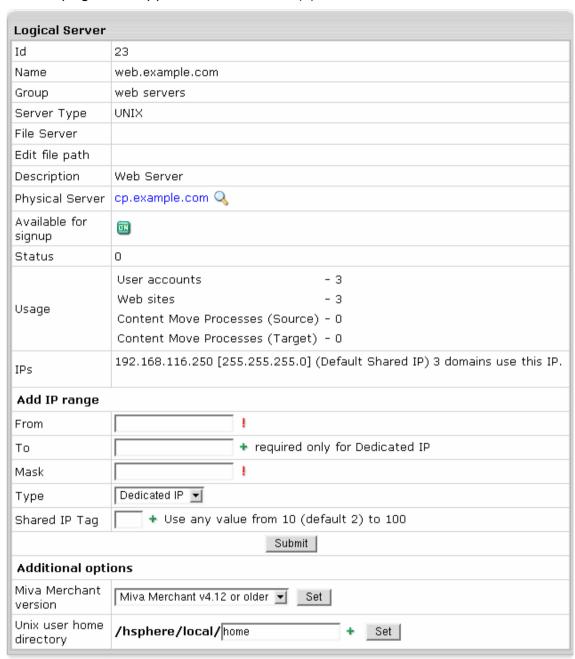
See Installation of Load Balanced Web/Mail Clusters in Parallels H-Sphere in Parallels H-Sphere System Administrator Guide for explanations.

Adding IPs

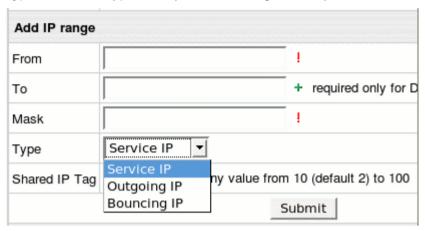
- > To add IPs to a logical server:
- 1. Go to E.Manager -> Servers -> L.Servers.
- 2. Select the logical server from the list:

Logical Servers		
20 - cp.example.com	Control Panel (Control Panel) - cp.example.com	III
21 - ns.example.com	DNS Server (name servers) - cp.example.com	īN .
22 - mail.example.com	Mail Server (mail servers) - cp.example.com	īN .
23 - web.example.com	Web Server (web servers) - cp.example.com	īN .
24 - ns2.example.com	DNS Server (name servers) - ns2.example.com	īN .
25 - mail2.example.com	Mail Server (mail servers) - ns2.example.com	II
26 - web2.example.com	Web Server (web servers) - ns2.example.com	II
27 - mysql.example.com	MySQL Server (MySQL servers) - ns2.example.com	īN .
28 - pgsql.example.com	PostgreSQL Server (PGSQL servers) - ns2.example.com	II
29 - win.example.com	Windows 2003 Server (win servers) - win2003.example.com	III
Add Logical Server	Apply changes	

3. On the page that appears, enter the IP(s):



- From: enter the first IP of the range of dedicated IPs. If you are adding only one IP, enter it here.
- To: enter the last IP of the range of dedicated IPs.
- Mask: enter the netmask—you should have received it from your Internet Service Provider. When adding a pool of IPs on FreeBSD servers, add the first IP separately with the real mask, then add the other IPs as a pool with the mask 255.255.255.255.
- Type: select the type of IP you are adding to the system:



- Dedicated IP the IP will be dedicated only to one site/service. This means that Dedicated IP should be unique and cannot be used anywhere else. Choose it only for Web and Windows servers.
- Shared IP the IP will be used by multiple Web sites under Unix and Windows via typical Virtual hosting. Choose it only for Web and Windows servers. Make sure to add shared IPs one by one, NOT as a range of IPs.
 Important: We recommend having at least one shared IP ("default" one with default Shared IP tag 2) on every Web/Windows server. This is in particular essential for creation of reseller DNS aliases.
- Service IP choose it for logical servers other than Web and Windows. Don't choose it for Web and Windows servers!

Note:

- 1. For every logical server other than Web/Windows exactly one service IP must be set!
- 2. If you add a service IP to a logical server in the «Control Panel» or «MRTG» group, make sure it is the IP of the physical server. Mind also, that service IP doesn't automatically bind to a physical server. Instead you have to put it up manually or use physical server's primary IP.
- DNS Reseller IP choose it only for resellers' name server aliases.
- System Management IP reserved for future use. Don't select it.
- Outgoing IP configure separate IP for sending outgoing mail. If this value is specified, all your mail is sent from the specified IP, not from your actual mail server IP. Use this control when your mail server IP is added to a spam blacklist, and mail from your domain is rejected. Important: You can have only one Outgoing IP per mail server.
- Bouncing IP configure separate IP for sending bounced mail. It allows isolating bounced message on a different IP address and block them without blocking other mail. Important: You can have only one Bouncing IP per mail server.
- Shared IP Tag: a digital "mark" that helps to separate sites on one logical server. It allows you to allocate a separate shared IP address to a group of sites of, say, explicit nature. This may become necessary, because many corporate firewalls filter sites based on their IP address, not domain name. Note: Make sure to have one shared IP tag used by one shared IP within one logical server.

IMPORTANT:

- 1. Make sure the same dedicated or shared IP is not used by more than 1 server.
- 2. When added to the logical Web server, dedicated IPs are not registered in ipconfig. They are only added when new accounts are created.
- 4. Added IPs will show up under IPs in the Logical Server section.

Once added, IPs can be painlessly changed only when no Websites are running on the system. Changing IPs on production servers implies an IP migration.

DNS Servers

How Do I Put Several DNS Servers On One Box?

You can have more than one DNS servers on one box. However, if you'd like to put your DNS servers on more than one box, you need to put each of them on a separate box.

To configure multiple DNS servers on one physical box, see *Single DNS Confiruration* in System Administrator Guide.

How do I assign master and slave roles to DNS logical servers?

- 1. Go to E.Manager -> Servers -> L.Servers.
- **2.** Click DNS logical server name. You'll be taken to its configuration page. At the bottom of the page you'll see the **Additional options** form:



- From the DNS role drop-down box choose either master or slave1 or slave2.
- **4.** Repeat steps 1-3 for the rest of your DNS logical servers.

If DNS logical servers are not assigned any roles or more than one DNS logical servers are assigned the same role (e.g. two master or two slave1 servers), Parallels H-Sphere will randomly assign "master" to one of them and address another one as "slave". In this case it's quite likely that the same DNS logical server will have different roles for different DNS zones.

How do I limit resellers to particular DNS logical servers?

- 1. Go to E.Manager -> Servers -> L.Servers.
- 2. Click DNS logical server name. You'll be taken to its configuration page. At the bottom of the page you'll see the Additional options form:



- 3. From the Used by drop-down box choose:
- all accounts to allow both regular and reseller customer accounts to use this DNS logical server;
- resellers only to allow only reseller end customer accounts to use this DNS logical server:
- master admin only to allow only your regular customer accounts to use this DNS logical server.

Important: if all DNS logical servers are used by the same group, signups from under the other group will fail.

Mail Server Settings

Parallels H-Sphere incorporates the following mail server functionality configured from CP web interface:

- Qmail controls configuring general and antispam Qmail controls (System Administrator Guide).
- SpamAssassin configuring mail server SpamAssasin parameters.
- SPF and SRS configuring SPF and SRS on server level.
- Blocking IP fighting spam or ignoring unwanted emails by denying relay to specific IP.
- Adding Qmail Settings To IP/Subnet adding mail relay and other Qmail settings to a chosen IP/subnet.

SPF and SRS

- SPF or Sender Policy Framework figthts e-mail forgery in SMTP transaction. It prevents unauthorized people from forging email addresses. When users enable SPF, a DNS TXT record is created for DNS zone hosting this domain. It defines what IP's can be used to send mail from this domain. On receiving e-mail from user's domain, recipient, providing SPF is enabled on their side, can check if it indeed was sent from the IP listed in this DNS record.
- SRS or Sender Rewriting Scheme is a mechanism to rewrite sender addresses when a mail is forwarded in such a way that mail forwarding continues to work in an SPF compliant world. When you add SRS, then srs qmail parameters will be included on all mail servers, also base64 secret key used in the SRS address cipher will be generated. You can include mailSRS cron in the Background Job Manager to regenerate secret key every month.

In this section:

Enabling SPF and SRS	54
Configuring SPF and SRS	55

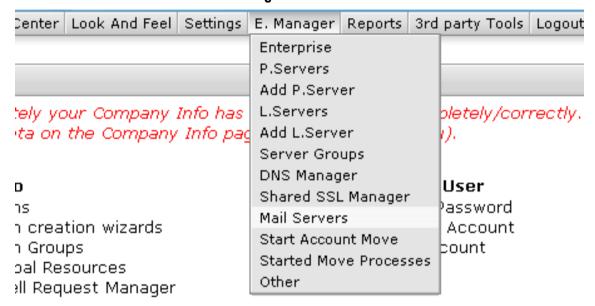
Enabling SPF and SRS

- SPF is included in plans as a regular resources with plan edit wizards.
- SRS is enabled for the whole system and doesn't require enbaling it in the plans.
 To enable SRS, go to Mail Servers (the E.Manager -> Servers menu) and turn it ON, clicking the OFF button in the SRS entry:



Configuring SPF and SRS

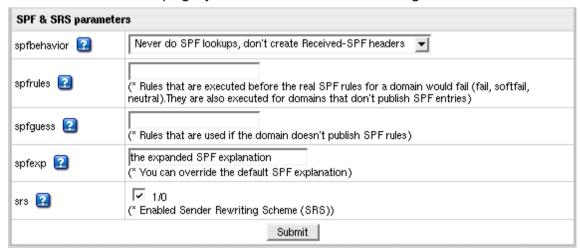
- > To access SPF/SRS configuration form:
- 1. Select Mail Servers from the E.Manager -> Servers menu:



2. Click the Action icon in the Mail Server Settings section:



3. At the bottom of the page you will find SPF/SRS configuration form:



For SPF/SRS configuration parameters see details in *Configuring SPF/SRS* parameters in System Administrator Guide

AntiSpam and AntiVirus

Parallels H-Sphere incorporates SpamAssassin and ClamAV filters into its mail servers. They have been added to Parallels H-Sphere as the Antispam and Antivirus resources globally enabled in the system, and can be configured in Control Panel both at the server level (on page 53), and for individual plans, accounts, domains and mailboxes.

In this section:

Enabling AntiSpam and AntiVirus in Control Panel	. 56
Configuring AntiSpam and AntiVirus Default Settings	. 57

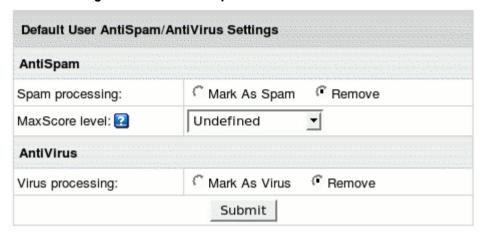
Enabling AntiSpam and AntiVirus in Control Panel

- To enable AntiSpam and AntiVirus in Control Panel:
- 1. GLOBAL SETTINGS: In Info -> Global Resources, check AntiSpam and AntiVirus and click Submit Query.
- 2. PLANS: In Info -> Plans select the plans where you would like to enable spam and virus protection. On the first page of the wizard, enable Antispam and Antivirus. Optionally, set prices for these resources on the subsequent steps.
- **3.** Accounts, domains and mailboxes: managing Antispam and Antivirus on this level is managed via User CP.

Configuring AntiSpam and AntiVirus Default Settings

You can set default AntiSpam and AntiVirus settings for new mail domain. They will be applied to all new mail domains. Later each user can change it via user CP.

- > To set defaults in your Admin CP:
- 1. Go to Settings menu > AntiSpam and AntiVirus Defaults:



- Choose Spam and Virus processing manipulation
- Set MaxScore level: this value cannot be chosen with Spam processing Remove value simultaneously
- 2. Click Submit

System SMTP Relays

There are two system SMTP relays you can choose for each individual mail server - POP before SMTP and SMTP AUTH.

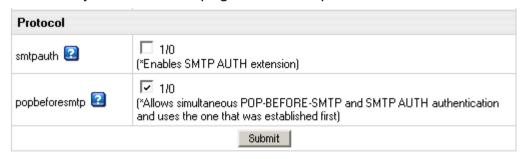
In *POP before SMTP*, the relay system collects IP addresses of users who successfully authenticate themselves with a POP server, and then permits SMTP relaying from that IP address for a short period of time.

If clients do not have known IP addresses, relays use *SMTP AUTH*, an SMTP based protocol, in which the client must send a name and password in addition to the normal SMTP envelope information. Obviously this requires a special client, which has been configured to use this protocol.

- To specify the protocol for a specific server:
- 1. Go to E.Manager -> Servers -> Mail Servers.
- 2. At the top of the page that appears, click the **Action** icon next to the mail server.



3. At the very bottom of the page select the protocol and click Submit.



Advanced Web Server Settings

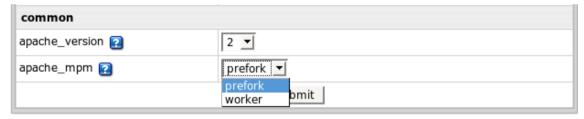
Parallels H-Sphere 3.1 branch adds support of Apache 2.2 and adds more flexibility in configuring the web service for Unix boxes, while many options are available right from the administrator interface. These settings are available under icon near the server on E. Manager -> Servers -> P.Servers page. After you're done with the settings, don't forget to click Submit.

In this section:

Apache Version	59
Apache Modules	
Using Gotroot.com Modsecurity™ Rules With H-Sphere	
PHP Modes	
PHP Plugins	
PHP Accelerators	

Apache Version

- > To choose Apache version for your physical Unix box:
- 1. Go to E. Manager -> Servers -> P.Servers and click the (Server options) icon.
- 2. On the page that appears choose Apache versions:



1 corresponds to Apache 1.3.x, 2 to Apache 2.2.x. If you enable Apache 2.2.x, choose also MPMs (Multi-Processing Modules): prefork or worker.

3. Click Submit.

Apache Modules

Some Apache modules like apache_ssl consume much of the system resources, some are obsolete like apache_throttle and apache_frontpage. You can toggle them from the interface for each Apache version. By default, only apache_ssl of the following is enabled, the rest are disabled:

Apache Modules	
apache_ssl 🔃	(* Apache module mod_ssl)
apache_fastcgi 2	(* Apache module mod_fastcgi)
apache_scgi 🔃	(* Apache module mod_scgi)
apache_throttle 2	(* Apache module mod_throttle)
apache_frontpage 😰	(* Apache module mod_frontpage)
apache_status 🛭	(* Apache module mod_status)
apache_security 2	(* Apache module mod_security)
apache_cache	(* Apache cache engine for Apache 2.2.x)

- apache_ssl this module provides strong cryptography for the Apache 1.x webserver via the Secure Sockets Layer (SSL v2/v3) and Transport Layer Security (TLS v1) protocols by the help of the Open Source SSL/TLS toolkit OpenSSL.
- apache_fastcgi this module provides support for the FastCGI protocol. FastCGI is a language independent, scalable, open extension to CGI that provides high performance and persistence without the limitations of server specific APIs.
- apache_scgi the SCGI protocol is a replacement for the Common Gateway Interface (CGI) protocol. It is a standard for applications to interface with HTTP servers. It is similar to FastCGI but is designed to be easier to implement.
- apache_throttle limit the bandwidth usage and server load of virtual hosts, directories, locations, or users according to selected policies.
- apache_frontpage this module adds front page support.
- apache_status this module allows a server administrator to find out how well their server is performing. A HTML page is presented that gives the current server statistics in an easily readable form. If required this page can be made to automatically refresh (given a compatible browser). Another page gives a simple machine-readable list of the current server state.
- apache_security open source Intrusion Detection and Prevention module for Web applications.
- apache_cache enables memory caching scheme with most common set of related parameters. If you want to change them, or use disk caching scheme, or combination of the two, prepare a custom template for corresponding include file.

When enabling apache_security, set also Apache mod_security options.

We also provide a new tool for loading Gotroot rules included into hsphere-apacheshared-h3.1 package.

If you want to use Gotroot.com rules with Apache mod_security, you should first load them into H-Sphere. Read about Using Gotroot.com Modsecurity Rules With H-Sphere (on page 63).

Apache mod_security options (effective if apache_security enabled)		
asecurity_rules 😰	(* Web Application protection)	
asecurity_jitp 😰	(* Just in Time Patches for Vulnerable Applications)	
asecurity_useragents 🔃	(* Bad UserAgents blocking)	
asecurity_blacklist 🔃	(* Comment spam blacklist)	
asecurity_blacklist2 🗿	(* Compromised/Hacker boxes blacklist)	
asecurity_apache2-rules 🙎	(* Additional Apache 2.x rules)	
asecurity_rootkits 🔃	(* Known rootkits/worms)	
asecurity_exclude 🔃	(* Rule Exclusions)	
asecurity_recons 😰	(* "Google Hacks" signatures)	

- asecurity_rules Web Application protection. Config file: rules.conf. Default: 0 (disabled).
- asecurity_jitp Just in Time Patches for Vulnerable Applications. Config file: jitp.conf. Default: 0 (disabled).
- asecurity_useragents Bad UserAgents blocking. Config file: useragents.conf. Default: 0 (disabled).
- asecurity_blacklist Comment spam blacklist. Config file: blacklist.conf. Default: 0 (disabled).
- asecurity_blacklist2 Compromised/Hacker boxes blacklist. Config file: blacklist2.conf. Default: 0 (disabled).
- asecurity_apache2-rules Additional Apache 2.x rules. Effective for apache 2.2 only.
 Config file: apache2-rules.conf. Default: 0 (disabled).
- asecurity_rootkits Known rootkits/worms. Config file: rootkits.conf. Default: 0 (disabled).
- asecurity_exclude Rule Exclusions. Config file: exclude.conf. Default: 0 (disabled).
- asecurity_recons "Google Hacks" signatures. Config file: recons.conf. Default: 0 (disabled).

Using Gotroot.com Modsecurity™ Rules With H-Sphere

Parallels H-Sphere provides a tool for loading Gotroot.com Modsecurity rules included into hsphere-apache-shared-h3.1 package.

At the moment, the following Gotroot rules are supported (the list may differ for Apache 1.x and 2.x, modsecurity 1.9 and 2.0-2.1 versions):

- apache2-rules
- badips
- blacklist2
- blacklist
- exclude
- jitp
- proxy
- recons
- rootkits
- rules
- useragents

You can download Gotroot rules from http://www.gotroot.com/tiki-index.php?page=mod security+rules

> To be able to use Gotroot rules in Parallels H-Sphere, follow steps below:

Step 1. Download necessary Gotroot rules archives and place them into the corresponding directories in your web box(es).

Apache 1.x: the rules are available for modsec 1.9 only.

- 1. Enter a temporary directory
- 2. Download archived Gotroot rules:

```
# wget
http://www.gotroot.com/downloads/ftp/mod security/apache1/apa
che1-gotrootrules-latest.tar.gz
```

3. Untar it into the temporary directory

```
# tar zxf apache1-gotrootrules-latest.tar.gz
```

4. Copy the configuration *.conf files to the /hsphere/pkg/config/httpd/gotrootrules directory:

```
# cp -f ./apache1/*.conf /hsphere/pkg/config/httpd/gotrootrules/
```

Apache 2.x: it is required to download the rules for both modsec 1.9 and 2.0-2.1 versions.

modsec 1.9:

- 1. Enter a temporary directory
- 2. Download archived Gotroot rules:

waet

http://www.gotroot.com/downloads/ftp/mod security/apache2/apache2gotrootrules-latest.tar.gz

- **3.** Untar it into the temporary directory:
- # tar zxf apache2-gotrootrules-latest.tar.gz
- **4.** Copy the configuration *.conf files to the

/hsphere/pkg/config/httpd2/gotrootrules directory:

cp -f ./apache2/*.conf /hsphere/pkg/config/httpd2/gotrootrules/

modsec 2.0-2.1

- 1. Enter a temporary directory
- 2. Download archived Gotroot rules:

wget

http://www.gotroot.com/downloads/ftp/mod_security/2.0/apache2/apache2gotrootrules-modsec2.0-latest.tar.gz

- **3.** Untar it into the /hsphere/pkg/config/httpd2/gotrootrules2 directory:
- # tar zxf apache2-gotrootrules-modsec2.0-latest.tar.gz -C
 /hsphere/pkg/config/httpd2/gotrootrules2

Step 2. run apache-load-gotrootrules.sh tool to load Gotroot rules into H-Sphere from configuration files:

- # /hsphere/shared/scripts/apache-load-gotrootrules.sh -h
- -h|--help option will show usage details:

```
usage: apache-load-gotrootrules.sh [-f|--force] [<rule> <rule2>
<ruleN>] [-h|--help]
       -f|--force : process rules from gotrootrules configuration
files `*.conf' by force even if they were already loaded (`*.conf.tmpl'
                 : process rules from file '<rule*>.conf' only. Space
        <rule*>
separated list allowing to process more then one gotrootrule
configuration file.
        -h|--help : print this help messagee.
       Following gotrootrules are supported:
       apache2-rules badips blacklist2 blacklist exclude jitp proxy
recons rootkits rules useragents
Examples:
       # apache-load-gotrootrules.sh-force jitp
       Process rules from 'jitp.conf' even if 'jitp.conf.tmpl' already
exists
        # apache-load-gotrootrules.sh
       That will process only rules from new configuration files (if
'*.conf' exista and '*.conf.tmpl' - not).
```

Step 3. enable Apache mod_security options in Admin CP:

pache mod_security option	s (effective if apache_security enabled)
security_rules 🔃	(* Web Application protection)
ecurity_jitp 🔃	(* Just in Time Patches for Vulnerable Applications)
curity_useragents 🔃	(* Bad UserAgents blocking)
ecurity_blacklist 🔃	(* Comment spam blacklist)
urity_blacklist2 🔃	(* Compromised/Hacker boxes blacklist)
curity_apache2-rules 2	(* Additional Apache 2.x rules)
curity_rootkits 🔃	(* Known rootkits/worms)
curity_exclude 😰	(* Rule Exclusions)
curity_recons 😰	(* "Google Hacks" signatures)

asecurity_rules - Web Application protection. Config file: rules.conf. Default: 0 (disabled).

asecurity_jitp - Just in Time Patches for Vulnerable Applications. Config file: jitp.conf. Default: 0 (disabled).

asecurity_useragents - Bad UserAgents blocking. Config file: useragents.conf. Default: 0 (disabled).

asecurity_blacklist - Comment spam blacklist. Config file: blacklist.conf. Default: 0 (disabled).

asecurity_blacklist2 - Compromised/Hacker boxes blacklist. Config file: blacklist2.conf. Default: 0 (disabled).

asecurity_apache2-rules - Additional Apache 2.x rules. Effective for apache 2.2 only. Config file: apache2-rules.conf. Default: 0 (disabled).

asecurity_rootkits - Known rootkits/worms. Config file: rootkits.conf. Default: 0 (disabled).

asecurity_exclude - Rule Exclusions. Config file: exclude.conf. Default: 0 (disabled).

asecurity_recons - "Google Hacks" signatures. Config file: recons.conf. Default: 0 (disabled).

PHP Modes

For each available Apache version you can choose from libphp (default), cgi, or fastcgi:

- **libphp** PHP runs as an Apache module. The advantage is that PHP is always in memory use which results in a higher speed capability and lower server load.
- cgi PHP runs as a CGI script in a separate process which starts with each request and completes its work upon the script execution. This provides a simpler and more secure PHP work, but draws excessive memory usage and higher memory load.
- fastcgi PHP also runs as a CGI script, but under a single process which does not stop when the script is executed. This allows to minimize server load while running PHP in CGI mode.

To configure advanced PHP mode settings in admin CP, go to **E.Manager->Servers->P.Servers** and click on the Settings icon for a physical server. You will see the following interface:

PHP Configuration			
ersion	Mode	Enabled	Default
	libphp4 🔃		0
4	fastcgi4 🙎	<u> </u>	•
	cgi4 💽	V	0
	libphp5 💈	V	•
5 fastcgi5 ②	fastcgi5 🙎	V	0
	cgi5 💽	Ø	0

This form allows you to choose which PHP 4 and PHP 5 libphp/cgi/fastcgi modes will be available for end users whose domains are hosted on this physical server, and to set the default mode for each PHP version.

The fastcgi and cgi modes can be enabled for both PHP 4 and PHP 5, but the libphp mode only for one of the PHP versions. Modes checked as **Enabled** will be available for end users to choose from in the **Advanced PHP** configuration interface in **Web Options**. When users switch PHP version in the "simplified" PHP configuration interface, they switch between the default modes of PHP versions (the **Default** column in the form - choose one default mode per PHP version). After that, selected modes will be available for users to choose from for each domain.

If you have enabled fastcgi mode, you can configure its VirtualHost options in the form below:

Fast CGI options			
fcgi_idle-timeout 2	30 +		
regi_tate timeout	parameter -idletimeout		
fcgi_killInterval 2	300 +		
regi_milition var 🔠	parameter -killInterval		
fcqi_minProcesses ?	5 +		
	parameter -minProcesses		
fcqi_maxClassProcesses [2]	10 +		
regi_maxelassi rocesses [parameter -maxClassProcesses		
fcqi_maxProcesses [2]	50 +		
regi_maxi rocesses 🔠	parameter -maxProcesses		
fcgi_restart 2	₹ 1/0		
9-2	parameter -restart		
fcgi_multiThreshold 2	50 +		
	parameter -multiThreshold		
fcqi_singleThreshold [2]	0 +		
	parameter -singleThreshold		
fcgi_updateInterval 2	300 +		
	parameter -updateInterval		
	Submit		

- fcgi_idle-timeout the number of seconds of FastCGI application inactivity allowed before the request is aborted and the event is logged (at the error LogLevel). The inactivity timer applies only as long as a connection is pending with the FastCGI application. If a request is queued to an application, but the application doesn't respond (by writing and flushing) within this period, the request will be aborted. If communication is complete with the application but incomplete with the client (the response is buffered), the timeout does not apply.
- fcgi_killInterval determines how often the dynamic application instance killing policy is implemented within the process manager. Smaller numbers result in a more aggressive policy, larger numbers a less aggressive policy.
- fcgi_minProcesses minimum total number of dynamic FastCGI application instances allowed to run at any one time without being killed off by the process manager (due to lack of demand).
- fcgi_maxClassProcesses maximum number of dynamic FastCGI application instances allowed to run for any one FastCGI application. It must be less or equal to maxProcesses (this condition is not programmably enforced).
- fcgi_maxProcesses maximum total number of dynamic FastCGI application instances allowed to run at any one time. It must be greater or equal to maxClassProcesses (this condition is not programmably enforced).
- fcgi_restart causes the process manager to restart dynamic applications upon failure (similar to static applications).
- fcgi_multiThreshold an integer between 0 and 100 used to determine whether any one instance of a FastCGI application should be terminated. If the application has more than one instance currently running, this attribute will be used to decide whether one of them should be terminated. If only one instance remains, singleThreshold is used instead.
- fcgi_singleThreshold An integer between 0 and 100 used to determine whether the last instance of a FastCGI application can be terminated. If the process manager computed load factor for the application is lower than the specified threshold, the last instance is terminated. In order to make your executables run in the "idle" mode for the long time, you would specify a value closer to 1, however if memory or CPU time is of primary concern, a value closer to 100 would be more applicable. Setting it to 0 will prevent the last instance of an application from being terminated; this is the default value, changing it is not recommended (especially if -appConnTimeout is set).
- fcgi_updateInterval determines how often statistical analysis is performed to determine the fate of dynamic FastCGI applications.

PHP Plugins

In this form you can disable unwanted PHP plugins (PHP extensions as DSO modules):



phpext_dbx, phpext_domxml, phpext_filepro, phpext_mcal, phpext_xslt are implemented only for PHP 4, while phpext_soap and phpext mysqli - for PHP 5.

To obtain help on a plugin, click the button with ? near its title.

PHP Accelerators

Parallels H-Sphere 3.3 introduced PHP accelerators. They can be found in settings for each Web server.

To enable or disable PHP accelerator for a Web server:

- 1. Go to the E.Manager > P.Servers > [Your Physical Server] menu and click the icon in the top right corner of the form that appears.
- 2. In the PHP Accelerators section check or uncheck respective boxes to enable or disable the following accelerators:
 - phpacc_apc. Alternative PHP Cache (APC) is a free and open opcode cache for PHP.
 - phpacc_eaccelerator. eAccelerator is a free open source PHP accelerator, optimizer, encoder and dynamic content cache for PHP. It increases performance of PHP scripts by caching them in compiled state, so that the overhead of compiling is almost completely eliminated. It also optimises the script to speed up execution of PHP scripts. eAccelerator typically reduces server load and increases the speed of your PHP code by 1-10 times.
 - phpacc_xcache. XCache is a fast, stable PHP opcode cacher that has been tested and is now running on production servers under high load.
 - phpacc_ioncube. Loader for ionCube encoded files. ionCube is required for Parallels Sitebuilder.
 - phpacc_zend. Zend Optimizer is a free runtime application that enables PHP to run the files encoded by Zend Guard. This can be freely used by anyone looking to run encoded applications.
- 3. Click Submit to apply changes.

Server Groups

Logical servers are grouped by functionality and purpose. For instance, you can have a group of name servers, a group of 'priority' web servers, a group of 'basic' web servers etc. Logical server groups allow you to control the distribution of user data across servers.

Example: You have several customers on a priority hosting plan and you want to keep their sites on a separate box. To achieve this, you need to create a separate 'priority web' server group and add it to this box.

You can add one server group to many physical servers. For instance, if you add the 'priority web' server group to p.server1, p.server2, and p.server3, your priority plan customers will be randomly distributed across these three physical servers.

A physical server may have one or many server groups. For instance, you can add the 'priority web' server group to p.server1 and p.server2, whereas all other server groups can be added to p.server3.

Note: You can't add a logical server to a physical server if it doesn't have the respective server group.

Consider another example:

Let's say you've got:

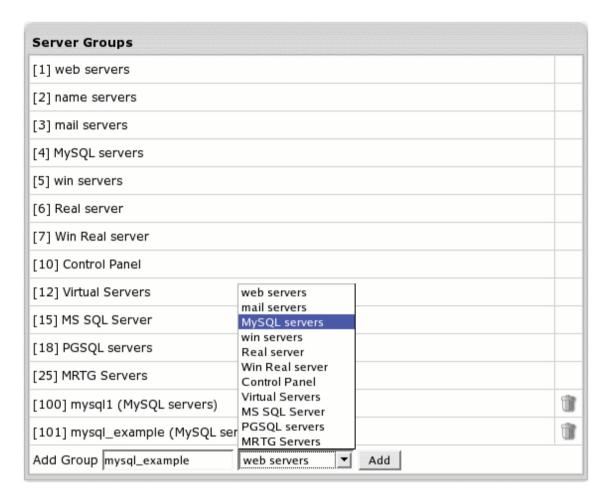
- p.server1 with the following groups on it: Control Panel, Mail, Web, Name and
- p.server2 with Mail, Real and MySQL server groups.

In this case logical servers:

- cp.net, web.net, name.net can be set up only on ph_server_1 and real.net with mysql.net on ph_server_2;
- while mail.net can be set up to any of them.

You can also have two logical servers carrying out mail service (e.g.: mail1.net and mail2.net) set up on different or the same physical server. Several different web, name, etc., logical servers can be put on one physical server, too. The only requirement is that it has the appropriate server group.

To see the server groups available in your system, go to E.Manager-> Servers -> Server Groups:



How Do I Create a Server Group?

- 1. Go to E.Manager -> Servers -> Server Groups.
- 2. At the bottom of the page that appears, enter the name of the server group and select its type.
- 3. Click Add.

How Do I Add a Group to a Physical Server?

- 1. Go to E.Manager-> Servers -> P.Servers.
- 2. Click the name of the physical server.
- **3.** At the bottom of the page that appears, select a server group and click **Add**.
- 4. Now you can create logical servers in this server group.

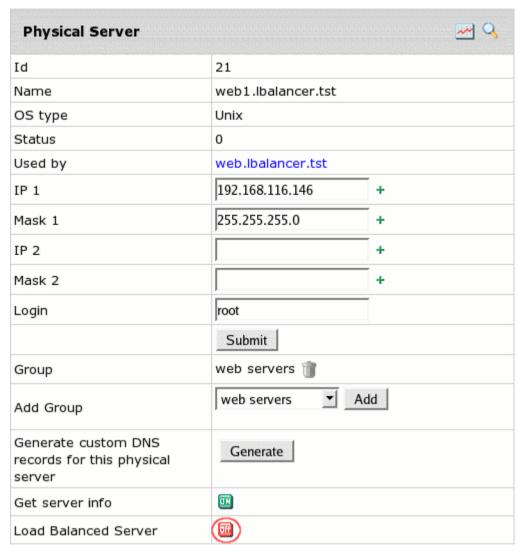
How do I delete a server group?

You can delete only custom server groups by clicking the Delete icon next to them.

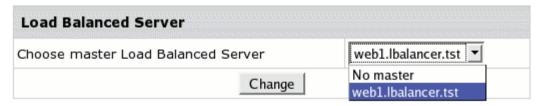
Load Balanced Server Clusters

Parallels H-Sphere interface allows you to set master-slave relations between servers in Web and mail clusters. Please refer to the complete procedure of installation and configuration of load balanced cluster servers in Parallels H-Sphere System Administrator Guide.

- ➤ To structure Parallels H-Sphere physical servers in a load balanced cluster:
- 1. Add physical servers to Parallels H-Sphere. (on page 36)
- 2. Create server groups on these servers (on page 71), depending on their functionality. Servers that belong to the same cluster must have the same server group created on them.
- 3. Create master servers:
 - 1. In the E. Manager -> Servers menu choose P. Servers.
 - 2. On the page which lists physical servers click the needed server name. Turn Load Balance Server on:



- 3. On the Load Balanced Server page chose No master and click change.
- 4. Add web or mail logical server group to each created physical server.
- **4.** Create slave servers. Enable **Load Balanced Server** for the rest of the servers choosing a master server for them:



5. As the result, on the **Physical Servers** page you should have load balanced clusters visualized with master and slave servers clearly distinguished:

Physical Servers		
cp.lbalancer.tst	192.168.116.145 [255.255.255.0] [] 0 [name servers] [mail servers] [MySQL servers] [Control Panel] [MRTG Servers]	Q
Load Balanced Ser	vers	
mail1.lbalancer.tst	192.168.116.149 [255.255.255.0] [] 1 [mail servers]	· !
mail2.lbalancer.tst	192.168.116.150 [255.255.255.0] [] 0 [mail servers]	į.
web1.lbalancer.tst	192.168.116.146 [255.255.255.0] [] 0 [web servers]	Q <u>w</u>
web2.lbalancer.tst	192.168.116.147 [255.255.255.0] [] 0 [web servers]	! 🐷
Add Physical Server		

Important: Logical servers can't be created on slave servers. Any number of slave servers can be created for master mail and load balanced web servers.

Platform Change

Parallels H-Sphere integrates a hostingPlatformChanger system package that enables users to change platform from Windows to Unix OS and vice versa.

WARNING:

Currently, hostingPlatformChanger system package is a beta version!

The platform change process with the help of hostingPlatformChanger package involves:

- Hosting plan change
- Domains IP change
- Deletion of incompatible resources (currently, all resources listed on the Web Options page)
- Manual transfer of a user's content

To enable users to change the platform, perform:

Step 1. Install the hostingPlatformChanger system package:

Log into your CP server as To log in as the cpanel user:

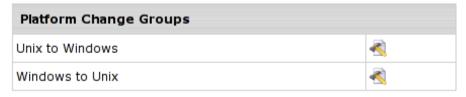
1. Log in as root first:

\$ su -1

- 2. Log in as the cpanel user:
 - 1. # su -l cpanel
 - Download
 (http://download.hsphere.parallels.com/downloads/index.html#platform_changer
) the latest hostingPlatformChanger package.
 - 3. Install the package. See System Administrator Guide for detailed instructions on package installation.

Step 2. Define the plans for which platform change is allowed:

 Go to Plans->Platform Change Groups and click on the Edit icon next to the target platform.



2. On the page that appears, choose the plans that you are going to allow your users to switch to. For this, check boxes near the plans in the **Add plans to a group** column and **Submit** the request.

Platform change: Windows to U	atform change: Windows to Unix	
Add plan to a group	Plans for platform change	
Unix system Press 'Submit' to add selected plans	Unix Platform Plan Press 'Submit' to remove selected plans	
S	ubmit	

Step 3. After users have requsted platform change from their User CP, you have to approve the process and choose the target server:

- 1. Go to E.Manager->Platform Change Processes and find the process to be approved
- 2. Click on the Approve icon in the Controls column
- 3. On the page you will be taken to, check with the details of the process, choose the target box, and approve the process by clicking **Submit** button

Approve	
User name	adminka
Account ID	1274
Source Plan	Unix Platform Plan
Target Plan	Windows Platform Plan
Source Server	web.test148.psoft
Target Server	win.test148.psoft
	Submit

Step 4. Launch the process manually or the process will be handled by a special cron. To launch manually use the icon in the **Controls** column of the page you will be taken to.

You can find the PlatformChange cron details from the Background Job Manager (on page 135) page:

Job name: PlatformChange		
Group name	CRON	
Status	enabled	
Priority	5	
Start at	now+7m	
Period, min	5	
Before start, min	4	
Launch count	20	

In general, platform change process takes the following stages:

- 1. Check if resources to be re-created physically can be created on selected logical server
- 2. Physical creation of resources
- 3. Incompatible resources deletion
- 4. Plan switch
- 5. Domains IP and DNS change
- 6. DNS propagation. In 24hr the content and resources will be removed from the old server. On this stage, the process can be suspended/resumed if DNS propagation within 24hr is not acceptable. To suspend, go to E.Manager->Platform Change Processes and use a respective icon in the Controls column.

To resume, go to **E.Manager->Platform Change Processes** and use a respective icon in the **Controls** column.

7. Old content on the source server deletion

When the procedure goes fine, the necessary resources are recreated, incompatible resources removed, DNS and IP changed. If something goes wrong, the process is rolled back and a trouble ticket created. You can view the TT from the **E.Manager->Platform Change Processes** page.

Updating Physical Boxes From CP Interface

In Parallels H-Sphere one can perform Parallels H-Sphere software installation and update on multiple boxes (except for the CP core and Parallels H-Sphere Windows core services) from the administrative control panel:

- Parallels H-Sphere update to the latest version or update of particular services on selected boxes
- Adding Parallels H-Sphere servers and services: physical installation of Parallels H-Sphere software into the new boxes previously added in admin CP as Parallels H-Sphere physical (on page 36) and logical (on page 39) servers

Installation and update from admin CP is performed under certain conditions:

- Before you run Update Wizard to update the whole cluster to a required Parallels H-Sphere version, you need first to update Parallels H-Sphere CP core (and Parallels H-Sphere Winbox core for Windows servers) by downloading and running Parallels H-Sphere update script with the cpupdate option (HSCore package for Windows servers) for this version.
- Update of particular packages and services on each box is according to physical server profiles (on page 82) - sets of update rules assigned to a group of physical servers.

Procedure

- > To update or install Parallels H-Sphere on selected physical servers:
- 1. Go to E.Manager -> Update -> Update Boxes:



- 2. Check the servers you need to update/install.
- 3. If necessary, you can get info about the box by checking boxes and clicking the Fetch Boxes Info button.
- 4. Click Start Update.

Update process indicator legend:

- Yellow: ready for update
- Blue: update is running
- Green: update successfully finished
- Red: update finished with error. If update fails, you will see an error message with details.

Physical Server Installation/Update Profiles

Parallels H-Sphere allows creating server update profiles to update/install packages on physical boxes according to the rules set by admin. For this, Parallels H-Sphere uses a so- called server update profile. By default, Parallels H-Sphere includes the 'DEFAULT' profile which can't be removed or changed. If not set otherwise, the box is updated according to this DEFAULT profile.

However, you can create your own update profiles and assign them to specific boxes. In this case, the system will update the server according to the profile it's assigned to.

> To create a profile:

- 1. Go to E.Manager -> Update -> Physical server profiles
- 2. Choose the box (Unix/Windows) and click the Add button:



3. Name and configure your profile in the form that appears:

Adding Unix profile:

Add profile	
Name	MySQL/PgSQL Updates +
Parameters	
Update only packages change, which takes p	olace in the hsphere subversion according to corresponding version (-s)
MyDNS service is used instead of Bind 9.3.x,	Update of the bind will be skipped (-m)
Update modes (-M)	Update of all packages excepting CP and Sitestudio (skipcphsupdt)
Package update strictly according to package	e list (by default update of packages with higher version skipped) (-r)
Source URL for packages download redefinition (-u)	
Private update (for testing purpose) (-P)	
3-rd front-end reconfiguration mode (-F)	
Update only pointed logical server groups	mysql pgsql mail unix_hosting dns cp mrtg vps
Allows to force install/update for the deprecently://www.psoft.net/HSdocumentation/admin/eo	
Exclude package list. Use this carefully, as HS packages has direct correlation with HS version. This may be used in the the following cases: 1. You have customized version of the specific HS package. 2. You update system packages, like MySQL server via native OS package manager, etc (-I)	Exclude 'mysql-*' packages Exclude 'postgresql' and 'hsphere-config-pgsql' packages Exclude 'hsphere-bind' package
Skip pre-configured exlude package list dur	ing current update (-o)
Allows to set another mirror instead of the default one. (-U)	psoft.net (USA) default
	Save

Adding Windows profile:

Add profile			
Name	MsSQL Hosting Mode	+	
Parameters			
Update only pointed logical server groups	✓ MsSQL ✓ Windows Hosting		
Source URL for packages download redefinition			
Packages update mode	Update to recent version	<u></u>	
Package update strictly accord	ling to package list (by de	fault update of packages with higher version skipped)	
Allows to set another mirror instead of the default one.	psoft.net (USA) default	_	
☑ Log level	Level1: Main H-Sphere Ir	stallation Session messages	▼
Location of users home (applicable for windows_hosting group only)		+	
MAC address of network interface to host dedicated IP's, etc (applicable for windows_hosting group only)		+	
Name of MSSQL server instance (applicable for MsSQL group only)		+	
	Sa	ave	

Where:

- **Update only pointed logical server groups.** You can choose between three hosting modes: Windows hosting only, MsSQL hosting only, or both Windows and MsSQL hosting modes
- Source URL for packages download redefinition is the link to an alternative server with MSI packages. If not set, default MSI location is http://download.hsphere.parallels.com/shiv/HS/WINDOWS/
- Location of user home directory. If it is not set there, Parallels H-Sphere Winbox installer will automatically create it on NTFS partition with the largest free space.
- MAC address of network interface to host dedicated IP's, etc. If not set there, Parallels
 H-Sphere Winbox installer will automatically choose an address based on the free IPs of a physical server.
- Name of MSSQL server instance. Give a name to a MsSQL server instance if you want it to differ from a default one generated from a NetBIOS name of a specific server
- **4.** Click **Save** to apply. Profile will appear in the list of existing profiles.
- 5. Click the Assign Profiles to Physical Servers link

Profiles Per Physical Server			
P.Server		Physical Server Profile	
cp.test101.psoft		UNIX DEFAULT	
web2.test101.psoft		UNIX DEFAULT	
web3.test101.psoft		UNIX DEFAULT	
web4.test101.psoft		UNIX DEFAULT	
vps.test101.psoft		UNIX DEFAULT	
☐ Select All Assign to	MySQL/PgSQI	L Updates ▼ Apply	
Edit profiles	Edit profiles UNIX DEFAUL MySQL/PgSQI		
	test		

You can assign only one profile to a server. But one and the same profile can be assigned by several servers.

6. Click Apply.

If you want to reassign a profile:

- 1. Go to E.Manager -> Servers -> P. Servers
- 2. Click the physical server name you want to reassign a profile to
- 3. Click the Edit icon in the Physical Server Profile field
- Reassign the profile

From now on, every time you update this physical box from CP interface, it will update according to the profile.

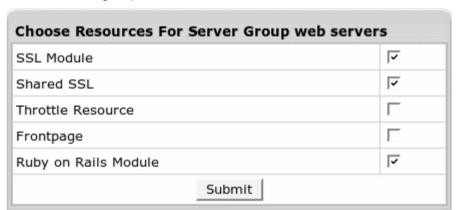
Resource Prerequisites

Resource Prerequisites implies the following:

- 1. Some resources can be enabled/disabled for selected logical server groups despite their availability on physical boxes.
 - Resources like:
 - SSL, Throttle, Frontpage and RubyOnRail for Unix web boxes
 - PHP, Urchin, Miva, Miva Empresa and ColdFusion for Windows web boxes
 - VPS templates and VPS context RSS limit for VPS boxes
 can be enabled or disabled on the level of logical server groups, no matter if they are installed on physical servers or not.
 - 1. Go E. Manager -> Servers -> Server Groups and click Edit for web server, win server or vps server group:



2. Enable/disable services for plans under this logical server group: for **web servers** group:



for win servers group:

PHP Module	~
Jrchin 3	P
Irchin 4	P
1IVA Resource	F
liva Empresa Engine	V
oldFusion module	V

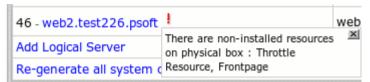
for **virtual servers** group:

VPS Template DNS Server	~
VPS Template FTP Server	~
VPS Template Mail Server	~
VPS Template MySQL Database Server	~
VPS Template PostgreSQL Database Server	~
VPS Template CP+	~
VPS Template Samba Windows File Server	~
VPS Template Web Server	~
VPS Custom Template	~
VPS context RSS limit	V

3. Click **Submit**. Users who sign up to plans hosted on such server groups will have these resources enabled or disabled.

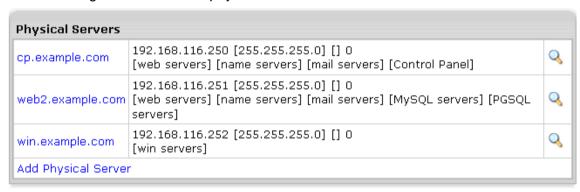
2. Periodical availability checks for resources with prerequisites.

A special CP cron periodically polls physical servers to check whether resources with prerequisites are installed on physical boxes. If some of them are not available, the ! mark appears near the corresponding logical server name. Go **E. Manager** -> **Servers** -> **L.Servers** and hover mouse over ! to see which resources are not installed physically:



Also, it is possible to see which resources with prerequisites are installed on physical boxes via the **Physical Servers** menu in administrator interface:

- 1. Go E. Manager -> Servers -> P.Servers
- 2. Click the magnifier icon near a physical server:



3. On the page that appears click **Installed Services**.

Note: For Unix boxes, you will get a page with installed resources with prerequisites only. For Windows boxes, the page will show all installed resources.

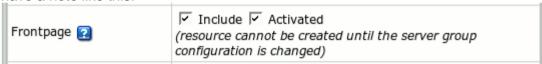
3. Enabling/disabling of resources automatically affects end users, without a need of editing respective plans.

You can enable resources with prerequisites when creating or editing a plan, no matter if these resources are installed or not installed on physical boxes. If a service is absent on physical box, users will see a red exclamation mark in their control panels near the service. If they hover mouse over the mark, a note like this appears:



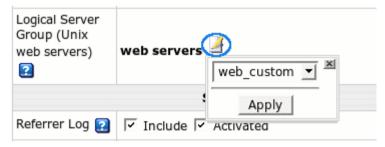
Then, after you installed missing services later, you don't need to go back to Plan Wizard to enable them in the plan. If they were already enabled in the server group configuration, users will automatically obtain them in their control panels.

In plan edit wizards, resources which were disabled in server group configuration have a note like this:



You can choose a different logical server group with a different set of prerequisites right in plan edit wizards. To do this:

1. Enter a plan edit wizard, scroll to the **Web services** section and click the control in blue oval in the **Logical Server Group** field:



For Virtual Private Server plans, find the **Logical Server Group** field right below the plan title:

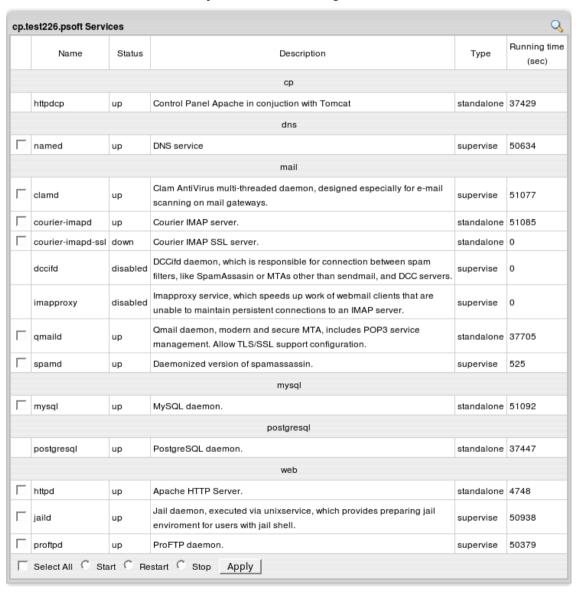


2. Choose another group and click **Apply**. Parallels H-Sphere will update this wizard page with the status of resources with prerequisites for the chosen group.

System Service Management

System Service Management is a utility that allows managing Parallels H-Sphere system services from the Admin CP interface.

- > To manipulate system services via Parallels H-Sphere interface:
- 1. Go to E.Manager -> Servers -> P.Servers
- 2. Click the lens icon next to the chosen physical server to get to the System Information page.
- 3. Scroll down and click the System Service Management link.



You see the list of all processes involved with this server split by groups; dns, mail, web, mysql, cp.

- Type of the service: supervise service is managed by supervising process;
 standalone service is independent
- Running time: shows how log the service has been running, in seconds
- **4.** Select necessary services and the action to start, restart, stop processes.
- 5. Click the Apply button.

Note: You can't manipulate httpdcp service for consistency reasons.

CHAPTER 7

DNS and Hosting

This chapter discusses the configuration steps required for your DNS.

In this chapter:

DNS Manager	93
Adding DNS Zones	
Instant Alias Templates	95
DNS Records	
Hosting Your Corporate Site	
Adding Domains for Third Level Hosting	
Providing Mail Under Service Domain for Third-Level Hosting	

DNS Manager

DNS Manager in the Admin panel is used to create and manage:

- service DNS zones (on page 93) to host your corporate site and provide third level domain hosting.
- instant alias templates (on page 95) to provide immediate access to users' newly registered domains until their domain's DNS hasn't been propagated.
- DNS records (on page 99) to manage servers external to Parallels H-Sphere with Parallels H-Sphere DNS.

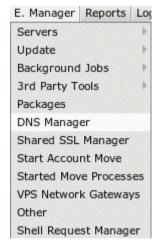
It's not intended to work with your user domains' dns.

Adding DNS Zones

You must have at least one DNS zone in your system. Before you start adding a DNS zone, make sure to have added the DNS servers with Service IPs.

> To add a DNS zone:

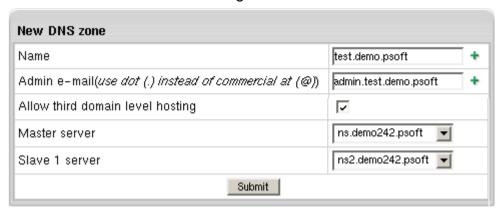
1. Select DNS Manager in the E.Manager menu:



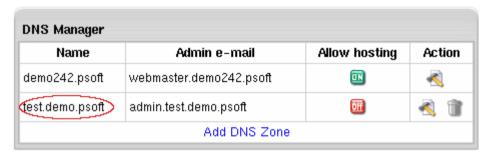
2. Click the Add DNS Zone link:



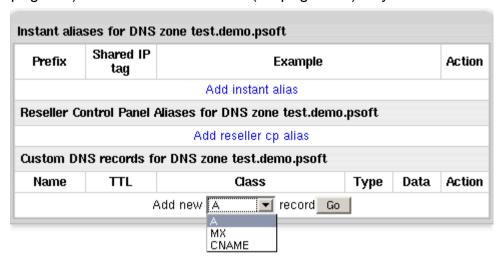
3. Enter zone name and zone administrator e-mail and choose whether to allow third level domain hosting in this zone:



- Name: the name of the DNS zone you are going to create. If this domain name is not yet registered, don't forget to register it with a domain registration company.
- Admin e-mail: the e-mail address of this DNS zone administrator.
- Allow third level domain hosting: allow the creation of lower level domains in this DNS zone.
- Master/slave server: available only for service DNS zones allows you to choose and appoint a master and a slave server. The information is backed up every hour.
- **4.** After you submit the form, the new zone appears in the DNS Manager table:



5. Click the EDIT icon to go to the DNS zone management page. Here you can add instant alias templates (on page 95), custom DNS records (on page 99) and Reseller CP alias (on page 383) to your DNS zone:



Instant Alias Templates

Instant Alias Templates are used to generate **Instant Aliases**, temporary addresses providing immediate access to users' domains from the Internet. They are usually helpful when the DNS servers worldwide are being refreshed and the site is temporarily unavailable at the regular domain name.

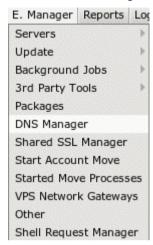
Creating an instant alias template will automatically add one or more A-DNS records to your service zone. These records resolve all your logical servers.

In this section:

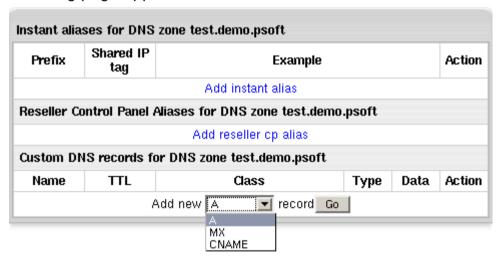
Adding Instant Alias Tem	nplates	.96
Editing Instant Alias Tem	nplates	. 98

Adding Instant Alias Templates

- > To add instant alias, do the following:
- 1. Select DNS Manager in the E.Manager menu.



2. Click the EDIT icon to go to the DNS zone management page. The following page appears:



3. To add an instant alias template, click the **Add instant alias** link. This will open the following form to fill out:

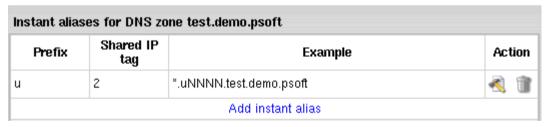


- Prefix: instant alias prefix that will appear on the left to the domain part in user's instant domain alias. Different prefixes should be set if you use different shared IP tags. Other than that, it is recommended to use one and the same prefix (e.g. u for all instant alias templates).
- Shared IP tag: a digital "mark" that helps separate sites within one plan on one logical server. All sites located on the same logical host under the same plan are usually assigned to the same shared IP. This feature allows to give a different shared IP to a group of sites of, say, explicit nature. This may become necessary as many corporate firewalls filter sites based on their IP, not the domain name.

Normally, you are expected to have devoted one IP address for each shared IP tag. To use a shared IP tag, you need to have it defined for every logical host. Go to the LServers (on page 39) section for instructions.

Numbers 10 to 99 are acceptable. The default value of 2 is assigned when the field is submitted being empty.

4. Click **Submit**. You will be taken back to the list of instant aliases with the new instant alias template added to the list.



Editing Instant Alias Templates

Once an Instant Alias is created, the system adds all necessary A DNS records to this DNS zone.

To view these DNS records, cilck the **Edit** button near the necessary Instant Aliases:

Created DNS records				
Name	ΠL	Data	Controls	
*.u23.test.demo.psoft	86400	192.168.116.242	Î	
*.u27.test.demo.psoft	86400	192.168.116.246	î	

The upper part of the table lists the existing DNS A records in the selected DNS zone. To delete DNS records, click the **Trash** icon.

The lower part of the table appears only when the DNS zone does not contain A records for some logical servers. It lists these logical servers with their IP's.

To add a logical server to the DNS zone, click the **Add** button. You can add all these servers to the DNS zone by clicking the **Add records to all listed logical servers** link at the bottom of the table.

If the IP address with the specified shared IP tag doesn't exist on one or more logical servers, you will get the corresponding message on the instant alias properties page. If you see this message, add a shared IP with this shared IP tag to the listed logical servers. Go to the LServers (on page 39) section for instructions.

To delete Instant Alias Template, click the Trash icon next to the corresponding alias.

DNS Records

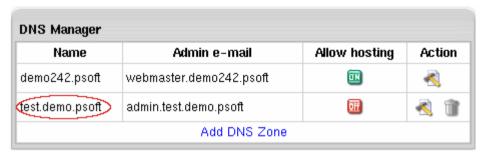
Custom DNS records are required to manage non-HSphere servers with Parallels H-Sphere DNS zone or to configure new logical servers that are added manually.

Depending on the service, you can add:

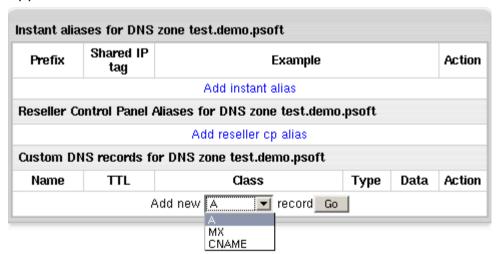
- A records
- MX records
- CNAME records

> To add new custom DNS records:

1. In your admin control panel go to the E.Manager menu -> DNS Manager. The following page shows:



2. Click the Edit icon near the chosen DNS zone. A page similar to this will appear:



- **3.** At the bottom of the page that shows, select a DNS record from the drop-down list and click the **Go** button.
- **4.** On the form that shows enter all necessary data and click **Submit** to save.

You can add one of the following types of DNS records:

- A records to map domain names and web server IP's.
- MX records to map domain names and their mail server IP's.
- 5. CNAME records to map aliases with domain names.

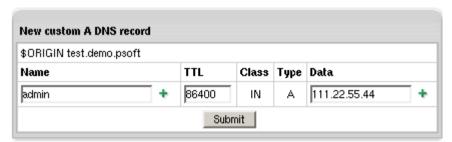
In this section:

Adding custom A records	
Adding custom MX records	101
Adding custom CNAME records	101
Re-generating System Custom DNS Records	103

Adding custom A records

The Address record (A record) gives you the IP address of a domain. That way, users that try to go to www.example.com will get to the right IP address.

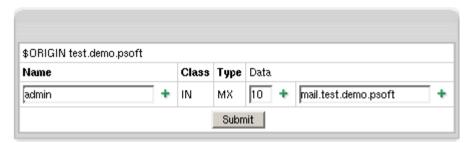
To add a new DNS A record, you need to provide a set of parameters:



- Name: the string appended to the domain name to create a FQDN mapped to the IP. For example, if your domain name is besthosting.com, entering cp will make the fully qualified domain name cp.besthosting.com.
- TTL (a Time To Live): seconds to elapse before the record is refreshed in the provider's DNS cache.
- Data: the IP address that fully qualified domain name will be mapped to. You can get this IP address with any ping utility.

Adding custom MX records

A host name can have one or more Mail Exchange (MX) records. These records point to hosts that accept mail messages on behalf of the host. Adding MX records is similar to adding A records:



- Name: your local domain name. If you leave the Name field blank, all mail will be redirected for the base zone.
- Data: the priority of the record and mail domain name (not the IP) mail will be forwarded to.

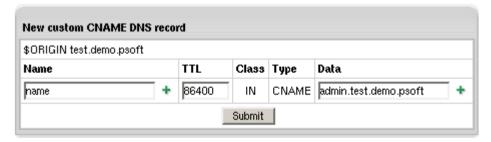
Note: The priority of the custom MX record defines whether your external servers will act as secondary or primary. For instance, if you set the priority of the custom MX record higher than 10 (e.g. 11), your external mail server will be used as secondary. If you set the priority of the custom MX record lower than 10 (e.g. 9), your external mail server will be used as primary. In the latter case, your mail will be sent to your external mail server until it goes down or becomes otherwise inaccessible. Then the default mail server will take over.

WARNING: Please pay attention to \$ORIGIN when you add an MX record.

Adding custom CNAME records

The Canonical Name (CNAME) record allows a machine or host to be referenced by more than one name. A CNAME can be used to define an alias host name. You can also use aliases when a host changes its name.

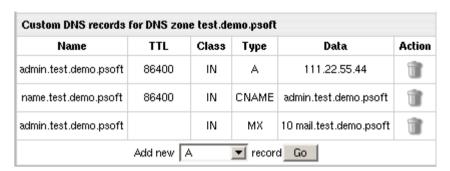
If you have selected CNAME record, the following page appears:



In the case of CNAME records, the values have the same format as in the A record with the exception of the **Data** field. In the **Data** field you have to enter the name of the server to which you are creating the alias record.

WARNING: Please pay attention to \$ORIGIN when you add a CNAME record.

The DNS records you create appear on the zone management page:



You can't edit DNS records. To remove unnecessary records, click the Trash icon

Re-generating System Custom DNS Records

When you add a logical server (on page 39), it is necessary to append system DNS records for it. You can automatically re-generate them.

Prior to re-generating system custom DNS records, make sure that:

- the basis of the logical server domain name coincides with the registered system DNS zones
- you have added Shared and Service IPs
- To re-generate system custom DNS records for all logical servers:
- 1. Go to E.Manager->Enterprise.
- 2. Click on the Re-generate all system custom DNS records link.
- To re-generate system custom DNS records for all logical servers assigned to a particular physical server:
- 1. Go to P.Servers in the E.Manager menu.
- 2. You will be taken to the list of all physical servers in the system. Select the server you would like to generate custom DNS records for.
- 3. On the page that appears press the **Generate** button in the **Generate custom DNS** records for this physical server field.
- To re-generate system custom DNS records for a particular logical server:
- 1. Go to L.Servers in the E.Manager menu.
- 2. You will be taken to the list of all logical servers in the system. Select the server you would like to generate custom DNS records for.

On the page that appears press the **Generate** button in the **Generate custom dns records for this logical server** field.

Hosting Your Corporate Site

This document explains how to host your corporate (promotional) web-site at the service domain (the domain you are offering for third level hosing). For example, if you are offering third level domains at example.com, such as thirdlevel.example.com or userdomain.example.com, you need to have your corporate site available at www.example.com.

> To set up your corporate site:

Step 1. Make sure you have a service DNS zone

- 1. Select DNS Manager in the E.Manager menu.
- 2. If the DNS zone is not in the list, click Add DNS Zone.
- On the page that appears, enter the service domain name and other values and click Submit.

Step 2. Create a service plan

You may already have a service plan in your system. It can also be called 'System plan'. If you don't, do the following:

1. Select Create in the Plans menu:



Click the Select icon for Unix plan wizard:



- 3. On the fist step of the Unix Plan Creation Wizard, set the plan name to System or Service.
- **4.** Check the **Include** boxes next to the resources you would like to use with your site.
 - Read more about plan resources in Creating And Editing Plans (Plan Wizards) (on page 252).
- 5. Make sure to check Service domain.
- 6. Scroll down to the the Settings section and set Billing Type to Without billing.
- 7. Click the **Next** button to go to Step 2.
- 8. Complete the wizard.

Step 3. Disallow signups from outside your admin account.

After you have created the system plan, you need to make sure that it is not used by your customers:

- 1. Select Manage in the Plans menu.
- 2. Click Access for the system plan.
- 3. Make sure only Admin is checked.
- 4. Select Manage in the Plans menu.
- 5. Enable the System plan by clicking the ON/OFF button.

Step 4. Create a service account

Now you can create an account for your service domain:

- 1. Select the **Signup** menu.
- 2. Click Select next to the recently created System plan.
- Select service plan signup wizard.
- **4.** Create service account using the wizard. When prompted the type of the domain, select **Service domain**.

Adding Domains for Third Level Hosting

Third level domains are created based on second level domains and have same features as second level domains. Customers can use your service domain to create third level domains of their own. For instance, if your second level domain is <code>example.com</code>, your customers can create domains like <code>illustrative.example.com</code>.

Third level domains are registered on your DNS server and need no domain registration company to be registered.

To add a domain for third level hosting, you need to create a DNS zone (on page 93) and allow third level hosting in the zone settings.

Third level domain registration will be available for your users only if you allow it in the plans. See Plan Creation Wizard (on page 252) for details.

Providing Mail Under Service Domain for Third-Level Hosting

In Parallels H-Sphere it is possible to allow third-level domain hosters to create e-mail resources under their service domains. I.e., users that host third-level domains user.domain.com under service DNS zone domain.com, will be able to create mailboxes like anything@domain.com from their user CP.

- > To allow third-level hosters to create mailboxes under a service domain:
- 1. Choose Manage in the Plans menu and check the Third level domain (Mail Under Host Domain) option for a plan:



2. Choose DNS Manager in the Settings menu and click the Off icon to enable the Allow creating emails under Service Zone option for a particular service domain:



Then, if you search by domain name in the **Search** menu, affected third-level domains will have the domain type **Third level domain (Mail Under Host Domain)**.

CHAPTER 8

Control Panel Web Interface

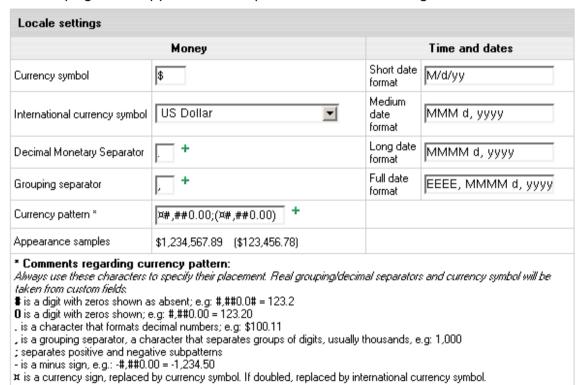
In this chapter:

Regional Settings	108
Images and Icons	
Interface Texts	
Skins and Colors	
Disabling CP Skins	
Setting Interface Language	

Regional Settings

This document explains how to change the default currency settings and date representation. The defaults are set when you change the default language (on page 118). Custom settings are kept until you switch to another default language.

- > To set custom regional settings:
- 1. Select Regional Options in Look and Feel under the Settings menu.
- 2. On the page that appears, enter preferred locale settings:



- Currency symbol used in your country that you want to show in prices, invoices etc.
- Corresponding International currency symbol which is an international string denoting the local currency.
- Decimal Monetary Separator, a character used to format decimal numbers.
- Grouping Separator, a grouping character used to separate thousands, e.g.: 100,000,000.

Note: It's commonly used for thousands, but in some countries it separates tenthousands.

- Currency pattern that shows how your monetary amount will look like. Refer to Comments regarding currency pattern for details. For example, the European currency pattern will look as follows: # ¤,##0.00;-# ¤,##0.00 (in some countries negative subpatterns are put into brackets: # ¤,##0.00;(# ¤,##0.00)) Another example for pattern: #,##0.##: for 3456.00 -> 3,456 although #,0#0.00: for 3,456.00 -> 3,456.00.
- Appearance Samples displays monetary amounts the way they will show in the system after you change the pattern.
- Short, medium, long and full date formats represent dates in your control panel.
 This feature is not yet implemented, though reserved for future versions.

Regional options page has also information about Day and Time Patterns:

Date and Time Patterns

Date and time formats are specified by date and time pattern strings. Within date and time pattern strings, unquoted letters from 'A' to 'Z' and from 'a' to 'z' are interpreted as pattern letters representing the components of a date or time string. Text can be quoted using single quotes (') to avoid interpretation. """ represents a single quote. All other characters are not interpreted; they're simply copied into the output string during formatting or matched against the input string during parsing. The following pattern letters are defined (all other characters from 'A' to 'Z' and from 'a' to 'z' are reserved):

Letter	Date or Time Component	Presentation	Examples
G	Era designator	Text	AD
у	Year	Year	1996; 96
М	Month in year	Month	July; Jul; 07
W	Week in year	Number	27
W	Week in month	Number	2
D	Day in year	Number	187
d	Day in month	Number	10
F	Day of week in month	Number	2
E	Day in week	Text	Tuesday; Tue
a	Am/pm marker	Text	PM
Н	Hour in day (0-23)	Number	0
k	Hour in day (1-24)	Number	24
K	Hour in am/pm (0-11)	Number	0
h	Hour in am/pm (1-12)	Number	12
m	Minute in hour	Number	30
s	Second in minute	Number	55
S	Millisecond	Number	978
z	Time zone	General time zone	Pacific Standard Time; PST; GMT-08:00
Z	Time zone	RFC 822 time zone	-0800

Pattern letters are usually repeated, as their number determines the exact **Presentation**:

- Text: For formatting, if the number of pattern letters is 4 or more, the full form is used. Otherwise a short or abbreviated form is used if available. For parsing, both forms are accepted, independent of the number of pattern letters.
- Number: For formatting, the number of pattern letters is the minimum number of digits, and shorter numbers are zero-padded to this amount. For parsing, the number of pattern letters is ignored unless it's needed to separate two adjacent fields.
- Year: For formatting, if the number of pattern letters is 2, the year is truncated to 2 digits; otherwise it is interpreted as a number.
- **Month**: If the number of pattern letters is 3 or more, the month is interpreted as text; otherwise, it is interpreted as a number.
- General time zone: Time zones are interpreted as text if they have names.
- RFC 822 time zone: For formatting, the RFC 822 4-digit time zone format is used.
- **3.** Click **Submit** and take a look at the values in the **Appearance samples** box to see how your changes will affect monetary amounts throughout the control panel.

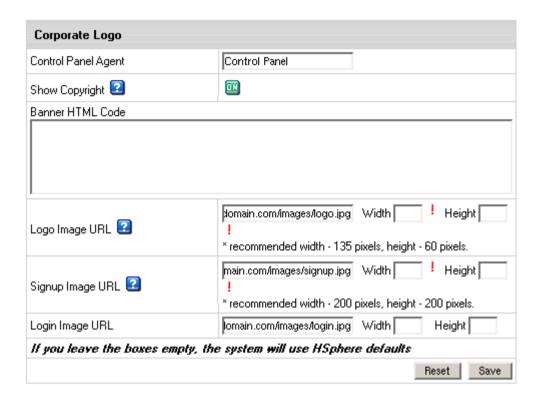
Your regional settings will affect control panels of your direct end users. Resellers can set their own currency in their admin control panels.

Images and Icons

Here you will learn how to change logo images and icons and control images in your control panel. These settings will affect control panels of your direct end users and resellers. Resellers' admin control panels and the control panels of resellers' end users won't be affected; their look and feel must be configured from the reseller admin control panels.

Logo Images

Logo images are the images that reflect your corporate identity. To go to the logo images page, select **Corporate Logo** in **Look And Feel** under the **Settings** menu.



Where:

- Control Panel Agent: enter the name you want to see as page title of the Control Panel interface instead of H-SPHERE.
 - This feature can be unavailable if you modify login.html, top.html or other service templates.
- Show Copyright: toggle the button to show/hide the copyright notice in the top left corner of the window above the logo both in admin and user control panels.
- Banner HTML Code: enter the HTML code for the banner you want to show up both in admin and your users control panels.

```
E.g.:<a href="http://www.destination_company.com/cgi-bin/blah-blah.cgi" target="blah-bhlah"> <img
src="http://www.domain.com/images//banner.gif" width=468
height=60></a>
```

Tip: it might be just an image, for example, your logo.

 Logo Image URL: enter the URL address of the image to show up in the top left corner of the window.

```
E.g.: http://www.domain.com/images/logo.gif
```

• **Signup Image URL**: enter the URL address of the image to show up in the left top corner of the windows for plan signup forms.

```
E.g.: http://www.domain.com/images/signup.gif
```

 Login Image URL: enter the URL address of the image to show up on the logging page on the right.

```
E.g.: http://www.domain.com/images/login.gif
```

Important: Your own custom images added to the Parallels H-Sphere interface can be lost with the new release update even if you put them into the

/hsphere/local/home/cpanel/shiva/shiva-templates/IMAGES/ directory. We recommend you to back up your custom images before each Parallels H-Sphere upgrade.

Icons And Control Images

Icons are the images that take you to certain sections of Parallels H-Sphere interface. They can be found on the home page of the **No Menu** skin and on the **Quick Access** page of the **Left Menu** skin.

Control Images are the images that you click to perform certain actions, for example Add, Edit, Delete.

- > To change default icons and control images:
- 1. Select Design Settings in the Look and Feel menu.
- Log into the CP server as cpanel and copy IMAGES/ directory (/hsphere/local/home/cpanel/shiva/shiva-templates/IMAGES/) to a custom location.

To implement customization correctly, all template files and directories should have cpanel:cpanel ownership.

- **3.** Replace the images you want to change. New images must have the same sizes as the defaults.
- **4.** Go to **Look and Feel -> Design Settings** and click **Change** at the bottom of page.
- **5.** In the Base Image Directory field, enter the path to the IMAGES directory:



This must be either a fully qualified URL of your host, for example

http://cp.mydomain.com:8080/BASE_IMAGE_DIRECTORY/ or a directory path relative to the CP Web Server Document Root

(/hsphere/local/home/cpanel/shiva/shiva-templates/) if your parent host put your images there.

The path must not include the IMAGES directory. For instance, if your images sit in http://www.example.com/hsphere/IMAGES/, enter the path http://www.example.com/hsphere/. Image directory path configuration is explained in the Skin and Icon Set Customization document in Customization Guide.

Note: The custom image directory is provided,

/hsphere/local/home/cpanel/shiva/shiva-templates/CUSTOM_IMAGES. Type /CUSTOM_IMAGES to the **Base Image Directory** field to make it your image location. Mind however that custom images from the Parallels H-Sphere packages are installed into this directory and may overwrite your images.

If you made a mistake and your images do not show, just clear the **Base Image Directory** field, and click **Submit**. The original path will be restored.

Interface Texts

Here you will learn how to edit interface texts including:

- LOGIN TEXTS: the texts that show on the Parallels H-Sphere login page
- SIGNUP TEXTS: the texts that show in the signup wizard
- MISCELLANEOUS TEXTS: Checks info, customer support info, and other texts

To edit interface texts, select Look and Feel under the Settings menu.

Login Texts

You can change the following texts displayed on the Parallels H-Sphere login page:

- Welcome message: the message on the top of the page. You can enter it in text or HTML format.
- Welcome text: the text under the welcome message also can be entered in text or HTML format.
- Welcome Services: describe the services provided by Parallels H-Sphere or enter any other welcome text.

To change interface login texts, enter your own text into the input box and click Save.

Signup Texts

Texts that appear on every page of the signup wizard and describe Parallels H-Sphere features and benefits. The title of the input box shows as the title of the signup text on the signup pages. If you leave the boxes empty, the system will use the default Parallels H-Sphere signup texts.

To change signup texts, enter your own text into the input box and click Save.

Miscellaneous Texts

- Customer Support info shows in the tooltip area when an action fails to execute with an error message written to the log and e-mailed to the support e-mail address. Also, this text shows in some customer email notifications after the sentence "If you have any questions, please contact us at:"
- Checks Info is very important for check users and if not entered, your check users won't be able to pay for the resources.
 It appears:
 - in signup wizard ("Send your checks to"),
 - in check invoice notifications,
 - in check approaching resources limit notifications, etc.
- Privacy Statement is reserved for future implementation.
- Sales Info shows on the signup pages.

To change these texts, enter your own text into the input box and click Save.

Skins and Colors

This document explains how to configure default design settings such as skins and color schemes for admin and users' control panels. Changing Look& Feel in your admin control panel will affect all end users in your Parallels H-Sphere system.

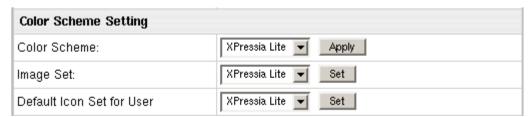
- > To change the Look& Feel of the control panel:
- 1. Select Design Settings from Look and Feel under the Settings menu.
- 2. On the page that appears select the default skin from the Choose Design box.
- 3. Click the Modify button.
- 4. On the page that appears, change the design settings:



- Users can choose this design: this option determines whether this design becomes available to your end users.
 If none of the designs is enabled, Parallels H-Sphere sets Left Menu design as default.
- New users will get this design as default: enabling this option will change default design for your end-users and switch it off for all other designs;
- Choose another design: select another design to modify.

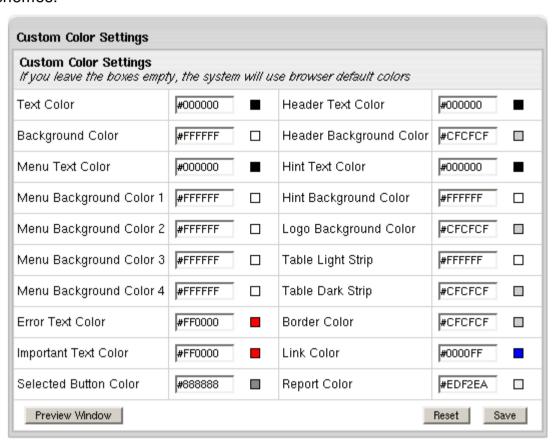
Note: XPressia Lite is specially designed to be used if your browser works slowly with XPressia.

5. Change control panel color and image set in the Color Scheme Setting section.



Important: You can change the color scheme, image set and icon set for Left Menu skin, whereas for Text Based and No Menu skins only Icon Set can be changed.

- Color Scheme: select a color scheme and click Apply.
- Image Set: select another image set and click Set. Image Set standards can't be customized.
- Default Icon Set for User: select the icon set that will be default for your end users and click Set.
- **6.** Create your own custom color scheme by changing default color schemes.



- Click Preview Window to see how your settings will effect users' control panel.
- Click Reset to return to default color scheme.

your custom configuration will be lost.

 Click Save to save your custom color scheme settings. It will appear in the Color Scheme drop-down box.
 If you don't save Custom Color Settings and return to one of the four standard, all

Note: these settings will affect control panels of your direct end users and resellers. Resellers' admin control panels and the control panels of resellers' end users won't be affected; their look and feel must be configured from the reseller admin control panels.

Disabling CP Skins

If you don't want some skins to be supported by Parallels H-Sphere, you need to exclude them for the entire hosting system so they become unavailable for end users and resellers.

You can disable skins globally or for particular reseller plan.

Disabling CP Skins globally

- To disable globally:
- 1. Log into your admin control panel
- 2. Select Globals in the Plans menu
- In the CP Designs section of the page that shows, uncheck the skins you want to be entirely disabled

Disabling CP Skins for reseller plans

- > To disable CP skins for a particular reseller plan:
- 1. Log into your admin control panel
- 2. Select Create in the Plans menu
- 3. Choose reseller plan to start Plan creation wizard
- **4.** On the Step 1, uncheck the skins you don't want to be supported by this particular plan.

Setting Interface Language

You can set both default system language and admin interface language.

Setting Default System Language

Default language is the language of newly created accounts, including navigation menu, form and control labels, context help, and system messages. However, every user can override the default language with one of those available in the user control panel.

Currently Parallels H-Sphere comes with the following languages: English, Russian, Italian, French, Spanish, Dutch, German and Portuguese. You can also add new languages by installing language packages from http://download.hsphere.parallels.com/downloads/index.html#languages, compiling new language bundles, or bulding new language packages. See Customization Guide for the info.

Default language affects the default regional settings (on page 108). You can set custom currency or currency pattern, but mind that they will be lost once you change to another language.

To change the default language:

- 1. Go to Default Language in Look and Feel under the Settings menu.
- 2. Select language from the drop-down box.
- 3. Click Submit to save changes.
- **4.** Proceed to Regional Settings (on page 108) configuration.

Changes of the interface language will affect control panels of your direct end users and resellers. In their turn, resellers can make their own changes that will take effect in all the resellers' end users control panels.

Setting Admin Interface Language

Unlike the language described above, which by default is set in all resellers' and users' cp, the language configured from **Admin User** menu relates only to your admin control panel, including reseller and user accounts which you access from it.

To change admin interface language:

- 1. Go to Language in the Admin User menu.
- **2.** Select language from the drop-down box.
- Click Submit to save changes.

Important: Now, when you visit accounts of your resellers and end users from your cp browser, they will appear for you in the language you just set. However, original language chosen by owners of these accounts will remain unchanged.

CHAPTER 9

E-Mail Notifications

Parallels H-Sphere provides E-Mail Notifications feature. Please see this chapter for details.

In this chapter:

Setting E-Mail Notification Recipients	121
Editing E-Mail Notifications	
Configuring User Notification Rules	

Setting E-Mail Notification Recipients

Parallels H-Sphere allows you to configure e-mail addresses where copies (the BCC: field) of e-mail notifications (on page 122) - such as, welcome messages to customers upon their signup, billing letters, confirmations of domain registration - will be sent to. Also, you can add e-mail addresses to receive copies of trouble tickets and system notifications about critical errors, etc. Mostly, this option is provided to enable various departments of your company to track and resolve specific issues.

- > To subscribe e-mail addresses to receive notification copies:
- 1. Go to the Settings menu > Notifications > Notification Recipients.
- 2. On the page that appears add subscribers to mailing lists you choose.

Mail Settings		
Action	Recipients	
Misc	Support <support@mycompany.com> [Remove All]</support@mycompany.com>	
Custom Domain Registration	[Remove All]	
Managing Debtors	Sales < sales@mycompany.com> Remove All	
Welcome Messages	Sales < sales@mycompany.com> Remove All	
Tax Exemptions	Sales < sales@mycompany.com> [Remove All]	
Domain Registration	[Remove All]	
Managing Trials	Support <support@mycompany.com> [Remove All]</support@mycompany.com>	
Trouble Ticket System	Admins <admins@example.com> Remove All </admins@example.com>	
Accounting	Sales < sales@mycompany.com> Remove All	
Suspend/Resume	Support <support@example.com> Remove All </support@example.com>	

System e-mail messages are grouped according to their specific tasks. These messages are configured in the **Settings** -> **Notifications** -> **E-Mail Notifications** menu. Please refer to Editing E-Mail Notifications (on page 122) for details.

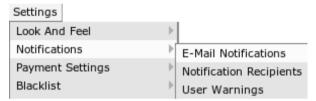
Editing E-Mail Notifications

Master admin and resellers can edit e-mail notifications directly from Parallels H-Sphere control panel.

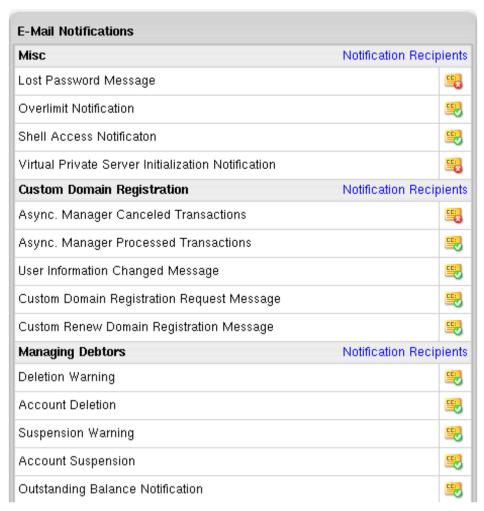
In previous versions, system emails were stored ONLY in system e-mail templates and could be edited only by master admin. Now system emails are stored in the Parallels H-Sphere database and can be modified in the admin CP for each of interface languages provided in Parallels H-Sphere.

> To customize system emails in CP:

1. In the admin interface, choose E-Mail Notifications under the Settings menu:



You will see the list of system e-mail notifications sent from the address entered as your company information (on page 131). These notifications are grouped by categories:



2. You can enable or disable sending copies (the BCC: field) of particular notifications to e-mail addresses in e-mail notification groups (on page 121) in the Settings->Notification Recipients menu. Sending copies is by default enabled for all notifications within a group.

Checkboxes in the **CC** column to the left of the notification name indicate if sending BCCs is enabled or disabled. You cannot enable or disable sending BCCs directly in the list of notifications. To do this, you should open a notification for edition and check/uncheck this option at the bottom of the page that appears:



After that, the CC indicator will be changed in the list:



- 3. To edit a custom email message, click on the notification name in the list or on the Configure icon to the right of the notification name. You will see the page containing two parts:
 - 1) Preview: message preview as generated from the message template code:

Welcome Letter

Preview Message

Subject:

New Account: PLAN.DESCRIPTION

Body:

Dear FirstName LastName,

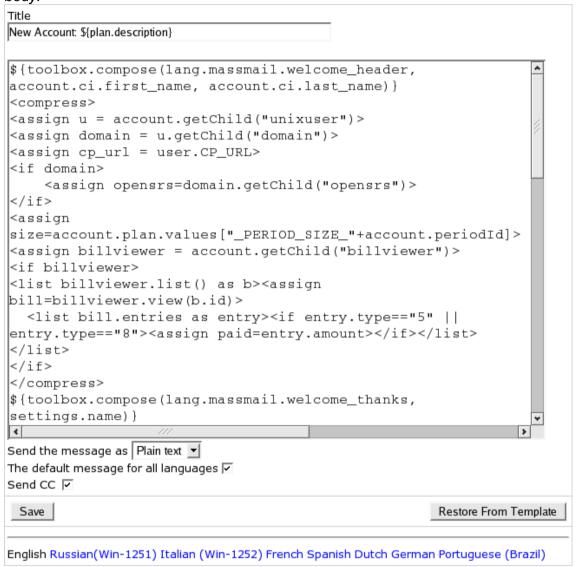
Thank you for choosing Positive Software for your Web hosting needs. We look forward to working with you to make sure you get the most of your account, and we wish you success with your online venture.

We have received and processed your payment of \$0.00.

This payment covers your setup and domain registration fees, and your first 3 ACCOUNT.PLAN.VALUES._PERIOD_TYPE_ACCOUNT.PERIODIDs.

NOTE: Variable message fields such as user's first and last name or user login are replaced in Preview by the Parallels H-Sphere intuitively understandable "pseudo texts": FirstName, LastName, USER.LOGIN, and the like.

2) **Edit Form**: contains the subject *title* and the dynamically generated message *body*:



Send the message as: setting the message's content type, the format in which the message would be sent (in plain text or in HTML format).

Default message for all languages: this allows to make a custom email message default for those of the languages listed below that have this option ticked. If you do not want this message to be default for any of the languages, uncheck this option for that specific language.

Send CC: check/uncheck this box to enable/disable sending copies (BCC:) of this particular message to e-mail addresses specified for this notification group (on page 121) in the **Settings->Notification Recipients** menu. This box is checked by default.

On the bottom of the form there is the **language panel** with all interface languages available in Parallels H-Sphere. Click to choose the language you wish to modify the message for.

4. Click Save to apply changes.

If you change the message code correctly, you will get the note that changes have been successfully saved (in the Parallels H-Sphere database), and you may see these changes in the **Preview Message**.

Otherwise, you will receive an error, and changes won't apply:

Failed to apply changes. Unexpected instruction at line 18

Welcome Letter

Preview Message

Subject:

New Account: PLAN.DESCRIPTION

Body:

Dear FirstName LastName,

IMPORTANT:

- 1. System email messages are generated from Freemarker code. To correctly customize the code, you should be familiar with Freemarker commands and with Parallels H-Sphere advanced customization and resources.
- 2. There is no need to customize lang texts represented in the code as
- \${lang.text_name} and set in the bundle files in the

/hsphere/local/home/cpanel/shiva//psoft/hsphere/lang/ default bundle directory or in *custom bundles directory*. Instead, you could set the text directly for each interface language here in the given form. For this, please make sure you uncheck **the** The default message for all languages box when editing the message for each language.

3. Changes applied to the system emails through the given form are stored in the system database and do not affect the .txt system email notification templates that are located in the /hsphere/local/home/cpanel/shiva/shiva-

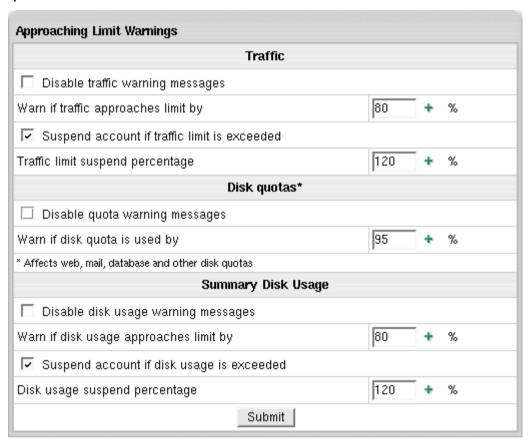
templates/common/mail. Moreover, you can restore the hardcoded system notification from the template by pressing the Restore From Template button at the bottom of the form.

We don't recommend customizing the default templates!

Configuring User Notification Rules

When customers approach their traffic (on page 290), summary disk usage limit (on page 300) or disk quota (on page 300), They get respective e-mail warnings. To choose how closely to the limit these warnings will be issued:

- 1. Select User Warnings in the Settings -> Notifications menu.
- 2. Specify when users will be e-mailed. Choose if the accounts will be suspended:



Online Invoices

When creating plans with plan wizards, you choose whether you want Parallels H-Sphere to e-mail order confirmations to users right after they buy resources. If you enable sending order confirmations, customers will receive them for every single bill entry, e.g. overlimit traffic. Order confirmations are sent from the e-mail address specified in the Look and Feel menu -> Company Info. If this feature is off, customers will get no order confirmations, even at the end of the billing period.

- > To turn sending order confirmations on or off:
- 1. Start a plan edit wizard.
- 2. On the first step scroll down to the Settings section.
- 3. Check the E-mail order confirmation box.
- **4.** Complete the wizard.

After signup, users can change this option in their accounts.

- ➤ To turn sending order confirmations ON or OFF for all your customers regardless of their current settings:
- 1. Select Other in the E.Manager menu.
- 2. Click ON or OFF in the E-mail order confirmations section:

E-mail order confirmations

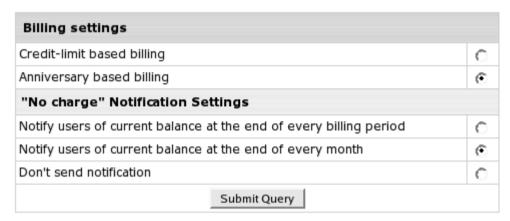
Force sending order confirmations for all existing users ...

ON OFF

Forcing sending order confirmations on or off overrides current user settings. However it doesn't prevent customers from switching this option back afterwards for their own accounts.

"No Charge" Notifications

You can configure the system to send clients automatic "No Charges Made for Your Account" notifications at the end of each billing period or month. To choose the rule, select **Billing Settings** in the **Settings** menu:



For credit limit based billing, customers are notified if their balance does not exceed credit limit. For anniversary based billing, they are notified if during given billing period or month there were no billing operations (charges for purchases or exceeded monthly resource limits).

Control Panel Configuration

This chapter discusses the configuration steps required to set up and manage your Parallels H-Sphere Control Panel.

In this chapter:

Entering Company Information	131
Disabling Global Resources, Hosting Platforms And Reseller CP SSL	
Using Background Job Manager	135
Supported TLD's	
Installing Shared SSL Certificates	140
Managing Mail SSL	144
Using Credit Card Encryption	150
Adding Credit Card Brands	

Entering Company Information

The system holds your company's name, mailing address and other details that are used across the control panel, including the letters e-mailed to the user. It's especially important for Enom and OpenSRS - incorrect or no info may decline domain registration.

> To enter your company info:

- 1. Select Company Info in Look and Feel under the Settings menu.
- 2. Enter your corporate details:



- Owner's first and last name: enter your name.
- Company, Adress, City, State, Country and Postal Code: enter your company's postal address information.
- Phone, Fax numbers of your company.
- e-mail: Parallels H-Sphere will use this address to send user notifications, mass mails, etc.
- Hostmaster E-mail: your sysadmin e-mail address. Use a dot "." instead of "@" in the e-mail address.
- Website: enter your company website if any.
- 3. Click Save to preserve changes.

Don't forget to configure Misc. Texts (on page 114) as well.

Resellers' admin control panels won't be affected by these settings. Their company info should be configured from the reseller admin control panels.

Disabling Global Resources, Hosting Platforms And Reseller CP SSL

Global resources are those that have effect on the ENTIRE system. By default, they are all enabled in the system. Disabling global resources will make them unavailable for use by all new customers under all your plans, including your first hand customers, resellers and their end users. However, it won't affect existing users who have been using these resources.

If you are looking to restrict resources only for a particular plan, use Plan Wizards (on page 360).

> To disable global resources:

- Log into your Admin CP.
- 2. Go to Plans -> Globals.
- 3. On the page that shows, uncheck the resources you want to be entirely disabled:

Note: These resources will appear as disabled in resellers Plan Creation Wizards and will be unavailable for activation.

_	 						
G	ha	l r	20	~ I	HP	CO	e

You can disable any of the following resources for the entire system by unchecking the boxes. Resources will become disabled after you submit changes in the Plan Edit Wizards for all plans, including the plans you created for your resellers and also their own custom plans. You can also disable any of the hosting platforms for the entire system.

Miva Empresa Engine	~
MIVA Resource (requires: Miva Empresa Engine)	~
osCommerce (requires: MySQL)	~
Urchin 3	~
Urchin 4	~
MySQL	~
MS SQL	~
PGSQL	~
Real Server user	~
ColdFusion module	~
Summary Disk Usage	~
Shell Requests Manager	~
Site Toolbox	~
SiteStudio	~
Kanoodle	~
Shared SSL	~
AntiSpam	~
AntiVirus	~
Email Auto Responder	~
Mail Relay	~
Virtual private server	~

ASPSecured (unavailable)	
ASPSecuredLicense (unavailable)	
Frontpage for Unix Plans (requires: Unix platform)	~
Frontpage for Windows Plans (requires: Windows platform)	~
Catch All for e-mail objects	~
Throttle Resource	~

4. In the same way disable hosting platforms, enable dedicated servers, disable reseller CP SSL (on page 394) and CP designs, as well as choose the type of IPs for reseller DNS servers:

Hosting Platforms			
Unix platform	~		
Windows platform	~		
MS Exchange platform	~		
Dedicated Servers			
Dedicated Server facilities			
Enable Custom-built dedicated servers (requires: Dedicated Server facilities)			
Enable Remote Reboot for dedicated server (requires: Dedicated Server facilities)			
Enable Backup feature for dedicated servers (requires: Dedicated Server facilities)			
Allow resellers to resell your dedicated servers (requires: Dedicated Server facilities)			
Allow resellers to sell their dedicated servers (requires: Dedicated Server facilities)			
Reseller CP SSL			
IP-Based CP SSL (not configured)			
Port-Based CP SSL (not configured)			
IPs Of Reseller DNS Servers			
Enable dedicated IPs for Reseller DNS servers	0		
Use the service IP for Reseller DNS servers	•		
CP Designs			
Here you can disable unnecessary designs. Note: If you disable all of them, "Left Menu" will be used forcibly in such a case.			
Left Menu	~		
No Menu	~		
XPressia	~		
XPressia Lite	~		
Submit Query			

- Enable Dedicated DNS Reseller IP to allow both service and dedicated IPs for reseller DNS:
- Use the service IP for Reseller DNS servers to disable dedicated IPs and host all resellers on one IP only.

You can't disable service IP hosting for the entire system.

5. Click Submit Query.

Using Background Job Manager

Background Job Manager is a utility that allows enabling, starting and disabling selected cron jobs from the admin control panel only.

This document will tell you how to manipulate cron jobs, see cron job details and view currently running jobs.

- > To manipulate cron jobs via Parallels H-Sphere interface:
- 1. Go to E.Manager > Background Jobs- > Background Job Manager.
- 2. On the page that shows, check necessary jobs:

ob name	Priority	Period, min	Status	
ASYNC_MAN	3	2	enabled	
BalanceExhaustionDateEstimator	3	1440	enabled	
BoxesInfo	3	10	enabled	
CleanMailRelaysForMailServer	3	15	enabled	
ComodoSSLRenewal	3	1440	enabled	
DedicatedServerCancellation	3	1440	disabled	
✓ DomainRegistrationRenewal	3	1440	enabled	
☑ ExpDateSynchronization	3	1440	enabled	
MIGRATION	3		enabled	
MSExchangeStats	3	1440	enabled	
ResellerSupportBilling	3	1	enabled	
Suspend	3	1440	enabled	
TTMailClient	3	3	enabled	
accounting	3	1440	enabled	
contentMoving	3	5	disabled	
escallation	3	15	enabled	
extcharge	3	5	enabled	
fSignups	3	10	enabled	
mailSRS	3	43200	disabled	
overlimit	3	4320	enabled	
reseller	3	1440	enabled	
revenue	3	1440	enabled	
transfer	5	5	enabled	
trial	3	1440	enabled	
ttAutoClose	3	1440	enabled	
vps	3	5	enabled	
vpsReconfig	3	5	enabled	
vps_templates	3	3	enabled	

The listed cron jobs will do the following:

- ASYNC_MAN: checks if asynchronous domain was created
- BalanceExhaustionDateEstimator: estimates the period of time before the user balance will be exhausted
- BoxesInfo: retrieves info from web/mail/etc boxes.
- CleanMailRelaysForMailServer: removes all mail relays from the mail server with none of mail domains
- ComodoSSLRenewal: performs renewal for Comodo SSL certificates
- DedicatedServerCancellation: cancels dedicated servers
- DomainRegistrationRenewal: performs renewal for domains registered via domain registrar (i.e: OpenSRS)
- ExpDateSynchronization: corrects expiration dates by requesting domain status from the registrar
- MIGRATION: launches migration from other control panels
- MSExchangeStats: collects MS Exchange mailbox usage statistics.
- ResellerSupportBilling: bills resellers for the users' trouble tickets solved by admin.
- Suspend: suspends debtors, finalizes incompletely suspended accounts and suspends users of suspended resellers
- TTMailClient: gets mails using Settings -> Tech Support pop3 access.

 If pop3 access is wrong, Parallels H-Sphere creates TT for current admin, sets the value TT_POP3_ACCESS in Postgres table settings to 0. Next time the Cron is started, it will skip getting mails for admin with TT_POP3_ACCESS set to "0". To take emails for this admin next time, re-submit the admin Settings->Tech Support settings, and then set TT_POP3_ACCESS to 1.
- accounting: performs recurrent billing for end users
- contentMoving: completes the process of moving user content
- escallation: sets higher priority to the tickets that are not answered for a long time
- extcharge: processes the external_credits table and adds payments performed within
 an external payment system outside Parallels H-Sphere to this table as the account
 credits, thus integrating external payments into Parallels H-Sphere. Read more
 about external credits configuration in Parallels H-Sphere Developer Guide.
- **fSignups**: sends emails about failed signups (every 5 minutes)
- mailSRS: monthly regenerates secret key used in the SRS address cipher
- overlimit: checks that the account is not going over the limit
- reseller: does billing for resellers
- revenue: calculates summary billing info
- transfer: moves accounts between boxes
- trial: suspends expired trial accounts
- ttAutoClose: closes trouble tickets answered certain time ago
- vps: queries the status of creating virtual servers (every 4 minutes)
- vpsReconfig: reposts net configuration for future VPS servers on each physical VPS box.
- vps_templates: checks the status of vps templates (on page 544)

- **1.** Choose an action: enable, start or disable jobs. The chosen action will be performed for all selected jobs.
- 2. Click the Apply button. The action will reflect in the job Status.

To view details of the specific job:

Click the Job name. The page that appears will show the job to be executed:

Job name: revenue		
Group name	CRON	
Status	enabled	
Priority	7	
Start at	4:30	
Period, min	1440	
Before start, min	1287	
Launch count	0	

Detailed description of cron jobs is listed in CP Cron Jobs in System Administrator Guide.

- Group name shows the group the job belongs to;
- Status shows what action has been performed.
- Priority ranges from 1 to 10. By default, priority is set as 5 (normal);
- Start at is a time when the job is to be started next time;
- Period is a time interval between the cron job launches, in minutes;
- Before start, min: time left before cron job starts;

Launch count shows how many times the job was started since Job Manager was initialized (or since CP was started).

> To view the jobs that are currently running:

Choose Current Jobs in the administrator control panel.

This page will show detailed information about the current jobs:



Id, Job name, Group name, Priority, Current status and job Progress in percents.

Depending on the current status of a job, you can restart, interrupt, suspend or resume specific jobs. To do it, check necessary jobs, select an action and click **Apply**.

Supported TLD's

This document outlines the Top Level Domains (TLD's) supported by domain registrars in Parallels H-Sphere.

Domain Registrar	TLD
OpenSRS (on page 163)	.com, .net, .org, .name, .info, .biz, .ca, .tv, .us, .co.uk, .de
Enom (on page 161)	.com, .net, .org, .us, .info, .biz, .tv, .ws, .nu, .bz, .cc, .ca, .cn, .com.cn, .net.cn, .org.cn, .br.com, .cn.com, .de.com, .eu.com, .hu.com, .no.com, .qc.com, .ru.com, .sa.com, .se.com, .uk.com, .us.com, .uy.com, .za.com, .de, .in, .jp, .uk.net, .se.net, .tw, .co.uk, .org.uk
OnlineNIC (on page 168)	.com, .net, .org, .biz, .info, .us
RRPproxy (on page 170)	.com, .net, .org, .info, .biz, .ws, .cc, .bz, .nu, .ag, .tv, .us, .fm, .name, .la, .cn, .tk, .tc, .vg, .ms, .gs, .pl, .jp, .sg, .tw, .ac, .am, .be
Ascionic (on page 172)	.co.hu, .co.pn, .com.my, .com.pa, .com.pe, .de, .dk, .hu, .in, .pn, .tm

Installing Shared SSL Certificates

Shared SSL certificates, also known as wildcard or server-wide certificates, are used to service multiple third level domains.

Thawte determines a wildcard certificate as "a single certificate, with a wildcard character in the domain name field. This allows the certificate to secure multiple hosts within the same domain. For example, a certificate for '*.domain.com', could be used for www.domain.com, www1.domain.com, www2.domain.com, in fact, any host in the domain.com domain. When a client checks the host name in this certificate it uses a shell expansion procedure to see if it matches."

According to VeriSign, a shared SSL certificate "enables Internet Service Providers (ISPs) to provide SSL (Secure Sockets Layer) encryption and business authentication to Web business customers, but without the need to issue unique digital certificates to each hosted customer. The service offers ISPs the convenience and streamlined management of a single specially licensed SSL digital certificate to share among multiple hosted web sites".

Shared SSL certificates work only within one domain level. For example, if you get a domain name for *.domain.com, it will work for www.domain.com and subdomain.domain.com. But it won't work for www.subdomain.domain.com or http://domain.com, and visitors' browsers will show a warning message: "The name on the security certificate does not match the name of the site".

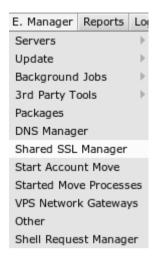
Parallels H-Sphere Shared SSL is based on shared IPs and wildcard SSL certificates and is bound to a particular service DNS zone. Since different servers use different shared IPs, Shared SSL is associated with a certain shared IP tag, which identifies these IPs on each server. When you install a wildcard certificate, it is set up on all web servers. Just make sure that shared IPs on the web servers have the same shared IP tag.

The cost of a shared SSL certificate usually depends on the number of subdomains that it covers and varies depending on the certificate authority.

Important: when obtaining SSL certificate, make sure it is generated for Apache regardless of whether you inted to install it on windows or unix box.

> To install a shared SSL certificate:

1. Select Shared SSL Manager in the E.Manager menu:



2. Turn Shared SSL Support on for the DNS zone domain you would like to secure:



Note: you can dedicate a DNS zone for secure third level hosting of your direct end users as well as end users of your resellers. With this utility, resellers can offer your secure DNS zone for secured third level hosting without having to purchase their own shared SSL certificate.

To let your resellers provide their end users with secure hosting on your 'dedicated' DNS zone, install shared SSL on it as described below and when you are through turn Share SSL with resellers on

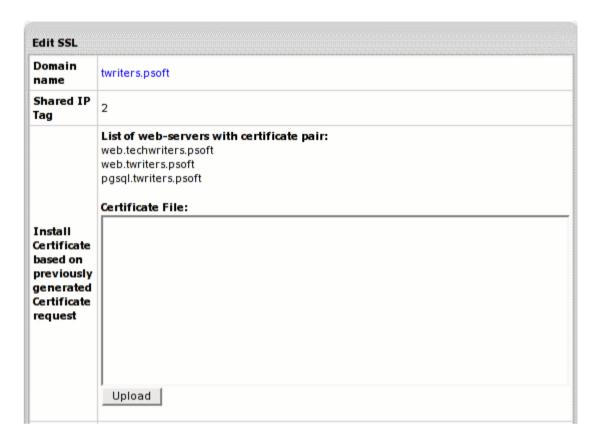
Shared SSL installation wizard

1. The window that appears on enabling Shared SSL support will give you two options:



- Generate a temporary wildcard certificate by clicking the link at the top of the window:
- Enter your existent wildcard certificate by entering it in the form. When you click the **Submit** button, the certificate will be installed.

If you have created a temporary wildcard certificate, you can request a permanent wildcard certificate in the future from a trusted certificate authority. To install the SSL certificate, click the **Edit** icon next to the domain name and enter the certificate key and certificate file. Then click the **Upload** button.



Sometimes, you may have to use a Certificate Authority File provided with the Certificate by your Certificate Authority (e.g. Comodo Ca, Geotrust, Equifax, etc.). To use the Certificate Authority File, you have to add a line to the apache config of each virtual host that uses shared SSL. Parallels H-Sphere can do this for you: enter the file in the **Certificate Authority File** text box and click the **Upload** button.



Note: If you are using more than one shared IP, each of them must have a unique shared IP tag. You can't create more than one certificate on one shared IP tag.

- Go to Plan Edit Wizard and enable Shared SSL. By doing this, you will also automatically enable Third Level Domain Alias, Third Level DNS Zone, Domain Alias A DNS Record.
- 3. If you have added a new web server and want it to be serviced with the shared SSL certificate, click the Edit icon next to the domain name and enter the certificate key and certificate file in the Install completely new certificate key and file pair boxes. Then click the Upload button. This will update the shared SSL certificate installation on all servers, including the newly installed one.

Besides, you can create 'reseller dedicated' DNS zone domain, secure it with your shared SSL and allow resellers to secure their end user third-level domains (registered on this domain) with your own shared SSL.

Managing Mail SSL

Mail SSL is enabled globally in the system for all end users, including those under resellers. It is available only to master admin. Once it is enabled, it secures all mail sent and received by mail clients (such as Outlook Express).

You can install a certificate on one service DNS zone, which defines logical mail servers names. For instance, if your mail server is mail.example.com, you will install the certificate on the example.com zone.

Private key is stored on mail servers and in the system database without encryption. It is in our plans to implement certificate encryption in the forthcoming versions.

Mail SSL supports all mail protocols and listens on the following ports:

SMTPs - 465/tcp

POP3s - 995/tcp

IMAPs - 993/tcp

Enabling Mail SSL

- > To enable Mail SSL:
- 1. Log into the admin control panel.
- 2. Select Mail Servers in the E.Manager -> Servers menu.
- 3. Turn on Mail SSL Support:



4. On the page that appears, select the service DNS zone:



5. On The next page, post private key and certificate:

New Mail SSL Support		
Generate a temporary SSL certificate and certificate request		
SSL Server Private Key		
SSL Certificate		
Submit		

- If you don't have a certificate, click **Generate a temporary SSL certificate and certificate request**. Parallels H-Sphere will generate you a fully-functional, but untrusted certificate.
- **6.** The key and cert are validated and published to all logical mail servers to the file <code>/hsphere/local/var/vpopmail/etc/mail.pem</code>. Then all mail servers are restarted. Parallels H-Sphere will display report messages at the top of the **Mail Servers** page.

Editing Mail SSL

You may need to edit Mail SSL in order to:

- Install new certificate for an existent private key.
- Install new key and certificate.
- Install a chain file.
- Install a revocation file.
- Install a certificate authority file.

Install Certificate based on previously generated Certificate request
Certificate File:
Upload
Install completely new Certificate key and file pair
Certificate Key:
Certificate File:
Upload
Certificate Chain File
Upload
Certificate Authority File
Upload

u 🕙 🥰

Newly installed files are validated on the CP server and published to all mail servers to the file /hsphere/local/var/vpopmail/etc/ca-mail.pem and the mail servers are restarted. New keys and certificates are also written to the system database.

Reposting Certificates

Mail SSL Support

Use this action to re-publish keys and certificates from the DB to all mail servers in the system. After the repost, mail servers are automatically restarted:



Disabling Mail SSL

If you disable Mail SSL, mail.pem files are permanently deleted from all mail servers, and related data (key, cert, zone, etc.) is removed from the system database. Then mail servers are restarted.

Using Credit Card Encryption

Normally, credit card numbers are stored in clear text in the Parallels H-Sphere database.

The *credit card encryption* feature will allow you to add security by encrypting all the credit card numbers and to control when the credit card numbers are accessible by the Control Panel. This feature uses Public/Private key encryption technology (RSA Block Asymmetric Algorithm with a 1024bit key). All credit cards will be encrypted with a *public key*. The public key is always stored in a file on the Control Panel Server. The private key, which will be used to decrypt credit card numbers, will be downloaded by the administrator as a part of the encryption wizard.

WARNING:

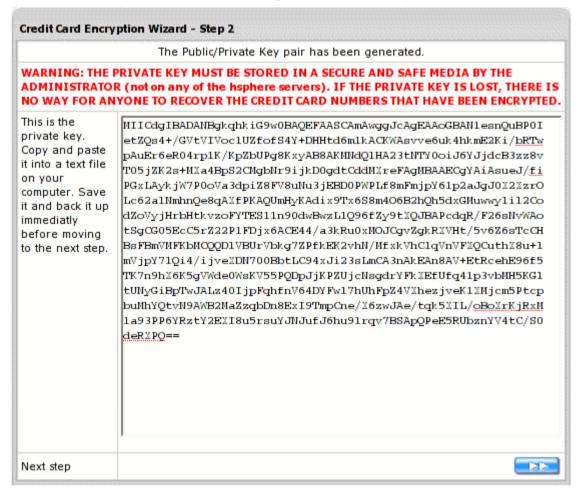
- 1. The private key; is stored in RAM (NOT ON THE DISK!) and must be uploaded every time the control panel is resarted!
- The permanent copy of the private key should be stored on a secure and safe medium by the administrator. It should not be on any of the Parallels H-Sphere servers!
 If the private key is lost, there is no way for anyone (even for the support staff or programmers) to recover credit card numbers that have been encrypted!

Turning On

- > To turn on credit card encryption:
- 1. Log into your admin control panel.
- 2. Select CC encryption in the Settings -> Payment Settings menu:

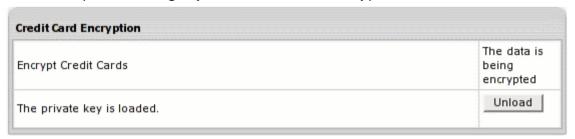


- 3. Click the OFF button to start encryption wizard.
- 4. Proceed to Step 2 of the wizard to get the form with your private key:



Copy the private key to your clipboard and also to a file stored in a safe location.

5. On the wizard's Step 3, enter the private key from the clipboard to the form, and proceed to get your credit cards encrypted:



Note: The encryption procedure may take a long time, up to an hour or even more, depending on the number of credit cards processed and the server physical configuration.

6. Now, CC encryption is complete:



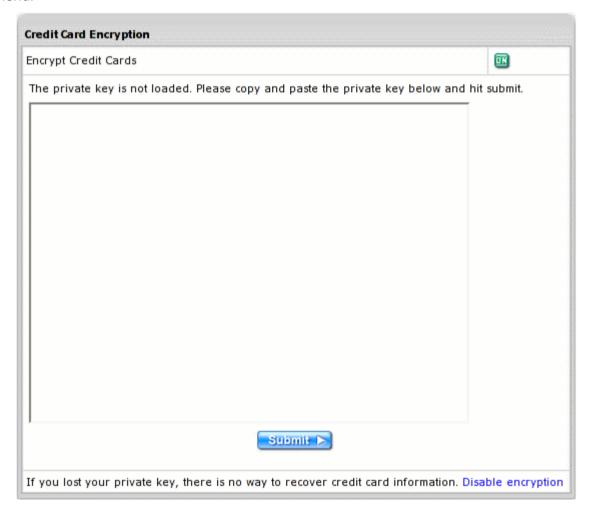
Once the credit cards are encrypted, the private key will be stored in RAM until the Control Panel is restarted or until the key is manually unloaded.

Note: If you restart Parallels H-Sphere during the encryption procedure, it would automatically continue after the restart.

Loading Private Key

If you have restarted Parallels H-Sphere, you need to load your private key, in order to be able to access encrypted data, or in case you need to complete CC decryption.

You would see the following form in the **Settings** -> **Payment Settings** -> **CC Encryption** menu:



To load your private key, insert to the form and enter Submit.

Turning Off

- > To turn off credit card encryption:
- 1. Log into your admin control panel.
- 2. Choose the **Settings** -> **Payment Settings** -> **CC Encryption** menu and click the ON button to start decryption wizard.
- After you choose to decrypt, you would get:



4. After the decryption process is finished, the CC Encryption menu would look like:



Click the Unload button to complete disabling CC Encryption.

Important: If you restart Parallels H-Sphere during decryption, you would not be able to proceed until you load your private key!

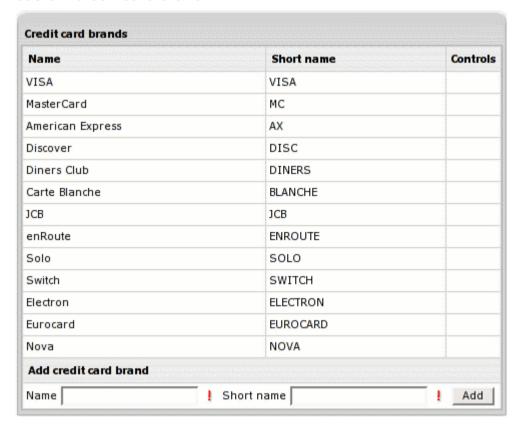
If You Lose Your Private Key

If the Private key fails to load, the following issues will arise with users who pay with credit cards:

- Accounts under plans without credit limit will not be able to add paid resources.
- If the accounting cron runs when the Private Key is not loaded, accounts whose billing period has ended will be debited regardless of their credit limit. This may put some users over their credit limit.
- Users who are over their credit limit will not be able to add any resources (including free resources) until the encryption key is loaded.

Adding Credit Card Brands

- ➤ To add support for a credit card brand (vendor) that is not provided with Parallels H-Sphere:
- 1. Find a credit card processing center that automatically processes payments with this credit card brand.
- 2. Go to your admin control panel and select CC Brands in the Settings->Payment Settings menu.
- **3.** On the page that opens, enter the full name and the short name of the custom credit card brand:



Now you can associate your credit card with this merchant gateway in the merchant gateway manager (on page 181).

Domain Registrars

Parallels H-Sphere comes with support of several Domain Registrars. You can find more info in this chapter.

In this chapter:

Domain Registrar Manager	
Enom Configuration	
OpenSRS Configuration	
OnlineNIC Configuration	
RRPproxy Configuration	
Ascionic Configuration	
TPPInternet Configuration	
Email Domain Registration	

Domain Registrar Manager

Parallels H-Sphere comes with Domain Registrar Manager. It supports automatic domain registration services with multiple domain registration providers.

In this section:

Configuring Domain Registration Settings	156
Editing Registrar Connection Settings	159
Removing TLD Associations	159
Deleting Registrar Connections	160

Configuring Domain Registration Settings

IMPORTANT:

- 1. Before you start, make sure to have your **company info** carefully entered, as it will be used as Billing and Tech info for registered domains. With your company info incorrect or incomplete, end users may start encountering problems with domain registration. Company Info is set on the **Look&Feel** -> **Company Info** page.
- 2. TLDs with asynchronous registration, such as .co.uk or .org.uk, .de, etc. can be handled by admin only by OpenSRS (on page 163).
- 3. TLDs that are not registered with supported registrars, such as .pt, or .jp should be handled by admin with Email Domain Registrar (on page 176).
- 4. Parallels H-Sphere supports .US, .CA, .INFO, and .BIZ domains. Supported domain registration providers require that registrant phone and fax numbers be entered in a special format. Users registering .US and .CA domains are also asked for additional information.

Phone/fax format depending on the country of residence:

- North America: NXX-NXX-XXXX/YYYY;
- Other countries: +CCC.ZZZZZZZZZZ/YYYY.

Here:

N is a digit from 2 to 9, X any digit, YYYY optional extension, CCC country code, ZZZZZZZZZ phone/fax number inside the country.

Administrators/resellers should also change the format of phone and fax numbers in their **Company Info** pages.

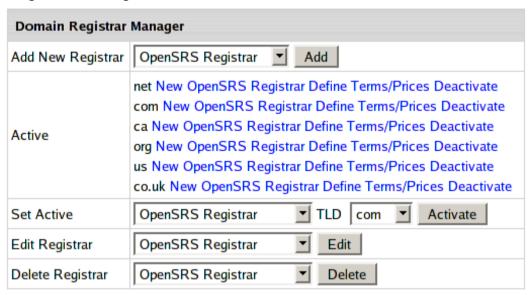
Step 1. Creating Connections with Domain Registrars

- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- Create connections for Enom (on page 161), OpenSRS (on page 163), OnlineNIC (on page 168), RRPproxy (on page 170), Ascionic (on page 172) or Email Domain Registrar (on page 176).

Step 2. Associating Top Level Domains with Domain Registrars

Now that you have created connections with domain registrars, you need to associate it with each TLD (top level domain). If you have registered connections with both registrars, you can have some TLD's registered with one and others with another. For example, you can configure Parallels H-Sphere to register .com and .net domains with OpenSRS, and others - with Enom. To set the associations:

- 1. In the **Set Active** field, choose the TLD and the registrar it will be registered with.
- 2. Click the **Activate** button to create the association. Now your Domain Registrar Manager form should look similar to this:



Make sure to create associations for each TLD you would like to support. Users won't be able to register domains with inactive TLDs from their control panels.

Step 3. Setting Default Domain Registration Prices

Requirements: Enom (on page 161) and/or OpenSRS (on page 163) configured.

You can set different domain registration prices in different plans. However, you first need to set default domain registration prices to be applied every time a plan-specific price hasn't been specified.

- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Active box, choose the top level domain (.net, .com, etc.) and click the Define Terms/Prices link next to it.

Set the default prices for various periods:



These are actual prices for the billing periods, they are not prorated to one year. This means, you need to enter "15 30 45 60 75 90 105 120 135 150", not "15 15 15 15 15 15."

- **4.** Repeat steps 3-4 for each TLD.
- 5. Now that you have entered default prices, set domain registration prices for individual plans. Warning: If you don't set default or plan-specific prices, end users won't be able to register domains from their control panels.

Step 4. Configuring Registrar Connections for Resellers

Resellers offer domain registration services using your registrar connections. In other words, once you have correctly completed the above steps, your registrar connections will become available in the resellers' admin control panels. Also, please:

- Ask your resellers to check that their company info is correctly entered (no fields should be left empty), as it will be used as Billing and Tech info for registered domains. With reseller company info incorrect or incomplete, resellers' end users may start encountering problems with domain registration. Company Info is set in the reseller admin CP on the Look&Feel -> Company info page.
- Make sure to enter prices for TLDs and year periods you would like to offer through resellers. These could be either default prices (see the previous step) or planspecific prices (see Plan Wizards, step 2, or both).

Editing Registrar Connection Settings

Requirement: domain registrar accounts configured (on page 156)

- 1. Log into your admin CP.
- 2. Go to Settings -> Domain Registrar.
- Choose domain registrar account from the Edit Registrar drop-down box and click the Edit button.

Removing TLD Associations

When you remove a TLD association, the TLD becomes unavailable for end users' domain registration. This, however, doesn't remove the registrar account. To remove a TLD association:

- 1. Log into your admin CP.
- 2. Go to Settings -> Domain Registrar.
- 3. Click the Deactivate link for the TLD association.

Deleting Registrar Connections

- 1. Log into your admin CP.
- 2. Go to Settings-> Domain Registrar.
- **3.** In the **Delete Registrar** drop-down box, choose the domain name registrar and click the **Delete** button.

Enom Configuration

Create a reseller account with Enom (http://www.enom.com). When prompted, enter the IP of your CP server and control panel DNS server names.

Note: DNS server names should be registered and propagated with ICANN accredited domain registrar.

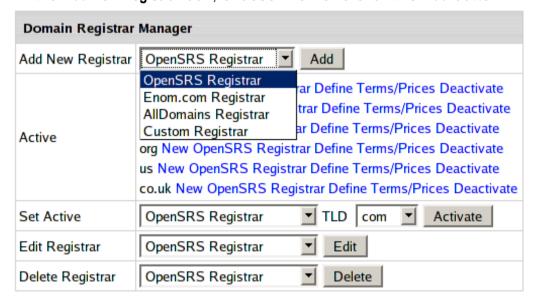
In your Enom account allow using other name servers for domain registration. Otherwise your resellers offering their end users domain registration won't be able to use nameserver aliases which will disclose parent host transparency.

With Enom registrar you can register, renew, lookup, and transfer domains.

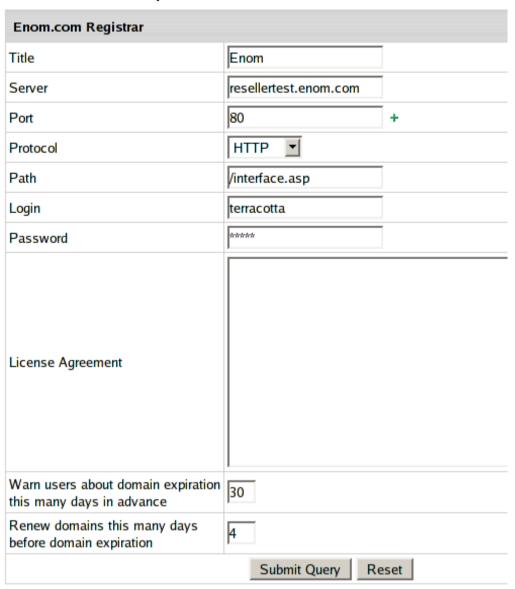
Setting Up Enom Connection

Requirement: agreement with Enom signed

- > To set up your connection with Enom:
- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose Enom and click the Add button:



4. You'll need to enter your Enom connection data:



- Title: the name of your account. You can have more than one connection with Enom.
- Server: Enom server (provided by Enom), e.g.: reseller.enom.com
- Port: the port used for connecting to the Enom server (provided by Enom), e.g.: 80
- **Protocol**: the protocol required by Enom.com to connect to the server, e.g.: http.
- Path: the path to the domain registration software (provided by Enom), e.g.: /interface.asp.
- Login: the login to the server (provided by Enom).
- Password: the password to login to the Enom.com's server (provided by Enom).
- License Agreement: the text and/or the path to the license agreement obtained from Enom that explains the Enom's obligations to your customers, their obligations to Enom and proves you are a lawful registration service provider. This will be shown to your end-customers on the signup forms and when they decide to create a new domain through their CP.
- Warn users about domain expiration this many days in advance: the domains are bought from Enom for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Renew domains this many days before domain expiration: number of days before domain expiration to automatically renew the domain registration (as opposed to manual domain name registration renewal).
- 5. Click Submit Query. Now your Enom connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

To test Enom without registering domains, you need to create a test account using Enom web interface.

OpenSRS Configuration

> To prepare for the OpenSRS Configuration:

 Create a reseller account with OpenSRS (http://resellers.tucows.com/opensrs/). When prompted, enter the IP of your CP server and control panel DNS server names.

Note: DNS server names should be registered and propagated with ICANN accredited domain registrar.

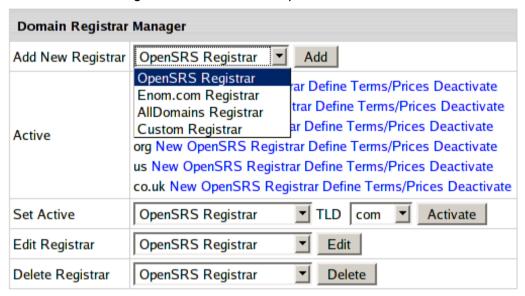
In your OpenSRS account allow to use other name servers for domain registration. Otherwise your resellers offering their end users domain registration won't be able to use nameserver aliases which will disclose parent host transparency.

2. Complete the Full Access (Fully Qualified Reseller) test on the OpenSRS site to get the Reseller status. This requirement is set by OpenSRS (not PSoft) to make sure you are familiar with their system and procedures and qualify to resell their services.

With OpenSRS registrar you can REGISTER, RENEW, LOOKUP, TRANSFER and LOOKUP TRANSFER domains.

Setting Up OpenSRS Connection

- 1. Log into your admin control panel.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose OpenSRS and click the Add button:



4. Now enter your OpenSRS connection settings:

OpenSRS Registrar			
Title	New OpenSRS Registrar		
Server	test-rese <mark>lle</mark> r.opensrs.net		
Port	55000	+	
IP	192.168.116.242		
Login	terracotta		
Key	738f6ab76f95080b9d9569		
License Agreement	Please read gTLD registration Agreement and Uniform Domain Name Dispute Resolution Policy before registering new domain with Domain Registration		
Warn users about domain expiration this many days in advance	30		
Renew domains this many days before domain expiration	4		
	Submit Query	Reset	

- Title: the name of your account. You can have more than one connection with OpenSRS.
- Server: OpenSRS server (provided by OpenSRS), e.g.: rr-n1-tor.opensrs.net
- Port: the port used for connecting to the OpenSRS server (provided by OpenSRS), e.g.: 55000.
- IP: your CP server IP that OpenSRS has been notified about and approved for connection to their servers.
- Login: the login to the server (provided by OpenSRS).
- **Key**: the password to login to the OpenSRS' server (provided by OpenSRS).
- License Agreement: the text and/or the path to the license agreement obtained from OpenSRS that explains their obligations to your customers, explains their obligations to OpenSRS and proves you are a lawful registration service provider. This will be shown to your end customers on the signup forms and when they decide to create a new domain through their CP.
- Warn users about domain expiration this many days in advance: the domains are bought from OpenSRS for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Renew domains this many days before domain expiration: the number of days before domain expiration to renew the domain registration (as opposed to manual domain name registration renewal).
- Click Submit Query. Now your OpenSRS connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

To improve your OpenSRS experience, write an e-mail to OpenSRS giving your company name and your e-mail address, and you will be personally contacted.

OpenSRS Testing Mode

To test OpenSRS without registering domains, use OpenSRS test server in OpenSRS settings in Parallels H-Sphere:

Title: OpenSRS Test Server **Server**: horizon.opensrs.net

Port: 55000

IP: IP address of your Parallels H-Sphere CP

Login: OpenSRS account login

Key: Generated by OpenSRS when you login to https://horizon.opensrs.net

Asynchronous Response Management

Even though OpenSRS declares it can register .co.uk, org.uk, .de, and .ca regional domains in real time, it sometimes fails to give a success or failure response immediately and returns an "unknown status" response. When Parallels H-Sphere gets this response, it:

- 1. adds the domain in a regular way
- 2. charges the domain registration fee
- 3. creates an entry in the list of pending registrations in Background Job System -> Async. Manager:

Async. Manager				
Description	User	Last Check	Interval (HOURS)	State
Domain transfer example.com	userl		1	Error cancel reset check
Domain transfer example.net	testuser	11/30/04 1:14 AM	1	Error cancel reset check
Domain transfer example.org	sampleuser	12/6/04 11:32 AM	1	In Progress cancel reset check

4. creates a background job which polls OpenSRS for a response every hour.

Success: Once Parallels H-Sphere gets a confirmation about successful domain registration, it notifies the user, removes the domain from **Async. Manager**, and sends the administrator an email with the list of all completed registrations.

Failure: If Parallels H-Sphere doesn't get a successful response within the allowed period of time, it shows this domain registration as timed out and refunds the domain registration fee.

Async. Manager offers the following controls:

- cancel remove domain from Parallels H-Sphere and refund transfer fee to the account balance. Use this option if the customer still wants to be hosted, but decided not to register domain due to the difficulties with registration.
- reset reset waiting time for a response from OpenSRS.
- **check** poll **Async. Manager** to get most up to date registration status.

OnlineNIC Configuration

Getting Prepared

In order to configure OnlineNIC domain registrar, download and install OnlineNIC.hsp package (for Java 1.4 and up).

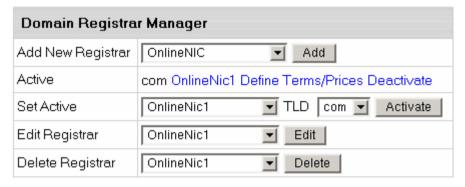
This package can be installed on Parallels H-Sphere as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

With OnlineNIC registrar you can register, renew, lookup domains.

Setting Up OnlineNIC Connection

Requirement: agreement with OnlineNIC signed

- To set up your connection with OnlineNIC:
- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose OnlineNIC and click the Add button:



4. You'll need to enter your OnlineNIC connection data:

OnlineNIC		
Title	OnlineNIC	
Server	218.5.81.149	
Port	40001	+
Login	135222	+
Password	******	
License Agreement	Test License Agree	ement
Warn users about domain expiration this many days in advance	3 +	
Request renewal domains this many days before domain expiration	1 +	
Initial renew mode	• Automatic.	
	Submit Query Reset	

- Title: the name of your account. You can have more than one connection with OnlineNIC.
- Server: OnlineNIC server (provided by OnlineNIC).
- Login: the login to the server (provided by OnlineNIC).
- Port: the port used for connecting to the OnlineNIC server (provided by OnlineNIC)
- Password: the password to login to the OnlineNIC.com's server (provided by OnlineNIC).
- License Agreement: the text and/or the path to the license agreement obtained from OnlineNIC that explains the OnlineNIC's obligations to your customers, their obligations to OnlineNIC and proves you are a lawful registration service provider. This will be shown to your end-customers on the signup forms and when they decide to create a new domain through their CP.
- Warn users about domain expiration this many days in advance: the domains are bought from OnlineNIC for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Renew domains this many days before domain expiration: number of days before domain expiration to automatically renew the domain registration (as opposed to manual domain name registration renewal).
- Initial renew mode: choose default domain registration renew mode. User can change it afterwards.
- Click Submit Query. Now your OnlineNIC connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

To test OnlineNIC without registering domains, you need to create a test account using OnlineNIC web interface.

RRPproxy Configuration

In order to configure RRPproxy domain registrar, download and install the latest RRPproxy .hsp package (for Java 1.4 and up).

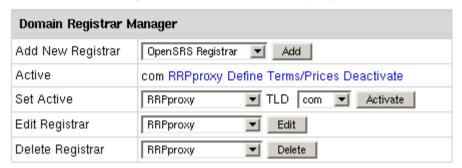
This package can be installed on Parallels H-Sphere as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide..

With RRPProxy registrar you can register, renew, lookup domains.

Setting Up RRPproxy Connection

Requirement: agreement with RRPproxy signed

- > To set up your connection with RRPproxy:
- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose RRPproxy and click the Add button:



4. You'll need to enter your RRPproxy connection data:



- Title: the name of your account. You can have more than one connection with RRPproxy.
- Server: RRPproxy server (provided by RRPproxy).
- Port: the port used for connecting to the RRPproxy server (provided by RRPproxy).
- Path: the path to the domain registration software (provided by RRPproxy).
- Password: the password to login to the RRPproxy.com's server (provided by RRPproxy).
- License Agreement: the text and/or the path to the license agreement obtained from RRPproxy that explains the RRPproxy's obligations to your customers, their obligations to RRPproxy and proves you are a lawful registration service provider. This will be shown to your end-customers on the signup forms and when they decide to create a new domain through their CP.
- Warn users about domain expiration this many days in advance: the domains are bought from RRPproxy for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Renew domains this many days before domain expiration: number of days before domain expiration to automatically renew the domain registration (as opposed to manual domain name registration renewal).
- 5. Click **Submit Query**. Now your RRPproxy connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

To test RRPproxy without registering domains, you need to create a test account using RRPproxy web interface.

Ascionic Configuration

In order to configure Ascionic domain registrar, download and install Ascionic .hsp package (for Java 1.4 and up).

This package can be installed on Parallels H-Sphere as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

With Ascionic registrar you can register, renew, lookup domains.

Setting Up Ascionic Connection

Requirement: agreement with Ascionic signed

> To set up your connection with Ascionic:

- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose Ascionic and click the Add button.
- 4. You'll need to enter your Ascionic connection data:

Ascionic	
Title	Ascionic
Server	partnertest.speednic.n
Port	7777
Login	ABC123
Password	*****
Name Server 1 handle	ASCIONS1
Name Server 2 handle	ASCIONS2
Name Server 3 handle (not required)	
Name Server 4 handle (not required)	
Name Server 5 handle (not required)	
License Agreement	
Warn users about domain expiration this many days in advance	3
Request renewal domains this many days before domain expiration	3
Submit Query	Reset

- Title: the name of your account. You can have more than one connection with Ascionic.
- Server: Ascionic server (provided by Ascionic).
- Port: the port used for connecting to the Ascionic server (provided by Ascionic).
- Login: the login to the server (provided by Ascionic).
- Password: the password to login to the Ascionic.com's server (provided by Ascionic).
- Name Server handle: nameserver ID. This handle is generated when Ascionic account owner registers nameserver in the Ascionic database.
- License Agreement: the text and/or the path to the license agreement obtained from Ascionic that explains the Ascionic's obligations to your customers, their obligations to Ascionic and proves you are a lawful registration service provider. This will be shown to your end-customers on the signup forms and when they decide to create a new domain through their CP.
- Warn users about domain expiration this many days in advance: the domains are bought from Ascionic for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Request renewal domains this many days before domain expiration: number of days before domain expiration to automatically renew the domain registration (as opposed to manual domain name registration renewal).
- **5.** Click **Submit Query**. Now your Ascionic connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

To test Ascionic without registering domains, you need to create a test account using Ascionic web interface.

TPPInternet Configuration

In order to configure TPPInternet (http://www.tppinternet.com/pub/php/home.php) domain registrar, download and install the latest TppInternet .hsp package.

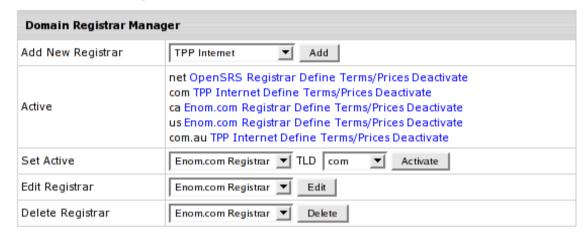
This package can be installed as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

With TPPInternet registrar you can register, renew, lookup domains.

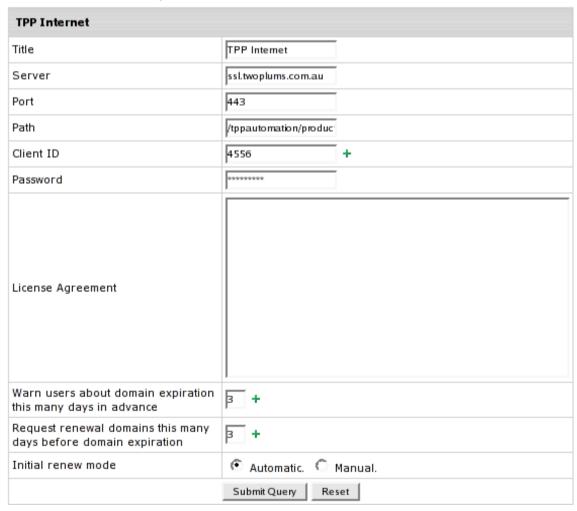
Setting Up TPPInternet Connection

Requirement: agreement with TPPInternet signed

- > To set up your connection with TPPInternet:
- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose TPPInternet and click the Add button:



4. You'll need to enter your TPPInternet connection data:



- Title: the name of your account. You can have more than one connection with TPPInternet.
- Server: TPPInternet server (provided by TPPInternet).
- Port: the port used for connecting to the TPPInternet server (provided by TPPInternet).
- Path: the path to the domain registration software (provided by TPPInternet).
- Client ID: client ID provided by TPPInternet.
- Password: the password to login to the TPPInternet.com's server (provided by TPPInternet).
- License Agreement: the text and/or the path to the license agreement obtained from TPPInternet that explains the TPPInternet's obligations to your customers, their obligations to TPPInternet and proves you are a lawful registration service provider. This will be shown to your end-customers on the signup forms and when they decide to create a new domain through their CP.
- Warn users about domain expiration this many days in advance: the domains are bought from TPPInternet for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Request renewal of domains this many days before domain expiration: number of days before domain expiration to automatically renew the domain registration (as opposed to manual domain name registration renewal).
- **5.** Click **Submit Query**. Now your TPPInternet connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

To test TPPInternet without registering domains, you need to create a test account using TPPInternet web interface.

Email Domain Registration

Email Domain Registration vs. Real Time Domain Registration

Real time domain registration means that domain is registered immediately after the customer places a domain registration request from the control panel. Parallels H-Sphere immediately gets a confirmation about successful or failed registration and either charges the user or notifies him with an error message. Real time domain registration is supported by Enom (on page 161), OpenSRS (on page 163), and a few other registrars.

Many domain names, including most regional domains, (e.g. .jp and .pt) can't be registered automatically, and you need to contact a registrar by email or otherwise.

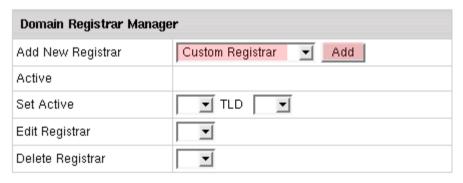
Email domain registration was introduced for users to request non-automated domain registration right from their control panels. You can also use email domain registration if you want to use your preferred unsupported registrar. When you configure Email Registrar and associate TLDs with it, they will appear among supported TLDs in the user control panels.

When a user selects a TLD associated with the Email Registrar, he is asked to fill out a form with his registration data. On submit, the domain is registered with Parallels H-Sphere, the FTP directory is created in the user home on the web server, and a request notification is generated.

When configuring Email Registrar, you can choose to receive requests as trouble tickets and/or specify an email address to send them to. When you get a request, you will have to contact the registrar to register the domain. If you have an agreement with a domain registrar, you can enter their email address so they receive the requests without your mediation.

Configuring Email Registrar

- > To configure Email Registrar:
- 1. Log into your admin CP.
- 2. Select Domain Registrar in the Settings menu.
- 3. In the Add New Registrar box, choose Custom Registrar and click the Add button:



4. Enter registrar settings:

Custom Registrar	
Title	Custom Registrar
Path to script for lookup	custom_reg +
Send notification to:	Trouble Ticket System CC: admin@example.com tech@example.com E_Mail. Add Delete
Supported tld	ip pt ■ <user_domain_name>. Add Delete</user_domain_name>
License Agreement	Please read gTLD registration Agreement and Uniform Domain Name Dispute Resolution Policy before registering new domain with Domain Registration
Warn users about domain expiration this many days in advance	7
Renew domains this many days before domain expiration	10
	Submit

- **Title**: the name of your account. You can have more than one connection with the preferred domain registrar.
- Path to scirpt for lookup: path to the scirpt that checks if the domain name user is adding hasn't been taken.
 - The script must treat parameter that Parallels H-Sphere passes to it as a domain name and stdout "0", if domain is available or "1" if it is already in use The path must start with slash "/" and should be absolute to /hsphere/shared/scripts.
- Send notification to: check this option if you want to be notified of the domain registration with custom registrar.
 - send it to the Trouble Ticket System and/or other email address entered into the empty field.
 - you can CC the mail notification to a number of email addresses. To do it, enter email into the **Email** field and click **Add**.
- Supported tld: enter all TLDs you would like to provide domain registration for with your preferred domain registrar.
- License Agreement: the text and/or the path to the license that:
 - lists your and registrar's obligations to customers, their obligations to you and the registrar;
 - proves you are a lawful registration service provider.
 - This will be shown on the signup forms and domain registration page in the user CP.
- Warn users about domain expiration this many days in advance: the domains are usually bought for a certain period of time (one or more years). When this time expires the domain is suspended, and if the term of domain name registration is not renewed, the domain is canceled and becomes available for sale to other buyers. Here you can set the number of days before the domain expiration date to remind the user about approaching domain cancelation.
- Renew domains this many days before domain expiration: number of days before domain expiration to remind the administrator that the domain needs to be renewed.
- 5. Click Submit Query. Now the domain registrar connection is created and you can proceed to configuring other registrar connections or associating top level domains with domain registrars (on page 155).

Merchant Gateways

This chapter provides information on how to configure Merchant Gateways in Parallels H-Sphere.

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Merchant Gateway Manager

Merchant Gateway Manager is a configurable Parallels H-Sphere add-on that allows you to set up and alter merchant gateways, the media for conducting transactions with online credit card processing centers. The software tracks gateway usage and provides statistical information on the number of transactions and total charges for every particular gateway.

Merchant Gateway Manager allows you to setup different merchant gateway accounts for different types of credit cards (like VISA, MasterCard, Discover, American Express). In this way you can maximize your profits by processing every type of credit card with the gateway that offers the lowest rate for this type of card.

Before configuring a merchant gateway, register an account with a supported merchant gateway.

Resellers can't use admin merchant gateway settings. They should register their own accounts with chosen Merchant Gateways.

IMPORTANT!

New merchant gateways are integrated to Parallels H-Sphere by means of packages. You can:

- download merchant gateway packages compiled by Positive Software
- build your own packages using Merchant Gateway SDK.

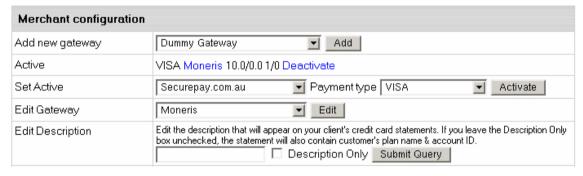
In this section:

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Setting Up Merchant Gateway

Once you have registered an account with a credit card processing center, you can set up a merchant gateway to your Parallels H-Sphere configuration:

- 1. Go Settings -> Payment Settings -> Merchant Gateway.
- 2. The following page will appear:



3. If you need to test Parallels H-Sphere billing without making real charges, select **Dummy Gateway** in the **Add new gateway** box and use it in the subsequent configuration steps. To configure real gateways, see the box **Configuring Specific Gateways** on the right for links to instructions.

Editing Merchant Gateway Settings

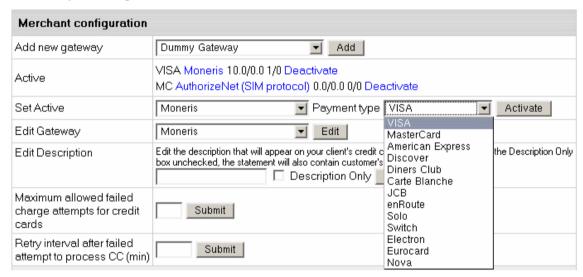
- To edit the configuration of the merchant gateway:
- 1. In the Edit Gateway box choose necessary merchant gateway from the drop-down box.
- 2. Click the Edit button. On the form that appears you can make necessary changes.
- 3. Click the Submit Query button to save changes.

Associating Merchant Gateways with Credit Card Vendors

Now that you have configured one or more merchant gateways, you need to associate them with credit card vendors. You can have different credit card brands processed with different processing centers. For example, you can configure Parallels H-Sphere to process VISA and MASTERCARD with AuthorizeNet, and AMERICAN EXPRESS - with CyberCash.

> To set the associations:

- 1. In the **Set Active** field, choose the credit card brand and the processing center it will be charged through.
- 2. Click the **Activate** button to create the association. Now your Merchant Gateway Manager form should look similar to this:



Make sure to create associations for each credit card brand you would like to support. Users won't be able to pay with the credit cards that haven't been associated with any processing center.

Editing Description for User Credit Card Statements

Use this feature to let your customers know from their credit card statements what charges are related to hosting with Parallels H-Sphere.

- 1. Select Merchant Gateway in the Settings menu.
- 2. Enter the description text in the Edit Description text box.
- Click Submit Query.

Handling CC Charge Request Failures

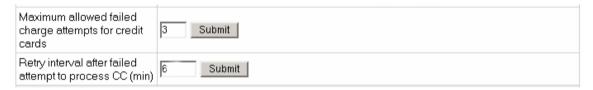
Parallels H-Sphere handles rejected credit card transactions by setting the maximum failed charge attempts and the retry interval. If a processing center rejects a CC charge request, Parallels H-Sphere will:

- 1. debit the account:
- 2. notify the administrator by e-mail (end user isn't notified);
- 3. send this CC request again in the defined period of time;
- 4. disable any other paid operations with this CC until this period elapses.

With the first successful credit card transaction, the charge failure counter is reset.

To configure this behavior:

- 1. Select Merchant Gateway in the Settings menu.
- 2. Fill out the last two fields on the Merchant Gateway Manager page:



- Maximum allowed failed charge attempts for credit cards: restrict the number of CC charge request failures.
- Retry interval after failed attempt to process CC (min): set the period (in minutes) to elapse before the system resends the charge request. Until then, the system will disable any transactions with this CC.

If charge failures reach the maximum number allowed, Parallels H-Sphere will mark such credit card as nonchargeable until you reset the charge failure counter:

- 1. Select CC processing errors in the Reports menu;
- 2. Retrieve the needed account:
- In the Controls column of the Search Results page, click the Reset icon for this account.

One Step Gateways

To offer completely automated credit card processing, a merchant gateway must support the following 4 types of transactions:

- AUTHORIZE specifies that a transaction authorizes the credit card.
- CHARGE specifies that a transaction charges amount without prior authorization.
- CAPTURE specifies that a transaction is completed.
- VOID specifies that a transaction cancells an amount.

Most credit card charges involve only the CHARGE transaction. An exception is domain registration, which involves two steps:

- 1. Lock required amount on the credit card (AUTHORIZE) before domain registration 2.a. If domain registration succeeds, debit the locked amount to the credit card (CAPTURE)
- 2.b. If domain registration fails, unlock the amount and cancel the initiated transaction (VOID)

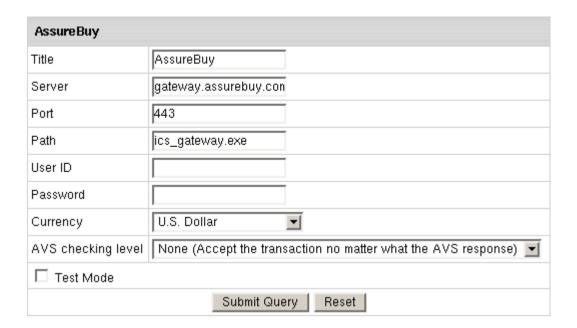
Some merchant gateways don't support CAPTURE or VOID transactions, requiring that they be performed manually through a web interface. In case of domain registration, you will receive email notifications requesting to complete or cancel a transaction every time a user registers a domain name.

AssureBuy Configuration

Preparation

No preparation is needed before configuration.

- 1. Select AssureBuy in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this AssureBuy connection
- Server: the name of the AssureBuy server
- Port: the port of the AssureBuy server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- User ID: your AssureBuy User ID
- AssureBuy Password: the password which comes with User ID
- Currency: the currency in which your end users will be charged
- AVS: AVS stands for Address Verification Service. It can be used as an additional layer of protection for merchants who wish to verify that the purchaser knows the billing address of the cardholder (in case these are two different people). This is not a very serious form of risk mitigation or fraud prevention, and yet it does give some assurance that a hacker isn't simply generating a list of valid credit card numbers and purchasing product at will. AVS simply matches the numeric portion of the cardholder's street billing address and the 5 or 9-digit zip code of the cardholder's billing address. The AVS request parameters are STREET and ZIP. The processing network verifies the AVS information, comparing a portion of the billing address from the request message with address data on file at the VIC or the issuer's center. Based on the comparison, a response will be returned which confirms whether the information matches or not. Banks do not decline transactions based on the AVS check. The AVS response is returned as two single tab-delimited characters: YY, NN, YN, NY (Y-'matches', N for 'does not match'). This information is just an advice. However, the Parallels H-Sphere system will either allow or decline the transaction depending on the selected AVS status. AVS is available only for US cardholders.

Important: To provide non US cardholders CC processing, disable AVS check-up in the merchant gateway configuration.

Test Mode box: with Test Mode checked, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

4. Click Submit Query

CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your AssureBuy account. More on CVV credit card verification.

AuthorizeNet (Sim Protocol) Configuration

Preparation

AuthorizeNet certificate is trusted by VeriSign Trust Network. In Java 1.3.x and older the standard java cartcerts file doesn't include VeriSign Trust Network public certificate and therefore Parallels H-Sphere returns 'Connect error, untrusted server cert chain' when trying to connect ito the merchant gateway. That's why VeriSign Trust Network certificates should be imported into cacerts file.

So, if you have Java 1.3 and older, you have the following solutions:

A. If you have got the default java cacerts file and you have never changed it, you can simply replace it with the cacerts file offered by Parallels (http://download.hsphere.parallels.com/cacerts):

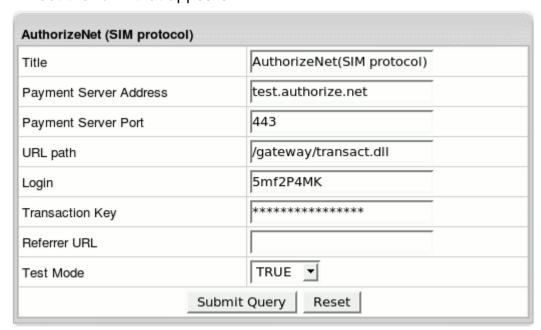
/usr/java/<java home>/jre/lib/security/cacerts

- B. You can update your cacerts file using the keytool feature available in the standard Java installation.
- C. Upgrade Java to 1.4 by following our documentation in System Administrator Guide.

Note: If your certificate is already imported into cacerts, but Java still generates 'Connect error, untrusted server cert chain', please check the connection to your payment server from your control panel server by running the following command from the control panel server console to check connection:

telnet [server.name] [port]

- 1. Select AuthorizeNet (Sim Protocol) in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this AuthorizeNet connection
- Server: the name of the AuthorizeNet server
- Port: the port of the AuthorizeNet server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login: your AuthorizeNet login
- Transaction Key: a unique gateway-generated alphanumeric string that is used by the gateway to authenticate the fingerprint and the transaction as originating from an authorized merchant
- Referrer URL: the URL of the page that requests the payment. It's required as in some cases requests can be canceled without this information. Referrer URL can be your control panel URL, e.g: http://cp.your_domain (http://cp.example.com). Make sure to enter the same Referrer URL in settings -> response/receipt URLs in your AuthorizeNet interface, otherwise the request will be denied.

Test Mode:

- FALSE: credit card transactions will be completed and credit cards will be charged;
- TRUE: authorization requests will be sent for verification without settlement requests and credit cards won't be charged.
- * In Test Mode, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

4. Click Submit Query

> To obtain the Transaction Key from the Merchant Interface:

- 1. Log into the Merchant Interface;
- 2. Select **Settings** from the Main Menu;
- 3. Click Obtain Transaction Key in the Security section;
- **4.** Type in the answer to your secret question (The secret question and answer are setup during account activation. It is required to authenticate the merchant before the transaction key is generated.)
- 5. Click Submit;
- **6.** The transaction key is returned by the Merchant Interface.

Note: Please make sure the time on your control panel server is precisely synchronized, or else transaction requests will be declined by AuthorizeNet.

AVS (Address Verification Service). To enable fraud protection using AVS, enable and configure AVS support in your AuthorizeNet account. To provide non US cardholders CC processing, AVS check-up in the merchant gateway configuration must be disabled.

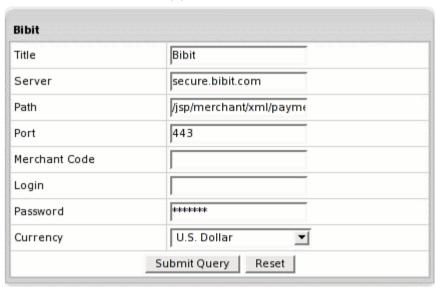
CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your AuthorizeNet account. More on CVV credit card verification.

Bibit Configuration

Preparation

No preparation is needed before configuration.

- 1. Select Bibit in the Add New Gateway box.
- 2. Click the Add button.
- Fill out the form that appears:



- Title: give a name to this Bibit connection
- Server: the name of the Bibit server
- Port: the port of the Bibit server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login: your Bibit login
- Password: the password which comes with login/username
- Merchant Code: your Bibit account ID
- Currency: the currency in which your end users will be charged
- 4. Click Submit Query

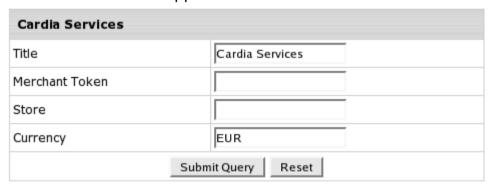
Cardia Services Configuration

Preparation

To configure Cardia Services, download and install Cardia Services .hsp package from http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways (for Java 1.4 and up).

This package can be installed on Parallels H-Sphere 2.4.x and higher as suggested in *Installing Parallels H-Sphere packages* in Customization Guide..

- 1. Select Cardia Services in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



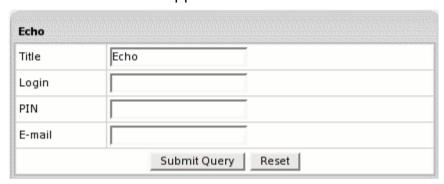
- Title: give a name to this Cardia Services connection
- Merchant Token: your Cardia Services account ID
- Store: Your Cardia Services unique ID, sometimes also referred to as Config File
- Currency: the currency in which your end users will be charged
- 4. Click Submit Query

ECHO Configuration

Preparation

No preparation is needed before configuration.

- 1. Select Echo in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this Echo connection
- Login: your Echo login
- Pin: once you register an account with Echo, you are given this to verify charge requests
- E-mail: the email address you provided on signing up with Echo
- 4. Click Submit Query

ePDQ Configuration

Preparation

Make sure that the CcxClientApi.jar file is present in the /hsphere/local/home/cpanel/java rt/directory.

If it's not there:

- 1. Contact ePDQ and obtain the CcxClientApi.jar file.
- 2. Put the lib file into in the directory ~cpanel/java_rt/.

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

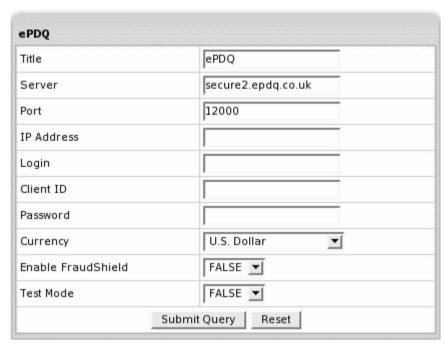
For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start.

- 1. Select ePDQ in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this ePDQ connection
- Server: the name of the ePDQ server.
- Port: the port of the ePDQ server
- IP Address: your external control panel IP address
- Login: your ePDQ login
- Password: the password which comes with login/username
- Client ID: the unique client ID code you get from ePDQ
- Currency: the currency in which your end users will be charged
- Test Mode:
 - FALSE: credit card transactions will be completed and credit cards will be charged;
 - TRUE: authorization requests will be sent for verification without settlement requests and credit cards won't be charged.
 - * In Test Mode, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

eWay Configuration

Preparation

No preparation is needed before configuration.

Configuration

- 1. Select eWay in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



Title: give a name to this eWay connection

eWay Customer ID: your unique eWAY customer ID assigned to you when you join eWAY, e.g.: 11438715

Server: the name of the eWay server

Port: the port of the eWay server

Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.

Notification Email for VOID and CAPTURE Transactions: eWay doesn't support VOID and CAPTURE transactions. Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled or completed manually through eWay web interface.

HSBC Configuration

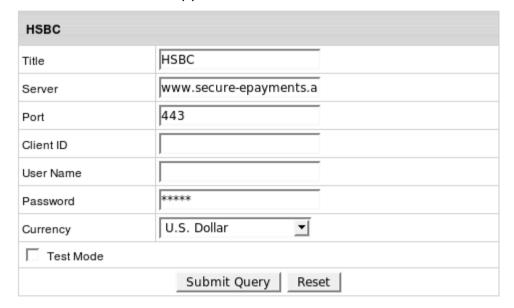
Preparation

In order to configure HSBC merchant gateway, download and install HSBC .hsp package

(http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways).

This package can be installed on Parallels H-Sphere as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

- Select HSBC in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



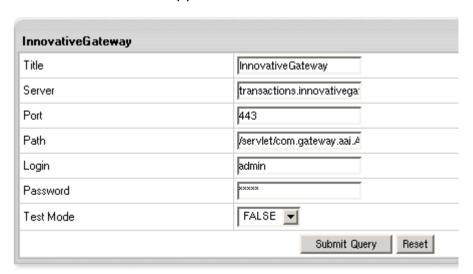
- Title: give a name to this HSBC connection
- Server: the name of the HSBC server
- Port: the port of the HSBC server
- Client ID: the unique client ID code you get from HSBC
- Username: enter the name given to you by HSBC provider
- Password: the password which comes with login/username
- Currency: the currency in which your end users will be charged
- Test Mode box: with Test Mode checked, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.
- 4. Click Submit Query

Innovative Gateway Configuration

Preparation

No preparation is needed before configuration.

- 1. Select InnovativeGateway in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this InnovativeGateway connection
- Server: the name of the InnovativeGateway server
- Port: the port of the InnovativeGateway server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login: your InnovativeGateway login
- Password: the password which comes with login/username
- Test Mode:
 - FALSE: credit card transactions will be completed and credit cards will be charged;
 - *TRUE*: authorization requests will be sent for verification without settlement requests and credit cards won't be charged.
 - * In Test Mode, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your InnovativeGateway account. More on CVV credit card verification.

LinkPoint (API v3.01) Configuration

LinkPoint deprecated support for its old API. It may cause problems with signup and billing. To update API to v3.01, users should convert the certificate from PEM to P12 format (see below)

Preparation

Make sure that the <code>JLinkPointTxn.jar</code> file is present in the <code>/hsphere/local/home/cpanel/java rt/directory</code>.

If it's not there:

- 1. Contact LinkPoint (API) and obtain the JLinkPointTxn.jar file.
- Put the lib file into in the directory ~cpanel/java_rt/.

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start.

When your linkpoint account is created you receive linkpoint welcome email which contains username, password and the certificate in the PEM format. You need to convert this certificate from PEM to P12 format. One way to do this is to run the following from a command prompt:

openssl pkcs12 -export -in YOURPEM.pem -inkey YOURPEM.pem -out YOURPEM.p12 -passout pass:YOURPASS -name "YOURNAME"
Where:

- q YOURPEM the name of your PEM file;
- q YOURPASS your merchant password (the password you specified in merchant gateway settings);
- q YOURNAME any arbitrary name.

For example:

openssl pkcs12 -export -in cert.pem -inkey key.pem -out 1234567.p12 -passout pass:987654321 -name "LinkPoint"

PEM files example:

```
key.pem:
----BEGIN RSA PRIVATE KEY----
```

MIICXAIBAAKBgQC6gLgc6I+vcvoSkJHFZfzt/sJRy6rBwAtf8AUMguAqgCq8sz2H
tIYHeng/71Z0uuPXUQY7veFUXDAXFvn4SLCresf5cH19hxlqNITRY2MhTn92TLlV
lmfzCZtBdhshncWydpQ6HcHOwRYUL8Ure1yw6iOlk7Q8ja6GstqiKbTWDQIDAQAB
AoGAWv8C1dgCgzAuI3EL2APa7KQoW5BrfDzjXYUNNNgggejexeoOU3AZFP0EPu2f
2UR2dk/qIqv6jRaNwDZNsH6G8831PyTmUJoMZB+vuAeYFyEV6uWyzBFYJohubB2g
V+fxq8wSalKKvmuyoUqr2TKexweumppUMCK+pruxfqeXuWECQQDtfpdiohLeTDaQ
Q84yIHABD1H80r9KLfdc77R0f5Y5BL+Obh+p/5T&bdue7HBB673QzNB0CrHOJJQi
xNiPYrJ/AkEAyQj5UX8dSVR8Xhcw/gVoqaB3WnyzmT4VSf8Y2tKlRETLNxIBTkAC
6BV9jkllOIIojFOl9kkj9OaMlF/fTm/ZcwJAPzihyAnpB/A13jWOoFluM3oGk0zu
yyptXPoaiaClNsyCycGbAEAfM32ax2ceqEL9JqY/H4TxTDUEkjTgiVr2tQJABrlW
HXOY9xDsV/lOmj8V9P9P9P96HUoKTD9MBYWmIXJrmZvwjz101qzpV534Yi+xOpc/
Zd+HahmL+ip6vZTgIQJBANfO45PBiDZV71kHCmVDKnMUtR7FsJ7yKfZ2i/P8+23I
k7GP9lp/fj7MkLLjdui8hdjkdoiZ5ylCYXgIvbE=

----END RSA PRIVATE KEY----

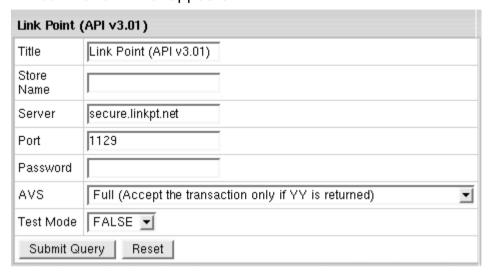
cert.pem

----BEGIN CERTIFICATE----

MIICZDCCAc2gAwIBAgIBADANBUndj8JJkoIUUTDC1LIJNQswCQYDVQQIEwJOWTER kNNgTfDhBgFYGvNHGIUy8YHKjUY98ojHL9hkjH987YTIJXJ1IGRldmVsb3BlcjEY MBYGA1UEAxMPTWF4aW0gs2FCMGDhhNSHYDJLLLSALLLCIvcNAQkBFhBta2FudHNA cHNvZnQubBSGDUuNHYiMMMUjhjhBKuuKLLL11HHUUJKHIjE1MzIzMVoweDELMAkG A1UECBMCT1kxETAPBgNVBAcTCE5ldyBZb3JrMRswGQYDVQQKExJILVNwaGVyZSBk ZXZlbG9wZXIxGDAW8jGFUUJ7B577b6655HGFHHHG5DSGHjEfMB0GCSqGSIb3DQEJ ARYQbWthbnRzQHBzb2Z0Lm5ld0UYGD7SH389SUNWFA8HXQEFAAOBjQAwgYkCGYEA uoC4HOiPr3L6EpFBVmX87f7CUcuqwcALX/AFDILgKoAqvLIIUDSUYID8732UJjjh SDIUDSTYR478745KWOS89SF7TL3I7RFHJDFPWP09866UJF099SPWQQ209D99W4LJ ghdjuKKuhhkktgjyr3tcsOojpZOOPI2uhrLaoim01g0CAwEAATANBgkqhkiG9w0B AQQFAAOBgQBNm1GvV+jrioeiortu+etikugOIUOULLKOFLHJIOijglkr94mjosij Ommdsktuier/wUUYTUGDJKHGASDIUYODIYF/589739IDJLCKJI48kudow9JKHIOJ BUokxewLJHK/l1fJQbEr90SJK59DK409SL3Zn0r4sQVTTTQWDTdXjMVYA6A==

----END CERTIFICATE----

- 1. Select Link Point (API v3.01) in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this LinkPoint (API) connection
 - Store Name: Your LinkPoint (API) unique ID, sometimes also referred to as Config File
 - Server: the name of the LinkPoint (API) server
 - Port: the port of the LinkPoint (API) server
 - Password: the password which comes with login/username
 - AVS: AVS stands for Address Verification Service. It can be used as an additional layer of protection for merchants who wish to verify that the purchaser knows the billing address of the cardholder (in case these are two different people). This is not a very serious form of risk mitigation or fraud prevention, and yet it does give some assurance that a hacker isn't simply generating a list of valid credit card numbers and purchasing product at will. AVS simply matches the numeric portion of the cardholder's street billing address and the 5 or 9-digit zip code of the cardholder's billing address. The AVS request parameters are STREET and ZIP. The processing network verifies the AVS information, comparing a portion of the billing address from the request message with address data on file at the VIC or the issuer's center. Based on the comparison, a response will be returned which confirms whether the information matches or not. Banks do not decline transactions based on the AVS check. The AVS response is returned as two single tab-delimited characters: YY, NN, YN, NY (Y-'matches', N for 'does not match'). This information is just an advice. However, the Parallels H-Sphere system will either allow or decline the transaction depending on the selected AVS status. AVS is available only for US cardholders.

Important: To provide non US cardholders CC processing, disable AVS checkup in the merchant gateway configuration.

Test Mode:

- FALSE: credit card transactions will be completed and credit cards will be charged:
- TRUE: authorization requests will be sent for verification without settlement requests and credit cards won't be charged.
- * In Test Mode, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

- 2. In Edit Gateway, select the newly created connection and press Edit.
- 3. Note the two new parameters that appeared on the gateway configuration page, **Key File**, and **Certificate File**. Put the key and certificate files on the control panel server to the locations suggested here.

Moneris Configuration

Preparation

In order to configure Moneris merchant gateway, download and install Moneris .hsp package from

http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways (for Java 1.5.x only).

This package can be installed as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

- 1. Select Moneris in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this Moneris connection
- Server: the name of the Moneris server
- StoreID: your unique ID received from Moneris
- API Token: your Moneris account ID
- 4. Click Submit Query

NetBilling Configuration

Preparation

NetBilling certificate is trusted by Equifax and provided by GeoTrust. In Java 1.3.x and older the standard java cartcerts file doesn't include GeoTrust root Certificates and therefore Parallels H-Sphere returns 'Connect error, untrusted server cert chain' when trying to connect to the merchant gateway. That's why GeoTrust Root certificates should be imported into cacerts file.

So, if you have Java 1.3 and older, you have the following solutions:

A. If you have got the default java cacerts file and you have never changed it, you can simply replace it with the cacerts file offered by Parallels (http://download.hsphere.parallels.com/cacerts):

/usr/java/<java home>/jre/lib/security/cacerts

B. Upgrade Java to 1.4 by following our documentation in System Administrator Guide.

Note: If your certificate is already imported into cacerts, but Java still generates 'Connect error, untrusted server cert chain', please check the connection to your payment server from your control panel server by running the following command from the control panel server console to check connection:

```
telnet [server.name] [port]
```

Make sure that the direct-java-2.3.3.jar file is present in the /hsphere/local/home/cpanel/java rt/ directory.

If it's not there:

- 1. Contact NetBilling and obtain the direct-java-2.3.3.jar file.
- 2. Put the lib file into in the directory ~cpanel/java_rt/.

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

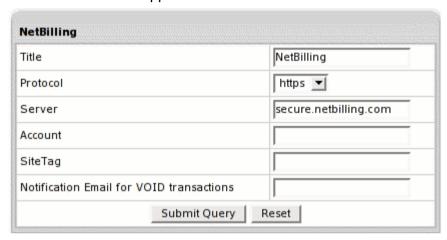
For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start.

Configuration

- 1. Select NetBilling in the Add New Gateway box.
- 2. Click the Add button.

Fill out the form that appears:



- Title: give a name to this NetBilling connection
- Protocol: http or https protocol to connect to the gateway server
- Server: the name of the NetBilling server
- Account: your NetBilling account ID
- Site Tag: your brief site nickname
- Notification Email for VOID transactions: NetBilling doesn't support VOID transactions. Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled manually through NetBilling web interface.

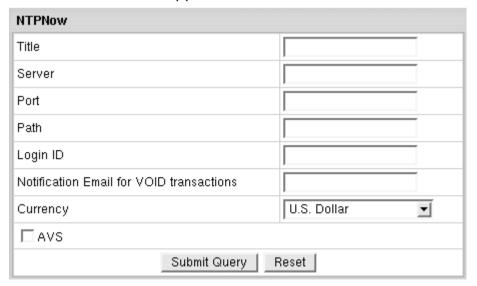
CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your NetBilling account.

NTPNow Configuration

Preparation

No preparation is needed before configuration.

- 1. Select NTPNow in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this NTPNow connection
- Server: the name of the NTPNow server
- **Port**: the port of the NTPNow server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login ID: your NTPNow login ID
- Notification Email for VOID transactions: NTPNow doesn't support VOID transactions. Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled manually through NTPNow web interface.
- Currency: the currency in which your end users will be charged
- AVS checkbox: AVS stands for Address Verification Service. It can be used as an additional layer of protection for merchants who wish to verify that the purchaser knows the billing address of the cardholder (in case these are two different people). This is not a very serious form of risk mitigation or fraud prevention, and yet it does give some assurance that a hacker isn't simply generating a list of valid credit card numbers and purchasing product at will. AVS simply matches the numeric portion of the cardholder's street billing address and the 5 or 9-digit zip code of the cardholder's billing address. The AVS request parameters are STREET and ZIP. The processing network verifies the AVS information, comparing a portion of the billing address from the request message with address data on file at the VIC or the issuer's center. Based on the comparison. a response will be returned which confirms whether the information matches or not. Unchecking the AVS box you configure Parallels H- Sphere to allow the transaction regardless of the response. AVS is available only for US cardholders. To provide non US cardholders CC processing, disable AVS check-up in the merchant gateway configuration.

Paradata Configuration

Preparation

Make sure that the trans_client_jsse.jar file is present in the /hsphere/local/home/cpanel/java rt/ directory.

If it's not there:

- 1. Contact Paradata and obtain the trans_client_isse.jar file.
- 2. Put the lib file into in the directory ~cpanel/java_rt/.

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start.

Make sure to include trans_client_jsse.jar after the rt.jar string but before the jce1_2_1.jar string (java cryptography extension).

- 1. Select Paradata in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



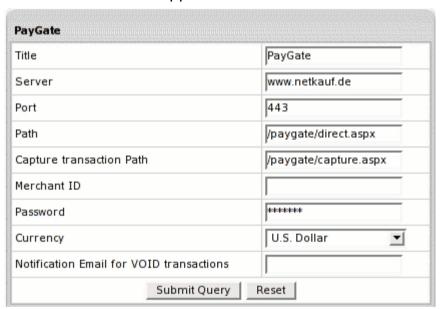
- Title: give a name to this Paradata connection
- Account Token: the unique code generated on the basis of your login and password that you get when opening the Paradata account.
 Adding TEST before the token will set the account to test mode
- 4. Click Submit Query

PayGate Configuration

Preparation

No preparation is needed before configuration.

- 1. Select PayGate in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this PayGate connection
- Server: the name of the PayGate server
- Port: the port of the PayGate server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Path for Capture transaction: path to the script that does the Capture transaction
- Merchant Id: your PayGate account ID. This is NOT the merchant number supplied by your bank
- Password: the password which comes with login/username
- Currency: the currency in which your end users will be charged
- Notification Email for VOID transactions: PayGate doesn't support VOID transactions. Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled manually through PayGate web interface.

PayJunction Configuration

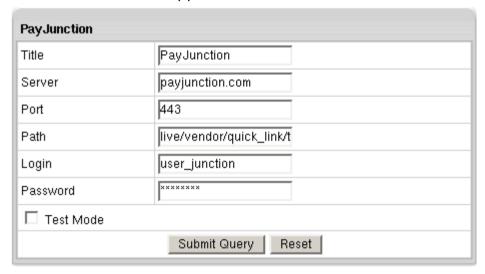
Preparation

In order to configure PayJunction merchant gateway, download and install PayJunction .hsp package from

http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways (for Java 1.4 and up).

This package can be installed as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

- 1. Select PayJunction in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this PayJunction connection
- Server: the name of the PayJunction server
- Port: the port of the PayJunction server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login: your PayJunction login
- Password: the password which comes with login/username
- Test Mode box: with Test Mode checked, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

Plug'n Pay Configuration

Preparation

Make sure that the pnpapi.jar file is present in the /hsphere/local/home/cpanel/java rt/ directory.

If it's not there:

- 1. Contact Plug'n Pay and obtain the pnpapi.jar file.
- 2. Put the lib file into in the directory ~cpanel/java_rt/.

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

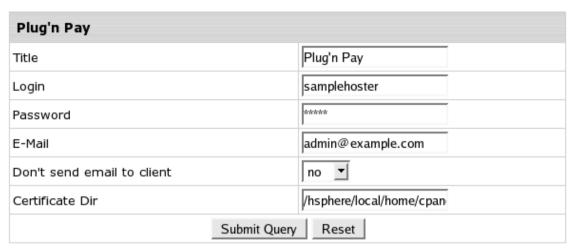
For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start.

Once you have registered with Plug'n Pay:

- **1.** Download the certificate file archive from the Plug'n Pay site: https://pay1.plugnpay.com/admin/download/files/certs.zip
- 2. Unzip the archive into a directory on the Control Panel server, for example, /hsphere/local/home/cpanel/shiva/pnp-certs/. This directory and files therein must have cpanel:cpanel permissions
- 3. Later on you specify this directory in the **Certificate Dir** field in Plug'n Pay configuration form (see below).

- 1. Select Plug'n Pay in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this Plug'n Pay connection
- Login: your Plug'n Pay login
- Password: the password which comes with login/username
- E-mail: the email address you provided on signing up with Plug'n Pay
- Send E-mail to Client: check this box to have your customers notified when they
 are charged. The addresses are taken from their contact info
- Certificate Dir: the directory on the Parallels H-Sphere control panel server where you have put the certificate file

Pay-Me-Now Configuration

Preparation

No preparation is needed before configuration.

- 1. Select Pay-Me-Now in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this Pay-Me-Now connection
- Server: the name of the Pay-Me-Now server
- Port: the port of the Pay-Me-Now server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login ID: your Pay-Me-Now login ID

CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your Pay-Me-Now account. More on CVV credit card verification.

PosNet Configuration

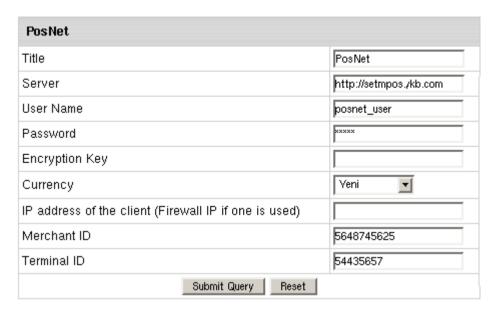
Preparation

In order to configure Posnet merchant gateway, download and install PosNet .hsp package from

http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways (for Java 1.4 and up).

This package can be installed as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

- 1. Select PosNet in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



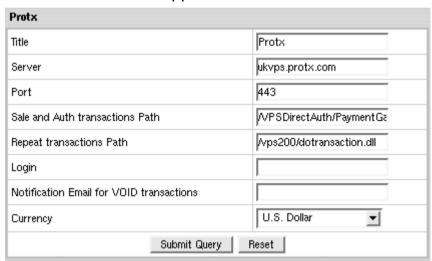
- Title: give a name to this PosNet connection
- Server: the name of the PosNet server
- Username, Password and Encryption Key: these parameters are generated in PosNet control panel by Generate Key menu option.
- Currency: the currency in which your end users will be charged
- IP Address: your external control panel IP address
- Merchant ID, Terminal ID: enter, accordingly, 10-digit and 8-digit code given to you by PosNet

Protx (VSP Direct Protocol 2.22) Configuration

Preparation

No preparation is needed before configuration.

- 1. Select Protx in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this Protx connection
- Server: the name of the Protx server
- Port: the port of the Protx server
- Sale and Auth transactions Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request
- Repeat transactions Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request
- Login: your Protx login
- Notification Email for VOID transactions: Protx doesn't support VOID transactions.
 Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled manually through Protx web interface.
- Currency: the currency in which your end users will be charged

4. Click Submit Query

Note: To work with the Parallels H-Sphere correctly, configure your Protx account to support the following transactions: PREAUTH, PAYMENT, REPEAT. In terms of transaction types supported by Parallels H-Sphere (on page 181), it's AUTHORIZE, CHARGE, and CAPTURE correspondingly.

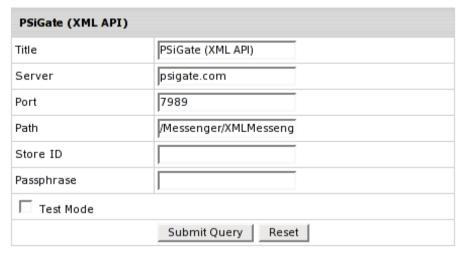
CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your Protx account. More on CVV credit card verification.

PSiGate (XML API) Configuration

Preparation

PSiGate does not allow auth transactions by default. In order to enable auth transactions, log into PSiGate control panel, go to *Fraud Settings* and set the 'allowed' menu for both PreAuth and PostAuth to 'YES'.

- 1. Select PSiGate in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this PSiGate connection
- Server: the name of the PSiGate server
- Port: the port of the PSiGate server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- StoreID: your unique ID received from PSiGate
- Passphrase: PSiGate provides the Passphrase within the PSiGate Welcome Email
- Test Mode box: with Test Mode checked, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

4. Click Submit Query

Test Note: Do not use real credit card numbers within the testing environment. When you are ready to go live, send an email to support@psigate.com to receive your production URL.

Send your test transactions to:

https://dev.psigate.com:7989/Messenger/XMLMessenger. To process a transaction through the test account, pass the following:

StoreID: teststore

Passphrase: psigate1234

To review your test transactions, log into https://dev.psigate.com with the following account information:

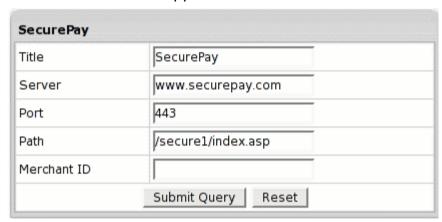
CID: 1000001 User: teststore pass: testpass

SecurePay Configuration

Preparation

No preparation is needed before configuration.

- 1. Select SecurePay in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this SecurePay connection
- Server: the name of the SecurePay server
- Port: the port of the SecurePay server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Merchant Id: your SecurePay account ID. This is NOT the merchant number supplied by your bank
- 4. Click Submit Query

SkipJack Configuration

Preparation

SkipJack certificate is trusted by Equifax. In Java 1.3.x and older the standard java cartcerts file doesn't include Equifax public certificates and therefore Parallels H-Sphere returns 'Connect error, untrusted server cert chain' when trying to connect to the merchant gateway. Therefore Equifax certificates should be imported into cacerts file.

So, if you have Java 1.3 and older, you have the following solutions:

A. If you have got the default java cacerts file and you have never changed it, you can simply replace it with the cacerts file offered by Parallels (http://download.hsphere.parallels.com/cacerts):

/usr/java/<java home>/jre/lib/security/cacerts

B. If you need to keep your cacerts file, you can fix this problem using the keytool feature available in the standard Java installation:

1. Download equifax.crt.cer file:

wget

http://download.hsphere.parallels.com/shiv/files/merchants/equifax.crt.cer

- 2. Place equifax.crt.cer in the /usr/java/jdk1.3.1/jre/lib/security/ directory
- **3.** As root, allow read/write access to the /usr/java/jdk1.3.1/jre/lib/security/cacerts file

chmod 666 /usr/java/jdk1.3.1/jre/lib/security/cacerts

4. Log in as the cpanel user:

su -1 cpanel

5. Go to the /usr/java/jdk1.3.1/jre/lib/security/ directory:

cd /usr/java/jdk1.3.1/jre/lib/security/

6. Run the following command:

keytool -import -alias equifax -file equifax.crt.cer -keystore cacerts

- **7.** When prompted, enter the password (the default password is: *changeit*)
- 8. When asked to trust the certificate, enter: yes
- **9.** As root, change permissions back on the /usr/java/jdk1.3.1/jre/lib/security/cacerts file:

chmod 444 /usr/java/jdk1.3.1/jre/lib/security/cacerts

Upgrade Java to 1.4 by following our documentation in System Administrator Guide.

Note: If your certificate is already imported into cacerts, but Java still generates 'Connect error, untrusted server cert chain', please check the connection to your payment server from your control panel server by running the following command from the control panel server console to check connection:

telnet [server.name] [port]

- 1. Select SkipJack in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this SkipJack connection
- Server: the name of the SkipJack server
- Port: the port of the SkipJack server
- Account ID: the HTML Serial Number you are given by SkipJack
- Developer Account ID: the ID you are given when you sign up for a trial SkipJack account
- 4. Click Submit Query

SecurePay.com.au Configuration

Preparation

In order to configure SecurePay.com.au merchant gateway, download and install SecurePayComAu .hsp package

(http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways) (for Java 1.4 and up).

This package can be installed on Parallels H-Sphere as suggested in our instruction on *Installing Parallels H-Sphere packages* in Customization Guide.

- 1. Select SecurePay.com.au in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this SecurePay.com.au connection
- Server: the name of the SecurePay.com.au server
- Port: the port of the SecurePay.com.au server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Merchant Id: your SecurePay.com.au account ID. This is NOT the merchant number supplied by your bank
- Password: the password which comes with login/username
- Currency: the currency in which your end users will be charged
- 4. Click Submit Query

SecureTrading Configuration

Preparation

Download xpay.zip from SecureTrading and place its content into /hsphere/local/home/cpanel/XPay directory on your control panel server:

1. Log into your control panel server and go to XPay directory:

su -

cd /hsphere/local/home/cpanel/XPay

2. Unpack xpay.zip:

unzip xpay.zip

3. Copy XPay.jar file into /hsphere/local/home/cpanel/java_rt directory:

cp XPay.jar /hsphere/local/home/cpanel/java_rt

4. Create the keystore file for XPay client:

keytool -import -file securetradingxpay.cer -alias xpay -keystore xpay

5. Edit the examplepolicy file and set the correct path to your keystore file, e.g:

keystore file: /hsphere/local/home/cpanel/XPay/xpay

- 6. Go to the startup directory and edit the xpay.sh file. Modify the variables: XPAYPOLICY, CLASSPATH and JAVAPATH. See configuration options:
 - 1. Set the location of the policy file

XPAYPOLICY=/hsphere/local/home/cpanel/XPay/examplepolicy

2. Set the location of the XPay jar file:

CLASSPATH=/hsphere/local/home/cpanel/java rt/XPay.jar

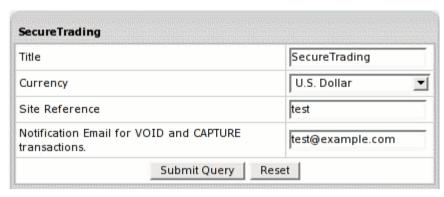
3. Set path to java executable:

JAVAPATH=/usr/java/jdk1.3.1/bin

7. Run the xpay.sh script to start XPay client.

For more information about XPay client configuration see Readme.txt in the xpay.zip bundle.

- 1. Select SecureTrading in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this SecureTrading connection
- Currency: the currency in which your end users will be charged
- Site Reference: enter valid site reference sent to you by SecureTrading upon registration
- Notification Email for VOID and CAPTURE Transactions: SecureTrading doesn't support VOID and CAPTURE transactions. Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled or completed manually through SecureTrading web interface.
- 4. Click Submit Query
- 5. In the Edit Gateway box choose Secure Trading from the drop-down box.
- 6. Click the Edit button.

The page that appears shows the **Path and name for certificate file**. You need to place the certificate which you received from Secure Trading under that name on the Control Panel server.



7. Click Submit Query.

ThePayDesk Configuration

Preparation

ThePayDesk certificate is trusted by Comodo Trusted Network. In Java 1.3.x and older the standard java cartcerts file doesn't include Comodo Trusted Network root certificates and therefore Parallels H-Sphere returns 'Connect error, untrusted server cert chain' when trying to connect to the merchant gateway. Therefore Comodo Trusted Network certificates should be imported into cacerts file.

So, if you have Java 1.3 and older, you have the following solutions:

A. If you have got the default java cacerts file and you have never changed it, you can simply replace it with the cacerts file offered by Parallels (http://download.hsphere.parallels.com/cacerts):

/usr/java/<java home>/jre/lib/security/cacerts

- B. If you need to keep your cacerts file, you can fix this problem using the keytool feature available in the standard Java installation:
- Download GTECyberTrustRoot.cer file:

waet

http://download.hsphere.parallels.com/shiv/files/merchants/GTECyberTrustRoot.cer

- Place GTECyberTrustRoot.cer in the /usr/java/jdk1.3.1/jre/lib/security/ directory
- **3.** As root, allow read/write access to the /usr/java/jdk1.3.1/jre/lib/security/cacerts file

chmod 666 /usr/java/jdk1.3.1/jre/lib/security/cacerts

4. Log in as the cpanel user:

su -1 cpanel

5. Go to the /usr/java/jdk1.3.1/jre/lib/security/ directory:

cd /usr/java/jdk1.3.1/jre/lib/security/

6. Run the following command:

keytool -import -alias root -file GTECyberTrustRoot.cer -keystore
cacerts

- **7.** When prompted, enter the password (the default password is: *changeit*)
- 8. When asked to trust the certificate, enter: yes
- As root, change permissions back on the /usr/java/jdk1.3.1/jre/lib/security/cacerts file:

chmod 444 /usr/java/jdk1.3.1/jre/lib/security/cacerts

C. Upgrade Java to 1.4 by following our documentation in System Administrator Guide.

Note: If your certificate is already imported into cacerts, but Java still generates 'Connect error, untrusted server cert chain', please check the connection to your payment server from your control panel server by running the following command from the control panel server console to check connection:

telnet [server.name] [port]

Configuration

- 1. Select ThePayDesk in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears:



- Title: give a name to this ThePayDesk connection
- Server: the name of the ThePayDesk server
- Port: the port of the ThePayDesk server
- Path: the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Login: your ThePayDesk login
- Merchant Id: your ThePayDesk account ID. This is NOT the merchant number supplied by your bank
- Notification Email for VOID transactions: ThePayDesk doesn't support VOID transactions. Instead, Parallels H-Sphere sends a notification to this address that the transaction needs to be canceled manually through ThePayDesk web interface.

4. Click Submit Query

Tucows Configuration

Preparation

Tucows certificate is trusted by GeoTrust. In Java 1.3.x and older the standard java cartcerts file doesn't include GeoTrust root certificates and therefore Parallels H-Sphere returns 'Connect error, untrusted server cert chain' when trying to connect to the merchant gateway. That's why GeoTrust certificates should be imported into cacerts file.

So, if you have Java 1.3 and older, you have the following solutions:

A. If you have got the default java cacerts file and you have never changed it, you can simply replace it with the cacerts file offered by Parallels (http://download.hsphere.parallels.com/cacerts):

/usr/java/<java home>/jre/lib/security/cacerts

- B. If you need to keep your cacerts file, use the keytool feature available in the standard Java installation in the Tucows manual (SSL notes).
- C. Upgrade Java to 1.4 by following our documentation in System Administrator Guide.

Note: If your certificate is already imported into cacerts, but Java still generates 'Connect error, untrusted server cert chain', please check the connection to your payment server from your control panel server by running the following command from the control panel server console to check connection:

```
telnet [server.name] [port]
```

- 1. Select Tucows in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:

Tucows	
Title	Tucows
User name	admin
Password	XXXXX
Notification Email for VOID transactions	admin@example.com
Currency	U.S. Dollar
AVS	Note: for US-issued cards only, leave fields empty to disable AVS check. X: Exact Match, 9 digit zip Y: Exact Match, 5 digit zip A: Address Match only W: 9-digit zip match only Z: 5-digit zip match only N: No address or zip match U: Address unavailable R: Issuer system unavailable E: Not a mail/phone order S: Service not supported G: Non-U.S. Issuer
✓ Test Mode	
	Submit Query Reset

- Title: give a name to this Tucows connection
- Username: enter the name given to you by Tucows provider
- Tucows Password: the password which comes with Tucows username
- Tucows Notification Email for VOID transactions: Tucows cannot cancel previously authorized transactions. Therefore Parallels H-Sphere sends a notification to this address notifying that the transaction needs to be canceled manually through Tucows web interface.
- Currency: the currency in which your end users will be charged
- AVS: AVS stands for Address Verification Service. It can be used as an additional layer of protection for merchants who wish to verify that the purchaser knows the billing address of the cardholder (in case these are two different people). This is not a very serious form of risk mitigation or fraud prevention, and yet it does give some assurance that a hacker isn't simply generating a list of valid credit card numbers and purchasing product at will. AVS simply matches the numeric portion of the cardholder's street billing address and the 5 or 9-digit zip code of the cardholder's billing address. The AVS request parameters are STREET and ZIP. The processing network verifies the AVS information. comparing a portion of the billing address from the request message with address data on file at the VIC or the issuer's center. Based on the comparison, a response will be returned which confirms whether the information matches or not. Banks do not decline transactions based on the AVS check. The AVS response is returned as two single tab-delimited characters: YY, NN, YN, NY (Y-'matches'. N for 'does not match'). This information is just an advice. However. the Parallels H-Sphere system will either allow or decline the transaction depending on the selected AVS status. AVS is available only for US cardholders.

Important: To provide non US cardholders CC processing, disable AVS checkup in the merchant gateway configuration.

 Test Mode box: with Test Mode checked, all transactions appear to be processed as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. Accordingly, all transactions will be approved by the gateway when Test Mode is turned on.

4. Click Submit Query

CVV (Card Verification Value). To enable fraud protection using CVV, enable and configure CVV support in your Tucows account. More on CVV credit card verification.

VeriSign PayFlow Pro Configuration

Preparation

Make sure that the signio.jar file is present in the /hsphere/local/home/cpanel/java rt/ directory.

If it's not there:

- 1. Contact PayFlow Pro and obtain the signio.jar file.
- 2. Put the lib file into in the directory ~cpanel/java_rt/.

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

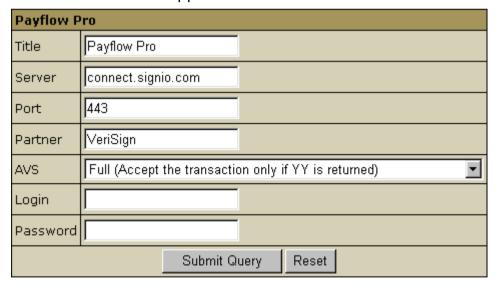
For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start.

- 1. Select PayFlow Pro in the Add New Gateway box.
- 2. Click the Add button.
- 3. Fill out the form that appears.



- Title: give a name to this PayFlow Pro connection
- Server: the name of the PayFlow Pro server
- Port: the port of the PayFlow Pro server
- Partner: your partner ID given to you by the authorized reseller who signed you up for the PayFlow Pro service
- AVS: AVS stands for Address Verification Service. It can be used as an additional layer of protection for merchants who wish to verify that the purchaser knows the billing address of the cardholder (in case these are two different people). This is not a very serious form of risk mitigation or fraud prevention, and yet it does give some assurance that a hacker isn't simply generating a list of valid credit card numbers and purchasing product at will. AVS simply matches the numeric portion of the cardholder's street billing address and the 5 or 9-digit zip code of the cardholder's billing address. The AVS request parameters are STREET and ZIP. The processing network verifies the AVS information, comparing a portion of the billing address from the request message with address data on file at the VIC or the issuer's center. Based on the comparison, a response will be returned which confirms whether the information matches or not. Banks do not decline transactions based on the AVS check. The AVS response is returned as two single tab-delimited characters: YY, NN, YN, NY (Y-'matches'. N for 'does not match'). This information is just an advice. However. the Parallels H-Sphere system will either allow or decline the transaction depending on the selected AVS status. AVS is available only for US cardholders.

Important: To provide non US cardholders CC processing, disable AVS check-up in the merchant gateway configuration.

- Login: your PayFlow Pro login
- Password: the password which comes with login/username
- 4. Click Submit Query

VeriSign PayFlow Pro With SSL Support

Important: PayPal announced EOL for v2 and v3 (https://www.paypal.com/IntegrationCenter/ic_downloads.html#PayflowPro). Support for a PayFlow Pro for SSL SDK v4 is implemented by a separate .hsp package.

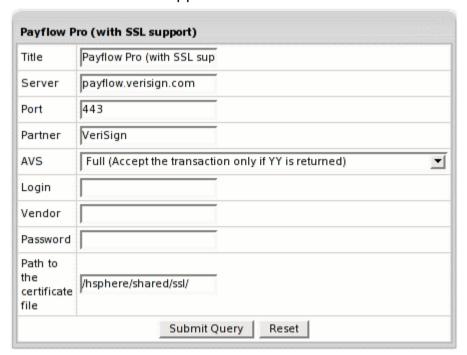
Preparation

To configure PayFlow Pro merchant gateway with SSL support, download and install a respective .hsp package:

http://download.hsphere.parallels.com/downloads/index.html#merchant_gateways.

This package can be installed on H-Sphere as suggested in our instruction on installing H-Sphere packages in *Parallels H-Sphere Customization Guide*.

- 1. Select PayFlow Pro (with SSL support) in the Add New Gateway box.
- 2. Click the Add button.
- **3.** Fill out the form that appears:



- Title: give a name to this PayFlow Pro connection
- Server: the name of the PayFlow Pro server
- Port: the port of the PayFlow Pro server
- Partner: your partner ID given to you by the authorized reseller who signed you up for the PayFlow Pro service
- AVS: AVS stands for Address Verification Service. It can be used as an additional layer of protection for merchants who wish to verify that the purchaser knows the billing address of the cardholder (in case these are two different people). This is not a very serious form of risk mitigation or fraud prevention, and yet it does give some assurance that a hacker isn't simply generating a list of valid credit card numbers and purchasing product at will. AVS simply matches the numeric portion of the cardholder's street billing address and the 5 or 9-digit zip code of the cardholder's billing address. The AVS request parameters are STREET and ZIP. The processing network verifies the AVS information, comparing a portion of the billing address from the request message with address data on file at the VIC or the issuer's center. Based on the comparison, a response will be returned which confirms whether the information matches or not. Banks do not decline transactions based on the AVS check. The AVS response is returned as two single tab-delimited characters: YY, NN, YN, NY (Y-'matches'. N for 'does not match'). This information is just an advice. However. the Parallels H-Sphere system will either allow or decline the transaction depending on the selected AVS status. AVS is available only for US cardholders.

Important: To provide non US cardholders CC processing, disable AVS check-up in the merchant gateway configuration.

- Login: your PayFlow Pro login
- Vendor: enter the name of the user associated with your PayFlow Pro Manager account
- Password: the password which comes with login/username
- Path to the certificate file: on the control panel server, the path to the SSL certificate you received when you signed up with PayFlow Pro
- 4. Click Submit Query.

Web-based Payments

This chapter describes how to make payments through Web payments Systems in Parallels H-Sphere.

In this chapter:

Web Payment Systems Manager	236
2CheckOut Configuration	
Authorize.Net (Sim Protocol) Configuration	
ChronoPay Configuration	241
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PayNova Configuration	243
PayPal Merchant Gateway Configuration	244
Sentry Configuration	245
Webmoney Configuration	247
WorldPay Configuration	

Web Payment Systems Manager

Unlike Merchant Gateways (on page 181), Web Payment Systems require that users make payments through their payment web page.

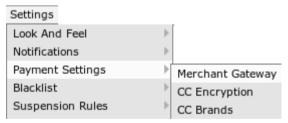
Work Principles

Once you have registered an account with such a gateway, you enter the account details in Parallels H-Sphere. When clients select a web payment system during signup, Parallels H-Sphere passes account ID, amount payable, and possibly other details to the gateway. The user is then taken to the gateway's web payment page to enter the credit card number and complete the transaction. When Parallels H-Sphere receives a payment notification, it creates the account.

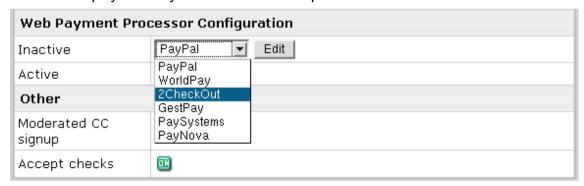
Since Parallels H-Sphere doesn't store credit card numbers of customers using web payment systems, further payments are also made outside Parallels H-Sphere.

Configuration Procedure

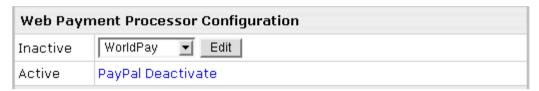
- > To configure a web payment system with Parallels H-Sphere:
- 1. Register an online account with this web payment system.
- 2. In Parallels H-Sphere admin control panel, select Merchant Gateways in the Settings -> Payment Settings menu:



Select the payment system from the drop-down menu and click Edit:



- **4.** Enter your account settings (for instructions, follow links in the blue box on the right).
- **5.** Once you enter correct settings, the web payment system will appear in the list as active:



Deactivating a payment system disables it for new signups and existing accounts. Although the gateway settings will be preserved, users won't be able to make payments from Parallels H-Sphere. You can also deactivate payment systems from their configuration pages.

Setting Web Payment Instant Notification URL

Some Web payment systems, like PayPal, WorldPay (on page 248) and GestPay (on page 242) require setting the so-called *instant notification URL* used by your Web payment system to report Parallels H-Sphere about received customer payments.

Parallels H-Sphere instant notification URL has uniform format for all supported Web payment systems:

The URL structure is:

CP_PROTOCOL://CP_HOST:CP_PORT/psoft/servlet/psoft.hsphere.Payment
ServletName.payment

- Here:
- CP PROTOCOL: http or https
- CP_HOST: domain name you host, e.g.: cp.example.com
- CP PORT: port of your CP, e.g.: 8080 (it may have a different look if customized),
- PaymentServletName is set in the ~cpanel/shiva/psoft/hsphere/merchants.xml XML config file as the servlet attribute of the processor tag for a respective Web payment system.

For example, for PayPal instant notification URL will look like:

http://cp.example.com:8080/psoft/servlet/psoft.hsphere.PayPal.payment

For WorldPay instant notification URL will look like:

http://cp.example.com:8080/psoft/servlet/psoft.hsphere.WorldPay.payment

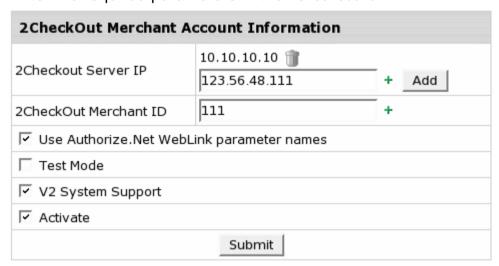
For GestPay instant notification URL will look like:

http://cp.example.com:8080/psoft/servlet/psoft.hsphere.GestPay.payment

2CheckOut Configuration

Before proceeding, make sure to read about Web Payment Systems Manager (on page 236).

- Once you have registered a 2CheckOut account, enable 2CheckOut payments in the control panel:
- 1. Select Merchant Gateways in the Settings -> Payment Settings menu.
- 2. On the Merchant Configuration page, choose 2CheckOut from the drop-down menu.
- 3. Click the Edit button to activate it.
- 4. Enter the required parameters in the 2CheckOut form:



- 2CheckOut Servers IP where payment notification requests come from. Payment requests from other IPs will be rejected which helps to avoid fraud. Note: You can enter IP mask instead of IP, for instance 127.0.0.* or 127.0.*.*
- 2CheckOut Merchant ID: your ID provided to you by 2CheckOut.
- Check the box if you want to Use Authorize. Net WebLink parameter names.
- With Test Mode enabled you can test your online 2CheckOut transactions.
- If V2 System Support is checked, the system will apply a new http routine used with the V2 2Checkout system.
 Note: 2CheckOut is transferring all customers to V2 System. Therefore we recommend enabling this option.
- Activate: check it if you want to enable 2CheckOut for new signups and existing accounts.
- 5. Click Submit. 2CheckOut now must show as active.

Authorize.Net (Sim Protocol) Configuration

Before proceeding, make sure to read about Web Payment Systems Manager (on page 236).

In order to configure Authorize.Net, download and install the latest Authorize.Net.hsp (http://hsphere.parallels.com/downloads/index.html#web_payment) package.

Setting Up Authorize.Net

- ➤ Once you have registered an Authorize.Net business account, enable Authorize.Net in your control panel:
- 1. Select Merchant Gateways in the Settings -> Payment Settings menu.
- 2. On the Merchant Configuration page, choose Authorize.Net from the drop-down menu.
- 3. Click the Edit button to activate it.
- 4. Enter the required parameters in the Authorize.Net form:



- Payment Server Address: the name of the server you will be redirected to for payment operations
- Payment Server Port of the Authorize. Net server
- URL path to the server side handler file which can be a script or a binary file.
- Login: API login ID for the payment gateway account obtained from the Merchant Interface.
- MD5 Hash Value: this security feature enables merchants to verify that the results of a transaction received by their server were actually sent from the Payment Gateway. This value should be configured in the Authorize.Net interface by the users with the appropriate permissions will be able to access this setting. To set the MD5 Hash Value in the Merchant Interface:
 - 1. Select Settings from the Main Menu in the Merchant Interface
 - 2. In the Security section click on MD5 Hash and enter the MD5 Hash Value
 - 3. Confirm the MD5 Hash Value entered and click Submit to save changes
- Transaction Key obtained from the Merchant Interface by users with the appropriate permissions will be able to access this setting To obtain the transaction key from the Merchant Interface;
 - 1. Select Settings from the Main Menu in the Merchant Interface
 - 2. In the Security section click on API Login ID and Transaction Key
 - 3. Type in the answer to the secret question configured on setup and click Submit
- Check **Activate** to enable Authorize. Net for new signups and existing accounts.
- **5.** Click **Submit Query**. Authorize.Net now must show as active.

ChronoPay Configuration

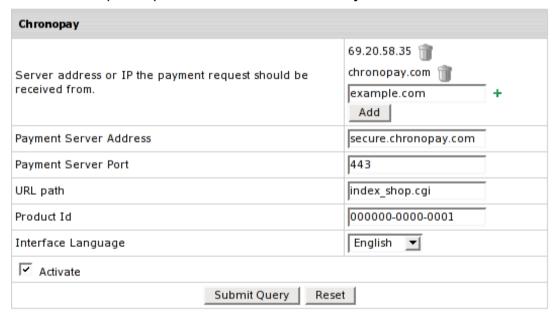
Before proceeding, make sure to read about Web Payment Systems Manager (on page 236).

In order to configure ChronoPay, download and install the latest ChronoPay .hsp package from

http://download.hsphere.parallels.com/downloads/index.html#web_payment.

Setting Up ChronoPay

- Once you have registered a ChronoPay business account, enable ChronoPay in your control panel:
- 1. Select Merchant Gateways in the Settings->Payment Settings menu.
- 2. On the Merchant Configuration page, choose ChronoPay from the drop-down menu.
- 3. Click the Edit button to activate it.
- 4. Enter the required parameters in the ChronoPay form:



- Server address or IP the payment request should be received from: set the IP where
 payment notification requests come from. Payment requests from other IPs will
 be rejected which helps to avoid fraud.
 - Note: You can enter IP mask instead of IP, for instance 127.0.0.* or 127.0.*.*. Also you can specify the server name.
- Payment Server Address you will be redirected to for payment operations
- Payment Server Port: enter the port to be used
- URL path the path to the server side handler file. This can be a script or a binary file that is launched with an http request.
- Product ID: the ID provided to you by ChronoPay system upon registration.
- Interface Language: choose the language from the drop-down box
- Check Activate to enable ChronoPay for new signups and existing accounts.
- 5. Click Submit Query. ChronoPay now must show as active.

GestPay Configuration

Before proceeding, make sure to read about Web Payment Systems Manager (on page 236).

- Once you have registered a GestPay account, enable GestPay in the control panel:
- 1. Select Merchant Gateways in the Settings -> Payment Settings menu.
- 2. On the Merchant Configuration page, choose GestPay from the drop-down menu.
- 3. Click the Edit button to activate it.
- **4.** Enter the required parameters in the **GestPay** form:



- Merchant Login: the ID you received from the payment provider.
- Interface Language: the language of GestPay website.
- Currency: choose between Italian Lira and Euro.
- Activate GestPay for new signups and existing accounts.
- 5. Click Submit Query. GestPay now must show as active.
- **6.** Set Instant Notification URL (on page 236) to receive information about payments made via GestdPay.

Notification URL works as follows:

- Customer submits a payment form through GestdPay;
- GestPay sends notification about payment made to the callback URL you specified.

PayNova Configuration

Before proceeding, make sure to read about Web Payment Systems Manager (on page 236). Once you have registered a PayNova account, enable PayNova payments in your Parallels H-Sphere control panel:

- 1. Select Merchant Gateways in the Settings -> Payment Settings menu.
- 2. On the Merchant Configuration page, choose PayNova from the drop-down menu.
- 3. Click the Edit button to activate it.
- **4.** Enter the required parameters in the **PayNova** form:
 - Unique Merchant ID: this value is given to you by PayNova payment provider upon signup.
 - Currency: choose the currency you will be working with from the drop-down menu.
 - Secret Key generated by Paynova: this key is generated and provided to you by PayNova. With invalid Secret Key transactions may be declined.
 - Test Mode: check this if you want to test your online PayNova transactions
 - Activate PayNova for new signups and existing accounts.
- Click Submit Query. PayNova now must show as active.

PayPal Merchant Gateway Configuration

Note: PayPal service is also available via Web payment interface.

Preparation

No preparation is needed before configuration

Configuration

- 1. Select PayPal in the Add New Gateway box.
- 2. Click the Add button.

Fill out the form that appears:



- Title: give a name to this PayPal connection
- Currency: the currency in which your end users will be charged
- Username: enter the name given to you by PayPal provider
- Password: the password which comes with login/username
- Certificate File: the filename and location on the control panel server relative to /hsphere/local/home/cpanel/shiva/ where you must put the *.der certificate file
- Private Key Password: Private key password for PayPal certificate.
- **Test Mode**: Check this box to enable PayPal merchant gateway's testing environment mode (off by default).
- 3. Click Submit Query

Sentry Configuration

Sentry (http://shop.privatbank.ua/about/sentry) web payment system is developed by Card Tech Ltd. In Parallels H-Sphere, Sentry is implemented for transactions in the Ukrainian currency Hryvnia (UAH).

In terms of Parallels H-Sphere, payments via Sentry are similar to check payments (on page 463), admin adds it to Parallels H-Sphere manually. If your customers choose to pay via online payment providers, their credit card info won't be stored in their billing profiles and billing info won't show in the control panel.

Preparation

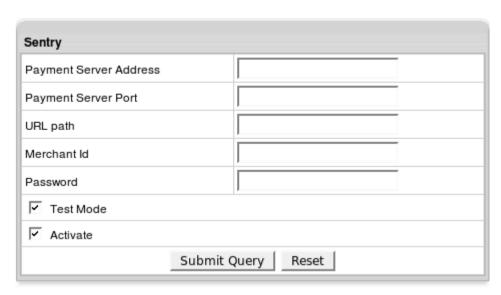
Prior to setting up a Sentry bank payment system in Parallels H-Sphere:

- Register your Sentry merchant account http://shop.privatbank.ua/register
- Secure your control panel with SSL (Please refer to User Guide for more info)
- Download Sentry Parallels H-Sphere package from http://download.hsphere.parallels.com/downloads/index.html#web_pay ment

Contact Privatbank if you have questions to PrivatBank about Sentry or any other issues of registration process.

Setup Procedure

- To enable Sentry in your control panel:
- 1. Go to Settings -> Payment Settings -> Merchant Gateways.
- 2. In the section Web Payment Processor Configuration choose Sentry from the drop-down menu.
- Click the Edit button to activate it.
- **4.** Enter the required parameters in the **Sentry** form:



- Server: the server used to run transactions.
- Port: enter the port to be used.
- Path: indicate the path. Note: Server, port and path should compose the URL where users are redirected for online payments, i.e:
 https://www.verification.privatbank.ua/SENTRY/PaymentGateway/Application/RedirectLink.aspx
- Merchant ID: given to you by PrivateBank upon registration.
- Password: provided by Sentry. You can change it afterwards
- **Test Mode**: check it if you want to test your online Sentry transactions. The amount of test transaction shouldn't exceed 1 UAH.
- Activate: enable Sentry for new signups and existing accounts.

Sentry's IPN system works as follows:

- Customer submits a payment form and Sentry sends notifications about payments made to your notification URL.
- On receiving the payment notification, your server will send the confirmation, including the encrypted code, back to a secure Sentry URL.
- Sentry will authenticate the transaction and send your server a "VERIFIED" or "INVALID" response.
- If verified, the payment is regarded as successfully completed. If you receive an "INVALID" response, it should be treated as suspicious and investigated.

Webmoney Configuration

Webmoney payments are similar to check payments (on page 463) in that they are added to Parallels H-Sphere manually.

Before proceeding, make sure to read about Web Payment Systems Manager (on page 236).

To enable Webmoney in Parallels H-Sphere:

1. Set your own purse

Visit http://merchant.wmtransfer.com. Enter the following data:

- Secret Key: optional set of symbols. Store it as you'll have to enter it to Parallels H-Sphere when activating Webmoney.
- Result URL: http://cp.url:8080/psoft/servlet/psoft.hsphere.payment.WebMoney.payment.
- Success URL: http://cp.url:8080/psoft/servlet/psoft.hsphere.payment.WebMoney.payment?action=success; method of requesting Success URL: LINK.
- Fail URL: http://cp.url:8080/psoft/servlet/psoft.hsphere.payment.WebMoney.payment?action=error; method of requesting Fail URL: LINK.
- Signature algorithm: MD5.

As a result, you should be assigned a unique merchant's purse ID which consists of a letter and twelve digits. Store it for future use in Parallels H-Sphere. Presently, Z, R, E, U, and D purses are in use.

2. Activate Webmoney payments in your Parallels H-Sphere control panel

- 1. Select Merchant Gateways in the Settings -> Payment Settings menu.
- 2. In the Web Payment Processor Configuration section, choose Webmoney from the drop-down menu.
- 3. Click the Edit button to activate it.
- **4.** Enter the required parameters in the **Webmoney** form:
 - Merchant's purse: your purse ID consisting of a letter and twelve digits (see above).
 - Payment Server you will be redirected to for payment operations. You can choose between default webmoney.ru or wmtransfer.com.

- Secret Key: optional set of symbols which you entered when setting your purse (see above).
- Test Mode: check it if you want to test your online Webmoney transactions.
- Activate: check it if you want to enable Webmoney for new signups and existing accounts.
- 5. Click Submit Query. Webmoney now must show as active.

If your customers choose to pay with Webmoney, their credit card info won't be stored in their billing profiles and billing info won't show in the control panel.

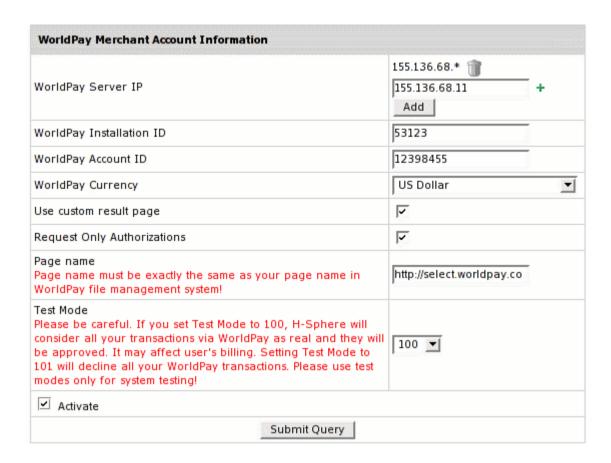
WorldPay Configuration

Before proceeding, make sure to read about Web Payment Systems Manager (on page 236).

Setting Up WorldPay

Once you have registered a WorldPay business account, enable WorldPay in your control panel:

- 1. Select Merchant Gateways in the Settings -> Payment Settings menu.
- On the Merchant Configuration page, choose WorldPay from the drop-down menu.
- 3. Click the Edit button to activate it.
- **4.** Enter the required parameters in the **WorldPay** form:



- WorldPay Server IP where payment notification requests come from. Payment requests from other IPs will be rejected which helps to avoid fraud.
 Note: You can enter IP mask instead of IP, for instance 127.0.0.* or 127.0.*.*
- Installation ID, provided to you by WorldPay system upon registration.
- WorldPay Account ID, provided by WorldPay upon registration.
- WorldPay currency from the drop-down box.
- Check Use Custom Result Page if you want your customers to receive your custom email payment notifications.
- Request Only Authorizations: enable AuthMode in WorldPay
- Enter the Custom Page name which should be exactly the same as in the WorldPay account.
- Set a Test Mode variable for testing online transactions via WorldPay:
 - with variable set to 100, Parallels H-Sphere will consider all your transactions real. They will be approved that will reflect on user's billing.
 - with variable set to 101, Parallels H-Sphere will decline all your WorldPay transactions.
 - with variable set to 0, Parallels H-Sphere will perfor real transactions in a live mode.
- Check Activate to enable WorldPay for new signups and existing accounts.
- 5. Click Submit Query. WorldPay now must show as active.
- **6.** Set Instant notification URL to receive information about payments made via WorldPay:
 - 1. Log into your WorldPay Business account
 - 2. In the Installations section, click the Configuration Options icon;
 - 3. Enter a callback URL (on page 236)
 - 4. Check Callback enabled box.

Callback URL works as follows:

- Customer submits a payment form through WorldPay;
- WorldPay sends notification about payment made to the callback URL you specified.

Plans

In Parallels H-Sphere a hosting plan determines the account type (on page 285) or, in other words, priveleges and hosting resources/services granted to an account owner. Plans are created and edited with plan wizards and can be divided into three main categories:

Plan Category	Used to create:	Related docs	Available to:
Administrati ve	administrative and tech support accounts	Admin Plans (on page 267) Providing Technical Support	Master admin and resellers. Resellers can create administrative plans at the level of their reseller control panel.
Reseller	reseller accounts	Understanding Resellers Creating Resellers	Master admin only
End User	system (service) and customer accounts	Hosting Your Own Domain (on page 103) Signing Up Users (on page 464)	Master admin and resellers

Reseller and User plans determine resource pricing if configured as pay plans.

User plans can differ by platform: Unix, Windows, Real Unix, Real Windows, etc.

You can also create Demo plans (on page 269) that demonstrate the capabilities of Parallels H-Sphere without having to use real resources.

Customers can change their hosting plans. You can configure which plans customers can upgrade from and to as suggested in Compatible Plans.

In this chapter:

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Placing Plans on Particular Boxes	

Creating and Editing Plans (Plan Wizards)

This chapter explains how to create and edit plan settings using plan creation and edit wizards.

In this section:

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Starting Plan Creation Wizards

In Parallels H-Sphere, plans are created with Plan Creation Wizards.

> To start a plan creation wizard:

- 1. Go to Plans->Create menu.
- 2. On the page that appears, choose the type of the plan.

 See the next sections for explanations on each plan type. If a plan is marked Not Configured, check if you have a logical server (on page 39) where its accounts will be hosted.
- **3.** Go through the wizard following the instructions in a A Typical Plan Wizard section.

Newly created plans are disabled by default. Toggling the ON/OFF button in the Signup column next to the hosting plan, you allow or prohibit signups under this plan.

Starting Plan Edit Wizards

Plans are edited with Plan Edit Wizards.

> To start a plan edit wizard:

- 1. Go to Plans->Manage menu.
- 2. In the list of plans that appears, click the name of the plan you would like to edit.
- **3.** Go through the wizard following the instructions i (on page 360)n the next sections.

Simplified Plan Wizards

Starting with version 3.1 Beta 1, Parallels H-Sphere allows shortening the subsequent steps (on page 360) of Plan Wizards where you set the prices for the billing period. To remove the fields for the resources not to be charged for, uncheck the boxes for these resources. For this:

1. Go to Plans->Simplified Plan Wizards

Simplified Plan Wizard Settings		
Check the resources users will be charged for. The price fields will be displayed for these resources only.		
VPS Templates	Set/Clear group	
VPS Template DNS Server	~	
VPS Template FTP Server	~	
VPS Template Mail Server	V	
VPS Template MySQL Database Server	V	
VPS Template CP+	V	
VPS Template PostgreSQL Database Server	V	
'C Tems' Winder	▽	

2. Uncheck the boxes next to the resources or the group of resources you are not going to charge for:

Other Domain Resources	Set/Clear group
SubDomain	
Stopgap Domain	
Third level domain	
Third level domain. (Mail Under Host Domain)	
Hosting Domain Alias	
Domain alias (old scheme)	
Parked domain	

3. Submit query

As a result, the Step 2 of Plan Creation Wizard and Steps 2 and 3 of Plan Edit Wizards will include the fields for the checked in **Simplified plan wizards** menu resources only:

Unix Plan Creation Wizard. Step 2.		
Plan Name: Unix I		
Set the prices for the DEFAULT BILLING PERIOD. These are BASE prices used to calculate prices for ACTUAL BILLING PERIODS (e.g. 2 weeks, 1 month, 2 month, 1 year, etc.) SETUP - the single-time amount payable at the moment when a unit of the resource is purchased; FREE - the number of resource units users get for free; MONTHLY - the advance payment for one unit of this resource; EXTRA - the payment for every resource unit used beyond the quota. *Leave fields blank instead of entering zeros.		
Quotas		
Summary traffic Free GB Monthly + \$/GB Extra + \$/GB Max + GB		
Disk space Free MB Monthly + \$/MB Max + MB Quota		
Domain Resources 2		
Domain Free + Setup + \$ Monthly + \$ Max +		
Other Domain Resources		
Web Services		
Statistics		
Mail Services		
Mailbox quota Free		
E-Commerce Options		
Other		
CREATE Unix I		

Note: if you have already set the price for a resource or the resource has a free value (e.g. disk quota, traffic etc.), the records on it will be represented in the subsequent steps regardless of your settings in **Simplified Plan Wizard**.

A Typical Web Hosting Plan Wizard

Most plan wizards (except for reseller plans) follow the same pattern and guide you through two or more steps:

- step 1:
 - including or excluding particular resources;
 - making them active by default;
 - configuring settings such as duration of the trial period, credit limit, money-back period, default type of IP, etc.
- subsequent steps:
 - setting custom prices for domain registration services in this specific plan;
 - setting free amounts and prices for each resource type for the **default** (1 month) and **actual** billing periods.
 - * The number of subsequent steps depends on the actual billing periods (on page 322) for this plan.

In this section:

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Step 1. Selecting Resources and Configuring Plan Settings

On the first step, select which resources will be available and active in the plan. Note that Plan Wizards display only those resources that are enabled globally in the system. Read about Global Resources (on page 285) for more info.

- Include: check the box to have the resource available for users subscribing for the plan. If you leave this box unchecked, users of this plan will be unable to take advantage of this resource. Checking Include alone doesn't activate this resource by default; in newly created accounts it will be off.
- Activated: determines whether the resource should be enabled immediately at signup (checked) or activated later by the user (unchecked). If a pay resource has Activated unchecked, it won't be included in the signup bill, but users will be able to turn it on when necessary and will be charged for it at the moment of activation. But if a pay resource has Activated checked, it will be included in the signup bill, and will be charged for when users enable it in their control panel. If the activated resource has some pay child resources also activated in the plan wizard, they will be included in the signup bill and user will be charged for them at the moment of activating the parent resource.

Some of the plan's resources are integral to the system and cannot be excluded from the plan. They are not available on this page.

Note: If you exclude resources that are in use by some users, they'll remain functional but become inaccessible from the user control panel.

First, you enter **Plan name** for the plan you are creating. Later you can change the plan name in the Plan Settings (on page 276).

Step 1 allows you to configure the following hosting resources:

Quotas

 Summary Disk Usage: unchecking this box will stop the system from billing end users for disk usage (on page 300).

Domain Resources

- Host Existing Site: allows to host domains registered outside Parallels H-Sphere without transfering them into supported registrars.
- Domain registration: allow users to create new standard domains through domain registration services (on page 155) supported in Parallels H-Sphere.
- Leave registrar prices as they are: Check this box to skip the second step of the wizard and use the default prices (on page 155). To enter custom domain registration prices, don't check this box.
- Domain Transfer: allows users to transfer domains already registered outside Parallels H-Sphere with any registar to OpenSRS or Enom.
- Leave domain transfer prices as they are: Check this box to skip the second step of the wizard and use the default prices (on page 155). To enter custom domain transfer prices, don't check this box.

Other Domain Resources

- **SubDomain**: allow users to create subdomains. Subdomains have the same functionalities as regular domains.
- Stopgap Domain: allow your customers to use hosting services without a real domain. Stopgap domains don't have DNS zones, and don't allow e-mail service. Still, users can access their sites using their instant domain aliases (on page 95). Stopgap domains support web site management and FTP services. Also, IP-only access is possible with a dedicated IP.
- Third level domain: allow your customers to create third level domains based on the domain names you offer. E.g. if your domain name is example.com, a user can have a domain like thirdlevel.example.com. Third level domains have the same functionalities as second level domains, i.e. regular domains.
- Domain alias (old scheme): a resource deprecated since version 3.1 with the Hosting Domain Alias resource under Web Options. Provided for backward compatibility. Please refer to domain aliasing in version earlier than 3.1 in *User Guide*.
- Parked domain: allow your customers to use Parallels H-Sphere DNS server for designating IPs to domain names serviced and hosted on other servers (not those of Parallels H-Sphere).
- Service Domain: should be included only for the administrative plans (like System plan) to host and manage your corporate web- site. To enable users register third level domains with the second level domain name of your corporate site, register it as a service domain. For example, the company offers third level domains at example.com, such as thirdlevel.example.com or userdomain.example.com. Naturally, the site of the hosting company should be available at example.com or www.example.com.

Web Services

- Hosting Domain Alias: Also referred to as stack domain. An extra domain name that points to a 'primary' domain. For example, the owner of the domain name example.com can register another domain name, for example, example.net and have it point to the location of example.com. This means that every Internet user who goes to example.net will land in example.com. Domain alias can have its own DNS zone, custom DNS records and their own mail service. Refer to domain aliasing in 3.1+ in User Guide.
- CGI Resource: allow your customers to map file extensions as CGI executables.
- cgi-bin Resource: allow your customers to create cgi-bin directory, so all the cgi-bin directory's content is treated as cgi executables which the server tries to run.
- Front Page: allow your customers to use FrontPage extensions on their web sites.
- Server Side Include: allow your customers to use interactive real-time features such as echoing current time, conditional execution based on logical comparisons, querying or updating a database, sending an e-mail etc., with no programming or CGI scripts.
- PHP Module: allow your customers to create dynamic web pages with PHP.
- Advanced PHP Module: allow your customers to choose various PHP 4 and 5 modes.
 Read about advanced PHP modes in User Guide.
- Redirect URL: allow your customers to redirect visitors from one URL to another.
 When an Internet user tries to connect to a URL that is redirected, he is taken to the address this URL is mapped to.

- Directory Index: allow your customers to set their custom directory indexes
- Server Side Imagemap: allow your customers to have files with a specific extension regarded as map files
- Throttle Resource: allow your customers 'throttle' the use of traffic in their accounts by delaying or refusing requests to their sites.
- mnogoSearch: allow your customers to use Parallels H-Sphere integrated search engine that searches their sites by keywords.
- **php BB**: allow your customers to use php BB, Parallels H-Sphere integrated, high powered, fully scalable, and highly customizable bulletin board package.
- Error Document: allow your customers to configure their own error pages that are shown when the requested pages fail to open.
- Ruby on Rails Module: allow your customers to create dynamic content with Ruby on Rails.
- Web Access Control: allow your customers to add and configure access rules to their domains from different locations.
- Logical Server Group: appropriate resources under this plan will be created on a particular logical server group.

Statistics

- Referrer Log: check the box to have separate referrer logs written into user directories. Referrer logs contain the URLs from which visitors were referred to your customer's site.
- Agent Log: check the box to have separate agent logs written into user directories.
 Agent logs contain data about visitors' browsers or any other Internet-based software, and related data.
- Error Log: check the box to have separate error logs written into user directories.
 Error logs store data about errors generated by the server (e.g. Page Not Found error) or by their cgi scripts.
- Webalizer Resource and Modlogan Resource: Check the boxes to install Webalizer and Modlogan into user directories. These freeware tools parse the transfer log and produce statistics reports in readable HTML format to be viewed through a browser.
- Urchin3 and Urchin4: Make sure to have Urchin installed and configured before enabling it in the plan. Check the sysadmin guide for Urchin installation and configuration.
- AWStats: another free tool that generates advanced graphical web server statistics reports. AWStats (on page 565) is set up on each Unix/Linux and Windows web server with Parallels H-Sphere installation or upgrade.
- Transfer Log: check the boxes to have transfer logs written into user directories.
 Transfer logs include combined data about every visit to your customer's site, including:
 - Remote host IP (i.e. visitor's IP)
 - Time of request (i.e. when visitor requested the page)
 - First line of request
 - Error generated by request, if any
 - Size of message sent in response to the request
 - Referrer (i.e. from which page visitor was directed)

- Agent ID (i.e. type of browser or another agent and related information, such as user's OS. etc.)
- Web Stats Password Protection, if enabled, will allow your users to password protect their sites' statistics compiled by Webalizer, AWStats and Modlogan.

Mail Services

- Email Auto Responder: to automatically reply to senders with a uniform response when mail arrives in a mailbox.
- Mail Box Alias: to have an alternative address to an existing mailbox.
- Mail Forward: to automatically forward all incoming mail to a list of remote addresses.
- Mailing List: to send mail to multiple recipients.
- Mail Service Alias: to have an alternative domain name to a mail domain. This is an obligatory resource for Email only plans, and therefore it's not listed as an option in their wizards. Refer to domain aliasing in 3.1+ in User Guide.
- Mail Domain Alias (old scheme): a resource deprecated since version 3.1 with the Mail Domain Alias resource. Provided for backward compatibility. Please refer to domain aliasing in version earlier than 3.1 in *User Guide*. Mail Relay: enable this option to ensure incoming mail is kept on the mail relay server, if your primary mail server goes down.
- AntiSpam: to set spam filtering for user mail domains.
- AntiVirus: to set virus filtering for user mailboxes.
- Logical Server Group (Mail Servers): appropriate mail resources under this plan will be created on the particular logical server group

E-Commerce Options

- SSL Module: enable your customers to use SSL (Secure Sockets Layer protocol) a standard for transmitting confidential data such as credit card numbers over the Internet.
- Comodo SSL: allow buying and installing Comodo SSL directly from user CP.
- Shared SSL: provide SSL (Secure Sockets Layer) encryption and business authentication to Web business customers.
- Miva Resource: allow your users to create online stores with Miva Merchant. For more information visit www.miva.com/products/merchant/
- osCommerce: allow your users to create online stores using an open source ecommerce solution (osCommerce 2.1 release). For more information visit www.oscommerce.com.

Other

Sub-account: (FTP Sub-account) allow or disallow your customer to create additional logins and passwords to his directory so his friends or colleagues can independently use it without having to create virtual FTP server and own a dedicated IP. There is a difference between sub-account and Win FTP sub-account. Win sub-account is just a windows user without any rights permissions and privileges for customer content. Also sub-account is a parent for the Sharepoint user.

- Virtual FTP Server: allow or disallow your customers to let their friends and colleagues download, upload or view files in the dedicated directories.
- Anonymous FTP Server: allow or disallow your customers to let anybody else download, upload or view files in the dedicated directories.

- Custom DNS Record: allow your customers to create new custom DNS records.
- Shell Access: allow your customers to access and operate their accounts through Shell.
- Crontab: enable your customers to clock and run their own Unix shell scripts automatically.
- Kanoodle: enable your customers to promote their website.
- RLimitCPU: checking the box will restrict the CPU usage by users' cgi scripts.
- RLimitCPU Min set the soft resource limit in seconds per process.
- RLimitCPU Max set the maximum resource limit in seconds per process.
- RLimitMEM: checking the box will restrict the memory usage by user' cgi scripts.
- RLimitMEM Min set the soft resource limit in bytes per process.
- RLimitMEM Max set the maximum resource limit in bytes per process.
- RLimitNPROC: checking the box will restrict the number of simultaneous processes per user.
- RLimitNPROC Min set the minimum number of processes.
- RLimitNPROC Max set the maximum number of processes.
- **Site Studio**: allow your customers to use a powerful site construction tool enabling them to create a professional-looking site in a matter of minutes.
- MySQL, MS SQL, PGSQL: allow or disallow your customers to create and use their own databases.

Settings

- Money Back Guarantee: the period in days after pay registration when users can claim back the recurrent fees they have paid if they decide to quit hosting services. The Money Back amount does not include the Setup Fees and is not affected by the refund percentage. The blank field sets it to zero, which disables the feature. Immediately takes effect and influences existent accounts. Recommended Value: less than 1 billing period.
- E-mail Order Confirmation: set the system to send e-mail copies of order confirmations to users registered under the plan. Note:
 - e-mail invoices are sent to the e-mail address user provides in his billing info or contact info (in the absence of the first)
 - the default can be overridden by individual user settings
 - toggling the option doesn't affect settings of the existing users
- Billing Type:
 - Paid: no trial period available.

Note: don't switch to without billing.

- Trial: paid plan with trial period available. Check the box to enable trial registration for this plan. If the box is checked, you will have to fill in the following fields too:
 - Duration: enter the duration of the trial period in days. Usually trial period does not exceed one month.

Credit Limit: maximum amount of credit a trial user can run up acquiring paid resources. If you set Trial Credit Limit to zero, trial users will be able to acquire only free resources. Usually this amount either equals the initial registration payment plus the recurrent fee for one payment period, or exceeds it a bit to enable trial users to buy some extra resources. After this amount has been reached, the user cannot purchase any more resources.

Note: decreasing the trial period affects already signed up trial users so their trial time is 'cut'. Their accounts can be suspended if they have had their accounts more than the trial period is set to.

- Zero out the balance before changing payment type from Trial to Paid: checking this
 option will prevent clients from charging for the resources used during the
 trial period. It will be reflected in their billing statement.
- Without billing: a totally free plan. Accounts registered without filling in the billing forms. Note: don't switch to paid.
- Credit Limit: amount of account's 'expenses' to be accumulated until it is charged.
- Default IP type: define the kind of IP user domains will get at signup (shared or dedicated). Each new user to signup for this plan will be given this kind of IP. Recommended value Shared. Note that:
- In the case of dedicated IPs, when you run out of dedicated IPs, newcomers won't be able to signup.
- Changing this parameter doesn't affect existent domains. Only new domains created under reconfigured plan will get the defined IP type. This is done either at signup or in the existent account.
- Shared IP Tag: a digital "mark" that is assigned to all accounts created under this plan. All sites located on the same logical host are usually assigned the same shared IP. Shared IP Tags allow dedicating a different shared IP to a group of sites. Possible uses:
 - hosting sites in different plans on different shared IPs:
 - hosting resellers' end customers on different shared IPs;
 - using different wildcard certificates for resellers and the parent host;
 - hosting sites of explicit nature on a different shared IP. This may become necessary as some corporate firewalls filter sites by their IPs, not domain names, which may block other sites with the same IP.

To use this feature, you must already have this tag (or tags) defined for all logical hosts (see also Instant Alias Templates (on page 95)). Recommended value 2.

Note: don't change the shared IP tag in Windows based plans if they have live accounts.

In Unix based plans changed shared IP tag immediately shows up in the system control panel interface, however it actually takes effect only when the changes to the server configuration are applied.

Instant alias appearance for given shared IP tag: select a template to create user instant aliases. Instant aliases are based on your domain names and allow users to view their sites without using their own domains. The example of an instant alias appearance is username.kNNN.example.com, where kNNN is the name of the logical server, on which user's account is located. Changes to this parameter will apply only to new domains, while the existent domains will retain the 'old' shared IP tag.

- Stopgap domain appearance for given share IP tag: select a representation for user stopgap domains. Stopgap domains will allow users to maintain their sites and access them using instant domain aliases. Stopgap domain is not a real domain and does not allow the user to have any domain name, DNS zone, and e-mail service. However, stopgap domain users can have IP-only access if they purchase a dedicated IP. Changes to this parameter will apply only to new domains, while the existent domains will retain the 'old' shared IP tag.
- Demo only mode allow creating demo end user accounts to demonstrate the capabilities of Parallels H-Sphere without having to use real resources. In demo mode, resources and services aren't created or used, but their creation and usage is simulated in the user control panel. For instance, users can create mailboxes, and the control panel will behave as if the mailboxes have been created, but in fact they haven't.

Subsequent Steps. Setting Prices

On subsequent steps, set prices and quotas for this plan. To enter the price configuration pages, don't check the **Leave registrar prices as they are** on step 1.

To limit amounts of resources users can obtain, set the Max values in plan wizard:



MySQL Plan Wizard

The plans created with this wizard allow customers only to create and use MySQL online databases. The customer can authorize individual Internet users to connect to the MySQL database and use it from any remote location.

Windows Plan Wizard

Windows plans are created similarly to Unix plans (see Unix Plan Wizard). The only difference is that you can include:

- MS Sharepoint to allow your clients install Windows SharePoint Services on their domains
- MS Sharepoint User to allow your clients create users within their Windows SharePoint Services
- Dedicated Application Pool to enable your clients create dedicated application pools introduced by IIS 6.0 right from their user cp
- Web Directory to enable your clients create web directories with two authentication levels and different sets of permission right from their user cp
- Web Application to enable your clients assign web applications to web directories, in the same time choosing a shared or a dedicated pool for each application
- Virtual Directory to enable your users create virtual directories and reorganize data
- ColdFusion Module to enable your users to maintain sites created by ColdFusion
 (Third party commercial products such as ColdFusion, MS SQL server, Real Server,
 and Miva are purchased separately and should be installed prior to Parallels H Sphere)
- ASP resource to enable your users maintain sites created by means of ASP
- ASPSecured to enable your users to manage access to their site resources creating their own groups and users
- ASPSecuredLicense to enable your customers to use ASPSecuredLicense for multiple sites
- ASP.NET to enable your customers to use .NET applications
- MS SQL Manager to enable your customers to manage their MS SQL databases through a web-interface with ASP Enterprise Manager
- ODBC Service: allow your customers to use ODBC resource and manage databases by means of its drivers.
- ODBC DSN Record: allow your customers to have system DSN records based on ODBC drivers.
- CF DSN Record: allow your customers to have system DSN records registred in ColdFusion.

Note: you can't create Windows plans, unless you have 'Windows' physical servers. **Not configured** means that your system lacks servers pertaining to the services to be run under the plan.

Windows RealMedia Plan Wizard

You can't create Windows RealMedia plans unless you have a winbox with properly configured RealServer.

E-mail Plan Wizard

E-mail plans are created similarly to Unix plans (see Unix Plan Wizard). The only difference is that they don't include any resources other than domain, mail and Custom DNS record. Stopgap domains are not supported.

To set the maximum number of resource units a user can buy under this plan, go to INFO -> Plans -> Resource -> Edit (next to the selected resource) -> the Max field

VPS Plan Wizard

VPS plans are created similarly to Unix plans (see Unix Plan Wizard). The only difference is that you can include

- VPS memory limit: check to restrict memory consumption by one VPS account.
- VPS process limit: check to set the maximum number of simultaneous system processes.
- Summary Disk Usage: mandatory resource. Users will be charged for the actual disk space used (on page 300).
- VPS context RSS limit: the maximum resident/virtual memory usage for processes running and libraries loaded on a VPS server.
- VPS files limit: the maximum number of file handlers opened inside a VPS server.
- VPS TCP sockets limit: the maximum number of TCP connections established on a VPS server.
- VPS CPU hard limit: the maximum CPU usage (of all host server CPUs) for a VPS server.
- Custom DNS Record: check to enable creating custom DNS records (on page 99).
- VPS server details: returns technical server info.

Markup Plan Wizard

Markup plans are created on the base of other hosting plans configured to allow reselling.

- 1. To allow reselling of a plan, go to Plans -> Manage, click the Settings icon in the Advanced column next to the plan you would like to configure as available for reselling and turn on the option "This plan can be resold". Otherwise when creating a markup plan it won't list this plan as available for reselling.
- Go to Plans -> Create and choose Create a markup plan at the bottom of the form.
- 3. On the form you will be taken to, pick a base plan for your markup plan.
- **4.** On the first wizard step can change only Settings options (on page 360). You cannot exclude predefined resources.
- **5.** On subsequent wizard steps set retail prices. Base plan prices are displayed in square brackets.

Admin Plans

This document explains how to create and edit administrator plans. Administrator plan wizards allow creating Tech Support, Billing and other admin plans.

Creating Admin Plans

- > To create an admin plan:
- 1. Select Create in the Plans menu.
- 2. Select Administrator plan wizard. Allow admins to do the following:



Plan name: enter admin plan name.

Signup Admin: sign up new users (on page 464).

Compatible Plan Groups: arrange compatible plans in groups.

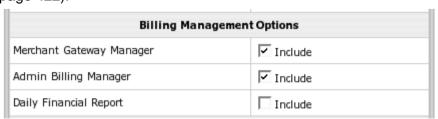
Support Center Options	
Login as user	✓ Include
TroubleTicket Admin	☑ Include
Allow assignment of trouble tickets	
Account Preview	✓ Include

Login as user: log into users' accounts.

TroubleTicket Admin: answer users' trouble tickets.

Allow assignment of trouble tickets: assign users' trouble tickets to other tech support

Account Preview: view users' contact and billing info and other account details (on page 422).



Merchant Gateway Manager: configure merchant gateways (on page 181).

Admin Billing Manager: administer users' billing: debit and credit users' accounts, view reports.

Daily Financial Report: create daily user reports (on page 434).

Third Party Packages Management		
Domain Registrar Manager	✓ Include	
Miva Merchant License Manager	☐ Include	
Urchin License Manager	☐ Include	
Kanoodle Manager	☐ Include	
Site Toolbox	☐ Include	
SpamAssassin Manager	☐ Include	

Domain Registrar Manager: set connection and prices for Enom&OpenSRS (on page 155) domain registrars.

Miva Merchant License Manager: add Miva Merchant licenses (on page 559).

Urchin License Manager: add Urchin licenses.

Kanoodle Manager: sign up as a Kanoodle.com Referral Partner (on page 564) from

Parallels H-Sphere.

Site Toolbox: configure and enable Site Toolbox utility

SpamAssassin Manager: configure SpamAssassin (on page 567).

System Management Options		
Admin DNS manager	✓ Include	
Enterprise Manager	Include	
Recreation tool	☐ Include	
Shell Requests Manager	✓ Include	
Dedicated Server Manager	☐ Include	
	Next	

Admin DNS manager: manage DNS settings.

Enterprise Manager: manage logical and physical servers. **Recreation Tool:** recreate user resources (on page 303).

Shell Requests Manager: acknowledge users' shell access (on page 467) requests.

Dedicated Server Manager: manage Dedicated Servers.

- 3. Click **Next** to complete plan creation.
- **4.** Once the plan is created, turn this plan ON in the **Signup Access** section on the plans page in order to allow signups.

Use this plan to create administrative plans for all purposes.

Editing Admin Plans

- To edit admin plan:
- 1. Go to the Plans -> Manage page and select necessary plan.

- 2. On the Plan Edit Wizard, make necessary changes by checking/uncheking resources.
- 3. Click Next to confirm changes.

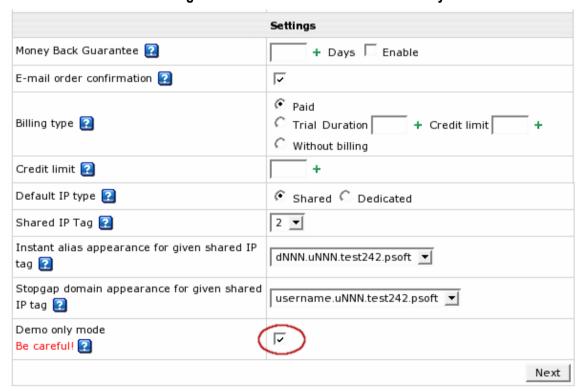
Demo Plans

This section explains how to create demo plans using plan creation wizards. Demo plans allow creating demo end user accounts to demonstrate the capabilities of Parallels H-Sphere without having to use real resources. In demo mode, resources and services aren't created or used, but their creation and usage is simulated in the user control panel. For instance, users can create mailboxes, and the control panel will behave as if the mailboxes have been created, but in fact they haven't.

You can apply demo mode only to end user plans. You can't have reseller demo plans.

Demo plans, similarly to regular plans, are created with Plan Creation Wizards:

- 1. Select Create in the Plans menu.
- 2. In the list of plans select the plan.
- 3. On Step 1 of the wizard, enter a name for the plan and choose the resources you want to demonstrate in the user demo control panel. *Note:* In user control panels, many resources will show as disabled even if you include them into the plan. See below for their list.
- 4. Scroll down to the **Settings** section and check the **Demo Only Mode** box.



Important: You won't be able to turn this option off in the plan editor later.

- 5. Click Next to proceed. Skip domain registration page if it appears.
- **6.** Step 2 shows the fields to enter free amount of resources necessary for the system to operate.



Note: You don't need to enter prices or free units.

- 7. Click **Next** to complete plan creation.
- **8.** Once the Demo plan is created, go back to **Manage** in the **Plans** menu and turn the newly created plan ON for user signups.
- If you want to create more payment periods for the plan, go to Plans -> Manage -> Settings and add as many payment periods as you need.

Now that the plan is created and enabled, users can sign up for it and navigate their control panels. If they like the system and want to go ahead and buy it, they will have to sign up again under a paid plan. Demo Mode doesn't allow switching plans.

Remember that a demo account takes a user license like any other Parallels H-Sphere user account.

Demo plans demonstrate how to:

- Transfer domains previously created
- Add subdomains
- Add Stopgap domains
- Create Third level domains
- Add domain aliases
- Create Parked domains
- Use Trouble Ticket support system
- Add Front Page extensions
- Change disk quota and traffic usage
- Change billing period
- Create MySQL, MS SQL and PgSQL databases
- Set Summary Disk Usage
- Create FTP sub-account additional logins and passwords to main directory

View Error, Transfer, and Agent logs Demo plans don't allow to:

- Have a home directory on the web server
- Have mailboxes and other mail resources
- Have MySQL / PGSQL / MS SQL databases
- Register domains through the domain registrars
- Create Service Domains
- Use Site Studio site construction tool
- Use third party products such as Miva, osCommerce, Modlogan, Webalizer, cgi scripts, etc.

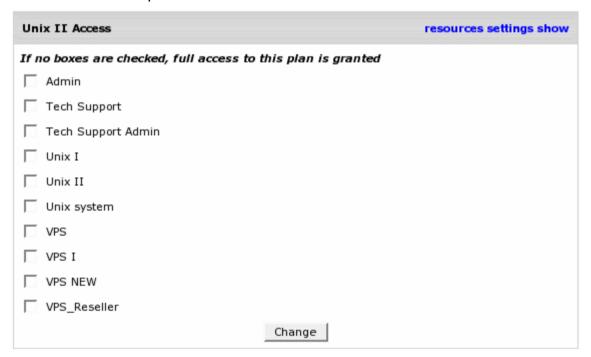
Access to Plans

This section explains how to set permissions to plans, i.e. who can create accounts under given plans.

Accounts can be created from outside the control panel ("from the street") or from existing accounts in Parallels H-Sphere. An account can be created "from the street" if it has unrestricted access. You can also restrict plan access to users of selected plans or only to administrators.

> To set up plan access:

- 1. Select Manage in the Plans menu.
- 2. Click Access for the plan to restrict access to.
- 3. Check authorized plans:

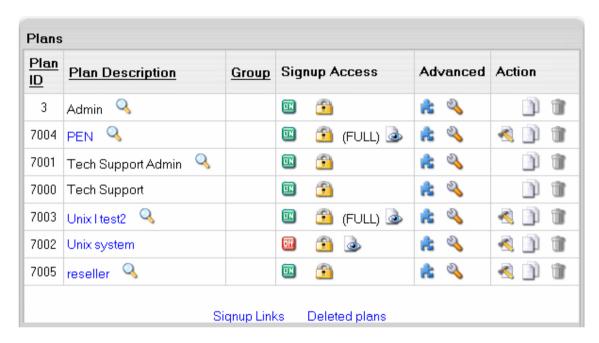


- Admin only: To make this plan available only to the administrator, check only
 Admin. For example, all Admin level plans should be unavailable to other users other than administrators.
- Registered Users: To make this plan available only to registered users under specific plans, check these plans in the list.
- Full access: To make this plan available "from the street", uncheck all plans in the list.

Plan Controls

This section describes the advanced plan controls. However it is recommended to avoid using them, if the same task can be done with the plan edit wizard.

To access plan controls, enter the administrator Control Panel and go to **Plans** menu -> **Manage**. Here you can see a list of available plans and multiple control options to handle the plans:



- Clicking the lens icon near the plan will start the signup wizard (on page 464).
- ON/OFF icon: turn the plan ON to enable signup under the plan for all users including admin. Turning it OFF will disable signup and with it all plan settings will be preserved.
- Access (on page 272) set permissions to create accounts under a plan for the users of other plans. FULL against the plan identifies that full access to this plan is granted.
- Show: select resources that will show on signup pages for the plan.
- Settings (on page 276) configure template locations. This page is partly reserved for Parallels H-Sphere development and should not be used in production control panels.
- Edit in the Action section click to open the Edit Plan wizard.
- Copy: create a copy of this plan. You may need this option to create a new plan based on the selected plan.
- Delete: delete a plan.

Show

This pages shows all resources included into the plan in the Plan Creation Wizard. Here you can select resources that will show to users on signup wizard pages.

Check resources to display on signup pages for "Unix 1" plan resources settings access
☑ Server Side Include
☑ SSL Module
✓ Webalizer Resource
☑ Mime Type
☑ Email Auto Responder
Mail Forward
✓ Anonymous FTP Server
☑ Virtual FTP Server
Change

Simply check all necessary resources and click Change.

Copy

Alternatively to the Plan Creation Wizard, you can use this feature to create custom plans based on the predefined plan samples. To create a new plan, click **Copy** for the selected plan sample. The newly created copy will appear in the plan list. You can now modify it according to your needs via Plan Edit Wizard or above discussed configuration tools.

Delete

Although deleting plans is quite a rare procedure (as plans are essential part of the whole system), you may want to delete needless or harshly created plans.

To delete a plan, click the **Trash** icon in the selected plan entry.

Warning: Deleted plans cannot be restored by any means! Do not delete any of the system default plans because they serve to create custom plans!

It is impossible to delete a plan if there is at least one account created under it. In other words, you can delete only the plans without any accounts.

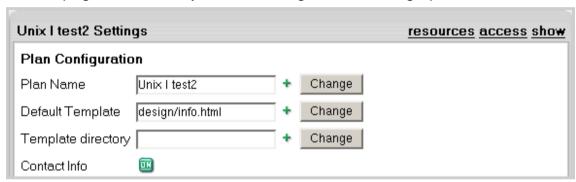
To see your deleted plans list, click the **Deleted Plans** link under the **System Plans** chart on the **Plans** page, **Info** menu.

Plan Settings

Plan settings on the **Plans** page allow to configure template locations, payment intervals and promotions.

> To access plan settings:

- 1. Enter the administrator Control Panel and select **Manage** in the **Plans** menu.
- 2. Click the Settings icon in the Advanced section for the target plan.
- 3. On the page that shows you can manage the following options:



This page is reserved for Parallels H-Sphere development and debugging and should not be used in production control panels.

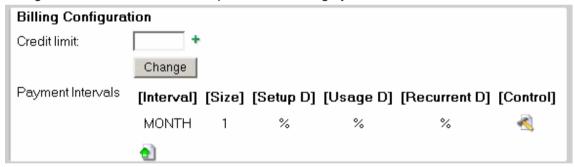
- Plan Name: this is the only place where you can edit the name of the plan.
- Default Template defines the page that opens when a user logs into the control panel. To specify a custom page, enter the file name and the path relative to the template directory. If your template works incorrectly, you can remove it to return to the system defaults.
- **Template Directory** specifies the name of the directory with templates used by this specific plan. If a template is not found in this directory, the system takes generic Parallels H-Sphere template with the same filename.

For example, you have a plan called 'SPECIAL', where the Template Directory parameter is set to special/ and the current skin is set to 'No Menu'. When the system tries to find, for instance, the design/login.html template, it will first scan the ~cpanel/shiva/shiva-

templates/nomenu/replacements/special/design/ directory, and if fails, it moves on to the ~cpanel/shiva/shiva- templates/nomenu/design/ directory in search of this template.

As seen from the above, the Template Directory parameter is NOT used for creating custom templates. Instead, when a new plan is added to the system, plan-specific templates are placed in this directory. Besides that, when you customize Parallels H-Sphere templates, you should check the replacements/ directory of each design location for plan-specific templates and customize them if necessary.

• Contact info: it's highly recommended to use this feature only for admin plans! With this feature turned OFF, user contact info will be unavailable which will disable billing for all accounts under this plan and sending system email notifications.



- Credit limit: enter a credit limit for the plan. Read more in Credit Limit (on page 319) documentation.
- Payment Interval: enter how far in advance recurrent fees for billing period resources are prepaid. Read more about Creating Billing Periods (on page 322).



Promotions management: assign flexible discounts to the particular plan. One plan can have several associated promotions (on page 342).

Custom Value	98	
menuld	unix	
	Submit	
Add Custom \	/alue	
Name		
Value		
	Submit	

Custom Values: menuld: in Parallels H-Sphere, each plan type has its own corresponding menu configuration. These menu types are configured in the /hsphere/local/home/cpanel/shiva/psoft/hsphere/menu.xml file. We use the menuld variable to specify the menu type. These are the standard menu types for the corresponding Parallels H-Sphere plan types:

```
unix - Unix plan;
admin - Admin plan;
ttadmin - Trouble Ticket Admin plan;
bill - Billing plan;
reseller - Reseller plan;
winduz - Windows plan;
real - Real Server plan;
mysql - MySQL Only plan;
email only - E-Mail Only plan;
vps - VPS plan.
```

You can add your custom menu to menu.xml and specify the custom menuId in the form to assign it to the plan. In menu.xml, you should add the new menudef tag:

```
<menudef id="custom menuId">
</menudef>
```

Note: Menu customization should be done very carefully, according to the Menu Customization Documentation (Customization Guide).

WARNING: If you set an incorrect value to *menuld* or leave this field empty in the form, the left menu in your Control Panel won't show up!

Add custom value: don't add them unless you definitely know how to use them.

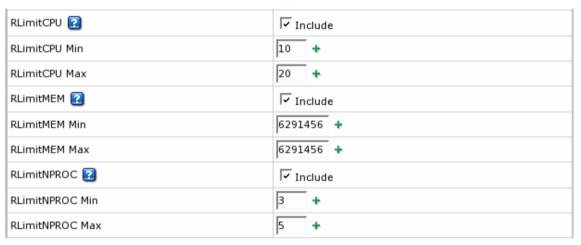
Controlling RAM And CPU Usage

To prevent overconsumption of your server's resources by users' cgi scripts, you can use Resource Limit Controls. It allows you to control the usage of the CPU, memory and server processes on the box with the web server.

* RLimit Controls use directives of Apache 1.2.X modules and, therefore, are not applicable for Windows hosting.

Enable RLimit in Plans

To apply RLimit to user scripts under a certain plan, scroll down to the **Other** section of the Plan Edit Wizard Step 1. It lists the following resources:



- RLimitCPU restrict the strain of CPU usage.
- RLimitCPU Min set the soft resource limit in seconds per process.
- RLimitCPU Max set the maximum resource limit in seconds per process.
- RLimitMEM restrict the memory used by processes run on the server.
- RLimitMEM Min set the soft resource limit in bytes per process.
- RLimitMEM Max set the maximum resource limit in bytes per process.
- RLimitNPROC restrict the number of the processes run simultaneously.
- RLimitNPROC Min set the minimum number of processes.
- RLimitNPROC Max set the maximum number of processes.

Configure RLimit Values

In most cases the default values are the best to prevent overconsumption of system resources on the one hand and allow correct performance of cgi scripts on the other. To set custom values for these resources, select **Manage** in the **Plans** menu. Then, click the **resources** link next to the plan you would like to edit. On the page that appears, find:

RLimitCPU	The Min parameter sets the soft resource limit for all processes and the Max parameter sets the maximum resource limit. CPU resource limits are expressed in seconds per process.
RLimitMEM	The Min parameter sets the soft resource limit for all processes and the Max parameter sets the maximum resource limit. Memory resource limits are expressed in bytes per process.
RLimitNPROC	The Min parameter sets the soft resource limit for all processes and the Max parameter sets the maximum resource limit. Process limits control the number of processes per user.

Don't change any parameters other than Min and Max.

WARNING:

Enabled RLimitMEM may affect the performance of certain CGI scripts and may result in FrontPage, Miva, and AWStats failures. Users may get the "premature end of script headers" message. Therefore, you should disable RLimitMEM if your customers use FrontPage, Miva, and AWStats, because these products use a lot of RAM. For more info, please refer to Apache Documentation: What does it mean when my CGIs fail with "Premature end of script headers"? (http://httpd.apache.org/docs/misc/FAQ-F.html#premature-script-headers)

The above changes will be applied only to accounts created thereafter. If you need to apply these changes to a specific existing account, enter this account's control panel, go to the **Web Options** page, and click **Apply Changes**.

Limiting Resource Use For Individual Accounts

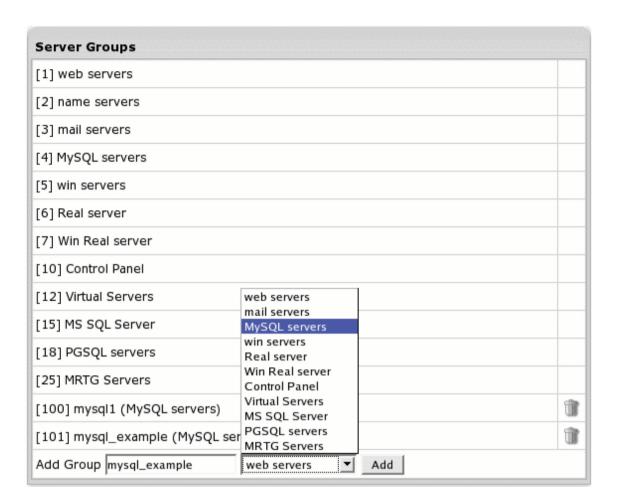
- To switch RLimitMEM OFF for one account in a plan where RLimitMEM is ON:
- 1. Switch RLimitMEM OFF for the whole plan
- 2. Enter this accounts' control panel
- 3. Go to the Web Options page
- 4. Click Apply Changes
- 5. Go back to your administrator control panel
- 6. Switch RLimitMEM back ON for the whole plan

The reverse procedure can be used to switch RLimitMEM ON for one account in a plan where RLimitMEM is OFF.

Placing Plans on Particular Boxes

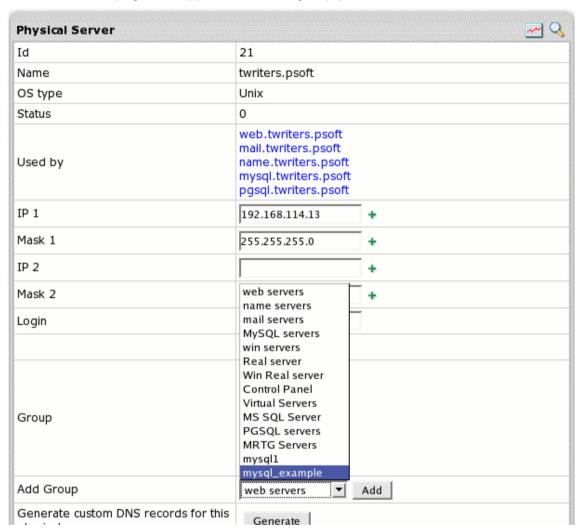
To associate a particular plan with a particular box:

Step 1: Go to **E.Manager** -> **Servers** -> **Server Groups**. Create groups of servers for each type (web, mail, Real, MS SQL etc.) of servers 'in charge' of the services that you intend to include in the plan:



When added, they will show up in the numbered list.

Step 2: Go to **E.Manager** -> **Servers** -> **P.Servers**. Click the name of this physical server. At the bottom of the page that appears, select a group you have created:



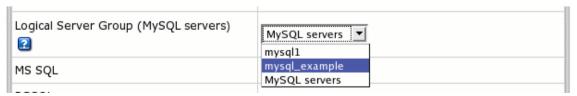
and click the **Submit** button. The name of the group will appear in the **Group** field. This means that this group will now be located on this physical server. Perform this procedure for each of the created server groups to get all of them assigned to appropriate servers.

Step 3: On the **Logical Servers** page, click the **Add Logical Server** link. On the page that appears, enter its name (e.g. gold.web.mycompany) select the group and this particular physical server which you assigned it to on the previous step, define server type and choose from the physical servers that have the same group. Finally, you should get the form filled out in a similar way:

Add Logical Server		
Name	example.psoft	+
Group	mysql_example 💌	
Server Type	UNIX 🔻	
Physical Server	twriters.psoft	
Description	just an example	+
File Server		
Edit file path		
Submit		

Submit the form.

- **Step 4:** On the Logical Server settings page, add the IPs (on page 48) that you want to use for accounts registered at this logical server. Define their type. Set shared IP tag.
- **Step 5:** In the upper part of the same Logical Server settings page toggle the **Available for signup** button to **ON**.
- **Step 6:** The same way create and configure new logical servers for each type (web, mail, Real, MS SQL etc.) of servers 'in charge' of the services that you intend to include in the plan, in case you want the appropriate resources, that your users will enable, to be created on different boxes.
- **Step 7:** Launch Edit/Creation Wizard for the plan that you intend to place on particular servers. In each section you will be prompted to select Logical Server Group where you want to create the included type of resources. Select the one assigned to that particular physical server:



Mind, these settings will not affect existing accounts. Only new accounts will be created on the designated server.

^{*} File Server and File Path fields are reserved for future implementations.

Resources

In this section we consider types of resources provided in Parallels H-Sphere.

In this chapter:

Users, Accounts, Domains	285
Traffic	290
Disk Space	300
Recreating Resources	
Blacklists in Parallels H-Sphere	

Users, Accounts, Domains

On the user side, Parallels H-Sphere operates with three tiers:

- users
- accounts
- domains

In this section:

Users	286
Accounts	
Domains	

Users

A user is, for the most part, nothing but a login and password to enter Parallels H-Sphere control panel. One user can have many accounts created under different plans and platforms, and switch between them without having to log in every time. For example, a user can have an account under a Unix plan for SSH access and an account under a Windows plan for ODBC and ColdFusion hosting.

Parallels H-Sphere has a service user (wwwuser) that owns the service account for hosting the service domain. See next section for more details.

Accounts

Parallels H-Sphere primarily operates with accounts, not users. One account, also referred to as *CP account*, can be defined as an instance of a plan. One account regardless of its type (administrative, reseller, reseller administrative or user), requires one license. Once an account is deleted, the license gets released and can be taken by new accounts.

One user can have many accounts created under different plans and platforms, and switch between them without having to log in every time. For example, an owner of a Unix account and a Windows account under the same username will use two Parallels H-Sphere licenses. The unique thing about each account is not username, but a numeric account ID.

The four account types are:

Account Type	Variations	Main Functions	Created	FTP home directory
Administrati ve	main admin	- allows Parallels H-Sphere owner to administer the entire hosting system	with administrative	N/A
	tech support	- allows Parallels H-Sphere owner's support staff to manage/answer trouble tickets from customers	- plan	

Reseller	N/A	- represents reseller as a user to the system and distributor of parent host resources - allows reseller to create reseller administrative account	with reseller plan	N/A
Reseller Administrati ve	admin	 represents reseller as an administrator to their customers allows reseller to distribute parent host resources grouped into plans to their customers at retail prices 	from reseller account CP	N/A
	tech support	- allows reseller's support staff to manage/answer trouble tickets from customers	from reseller administrative CP with administrative plan	N/A
User	customer	- provides Parallels H- Sphere owner and resellers with a 'medium' to distribute hosting services to customers - allows customers to manage their sites	with user plans	YES
	service	- allows Parallels H-Sphere owner and resellers to manage their promotional corporate sites		

Multiple Accounts

Depending on account's plan permissions (on page 272) its owner can create other accounts of the following types under the same login:

User's Original Account Type	Accounts that User Can Add Under the Same Login
administrative	- administrative - user
reseller	- user - admininstrative
reseller administrative	- reseller administrative - user
user	- administrative (valid only for parent host's users) - reseller (valid only for parent host's users) - reseller adminintrative (valid only for reseller's users) - user

Generally, a user with several accounts can:

- * login to different accounts with one login/password
- * switch between accounts without logging in every time
- * have accounts under different plans and platforms
- * use the same billing and contact information for different accounts (optional)

> To create a new account under the same user:

- Select Add Account in the Admin User menu. You will be taken to the signup page.
- 2. Follow the signup process. Note that the system suggests the contact information previously entered for the first account created under this user.

To switch between accounts within the same user:

- 1. Select Choose Account in the Admin User menu.
- 2. Click the **Select** icon to log into the selected account.

Domains

Domains represent the third tier in the end-user side hierarchy. Your customers can have as many domains as they want under their one control panel license, unless you limit the domains they can have. In terms of a web server, a domain is little more than a correspondence to a web-site. Domains within one account share one control panel (one menu tree with the same look and feel), and, having no traffic usage or disk quota of their own, are billed in bulk with the same invoices.

It is not recommended to run more than thirty or forty domains on one account, because some pages of the user control panel may become very slow or even time out when displaying the entire list of domains.

To provide registration and maintenance of the following domain types from user accounts make sure service DNS zone (on page 93) is registered, instant alias template (on page 95) is created, and there is shared or free dedicated IP on the web server (on page 48).

Domain Type	Explanation
second- level	new standard domains registered with a domain registrar Important: In addition to the above requirements, make sure domain registrar (on page 155) is configured.
transfered	existing domains transfered onto one of your Parallels H-Sphere's IP
third-level	new domains created based on the hosting company's service domain, e.g.user-domain.service- domain.com
stopgap	not an actual domain, just FTP service; the site can be accessed from the Internet by an instant domain alias (on page 95) or dedicated IP
parked	domain hosted elsewhere; a DNS zone mapping this domain to the IP of the server where your site is hosted.
service	 domain to: host your promotional site (on page 103) provide third level domain hosting (on page 106) provide shared SSL (on page 140) provide instant access to the site through domain aliases (on page 95)

To offer registration and maintenance of any of the above domain types, include the corresponding resource in the account's plan creation/edit wizard.

> To delete domains of a user:

- 1. Find the account by domain name (on page 413)
- 2. Click the Trash icon next to the domain you want to delete
- 3. On the page that appears, chose the Delete domain option

Traffic

This document explains how Parallels H-Sphere handles traffic and covers the following issues.

In this section:

Traffic Calculation	291
Traffic Limit	291
Traffic Pricing	291
Restricting Traffic Usage and Traffic Limit	
Charging for Traffic	
Traffic Configuration Changes	
Tracking End User Traffic Consumption	

Traffic Calculation

Parallels H-Sphere Control Panel calculates traffic per server, e.g. web server, mail server, Windows server, etc. with its own built-in utility that collects data from:

mail traffic logs with /hsphere/shared/scripts/cron/mail_anlz.pl
ftp traffic logs with /hsphere/shared/scripts/cron/ftp_anlz.pl
http traffic logs with /hsphere/shared/scripts/cron/cron analyze.pl,

parses them every 24 hours with java psoft.hsphere.TrafficLoader and then adds up to make up Summary Traffic. Summary Traffic statistics is updated every 24 hours and is shown to end users in their Control Panels. Because of that, Summary traffic doesn't include the current day's traffic consumption.

Traffic Reset. Calculation of Traffic Overlimit Usage

Regardless of account's billing period (on page 322), charges for exceeding traffic limit (on page 322) are calculated and traffic run up is reset at the end of each month. No user side account activities (changing billing period or switching to another plan) force traffic month closure. For example, if a customer signs up on March 7 for a billing period of 6 months, traffic month will always close on the 7th of each month.

Types of Traffic

Summary Traffic is not broken up into incoming or outgoing. Nor is it differentiated by the platform (operating system), however users can see **Traffic Details** for specific kinds of traffic consumption such as FTP User, Mail, HTTP, Real Server FTP traffic, etc.

Third Party Tools

Third party tools like ModLogAn, Webalizer, etc. can also be used to calculate the *HTTP* traffic statistics on users' domains. Since these tools generate statistics only for HTTP traffic, it will always differ from control panel Summary Traffic readings.

Traffic Limit

Traffic Limit defines how much traffic users can run up for one traffic month without being charged usage fee. Initially traffic limit equals free set for the plan. If users have or expect high hit rates, to prevent overlimit charges, they can reserve more traffic. With their traffic limit increased, each traffic month users will be accrued recurrent fee for the whole booked amount, which is usually lower than the usage (overlimit) payments.

Traffic Pricing

Traffic prices are set with plan edit wizards.

 Free*: GB of traffic you allow your users to run up during one traffic month free of charge.

Free makes up initial traffic limit.

Note: free GB of traffic set explicitly for two and more month billing period are not divided by the duration of the billing period in months.

E.g.: setting 10GB free for two month billing period, you allow your customers to run each month 10GB (not 5GB) without being charged.

- Recurrent: payment accrued each traffic month for each GB of difference between the traffic limit and free units. If the traffic limit is the same as free units, no recurrent fee is charged.
 - If users increase their traffic limit in the middle of a traffic month, they are accrued **absolute** (not prorated) recurrent fee for the whole traffic month.
 - E.g.: increasing traffic limit by 5GB on the 15th day of the traffic month means that the user will be immediately charged the recurrent fee for the 5GB for the whole traffic month.
 - Recurrent payments are non-refundable if users fail to use the reserved traffic.
- Extra or Usage: overlimit payment accrued at the end of each traffic month for each GB consumed over traffic limit.
 - The pricing for extra traffic is fractional, per KB. So if you set the price of \$1/GB, and the user consumes only 10MB overlimit, he will be charged \$0.01.
- * When increasing plan's free traffic, use mass mail (on page 535) to let the customers under this plan know they need to increase their traffic limit to new free in their user CP without any charges.
- * When decreasing plan's free traffic, use mass mail (on page 535) to let the customers under this plan know they need to decrease their traffic limit to new free, otherwise they will be charged recurrent fee.

Restricting Traffic Usage and Traffic Limit

Traffic usage can be restricted, which means when end users run up a certain amount of traffic, their sites will get suspended, and visitors won't be able to see the pages, and mailboxes and virtual ftp accounts will stop working. To configure the system to suspend user accounts when their traffic limit is exceed by certain percentage:

- 1. Select User Warnings in the Settings -> Notifications menu.
- 2. Check the Suspend account if traffic limit exceeded box.
- Enter percentage of the traffic limit usage, exceeding which user accounts will be suspended.

Also, you can restrict the maximum possible traffic limit end users can set. To set the Max value:

- 1. Select Manage in the Plans menu.
- Click Resource for the selected plan.
- 3. Click Edit for the Summary Traffic resource.
- **4.** In the **Max** field, enter the maximum allowed traffic limit value (in GB).

Charging for Traffic

Examples below, starting with easy further to more difficult, illustrate how end customers are charged for using traffic.

Staying within traffic limit doesn't cause any overlimit charges:

Plan & Account Settings:	Traffic consumption:	System Behavior:
Free = 10GB; Recurrent = \$2; Usage = \$4; Traffic limit = Free	By the end of the traffic month user runs up 9GB.	 Traffic month closes. Traffic usage is calculated, but as user stays within traffic limit, he doesn't pay anything. A new traffic month opens and traffic is reset to 0.

• Exceeding traffic limit brings overlimit (or usage) charges (on page 322):

Plan & Account Settings:	Traffic consumption:	System Behavior:
Free = 10GB; Recurrent = \$2; Usage = \$4; Traffic limit = Free	By the end of the traffic month user runs up 15GB.	- Traffic month closes Traffic usage is calculated and user is accrued usage fee for 5GB overlimit (= 15GB run up - 10GB of traffic limit) Usage fee accrued makes \$20 (= 5GB overlimit x \$4 usage price) A new traffic month opens and traffic is reset to 0.

- Changing traffic limit neither closes traffic month nor resets traffic already run up. Because of that:
 - when reserving more traffic than plan's free GB in the middle of the traffic month, users are immediately accrued absolute (not prorated) recurrent fee for the whole traffic month.

Plan & Account Settings:	Traffic Consumption:	System Behavior:

1 month billing period By January 15, the user - Traffic month doesn't close runs up 9GB and starts Jan 1; on January 15. Free = 10GB: increases traffic limit to - User is accrued absolute Recurrent = \$2; 12GB. recurrent fee for 2GB over Usage = \$4; By January 30, the user free (=12GB of new traffic Traffic limit = 10GB runs up 13GB. limit - 10GB free). - Recurrent fee accrued makes \$4 (= 2GB over free x \$2 recurrent price). - On January 31 traffic month closes. - Traffic usage is calculated, and user is accrued usage fee for 1GB (= 13GB run up -12GB traffic limit). - Usage fee accrued makes \$4 (= 1GB x \$4 usage price). - A new traffic month opens, traffic is reset to 0 and user is accrued recurrent fee for 2GB over free (= 12GB of traffic limit - 10GB free). - Recurrent fee accrued makes \$4 (= 2GB over free x \$2 recurrent price).

when downgrading account traffic limit to plan's free in the middle of the traffic month, users are refunded absolute (not prorated) recurrent fee already prepaid at the beginning of the traffic month.

Plan & Account Settings:	Traffic Consumption:	System Behavior:

1 month billing period By January 15, the user - On January 1 user is runs up 4GB and accrued absolute recurrent starts Jan 1; Free = 10GB: decreases his traffic fee for 2GB over free (= limit to 10GB. 12GB of traffic limit - 10GB Recurrent = \$2; Usage = \$4; By January 30 the user free). Traffic limit = 12GB runs up 9GB. - Recurrent fee accrued makes \$4 (= 2GB over free x \$2 recurrent price). - Traffic month doesn't close on January 15 and 4GB of traffic already run up aren't reset. User is refunded absolute recurrent fee for 2GB of downgraded traffic limit. - Refund of recurrent fee makes \$4 (= 2GB over free x \$2 recurrent price). - On January 30 traffic month closes. - Traffic usage is calculated, but as the user stays within his traffic limit, he pays nothing. - A new traffic month opens, traffic is reset to 0.

 Changing billing period or switching to another plan neither closes traffic month nor resets traffic already run up.

At such occasions the system checks account traffic limit and if:

traffic limit = current plan/billing period free GB, updates it to new plan/billing period free GB:

Plan & Account Settings: Traffic Li	mit and Traffic System Behavior:
-------------------------------------	----------------------------------

■ Source plan:
Free = 10GB;
Recurrent = \$2;
Usage = \$4;
Traffic limit = 10GB;
Traffic month starts
January 1.

Target plan: Free = 50GB By the time the user switches to a new plan, he runs up 14GB.

- Changing plans doesn't close traffic month.
- Traffic charge calculations don't take place.
- Traffic already run up isn't reset.
- Traffic run up for the rest of the traffic month under a new plan is added to 14GB run up under the former plan.
- Traffic limit is upgraded to new plan's free 50GB.
- If by the end of the traffic month user exceeds 50GB traffic limit, he is charged at the new usage price.
- On January 31 a new traffic month opens and traffic is reset to 0.

 traffic limit > new plan/billing period free GB > current plan/billing period free GB.

updates it to new plan/billing period free GB. Users are refunded the absolute *recurrent fee* already prepaid at the beginning of the traffic month:

Traffic Configuration for 1 and 2 Month Billing Periods:

Traffic Limit and Traffic Consumption:

System Behavior:

Traffic limit = 6GB By the time a user on - At the beginning of the traffic 1 month billing period month user is accrued recurrent 1 month billing period switches to a 2 fee for 1GB over free. - Recurrent fee accrual makes Free = 5GBmonth billing period, Recurrent = \$2 he runs up 10GB. \$2 (= 1GB over free x \$2 recurrent price). - At the billing period change, 2 month billing period * set explicitly: traffic month isn't closed. Free = 12GB- Traffic already run up isn't reset. - Traffic run up for the rest of the traffic month is added to 10GB run up before changing to a 2 month billing period. - Traffic limit is updated to 12GB free. - User is refunded absolute recurrent fee prepaid at the beginning of the traffic month. - Refund accrual makes \$2 (= 1GB over free x \$2 recurrent price). - If by the end of traffic month user exceeds 12GB traffic limit, he is charged at a new usage price.

traffic limit > current and new plan/billing period free GB,

leaves it as it is. If the absolute recurrent fee calculated based on new plan/billing period free and the new recurrent price is bigger than the recurrent fee already prepaid, the user is accrued the difference. If it is smaller, the user is refunded the difference:

Traffic Configuration for 1 and 2	Traffic Limit and Traffic	System Behavior:
Month Billing Periods:	Consumption:	

1 month billing period

Free: 5GB Recurrent: \$2

2 month billing period
* set explicitly:
Free = 12GB
Recurrent = \$3

By the time user on 2 month billing period with 14GB traffic limit switches to a 1 month billing period he runs up 15GB.

- At the beginning of the traffic month user is accrued recurrent fee for 2GB over free (= 14GB of traffic limit - 12GB free).
- Recurrent fee accrual makes \$6 (= 2GB over free x \$3 recurrent price).
- At the billing period change, traffic month isn't closed.
- Traffic already run up isn't reset.
- Traffic run up for the rest of the traffic month is added to 15GB run up before changing to a 1 month billing period.
- Traffic limit remains 14GB.
- As recurrent fee calculated based on 1 month billing period free (\$18 = 9GB over free x \$2 recurrent price) is bigger than recurrent fee already prepaid (\$6), the user is charged the difference of \$12.
- If by the end of the traffic month user exceeds 14GB traffic limit, he is charged at the new usage price.

Traffic Configuration Changes

This example shows how changes to traffic configuration in plan edit wizard affect end user charges for traffic consumption:

Plan and account settings:

Free: 2GB

Traffic Limit: 4GB Recurrent: \$3 Extra (usage): \$5 Billing period: 2 months

At the beginning of the traffic month the user is accrued recurrent fee for 2GB over free (= 4GB traffic limit - 2GB free).

Recurrent fee accrual makes \$6 (= 2GB over free x \$3 recurrent price).

In the middle of the first traffic month traffic configuration is changed from the plan edit wizard:

Increasing Prices		Decreasing Prices	
Free	2GB -> 5GB	Free	2GB -> 1GB
Monthly (recurrent)	\$3 -> \$4	Monthly (recurrent)	\$3 -> \$1
Extra (usage)	\$5 -> \$6	Extra (overlimit)	\$5 -> \$2

By the end of the traffic month the customer runs up 8GB.

- Traffic limit remains 4GB.
- Recurrent fee isn't recalculated.
 No refunds.
- Usage calculations are based on new Free as they cover traffic limit and new Extra price:
 8GB run up - free 5GB = 3GB overlimit
 3GB x Extra \$6 = \$18 usage fee.
- Traffic limit remains 4GB.
- Recurrent fee isn't recalculated.
- Usage calculations are based on traffic limit and new Extra price:
 8GB run up - 4GB of traffic limit = 4GB overlimit
 4GB overlimit x Extra \$2 = \$8 usage fee.

The traffic month is closed. User traffic is reset. A new traffic month is open.

- Traffic limit remains 4GB.
- User isn't accrued any recurrent fee as now his 4GB of traffic limit are covered with free 5GB. If by the end of the traffic month user exceeds his free units, he is charged for excess at new Extra price.
- Traffic limit remains 4GB.
- User is accrued \$3 recurrent fee:
 4GB of traffic limit free 1GB = 3GB;
 3GB x \$1 recurrent = \$3.
- If by the end of the traffic month user exceeds his 4GB traffic limit, he is charged for excess at new Extra price.

Tip:

when decreasing plan's free traffic, use mass mail feature available at the bottom of the search result page to let your customers know they will be charged recurrent fee unless they decrease their traffic limit to new free.

when increasing plan's free traffic, use mass mail to let your customers know they can increase their traffic limit to new free without being charged.

Tracking End User Traffic Consumption

To see how much traffic your customers consumed over a certain period, use Transfer Traffic Report (on page 434).

Disk Space

Disk space in Parallels H-Sphere is allocated to customers through *quotas*, which are set separately for:

- user's home directory on the web server
- each user mailbox
- each user database

Quotas are obligatory plan resources and can't be disabled. Customers can't upload and store more MB than the resource quota allows (except for My/Pg SQL DBs) and will get an error message if they try to do so. If end users need to upload more MB than their resource quota allows, they can increase it. To keep users from increasing resource quota, it can be MAX restricted. This is done directly in plan edit wizards

All files with the owner's ID including those outside user's home directory (e.g. *Transfer, Referrer, Agent* and *Error* logs that are used for user website statistics) are counted toward used disk space. That's why quota usage may be different from the size of the user home directory.

Important: when creating a plan for MS SQL DB's service, don't set MS SQL quota of 0MB, as just created MS SQL databases already contain system information of 2MB (for MSSQ 2000) or 3MB (for MSSQ 2005) of disk space!

Summary Disk Usage

Every 24 hours a cron script scans end user's FTP home directory, all mailboxes, and DBs to summarize the disk space and make up *summary disk usage for the last day*. Summary readings of each daily scan are added up and divided by days elapsed from the beginning of the billing month (on page 322). The resulting amount makes up user's *average summary disk usage*.

In this section:

Charging Users for Disk Spa	ace	301
Enabling/Disabling Summar	y Disk Usage	302

Charging Users for Disk Space

There are two approaches to charge customers for disk space. To avoid double billing, don't use both of them in the same plan.

Charging for Increased Quotas

Set free units and recurrent prices (on page 322) for quotas. If end users need to upload more MB than free quota allows, they have to increase it.

- When they increase FTP, mailbox and MS SQL quotas they will be charged recurrent fee for billing period resources.
- When they increase My/PG SQL DB quotas they will be they will be charged recurrent fee for monthly resources.

Important:

Unlike FTP/Mailbox/MS SQL db quotas, My/PG SQL db quotas can be exceeded. If by the end of the month users exceed their My/PG SQL db quotas, they are charged usage (overlimit) fees (on page 322).

Charging for Increased and/or Exceeded Summary Disk Usage Limit
Enable the summary disk usage resource and set free units, recurrent and extra
prices for it. Summary disk usage free units make up user's initial summary disk
usage limit. If by the end of billing month user's average summary disk usage
exceeds it, they will be charged usage (overlimit) fees. To prevent it, users can
increase their summary disk usage limit (unless it is MAX restricted) and be charged
recurrent fee for monthly resources which is usually less than usage (overlimit) fees.

Customers are not refunded if they haven't used up all the reserved disk space. If customers reduce prepaid *quotas* or *summary disk usage limit*, they are refunded as described in Money Returns (on page 339).

Enabling/Disabling Summary Disk Usage

	In a Certain Plan	In All User/Reseller Plans
Enabl e	1. Include Summary Disk Usage in the plan.	Log into the CP server as the cpanel user.
	Log into each existing user/reseller account under this plan and in the Control Area on the left (or Quick Access page, the Account menu for the Left Menu design) press the Add button next to Disk Usage.	 Execute the SummaryQuotaUpdate class: java psoft.hsphere.converter.Summary QuotasUpdate—enable Restart Parallels H-Sphere. Summary Disk Usage free units will be set to equal Free Disk Quota, its monthly and usage prices will be removed.
Disabl e	Exclude Summary Disk Usage from the plan.	Log into the CP server as the cpanel user.
		2. Execute the SummaryQuotaUpdate class: java psoft.hsphere.converter.Summary QuotasUpdate—disable
		3. Restart Parallels H-Sphere.

Recreating Resources

Some resources, if broken, can be recreated with the resource recreation manager. They include:

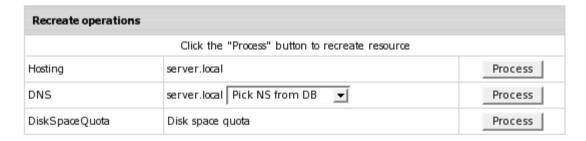
- Disk Space Quota for Unix and Windows platforms
- DNS

Hosting The resources are recreated in three steps:

- 1. The configuration of the resource and dependent resources is gathered;
- 2. The resource and the dependent resources is deleted;
- 3. The resource is created anew and configured with the original settings.
- > To run the resource recreation manager:
- 1. Find the account using the Search utility.
- 2. Click the Recreate icon in the Controls column.



3. Click the **Process** button to start the recreation process.



Note: demo accounts don't have the Recreate feature enabled.

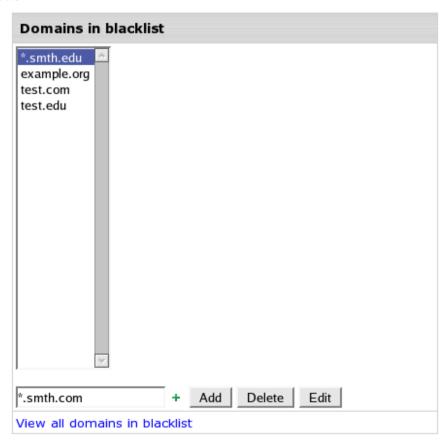
Blacklists in Parallels H-Sphere

Master administrator and resellers can create Black Lists directly from Parallels H-Sphere control panel.

If you want to make some domains, domain aliases or emails unavailable for end users, you have to include the domains/emails into blacklist. So when users try to add a domain (domain alias, etc.) or email from the blacklist, they will get a failure message - Domain {0} or it's pattern exists in black list (or Email {0} or it's pattern exists in black list).

Domains in blacklist

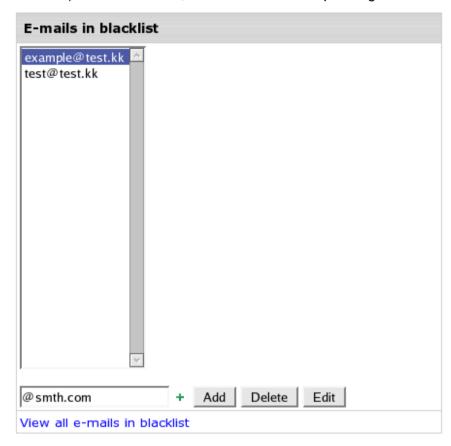
Use blacklist controls in your CP to add/delete/edit a domain. For this, go to **Settings-Blacklists->Domains in Blacklist**, enter either the full domain name or a domain name with a wildcard (e.g. *.smth.com) into the text box, and click on the corresponding button:



View all domains in blacklist text link allows you to see all the blacklisted domains of your resellers.

Emails in blacklist

Use blacklist controls in your CP to add/delete/edit an email. For this, go to **Settings->Blacklists->Emails in Blacklist**, enter either the full email or an email with a wildcard (e.g. @smth.com) into the text box, and click on a corresponding button:



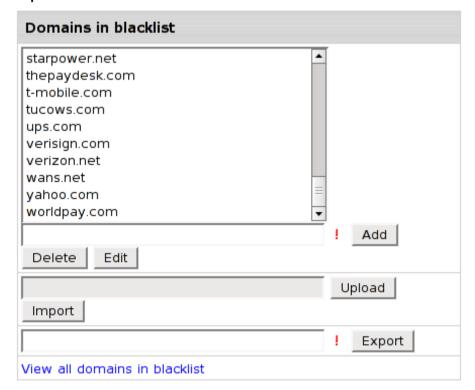
View all emails in blacklist text link allows you to see all the blacklisted emails of your resellers.

Uploading and Exporting Black Lists

Parallels H-Sphere allows uploading from a file or export to a file black lists of domains or emails.

> To upload black lists from a file:

- 1. Create a file with a list of domains/emails. Download a predefined list from http://download.hsphere.parallels.com/downloads/blacklist.txt
- 2. Go to Settings->Blacklists->Domains in Blacklist (or Emails in Blacklist) and click on the Upload button to choose the file.
- 3. Import a selected file:



> To export black lists to a file:

- 1. Go to Settings->Blacklist->Domains in Blacklist (or Emails in Blacklist)
- 2. Click on the Export button to save blacklisted domains or emails to a file.

Billing

One of Parallels H-Sphere's biggest assets is that it provides fully automated billing for credit card payment accounts. It also supports other types of payments including check payments, web payment systems, wire transfers, etc. This chapter provides an overview of all billing features in Parallels H-Sphere.

Plans

Hosting resources and services are sold in plans, each having its own price scheme. In plan settings, the administrator needs to set:

- which resources will be available in the plan;
- prices, free units, and max units for each resource;
- credit limit, moneyback period, billing type, etc. More >>

Billing Types

Plans in Parallels H-Sphere can be commercial and free. Free plans are typically used to host your corporate site, use an external billing system, or to disable billing for any other reasons. Commercial plans require payments by credit cards or checks. Commercial plans can allow trial hosting for a limited period of time. More >> (on page 312)

Trial Hosting

Trial hosting enables users to sign up for a plan and use it for a certain number of days without paying. If a trial user decides to continue and become a pay user, Parallels H-Sphere charges (1) for the resources that were purchased/used during the trial period and (2) recurrent fees for the next billing period. If a user decides to quit, the account gets suspended when the trial period ends. More >> (on page 480)

Billing Profiles

For the system to be able to charge customers for the resources and services, each pay user should enter the information about credit cards or check account. Such info is contained in user's billing profile. One billing profile can be used for several accounts. At the same time customers can have multiple billing profiles, but only one active at a time. Trial and free accounts don't have billing profiles. More >>

Prices

The system charges users three types of fees:

- Setup: only when a user purchases a resource.
- Recurrent: at the beginning of the billing period or billing month.
- Overlimit: for resources used beyond the pre-paid limit (e.g. summary disk space usage, traffic, etc.).

Fees are calculated based on prices and billing periods. More >> (on page 322)

Limiting Resources

You can include a certain amount of free resources in a plan. If need arises, users can get more, until they reach the maximum amount of resources you have allowed them to have. For instance, you can include 5 free mailboxes in the plan and allow users to have no more than 10 mailboxes. More >>

Usage of some resources, such as disk space and traffic, can be controlled additionally by resource limits. A user can exceed a resource limit, but every excess unit is charged at the overlimit price. You can configure Parallels H-Sphere to send warnings and suspend accounts when users approach or exceed traffic or disk usage limit. More >> (on page 127)

Billing Periods

You can create many billing periods within a plan for customers to choose from. Billing periods allow you to set discounts for each individual price type - setup, recurrent, and overlimit. The bigger billing period, the bigger the discount. More >> (on page 322)

Crediting Accounts

You can manually credit (put money to) individual accounts. Do this when you receive check or other non-credit-card payments from customers or when you need to refund a payment. These amounts are credited to the account balance, not credit cards. More >> (on page 424)

Debiting Accounts

You can debit (take money from) individual accounts. Accounts are debited manually when you need to charge your customers extra amounts.

You can configure your system to debit accounts on regular basis for services offered outside Parallels H-Sphere, for instance, antivirus protection. More >> (on page 425)

Billing Modes

Parallels H-Sphere allows you to switch between the two modes of charging: credit limit based and anniversary based. In credit limit based mode customers are charged every time their balance exceeds credit limit. In anniversary based mode charges are done at the end of each billing period or month, depending on type of the fee. More >>

Traffic

Actual use of traffic cannot be physically restricted, but can be regulated by charging higher prices for overlimit traffic consumption. At the beginning of the billing period customers pay for traffic they expect to run up. If they go over this pre-paid limit, they are charged for the excess gigabytes at the overlimit rate at the end of each billing month regardless the duration of the billing period. More >> (on page 290)

Disk Space

Parallels H-Sphere offers two approaches to paying for disk space. **Disk Space Quota** is used to charge users for booked disk space. Web, mail, and database resources take separate quotas within the same account. Disk quota can't be exceeded, but users can raise it if they need more disk space. **Summary Disk Space** is used to charge users for actually used disk space. With summary disk space, users can exceed disk space limit, and pay for excess megabytes at the overlimit rate at the end of each billing month regardless the duration of the billing period. More >> (on page 300)

E-mailing Invoices

When creating plans, you choose whether you want Parallels H-Sphere to e-mail invoices to users immediately after they buy resources. With e-mail invoicing on, customers will receive invoices for every single bill entry, e.g. overlimit traffic. With e-mail invoicing off, customers will get no invoices, even at the end of the billing period. After signup, users can change this option for their accounts. More >> (on page 127)

Taxes

Parallels H-Sphere allows you to apply taxes, such as VAT, to customer charges. Taxes are added to the summary invoice amounts. More >> (on page 331)

You can wave individual users from paying taxes. At signup, users enter tax exemption code, then you need to approve or reject it. More >> (on page 333)

Promotions

You can apply promotions to plans. You can give a **promo code** to eligible users to offer them a discount. Or you can create an **unnamed promotion** that will apply to all accounts under this plan for a specified period of time, for instance the month before Christmas. More >> (on page 342)

Billing Resellers

Resellers are charged for each individual unit of resources purchased or used by their customers. Every time the system creates a billing entry for a reseller's customer, it also creates a shadow billing entry for the reseller.

Managing Debtors

You can set how many days your customers can stay in debt before they receive a negative balance warning, or get their account suspended or deleted. More >> (on page 340)

Money Returns

On some account activities, such as quitting hosting, changing plans, or deleting paid resources, Parallels H-Sphere automatically returns recurrent charges by crediting customer's account balance. Refunds are calculated based on the moneyback period, refund percentage and the resource billing type. If a customer quits with positive balance, you need to send him the remaining amount by check. More >> (on page 339)

Billing Statements

A billing statement is a detail cumulative record of paid activity reflecting all charges and credits incurred during a billing period (on page 322). This means each billing statement represents user's paid activity during the billing period.

Billing statements get **sequential numbering**. In other words, each billing statement is identified by account id and statement id in the format account_id-statement_id. For example, account_id-1, account_id-2, ...

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Billing Types

Billing types indicate whether and how users pay for hosting services.

Generally, hosting in Parallels H-Sphere can be commercial and free. Free plans are typically used to host the corporate site of the hosting provider or to disable billing for any other reasons. Commercial plans require payments by credit cards or checks. Commercial plans can allow trial hosting for a limited period of time. Accounts in Parallels H-Sphere can have the following billing types:

No Billing: To disable billing in a plan, select **Without Billing** in the **Billing Type** field on the first step of the Plan Wizard, and any references to billing information will disappear from the signup wizard. Billing profiles won't be created, and users won't be charged for any resources or services including those provided by third parties, such as domain registration by Enom or OpenSRS. To collect payments only for Enom or OpenSRS services, create a paid plan and enter prices only on the second page of the wizard.

Credit Cards: Parallels H-Sphere begins to accept credit cards signups after you have added and configured at least one Merchant Gateway (on page 181). Removing all merchant gateways will remove the credit card option from the signup wizard.

Credit card numbers can be encrypted (on page 150) (normally they are kept in clear text in the Parallels H-Sphere database) and are checked for cc verification number. But unlike CC numbers, it's not stored in Parallels H-Sphere DB upon the check-up to comply with legislation in force.

See also adding custom credit card brands (on page 154) and activating credit card accounts (on page 464).

Checks: users send checks to the location you have specified. After you have received a payment, you should process it as suggested in Processing Check Payments (on page 463). You can also enable or disable check payments:

- 1. Select Merchant Gateway in the Settings -> Payment Settings menu.
- 2. Turn Accept Checks on or off.

Turning off check payments will affect the whole system, not individual plans. After you have disabled check payments, existing check payment users will still be able to use this form of payment, but new customers won't see this option in the signup forms.

Online Payment Systems: You can also collect payments with WorldPay (on page 248), PayPal, 2CheckOut (on page 238), and GestPay (on page 242). If your customers choose to pay with one of these systems, their credit card info won't be stored in their billing profiles and billing info won't show in the control panel.

Trial: Commercial plans can allow trial hosting for a limited period of time. Trial users are not charged for the resources they use, unless they decide to stay with you upon trial period expiration and become pay users. In this case they are charged for the resources they have used during the trial period and recurrent fees (on page 322) for an open billing period (on page 322). Their custom settings remain unchanged. See also Providing Trial Hosting (on page 480).

Billing Profiles

A billing profile is a set of billing details such as customer's credit card information and/or billing info (first and last name, company, address, phone, e-mail, etc.) It is required to collect payments from a customer.

One customer can have multiple billing profiles, but only ONE ACTIVE AT A TIME. For instance, a user can have two credit cards, VISA and MASTERCARD, and a check account. This user can have three billing profiles, two for credit cards and one for checks. If the VISA billing profile is set active, the MASTERCARD won't be charged and no check payments will be necessary.

One billing profile can be used for multiple accounts. This means a user with several accounts can pay with one card or receive all bills at one mailing address.

Trial users don't have billing profiles until they choose to become pay users. The system, however, tracks all trial user's purchases and includes them into the first bill.

When edited, the billing profile is not actually modified. Rather, a new version of billing profile is created, and the old version is preserved to allow tracking payments.

Billing Periods and Discounts

Billing period determines how far in advance recurrent fees for billing period resources are prepaid.

In addition to a 1 month billing period coming with each new hosting plan, you can create multiple billing periods of different length for your customers/resellers to choose from at signup or switch between later. This allows you to configure pricing individually for each billing period.

Default and Actual Billing Periods. Base Prices

When you create a new hosting plan, you can set prices and free units for the **one month default billing period**. These are the **base** prices and free units used in the calculation of **actual** prices and free units. When you have created a plan, you can go ahead and create actual billing periods for it. Unlike the default billing period, actual billing periods can be chosen by users. If you don't set a price or free units for an actual billing period, it will be calculated according to the corresponding *base* prices/free units and discounts.

Monthly and Billing Period Resources

Accounting for such resources as *traffic, disk usage, MySQL* and *PGSQL quotas* is determined not by billing periods as it is for the rest resources, but by a *billing month*. Billing month equals the number of days in the billing period divided by billing period duration in months. That's why these resources are referred to as *monthly resources* as opposed to *billing period resources*.

Opening a New Billing Period/Month

A new billing period/month opens:

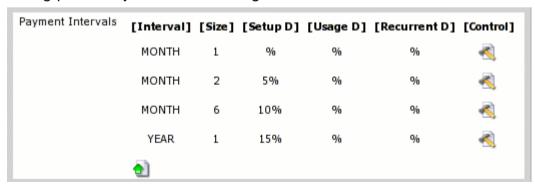
- when a new account is activated upon signup or moderation, which makes it start differently for each individual account
- when the billing period closes
- on resuming suspended account after the end of the billing period
- on changing account's billing period
- on changing start billing date

On other events, the billing period doesn't close.

Creating and Configuring Actual Billing Periods

Each new hosting plan comes with 1 month billing period, but you can create multiple actual billing periods.

- > To create or edit a billing period:
- 1. Select Manage in the Plans menu.
- 2. On the page that appears, click **Settings** for the hosting plan to edit.
- 3. Make sure Billing is ON.
- 4. In Payment Intervals, the Billing Configuration section, click the Add icon if you want to create a new billing period, or Edit icon next to the existing billing period if you want to change its duration or discounts:



- 5. Interval: the time unit used to measure billing period duration.
- **6. Size**: the number of such time units in this billing period. Make sure it is set to a positive value, otherwise it will mess up billing for accounts on this billing period.
- 7. Setup D, Usage D, Recurrent D: discounts for different types of fees.

In Parallels H-Sphere billing periods cannot be deleted, but you can change their duration. For instance, if you decide you don't need your yearly billing period, you can change its duration to two months.

Warning: Don't change the duration of a billing period if it has live accounts, as this will mess up billing for them. Instead you can create an identical plan with the same set of resources but different billing periods and move accounts to this plan. Once you know you have no accounts under this billing period, you can safely change its duration.

Changing Account's Billing Period

If there are more than one actual billing periods, users can switch between them:

When switching to a billing period				
longer	shorter			
than the time elapsed from the beginning of the current billing period, the user is transferred to a new billing period with the start date				
the same as of the one the he switches from.	of the day he switches to a new billing period on.			
For example, a 1 month billing period starts on September 1. On September 15 a user switches to a 2 month billing period. He is then transferred to a 2 month billing period with the start date of September 1 and closure date of October 31.	For example, a 2 month billing period starts on September 1. On October 5 a user switches to a 1 month billing period. The current 2 month billing period is interrupted, closed and a new billing period is open with the start date of October 5 and closure date of November 5.			
Refunds for the interrupted billing period are ca subtracted from	lculated as described in refund formulas and			
new recurrent fees prorated to the time remaining to a new billing billing period closure.	new recurrent fees for a new billing period.			
If the resul	ting amount is:			
	nt balance is credited the difference; nce is charged as additional recurrent fee.			

Important: New billing period start date is set to the current date on any billing period change for accounts whose start billing period date was moved to the past and the open billing period closes earlier than the current date. In such cases no refunds are issued for the interrupted billing period.

Billing

Changing Billing Period Start Date

It is strongly recommended to avoid changing start billing date whenever possible, as it greatly affects customer billing.

If you set the same billing date for many customers, the system may become overloaded on this billing day.

Changing the billing period start day doesn't change the length of the billing period. To change the billing period length, refer to Creating and Editing Billing Periods (on page 322).

> To change billing period start date:

- 1. Find account (on page 413).
- 2. Click the Date icon in the Billing column for this user.
- 3. Enter the date you want this user billing period to start on.
- 4. Click Submit.

When you shift the start billing date to the past:

- Current billing period and billing month are interrupted and forced to close.
- 2. Usage fees (on page 322) (if any) are charged.
- 3. Refunds (on page 339) (if any) are issued.
- **4.** A new billing period and billing month open.
- 5. Recurrent fees for an open billing period and billing month are charged. Thus, most likely, you will want to credit (on page 424) the extra charged amount back to user's account.
 - * The recurrent charges for traffic and summary disk usage are prorated to the period from the date the interrupted billing period should have normally closed to the closure date of an open billing period.

Running into a negative balance upon opening a new billing period may result in suspending or even deleting the account, because by this date, the account is likely to have been in debt for more days than allowed in the managing debtors (on page 340) control. If you don't want the account to be automatically suspended, do either of the following:

- (a) prior to moving start billing date back, credit the amount that is going to put the account into a negative balance
- (b) set the Outstanding balance date, User's Billing Info, (available by clicking the User name in the Search result page) to the current date.

> When you shift the start billing date forward:

- 1. Current billing period and disk usage/traffic month are interrupted and forced to close.
- 2. Recurrent fees prepaid at the beginning of the interrupted billing period for billing period resources are refunded.
 - * The refunds are prorated to the days remaining to the end of the interrupted billing period and adjusted to the refund percentage.

Note: Recurrent fees prepaid at the beginning of the interrupted disk usage/traffic month for monthly resources are not refunded.

- 3. Usage fees for traffic/disk overlimit usage are accrued if any.
 * Usage fees are calculated as follows:
 Disk/traffic usage minus disk space/traffic free units prorated to the days elapsed from the resource month start date multiply by usage price.
- 4. Traffic and average summary disk usage are reset.
- 5. A new billing period and disk usage/traffic month open .
- **6.** Absolute recurrent fees for billing period resources are accrued.
- 7. If a start billing date is set further than the date the interrupted billing period should have normally closed on, the user is accrued absolute recurrent fee for disk usage/traffic. If not, the user is accrued the recurrent fee prorated to the period from the date the interrupted billing period should have normally closed on to the closure date of the open billing period.

Shifting the start billing date forward, you create a gap between the billing periods. The system does not charge the customer recurrent fees for the time gap. Traffic and disk space used during this gap are tracked and taken into consideration when usage is calculated at the end of the billing period. If a user purchases some resources during the gap period, the system will charge the recurrent fee for these resources. However, it will calculate the price from the moment of purchase till the end of the new billing period. Say, you close the current billing period on November 11 and set the new starting date to December 1 (with a one month billing period. This way, the user doesn't pay recurrent fees for the remaining days of November. Still, if a user buys a resource on November 20, he/she will be charged the recurrent fee for the interval of 40 days (November 20 - January 1).

Credit Limit

Credit limit is the maximum negative balance that can be reached before the customer is charged or treated as a debtor.

In Parallels H-Sphere credit limit serves two purposes:

- **cumulative:** This is applicable only to credit cards. All setup, recurrent and usage fees are accrued until their cumulative amount reaches or exceeds the credit limit. Only then is this amount charged. This approach minimizes referrals to credit card processing centers.
- restrictive: This is pertinent to check payments and invalid/expired credit cards. When the negative balance exceeds the credit limit, the account owner is considered to run into debts and is blocked from buying any resources, paid or free. Except for this, the functionality of the debtor's account isn't affected, unless you configure the system to suspend debtors (on page 340). Recurrent and usage fees will be still accrued, and the debt will grow with every new billing period (on page 322).

Mind that although a reseller in debt can't buy any more resources provided with the reseller account (traffic and disk space in particular), Parallels H-Sphere neither forbids his end user signups nor bars his existing users from acquiring more resources.

Example: If you set the credit limit to \$10, a user with a \$0 balance purchasing \$5 resource won't be charged, even though his balance will become -\$5. This is also true of invalid credit card or check payments.

Further, if this user decides to buy another \$10 worth of resources, he will get charged \$15, and his balance will become zero. But in case of an invalid credit card or a check payment, this user won't be able to buy these extra \$10 of resources, and his balance will remain -\$5. If this is the case, and if his usage fee equals \$20, at the end of the payment interval his debt will increase to (\$5 + \$20 =) \$25.

In this section:

Setting Credit Limit in a Plan	320
Increasing Credit Limit for Individual Accounts	
Resetting Credit Limit For All Users	

Setting Credit Limit in a Plan

- > To set plan's default credit limit:
- 1. Launch plan edit wizard
- 2. On the first step at the bottom of the form you'll find the Credit Limit entry.

If you leave the field empty, credit limit is set to 0. This results in immediate credit card account charges and doesn't allow check paid accounts acquire resources with no money on their balance.

Plan's default credit limit is the same for all accounts in this plan. However, you can increase or reduce credit limit for particular accounts by following the instruction below.

Increasing Credit Limit for Individual Accounts

- > To increase or reduce credit limit for a particular account by a fixed amount:
- 1. Find the account (on page 413) using the **Search** utility.
- 2. Click the credit limit value in the Credit column.
- 3. On the page that appears, enter the amount above plan's credit limit value. For example, the Credit Limit for the plan is \$10. To make it \$12 for a specific account, enter 2.
- **4.** Click **Increase**. The search results page will now show the difference from the default, not the absolute credit limit.

Resetting Credit Limit For All Users

Sometimes you need to reset credit limit for all accounts to the plan's default value. To do it in one go, do the following:

- 1. Select Other in the E. Manager menu.
- 2. Click Reset Credit Limit to eliminate credit limit increases in all accounts of your direct end users. This won't affect your resellers' end users.
- 3. Click Reset Credit Limit for all accounts in the system (resellers inclusive) to eliminate credit limit increases in all accounts of your direct end users and resellers' end users:

Mass credit limit reset

Reset credit limit for all accounts to the plan's credit default value. This will delete all your manual credit enlargements of users' accounts.

Reset credit limit

Reset credit limit for all accounts in the system (resellers inclusive)

Note: Remember that resetting credit limit for all accounts will set all increased credit limits, if any, to the plan defaults. They will show as zero on the Search result page in the **Credit Limit** section, where zero is the difference from the default plan value.

Fees Collected From Customers

In Parallels H-Sphere customers can be charged:

- plan fees
- custom debit fees (separate document)
- custom job fees (separate document)

Plan Fees

Plan fees are the fees for user account services provided with its hosting plan. Plan fees, except for domain registration fee are charged for resources acquired beyond free units and are calculated based on prices set for the actual billing period. If a price or free units in the formulas below aren't set for the actual billing period, corresponding base price or free units are then used instead. Fees calculated on base prices are discounted.

- **Setup fee**: single time fee charged at the moment a unit of specific resource is acquired over free units.
 - = Setup price for this specific resource
- Recurrent fee for billing period resources: service fee for resource maintenance during the whole billing period; charged in advance the moment it is acquired and since then at the beginning of each billing period.
 - = Monthly price for the resource x units over free (for quotas) x days left to the end of the billing period / billing period duration in days
 - * if the base price is used, the fee is multiplied by billing period duration in months
- Recurrent fee for monthly resources: fee for each GB of traffic or MB of disk space reserved over free units; charged inprorated for the whole billing month in advance at the moment of purchase and since then at the beginning of each billing month.
 - = *Monthly* price for a monthly resource **x** units over Free *l* billing period duration in months
 - * if the base price is used, it's not divided by billing period duration in months
- Usage fee: fee for each excessive GB of traffic or MB of disk space consumed over the user reserved limit; charged at the end of each billing month
 - = Extra price for a monthly resource x units over the user reserved limit / billing period duration in months
 - * if the base price is used, it's not divided by billing period duration in months
- Domain registration fee: single time setup fee charged at the moment of OpenSRS or Enom domain registration / renewal performed through Parallels H-Sphere CP
 - **=** Custom price for the term the domain is registered / renewed for
 - * if a *custom* price isn't set for a certain term, the fee equals then the default price set for a corresponding term.

Free Units

When we talk about free units, we actually mean free gigabytes of traffic, free megabytes of disk space, free subdomains and mailboxes, etc. customers get with the user account (on page 285) and can use them free of charge within one billing period (on page 322) or billing month when we talk about monthly resources. For example:

Resource	Free units set for		User gets
	default one month billing period	actual 2 month billing period	
Traffic	10	-	10 GB to use over one month for free
	10	12	12 GB to use over one month for free
Mailbox	10	-	10 free mailboxes
	10	12	12 free mailboxes

Free isn't applicable to resources that can't be measured in units, such as *Directory Index* or *SSH Access*.

Setting Prices and Free Units

This section explains how to set prices used to calculate plan fees (on page 322).

Important: Don't separate thousands with commas when setting any prices or free units. Comma "," is treated as a decimal separator, not thousand separator, to support international standards (e.g. \$2,95).

To set base prices and free units:

- 1. Launch plan creation/edit wizard
- 2. On step 1 of the wizard check the Leave registrar prices as they are box in the Domain types section and uncheck the Do not change resource prices one in the Settings section.

 3. At the bottom of the same form click the Next button and the wizard will take you to the base price and free units configuration page.

> To set prices and free units for actual billing periods:

- 1. Go through steps 1-3 of setting base prices and free units.
- * Prices and free units for billing periods, on the contrary to base ones, can be set only with plan edit wizard.
- 2. At the bottom of the base price and free units configuration page click **Next** and the wizard will take you to the forms where you can set prices and free units for actual billing periods (on page 322). The number of subsequent steps depends on the number of billing periods available for the plan.

To set default prices for OpenSRS or Enom domain registration/renewal: follow the Enom (on page 161) and OpenSRS (on page 163) Configuration instructions. **Important:** if the default prices aren't set, the domain registration option won't be available to customers!

> To set custom prices for OpenSRS or Enom domain registration/renewal:

- 1. Make sure default prices for OpenSRS / Enom domain registration / renewal are set in domain registration manager.
- 2. Launch plan creation/edit wizard
- 3. On step 1 of the wizard uncheck the Leave registrar prices as they are box in the Domain types section.
- 4. At the bottom of the same page click the **Next** button and the wizard will take you to the form where you can set custom prices for OpenSRS/Enom domain registration / renewal.

Comments on Resources

Don't get confused with setting prices for the following resources:

CP Account: See Understanding Accounts, Domains, and Users (on page 285).

- Summary Traffic: See Traffic (on page 290)
- Disk Space Quota: See Individual Disk Space Quotas (on page 300)
- Domain: any domain transferred or registered through Parallels H-Sphere control panel.
- Mailbox: Each new customer domain is created with a webmaster mailbox. If a user runs out of free mailboxes, adding a new domain - even a free domain - will trigger charges for a webmaster mailbox. Hense, it is a good idea to provide at least several free mailboxes.
- Mailbox quota: initial quota on one user mailbox.
- MySQL/PGSQL database quota: initial quota on one database calculated as the total size of all files in the database directory.
- MS SQL Quota: Quota on one database calculated as the total size of all files in the database directory.
- IP Address: any dedicated IP taken by domains maintained through customer control panel.
- Real User:number of simultaneous connections, i.e. how many visitors can simultaneously access customer's RealServer account.

Setting prices for the following resources often confuses Parallels H-Sphere administrators:

Resource	Explanation	Plan Wizard Pr	ice Fields		
		Free	Setup	Monthly	Extra

CP Account	A user/administrative account in H- Sphere. One CP account equals one control panel and takes one license	N/A	Charged when the user creates a new account	Used to calculate recurrent fee for one account. If a user has two accounts (e.g. Unix and Windows), he will be charged (recurrent fee (on page 300) X 2)	N/A
Summary Traffic	User data transferred to/from web, mail, and other servers	GB of traffic which users can use over the month for free	N/A	Used to calculate recurrent fee (on page 285) for reserving GB of traffic over initial user free traffic quota. Charged once at the beginning of the billing month for the difference between the limit customer sets and the free units.	Charged at the end of each month of the billing period for each GB used beyond the limit.
Disk Space Quota	User FTP quota on the web / windows server	MB of disk space that you grant users for free	N/A	Billing Consequences of Editing Prices and Free Units< Applied only if users change their default disk space quota. Charged once at the beginning of the billing period for the difference between the quota and the free units	N/A
Domain	Includes transferred domains and newly registered OpenSRS/Enom domains. Prices for this resource don't replace	Number of domains a user can transfer or register without being charged,	Charged when the user transfers/re gisters a domain beyond free units	Charged at the beginning of the billing period for each registered or transferred domain beyond free units	N/A

	domain registration prices you entered on the previous page. Prices here are set for your services and are collected based on user's billing period, whereas prices on the previous page are collected on yearly basis for the services offered by Enom/OpenSRS. Note: service domain isn't counted as payable resource	let alone yearly domain registratio n fees			
Mailbox	Each new customer domain is created with a webmaster mailbox. If a user runs out of free mailboxes, adding a new domain - even a free domain - will trigger charges for a webmaster mailbox. Hense, it is a good idea to provide at least several free mailboxes.		Charged when the user purchases a new mailbox beyond free	Charged at the beginning of the billing period for each mailbox beyond free	N/A
Mailbox quota	Quota on one user mailbox	The default mailbox size user can use for this mailbox free of charge	N/A	Applies only when users increase their mailbox quota. Charged once at the beginning of the billing period for the difference between the quota and the free units.	N/A

MySQL/PG SQL database quota	Quota on one database calculated as the total size of all files in the database directory	MB of free disk space that you give out for each new database	N/A	Applies only when users increase their database quota. Charged once at the beginning of the billing period for the difference between the quota and the free units	Charged for the disk space (prorated to the billing month duration) used in excess of the database quota as of the last day of the billing month. For example, you host a user with the billing period of 6 months, 0 free units, and the database size quota of 60MB. By the end of the first month, the size of the database makes 65MB, and the 5 MB overlimit is charged as the usage (excess) fee
MS SQL Quota	Quota on one database calculated as the total size of all files in the database directory.	MB of free disk space that you allocate for each new database	N/A	Applies only when users increase their database quota. Charged once at the beginning of the billing period for the difference between the limit and the free units.	N/A

IP Address	A dedicated IP Address	Number of dedicated IPs that you grant users for free	Charged when the user purchases a new dedicated IP beyond free units	Charged at the beginning of each billing period for each dedicated IP beyond free units	N/A
Real User	the maximum number of simultaneous connections, i.e. how many visitors can simultaneously access user's RealServer account.	Number of simultane ous connections to RealServe r that you grant users for free.	N/A	Charged once at the beginning of the billing period for the difference between the limit and the free units.	N/A

Discounts

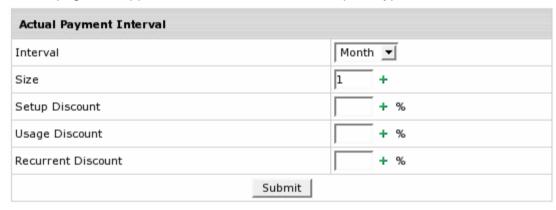
Only plan fees calculated on base prices can be adjusted to discounts set for the actual billing periods.

Discounted fee = absolute fee x ((100% - discount set for the type of price used to calculate absolute fee) / 100%)

As a rule, the bigger billing period, the bigger the discount. Discounts are configured individually for each billing period and can be set for each type of price:

- 1. Select Manage in the Plans menu.
- 2. On the page that appears, click Settings for the plan to edit.
- 3. Make sure **Billing** is ON. In the **Billing Configuration** section, click the **Edit** icon for the selected billing period.

On the page that appears, enter discounts for each price type:



4. Click Submit Query.

The following table explains how a 10% recurrent discount for a 2 month billing period effects calculation of the recurrent fee (on page 322) for additional mail box:

Monthly Price for Mailbox		Recurrent Fee
default one month billing period	2 month billing period	

\$10	-	18 (= \$10 x 2 month x ((100% - 10% recurrent discount) / 100%)
\$10	\$17	\$17

Billing Consequences of Editing Prices and Free Units

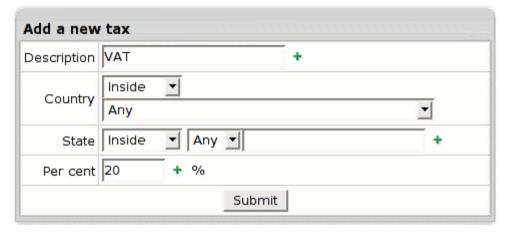
- New free units are applied in subsequent setup and recurrent fee calculations.
- New monthly price are applied in subsequent recurrent fee calculations.
- New usage price are applied in subsequent usage fee calculations.

Taxes

Prices in your plans are net of any taxes. Parallels H-Sphere further calculates the amount to be added to the SUBTOTAL of the user invoice based on the tax value.

> To adjust prices for taxes:

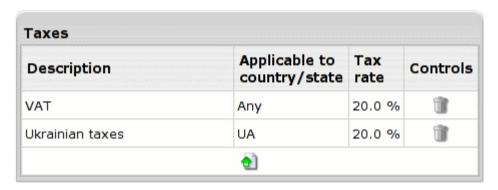
- 1. Select Taxes in the Settings menu.
- 2. On the page that appears, click the Add icon.
- 3. Fill the form that appears:



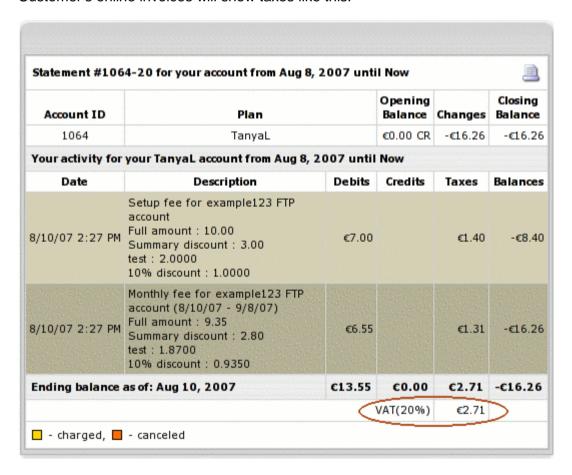
- Description: enter the name of the tax that will show in user invoices.
- Country: choose a country this tax applies to and choose where this tax will take effect - inside or outside the country.
- State: choose the state from the drop-down box if the tax applies to USA or Canada. If other, enter the one of your own. Choose where this tax will take effect - inside or outside this state.
- Per cent: enter the tax amount. For instance, to apply a 12% VAT to your prices, enter 12.

4. Click Submit.

To delete a tax, click the **Trash** icon next to the tax:



Customer's online invoices will show taxes like this:



Parallels H-Sphere provides detailed tax figures in majority of receipts. When there are several taxes, total tax amount is calculated in one line based on subtotal as in the following example:

BILLING ST	FATEMENT	
SETUP	Setup Fee Mail Forward	\$15.00
RECURRENT	Monthly fee for Mail Forward (11/2/07 - 11/5/07)	\$0.48
SETUP	Setup Fee AntiSpam	\$20.00
RECURRENT	Monthly fee for AntiSpam (11/2/07 - 11/5/07)	\$0.97
	Subtotal	\$36.45
	XYZ(15%), VAT(20%)	\$12.76
	TOTAL	\$49.21

The subtotal is \$36.45, 15% XYZ and 20% VAT make up 35% which constitutes \$12.76. \$36.45 subtotal and \$12.76 taxes result in \$49.21 total.

Tax Exemption

Your users can sign up for tax-free accounts. The mode where taxes are not calculated for an account is called **tax exemption**. This feature is available for users from all countries, but particularly supported by European Union members due to certain peculiarities of EEC taxation.

- To exempt users from taxes in Parallels H-Sphere, administrator should:
- 1. Enable tax exemption in Admin Control Panel;
- 2. Set tax exemption mode during user signup;

Activate user accounts with tax exemption code entered.

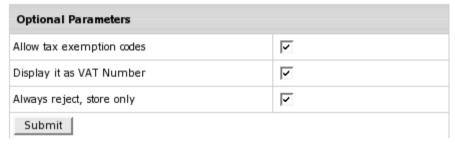
In this section:

Enabling Tax Exemption	334
Setting Tax Exemption Mode at Signup	
Activating User Accounts with Tax Exemption Code Entered	

Enabling Tax Exemption

Tax exemption option cannot be configured individually for each plan. You can either enable or disable it globally for all your plans. To do this:

- 1. Select Taxes in the Settings menu.
- Check or uncheck the Allow Tax Exemption box in the Optional Parameters table below the list of taxes:



You can also choose whether to display customer's VAT number on a user's invoice. If the **Display it as VAT Number** option is checked, VAT Number will be displayed as a label, instead of Tax Exemption code; If the **Always reject, store only** option is checked, VAT number/exemption code will be stored, but marked as rejected (though rejection signs in UI are suppressed), taxes will be collected - but VAT Number will be recorded.

3. Click Submit.

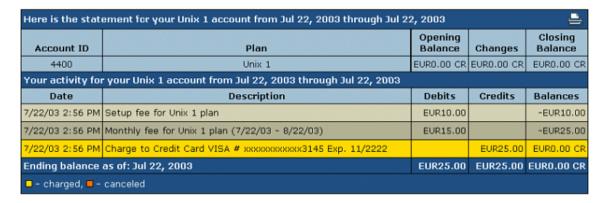
Setting Tax Exemption Mode at Signup

- To set exemption from taxes for individual user at signup:
- 1. Go the the Signup menu and click the plan to signup.
- 2. In the Signup wizard get to the Payment Information signup page.



- **3.** Enter user's own valid individual **Tax Exemption Code** in the corresponding field of the signup page.
- 4. Proceed with usual signup procedure (on page 464).

After signup, the created account is put into the list of accounts awaiting moderation (on page 471), regardless of the type of payment.



Activating User Accounts with Tax Exemption Code Entered

- > To activate the account with tax exemption option enabled:
- 1. Go to the Moderate submenu of the Signup menu.
- 2. Choose the account to be moderated.
- **3.** In the billing section of the table that appears, find the **Tax Exemption Code** line:



- **4.** Call the corresponding tax office to verify the tax exemption code entered by the customer.
- 5. According to the result of the validation, approve or reject the tax exemption code by clicking the respective link. The customer would be immediately notified by email.

Note: If the customer has entered his or her tax exemption code incorrectly, you may edit that code by clicking the **Edit** icon.

6. Activate the account by clicking the Create link at the bottom of the form.

Note: You would not be able to activate the account until the tax exemption code is approved or rejected.

You may also approve or reject the customer's tax exemption code in the account profile:

- 1. Search for the account in the Search menu.
- 2. Click on the account's id link in the Account ID column.
- 3. In the form that appears in the upper frame of the new page, click VIEW in the Contact&Billing Email section. Scroll down to the Tax Exemption Code line:



4. Approve or Reject the tax exemption code by clicking the corresponding link.

For an account where tax exemption is enabled, online invoice will look like this:

Money Returns

The money in Parallels H-Sphere is returned either by check or by crediting the account balance, but *can't* be issued to credit cards! This document focuses on the automatic account balance crediting which in the Parallels H- Sphere terms is called refunding. Only the latest billing period/month (on page 322) recurrent (on page 322) charges can be refunded. Other charges can be returned by crediting accounts (on page 424) manually. Refunds are listed in the user online invoice

(../user/billing.html#onlineinvoice). The "Full refund" message in the account Online Invoice implies that it isn't adjusted to the refund percentage.

In this section:

Events that Trigger Refunds	337
Refund Formulas	338
Moneyback Period3	338
Reducing Quotas and Limits	
Refund Percentage	

Events that Trigger Refunds

Refunds are issued on:

- quitting hosting during and after the moneyback period (on page 339)
- changing account's plan
- changing account's billing period (on page 322)
- changing account's start billing period date (on page 322)
- reducing quotas and limits (on page 339)
- deleting prepaid billing period resources (on page 322)
 - * Recurrent fees prepaid for monthly resources are not refunded on monthly resource removal. See also reducing quotas and limits (on page 339).

Important:

- No refunds are issued for the removal of the resource units acquired for free.
- No refunds are issued for prepaid resource units that become free upon the removal of the resource units acquired for free.

Example: A customer uses 2 dedicated IPs. As a customer's account offers only one dedicated IP for free, he pays for the extra one. Removing one of them the user will be refunded only if it is the IP that he prepaid for. If the removed IP was acquired for free, no recurrent fees (on page 322) are returned for the prepaid IP that appears to be free now. The system will treat this resource as free starting from the next billing period (on page 322).

In such cases users are advised to remove the resouce to get the refunds and then add it again as free.

Refund Formulas

Refunds for monthly resources, unlike billing period resources, are never prorated to the days remaining till the billing month closure. When refunded, recurrent charges for all resources are adjusted to refund percentage except for when users quit hosting during the Moneyback Period.

- Refunds for billing period resources
 = (recurrent fee charged over the current billing period x days remaining to its closure x refund percentage) / (billing period duration in days x 100%)
- Refunds for monthly resources
 = (recurrent fee charged over the current billing month x refund percentage) / 100%

If recurrent price for resource was changed, the refund will be calcuated based on prices used to calcuate the latest recurrent fees prepaid.

Moneyback Period

If users quit hosting *during* the Moneyback Period, they are refunded all recurrent charges that are neither adjusted to refund percentage (on page 322) nor prorated to the days remaining to the billing period closure. If users quit hosting *after* the MoneybackPeriod, refunds are calculated as described above.

To set the moneyback period:

- 1. Select Manage in the Plans menu.
- **2.** Click the name of the plan to start the wizard.
- Scroll down to the Settings section and check Enable in the Money Back Guarantee field. Enter the duration of the Money Back period in days.
- **4.** Scroll down to the bottom of the page and check Don't change resources prices.
- **5.** Complete the wizard.

Reducing Quotas and Limits

Refunds for decreased:

- FTP/Mail Box/MS SQL DB Quota
 (decreased MB of prepaid quota x recurrent price they were bought at x days remaining to the billing period closure x refund percentage (on page 339)) / (billing period duration in days x 100%)
- PG/My SQL DB Quota, Summary Disk Usage or Traffic Limit
 (decreased MB/GB of prepaid quota/traffic limit x recurrent price they were bought at x refund percentage (on page 339)) / 100%

Refund Percentage

The refund percentage defines how much of the recurrent charge will be returned to the user.

> To set the refund percentage:

- 1. Select Manage in the Plans menu.
- 2. Click Resources for the plan.
- On the page that appears, click Price next to the resource that you are setting refund percentage for.
- 4. In the Refund Percentage field, enter how much of the recurrent charge will be returned to the user

Notes:

- if no refund percentage is set for actual billing periods, refunds will be calculated based on refund percentage set for default billing period;
- leaving the refund percentage field empty sets it to 100%;
- if it is set to 0, no refunds will be issued.

Managing Debtors

In Parallels H-Sphere terms a user runs into debt when their account negative balance exceeds credit limit (on page 319).

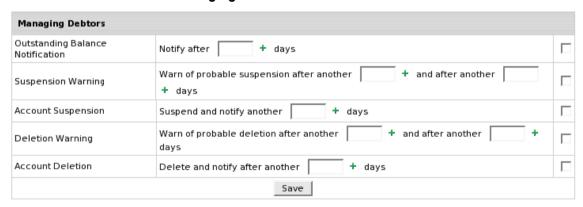
Punitive Measures

When users run into debts, they are automatically blocked from buying more resources. Except for this, the functionality of the debtor's account isn't affected. If you find this insufficient, use billing balance report (on page 434) to track down debtors and warn them with mass mail (on page 535) of expected punitive measures if they fail to pay off the debt. When the period to pay off the debts expires, you can suspend their account (on page 430). This will close access to their control panel and display a *Suspended* page to their site visitors. If the debt is paid by check, you credit the paid amount and resume the account. If the debt is paid by credit card, the account will be resumed automatically. If the debtor fails to pay the debt, you can delete (on page 429) their account along with user's home directory content.

Punitive Measures Automation

You can configure Parallels H-Sphere to apply punitive measures (on page 429) to debtors automatically:

- 1. Select Managing Debtors in the Settings menu.
- 2. You'll be taken to the Managing Debtors form:



- 3. Check the boxes next to the measures you'd like to apply to debtors.
- **4.** Enter the number of days to pass since the last measure taken before the enabled option is applied. The notifications and warnings are sent to the customer's e-mail when a cron runs accounting for the user.

Notes: leave the **days** box empty, to apply enabled measure immediately without any prolongation periods.

- **5.** Edit debtors warnings and notifications (on page 531).
- 6. Click the Save button at the bottom of the form.

Start Date of Time in Debt

If you want to change the date since when the system starts treating user as a debtor to apply punitive measures to:

- 1. Find (on page 413) this user.
- 2. Click the username link on the search result page.
- 3. In the Outstanding balance date field enter the new date.
- 4. Click the Set button.

Promotions

You can offer promotions (flexible discount or promotion plans) based on the default Constant Percent Discount calculator or on custom calculators. Promotions apply to entire accounts, not individual resources or domains.

Promotion Types

Promotion Codes. At signup, a customer enters a promotion code, the system verifies it, and if it proves valid for the chosen plan, the user is billed with the discount. These promotions apply only to new signups; you can't apply them to existing accounts. An example of this promotion is the Constant Percent Discount that comes with Parallels H-Sphere by default. One account can use only one promo code.

Unnamed Promotions. You can create promotions that don't require promo codes. For instance, you can create a calculator that will apply Christmas discounts to all accounts under the given plan. One account can use multiple unnamed promotions.

Calculating Promotion Discounts

If an account is affected by two or more promotions, each of the promotion discounts is calculated based on the full amount of charge.

Example: An account is affected by two promotions, each offering 20% off. When the user buys \$1 worth of resources, the first promotion takes 20 cents off the full amount making it 80 cents. The second promotion will apply to the full amount again, not to the remaining 80 cents, which means the final discounted charge will be 60 cents.

Promotion discounts are rounded to 3 digits after the decimal point, then added, and the final amount is rounded to 2 digits after the decimal point.

Creating Promotions

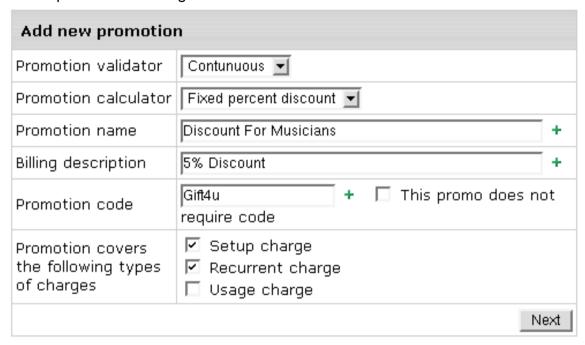
This procedure explains how to create a promotion based on the default Constant Percent Discount calculator. Promotions based on other (custom) calculators may take a different set of forms.

To create a promotion, you need to have an administrative account with billing management permissions.

1. Select Promo Management in the Settings menu:

Settings Look And Feel Notifications Payment Settings Blacklist Domain Registrar Comodo SSL Signup Guard Tech Support Reseller Client Support Managing Debtors Managing Trials Taxes Affiliate Program Promo Management Billing Settings

- 2. On the page that appears, click Add new promotion.
- 3. Enter promotion settings and click Next:



Promotion validator - determines if the promo applies to a given account at the given moment in time

Promotion calculator - calculates the amount of the discount for the given account Promotion name - this will appear throughout the control panel Billing description - this will appear in invoices/bills and price estimators Promotion code - string of alphanumeric characters, analogous to a password

4. On the next page, enter discount percentage and click Next:



5. Your discount now appears in the list of promotions. Now you need to associate the promotion with target plans.

Calculators shipped with H-Sphere

Fixed percent discount. Applies fixed discount given in percents.

Validators shipped with H-Sphere

Contunuous. Promotion is valid all the time.

Finite. Promotion is valid for specified number of billing periods from user sign up date.

Associating Promotions With Plans

To take effect, promotions should be assigned to particular plans. One plan can have several associated promotions.

- To associate a promotion with a plan:
- 1. In the list of plans, click **Settings** for the target plan.
- 2. On the page that appears, scroll down to the **Promotions Management**, select a promotion, and click **Add**.
- If the promotion requires a code, make sure to communicate it to the potential customers. They will be able to enter it on the Payment Information page of the signup wizard

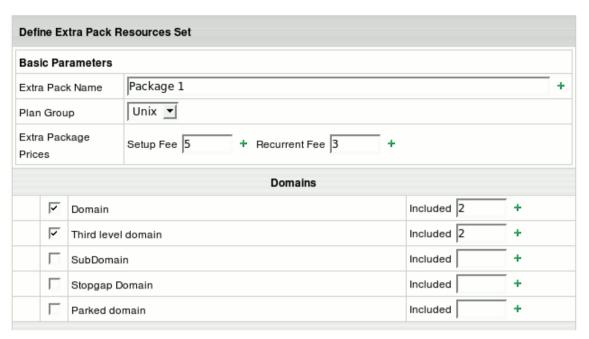
Extra Packages

The Extra Packages function enables you to sell users the sets of predefined resources for which you can assign prices and bill users in the gross.

Creating Extra Packs

Extra Packs are assigned for group of plans. Prior to creating an Extra Package, make sure there is at least one plan group.

- To create an Extra Package:
- 1. Go to Plans -> Extra Packages -> Add New Extra Package.
- 2. Configure Extra pack:



- Set Name to the package
- Assign pack to necessary Plan Group
- Set Setup and Recurrent prices
- Select resources and set Included values for them

3. Click Submit.

The package will appear available for users signed up for the plans of this group.

If user wants to buy more resources than the package includes, the prices of the plan he signed up for will be in effect.

Managing Extra Packs

Now, that a package is created, you can edit package name, prices and resources for the whole plan and set specific package prices for each plan under group.

Go to Plans -> Extra Packages -> Available Extra Packages.

Extra Packages				
Extra Pack Name	Setup Fee	Recurrent Fee	Plan Group	Controls
Package 1	5.0	3.0		<u> </u>
Package 2	25.0	5.0	Unix	4 # 1

- Click Edit next to the chosen package to change Extra Pack name, prices and add/remove resources that will affect the whole plan group
- Click Set Prices For Each Plan if you want to set different Extra Pack prices for different plans under the plan group

Extra Pack	Resource Set			
Resources	Include	d	М	ax
Domain	2.0		2.0	
Domain alias (old scheme)	2.0		2.0	
Mailbox	10.0		10.0	
IP Address	5.0		5.0	
Third level domain	2.0		2.0	
Define \$Package	1 Extra Pack Price	s		
Plan	Setup F	ee	Recurr	ent Fee
Unix I	3	+	1	+
plan N1	6	+	2	+

Click Trash to delete package.

Important: extra package used by at least one account cannot be deleted.

Anniversary Based Billing

In addition to traditional credit limit (on page 319) based charge scheme a new billing mode is introduced in Parallels H-Sphere, namely anniversary based. This new charge scheme is designed and makes sense exclusively for accounts with credit cards. In all Parallels H-Sphere installations and newly created reseller accounts anniversary billing is enabled by default.

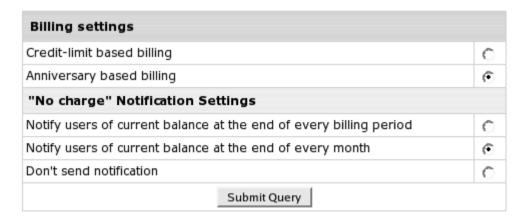
In this billing mode, credit limit is ignored when charging customers for regular fees. Their credit cards are charged at the end of every billing month for monthly resources and at the end of every billing period for other resources, even if the cumulative fee is less than the credit limit. Credit limit only matters when customers decide to buy additional resources (on page 319).

Anniversary billing option is implemented to make billing operations more transparent for clients. Choose it if your clients prefer to be billed regularly, and if occasional charges of their credit cards, that occur usually in credit limit based scheme, worry them.

Switching Between Billing Modes

If credit limit based billing seems to be more preferable to you, you can always switch to this mode without any interruptions in billing.

To switch between billing modes, select **Billing Settings** in the **Settings** menu, choose the needed under the **Billing Settings** section and press **Submit Query**:



Sending "No charge" Notifications

If there are no charges at the end of the billing circle, some clients wish to know that this happens because there is nothing to charge them for, not because something is wrong with the system. To make them feel comfortable and sleep well, configure sending "No Charges Made for Your Account" (on page 127) notifications.

Sending such notification can be enabled both for anniversary and credit limit based modes of billing.

Warning of Immediate Charges in Case of Buying Additional Resources

Both in anniversary and in credit limit based billing modes, when clients with credit cards buy additional resources, their credit cards are charged at the moment of purchase only if the resource fees exceed credit limit. In this case, the user is presented with online invoice where the amount due is stated (balance plus charge for the resource). The user is also asked to confirm/decline the purchase:



In case the user decides to decline, resources are not added.

If the resource fee is less than the credit limit, the client is to pay for this resouce at the end of the billing circle in anniversary billing mode or when the credit limit has been exceeded in the other mode.

Dedicated Servers

Dedicated servers feature automates your leasing entire servers with full control over the server to first-hand and reseller end users.

Parallels H-Sphere performs complex billing procedures for dedicated hosting. However, it is not designed for physical administration of dedicated servers. Before adding a server to the system, prepare it according to your clients' preference: provide hardware, install operating system and software to ensure their web presence. If you apply any changes to dedicated servers via the interface, you have to effect them manually on the physical level. This means that if, for instance, extra IPs are added via the interface, the same physical actions have to be done. Or if a dedicated server was withheld from an account, you also need to block access to the server for the client who had been owing it and manually clean up the server to prepare it for future use.

In this chapter:

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Adding MRTG Logical Servers and Network Switches	
Creating/Managing Dedicated Server Templates	
Dedicated Server Plans	
Managing Dedicated Servers	
Dedicated Server Status	
Assigning Additional IP Ranges	
Billing Dedicated Servers	
Dedicated Servers' Maintenance	

Enabling Dedicated Servers in Globals

To be able to lease dedicated servers via Parallels H-Sphere, first of all you need to make sure that they are enabled in globals. In all Parallels H-Sphere installations dedicated servers are disabled by default.

- > To enable dedicated servers in Globals:
- 1. Go Info -> Globals.
- 2. Include the needed resources in the Dedicated Servers section:

Dedicated Servers	
Dedicated Server facilities	~
Enable Custom-built dedicated servers (requires: Dedicated Server facilities)	~
Enable Remote Reboot for dedicated server (requires: Dedicated Server facilities)	~
Enable Backup feature for dedicated servers (requires: Dedicated Server facilities)	~
Allow resellers to resell your dedicated servers (requires: Dedicated Server facilities)	~
Allow resellers to sell their dedicated servers (requires: Dedicated Server facilities)	~

3. Press Submit Query.

This enables the **Dedicated Servers** menu, as well as the **Dedicated Server plan wizard** on the **Plan creation wizards** page.

Adding MRTG Logical Servers and Network Switches

Network switches are used in Parallels H-Sphere to monitor the traffic load on dedicated servers and provide data to calculate bandwidth charges. They send traffic data to MRTG (http://oss.oetiker.ch/mrtg/) (The Multi Router Traffic Grapher) logical servers that display bandwidth (on page 374) graphs. The Round Robin Database Tool is used to store data on each network switch port in a separate RRD.

In this section:

Adding MRTG Logical Servers	352
Adding Network Switches	
Viewing MRTG Server Info	
viewing with a convention	00-

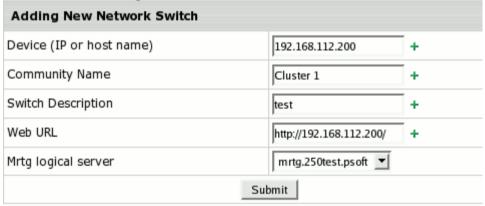
Adding MRTG Logical Servers

Add MRTG service when installing Parallels H-Sphere. If you haven't done it with the installation , you need to add this service later. For the instructions, refer to System Administrator Guide. This procedure will result in installing the hsphere-mrtg-rrd system package on a target Parallels H-Sphere box, and MRTG logical server will appear in the Parallels H- Sphere interface (in the **E. Manager** -> **L. Servers** menu). If you plan that your resellers lease their own dedicated servers, besides the ones that belong to you, and that servers' traffic data is displayed properly to their end users, make sure to add a Service IP (on page 48) to this server.

Adding Network Switches

Make sure switch is connected to network, prior to adding it via the interface. Parallels H-Sphere will operate with network interfaces (not physical network switches polled by MRTG servers) to collect statistics from all used ports: which ports are used by which particular dedicated servers.

- > To add a network switch:
- 1. Go to Dedicated Servers -> Network switches
- 2. On the Managing Network Switches page click Add new switch:
- 3. Fill in the following data:



- Device (IP or host name): network switch IP or host name.
- Community Name: enter the community name which was physically assigned to it. If other than 'public', it's displayed as ****. You can see this info only when editing the switch data.
- Switch Description: field for additional info.
- Web URL: implemented to let you access the switch from the interface by clicking the URL icon on the Managing Nework Switches page.
- Mrtg logical server: choose from available logical servers.
- **4.** Click **Submit**. The newly-added switch should appear on the **Managing Nework Switches** page:

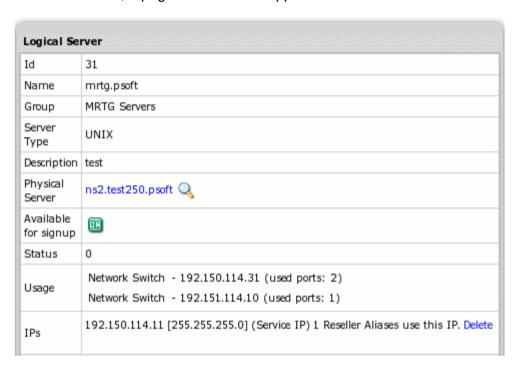
Id	Device (IP or host name)	Community Name	Switch Description	Ports In Use	URL	Controls
2	192.168.114.31	public	test	3		<u>«</u>
4	192.168.112.10	public	Real Psoft switch	1	4	<u>~</u>
13	192.168.112.200	****	test	0	dh.	A m

On this page, you can edit your switches data (click **Edit** in the **Controls** column). Only unused switches can be deleted. Click numbers in the **Ports In Use** column to see dedicated servers connected to switches.

When you add dedicated server (on page 362) to the system, choose the network switch and its port assigned to the server. If you've done everything correctly, users of dedicated servers should be able to view traffic graphs from their control panels.

Viewing MRTG Server Info

To view your MRTG logical server info, use **E.Manager** -> **L. Servers** menu. After you choose its name, a page similar to this appears:



Here you can see how many switches send data to this MRTG server, both the ones that belong to you and to your resellers.

Creating/Managing Dedicated Server Templates

Before adding dedicated servers to the system, you have to create dedicated server templates. They simplify managing and billing servers of the same type. When creating a dedicated server plan (on page 357), you can choose server template(s) for it. This way you can create, for instance, Windows, Linux, FreeBSD etc. dedicated server plans. Custom-bult servers, on the other hand, are added to Parallels H-Sphere in one step and assigned to users directly (not distributed via plans). That is why you need to determine setup and monthly fee when creating a non-templated server.

> To add a template:

- 1. Go to Dedicated Servers -> Manage Templates
- 2. Click Add server template.
- 3. Fill in the form you will be taken to and click Submit

You can allow this template in plans right away or later using the **Manage Templates** menu. When you add a dedicated server template, it appears in the dedicated server templates list (the **Manage Templates** menu). Check boxes near templates which you are going to use in plans:



- To edit a template, click the Edit icon in the template entry (the Manage Templates menu).
 - * You can't edit a template if at least one server added from that template was taken by a user.
- To remove a template, click the Trashcan icon in the template entry.
 - * You can't remove a template if at least one server was added from that template.
- To be able to use a template in plans, check the box in the template entry. Such templates will show in Dedicated Server Plan Edit Wizard (on page 357).

In this section:

Custom-built Dedicated Servers

If enabled in Globals, clients can request custom-built dedicated servers by simply clicking a link. When they do so, a trouble ticket is generated:

Ticket Thread

[Sep 26, 2005 7:36:29 AM]

Q: User "tkissres" requested to add a custom-built server to account #3140.

Description:

Operating system: FreeBSD 5.3

RAM: 256

Disk space: 100 GB

When you receive such requests, add non-templated servers (on page 362) and assign them to users by changing server's status (on page 365) to **In use**.

Dedicated Server Plans

In this section we describe features specific to dedicated server plans. If any additional info on plans in Parallels H-Sphere is needed, please refer to Plans section of the Administrative Guide. Note that in our case there is only 1 month billing period (on page 322) in plan.

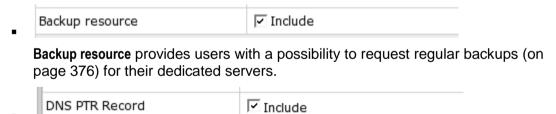
After a plan has been created, don't forget to enable signup access for it using the On/Off icon on the Plans (on page 273) page.

In this section:

User Plans	357
User's Choosing a Server at Signup	359
Reseller Plans	

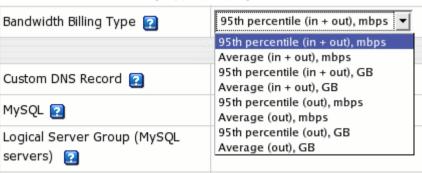
User Plans

- To create a dedicated server plan:
- 1. Launch plan edit wizard using Plans -> Create menu and choose Dedicated Server Plan Wizard.
- 2. On the first step of the wizard, include the necessary resources:



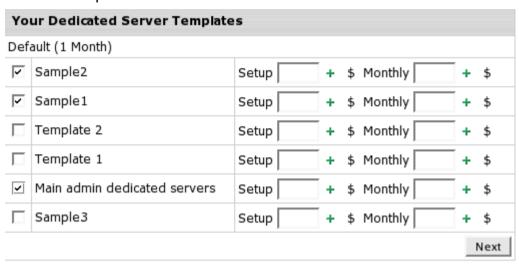
DNS PTR-records resource allows users to create reverse DNS records (on page 368) for IPs used on thier servers.

Choose Bandwidth Billing Type (on page 374).



Note: Think twice choosing the type as you won't be able to change it later, when there are customers under this plan.

3. Choose dedicated servers templates to be available in the plan and define their prices:



4. On the step 2 of the wizard, define fees for dedicated server related resources, and set free units:



Dedicated Server IP Range: set number of IPs to acquire for free, and monthly fee per one IP.

Backup: set fees for clients' regular backups (on page 376). Set monthly fee per a planned backup task and extra fee per a custom one.

Set quotas:

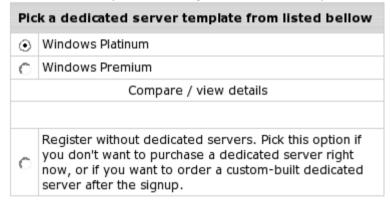


Summary traffic: traffic to/from client server(s) via the provider's mail system. **DS Bandwidth:** all incoming/outgoing traffic for client server(s) excluding the above summary traffic.

5. Step 3 of the wizard is the same as for regular plans.

User's Choosing a Server at Signup

When user signs up to a dedicated server plan, he can pick up one dedicated server from templates which you enabled in the plan:



By clicking **compare / view details**, user can compare parameters of available servers as well as their prices:

Comparison of available servers						
Dedicated Server	os	CPU	RAM	Disk Space	Setup Fee	Recurrent
Windows Platinum	Windows	Athlon 1000	128	100 GB	\$45.00	\$45.00
Windows Premium	Windows	Athlon 1000	128	10 GB	\$40.00	\$40.00
Close this window						

When user who chose a dedicated server at signup first enters his account, he finds that server in his cp and can use it. After the signup, you can notice this server status automatically changed from **Available** to **In use**.

Also user can choose to sign up without a dedicated server. In his cp, he can always add a templated server or send a request for a custom-built server. In this case you can create a non-templated server and assign it to the user's account by changing the server status (on page 365) to **In use**.

Reseller Plans

You can allow clients who sign up under such plans to resell your dedicated servers and/or sell their own dedicated servers.

- > To create a reseller dedicated server plan:
- 1. Launch plan edit wizard using Info -> Plan creation wizards menu and choose Reseller Plan Wizard
- 2. On the first step of the wizard, make sure to include MRTG Servers under Logical Server Groups. Such servers are needed to monitor the traffic load on client dedicated servers of a reseller:



Allow resellers to provide dedicated servers related resources, resell your servers and/or sell their own dedicated servers:

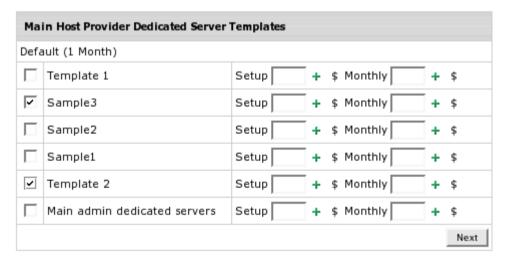


Choose Bandwidth Billing Type (on page 374) for reseler's clients who use your dedicated servers. Include Reseller DS Bandwidth and Reseller backup resource, and define prices for them:



This is what resellers will have to pay if their clients who rent dedicated servers from you use these resources. Set monthly fee per a planned backup task and extra fee per a custom one.

3. Choose dedicated server templates available to resellers setting prices for them:



- 4. On the second step of the wizard, define prices to charge reseller for:
 - Dedicated Server IP Range resource each time his clients who rent your dedicated servers buy extra IPs:



DNS PTR-records resource - each time they create records of this kind for these IPs:



Managing Dedicated Servers

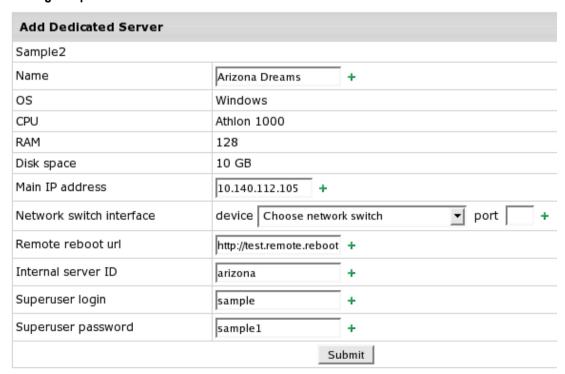
This section provides information on how you can manage dedicated servers.

In this section:

Adding Dedicated Servers	362
Editing Dedicated Servers	364
Deleting Dedicated Servers	

Adding Dedicated Servers

- > To add templated and non-templated (custom-built) servers:
- Go Dedicated Servers -> Manage Servers and click Add new Dedicated Server. If there are no dedicated server templates in the form that appears, you'll be able to add only non-templated servers.
- 2. Click the Choose icon next to the type of server you are adding.
 - Adding Templated Servers



Name: this name will be used to identify the server in the system, both by you and your users.

Main IP address: when adding a dedicated server, you can assign only one IP to it. Read how to add extra IPs (on page 368).

Network switch interface - choose a network switch (on page 351) from available in the system and its port assigned to the server.

Remote reboot url - url for online rebooting (reserved for future implementation). **Internal server ID** - "secret" name you give to the server; it will be known only to you.

Superuser login Superuser password - superuser login and password that will be provided to a customer. This information is needed for you to support this server.

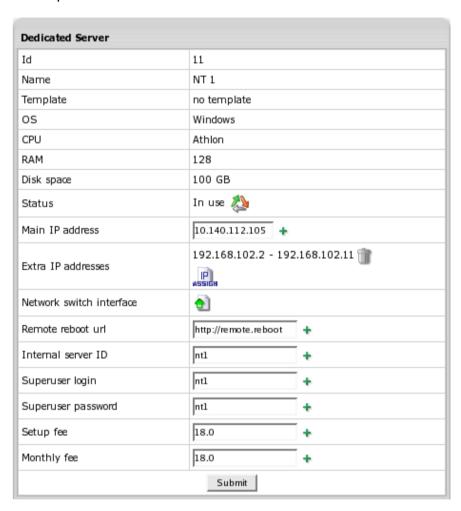
Adding Non-templated Servers

Enter the same parameters as for templated servers and define **setup** and **monthly** fee.

When you've added a server, it becomes available which means it can be assigned (on page 365) to users under dedicated server plans. Templated servers can also be picked up by users from their control panels.

Editing Dedicated Servers

Regardless of dedicated server status, you can edit the following settings using the **Dedicated Servers** -> **Manage Servers** menu. Don't forget to change the edited parameters physically. After you edit a taken server, make sure to inform its owner about the new server parameters.

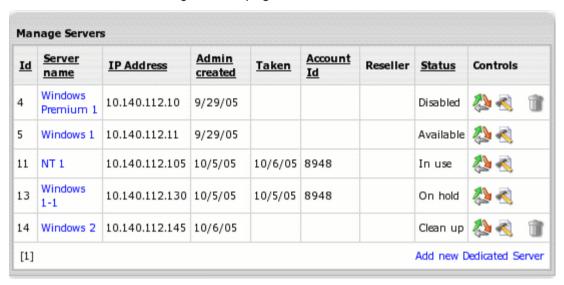


Deleting Dedicated Servers

Only dedicated servers of **Disabled** and **Clean up** status (on page 365) can be deleted from the system.

Dedicated Server Status

Dedicated servers in the system may be successively assigned the five states that are seen under **Status** on the **Manage Servers** page:



To change server status, go **Dedicated Servers** ->**Manage Servers** and click the **Change status** control against the server. Make the necessary changes and click **Submit**.

When setting In use and On hold, you will be taken to search accounts by dedicated server (on page 413) form. Find the account to assign the server to and click Select in its entry:

After you've assigned a server, the user will receive an email message with login, password, URL and IP of the server. Both **In use** and **On hold** indicate that the dedicated server belongs to account (is taken) and is billed.

There is a set sequence of changing dedicated server states. For instance, you can't change **In use** to **Available** in one click. First you need to Clean up the server as an intermediate step.

- Available -> In use is set automatically for dedicated server picked up at signup after the account it belongs to has been moderated. Set it manually for non-templated servers. Before assigning a templated server to an account, make sure that its template is enabled in the plan the account is created under. This is necessary if you want this server to be billed properly.
- Available -> Oh hold is set manually if you want to reserve a server.
- Available -> Disabled is set manually if you want the server to be unavailable to users and still remain in the system.
- On hold -> In use is set automatically when account the server belongs to gets resumed. Set it manually if you want to pass a reserved server to a user.
- On hold -> Clean up is set manually if you need to clean a used server, for instance, when upgrading the server.
- In use -> On hold is set automatically for dedicated servers if the account they belong to becomes suspended. If user requestes upgrade for his server, keep on hold (assign this status manually) both the upgraded server and the new one until the latter is ready for use.
- In use -> Clean up is set manually when user wants to cancel the server.
- Clean up -> Available is set manually after you've cleaned up the server and it is ready to be used again.
- Clean up -> Disabled is set manually if you want the server to be unavailable to users and still remain in the system.
- Disabled -> Available is set manually.

Important:

- 1. Parallels H-Sphere won't block access to dedicated servers after it cancels them or after you unassign them. Do it manually if you don't want your clients to use them anymore. The same relates to servers that go **On hold** after the system suspends accounts they belong to.
- 2. Change dedicated server status with caution. Don't practise on taken servers, even for a short time. If you make a taken server available, this can cause disclosure of private information and even its loss. If you assign a server to an account, the latter will be charged a non-refundable setup fee.

Assigning Additional IP Ranges

When a client signs up to a dedicated server plan, he receives a server with only one IP address. If allowed by the plan, he can always request additional IPs from his control panel. Clients' requests for additional IPs are received by the trouble ticket system.

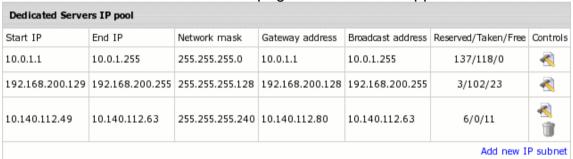
IP ranges can be assigned only to dedicated servers which are **In use**. To assign/unassign IP ranges, perform the following steps:

1. Set Prices for Extra IPs in Plans

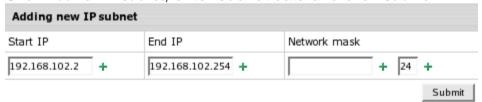
Set prices for **Dedicated Server IP Range resource** in your dedicated server plans. Allow number of free IPs and set monthly fee per one IP.

2. Add IP Subnet

1. Go Dedicated Servers -> IP Pool. The page similar to this appears:



2. Click Add new IP subnet, enter subnet data and click Submit:



Start IP - the IP next to the subnet broadcast address **End IP** - the IP preceding the subnet gateway address **Network mask** - a 32-bit number (e.g. 255.255.250) or a slash standard number (e.g. 24).

3. Parallels H-Sphere will define for you the IP range available for assignment setting the first IP in the subnet as the **Gateway address**, the last IP - the **Broadcast address**. If a case, it also defines unusable IPs which don't fit the mask. Click **Submit**:

Adding new IP subnet					
You've submit the following data					
Start IP	End IP	Network mask	Broadcast address	Gateway address	
192.168.102.2	192.168.102.254				
	Subnet calc	ulated based or	entered data		
Start IP End IP Network mask Broadcast address			Gateway address		
192.168.102.1	192.168.102.1 192.168.102.255 255.255.255.0 192.168.102.255 192.168.		192.168.102.1		
Defined IP ran	iges				
192.168.102.1	- 192.168.102.1		Gateway addres	s	
192.168.102.2 - 192.168.102.254 Available for assignent					
192.168.102.255 - 192.168.102.255 Broadcast address					
Submit					

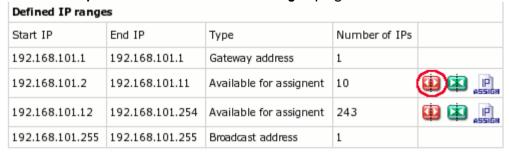
The newly added IP subnet appears on the **Dedicated servers IP pool** page (see above).

3. Split IP Subnet to Smaller IP Ranges

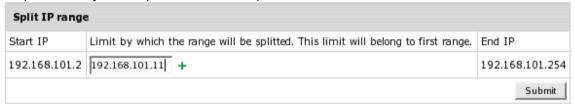
1. Go Dedicated Servers -> IP Pool and click the Edit icon opposite the needed range:

0						
192.168.101.1	192.168.101.255	255.255.255.0	192.168.101.1	192.168.101.255	2/0/253	

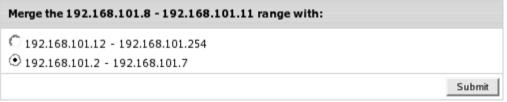
2. Click the Split icon on the Defined IP ranges page:



3. Enter the last IP in future range, depending on the number of IPs requested by user (10 in our case). Click submit:



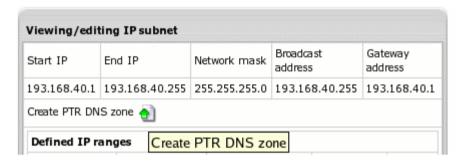
You come back to the **Defined IP ranges** page where you can further split the ranges by clicking red arrows (the **Split** icon). You can also merge the corresponding ranges by clicking green arrows (the **Merge** icon):



4. Create PTR zone for Reverse DNS Records

PTR zone is needed to store future reverse DNS records (http://www.simpledns.com/help/index.html?df_reverse.htm) users will create for their IPs.

To create PTR zone, go **Dedicated Servers** -> **IP Pool** and click the **Edit** icon opposite the needed subnet and then click **Create PTR DNS zone**:



Now it should appear on this IP subnet page:

Viewing/editing IP subnet						
Start IP	End IP	Network mask	Broadcast address	Gateway address		
193.168.40.1	193.168.40.255	255.255.255.0	193.168.40.255	193.168.40.1		
PTR DNS Zone 2-254.40.168.193.in-addr.arpa						

This will allow owner of dedicated server to which IP range from this subnet will be assigned to create PTR record for each IP from this range.

Important: Setting up reverse DNS records is implemented only for class C network IPs.

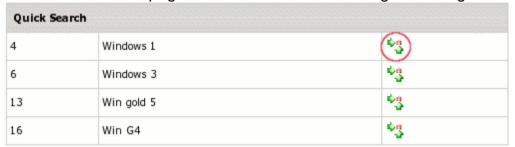
5. Assign IP Range to Dedicated Server

From the IP Pool page

1. Go Dedicated Servers -> IP Pool. Click Edit against the needed IP subnet. On the page that appears click Assign opposite to the IP range to be assigned:



2. On the Quick Search page choose the server to assign the range to:



Add your comment on the IPs usage and click Submit:



4. After that, the IPs are added to the server, and the IP range appears in the **Defined IP ranges** section as **Assigned**:



Click **Assigned** to edit the dedicated server of the newly assigned range. By clicking the **Lens** icon, you can see the server info and the comment you've just added:

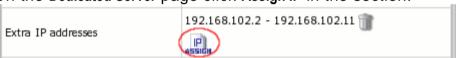
IP range assignee	
Assignee's reseller	admin
Assignee's account	2631
Assigniee's DS	Windows 1
Usage info	Add your comment.

From the Manage Servers page

 Go Dedicated Servers -> Manage Servers and click Edit for the server to add IPs to:



2. On the Dedicated Server page click Assign IP in the section:



3. Select an IP subnet. A page similar to the following appears with IP ranges available for assignment. Choose one of them:



4. Repeat steps 3 and 4 above.

6. Unassign IP Range

- Go Dedicated Servers -> Manage Servers and click Edit for the server to remove IPs from
- 2. On the Dedicated Server page click Assign IP in the section:



Important: When assigning/unassigning IP ranges from the control panel, don't forget to effect these changes on the physical level.

Billing Dedicated Servers

Dedicated servers' billing is implemented within the unified Parallels H-Sphere billing scheme. Similarly to all other resources, dedicated servers are sold by means of plans in which you can choose resources to be available to clients and determine their prices. The exception is custom-built servers (on page 355) which are assigned directly to clients who ordered them.

In this section:

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Bandwidth	Billing Types Options	376

Bandwidth Billing Types

By **bandwidth** we mean both the amount of data that can be transmitted in a fixed amount of time (measured in megabits per second) and the **traffic** - the amount of data transferred to/from the server for the given billing period (measured in gigabytes).

Dedicated server plan wizard (on page 357) allows you to choose between two basic approaches to bandwidth calculation:

- Average is calculated as the sum of all samples for a period devided on the number of the samples;
- 95th percentile which is basically the upper-range value resulting from sorting all samples for a time period, and then truncating (dropping out) the 5-percent maximums. A customer may want using this type of billing if only his dedicated server traffic is quite even (flat).

According to http://webdesign.about.com/od/colocation/a/aa012405.htm, "small servers with low bandwidth usage will typically use the average bandwidth billing while larger servers tend to use the 95th percentile.

The average bandwidth billing is quite simple to determine. The total amount of traffic inbound and outbound over the billing period is added up and then billed to the customer. This means that if the net link to a collocation server transfers 20GB of data, this is what the customer will be charged at. This is very simple and straightforward that most customers don't have a problem with this. The important thing to know is it looks at total data traffic to and from the server.

The 95th percentile calculation is a bit hard formula to explain. The easiest way to explain it is to give an example of how the calculation might be computed after a bit of explanation.

In order to determine the amount of data transferred to a server, the provider will monitor the network port that a server is attached to. Every 3 to 5 minutes, they will get a reading for the data transfer rate recorded over that time period. These are then stored in a database. At the end of the billing period, the database is queried for the entry that is the 95th percentile in overall size. This number is then put into the formula, i.e:

```
(95^{th} Percentile rate) \times (billing period length) = Bandwidth usage
```

Now, this in general will benefit most individuals since most network connections are idle for the majority of the time they are idle. However, if a site has a high sustained data transfer rate that is used for more than 5% of the time the link is up, it can be very expensive. Let's look at two examples using a shorter time span of 1 day to make it simple.

Example 1:	Over a 30 day period, a webserver gets about 30GB of traffic. For 28 of these days, the traffic consists of only 0.5GB/day. The last two days has 8GB/day of traffic. In this case of bursting traffic, the 95 th percentile would be around 0.5GB/day. Using the 95 th percentile calculation, the bandwidth charge would be: (0.5GB/day) * (30days) = 15GB
------------	--

20 c add The	ver a 30 day period, a webserver gets about 30GB of total traffic. For of these 30 days, there is only a small amount of traffic that doesn't dup at a single GB. The remaining 10 days sees traffic of 3GB/day. The sees would be 3GB. Using the 95th percentile local
--------------------	---

As you can see, the consistent traffic with several days of busting traffic in the first example actually is more beneficial to the customer compared to the second example with its traffic that bursted for more than 5% of the time. The majority of servers on the Internet are going to be similar to Example 1 and not Example 2".

Bandwidth Billing Types Options

For each of the above schemes, you can choose either to calculate only outgoing or incoming traffic as well. There are two measure unit types: mbps (megabits per second) and GB.

To summarize, there are the following bandwidth billing types options:

- Bandwidth, 95th percentile (in + out), mbps;
- Bandwidth, Average (in + out), mbps;
- Bandwidth, 95th percentile (in + out), GB;
- Bandwidth, Average (in + out), GB;
- Bandwidth, 95th percentile (out), mbps;
- Bandwidth, Average (out), mbps;
- Bandwidth, 95th percentile (out), GB;

Bandwidth, Average (out), GB.

Dedicated Servers' Maintenance

Dedicated hosting is usually accompanied by a range of managed services, such as system administration, firewalls, backups, remote reboots etc. Parallels H-Sphere facilitates providing some of such services. The backup scheduling manager receives backup requests from client control panels and is ready to display them to you in a convenient manner. Attending to other user requests, such as remote reboots, adding extra IPs and server upgrades, is assisted by the trouble ticket system.

If you want your clients to be able to send requests for remote reboot and backup of their servers, make sure to enable these resources in globals (on page 351).

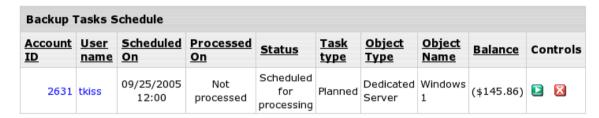
In this section:

Regular Backups	377
Maintenance Requests	
Automatic Cancellation Settings	

Regular Backups

Parallels H-Sphere implements backup scheduling manager for client dedicated servers.

To check backup schedule, go to **Backup Maintenance** in the **Dedicated servers** menu. After you choose search criteria, a page similar to this appears:



After a user has filled out regular backup request form, his record appears in this form.

When you perform the backup manually, click the (Mark as complete) icon, and the user will be notified that this task has been completed.

If you wish to cancel the user's backup request, click (Cancel the task) icon, and the user will be notified that this task has been cancelled.

Maintenance Requests

Besides regular backups, clients can request the following services from their interface:

- server upgrade
- extra IPs
- remote reboot
- server cancellation (other than automatic)

Such requests are received by the trouble ticket system:

Id	Title	Priority	Created	Last Mod.	Туре	State	Pick Up
33	Account 3166 Requested Dedicated Server Cancellation	75	Sep 21, 2005 8:41:32 AM	Sep 21, 2005 8:41:33 AM	P	New	Pick Up
31	Account 3140 Requested Dedicated Server Reboot	75	Sep 21, 2005 7:27:41 AM	Sep 21, 2005 7:27:41 AM	P	New	Pick Up
30	Account 3140 Requested New IP Numbers	75	Sep 21, 2005 7:11:49 AM	Sep 21, 2005 7:11:49 AM	P	New	Pick Up
29 	Account 3140 Requested Dedicated Server Upgrade	75	Sep 21, 2005 7:03:46 AM	Sep 21, 2005 7:03:46 AM	Р	New	Pick Up

Add you comments to confirm or reject providing such services, or to specify the necessary details:

Ticket Thread [Sep 21, 2005 7:27:41 AM] Q: User "tkissres" account #3140 requested reboot of server "Windows Gold 4" (id #17) ASAP.

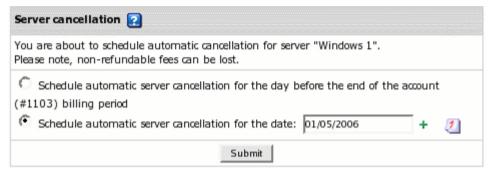
Answer				
In order to answer this ticket you should fill out the support admin info.				
Notes				
Type in your comment and click "Submit".				
Submit				

When you open ticket thread, you can see the server name and id by which to easily find it on the **Manage Servers** page.

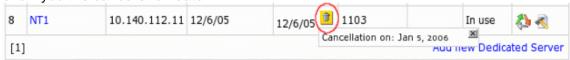
Automatic Cancellation Settings

Automatic cancellation of a dedicated server can be set both by you and by the client who has been using it. While the client can schedule cancellation only for the end of the billing period, you are empowered to perform the following:

appoint any date for automatic cancellation
 Go Dedicated Servers -> Manage Servers and click Edit for the server you'd like to
 cancel and then click in the Status field. Set cancellation date:

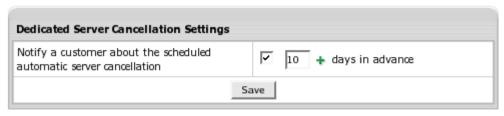


Now, on the Manage Servers page, you will see this server having specific sign to show you the cancellation date:



If the server is due to be automatically canceled within the billing period, refunds will be issued according to your refund formulars (on page 339).

- update cancellation settings
 You can update both your own and your user's cancellation settings. To discard
 cancellation, click and confirm your intention. To reschdedule, click and choose the new date.
- enable sending cancellation warnings
 To enable sending e-mail notifications about automatic server cancellation, go
 Dedicated Servers > Cancellation Settings. On the Dedicated Server Cancellation Settings
 page check the smaller box and in the bigger box, type the number of days in advance to warn your customers:



Read how to edit e-mail notifications (on page 122).

Resellers

Resellers in Parallels H-Sphere have virtually independent hosting systems to resell hosting resources and services. Resellers can't have resellers of their own.

This document explains the main aspects of resellers in Parallels H-Sphere.

Plans

Unlike in other control panels, resellers in Parallels H-Sphere don't resell your plans. Rather, they sell your hosting resources such as disk space, traffic, mailboxes, etc. at retail prices, and are charged for them at wholesale prices. In other words, you set wholesale prices and allow your resellers to group your resources into their own plans and define their own retail prices for them. Resellers aren't charged for any resource until their end-users come and buy them at retail price. This makes resellers full-featured hosting providers with complete freedom in developing their own sales policies and creating hosting plans that are totally different from yours by prices and combination of resources.

Dual Nature of Resellers

A reseller in Parallels H-Sphere has a dual nature, which is incorporated in two control panels and, respectively, two Parallels H-Sphere accounts. On the one hand, a reseller is a user to the system and has a reseller account holding reseller's contact info, billing info, and online invoices. On the other hand, as administrator to their customers and distributor of hosting services, a reseller has a reseller administrative account, which is created from inside the reseller account. Reseller Admin CP is created automatically when reseller signs up for a plan. It doesn't show up in search results which prevents this account from unintentional deletion.

Private Label

With the reseller administrator CP, each reseller gets a private label hosting system, which makes admin completely invisible to the end customer including at signup and domain registration. Resellers can have their own independent control panel URL, DNS server names, host names for mail, web, sql, and other servers, company information, and all other properties that make them look as totally independent hosting companies. Furthermore, reseller control panels are inaccessible by IP, which excludes the possibility of accidental or intentional visits to your control panel.

Look and Feel and Regional Settings

With their admin control panels, resellers can customize the default look and feel of their users' control panels. They can change colors, replace all control panel images with those of their own, edit many texts, change the default control panel language and the currency of end user payments, enable and disable skins, set default skins for new accounts. etc.

With their reseller control panels, resellers can change the skin and language of their reseller control panels only.

Merchant Gateways

Resellers are independent in configuring credit card processors and web payment systems. To accept credit cards, resellers must register their own accounts at the credit card processing centers and configure their merchant gateways, just like it is done by master admin.

Domain Registration

For resellers to offer domain registration services, master admin needs to set up a connection with a supported domain registration provider and set wholesale domain registration prices for supported TLDs in the reseller plan. Resellers can't create their own registrar connections. They can only set retail domain registration prices for the TLDs configured by master admin.

Providing Support

Resellers in Parallels H-Sphere have their own independent support centers.

Ticket Center. Each reseller has a fully-featured ticket center to answer trouble tickets from end customers. The administrator receives only internal system error notifications that are related to the server configuration. If necessary, the administrator can provide support to resellers' end users (on page 408).

Knowledge Base. Knowledge bases owned by resellers are separate from those owned by master admin.

Control Panel

Resellers acquire almost all administrative features offered by Parallels H-Sphere, except Logical/Physical Server management and related reports, Miva and Urchin License Management, creating sub-resellers, and viewing summary info for the whole hosting system.

Web, Mail, and SQL Resources

Resellers don't have web, mail, and SQL resources. Both reseller and reseller admin accounts are only logical entities of the control panel and DNS, and don't have corresponding accounts on web, mail, or SQL servers. To set up a website, a mailbox, or a database, a reseller Starting from Parallels H-Sphere 3.0 reseller administrative CP is created authomatically when reseller sign's up for a plan. It doesn't show up in search results which prevents this account from inententional deletion. Reseller now won't be able to login to his resller administrative account from the login page and will have to first login to his top reseller account.

Servers

Resellers' customers are automatically distributed across web, mail, and SQL servers, and their home directories are created next to the directories of admin's direct end users. If necessary, resellers can be placed on separate boxes (on page 404).

SSL

CP SSL. Parallels H-Sphere offers SSL protection for reseller control panels based on service IPs or ports.

Shared SSL. Resellers can install wildcard ssl certificates to protect their customers' websites running on third level domains.

Inherited SSL. Resellers can offer SSL protection using admin's wildcard certificates.

Billing

Every time the system creates a billing log entry for a reseller's customer, it also creates a shadow billing log entry for the reseller. The two entries show two different amounts, because they use retail and wholesale prices respectively. When reseller's customers acquire resources over free quotas allocated to the reseller, the reseller is charged the wholesale amount. When reseller's customers are refunded, the corresponding wholesale refund amount is credited to the reseller's account.

At the end of each day, the wholesale charges are summarized by type, and a separate bill is created for each type of resources. As the result, resellers don't see these charges until the next day. More on billing resellers (on page 392).

Markup plans

Markup plans are plans with **pre-defined set of resources** created based on other hosting plans to be resold by resellers or main host administrator. Billing for markup plans works the same way as for other plans. If a markup plan is resold by reseller, fees are collected from reseller as described in Billing Resellers (on page 392).

To create a markup plan, see Creating and Editing Plans (on page 360).

In this chapter:

Reseller DNS	
Creating And Editing Reseller Plans	
Billing Resellers	392
Reseller Control Panel SSL	394
Reseller Shared SSL	400
Placing Resellers on Separate Boxes	404
Allocating Physical Servers to Resellers	407
Supporting Resellers' Customers	408
Deleting Resellers	409
Suspending And Resuming Resellers	410
Moving Accounts Between Resellers	410

Reseller DNS

This document explains what you need to do in the administrator control panel before you can start creating reseller plans and reseller accounts.

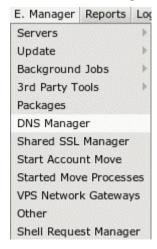
Step 1. Adding Reseller CP Alias Template

Note: Properly configured admin control panels would already have a reseller cp alias template created during Parallels H-Sphere installation or post-install configuration. If you find out that you have a reseller cp alias template added, simply proceed to the next section of this document.

Reseller CP Alias Template is used to generate Reseller CP Aliases, temporary addresses that are used to access reseller control panels until they are changed to resellers' own URLs. Reseller CP Alias Template is one for all resellers.

> To create the Reseller CP Alias Template:

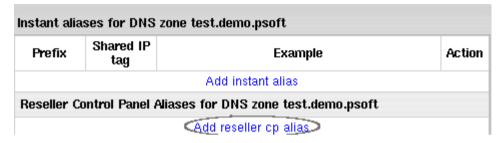
1. Select DNS Manager in the E.Manager menu:



2. Click the Edit icon next to the DNS zone:



3. On the page that appears, click Add reseller cp alias:



4. Enter a new prefix, for instance w.



This prefix will help you distinguish which DNS zone will service the temporary reseller cp alias when you proceed to creating reseller plans.

Note: There is no need to create more than one reseller cp alias template in this DNS zone.

Step 2. Configuring Reseller DNS Servers

Resellers can use their own names for your logical servers, which improves the transparency of your hosting company.

To enable this possibility for resellers, you need to allocate several additional IPs:

- 1. Select L.Servers in the E.Manager menu.
- 2. Click on your ns1 server.
- 3. On the page that opens, add a range of IPs. As the type of IP, select DNS Reseller IP. Shared IP tag field is usually left empty. Ideally, the number of IP's should correspond to the number of resellers.
- 4. Repeat the previous step for all other name servers. Make sure to add a different set of IP addresses to each of your logical DNS servers, even if they are on the same box. The number of IP's must be the same for each logical DNS server. For example, if you have two DNS servers, ns1.provider.com, and ns2.provider.com, you need to add, say 10 DNS Reseller IPs to ns1.provider.com and another 10 DNS Reseller IPs to ns2.provider.com. One common mistake is to add reseller DNS IPs to the CP logical server. In this case you will get the following message: The dns record "*.zxcv.web-hosting-service.com" already exists. You can use a duplicate DNS record name only for MX records. If you get this message, delete the range of IPs you have added and then add it again to the DNS logical server.
- **5.** Enable dedicated IPs for Reseller DNS servers by checking a box in **Globals**.

Reseller DNS server IPs are treated as free. If you want to charge your resellers for using them, please include their cost into reseller account maintenance recurrent fee.

If your DNS servers run out of available IPs, the system will return the following message:

no Reseller DNS IP is available for host ... In this case, you need to add several more DNS Reseller IPs to each of your DNS servers.

Now that you have performed the above two steps, you can proceed to creating reseller plans. After that you'll be able to sign up reseller accounts using the **SIGNUP** utility in your admin control panel, and the newly created resellers will be able to enter and configure their accounts according to the Getting Started section of the reseller guide.

Creating And Editing Reseller Plans

> To create reseller plan:

- 1. Launch reseller plan creation wizard (on page 360)
- 2. Fill in the wizard forms (see below)
- 3. Follow-up (optional)
 - Grant access to the newly created plan (on page 272)
 - Enable/disable the newly created plan for signup
 - Create actual billing periods (on page 322)
 - Edit the newly created plan (see below)

Plan creation wizard forms are arranged into the following steps:

Step 1. Configuring The Plan

- Plan name: give a name to this plan. Later you can change this name on the Settings page, Manage, the Plans menu.
- Hosting Platform: hosting platforms available for all users under this plan are enabled by default.

Note: unchecking any of hosting platforms will not just disable them for all users under this plan, but also will disable all relevant server groups to be available at signup.

- Allow server groups: groups of logical servers enabled for the entire system for users after signup.
 - Note that unchecking either win server or web server group will disable the corresponding hosting platform for all users under this plan.
- Global Resources: resources that are included into Parallels H-Sphere but may not be
 offered by the administrator. They can be disabled for all users under this plan by
 unchecking the box next to the resource.
- Dedicated Servers: allow Dedicated Servers hosting and its features including custom built dedicated servers, remote reboot, and backup.

Note: platforms, logical servers, global resources, and dedicated servers are enabled in Reseller Plans by default. Unchecking either of them will disable them for all resellers under this plan and their end users as well.

- Reseller CP SSL: enable securing reseller complete control panel with IP-based or port-based SSL or disable it for all accounts under this reseller plan.
 Note that if the reseller CP SSL is disabled in the Global Resources menu, it will appear entirely disabled in the Plan Wizard. More about Reseller CP SSL. (on page 394)
- IPs Of Reseller DNS Servers: choose whether resellers on this plan will host their DNS server aliases on a shared IP (Service IP) or will be able to use dedicated IPs for this purpose. In latter case you'll have to add a pool of free DNS IPs for resellers on your DNS logical servers. More about Reseller DNS IPs. (on page 383)

- E-mail Invoice Notification: set the system to send e-mail invoices to resellers registered under the plan.
 - e-mail invoices are sent to the e-mail address that reseller provides in his billing info or contact info (in the absence of the first);
 - the default can be overridden by individual reseller settings;
 - toggling the option doesn't affect settings of the existing resellers.
- Leave registrar prices as they are: checking this box will fix prices for domain registration for all account under this plan that are set in the Domain registrar of the Settings menu and omit Step Prices for Registrar of plan wizard.
- Leave domain transfer prices as they are: check the box if you want to charge resellers
 the default fees for registering domain names by his end-customers. This will omit
 Step Domain Transfer Prices of plan wizard.
- Leave SSL Certificate and Logo prices as they are: checking this box will leave prices for SSL Certificates and TrustLogos as set in the ComodoSSL of the Settings menu and omit Step Define Terms/Prices of plan wizard.
- Credit Limit: the amount of negative balance you allow your resellers to run into before they are charged. More about Credit Limit (on page 319).
- Control panel alias: alias template (mask) used to generate URL at which reseller and his users will be able to log into the control panel until the reseller changes it to his own control panel URL.
 - * In case the Control panel alias field is blank, check if you have created Control panel alias template (on page 383) in your DNS zone.
- Reseller Account, Reseller Traffic, Summary Disk Usage: set prices and free units for default 1 month billing period or base prices to calculate fees (on page 392) collected from resellers for services provided with reseller account if they are not specified for the actual billing period on the fourth or any subsequent steps of reseller plan edit wizard.

Important: If you have changed Reseller Traffic or Summary disk usage values while editing reseller plan, make sure not to check **Do not change resource prices**, otherwise the wizard won't remember the changes.

Setting Custom Prices for Registrar

Set custom fees to charge resellers for domains registered with Enom or OpenSRS by their end users. To get to this page, make sure to uncheck the 'Leave registrar prices as they are' box while configuring plan wizard.

Prices for Registrar				
Duration	Default price	Custom price		
.net				
1 Year	5 \$	6		
2 Years	4 \$	7		
3 Years	6 \$	8		
4 Years	7 \$	9		
5 Years	8 \$	10		

The custom fees you enter override the default domain registration fees set in the Domain Registration Manager (on page 155). If you don't enter a price, a corresponding default price will be used in its place.

Important: To allow your resellers to sell your domain registration services, make sure to set default domain registration prices in the Domain Registration Manager (on page 155). Otherwise, resellers under this plan won't be able to offer domain registration to their end users.

Setting Custom Domain Transfer Prices

Set custom fees to charge resellers for domain transfer performed by their end users. To get to this page, make sure to uncheck the 'Leave domain transfer prices as they are' box while configuring plan wizard. The custom fees you enter override the default domain transfer fees. If you don't enter a price, a corresponding default price will be used in its place.

Setting Custom SSL Certificate and Logo Prices

Starting with Parallels H-Sphere 3.0, prices for various types of certificates and trustlogo & cardpayment logo, when bundled with that certificate, can be customized in the plans, provided you didn't check the Leave SSL Certificate and Logo prices as they are box while configuring plan Wizard.

	oox write cornigating plan wizara.				
Define Terms/Prices					
InstantSSL Certificate					
1 Year	1	+	TrustLogo 1	+	Card Payment TrustLogo 1 +
2 Years	2	+	TrustLogo 2	+	Card Payment TrustLogo 2 +
3 Years		+	TrustLogo	+	Card Payment TrustLogo +
InstantS	InstantSSL Pro Certificate				
1 Year		+	TrustLogo	+	Card Payment TrustLogo +
2 Years	2	+	TrustLogo 2	+	Card Payment TrustLogo 2 +
3 Years		+	TrustLogo	+	Card Payment TrustLogo +
PremiumoSSL Certificate					
1 Year		+	TrustLogo	+	Card Payment TrustLogo +
2 Years		+	TrustLogo	+	Card Payment TrustLogo +
3 Years		+	TrustLogo	+	Card Payment TrustLogo +
EliteSSL Certificate					
1 Year		+	TrustLogo	+	Card Payment TrustLogo +
3 V		٦.	T41	٦.	C C

The price for logos is dynamically updated based on the certificate selected in the select box. If you specify the price 0 for the logo, the logo will be available for a user, but the user will not be charged for it. But if you specify no price for the logo, a user will not be able to check this logo, and the price for the logo will be displayed as NA.

Step 2

Set prices to calculate fees collected from resellers for hosting services they distribute with user accounts (on page 285) over free quotas set herein.

Price Parameters

Parameter	Meaning	Example	Entering 0 (zero)	Leaving Empty
Free	Units of each resource resellers can offer to their customers without being charged. Free units make sense only for pay resources.	If you set 10 Free units for Mailboxes, each reseller will get 10 mailboxes to be spread among all his customers. If he runs out of these 10 free mailboxes, reseller will be charged for each extra mailbox acquired by his end users.	Reseller gets no free units. Better leave the field empty instead.	Reseller gets no free units. If you want to set free units to unlimited, better don't set any prices for this resource.
Setup	Single-time fee resellers are charged, if their end users acquire resources over free units you allocate resellers with.	Reseller on a plan with 10 free domains and \$1 for domain setup, signs up the 11 th user on a 2 month billing period. Provided each of the reseller's first 10 users has registered one domain, the reseller will be charged \$2, because the 11 th domain is registered over 10 free domains used up by existing accounts.	Reseller won't be charged for resources his end users acquire over free.	Reseller won't be charged for resources his end users acquire over free.
Recurrent	Monthly price to calculate recurrent fees resellers are charged ahead when their end users acquire resources over free units that resellers are allocated with.	Reseller on a plan that allows 3 free user accounts and \$1 of recurrent for each user account over free, signing up the 4 th account on a 2 month billing period will be charged \$2.	Resellers won't be charged any recurrent fees for resources his end users acquire over free.	Resellers won't be charged any recurrent fees in the documentation for resources his end users acquire over free.
Usage	not	-	-	-

	implemented yet leave the field empty			
Max	Units of this resource that can be distributed among all customers of one reseller. Reseller's customers can't create resources beyond the reseller's Max.	Reseller on a plan with 100 MB Max set for disk quota, won't be able to sign up more than 5 accounts under a plan allowing 20 MB of FTP quota for each new account. Keep in mind that end users can increase their initial FTP quota which may leave insufficient MB to create new accounts.	Reseller won't be able to offer any units of this resource or create accounts under plans with this resource included.	Reseller will be able to offer unlimited units of this resource.
Refund	The part of the prepaid recurrent fee returned to the reseller if the resource is canceled by the end customer.	You are setting prices for a 2 month billing period. Your wholesale recurrent price for a domain is \$4. You set resellers refund to 50%. An end user signs up on 1 January. On 1 February he cancels the account, which means the February half of the recurrent fee is due back. The reseller will get in the documentation a refund of (\$4 X 50%refund X 50% billing period =) \$1.	Reseller won't be refunded.	Reseller will be refunded 100%. Don't enter 100%, leave the field empty instead.

Comments on Resources

Don't get confused with setting prices for the following resources:

- CP Account: Parallels H-Sphere account with a unique account ID.
- Domain: any domain transferred or registered through Parallels H-Sphere under reseller.

Note: service DNS zone domain isn't counted as a payable resource.

Web Server User: an FTP user on a web or win server.

- IP Address: any dedicated IP taken by domains under reseller. Note that reseller DNS server IPs are treated as free. If you allow resellers to host their DNS server aliases on dedicated IPs you might want to include their cost into recurrent fee for reseller account maintenance.
- Summary Traffic: appears only if you choose to bill reseller for traffic allocation.
- Disk Space Quota: refers to web FTP disk space only and doesn't include disk space for mail resources and DBs.

> To edit reseller plan:

- 1. Launch reseller plan edit wizard (on page 360).
- 2. Fill in the wizard forms arranged into four or more steps:
 - **Step 1 2** (including sub-steps): the same as in plan creation wizard. **Subsequent steps:** set actual billing period prices and free units for services provided with reseller account (on page 285) (**Reseller account**, **Reseller traffic** and **Summary Disk Usage**). If you leave the fields empty, fees for the respective services will be calculated based on prices and free units set on the first step of the reseller plan wizard.
 - * The number of subsequent steps depends on the number of actual billing periods (on page 322) for this plan.

Billing Resellers

Fees Collected From Resellers

Due to the dual nature of resellers in Parallels H-Sphere they are charged:

- for services provided with reseller account
- for services distributed with user accounts

Fees for services provided with reseller account

Fees for services provided with reseller account are calculated based on *actual billing* period prices and free units set on the fourth or any subsequent steps of reseller plan edit wizard. If prices or free units for actual billing period aren't set, corresponding base prices and free units set on the first step of reseller plan wizard are used instead. In this case the fee is adjusted to respective discount (on page 322).

- Setup fee for reseller account: single time fee charged at the moment the reseller account is created.
 - = Setup price for a CP account
- Recurrent fee for reseller account: service fee for maintaining of reseller account during the whole billing period; charged in advance the moment reseller account is created and since then at the beginning of each billing period.
 - = Monthly price for a CP account
 - * if the base price is used, it is multiplied by billing period duration in months.
- Recurrent fee for additional traffic or disk space: fee for each GB of traffic or MB of disk space that reseller reserves to distribute between his end users over free units you allocate to resellers; charged inprorated for the whole billing month in advance at the moment of purchase and since then at the beginning of each billing month.
 = Monthly price for Reseller traffic or Summary Disk Usage x units over Free quota /
 - = Monthly price for Reseller traffic or Summary Disk Usage x units over Free quota / billing period duration in months
 - * if the base price (on page 392) is used, it's not divided by billing period duration in months
- Usage fee for exceeding traffic or disk space quotas: fee for each GB of traffic or MB of disk space consumed by reseller's end users over the quota reserved by reseller; charged at the end of each billing month
 - = Extra price for Reseller traffic or Summary Disk Usage **x** units over Traffic/Summary Disk Usage quota reserved by reseller / billing period duration in months
 - * if the base price is used, it's not divided by billing period duration in months

Fees for services distributed with user accounts

Resellers are charged fees for services distributed with user accounts when their customers acquire resources over free quotas allocated to resellers. The fees are calculated based on prices and free units set on the third step of reseller plan wizard.

- Setup fee: single time fee for creating a unit of specific resource by reseller's end users over free units you allocate to reseller; charged the day after it is acquired.
 Setup price for specific resource
- Recurrent fee: service fee for maintaining of resource acquired by reseller's end
 users over free units you allocate to reseller; charged in advance for the whole end
 user's billing period the day after it is acquired and since then at the beginning of
 each end user's billing period.
 - = Monthly price for specific resource **x** end user's billing period duration in months * Mind that if the resource is acquired in the middle of the end user's billing period, the recurrent fee is prorated to the days remaining to the closure of the end user's billing period:
 - = recurrent fee ${\bf x}$ days remaining to the billing period closure ${\it I}$ billing period duration in days

Charging Resellers for Traffic

The table below explains the difference between two alternative approaches in charging resellers for traffic.

Traffic Usage	Traffic Allocation		
- charge resellers for the traffic that their end users have run up during a month period (either from the beginning of the billing period or from the time when the traffic limit was changed). * the traffic run up during the last day of the month is transferred to the next month charges	- charge resellers for traffic that their end users have requested		
Configuration of Traffic Charge Billing Schemes through Plan Edit Wizard			

On the first step set:

- Free: GBs of traffic that you allow your reseller to provide to his end customers for month. If traffic run up during the month keeps within this amount, you don't charge reseller anything. Free makes up initial traffic quota.
- Extra: reseller payment per each GB that is run up over traffic quota*.
 'Extra' is charged at the end of each month.
- Monthly: fee that reseller pays per each GB bought to increase his 'free'. This way reseller increases his traffic quota. This is usual when reseller constantly overpays for exceeding the 'free' limit. Monthly is charged at the beginning of each month.
 - * traffic quota = free GBs + additional GBs

On the first step leave all the fields referring to traffic empty.
On the second step set:

- Free: GBs of traffic for billing period a reseller can provide to all his end customers without being charged.
- Setup: N/A
- Recurrent: reseller month payment per each GB reseller's end customers have requested by setting Summary Traffic limit for their accounts in excess to free you set for this reseller's plan.
- Usage: Money paid by reseller per each GB of traffic his end customers run over traffic limit they set for their accounts.
- Refund: % of recurrent fee that is refunded to the reseller for the unused GBs of booked traffic when the end user quits hosting or otherwise closes the billing period.
- To set traffic usage scheme working, you have to log into each reseller account registered with that kind of plan and change their summary traffic limit (Info-> Account Settings) to either plan's free traffic amount or zero.
- > If you decide on enabling traffic usage scheme for all your reseller plans, To log in as the cpanel user:
- **1.** Log in as root first:

\$ su -1

- **2.** Log in as the cpanel user:
- 3. # su -l cpanel and run the following command:

java psoft.hsphere.converter.ResellerTrafficUpdate

Reseller Control Panel SSL

Parallels H-Sphere allows securing reseller control panels with SSL by allocating either spare IPs or open ports to the control panel server. It is available only for **Apache installations** of Parallels H-Sphere because it uses virtual hosts in the Apache configuration file.

In one reseller plan, you can use either IP-based or Port-based reseller SSL, not both. Although you can set different types of CP SSL protection for different reseller plans, it's highly recommended to use *IP-based* Reseller CP SSL in contrast to *port-based*. The reason for this is that Internet is widely accessed from behind firewalls and proxy servers that don't allow using random ports.

In this section:

Enabling Reseller Control Panel SSL Protection	396
Disabling Reseller Control Panel SSL Protection	400

Enabling Reseller Control Panel SSL Protection

Step 1: Add and register index.conf file.

- 1. Log into your control panel server as root.
- 2. Make sure you have the following line in the /hsphere/local/home/cpanel/apache/etc/httpd.conf file: include /hsphere/local/home/cpanel/apache/conf/sites/index.conf
- 3. Open file ~cpanel/shiva/psoft_config/hsphere.properties
- **4.** Make sure the following variables are there and uncommented:

Note: If you don't add these variables, Reseller CP SSL won't be working. So make sure to do it.

■ For IP-based SSL:

RESELLER_SSL_SEC_PORT = 8443

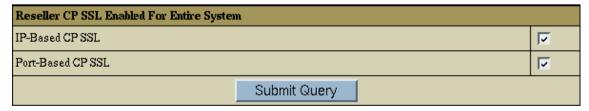
RESELLER_SSL_INSEC_PORT = 8080

You may need the ports changed, e.g. to 443 and 80 correspondingly.

- For port-based SSL: RESELLER_SSL_PORT_RANGE = 8440, 8444 - 8449, 8451, 8453-8468 It's a possible range of ports for port-based CP SSL to be created on. Make sure that ports are open.
- 5. Check if you have the sites directory in the /hsphere/local/home/cpanel/apache/conf/ dir. If you don't, create it: mkdir /hsphere/local/home/cpanel/apache/conf/sites and make file index.conf inside it: touch /hsphere/local/home/cpanel/apache/conf/sites/index.conf
- 6. Restart Parallels H-Sphere

Step 2: Check Global Resources for Reseller CP SSL in your administrator CP.

- 1. Log into your admin control panel.
- 2. Select Globals in the Plans menu. The following page appears:



Make sure that Reseller CP SSL is checked i.e. enabled entirely for the whole system.

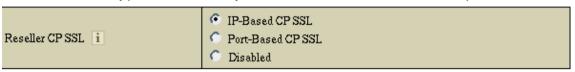
- If they are checked, leave as they are.
- If they are unchecked, check them and click **Submit**.

Note: be careful because unchecking the boxes will disable Reseller CP SSL entirely.

Step 3: Include Reseller CP SSL in Reseller Plan Wizards

This step is most important for resellers. For the resellers to be able to secure their control panel, Reseller CP SSL needs to be included in the plan settings:

- 1. Select Manage in the Plans menu.
- 2. Click the name of the reseller plan to start the wizard.
- 3. On the first step of the wizard, scroll down to the Reseller CP SSL section and select the type of CP SSL you want to be enabled in this plan.



Note: If you select **Disabled**, reseller CP SSL will be disabled for all accounts under this plan.

4. Confirm changes in the Plan Wizard by clicking **Submit** through all steps.

Step 4: Add spare IPs to the control panel server.

Note: Port-based CP SSL uses CP IP, so skip this step if you are setting *port-based SSL*.

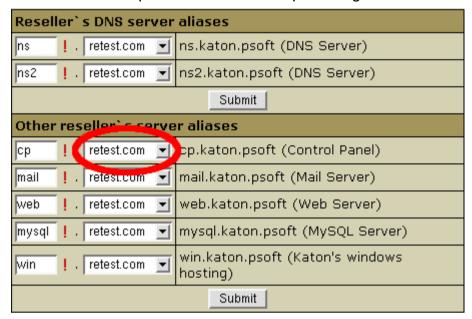
- 1. Log into your admin control panel.
- 2. In E.Manager, select the cp logical server and add Reseller SSL IPs (on page 48)

Step 5: Install SSL certificate.

1. Log into reseller control panel.



- 2. Select **DNS Manager** in the **E.Manager** menu and create a DNS Zone (on page 93) if it has not been created before.
- 3. Select Server Aliases in the DNS zone settings.
- **4.** Add **CP Alias** that points to the control panel logical server:



- **5.** The CP alias name should coincide with the domain name you are going to secure.
- 6. Select CP SSL Manager in the E.Manager menu.
- 7. On the page that shows, turn on **CP Alias** to enable it in the system:

CP SSL Manager					
Reseller CP alias	Port number	IP	Action		
cp.tech.biz.net		-	OFF		

On the page that appears, you have two choices:

Generate a temporary SSL certificate and certificate request				
New SSL Support				
SSL Server Private Key				
J				
SSL Certificate				
Submit				

- Generate a temporary wildcard certificate by clicking the link at the top of the window;
- Enter your existent wildcard certificate by entering it in the form.
- 8. Click the Submit button to install the certificate.
- 9. On the page that shows, CP alias turns on. In the Action section you can:

CP SSL Manager						
Reseller CP alias	Port number	IP	Action			
cp.tech.biz.net	443	192.168.112.172	ON EDIT CHANGE			

- Click the Edit icon against the alias to edit certificate data or to enter new keys.
- Click the Change icon to change current reseller CP URL to the secured URL you have bought SSL certificate for.

Note: Select **DNS Manager** in the **E.Manager** menu. If you have set IP-based CP SSL, *cp server alias* becomes an *A DNS record*.

Step 6: restart Parallels H-Sphere

Disabling Reseller Control Panel SSL Protection

- 1. Go to CP SSL Manager in the E.Manager menu.
- 2. Turn off Reseller CP alias in the Action entry.
- 3. Go to Server Aliases in the E.Manager menu.
- 4. Remove server alias for the cp logical server and add it again.

Reseller Shared SSL

This document explains how to configure your hosting system so your resellers can offer their own wildcard SSL certificates or your wildcard SSL certificate.

In this section:

Resellers' Own Wildcard Certificates	401
Sharing Your Wildcard Certificates with Resellers	402

Resellers' Own Wildcard Certificates

In order to allow a reseller set up a shared SSL certificate, you need to give this reseller a unique IP address. This can be done by means of shared IP tags. A shared IP tag is a one or two digit 'mark' that is assigned to customer accounts so accounts with different shared IP tags can be hosted on different shared IPs. In the plan settings, you or your resellers will select out of available shared IP tags, after which new accounts will be created on this new shared IP address. Existing accounts won't be affected, meaning their old IP address will remain the same.

> To create a new IP with a shared IP tag:

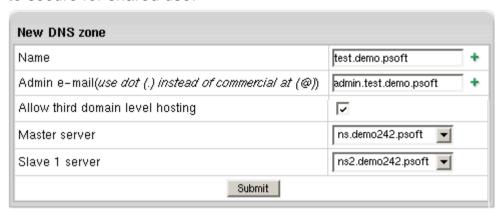
- 1. Select L.Servers in the E.Manager -> Servers menu.
- 2. Click the first web (or win2000) server.
- 3. On the page that appears, enter a new IP address and net mask, in the Type box select Shared IP, and in the Shared IP Tag field enter a value from 10 to 99. Click Submit.
- **4.** Repeat the previous step for all web and win servers, using a different (unique) IP addresses for each server, but the same shared IP tag.
- 5. Tell your reseller which shared IP tag he can use. For instance, if you have two resellers willing to install shared SSL certificates, you need to create two shared IP tags, e.g. 10 and 11. Then you tell one reseller that he can use tag 10, and the other, that he can use tag 11. It's a good idea to check each reseller's plan settings to make sure they are using correct shared IP tags.

Sharing Your Wildcard Certificates with Resellers

Since a wildcard SSL certificate can secure only third level domains of one base domain (e.g. *.example.com), you need to dedicate one domain name that will be available both to your direct end users and to end users of your resellers. Normally, this would be a neutral domain name unrelated to the name of your hosting business. Even though end users will still be hosted on their resellers' domains and will use these domains for http access (http://user1.resellerdomain.com), they will also get secure access based on the domain you offer for shared reseller ssl (https://user1.sharedresellerssldomain.com).

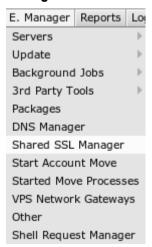
> To enable Shared SSL for resellers:

 Select DNS Manager in the E.Manager menu and add a DNS zone you'd like to secure for shared use:



The DNS zone must appear in the list of available DNS zones. If you are going to use this zone only to offer shared SSL, you don't need to enable third level hosting, nor add instant alias or reseller cp alias.

- 2. Install a shared SSL certificate on this domain zone as instructed in the Installing Shared SSL Certificates (on page 140) manual.
- 3. Once you have installed the shared SSL certificate, select Shared SSL Manager in the E.Manager menu:



4. Click to enable **Share SSL with resellers** for the domain zone you have added:



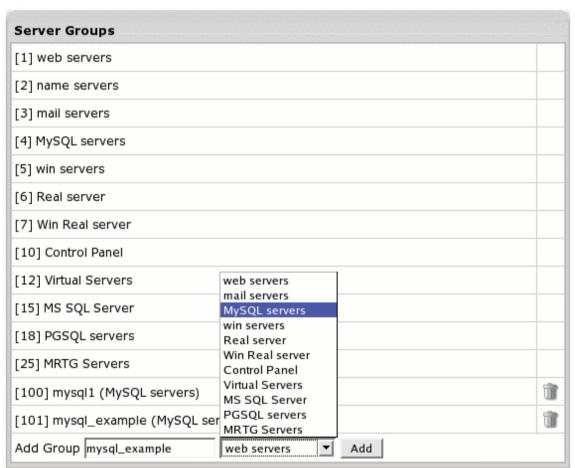
5. Now your resellers can enable this shared SSL certificate for use by their end users as instructed by the Offering Provider's Shared SSL in the Reseller's guide.

Note: If you are using different shared IP tags, make sure that your resellers use the same shared IP tag as in the main administrator control panel Shared SSL settings.

Placing Resellers on Separate Boxes

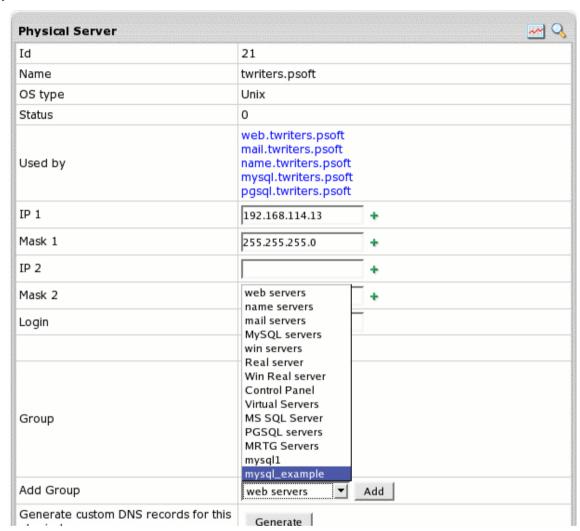
This document explains how to configure your control panel so user homes under one reseller are created on a separate physical server:

Step 1. Go to **E.Manager -> Servers -> Server Groups** and create new server groups for each type that will be created on this reseller's box:



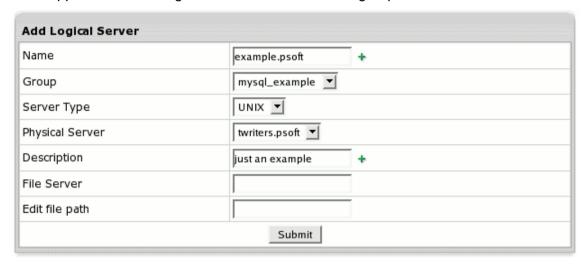
Usually, this would be a web server, sometimes a MySQL, PostgreSQL, or RealMedia server. Make sure not to create separate DNS server groups. When added, server groups will show up in the numbered list.

Step 2. Go to **E.Manager** -> **Servers** -> **P.Servers**. Click the target physical server. At the bottom of the page that appears, select a group you have created to add to this physical server:

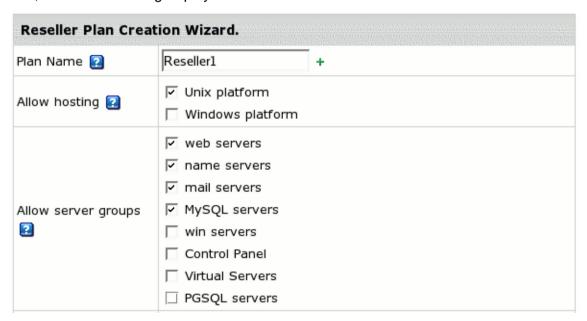


and click the **Submit** button. The name of the group will appear in the **Group** field. Repeat this procedure for each of the new server groups.

Step 3. Go to **E.Manager** -> **Servers** -> **L.Servers** and click **Add Logical Server**. Fill out the form that appears to add a logical server to a new server group:



- **Step 4.** On the Logical Server settings page, add the IPs (on page 48) that you want to use for accounts registered on this logical server.
- **Step 5.** In the upper part of the same Logical Server settings page, turn on **Available for signup**.
- **Step 6.** Repeat steps 3, 4 and 5 to add one logical server to each new server group.
- **Step 7.** If the reseller plan hasn't been created yet, launch the Reseller Plan Wizard (on page 386). Otherwise, launch the Plan Editor (on page 386). In the **Allow server groups** section, check the server groups you would like the reseller to use:



Mind, these settings will not affect existing end user accounts. Only new accounts will be created on the designated server.

Step 8. If the reseller account hasn't been created yet, go to **Plans -> Manage** and enable signup for this plan. Then go to **Signup** and create the reseller account.

Step 9. Go to **Plans** -> **Manage** and turn this reseller plan OFF for other signups.

Allocating Physical Servers to Resellers

Parallels H-Sphere introduces Allocated Servers which allow assigning *nix physical servers to resellers so their end users' homes are created on it (to allocate Windows servers, refer to Placing Resellers on Separate Boxes (on page 404)). Physical servers are assigned to reseller plan, so every reseller signing up for it obtains one of them. In case there are no allocated servers available for the plan, reseller signing up with it, will be moderated (on page 471) and you will be notified of it through trouble ticket system

To allocate a physical server to a reseller:

- 1. Make sure it meets all of the following requirements:
 - physical server is assigned all of and only these server groups (on page 71):
 WEB, MAIL and MySQL
 - * if any of these server groups isn't assigned or the physical server is assigned another type of server group, **E.Manager** -> **Servers** -> **Allocated servers** won't list it as an allocated server.
 - physical server is associated with all three logical servers (on page 39): Web, Mail and MySQL
 - the logical servers assigned must not be used by any accounts
 - none of the associated logical servers is involved in a content move (on page 488)
- 2. Go to E.Manager -> Servers -> Allocated Servers. You will be taken to the list of physical servers meeting the above requirements in the Search Results section:

Search Results							
P.Server ID	P.Server Name	<u>State</u>	<u>Plan ID</u>	<u>Plan Name</u>	Account ID	<u>Username</u>	Controls
21	allocated.psoft	Taken	7	Reseller1	1872	resralloc	
22	allocated1.psoft	Taken	7	Reseller1	2165	testcom2	
23	allocated2.psoft	Available	15	Reseller 2			Assign server to plan Unassign
24	allocated3.psoft	Unassigned					Assign server to plan
25	allocated4.psoft	Available	7	Reseller1			Assign server to plan Unassign
[Prev] [1] [2] [3] [Next]							

- 3. Click Assign Server to Plan (the Controls section) for the physical server you are allocating.
- **4.** On the next page, choose the reseller plan you want to add this server to:



The allocated server's state in the **Search Results** table will change from **Unassiged** to **Available**. This means the server is ready to be taken by a reseller.

- **5.** To allow resellers to obtain an allocated server, include **Allocated physical** server resource in the reseller plan wizard (on page 386)
- **6.** Sign up (on page 464) a reseller for this plan, and he will automatically get the physical server. The server's state in the **Search Results** table will change from **Available** to **Taken**.

Supporting Resellers' Customers

- ➤ To help your resellers answer their incoming trouble tickets:
- 1. Select In Resellers in the Support Center menu.
- 2. Select reseller account in the Reseller dropdown box and enter other search criteria. Click Submit.
- 3. Select the ticket you would like to answer.
- **4.** In the **Assign To** drop-down box, select **Admin** or any other technical support staff and click **Change**.
- **5.** Click the title of the ticket to open it and answer the question.

Deleting Resellers

> To delete a reseller account:

- 1. Enter the reseller's administrator panel.
- 2. From the search menu retrieve all user accounts of this reseller.
- 3. Delete all these accounts, one by one, except the admin account.
- **4.** Go to the moderation section and delete all the accounts pending for moderation, if any.
- 5. Delete reseller's admin account.
- 6. Go back your admin panel and delete the reseller account.

Suspending And Resuming Resellers

Suspending a reseller would immediately disable reseller's control panel URL, including Admin control panel. Moreover, within the subsequent 24 hours *all reseller's end user accounts will be suspended*. Billing is also stopped for suspended resellers.

> To suspend a reseller's account:

- 1. Enter your Admin CP.
- 2. Use the Search utility to find this resellers account.
- 3. Click Suspend for this account.

Resuming a reseller doesn't resume end users. After the reseller's account has been resumed, the reseller needs to log into the Admin CP and resume suspended customers' accounts one by one. This is done to avoid resuming accounts that were suspended for other reasons.

> To resume a reseller's account:

- 1. Enter your Admin CP.
- 2. Use the Search utility to find this resellers account.
- 3. Click Resume for this account.
- 4. Log into the reseller's account.
- 5. Click Fix next to the Login icon.
- 6. Make sure that the reseller logs into the administrator control panel and resumes end users' accounts. You can also do this yourself by logging into the reseller's admin cp.

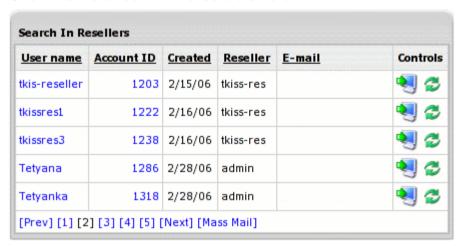
Moving Accounts Between Resellers

You can move accounts between resellers if they belong to one of the following plan types:

- Unix
- Windows
- MySQL
- Unix RealServer
- Windows RealServer
- Administrator

You can't move accounts that to other plans types, such as e-mail only.

- > To move an end user account to a different reseller:
- 1. Find the account (on page 413) using the Search -> In Resellers utility.
- 2. Click the Move icon in the Controls column:



3. Proceed with the wizard following the instructions on screen.

You can't move a reseller's service account (on page 285) to another reseller.

Note: Even though resellers use different nameservers, you don't need to add them to the control panel.

Account Management

In this chapter you will find information on how you can manage accounts in Parallels H-Sphere.

In this chapter:

Finding User Accounts	413
User Details	422
Admin Notes	423
Crediting Accounts	424
Debiting Accounts	
Deleting Accounts	429
Suspending and Resuming Accounts	430
Restoring Accounts	433
Reports	434
Processing Check Payments	
Splitting Multiple Accounts	466
Granting SSH Access To Users	

Finding User Accounts

To perform any operations with an individual account, you need to find it in the system. You can search users and accounts:

- by generic criteria
- by domain name
- by contact info
- in resellers
- among suspended
- among deleted
- by dedicated servers (version 2.5 and higher)
- by VPS hostname (version 2.5 and higher)

Also, you can generate reports to find users and accounts:

- by account balance
- by estimated balance exhaustion date
- by merchant gateway transactions
- by invoice/balance entries
- by credit card charges
- by transfer traffic
- by disk usage
- by CC failed processing attempts
- by logical and physical servers
- by resellers transfer traffic
- by reseller disk usage

On the reports pages, however, you can't perform most operations, so once you know the username or account ID, retrieve the account using the **Search** utility.

In this section:

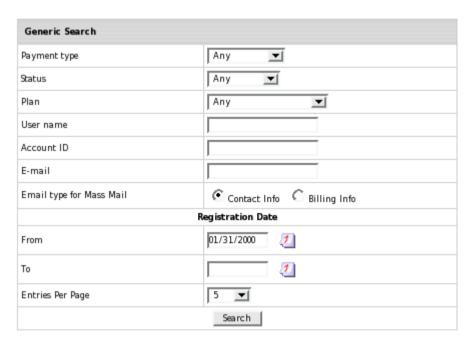
Generic Search	414
Search by Domain Name	415
Search by Contact Info	
Search in Resellers	
Search Suspended Accounts	417
Search Deleted Accounts	418
Search Dedicated Server Accounts	418
Search by VPS Hostname	419
Search by Account Balance	419
Search by Merchant Gateway Transactions	419
Search by Invoice/Balance Entries	
Search by Credit Card Charges	420
Search by Transfer Traffic	

Search by Disk Usage	421
Search by CC Processing Errors	
Search by Logical and Physical Servers	
Search by Reseller Traffic	
Search by Resellers Disk Usage	

Generic Search

Use generic search to find your direct customers, not customers of your resellers.

- > To run generic search:
- 1. Click the Search menu.
- 2. Enter search criteria and click Search:



Search by Domain Name

- > To find an owner of a domain name:
- 1. Select By Domain in the Search menu.
- 2. In the **Domain Name** field, enter a search string. For instance, typing **music**, you retrieve all accounts with domain names containing 'music':

music.funhosting, musicians.funhosting, instruments.music.funhosting, instruments.musical.funhosting, music.insturments.funhosting, musical.instruments.funhosting



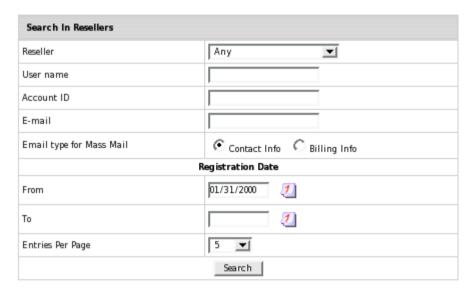
Search by Contact Info

- To find an account by user's Contact Info:
- 1. Select By Contact Info in the Search menu.
- 2. Enter search criteria and click Search.



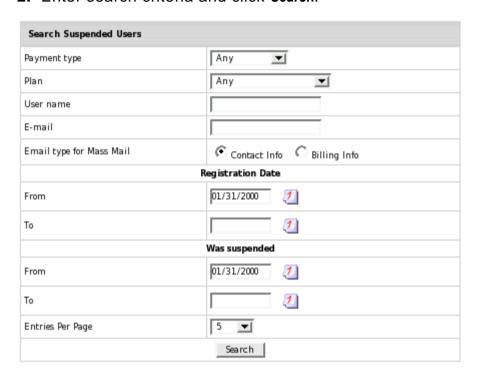
Search in Resellers

- > To find an account under a specific reseller:
- 1. Select In Resellers in the Search menu.
- 2. Enter search criteria and click Search.



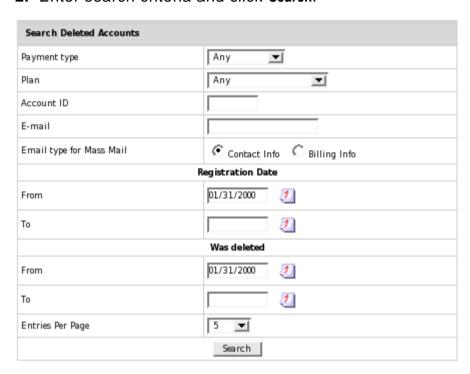
Search Suspended Accounts

- > To find a suspended account:
- 1. Select Suspended in the Search menu.
- 2. Enter search criteria and click Search.



Search Deleted Accounts

- > To find a deleted account:
- 1. Select Deleted in the Search menu.
- 2. Enter search criteria and click Search.



Search Dedicated Server Accounts

To find dedicated server accounts, go to **Search** -> **By D. Serevers**, and enter search criteria.

Search by VPS Hostname

To find VPS hostnames, go to Search -> by VPS Hostname, and enter search criteria.

You can recreate resources (../admin/recreating_resources.html) of VPS accounts from the Generic search result page.

Search by Account Balance

- > To find an account by current balance:
- 1. Select Billing Balances in the Reports menu.
- 2. Enter search criteria. In the **Balance** field select the minimum balance value. For instance, to list users that owe you more than \$15, select **Debt** and enter 15.
- 3. Click Search.

Search by Merchant Gateway Transactions

- ➤ To find accounts by de facto transactions with the processing center in a given time period:
- 1. Select Charge Log in the Reports menu.
- 2. Enter search criteria and click Search.

Search by Invoice/Balance Entries

- > To find accounts by individual debits and credits to account balance, such as fees and refunds:
- 1. Select Billing Entries in the Reports menu.
- 2. Enter search criteria and click Search.

Search by Credit Card Charges

- > To find accounts by summarized debits and credits for each credit card charge:
- 1. Select Monetary Transactions in the Reports menu.
- 2. Enter search criteria and click Search.

Search by Transfer Traffic

- To find accounts by overall traffic generated over the specified period of time:
- 1. Select Transfer Traffic in the Reports menu.
- 2. Enter search criteria and click Search.

Traffic readings in this report is different from the Summary Traffic in the user control panel, as it shows traffic for the period defined in the search criteria, whereas the user control panel shows traffic generated during the current billing period.

Search by Disk Usage

- > To find accounts by disk usage consumed by customers over a specified period of time, do the following:
- 1. Select Disk Usage in the Reports menu in your administrator control panel.
- Enter search criteria and click Search.

Note: in the list of accounts that shows, click the **Edit** icon in the **Controls** section. On a page that appears you will be able to login into the accounts.

Search by CC Processing Errors

- ➤ To find accounts with credit cards that failed to be connected or charged by credit card processing centers:
- 1. Select CC Processing Errors in the Reports menu in your administrator control panel.
- 2. Enter search criteria and click Submit.

Note: to login into the accounts that show in search result, click the **Edit** icon in the **Controls** section.

Search by Logical and Physical Servers

- ➤ To find accounts by logical or physical servers and to generate a report by accounts located on these servers:
- 1. Select Users in the Search menu.
- 2. Choose search criteria and click Search.



Search by Reseller Traffic

This feature allows you to retrieve data on transfer traffic consumed by resellers and/or users of the reseller. This report is available only to admins. To do this:

- 1. Select Reseller Traffic in the Reports menu.
- 2. Enter search criteria and click Search.

Note: checking the "**Show user details**" box will show reseller's users accounts directly. Leaving this box unchecked will show resellers accounts only.

Search by Resellers Disk Usage

- ➤ To find reseller accounts by the amount of disk space that resellers or reseller's users consumed over a specified period of time:
- Select In Resellers Disk Usage in the Reports menu in your administrator control panel.
- 2. Enter search criteria and click Search.

Note: checking the "**Show user details**" box will show reseller's users accounts directly. Leaving this box unchecked will show resellers accounts.

User Details

- To view details of a particular user or account:
- 1. Find the account (on page 413) using the **Search** utility.
- 2. Click the username to view contact info and billing info.
- **3.** Click the account ID to view account details, custom jobs and administrator notes.
- 4. Click the View icon in the Balance column to view balance details.

Admin Notes

Admins can make and view notes to particular user accounts. These notes will not be visible to users.

- > To make an administrator note for specific account:
- 1. Find the account (on page 413) using the Search utility.
- 2. Click the Account ID to go to the account details:



You will see all information about the user: contact&billing e-mail, billing information, FTP login, used disk quota and traffic, mail and domains information.

3. To view/post admin notes for this account, click the **Notes** link in the **Control Panel User** section.



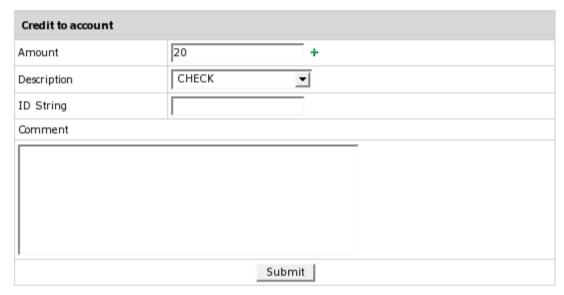
4. On the page that appears, enter a note in the text box and click the **add a note** button. You will also see the notes added before.

Crediting Accounts

Credited amounts are never added to credit card balances. Parallels H-Sphere can't put money on credit cards. Instead, credited amounts are put on the account balance.

> To credit a fixed amount to an account:

- 1. Find the account (on page 413) using the Search utility.
- 2. Click the Credit icon in the Billing column.
- 3. Enter the amount:



- Amount: don't enter negative amounts; instead, debit the account (on page 425).
- Description: the reason for crediting the account. It can be Check, Manual CC Charge, Promotion and Other.
- **ID String**: the explanation to the transaction that will show up in the invoice and the balance statement.
- Comment: any comment.

Debiting Accounts

When you debit a **check** payment user, the amount is subtracted from the account balance. When you debit a **credit card** payment user, the amount is first subtracted from the account balance, and when the credit limit is reached, all the negative balance is charged to the credit card. Once you have debited an account, you can't put the money back to the credit card, you can only credit the account balance or send this amount by check.

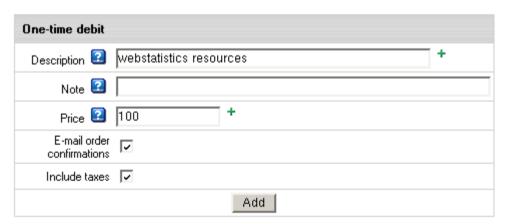
To debit an account once or periodically:

- 1. Find the account (on page 413) using the Search utility.
- 2. Click the Service+ icon in the Billing column next to the necessary user.
- 3. Fill out the selected debit option and click Add:
 - One-time debit
 - Month based debit
 - Billing period based debit

Later on you can also view existing custom debits.

One-time debit

With this type of debit an account will be debited once.



Description: the title of the charge displayed in user' billing and balance statements. **Note:** the comment displayed in small font in user' invoice and balance statement.

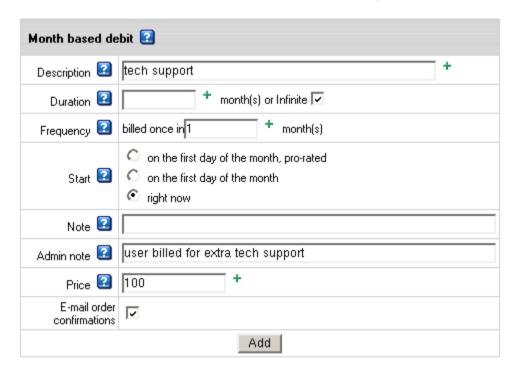
Price: debit amount.

E-mail order confirmations: email a separate billing statement for this debit.

Include taxes: apply taxes to this debit.

Month based debit

In this case accounts will be debited every month for regular premium services.



Description: the title of the charge displayed in user's billing and balance statementS.

Duration: when this period expires, debit charges are discontinued.

Frequency: the charge cycle; leave 1 to charge the account every month.

Start: choose one of three options when to start debiting the account:

 on the first day of the month, pro-rated: account is debited on the 1st of each charge cycle, except for the first time. The first debit charge is conformed with the time left to the end of the charge cycle.

Example: enabled - 20 April; frequency - 2 months; price - \$6 On 20 April the first debit charge will be applied. Account will be charged \$4 (\$3 for May + \$1 for ten days of April). The next debit charge (\$6) will be applied on 1 June.

- on the first day of the month: account is debited on the 1st of each charge cycle. The whole debit amount is charged without being pro-rated.
 Example: enabled 20 April; frequency 2 months; price \$6
 On 20 April the first debit charge will be applied. Account will be charged \$6.
 Next \$6 charge will occur on 1 June.
- right now: account is debited on the day you enabled it each charge cycle.
 Example: enabled 20 April; frequency 2 months; price \$6
 On 20 April the account will be debited \$6. Next \$6 charge will occur on 20
 June, then on 20 August, and so on.

Note: the comment displayed in small font in user' invoice and balance statement

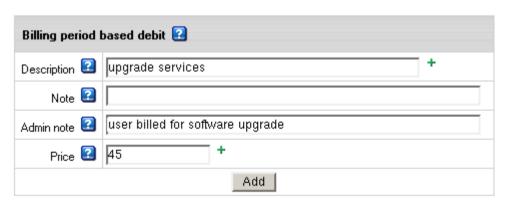
Admin note: this note won't be visible to the user, for administrator's use

Price: debit amount

E-mail order confirmations: email a separate billing statement

Billing period based debit

In this case accounts will be debited at the beginning of each billing period for regular premium services.



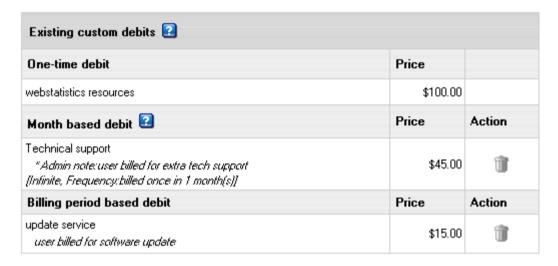
Description: the title of the charge displayed in user' billing and balance statement. **Note**: the comment displayed in small font in user's billing and balance statement.

Admin note: this note won't show to the user, for admin's use.

Price: debit amount.

View debits

Now you can views all debits you have added. Active debiting rules are listed at the top of the page:



You can remove debits by clicking the TRASH icon.

Deleting Accounts

- To delete an individual account permanently:
- 1. Find the account (on page 413) using the Search utility.
- 2. Click the **Delete** icon in the **Controls** column. You will be taken to the **Remove Account Option** form:

Remove account 61388 (user underres1)?

- Perform billing (refund/usage) without charging the credit card
- Perform billing (refund/usage) and charge end balance amount
- On't perform billing (refund/usage), only charge current balance amount

Yes, remove the account No, don't remove the account

- Without billing actions: no billing implied.
- Perform billing (refund/usage) without charging: refunds (on page 339) and usage fees (on page 322) are accrued, however account isn't charged.
- Perform billing (refund/usage) with charging end balance amount (applied to CC accounts only): refunds (on page 339) and usage fees (on page 322) are accrued first. If the resulting balance is negative and it has reached the account's credit limit (on page 319), it is charged off the account.
- Charging end balance amount (applied to CC accounts only): any negative balance, if it reached the account's credit limit (on page 319), is charged off the account.

Even after account is deleted, contact and billing information about this user still remains in Parallels H-Sphere database and so sometimes will appear in reports.

Warning: When deleting a reseller account, make sure to delete this reseller's customers first.

Suspending and Resuming Accounts

Account suspension closes user access to their control panel, but on the contrary to removing account (on page 429), preserves its content and configuration. Visitors to suspended sites are redirected to the predefined **Suspended account** page in the /hsphere/shared/skel/suspended/ directory. If you edit this page, back it up as it is overwritten with system updates .

An account suspension doesn't close billing period (on page 322). As a result:

- recurrent fees (on page 322) are not refunded (on page 339).
- user files remain on disk. This may lead to average summary disk usage (on page 300) exceed its limit and user be charged usage fees (on page 322) for exsessive MB.

Owners of suspended accounts get e-mail notifications, and can view their invoices (../user/billing.html#onlineinvoice) and billing profiles (on page 313).

Note: owners of suspended accounts get e-mail notifications only at the e-mail specified in the "Billing info" in their user control panel.

The suspended account mail system is restricted by:

- -d (sets no password changing flag)
- -p (sets no pop access flag)
- -w (sets no web mail access flag)
- -i (sets no imap access flag)
- -b (sets bounce mail flag)

Overlimit Cron

-r (sets no external relay flag)

Parallels H-Sphere tracks the account suspension process to keep the history of the suspension agents (doers) and the reasons for it. According to the information collected, the resumption of suspended accounts can be performed automatically by a respective system cron, or manually by Admin or Reseller. The dependencies between the suspenders and resumers are shown in the following chart:

	<u> </u>				-				
Resumers	Suspende	Suspenders							
	Admin	Reseller	Overlimit Cron	Suspend Cron (account of a suspended reseller)	Suspend Cron (account in debt)	Trial Cron	MoneyBack Request		
Admin									
Reseller									

Suspend Cron (account of a suspended reseller)

Suspend Cron (account in debt)

Trial Cron

MoneyBack Request

Trtoin (account moved from trial payment to instant)

ExemptionCo de Approve

ExemptionCo de Reject

Legend:

- + resumer can resume account
- resumer can't resume account

Parallels H-Sphere implements Auto Resuming that allows or disallows Suspend cron (../admin/background_job_manager.html#manipulate) to resume accounts.

> To allow/disallow:

- 1. Go to Settings->Auto Resuming
- 2. Click the On/Off icon to allow/disallow:

Note: After the Parallels H-Sphere installation, Auto Resuming is enabled by default. Upon the Parallels H-Sphere update, it is disabled.

To view the history of the suspension process:

- 1. Find the account using the Search utility
- 2. Click the account ID
- 3. Click the Suspend History link in the Account Status field
- **4.** On the page that appears, you will see the info on suspender/resumer, the reason for suspension/resumption, and other related info.

In this section:

Suspending Accounts	432
Resuming Accounts	433

Suspending Accounts

> To suspend any individual account:

- 1. Find the account (on page 413).
- 2. Click the Suspend icon in the Controls column.

You can, also, configure your system to suspend debtors automatically (on page 340) in case of trial hosting (on page 480) and exceeding resource limit (on page 290).

Resuming Accounts

Resuming suspended accounts "unlocks" the Control Panel and stops redirecting site visitors to **Suspended account** page.

> To resume suspended account:

- 1. Find the suspended account (on page 413).
- 2. Click the Resume icon in the Controls column.

There are several billing cases caused by resuming account:

before the billing month ends	after the billing month ends	after the biling period ends
You will be charged according to your Billing Statement (/user/billing.html#onlinein voice) prior to suspension.	You are charged overusage fees of the previous and monthly fees (on page 322) for the next billing month (/admin/billing_periods.ht ml#month), for monthly resources (e.g. quota and traffic).	A new billing period starts and the start billing period date is set to the current one. You are charged overusage fees (for quota and traffic) of the previous and recurrent fees (on page 322) for the next billing period.

Resuming expired trial account (on page 480) will automatically suspend it again within 24 hours. To activate this account, you should pay for hosting by creating a valid billing profile (../user/billing.html#billingprofiles)

Restoring Accounts

In Parallels H-Sphere deleted accounts are not completely erased from Parallels H-Sphere. Information about deleted accounts and their resources is stored in the deleted_account_xmls of the system database.

> To restore accounts:

1. Go the Search menu and choose Deleted Accounts:

Search [Search Deleted Accounts								
Account ID	<u>Plan</u>	Created	Deleted	E-mail	Payment type	Balance	Credit	Controls	
1308	Unix plan	Jun 23, 2006 3:11:11 PM	Jun 23, 2006 3:13:16 PM	test@sample.com	Check	\$0.00 CR	\$0.00	1308 🔍 Restore account	
[1]									

You will see the list of deleted accounts.

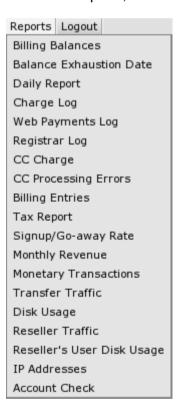
2. Click the Restore account icon in front of an account to be restored. This will create a new account with a new account id (not with the deleted account id) but of the same structure that the deleted account. Note that deleted account data does not include the account's Web/mail/database content, so you need to manually copy the content from the backup once the account is restored.

Note: Account can be restored only if exists more than 10 minutes. Parallels H-Sphere considers an account as created if it's more than 10 minutes old.

Reports

Reports help you monitor accounts in the system, find necessary accounts by specific parameters, and view details on these accounts. Most of reports can be exported and viewed as a spreadsheet on your computer. Parallels H-Sphere suggests several search methods, each serving its purposes.

To access reports, select Reports in the navigation menu:



In Parallels H-Sphere seven additional reports can be installed as a package (on page 456). It adds the following reports:

Suspended
Billing Statement History
Cash Receipts Report
Refunds
Billing Statements
Balance History
Bill Entries

In this section:

Exporting Reports	436
Exporting Reports Billing Balance	436
Estimated balance exhaustion date	
Daily Report	439
Web Payments Log	
Charge Log	
Registrar Log	
Credit Card Charge	
Billing Entries	
Signup/Go-away Statistics	445
Monthly Revenue	446
Monetary Transactions	447
Transfer Traffic Report	448
Disk Usage Report	450
Reseller Traffic Report	451
In Resellers Disk Usage Report	452
IP Addresses Report	453
CC Processing Errors Report	454
Account Check	455
Reports Installed in a Package	456

Exporting Reports

Most of the reports (billing balances, estimated balance exhaustion date, charge log, billing entries and monetary transactions) allow saving the results in the *.txt format and **exporting** them to other applications.

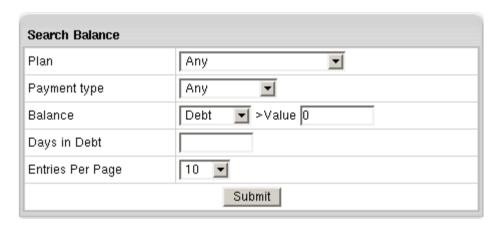
> To export necessary report results:

- 1. Click the Export link at the bottom of the results page.
- 2. Follow the standard download procedure using the dialog window.

Parallels H-Sphere saves report results in the \star_{CSV} format that is supported by numerous spreadsheet and database programs. Commas are used as delimiter separators.

Billing Balance

The Billing Balance feature enables you to keep track of users' balances. You can customize your search by the following criteria:



- Plan: the plan under which the accounts were created.
- Payment Type: the type of payment for the services provided.
- Balance:
 - Debt: defines users with debt.
 Important: Parallels H-Sphere regards debt as negative balance exceeding credit limit.
 - **Deposit**: defines users with positive balance.
- >Value: the balance threshold. For example, if you select Debt and set >Value to \$10, the search will retrieve only the accounts with the debt of \$10 or more.
- Days in Debt: days in debt that exceeds the credit limit. If you enter 7, the search will retrieve only accounts with the debt that appeared 7 or more days ago.
- Entries Per Page: set the number of matching accounts to be listed at a time on the Search Results page.

The results of the search are organized as follows:

Search Ba	Search Balance										
<u>User</u> name	Account ID	<u>Plan</u>	Billing Period	Days in Debt	Туре	Balance	Suspended	E-mail			
ftpuser	1375	Unix I	1 MONTH		CC	(\$36.00)	Active	olesya@(************************************			
ptest	1430	Unix I	1 MONTH		CC	(\$36.00)	Active	dimitry@pppminet			
UnixOne	1216	Unix I	1 MONTH	9	Check	(\$209.22)	Dec 15, 2004 2:40:14 AM	olesya@####################################			
user22	1254	Unix I	1 MONTH		CC	(\$24.00)	Active	olesya@mmmittet			
[1] [Expo	rt] [Mass Mail]					1				

- Username: the user's login. Click it to view user's Contact Info.
- Account Id: the system ID of the account. Click it to view the account properties.
- Plan: the plan this account was created under.
- B.Period: the frequency of payments for hosting services of this account.
- Days in Debt: days in debt over the credit limit. If you enter 7,, the search would only show the accounts with the debt that appeared 7 or more days ago. The empty cell means that the debt hasn't reached the Credit Limit yet.
- Type: the type of payment.
- Balance: positive balance shows how much the user has paid in advance (usually when paying by check or canceling some resources). Negative balance shows how much the user owes you and is displayed in brackets, e.g. (\$104).
- Suspended: the day and the time when this accountr was suspended. All account settings are saved, but the access to these accounts is disabled. 'Active' means the account is not suspended. More on suspending and resuming accounts (on page 430)

You can sort search results by clicking underlined column captions.

The **Export** link enables you to save the chart data in *csv format that is supported by numerous spreadsheet and database programs. Commas are used as delimiter separators.

Estimated balance exhaustion date

From time to time you might need to inform your check users about when their account balances are likely to become negative. In other words, let them know when approximately they will run out of their balance money, in case they will pay off their outstanding debts and won't purchase any more paid resources. Use this report tool for these purposes:

From/To: the search will retrieve all the accounts with estimated exhaustion balance date within the time frame set.

The results of the search are organised in the following way:

<u>User name</u>	Account ID	<u>Plan</u>	Billing Period	E-mail	<u>Balance</u>	Exhaustion date	Controls
reseller	171851	Kirill	2 MONTH	kato@######wua	\$55.85	Apr 29, 2005 12:00:00 AM	<u>«</u>
testjidjdsbdswejlew	166357	Kirill	1 WEEK	maxim@####################################	\$23.92	Feb 18, 2005 12:00:00 AM	()
maxtest	168822	Win	1 MONTH	maxim@pppssssssssssssssssssssssssssssssssss	\$195.08	Jul 18, 2005 12:00:00 AM	()
testiki	168984	Res-kirill-1	1 MONTH	kato@ppppiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	\$56.98	May 6, 2006 12:00:00 AM	()
psofttest	169948	Reseller	1 MONTH	maxim@@@@@	\$77.00	Apr 6, 2011 12:00:00 AM	~

- Username: the user's login. Click it to view user's Contact Info.
- Account Id: the system ID of the account. Click it to view the account properties.
- Plan: the plan this account was created under.
- Billing Period: the frequency of payments for hosting services of this account.
- Email: the contact info account's e-mail address.
- Balance: the current agriniamount of money on user's balance.
- Exhaustion date: approximate time when the user's balance indicated on the left runs out and becomes zero. This is only true if that user won't buy any more paid resources.
- Controls: Click the Edit icon to Credit (on page 424) / Debit (on page 425) / Increase Credit Limit (on page 319) / Change Billing Period Start Date (on page 322) /Login / Suspend (Resume) (on page 430) / Delete (on page 429) the account.

Upon getting the search results, you can send a mass email to all users in the report. To do this, click the **Mass Mail** link at the bottom of the report page.

Daily Report

The Daily Report feature allows you to keep track of subscribed users and total signup payments, as well as users that have canceled their hosting and total refunds.

To keep track of accounts created during a certain period of time, select **Daily Report** in the **Reports** menu.

Set the From/To period and the search will retrieve all the newly created, canceled and failed accounts grouped by plans and billing periods:

Report for period	from 11/02/200)4 to 12/15/2004 (nev	v hosting)	
Plan	Period	Signup pays	Signup pays	1 year pays
Unix I	1	2	\$48.00	\$312.00
Demo Reseller	1	2	\$0.00	\$0.00
Рай	1	1	\$0.00	\$0.00
Total new accounts		5	\$48.00	\$312.00

Report for	period from 1	1/02/2004 to 12/15/2004 (cancel	ed hosting)	
Plan	Period	number of accounts	Refunded	1 year losses
Total failed a	accounts	0	\$0.00	\$0.00

Report f	or period from 1	1/02/2004 to 12/15/2004 (failed	d hosting)	
Plan	Period	number of accounts	Refunded	1 year losses
Total faile	d accounts	0	\$0.00	\$0.00

Report for new hosting shows:

- Plan: the plan under which retrieved accounts were created or canceled.
- Period(month): the duration of the billing period in months.
- Signup pays the total amount of recurrent payments

1 year pays: expected annual income from new hosting Report for canceled and failed hosting also shows:

- number of accounts in the system both under this plan and with this billing period created or canceled between the requested dates.
- Refunded: refunds for these accounts.
- 1 year losses: deficiency from canceled hosting.

Web Payments Log

You can perform search in your WebPayment transactions logs:

<u>User</u>	Account	Plan	E-mail	Performed	Amount	Transaction	Details	Result
name	<u>ID</u>			<u>on</u>		Туре		
reseller	1331	Reseller	maxim@ttm	Jul 7, 2005 3:54:10 PM	\$0.11	Redirect Request	PayPal	ERROR
reseller	1331	Reseller	maxim@ ¹⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰⁰	Jul 7, 2005 4:27:36 PM	\$0.11	Payment Notification Request	PayNova	ок
user	1029	Unix S	maxim@@	Aug 29, 2005 2:13:57 PM	\$1.00	Redirect Request	WebMoney	ок

Charge Log

To view the messages that Parallels H-Sphere exchanged with the Credit Card Online Processing Center, select **Charge Log** in the **Reports** menu.

Enter Account ID, User name, Plan, Transaction result, Performed on date and run this report.

The retrieved information is organized in the chart with the following columns:

<u>User</u> name	Account ID	<u>Plan</u>	<u>Period</u>	E-mail	Performed on	Amount	Transaction Type	Details	Result
reseller	164092	Reseller	2 MONTH	maxim@ ppgggggggg ua	Feb 6, 2004 5:04:41 PM	37.66	Charge	Tucows	Successful
reseller	164092	Reseller	2 MONTH	maxim@ pppppttttm/ ua	Feb 6, 2004 5:03:11 PM	37.66	Charge	Tucows	Failed Transaction failed on AVS check: 306
reseller	164092	Reseller	2 MONTH	maxim@pparamawwa.	Feb 6, 2004 4:55:10 PM	37.66	Charge	Tucows	Failed Connect error, There was a problem processing transaction unsupported currency ('currency'): [840]
vserhiy	165016	Kirill	1 WEEK	v_serhiy@@@ammet	Feb 5, 2004 11:36:23 AM	0.46	Charge	Dummy Gateway	Successful
vserhiy	165016	Kirill	1 WEEK	v_serhiy@mmmttet	Feb 4, 2004 1:07:07 PM	0.46	Charge	The Pay Desk	Failed CARD TYPE ERROR (31)

- Username: user login. Click the link to view user's contact info.
- Account ID: account's system Id.
- Plan: account's plan.
- Period: account's billing period.
- E-mail: account's contact e-mail address.
- Performed on: the time and the date when the transaction was executed.
- Amount: transaction fee.
- Transaction Type:
 - Charge pay transaction.
 - Authorize request for transaction approval.
 - Void canceled authorize transaction.
- Details: merchant gateway the transaction was processed by.
- Result: transacion confimation / errors for failed transations.

Registrar Log

This report will show all the requests to domain registrars and responses from them.

Select Registrar Log in the Reports menu, enter search criteria and click Submit.

Enter Domain, Account ID, User, Plan, Transaction result, Performed on date and run this report.

Note: Check the Only Live Users box to exclude canceled accounts from the search.

The retrieved information is organized in the chart with the following columns:

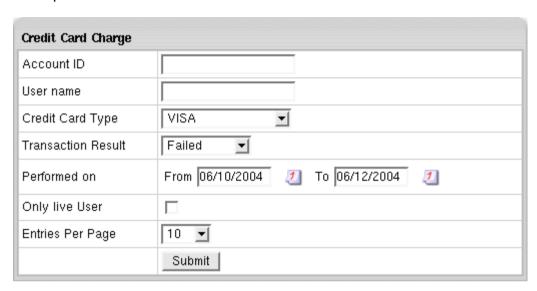
<u>Domain</u>	account id	<u>User</u>	Transaction Type	<u>Date</u>	Period	<u>Details</u>	Error message	Transaction Result
enom-psofttest.com	164628	unixtest	Lookup	Aug 25, 2004 7:20:33 PM		Enom		success
enom-psofttest.com	164628	unixtest	Register	Aug 25, 2004 7:22:43 PM		Enom	Invalid Domain Name or Nameserver	fail
enom-psofttest.com	164628	unixtest	Lookup	Aug 25, 2004 7:34:31 PM		Enom		success
enom-psofttest, com	164628	unixtest	Register	Aug 25, 2004 7:35:20 PM	2	Enom	Invalid Domain Name or Nameserver	fail
enom-test.com	164628	unixtest	Lookup	Aug 25, 2004 7:34:18 PM		Enom		success
enomtesttttvvv.com	164628	unixtest	Register	Aug 17, 2004 6:53:07 PM	1	Enom	Invalid Domain Name or Nameserver	fail

- Domain: the domain name of the site.
- Account ID: account's system ID.
- User: the name of the user who owns the domain
- Transaction Type:
 - Register: domain registration
 - Renew: renewing the existing domain registration
 - Lookup: checking if the domain name the user has chosen already exists
 - Change contacts: changing domain name contact info
 - Change password: changing user access info
 - Change nameservers: changing nameservers
- Date: account's billing date
- Period: domain registration period in years
- Details: the domain registrar of the domain involved
- Error message: an error message returned by the domain registrar
- Transaction Result: confirmation of successful or failed transaction

Credit Card Charge

Use **Credit Card Charge** report to find all, successful or failed credit card transactions by specified period, credit card type or user.

Enter Account ID, User name, Credit Card Type, Transaction result, Performed on date and run this report.

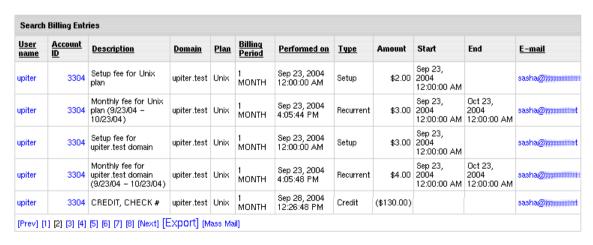


Billing Entries

The Billing Entries feature allows you to find accounts by several criteria. Select **Billing Entries** in the **Reports** menu and then enter the search parameters in the form that appears.

Check the Only Live Users box to exclude canceled accounts from the search.

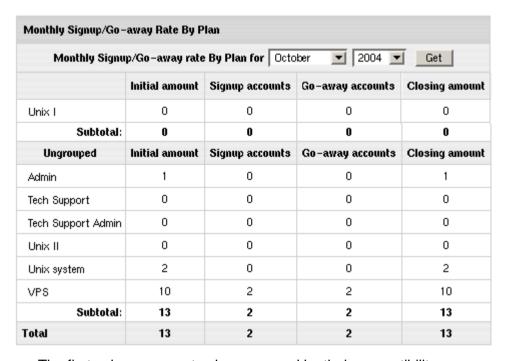
When you submit your query, the billing entries will be shown in the following chart:



- Username: the user's login. Click it to view the Contact Info.
- Account ID: the system ID of the account. Click it to view the account properties.
- Description : billing entry description.
- Domain: the domain name of the site.
- Plan: the plan under which this account was created.
- Billing Period: the frequency of payments for hosting services for this account.
- Performed on: the date and the time when the transaction was performed.
- Type: the type of transaction
- Amount: the amount of transaction. Outflow transactions are displayed in brackets.
- Start indicates according to the type of transaction
 - Setup the beginning of the billing period. In this case it coincides with the Performed.
 - Recurrent the beginning of the billing period.
 - Usage the beginning of the billing period. It coincides with the Performed.
 - Refund the beginning of the billing period.
 - Charge the beginning of the billing period.
 - Credit the beginning of the billing period.
 - Moneyback the beginning of the billing period.
 - Debit the beginning of the billing period.
- End indicates according to the type of transaction -
 - Setup not applicable.
 - Recurrent the time and the date of the end of the billing period.
 - Usage the time and the date of the end of the billing period. It coincides with the Performed.
 - Refund the end of the billing period.
 - Charge not applicable.
 - Credit not applicable.
 - Moneyback not applicable.
 - Debit not applicable. Each transaction is represented in a separate billing entry.
 You can sort them by clicking underlined column captions.

Signup/Go-away Statistics

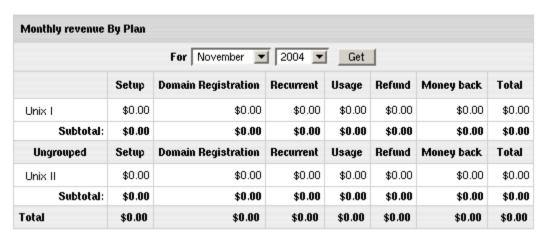
This feature enables you to get month statistics for each specific plan. Open **Signup/Goaway rate** in the **Reports** menu, then select the month and the year to view the statistics.



- The first column presents plans grouped by their compatibility.
- Initial amount: the number of accounts under this plan at the beginning of the month.
- Signup accounts: the number of accounts under this plan registered during this month.
- Go-away accounts: the number of accounts abandoned during this month.
- Closing amount: the number of active accounts by the end of the month.

Monthly Revenue

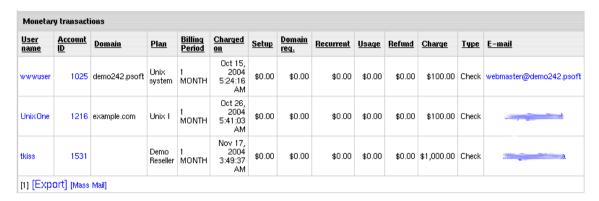
To view the financial report on each month, select **Monthly Revenue** in the **Report** menu. The page that opens presents data in the following table:



- the first column presents plans grouped by their compatibility.
- Setup: the total signup payments for the accounts registered under this plan during the selected month;
- OpenSRS: the gross amount received for domain name registration with OpenSRS.
 For example, if you charged users the total of \$300, while your payments to OpenSRS were \$280, the table will show \$300.
- Recurrent: the total recurrent payments for this month. For example, if a user selected a 6 month billing period and was charged the recurrent fee at the beginning of the first month, all this amount will be included in the first month; the remaining five months will show zero recurrent payments.
- Usage: the total usage payments for this month. For example, if a user selected a 6 month billing period, he would be charged at the end of the last month; all this amount will be included in the last month's usage fee, and the reaming five months will show zero usage payments.
- **Refund**: the total amount of money refunded during this month.
- Money back: the total amount of money returned to the users who claimed their money back during the Money Back period.
- Total: overall money received for the month.

Monetary Transactions

Choose Monetary Transaction from the Reports menu. Combine Account Id, Username, Plan and Created search criteria to retrieve monetary transaction statistics organized in chart which consists of the following columns:



- Username: user login.
- Account Id: account's unique system Id number.
- Domain: domain name.
- B.Period: account's billing period.
- Charged on: the time and the date the sum indicated in the Charge column was charged.
- Setup: setup fee accrued.
- Domain reg.: OpenSRS domain registration fee accrued.
- Recurrent: recurrent fee accrued.
- Usage: usage fee accrued.
- Refund: refund accrued.
- Charge: final amount charged. This amount is the sum of all accrued fees and current negative balance less the refund.
- Type: type of payment /*CC stands for credit cards/.

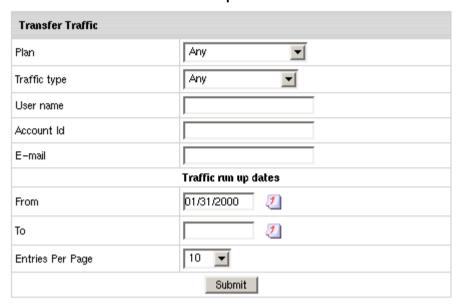
Each row in the chart represents an invoice for a separate payment. You can sort entries by clicking underlined column captions.

The **Export** link enables you to save monetary transaction statistics in the *.csv format that is supported by numerous spreadsheet and database programs. Commas are used as delimiters.

Transfer Traffic Report

To generate report by overall traffic generated over the specified period of time:

1. Select Transfer Traffic in the Reports menu.



2. Enter Search criteria

- Traffic Type: overall traffic or specific transferred (HTTP, FTP, mail, Real Server) traffic.
- Plan, username, account ID and email are explained above.

3. Click Search.

Report shows a list of users matching your search criteria, plan they are signed up under, email and transfer traffic consumed over the specified period.



By clicking the **Edit** icon in the **Controls** section, a login page shows and you will be able to login into this account.

Note: Upon retrieving a report, you can send a mass email to all users displayed in the report. To do this, click the Mass Mail link at the bottom of the report page and send a message.

Traffic reading in this report is different from the Summary Traffic in the user control panel, as it shows traffic for the period defined in the search criteria, whereas the user control panel shows traffic consumed during the current traffic cycle wich is one month.

Transfer traffic report can also be used as a search utility to find accounts by overall traffic (on page 413).

Disk Usage Report

This feature allows you to retrieve data about disk space consumed by users over a specified period of time. The obtained numbers don't reflect the state for this moment in time. They show disk space usage averaged for the selected time period. To get the latest registered disk usage, limit your search to one day only.

> To generate a report, do the following:

- 1. Go to the Reports menu in your admin control panel.
- 2. Select Disk Usage. The following page will show:
- 3. Enter Search Criteria:
 - Usage Type: overall disk usage or disk space consumed on specific (mail, web, DB) server.
 - Plan, username, account ID and email are the same as for other reports.

4. Click Search.

On the page that shows, you can see a list of users, their accounts that match your search criteria, plans they are signed up under, emails and disk usage consumed during the mentioned period.

Disk Usage					
<u>User name</u>	Account ID	<u>Plan</u>	<u>E-mail</u>	Disk usaqe	Controls
ftpuser	1375	Unix I	olesya@mmminioa	0.17 Mb	<u> </u>
wwwuser	1025	Unix system	webmaster@demo242.psoft	0.21 Mb	<u> </u>
ptest	1430	Unix I	dimitry@hmmet	0.17 Mb	<u>a</u> Q
jsmith	1055	Unix - No billing	jsmith@example.com	0.73 Mb	<u>a</u> Q
UnixOne	1216	Unix I	olesya@www.nt	0.24 Mb	<u>a</u> Q
Deleted user	1254	Unix I	olesya@mmmittet	0.21 Mb	<u>a</u> Q
[1] [Mass Mail]	1	'		

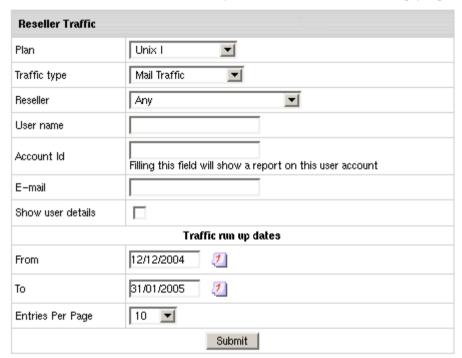
Clicking the Edit icon in the Controls section you are taken to the page from where you can login into selected account. You can also use this feature as a search utility to find account by disk space used for a period of time.

Note: Upon the search results, you can send a mass email to all users displayed in the report. To do this, click the Mass Mail link at the bottom of the report page.

Reseller Traffic Report

This feature allows you to retrieve data on transfer traffic consumed by resellers and/or users of the reseller. This report is available only to admins. To do this:

1. Select Reseller Traffic in the Reports menu. The following page will appear:



2. Enter search criteria:

- Traffic Type: overall traffic or specific transferred (HTTP, FTP, mail, Real Server) traffic.
- Reseller: choose a name of the reseller.
- Plan, username, account ID and email are explained above.

3. Click Search.

With 'Show user details' checked, the result page will show traffic used by the customers of the reseller. With this box unchecked, it will show report on traffic used by resellers only.

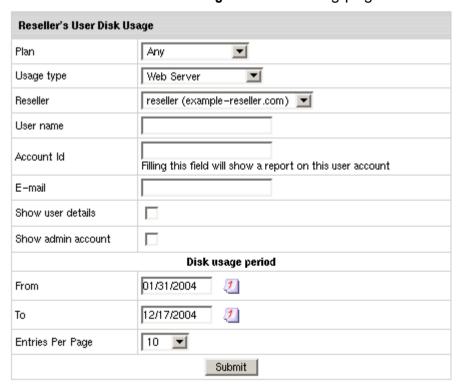
Note: Upon the search results, you can send a mass email to all users displayed in the report. To do this, click **Mass Mail** at the bottom of the report page.

In Resellers Disk Usage Report

This feature allows you to generate a report by the amount of disk space that reseller's users consumed over a specified period of time. This report is available only to admins.

> To generate a report:

- 1. Go to the Reports menu in your admin control panel.
- 2. Select Reseller's User Disk Usage. The following page will show:



3. Enter Search Criteria:

- Usage Type: overall disk usage or disk space consumed by specific (mail, web, DB) server.
- Reseller: choose a name of the reseller.
- Plan, username, account ID and email are explained above.

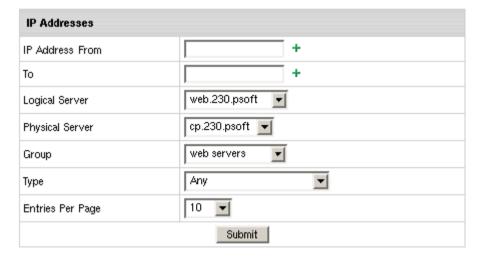
4. Click Search.

Note: if you check the "**Show user details**" box, the result page will show disk space used by customers of reseller. If you leave this box unchecked, you will get a report on disk space used by resellers in general.

Note: Upon the search results, you can send a mass email to all users displayed in the report. To do this, click the Mass Mail link at the bottom of the report page.

IP Addresses Report

- > To find necessary IP addresses or have them sorted by different criteria:
- 1. Go to the **Reports** menu in your admin control panel.
- 2. Select IP Addresses
- 3. Enter Search Criteria of IP addresses:



4. Click Submit

- 5. The following results will show:
 - ID of logical server
 - Logical server host name
 - Host IP
 - IP Type (on page 48) (Status)
 - Additional Info

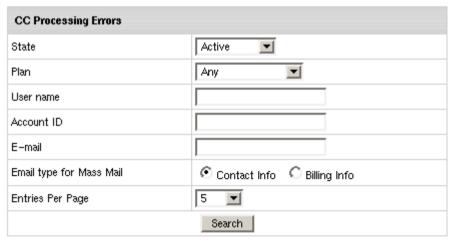
Note: For Busy Dedicated IP info shows the domain name hosted on it, and for Busy DNS Reseller IP also the name of the reseller.

CC Processing Errors Report

This feature allows you to generate a report on failed credit card attempts to be connected or charged by credit card processing center. This report is available only for credit pay users.

> To generate a report:

- 1. Go to the Reports menu in your admin control panel.
- 2. Select CC Processing Errors.
- 3. Enter Search Criteria:
 - State of the account, plan, username and account ID are mentioned above.
 - Email type for Mass Mail: select whence in your control panel email address for mass mailing will be taken from - contact or billing info.



4. Click Submit.

Note: Upon the search results, you can send a mass email to all users in the report. To do this, click the Mass Mail link at the bottom of the report page.

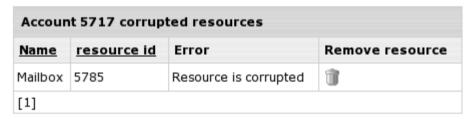
Account Check

This report allows to track corrupted resources per account and delete these resources to clean system DB.

- 1. In your Admin CP, go to Reports -> Account Check:
- 2. Enter Account ID and click Search:



3. On the result page, click **Remove resource**. It will remove it *only from system DB*:



Note: The removed resource may still exist physically.

Reports Installed in a Package

In H-Sphere seven additional reports can be installed as a package.

> To use additional reports:

- Download AccountingReports .hsp package from http://download.hsphere.parallels.com/downloads/index.html#billing (for Java 1.4 and higher)
- 2. Install the package as suggested in our instruction on *Installing Parallels H-Sphere Packages* in Developer Guide .

Note: Upon installing the package, the built-in Billing Entries report will be replaced with the one that comes with the package.

In this section:

Suspended	457
Billing Statement History	
Cash Receipts Reports	
Refunds	459
Billing Statements	460
Balance History	
Bill Entries	461
Tax/Refund Report	

Suspended

This report shows info about suspended accounts by reason, date and user info.

Enter Payment type, Plan, User name, Account ID, Registration Date, Suspention date and run this report.

Search S	Search Suspended Users									
Account ID	<u>User name</u>	E-mail	<u>Plan</u>	Company	<u>Name</u>	Suspension Date	Reason	<u>Balance</u>		
165044	test09808080	test@yahoo.com	Kirill	t	tt	Sep 22, 2004 5:52:08 PM	Suspend test	(\$15.64)		
170049	paypaltest22	maxim@///	Unix System	t	testt	Sep 22, 2004 6:03:43 PM	Suspend Debtor	(\$12.00)		
170140	test777666444	maxim@;;;;;;;;;	Unix System	t	testt	Sep 22, 2004 6:03:43 PM	Suspend Debtor	(\$110.00)		
170152	testmmm34567890	maxim@;;;;;;;;a.	Unix System	t	testt	Sep 22, 2004 6:03:44 PM	Suspend Debtor	(\$110.00)		
170490	testmmm098098098098	maxim@;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	Unix System	t	testt	Sep 22, 2004 6:03:54 PM	Suspend Debtor	(\$110.00)		
[Prev] [1]	[2] [3] [4] [5] [6] [Next] [E	xport] [Mass Mail]								

Billing Statement History

This report shows account activity: billing statement totals, additionally grouped by billing statement ID and age in days.

Enter Payment type, Plan, User name, Account ID, Registration Date and run this report.

Account ID							
<u>User name</u>							
<u>Plan</u>	Billing Statem	_					
<u>Company</u>	Note: The last 4	columns show bi	illing stateme	nt totals	groupe	d by their	age in day
<u>Name</u> E-mail							
	Billing Statement ID	Date	Total	0 - 30	31 - 60	61 - 90	90+
	164096	Nov 14, 2003 12:00:00 AM	\$2.00				\$2.00
	164099	Nov 14, 2003 12:00:00 AM	\$53.00				\$53.00
Account ID : 164092	166582	Dec 14, 2003 12:00:00 AM	\$1.00				\$1.00
Jser name : reseller Plan : Reseller Company : Doe	166930	Dec 23, 2003 12:00:00 AM	\$112.55				\$112.55
Name : JohnDoe E-mail : maxim@///	167671	Jan 14, 2004 12:00:00 AM	\$316.20				\$316.20
	169088	Mar 14, 2004 12:00:00 AM	\$89.35				\$89.35
	170208	May 14, 2004 12:00:00 AM	\$245.00				\$245.00
	172658	Jul 14, 2004 12:00:00 AM	\$274.37				\$274.37
	Summary		\$1,093.47	\$0.00	\$0.00	\$0.00	\$1,093.4

Cash Receipts Reports

This report shows info about payments and credits by payment type, amount and date.

Enter Payment type, Plan, User name, Account ID, Date of payment and run this report.

The search result will be similar to the following:

Cash Receipts										
<u>Account</u> I <u>D</u>	<u>User</u> name	<u>Plan</u>	<u>Company</u>	<u>Name</u>	<u>E-mail</u>	<u>Date</u>	<u>Amount</u>	<u>Discount</u>	Payment type	<u>Payment</u> <u>Descriptio</u>
164092	reseller	Reseller	t	JohnDoe	maxim@####################################	Nov 14, 2003 5:43:22 PM	\$100.00	\$0.00	cc	CREDIT, CHECK#
164092	reseller	Reseller	t	JohnDoe	maxim@@mmiimwa	Dec 30, 2003 1:36:42 PM	\$100.00	\$0.00	cc	CREDIT, CHECK#
164092	reseller	Reseller	t	JohnDoe	maxim@mmmmaa	Jan 29, 2004 7:17:38 PM	\$15.55	\$0.00	cc	PayNova Payment
164092	reseller	Reseller	t	JohnDoe	maxim@ddininiii/isa	Jan 29, 2004 7:25:49 PM	\$0.11	\$0.00	cc	PayNova Payment
164092	reseller	Reseller	t	JohnDoe	maxim@ua	Jan 29, 2004 7:26:54 PM	\$0.11	\$0.00	cc	PayNova Payment

[Prev] [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] [31] [32] [33] [34] [35] [36] [37] [Next] [Export] [Mass Mail]

Refunds

This report allows getting information on all refunds addressed to your users by refund description, billing profile, amount etc.

To run a report, enter parameters for Payment type, Plan, User name, Account ID, Date of refund.

Refunds	Refunds									
Account ID	User name	<u>Plan</u>	Company	Name	E-mail	Registration Date	Amount	Billing Profile	Payment Description	
164092	reseller	Reseller	t	JohnDoe	maxim@pananaminoa	Dec 23, 2003 12:00:00 AM	(\$0.03)	CC (VISA xxxxxxxxxxxxxx0006)	Refund reseller (11/14/03 - 12/23/03)	
166105	bilingtest	Kirill	billingtest	billingtestbillingtest	kato@ pppminim es	Dec 16, 2003 8:13:28 PM	(\$0.55)	Check	The difference between the recurrent fee for the current and the new CGI Directory hisphere/local/home/billingt for billingtest.com (12/16/03 – 2/3/04)	

Billing Statements

This report shows billing statements ID, status, amount (of all billing entries in the billing statement) that includes refunds.

Enter Payment type, Plan, User name, Account ID, Performed on and Registration Date and run this report.

The search result will be similar to the following:

Billing Statements									
Performed on	Billing Statement ID	Account ID	<u>User name</u>	<u>Plan</u>	Company	Name	Amount	<u>Discount</u>	<u>Status</u>
Sep 18, 2004 12:00:00 AM	175335	166406	testlhdfsdlktgior	Kirill	t	tt	\$1.38	\$0.00	Open
Sep 16, 2004 12:00:00 AM	175360	167742	testmmmreseller	Reseller	test	testmmmtest	\$2.00	\$0.00	Closed
Oct 16, 2004 12:00:00 AM	175626	167742	testmmmreseller	Reseller	test	testmmmtest	\$2.00	\$0.00	Open
Sep 17, 2004 12:00:00 AM	175362	168822	maxtest	Win	t	testt	\$21.00	\$0.00	Closed
Oct 17, 2004 12:00:00 AM	175628	168822	maxtest	Win	t	testt	\$21.00	\$0.00	Open
[Prev] [1] [2] [3] [4] [5] [6] [7	7] [8] [9] [10	0] [11] [12] [13] [1	lext] [Ex	port] [Mass	Mail]			

Balance History

This report shows what was the account balance for a certain user for a certain date.

Enter Payment type, Plan, User name, Account ID, Performed on date and run this report.

The search result will be similar to the following:

[Prev] [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [Next] [Export] [Mass Mail]

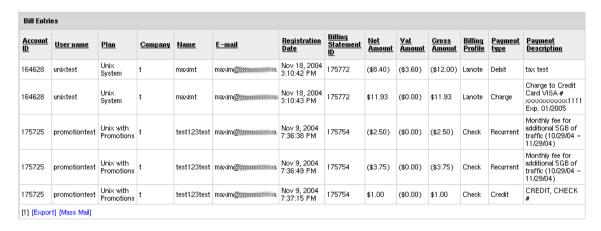
Balance History										
Account ID	<u>User name</u>	<u>Plan</u>	<u>Company</u>	<u>Name</u>	<u>E-mail</u>	Balance				
165016	vserhiy	Kirill	v_serhiy	v_serhiyv_serhiy	Accesses the second	(\$4.60)				
165044	test09808080	Kirill	t	tt	test@yahoo.com	(\$15.64)				
165702	test000112l	Kirill	t	tt	::::::::::::::::::::::::::::::::::::::	(\$70.54)				
165749	mmmrttyyui	Kirill	t	testt	SPARTITURES SOURCE	(\$14.60)				
165822	testmmkdodfujdn	Kirill	t	testtt	Andress	(\$70.54)				

Bill Entries

This report lists billing entries along with payment type, billing profile, billing statement ID for all accounts.

Enter Payment type, Plan, Transaction Type, User name, Account ID, Performed on date and run this report.

The search result will be similar to the following:

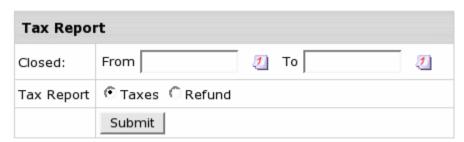


Note: Upon installing the package, the built-in Billing Entries report will be replaced with the one that comes with the package.

Tax/Refund Report

This report can list either total tax or total refund (depending on search criteria) along with links to billing statements of the billing period they were accured over.

To run the report choose **Tax Report** in **Reports**, select either **Tax** or **Refund** and enter the period you want to search it for:



Tax Report									
Billing statement	Account ID	Amount	<u>Taxes</u>	Tax Exemption Code	Country	<u>State</u>			
1287-1 🔍	1287	\$370.00	\$0.00		AF				
1287-3 🔍	1287	\$70.00	\$0.00		AF				
1611-1 🔍	1611	\$250.00	\$0.00		AF	NA			
1611-3 🔍	1611	\$50.00	\$0.00		AF	NA			
1633-1 🔍	1633	\$550.00	\$0.00		AF	NA			
1633-3 🔍	1633	\$50.00	\$0.00		AF	NA			
1658-1 🔍	1658	\$550.00	\$0.00		AF	NA			
1658-3 🔍	1658	\$50.00	\$0.00		AF	NA			
1968-1 🔍	1968	\$424.00	\$21.20		AF	NA			
2098-1 🔍	2098	\$327.50	\$16.38		AF	NA			
[Prev] [1] [2] [3] [4	4] [5] [Next] [Export]		1	,				

^{*} Billing statement ID is modified to indicate the order number of the billing statement in the billing statement history.

Processing Check Payments

This document discusses how to process payments by checks, wire transfers, and other methods that don't involve credit card processing and web payment systems.

If a user chooses to pay by check or wire transfer, the account registration and operation will include the following steps:

- 1. The user goes through the registration wizard.
- 2. Upon the completion of the wizard's last form, the account is not activated. An invoice is e-mailed to the user. A copy of this invoice is sent to your administrator address (see Setting E-mail below on how to specify this e-mail address). The invoice includes mailing address for check payments or bank details for wire transfers.
- **3.** The user sends you a check or wires the amount specified in the invoice.
- **4.** You receive user's check or wire and enter the received amount into the system.
- 5. Next you moderate the account, it becomes active, and the system sends user an e-mail notification that the account has been created.
- 6. User receives the notification e-mail and can log into the control panel.
- Further, user sends checks or makes wire transfers to pay the bills. Upon their receipt, you enter the payments (on page 424) into the system.
- **8.** When the billing period closes, the account is not suspended and continues to operate, and the payment owed becomes user's negative balance. When user's negative balance exceeds the credit limit, this user will become unable to purchase more resources, which does not allow the negative balance to grow too high over one billing period. See also Suspending Debtors (on page 340).
- **9.** When necessary, you can turn off check payments for the entire system.

In this section:

Setting up the Check Mailing Address	464
Setting E-mail	
Moderating Accounts	
Turning Off Check Payments For the Entire System	

Setting up the Check Mailing Address

Bank details or mailing address for checks is entered in the control panel under **Settings** -> **Look and Feel** -> **Misc.Texts** in the **Checks Information** field. This text will show up in the Welcome letter after the line: "*Please print out this message and send it along with payment to:*"

Setting E-mail

To receive notifications about the creation of new accounts, you have to specify your e-mail address.

1. Select Notification Recipients from the Settings -> Notifications menu:

2.



3. On the page that appears, specify the recipients of mail notifications (on page 121).

Moderating Accounts

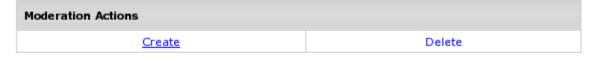
'Moderate' means complete account registration and activate the account. Moderation is applicable to accounts that are paid for by checks, wire transfers, web payment systems, and, optionally, credit cards. You moderate an account when you receive the payment from the user.

> To moderate an account:

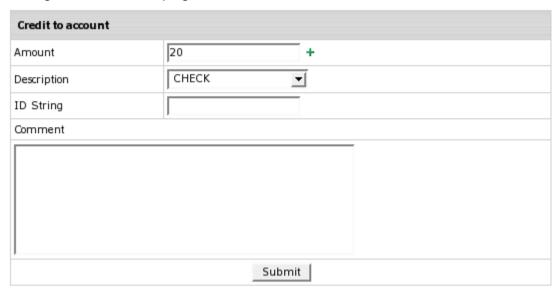
1. Select Moderate in the Signup menu:



- 2. In the page that appears, click the name of the account moderated.
- 3. Check customer details in the signup info thoroughly.
- **4.** Scroll down to the **Moderation actions** section and click **Create** at the bottom of the page:



5. Once the account is created, an e-mail is sent to the user and you are brought to the **Credit** page.



In the Amount field, enter the paid amount and click Submit.

You will get the message informing you that the payment has been added to the system:



Turning Off Check Payments For the Entire System

If you want to disable check payments, it will affect the whole system, not individual plans.

- To disable check payments:
- 1. Select Merchant Gateway in the Settings -> Payment Settings menu.
- 2. Turn Accept Checks OFF.



After you have disabled check payments, existing check payment users will still be able to use this form of payment, but new customers won't see this option in the signup forms.

Splitting Multiple Accounts

Multiple user accounts (on page 285) can be split and moved to new users. This option is available if there is at least one reseller.

To split multiple accounts:

- 1. Use Search in Reseller (on page 413) utility to find user's multiple accounts.
- 2. Click the Split icon in the Controls section for the account you want to move to a new user:



3. You will be taken to the Split Users by Accounts page:



4. Fill in form to create a new user you will move this account to and click **Submit**.

Granting SSH Access To Users

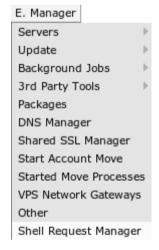
Sometimes you may need to allow selected customers SSH access to your server. Such authorized users can run shell scripts, and have other extensive privileges. To allow your customers request shell access and, if granted, operate their accounts through shell, make sure to include it in plan wizard.

Please be careful with choosing who can be given SSH access permission to reduce the risk of system functionality and security problems.

Important: Resellers also can offer Shell access which can be included in plan wizard. But they can't grant/deny user requests from the reseller administrator area. Instead, end-user requests are sent to the main admin. Once the request is granted or denied, the reseller and its users receive the corresponding email notification.

> To view shell access requests from your customers:

1. Select Shell Request Manager in the E. Manager menu:



2. On the Shell request manager page you will see:

Shell request	manager							
	an							
Accounts with Shell Access Requested								
User name	Account Id	Date	Action					
olesya22	1601	Aug 4, 2004 6:47:16 AM	Allow Prohibit					
testuser	1456	Aug 4, 2004 6:49:19 AM	Allow Prohibit					
Accounts with Shell Access Enabled								
olesya	1046	Aug 4, 2004 6:43:33 AM	Disable Access					

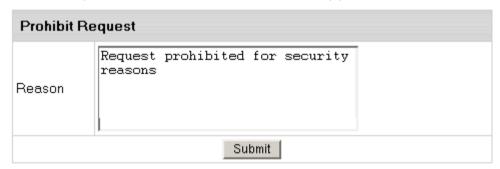
- Shell Access Notifications: turn it ON and your end-users will get notifications stating that shell access was granted or denied
- Accounts with Shell Access Requested: it shows how many user requests you have recieved. You can allow or prohibit the access.
- Accounts with Shell Access Enabled: it shows the accounts that have been granted shell access

> To allow shell access:

- 1. Go to Shell Requests Manager in the E. Manager menu.
- 2. Click Allow in the Action area. The account will appear in the Accounts with Shell Access Enabled section and user will get the notification.

> To prohibit shell access:

- 1. Click Prohibit in the Action area.
- 2. Enter the prohibit reason in the form that appears:



3. Click **Submit**. The account will disappear from **Shell Request Manager** and user will get the corresponding notification.

You can also disable shell access for the accounts with previously granted access. To do it, click **Disable Access** and account will disappear from **Shell request manager**.

Customer Signup

This chapter tells you how to manage customer signups.

In this chapter:

Signing Up Users	469
Moderating User Signups	471
Signup Guard Settings	
Viewing Signup Info	
Trial Hosting	

Signing Up Users

Requirements: Signups are possible only under plans available for signup!

This chapter introduces two ways of signing up users in Parallels H-Sphere:

- from the administrator control panel
- "from the street".

The registration "from the street" can be performed by the customer from your web site, without admin's interaction. The registration from the admin control panel goes through exactly the same steps, but can be performed only by the administrator.

In this section:

Signing Up Users from Admin Control Panel	470
Signing Up Users from the Street	471

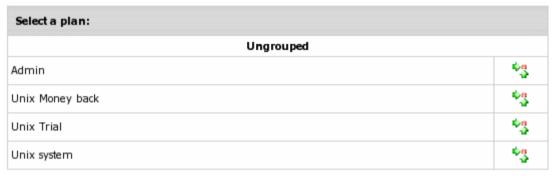
Signing Up Users from Admin Control Panel

Signup from the administrator control panel is also the one and only way to create accounts that are unavailable "from the street", regardless of whether they are tagged available or unavailable for signup, for instance admin and technical support accounts.

- To sign up a new user from the admin control panel:
- 1. Select Signup in the Signup menu:



2. On the page that shows, click Select next to the plan for the new account:



If the list doesn't offer desirable plan, check if it is available for signup.

- **3.** Signup Wizard page appears. Go through the **Signup Wizard**. Click arrows in the lower right corner of the page to proceed signup.
 - Enter your contact info in the form that shows (name, e-mail, address, etc.).
 - Select payment type in the drop-down box (credit card, check, online payments) or trial hosting.
 - If you have the Tax Exemption option (on page 331) enabled in the Taxes submenu of the Settings menu, you may enter the valid VAT code to set tax exemption mode for your account.
 - Enter payment information: credit card numbers, expiry date and etc. for credit cards: address where the bills will be sent - for checks.
 - Enter username and password for this account.
 - Choose the type of domain you want to sign up with (or sign up without domain).
 - Agree to charges if any and complete the creation of account.

When you are through with the Signup Wizard, account will be either created or assigned for activation (on page 471).

If you want to replace signup forms with those of your own, read the User Signup Customization guide.

Signing Up Users from the Street

To allow users to sign up directly from your website, instead of entering your Parallels H-Sphere start page, you should to put signup links on your own page.

To allow signing up users "from the street", make sure that:

- plan is available for signups;
- plan has full access (on page 272).

To find out what URL starts signup wizard for a particular plan:

- 1. Go to the list of your plans in the Plans menu -> Manage.
- 2. At the bottom of the page, click **Signup Links** and the list of links that launch signup "from the street" will appear.

Note: To retrieve a link to a specific plan, click the "lens" icon to the left of a plan's title and copy it from the address line.

3. Once you have signup links for plans, publish them on your website and allow users to go directly to the SignUp wizard of the chosen plan.

In case if any errors occur during user signup, Parallels H-Sphere places the account into the moderation section. Read about signup errors in the Moderating accounts (on page 471) guide.

Moderating User Signups

Newly registered accounts do not get activated immediately. Some of them need to be activated manually by administrator. This procedure is called account moderation. This document explains how to moderate signed up users, activate their accounts from the admin control panel and more.

Moderated Signups

The following signups are moderated:

- Check payment signups regardless of Signup Guard or any other settings
- Web payment signups: WorldPay, PayPal, 2CheckOut, and GestPay networks depending on the Signup Guard (on page 475) settings
- Credit card payment signups are moderated when Moderated CC Signup is enabled in Settings -> Payment Settings -> Merchant Gateway. If it is disabled, account moderation is based on the Signup Guard (on page 475) rules
- Failed signups that returned errors:
 - Signups that experienced Parallels H-Sphere system errors. Such accounts will be placed into the regular Moderated Signup section, so you can activate the account after the problem is fixed.

- Credit card signups that experienced errors with processing centers. Such accounts are placed into the "Signups failed for unknown reason" section in the Moderated Signup submenu.
 - To see the error log, go to Reports -> Charge Log and from the drop-down box choose Failed transaction result.
- Signups that failed due to other technical problems
- Trial signups are moderated if Signup Guard (on page 475) in the Settings menu is configured to put trial signups on moderation

Even if a signup fails, the user is still allowed to complete the registration procedure. The potential customer is notified of the temporary problems and the signup request lands in the moderate section.

Email Notifications

In case of moderation, account owners receive two email notifications:

- 1. the first one is sent at signup completion and states that account will soon be activated.
- **2.** the second one is sent upon activation stating that the account has been *registered* and can be accessed by the user.

Activating Or Rejecting Signups

- > To activate or reject activation of an account:
- 1. Select **Moderate** in the **Signup** menu. The list of accounts awaiting moderation shows.
- 2. Click the name of the account and check customer details in the signup info thoroughly.
- **3.** Scroll down to the **Moderation actions** section and click **Create** or **Delete** at the bottom of the page:

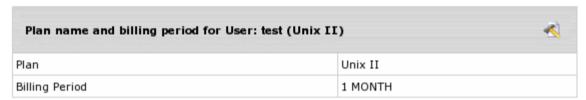
Moderation Actions	
<u>Create</u>	Delete

If you delete an account, it can't be restored. In some cases accounts won't activate even after clicking **Create** and system will show the reason why it happened.

Changing Details of Moderated Accounts

When an account gets to the **Moderate** signup section, you can change details of an account before it gets created, including:

- Contact Info: click the Edit button in the Contact Info section.
- Billing Info: click the Edit button in the Billing Info section.
- Domain name: click the Edit button in the Other Signup Information section.
- Control Panel Password: click the Change button in the Other Signup Information section.
- Hosting plan within its compatibility group:
 - 1. Scroll down to the Plan name and billing period section.



2. Click the Edit icon next to the plan name and the following page shows:



- 3. Chose a new plan from a drop-down box and click Save.
- 4. On the page that appears, chose a new billing period for this plan and click Save.
- 5. Make sure to click **Save** to save changes.

Moderated Credit Card Signup

When the attempts to use stolen credit cards become frequent, the online processing center may close or suspend your account. To prevent this, you can switch to the **moderated credit card signup** mode and manually check each credit card, including its authenticity, address info, and other details, before allowing to create the account and charging the registration fee.

To enable moderated credit card signup, select Merchant Gateway in the **Settings** -> **Payment Settings** menu. On the page that appears, switch on **Moderated CC signup**:



Signup Guard Settings

In Parallels H-Sphere you can moderate signups using the **Signup Guard** feature. With Signup guard you can create rules to moderate accounts matching specific criteria and/or blacklist certain parameters that will put the account into moderation.

Creating moderation rules

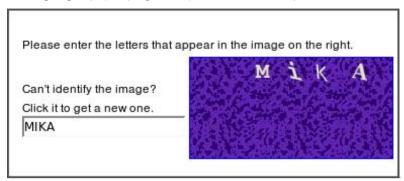
Once configured, this utility decides if the new account will be created right away or will be placed into the awaiting moderation list on the **SIGNUP** -> **Moderate** page with appropriate comments/warnings.

- > To configure moderation rules, do the following:
- 1. Select SignupGuard in the Settings menu.

Signup Guard		
Moderate Everything		
Moderate On Domain Registration	Moderate On Domain Transfer	
Moderate On Stopgap Domain	Moderate On 3rd level domain	
Moderate On No Domain	☑ Moderate On Trial Account Signup	
CVV validation		
✓ Human Checker		
Max. Amount 100000.0		
Submit Query Reset		
Black Lists		
Domains	Remote IPs	
Contact/Billing Emails	Phone #	
Countries	Credit Card Numbers	
Names	Usernames	

- 2. On the page that appears, select which accounts will be placed in the awaiting moderation list and click **Submit**.
 - Human Checker: enable the system to check if the signup is performed by human or by robot.

During signup (on page 464) user will be required to enter the validation letters:



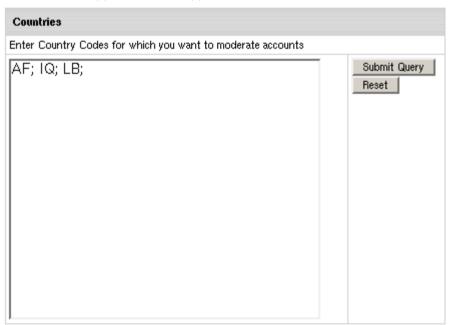
- Max Amount: accounts will be moderated if the total price for such signup is bigger than this amount.
- 3. Click Submit Query.

Setting Signup Guard Blacklist

You can blacklist accounts by certain parameters: account names, email addresses, domains, IPs, countries, etc., i.e., categories included into the **BlackLists** section of the **Signup Guard** page. Accounts with parameters specified in these blacklists will be moderated after the signup.

> To configure blacklists:

- 1. On the **Signup Guard** page, in the **Black Lists** section, choose the parameters (e.g: **Countries**) to be tracked during signup.
- 2. On the page that shows, enter the list of parameters delimited wih semicolons (;), commas (,), or line breaks:



In the above example, all accounts from the countries specified in the blacklist (Afghanistan, Iraq, Lybia) will be automatically moved to the awaiting moderation section upon their signup.

Note: You cannot set the range of IPs or use wildcard symbols for names!

3. Click Submit Query.

From now on, make sure to check the awaiting moderation list regularly. It is available on the **SIGNUP** -> **Moderate** page.

Note: SignupGuard will never reject client signup, it will place all suspicious signups into the awaiting moderation list on the SIGNUP->Moderate page.

Country Codes for the Signup Guard Blacklist

Here is the list of country codes for the Signup Guard blacklist: http://www.iso.org/iso/english_country_names_and_code_elements.

Viewing Signup Info

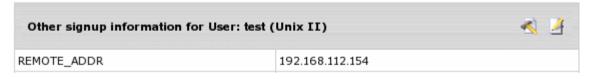
This document shows how to track information about signups in your control panel including signup IPs (the IPs of the computers signups came from) and signup statistics.

Signup IPs

To prevent the use of fraudulent credit cards, check the IPs of the computers where signups came from against the country in the billing info.

> To see the signup IP:

- 1. Go to Moderate in the SIGNUP menu.
- 2. Click the account to view account info. In the Other signup information table REMOTE_ADDR entry shows this account signup IP:



Note: The section **Other signup information** also shows Domain Registration Billing and Owner Information. You can change it before account is created.

Signup Statistics

Signup statistics includes data about accounts created and deleted by each administrator. Signups "from the street" are not included into this statistics, they can be viewed in Signup reports (on page 434).

> To view signup statistics:

1. Choose Stats from the Signup menu. The following page will show:



- 2. Click the underlined number in the Live accounts column to display details on these accounts.
- 3. Click the underlined columns' captions to sort the entries.

The **Export** link under the chart enables you to save the chart data in *.csv format that is supported by numerous spreadsheet and database programs. Commas are used as delimiters.

Trial Hosting

Introduction to Trial Hosting

Trial registration allows users to sign up (on page 464) and evaluate a full featured account for a set number of days (trial period) without being charged the fees to be paid for account setup and activity during the trial period if they decide to continue hosting with you. Trial registration can be enabled in any pay plan. Upon trial period expiry, the trial account automatically gets suspended (on page 430).

To continue hosting with your company, a trial account's owner needs to become a pay user. If a trial account's owner becomes a check-pay user by the time their trial account has been suspended, resume their account, because it doesn't get automatically resumed, as opposed to credit card paid accounts.

When a trial user enters valid credit card info, two things may happen:

- by default, he will be immediately charged according to Billing Statement (../user/billing.html##onlineinvoice).
- if in Plan Wizard the option **Zero out the balance before changing payment type from Trial to Paid** is checked, it will prevent clients from charging for the resources used during the trial period, however will be reflected in their billing statement.

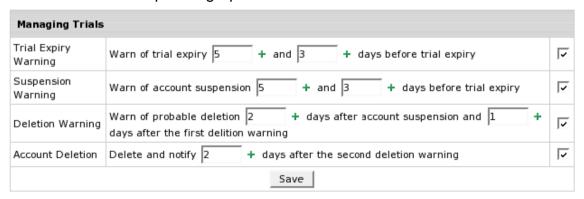
Managing Trial Accounts

You can configure your system to automatically:

- warn trial account owners of approaching trial period expiry and account suspension;
 - warn owners of suspended trial accounts of probable account deletion;
 - delete suspended trial account.

To enable any of the above options:

- 1. Go to Settings -> Managing Trials.
 - 2. Select the corresponding option checkbox:

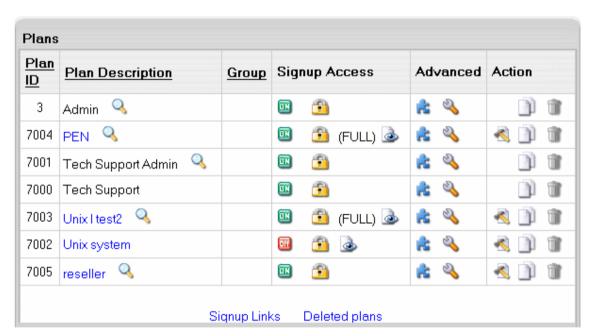


- 3. Set the option timing.
- 4. Click Save.
- > To edit the corresponding warning/notification message:
- 1. 1. Click the Edit icon next to the selected checkbox.
 - 2. Follow instructions on how to edit mail messages to users (on page 122).

Enabling Trial Registration

To enable trial hosting for an individual plan, do the following:

1. Select Manage in the Plans menu and click the plan name to start the plan edit wizard:



- 1. On the page that appears, scroll down to the last section and select **Trial** as the Billing Type.
- 2. In the **Duration** field, enter the days of the trial period. If you leave the field empty, the duration of the trial period will be set to zero, and all accounts under trial registration will be suspended immediately after signup. Usually trial period does not exceed one month.
- 3. In the Credit Limit field, enter the maximum negative balance you want to allow for one trial user. Trial Credit Limit is the maximum amount of credit a trial user can run up acquiring paid resources. If you leave the field empty, the Trial Credit Limit is set to zero, and users can acquire only free resources. For trial periods of up to one month, this amount is usually set to slightly exceed the initial registration payment plus the recurrent fee for one payment period to disallow free use of extra resources. If you set Trial Credit higher, trial users will be able to acquire more resources than it is offered with the standard plan configuration. For trial period of more than a month, you need to set a higher credit limit to ensure that the trial account has enough balance to pay subsequent recurrent fees.
- 4. Zero out the balance before changing payment type from Trial to Paid: checking this option will prevent clients from charging for the resources used during the trial period. It will be reflected in their billing statement.
- **5.** Scroll down to the bottom of the form. Check the **Don't change resources** prices and click **Next**.

Grouping Trial Plans

To ensure correct transition from one plan to another, you should always group plans based on their compatibility, so plans with the same settings belong to the same group. Don't group plans of different nature (for example Windows and Linux hosting), as this will lead to unexpected results. A very common mistake is to create dedicated Unix and Win2000 trial plans and put them in a separate trial plans group. On the one hand, this will not allow trial users to switch to pay plans, as they are in a different group. On the other hand, when switching from Win2000 Trial to Unix trial, a user will lose the settings that are unavailable under Unix plan, such as ASP and ODBC service.

In this section:

Managing Trial Accounts	483
Enabling Trial Registration	484
Grouping Trial Plans	

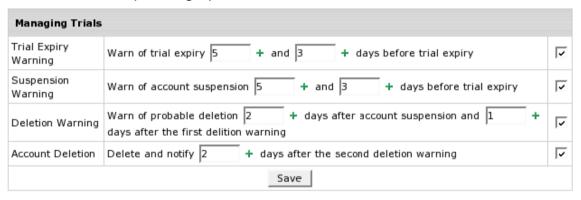
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 - warn owners of suspended trial accounts of probable account deletion;
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- 2. Select the corresponding option checkbox:



- 3. Set the option timing.
- 4. Click Save.

> To edit the corresponding warning/notification message:

- 1. Click the Edit icon next to the selected checkbox.
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- 4. In the Credit Limit field, enter the maximum negative balance you want to allow for one trial user. Trial Credit Limit is the maximum amount of credit a trial user can run up acquiring paid resources. If you leave the field empty, the Trial Credit Limit is set to zero, and users can acquire only free resources. For trial periods of up to one month, this amount is usually set to slightly exceed the initial registration payment plus the recurrent fee for one payment period to disallow free use of extra resources. If you set Trial Credit higher, trial users will be able to acquire more resources than it is offered with the standard plan configuration. For trial period of more than a month, you need to set a higher credit limit to ensure that the trial account has enough balance to pay subsequent recurrent fees.
- **5.** Scroll down to the bottom of the form. Check the **Don't change resources** prices and click **Next**.

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Migration

In this section you will know how to move domains between accounts, accounts between servers, and how to migrate individual accounts from other Control Panels to Parallels H-Sphere.

In this chapter:

Moving Domains Between Accounts48	ΟÜ
Moving Accounts Between Servers48	
Migrating Individual Cobalt RAQ4 Accounts to Parallels H-Sphere49	91
Migrating Individual cPanel Accounts to Parallels H-Sphere49	96
Migrating Individual Ensim Accounts to Parallels H-Sphere	
Migrating Mass Accounts to Parallels H-Sphere50	06

Moving Domains Between Accounts

This chapter explains how to move a domain with its content, subdomains, and site settings from one Unix account to another.

In this section:

Domain Move Requirements	486
Moving Domains with Domain Mover	
Compatibility	488
Manual Domain Move	

Domain Move Requirements

- The accounts must be located on the same server
- The accounts must belong to compatible (on page 486) plans
- Domain mover works only with Unix servers and doesn't support Windows accounts
- Depending on the domain type, migrate it:

with Domain Mover java tool	manually
second- and third-level domains (on page 285)running on shared IP	- second- and third-level domains running on dedicated IP - other types of domains

Moving Domains with Domain Mover

- 1. Create the new account (you may already have it created).
- **2.** Log into your corresponding web server as root:

S11 -

3. As root, copy the domain directory with all its content to the home of the new account and change the ownership of the files to the new account. Example:

```
cp -r /hsphere/local/home/user1/xyz.com
/hsphere/local/home/userd2
chown -R userd2:userd2 /hsphere/local/home/userd2/xyz.com
```

4. Log into control panel server as the cpanel user:

```
su -1 cpanel
```

5. As cpanel, run DomainMover with the command:

```
java psoft.hsphere.tools.DomainMover xyz.com userd2
```

Note: If you are moving domains between two accounts with the same name, you can run the following tool:

```
java psoft.hsphere.tools.DomainMover xyz.com account id
```

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

- /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start
- 2. Log into the new account, go to **WebServices**, select the new domain if you don't get into it right away, and click **Apply Changes**.
- If this domain uses SSL, go to the old account's home directory, enter ssl_conf, copy the keys (not the files), then log into the new account's control panel and enter the keys.

Note: As the result of domain migration, the log history of this domain will be lost.

Compatibility

It's very important that accounts belong to compatible plans. If the target plan doesn't have a resource used by the domain, the resource will be lost during the move. As a result, you may start getting java exceptions saying that the class is unknown. As a workaround, go to the plan editor and enable and then disable the resource to turn it off correctly. Note: avoid moving domains from accounts under the VE-Mail Only plans to accounts under Unix or Windows hosting plans.

Manual Domain Move

If the domain has a dedicated IP or you can't use the java class for any other reason, you can still migrate the domain, but the site settings will be lost:

- 1. Remove the domain (NOT the account) in the old user's CP. Make sure not to check the domain name at the 'Remove web content' step to keep the content.
- 2. Create exactly the same domain in the new user's CP.
- Transfer all content from the old user's directory to that of the new one either by FTP or by using the mv command as root, in which case you need to change file ownership.

Note: If FrontPage was enabled in the original site, fix FrontPage from the user control panel to update the directory paths.

Moving Accounts Between Servers

This document describes how to move virtual hosting accounts between two Unix/Linux physical servers or between two Windows servers within the same Parallels H-Sphere cluster. It is not possible to move accounts between a Windows and a Unix/Linux servers.

Content move utility has a web interface in the control panel, doesn't require manual restart of Parallels H-Sphere, considers DNS synchronization issues, and resolves many other problems.

Account move implies:

- 1. transfer of
 - user account
 - all domains hosted under this account
 - home directory and its content

Note: no mail resources can be moved between Parallels H-Sphere servers.

2. IP and DNS data changes.

Account move doesn't involve user databases, as they are located on separate database servers. Once you have correctly moved the accounts to a different web server, user scripts will be able to work with MySQL databases from the new location.

Warning: As a result of the account move, Webalizer statistics will be reset. ModLogAn statistics won't be lost.

In this section:

Cautions	489
Requirements	489
Procedure	490

Cautions

- Check if any of the customer scripts use the server IP address and instant access domain alias. Note all uses to update them right after the move.
- Check for absolute file paths in customer scripts if you are going to change the location of user homes. Note all uses to update them right after the move.
- Make sure the server has no users that reached their disk quota.

Requirements

- There should not be any users on the target server with the same username as on the source server.
- You need to have SSL certificates for all accounts using SSL. Since account move doesn't work with accounts using SSL, you'll need to disable SSL for these accounts before the move, and reinstall the certificates after the move.
- Port 873 (RSync) should be open
- The target server should have:
- shared IP with the same shared IP tag for migrated shared IP domains;
- free dedicated IP for migrated dedicated IP domains.

Procedure

Before moving an account, make sure that the target server has a shared IP available with the same tag as the shared IP on the source server.

> To move an account:

- 1. Disable SSL on all accounts where it is enabled.
- 2. Select Start Account Move in the E.Manager menu.
- 3. Select source and target servers. Enter account details. Click Submit.
- **4.** Click **Move** for this account. The account will be scheduled for move. The system will check with the source and target servers for information about the resources to be moved.
- 5. Select Start Move Processes in the E.Manager menu.
- 6. Click Launch for this account.

The content move routine takes the following steps:

- 1. Initialization: collecting all necessary information for moving the account.
- 2. **Checking if the move is possible:** checking if the required resources can be created physically on the target server.
- 3. Physical creation of the resources on the target server.
- 4. **Content transfer:** transferring the user's directory to the target server.
- 5. **Switching DNS**: changing IPs, binding dedicated IPs to the target server's interface.
- 6. **Deleting resources on the source server**: this operation is performed with a 24 hour delay after switching IPs.
- 7. Reinstall SSL certificates on all accounts where they had been installed.

If at any stage an error occurs, the process gets suspended, and a trouble ticket is created and assigned to this specific transfer process, so administrator can identify and resolve the problems. Once the problem is resolved and the process resumed, account move continues from where it stopped.

Migrating Individual Cobalt RAQ4 Accounts to Parallels H-Sphere

You can migrate individual user Cobalt RAQ4 accounts into Parallels H-Sphere.

This document covers the procedure of migration and billing issues for migrated accounts.

Before exporting Cobalt RAQ4 accounts to Parallels H-Sphere:

- Generate an archive using the cmuexport utility for each RAQ4 domain to be migrated.
- Create MIGRATION_DIR in hsphere.properties. This directory is used to store a migration backup file from the ftp server during migration

In this section:

Migration Procedure	. 492
Billing Issues	. 495

Migration Procedure

- To migrate a RAQ4 account to Parallels H-Sphere:
- 1. Generate cmuexport archive and save it to Parallels H-Sphere ftp server.
- 2. Using Parallels H-Sphere Unix plan creation wizard, create a plan for migrated accounts with the following resources enabled:
 - domain
 - domain alias
 - mail domain aliases, mailbox alias, mail forward, autoresponder
 - SSL Module, Comodo SSL, Shared SSL
 - Front Page, CGI Resource, PHP Module
 - Referrer Log, Agent Log, Error Log, Transfer Log, Webalizer Resource, Modlogan Resource
 - FTP sub-account
 - dedicated IP (make sure there is one)
- 3. Go to Signup -> Import Users and click Cobalt RAQ User Import Wizard:

Import users from other Control Panels

Cobalt RAQ User Import Wizard

Wizard supports RAQ4 and RAQ550. It requires file generated by cmuexport utility for each website being exported (one file per website), cmuexport is available here: ftp://ftp-eng.cobalt.com/pub/users/jeffb/cmu/experimental/

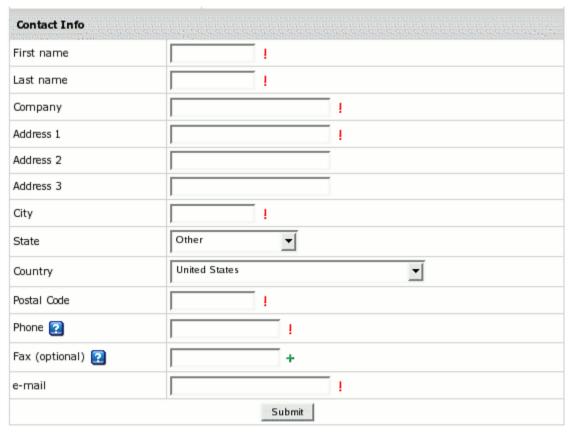
Current jobs

RAQ-2 aaabusinesshosting.com 9 Done

4. Fill in the form that appears:

Cobalt RAQ User Import Wizard		
FTP Server		
FTP Login		
FTP Password		
Path To CMU Export Archive		
User name	· !	
Password	į.	
Plan	Test plan (Raq4) ▼	
Billing Period	1 MONTH 🔻	
Start Date	1	
Balance	I I	

- FTP Server, Login, Password your FTP server data.
- Path To CMU Export Archive it's where you saved the archive (see above).
- User name, password give name and password to the new Parallels H-Sphere account.
- Plan choose the Unix plan you have just created.
- Billing Period choose from availabe in the plan.
- Start Date initial billing date for the newly created account.
- Balance credit the account.



- Name, Company, Address, Phone, Email: enter contact info for the future Parallels H-Sphere account.
- 5. Click Submit.
- **6.** This initiates a new migration job which appears under **Current jobs**:



7. Click the job link to see its status:

```
Import users from other Control Panels
State:
                         RAQ-2:9: Done
Log:
#0:WAITING
#1:Connecting
#1:Downloading
#2:Parse Date
#3:Set customer info
#4:preparing config data
#5:creating user
Cheking user raqtest1... [ OK ]
Creating user ragtest1 [ OK ]
Resolving plan ID for plan Test plan (Raq4) [ OK ]
Adding account for raqtest1 [ OK ]
Preparing balance [ OK ]
Setting new disk quota value 500 [ OK ]
Adding FTP subaccount - sal [ OK ]
Adding FTP subaccount - w [ OK ]
Adding FTP subaccount - suk [ OK ]
Adding FTP subaccount - dstayton [ OK ]
Adding FTP subaccount - downcatus [ OK ]
Adding FTP subaccount - downresus [ OK
Adding FTP subaccount - downbusus [ OK
Adding FTP subaccount - pri [ OK ]
Adding FTP subaccount - forumusers [ OK ]
```

When the job has been completed, you'll see whether Done or Error near its title.

If the migration is done successfully, you should be able to find the new account (on page 413) under the chosen plan and manage it just like other Parallels H-Sphere accounts.

Billing Issues

Once user is migrated, Parallels H-Sphere creates an account with *check payment* billing type enabled by default.

You can view user's Billing Statement to see the account balance. If you entered the necessary amount for *Balance* in the *General* section during migration, account balance will show it.

If user wants to change his billing profile to, say, *Credit Card*, he can do it in his user CP using our User Guide.

Migrating Individual cPanel Accounts to Parallels H-Sphere

You can migrate individual user cPanel accounts into Parallels H-Sphere.

This document covers preparation for migration, procedure of migration and billing issues for migrated accounts.

In this section:

Preparing for Migration	496
Migration Procedure	
Billing Issues	

Preparing for Migration

Prior to importing a cPanel account (http://www.cpanel.net) into Parallels H-Sphere, prepare for migration.

- Create an archive of this account using the cPanel backup utility (http://www.cpanel.net/docs/cpanel/cPanel_User_Manual.htm#Backup.h tm).
- 2. Save the archive to your ftp server.
- 3. If your user wants to have similar account options and prices that were available under cPanel, have your user choose what Parallels H-Sphere plan he wants to be signed up for.

 If no plan meets the requirements, you may need to create a new plan (on page 360) for this user with all options needed.
- **4.** Create MIGRATION_DIR in hsphere properties. This directory is used to store a migration backup file from the ftp server during migration

Important:

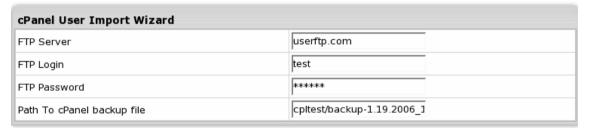
- 1. It is not possible to migrate parked domains!
- 2. If you migrate mailing list subscribers, make sure the mailman package must be installed on the CP server, because mailing list info is stored in binary mailman format. If mailman isn't installed, mailing list subscribers will not be migrated.

Migration Procedure

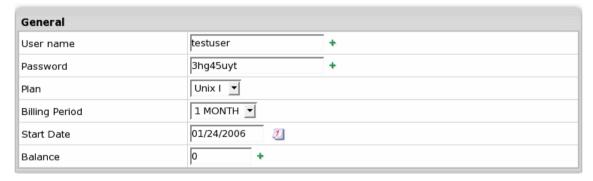
- > To migrate a cPanel account into Parallels H-Sphere:
- 1. Go to Import Users in the Signup menu.
- 2. Click cPanel User Import Wizard:

Import users from other Control Panels Cobalt RAQ User Import Wizard Wizard supports RAQ4 and RAQ550. It requires file generated by cmuexport utility for each website being exported (one file per website). cmuexport is available here: ftp://ftp-eng.cobalt.com/pub/users/jeffb/cmu/experimental/ CPanel User Import Wizard Wizard for migrating cPanel users to H-Sphere. It requires backup file generated by cPanel.

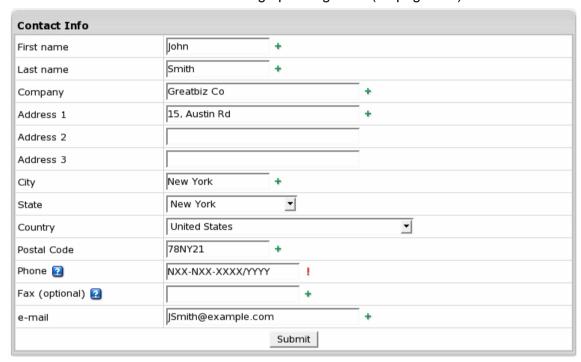
3. Fill in the page that appears:



- FTP Server where account archive is stored
- FTP Login and Password: your FTP server access data
- Path to cPanel backup file: enter location of the archive



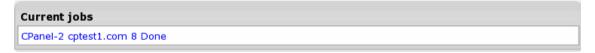
- User name, password give name and password to the new Parallels H-Sphere account
- Plan: choose the Unix plan for signup
- Billing Period: choose from available in the plan
- Start Date: initial billing date for the newly created account.
- Balance: enter the amount paid by user prior to migartion or zero if no payments were made. Read more about billing upon migration (on page 496).



 Name, Company, Address, Phone, Email: enter contact info for the future Parallels H-Sphere account.

4. Click Submit.

This will initiate a new migration job which appears under Current jobs.



5. Click the job link to see its status. When the job has been completed, it will show **Done** or **Error** on top of page.

```
Import users from other Control Panels
                        CPanel-2:8:Done
State
Log
#0:WAITING
#1:Connecting
#1:Downloading
#2:Parse Date
#3:Set customer info
#4:preparing config data
#5:creating user
User belongs to reseller admin. Trying to set reseller
Cheking user gwerty1...
                             OK
                          [
                                 1
Creating user qwerty1 [
                         OK
                              1
Resolving plan ID for plan Unix I [
Adding account for qwerty1 [
                               OK 1
Preparing balance [
                      OK
                          ]
Setting new disk quota value 200 [ OK
 [
    OK
Creating mailbox carlos [
Creating mailbox susan [
                               1
Creating mailbox stacy [
                               1
                           OK
Creating mailbox mike [
                              1
Creating mailbox anna [
```

If the migration is done successfully, you should be able to find the new account (on page 413) under the chosen plan and manage it just like other Parallels H-Sphere accounts.

Billing Issues

Once user is migrated, Parallels H-Sphere creates an account with the check payment billing type enabled by default.

You can view user's Billing Statement to see the account balance. If you entered the necessary amount for **Balance** in the **General** section during migration, account balance will show it.

If user wants to change his billing profile to, say, Credit Card, he can do it in his user CP using our User Guide.

Migrating Individual Ensim Accounts to Parallels H-Sphere

You can migrate individual user Ensim accounts into Parallels H-Sphere.

In this section:

Preparing for Migration	501
Migration Procedure	502
Migration Notes	505
Billing Issues	506

Preparing for Migration

Prior to importing an Ensim account into Parallels H-Sphere, prepare for migration.

- 1. Create an archive of this account using the original Ensim backup tool.
- 2. Save the archive to your ftp server.
- 3. If your user wants to have similar account options and prices that were available under Ensim, have your user choose what Parallels H-Sphere plan he wants to be signed up for.

 If no plan meets the requirements, you may need to create a new plan.
 - If no plan meets the requirements, you may need to create a new plan (on page 360) for this user with all options needed.
- **4.** Create MIGRATION_DIR in hsphere.properties. It is used to store a migration backup file from the ftp server during migration. Make sure this directory is writable for cpanel user:

```
chmod 777 dir

or

chown cpanel dir

chmod 777 dir
```

5. Create ENSIM_TMP_DIR for recoded tmp files. This directory should be writable for cpanel user.

Following is the **example** of MIGRATION_DIR and ENSIM_TMP_DIR creation (*for your consideration*):

```
MIGRATION_DIR = /hsphere/local/home/cpanel/migration/
ENSIM_TMP_DIR = /hsphere/local/home/cpanel/migration/ensim_tmp_dir/
```

To create directories, run:

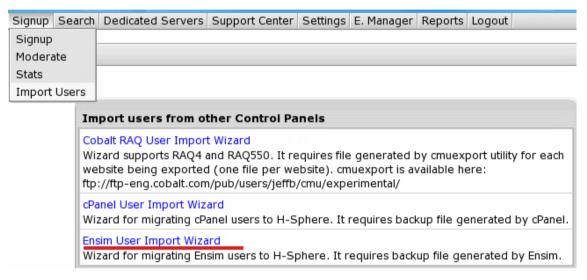
mkdir -p /hsphere/local/home/cpanel/migration/ensim_tmp_dir

> To set correct ownership/permissions:

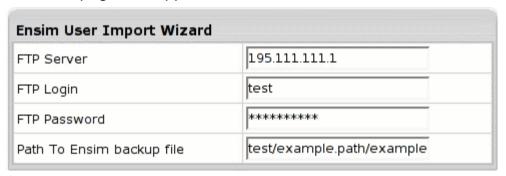
chown -R cpanel /hsphere/local/home/cpanel/migration chmod -R 750 /hsphere/local/home/cpanel/migration

Migration Procedure

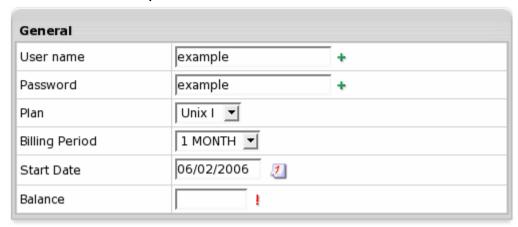
- > To migrate a Ensim account into Parallels H-Sphere:
- 1. Go to Import Users in the Signup menu.
- 2. Click Ensim User Import Wizard:



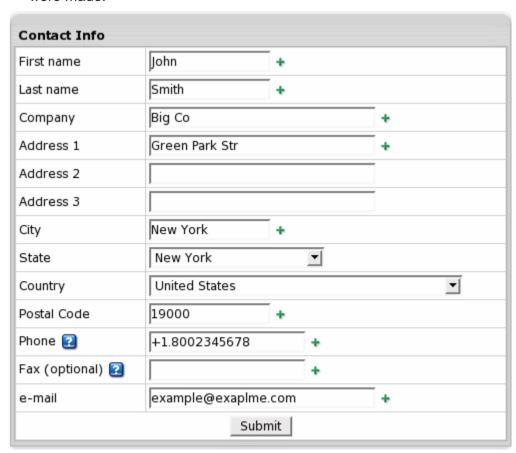
3. Fill in the page that appears:



- FTP Server where account archive is stored
- FTP Login and Password: your FTP server access data
- Path to Ensim backup file: enter location of the archive



- User name, password give name and password to the new Parallels H-Sphere account
- Plan: choose the Unix plan for signup
- Billing Period: choose from available in the plan
- Start Date: initial billing date for the newly created account.
- Balance: enter the amount paid by user prior to migartion or zero if no payments were made.



- Name, Company, Address, Phone, Email: enter contact info for the future Parallels H-Sphere account.
- **4.** Click **Submit**. This will initiate a new migration job which appears under **Current jobs**.
- **5.** Click the job link to see its status. When the job has been completed, it will show **Done** or **Error** on top of page.

```
Import users from other Control Panels
State
            Ensim-1: 7: Uncompressed ./var/www/html/webalizer/web/daily_usage_200412.png
Log
#0:WAITING
#1:Connecting
#1:Downloading
#2:Parse Date
#3:Set customer info
#4:preparing config data
#5:creating user
Cheking user qwerty1...
                            [ OK
Creating user qwerty1 [
                            OK ]
Resolving plan ID for plan Unix I [
Adding account for qwerty1 [ OK
```

If the migration is done successfully, you should be able to find the new account (on page 413) under the chosen plan and manage it just like other Parallels H-Sphere accounts.

Migration Notes

- 1. Custom DNS entries cannot be migrated.
- 2. By default, domains are created on default shared IP (or as it is defined in a plan) on your H-Sphere web boxes available for signup.
- **3.** At domain content migration all target account default content is overwritten with user's original content of domain and subdomain directories.
- **4.** Mailboxes and db users passwords cannot be migrated. By default passwords are equal to mailbox and db user names. After migration users must change them.
- **5.** If a userweb (in Ensim terms) has a subdomain, such resources will be created for this user:

```
subdomain user_name.domain_name.tld;
ftp subuser username
mailbox user_name@domain_name.tld
and directory for such ftp sub user will be set to subdomain directory.
```

If an Ensim user doesn't have a subdomain, only a mailbox and an H-Sphere ftp sub user will be created and a home directory for this user in this case will be set to user's username

Billing Issues

Once user is migrated, Parallels H-Sphere creates an account with *check payment* billing type enabled by default.

You can view user's Billing Statement to see the account balance. If you entered the necessary amount for **Balance** in the **General** section during migration, account balance will show it.

If user wants to change his billing profile to, say, **Credit Card**, he can do it in his user CP using our User Guide.

Migrating Mass Accounts to Parallels H-Sphere

In Parallels H-Sphere, you can migrate mass accounts from cPanel, Ensim and Cobalt RAQ4 control panels into Parallels H-Sphere in bulk.

Preparing for Migration

Prior to importing mass accounts into Parallels H-Sphere, prepare for migration.

- 1. Create an archive of this account using the original Ensim backup tool.
- **2.** Save the archive to your ftp server.

If your user wants to have similar account options and prices that were available under Ensim, have your user choose what Parallels H-Sphere plan he wants to be signed up for

If no plan meets the requirements, you may need to create a new plan (on page 360) for this user with all options needed.

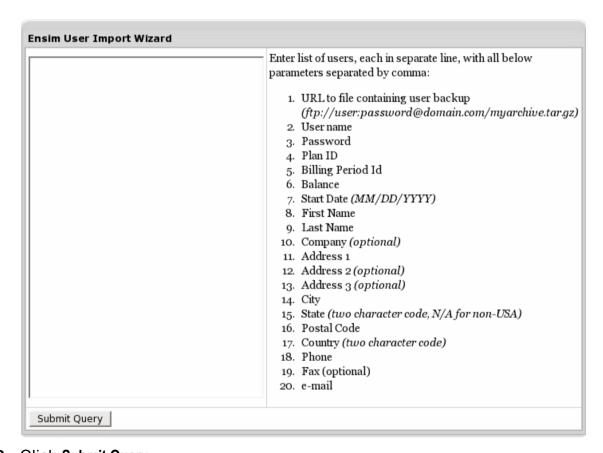
Migration Procedure

- To migrate a mass accounts into Parallels H-Sphere:
- 1. Go to User Imports in the Signup menu.

Import users from other Control Panels Cobalt RAQ User Import Wizard (Mass Action) Wizard supports RAQ4 and RAQ550. It requires file generated by cmuexport utility for each website being exported (one file per website). cmuexport is available here: ftp://ftp-eng.cobalt.com/pub/users/jeffb/cmu/experimental/ cPanel User Import Wizard (Mass Action) Wizard for migrating cPanel users to H-Sphere. It requires backup file generated by cPanel. Ensim User Import Wizard (Mass Action) Wizard for migrating Ensim users to H-Sphere. It requires backup file generated by Ensim.

2. Click Mass action link next to the chosen panel:

Fill in the form that appears:



3. Click Submit Query.

If the migration is done successfully, you should be able to find the new account (on page 413) under the chosen plan and manage it just like other Parallels H-Sphere accounts.

Billing Issues

Once user is migrated, Parallels H-Sphere creates an account with check payment billing type enabled by default. You can view user's Billing Statement to see the account balance. If you entered the necessary amount for **Balance** in the **General** section during migration, account balance will show it. If user wants to change his billing profile to, say, Credit Card, he can do it in his user CP using our User Guide.

Technical Support

Generally, customer support can be carried out from two kinds of accounts: the main administrator account that you use to configure and manage your hosting system and support account created under administrative plans (on page 267).

Customer support is accomplished via trouble tickets or TTs, which are:

- your customers' questions sent from their control panel support center
- system error reports;
- customer questions sent to support e-mail set in Settings >Tech Support (on page 522)

These are delivered to POP3 support mailbox (e.g.support@example.com) specified in Settings - >Tech Support (on page 522) and then submitted to your Client Support Center (on page 510).

Web-based customer support has been profoundly improved. New Client Support Center is now equipped with:

- Security Administration (on page 510) allowing to set permissions per admin
- Reseller Client Support (on page 510) allowing admin to process resellers end user tickets and charge for it.
- Task System (on page 510) which allows assigning tech admins tasks with due date
- Private Messaging System (on page 510) for better communication between Tech Support Admins

Merging (on page 510) trouble tickets It also allows:

- main admin to bill reseller per customer, per ticket and by reseller custom pricing
- main admin to assign a ticket to a reseller account based on end user details
- to assign new tickets to users based on history
- to ignore pop3 errors when using TTMailClientCron

Client Support Center is intended to manage TTs and is integrated into main administrative control panel and support accounts provided the **TroubleTicket Admin** resource is included into the plan they are registered under.

To configure Client Support Center, go to **Settings** menu -> **Tech Support** and follow instructions of Configuring Your Support Center (on page 522).

To configure Reseller Client Support, go to Settings menu - > Reseller Client Support and follow instructions of Client Support Center (on page 510).

To enter Client Support Center, go to Support Center menu - > Client Support Center:

You will be taken to a new window, separate from CP. On the Client Support Center you will see the top navigation menu and also several sections with My Assigned Tickets, New Unassigned Tickets, Other Open Tickets, Quick ticket search, Private Messages and My Assigned Tasks

In this chapter:

Client Support Center	510
Configuring Support Center	
Knowledge Base	525
Custom Jobs	
Mass Mail	535
Crash Report	537

Client Support Center

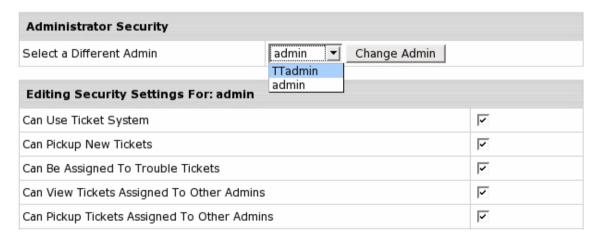
When you enter TT system through **Support Center** menu - > **Client Support Center**, you will be taken to a separate window with the support dashboard.



In this section:

Configuring Administration Security	511
Managing Trouble Tickets	512
Task System	516
Searching Trouble Tickets	517
Exchanging Private Messages	518
Managing KnowledgeBase	519
Ticket Statistics	519
Ticket Queues	520
Supporting Reseller End Users	521

Configuring Administration Security



As a main administrator, you can set permissions for every admin in your Client Support Center. You can allow or disallow your support admin to use or administrate task system, private messaging system, knowledgebase, assign tickets to other admins, etc.

To configure Administrator Security, go to **Settings** -> **Administrator Security**. Check the security settings your admins can have and click **Save**. hese settings will be applied immediately in their admin accounts.

To answer and assign tickets, enter Tech Support Admin Info: go to **Settings** -> **My Profile** and fill in the form.

Managing Trouble Tickets

You, as main administrator, or your support technicians may need to create your own TTs. For instance, if a customer TT contains several different questions and should be assigned to different support technicians, you can divide it and make each question go to a separate TT.

To create a new ticket, go to **Support tickets - > Make a New Ticket**. Fill in the form.

To view and process existing tickets, click the name in the list of **My Assigned Tickets** or **New Unassigned Tickets**. The ticket will look as follows:



Editing ticket can be done in the Ticket Info section.

- Assigned to: change Tech Support Assistant the ticket is assigned to. When assigned to "nobody", it means it's not picked up by any of tech support admins.
- The Status of resolving the ticket. Setting "Resolved" or "Closed" states will remove the ticket from the list.
- The Queue the ticket belongs to.
- The **Priority** of resoving this ticket from '0' to 100% by entering new priority level.

The **Change User** icon allows to change the ticket owner: the account this ticket is tied to. Simply find this user through search and click **Choose User**

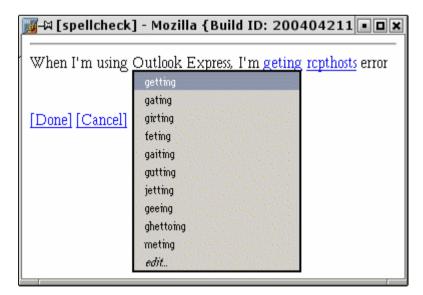
The Edit Ticket Details icon allows to change the ticket title and email.

To answer a ticket, it must be assigned or picked up and TT Admin Info must be entered in **Settings** -> **My Profile** .



You can also add Attachment and a Note to your ticket

To spellcheck your answer, click the **spellcheck** link under the message field. Pop-up window shows with misspelled words, if any, being underlined:



Point your mouse to a misspelled word and a number of suggestions shows. Choose the correct variant and click **Done**.

To assign ticket, choose the TT Admin from the **Assign To** drop down box, change Priority and Status, if necessary and click the **Change** button.

Select the **Sticky** option if you want the ticket to remain assigned to the same tech support admin in case of client's reply. If **Sticky** is not set, the ticket with customer's reply appears as "not assigned".

To assign yourself a TT, click the **Pick Up** link on the right to the TT's title. Assigned TT moves to the **My Assigned Tickets** section.

Releasing TTs in Parallels H-Sphere terms is removing your TT ownership. Released TTs return to the **New Unassigned Tickets** section and can be picked up again. To release an assigned ticket back to a main queue, click the **Release** link in the rightside menu of the ticket.

Close a ticket if you've answered it and don't need it any further. To do it, click the Close button in the rightside menu.

Closed trouble tickets are regarded as deleted and are not available for your viewing, but remain in the TT database and remain open in the user's interface until the user closes it. In case the user decides to post a follow-up message on the same issue, the TT will show up on the interface in the **Open Tickets** section. You may access closed TTs through the Search (on page 510) option.

You can have your trouble tickets closed automatically after they have been answered. You can choose whether you want them to close immediately after they are answered (the default Parallels H-Sphere option) or close after a certain number of days after they are answered:

- 1. In TechSupport Admin CP, select Tech Support in the Settings menu.
- 2. Enter the number of days when your tickets are to be closed.

Tickets can also remain in open status. If you want all answered tickets to remain open in the system, enter -1 in the field, as shown on the image below:



Deleting trouble tickets will remove TT permanently, unlike with closing trouble tickets which remain in the database, and you can always retrieve them with the **Search Tickets** utility.

> To remove multiple TTs permanently:

- 1. Find necessary tickets with the Search Tickets utility.
- 2. Click Mass Action link at the bottom of the page.
- 3. In the Action field, select Delete from the drop-down box.
- 4. Click Submit and tickets will be removed permanently.

Merging tickets is necessary when you get two and more tickets from the same customer on the same issue.

> To merge tickets:

- 1. Click Merge this Ticket link in the rightside menu.
- 2. Find the ticket to be merged with via the Search utility.
- 3. On the result page that shows, against the target ticket click Merge With This Ticket link:

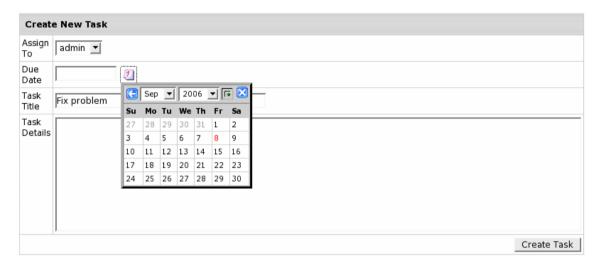
та	Title	Created	Last Mod.	Type	Assigned	State	
<u>ru</u>	IIIIe	Createu	Last Mou.	Type	Assigned	State	
2	New TT system doesn't work (vlad@psoft.lviv.ua)	Jun 9, 2005 6:19:11 PM	Jun 9, 2005 6:25:44 PM	Р	admin	Closed	Merge With This Ticket
5	problem adding DNS zone (olesya@psoft.lviv.ua)	Jun 11, 2005 9:23:31 AM	Sep 7, 2006 6:47:14 PM	P	admin	Need More Info	
12	How can I install H-Sphere? (jsmith@example.com)	Sep 7, 2006 4:38:23 PM	Sep 7, 2006 6:25:22 PM	Р	admin	In Progress	Merge With This Ticket

Merging tickets will cause the original ticket to be deleted.

Task System

Task System allows main administrator to run more effective Client Support by assigning tasks to support technicians, determining Due Dates and adding notes to it. It helps to keep track of the support process.

To create a new task, go to Tasks menu -> Make New Task



Choose the task assignee from the drop-down box, set Due Date, task title and details and click **Create Task**.

To view assigned tasks, go to Tasks menu -> My Assigned Tasks.

To administer tasks, go to **Tasks** menu -> **Task Administration**:



To see the task details, click the task name. On the Task Info page, you can change **Due Date** and add a note.

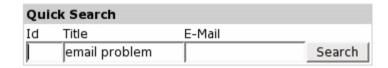
Searching Trouble Tickets

Among all trouble tickets received from users, you can select those that match your specified criteria.

Trouble Ticket system allows searching tickets via **Search Tickets** (advanced search) and **Quick Search** (directly from the dashboard) and In Resellers (tickets of your reseller).

To perfor advanced search, select **Search Tickets** in the top menu. Enter or choose the search criteria and click **Submit**.

To search trouble tickets Via Quick Search, go to the dashboard and fill the Quick Search section:



To quick search tickets, just enter its ID, title or email address and click Search.

To search trouble tickets In Resellers, select **Search In Resellers** in the top menu. The search page is the same as the common search form, except for the additional **Reseller** field at the top of the form:



To find reseller enduser tickets, you need to set necessayr reseller first: in the **Reseller** field, click the **Change** icon. Find the reseller in a separate form.

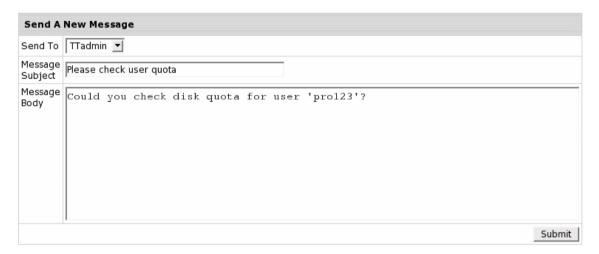
Once you've chosen reseller, you can find its end user tickets: enter ticket ID, Title or email address into the corresponding field. Click Submit.

On the search result page you can open, view, export, sort and also perform mass actions with reseller tickets.

Exchanging Private Messages

Communication between support technicians is carried out by Private Messages System.

To create a private message, go to the dashboard and click **Send a New Message**:



Choose administrator to send the message to, enter subject and message text and click **Submit**. *Important:* The admin you sent the message to will receive email notification.

To view all sent or received messages, go to the **Private Messages** -> **My Inbox** or to the dashboard.



You can delete received messages: check the box and click Delete Selected.

Managing KnowledgeBase

To create and manage Knowledgebase System, refer to our detailed manual on KnowledgeBase (on page 525)

Ticket Statistics

To view trouble ticket statistics for the chosen period of time, click the **Ticket Stats** option in the top menu and set the stats date range. Click **Submit**.



On the TT System Statistics page Per Admin Stats shows administrator's activity in the Support System, Basic Stats shows general activity, Ticket System Averages shows average indicators and Reseller Support Stats shows reseller related activity.

Ticket Queues

If you have different support departments, for instance sales or billing, each with its own email address, you will probably want each department to receive only relevant tickets, but still have all tickets centralized in one support center. To ensure this, create a ticket queue for each department. For instance, the Sales queue for tickets sent to sales@example.com or the Billing queue for tickets sent to billing@example.com.

Queues may serve one of search ticket criteria in the Search Tickets form.

A support administrator can see and answer tickets in the queue he is entitled to and also tickets in the default queue, or tickets that are assigned to him regardless of the queue.

Important: Messages sent to one of these queue email addresses will appear and be processed in your Trouble Ticket system only if these messages are redirected to the main support e-mail address (on page 522) configured in the **Settings** -> **Tech Support** menu. Thus, queue e-mail addresses should be configured mail aliases/redirects to the main support address.

Note: We recommend using support e-mail addresses outside the Parallels H-Sphere cluster, so that you'll be able to receive tickets even if Parallels H-Sphere fails.

To create a ticket queue, go to the **Queue Administration** in the **Settings** menu and click **Create New Queue** on the page that appears:



Fill in the form that appears: enter **Name** of the queue, **E-Mail**, the mailbox to be polled for this queue and autoresponse messages that will be sent to customers: **New ticket auto response** and **Resolved/closed ticket auto response**

When you delete a queue, you will be prompted either to delete all its tickets, or move them to another queue. You can't delete the last queue remaining in the TT system.

Supporting Reseller End Users

Support Center allows main administrator to provide Reseller End User Support and to bill reseller *per total customer count, per ticket and with custom pricing per reseller.*

To allow Reseller Client Support, log into your Admin Control Panel and go to **Settings** menu - > **Reseller Client Support**



Click Offer End User Client Support To Resellers ON.

To be able to charge reseller for supporting his users, choose **Pricing Structure** from the drop-down box: **Per ticket** or **Per customer** and set **Default price per unit**. Click **Save**.

Custom Reseller Support Prices can be set for some specific reseller:



Choose reseller from the drop-down box, set unit of measure and enter price. Click **Save**.

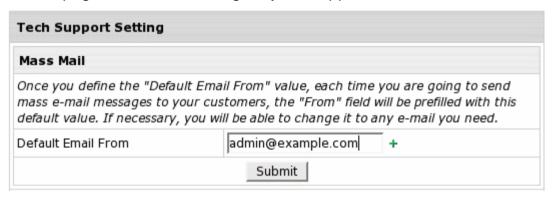
Configuring Support Center

Parallels H-Sphere periodically polls the specified POP3 support mailbox (e.g. support@example.com) and extracts its content to generate Trouble Tickets and submit them to the Support Center. Then the messages are removed from the mailbox. If any of the required parameters is not specified correctly or is missing, the mail will not be collected.

Since the trouble ticket system doesn't provide the functionality to view attachments and mail headers, it is also recommended to have support e-mail forwarded to another mailbox for archiving purposes.

> To configure your Support Center:

- 1. Log into your Tech Support Admin account control panel
- 2. Select Tech Support in the Settings menu
- 3. On the page that shows, configure your Support Center:



 Default Email From: This email address will be automatically filled in as the From email for Mass Mail (on page 535). It can be changed if necessary.

Trouble Tickets	
Support Email	admin@example.com
POP3 Host	admin.example.com
POP3 User	user@example.com
POP3 Password	*******
Automatically Close Answered Tickets After This Many Days	(Use -1 if you don't want option to be enabled)
Report on Ticket Screen	Show by User Show by Email
Max. Latest Tickets to Show	(Maximum number of newest tickets from the same account/email to display on the ticket page)
Default Knowledge Base	N/A 💌
Default Support Knowledge Base	HT-FAQ 🔻
Max Suggestions	(Max number of suggestions to show next to trouble ticket)
Don't send confirmation emails for received Trouble Tickets	

- Support Email: Your primary support e-mail address (e.g. support@example.com) It is the address your customers write to, and replies are sent from.
- POP3 Host: Name of the POP3 mail server
- POP3 User: The login to the mailbox polled by the support center, e.g.:
 example_user@example.com. If it is different than the Support Email, make sure
 all mail is forwarded from Support Email to this address. Different email addresses
 are used to allow forwards of trouble tickets to multiple addresses.
- POP3 Password: Password to the POP3 mailbox (POP3 User).
- Automatically Close Answered Tickets After x Days
 - Enter days to keep answered trouble tickets open. Tickets will be closed after these many days once you answer them.
 - Leave this field empty if you want answered tickets to be closed immediately.
 - Enter -1 if you want all answered tickets to remain open in the Tickets Center.
- Ticket Center Settings: You can choose "Answered" and "On Hold" sections to show/hide in the Tickets Center.
- Default KnowledgeBase: This knowledge base will be available to your end users as well as Tech Support admins and Tech Support assistants in the control panel from Support Center -> KnowledgeBase To make your knowledge base available to end users of your reseller, go to this reseller's administrator CP, select Settings->TechSupport, and specify the default knowledge base.
- Default Support KnowledgeBase: This knowledge base will be used to suggest trouble ticket answers to all Tech Support admins and Tech Support assistants.
- Max Suggestions: The maximum suggested trouble ticket answers from the KnowledgeBase.
- Don't send confirmation emails for received Trouble Tickets: With this box unchecked, the system will send receipt confirmations to e-mail senders. Please be careful with this option, because if the sender has an autoresponder enabled, you'll end up exchanging endless receipt confirmations with him.

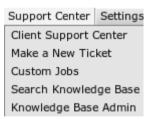


- Do not check e-mail address: When an e-mail message arrives to the support address, its from address and subject are checked to see if it's a follow up to an earlier response. If you enable Do not check e-mail address, incoming messages will be checked only by the subject. In this way, a reply from a different e-mail address won't be treated as a new support request if the subject remained unchanged.
- Highlight E-mails: E-mails received from the domains you entered here will be highlighted with red in the main queue of trouble tickets. This is typically used for customers with priority support but can also be used for other purposes, for instance, to emphasize on brand new customers, etc.
- Spam E-mails: E-mails received from the domains you entered here will be blocked as spamming emails. You can use it to stop spamming attempts.
- PGP private key, PGP code phrase: Enter the private key and code phrase generated with pgp encryption program you are using, so your trouble ticket system can decode customer messages encrypted with a publicly available pgp public key.
- **4.** Now that your Support System is configured, click **Save** to apply settings.

Knowledge Base

Created as a combination of FAQ and search utility, the KnowledgeBase system helps to improve customer support.

Knowledge Base is implemented in the control panel TechSupport System. It helps TechSupport admins and TechSupport assistants to compose answers to customer questions and problems. Technically, the KnowledgeBase system checks the trouble ticket against the knowledge base to find the most relevant suggested replies that appear on the trouble ticket page.



There are 2 knowledge base utilities in the Support Center menu:

- Knowledge Base Admin allows creating, editing and removing knowledge bases.
 This option is available under TechSupport Admin account only.
- Search Knowledge Base option allows only viewing records and searching suggestions. This option is available under TechSupport and TechSupport Admin accounts.

Resellers can't use your knowledgebases. They need to create their own knowledgebases, or you can export your knowledgebase for resellers to import.

Knowledge base can be created only under Admin and Tech Support Admin plans. We presume you have already created Tech Support Admin account as a necessary step to create knowledge base and configure your technical support system.

In this section:

Creating Knowledge Bases	527
Editing and Removing Knowledge Bases	
Exporting Knowledge Base	528
Importing Knowledge Bases	
Spellcheck	
Search	
Settings	
9	

Creating Knowledge Bases

Knowledge base works as a standard search system. When creating knowledge base records, make sure to compose logical entries that contain important keywords and avoid wordiness.

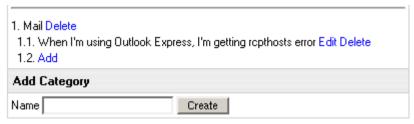
> To create a knowledge base:

- 1. In your administrator control panel, select **KnowledgeBase Admin** from the **Support Center** menu.
- 2. On the page that shows, enter the name of the knowledge base in the Create Knowledge Base section.
- 3. Click the Create button. The newly created knowledge base appears in the Existing Knowledge Bases section.
- **4.** To create a category in this knowledge base, click the **Edit** link next to the new knowledge base.
- **5.** On a page that shows, enter a category name in the **Add Category** section.
- **6.** Click **Create**. New category appears in the list of existing categories.
- **7.** To create actual records in knowledge base categories, click **Add** in the necessary category.
- 8. Enter the problem in the Question field and a solution in the Answer field.
- 9. Click Submit Query.

Editing and Removing Knowledge Bases

You can edit existing knowledge bases, e.g. add and remove categories, edit and remove posted records, move records between categories. To edit a knowledge base, do the following:

- 1. In your Tech Support Admin account control panel, select **KnowledgeBase**Admin from the **Support Center** menu;
- 2. Click the Edit link next to the knowledge base. On the page that shows, you can:



- Delete categories by clicking the Delete link next to it
- Edit records by clicking Edit next to it, and, when done, clicking Submit Query.
- Remove records by clicking Delete next to it
- Switch records between categories:
 - 1. Click Edit against the necessary record;
 - 2. In the drop-down box, select the category;
 - 3. Click the **Change** button. The record moves to the selected category.

Note: think twice before removing categories and records, they won't be restored.

Important: after you made significant changes in your knowledge base, like removing a number of records or adding a lot of new entries, the search system needs to be reindexed and updated to a number of new keywords. To do it, click **Fix** against the modified knowledge base.

To remove an existing KnowledgeBase, simply click the Delete link next to it.

Exporting Knowledge Base

You can export existing knowledge bases from your Parallels H-Sphere control panel and download them to a chosen location. All knowledge bases are downloaded from Parallels H-Sphere in 'jar' format. To export a Knowledge Base:

1. In your Tech Support Admin account control panel, select **KnowledgeBase**Admin from the **Support Center** menu.



- 2. Click the **Export** link next to a Knowledge Base and the standart dialog window shows.
- **3.** Perform common steps to download file: choose location and click Save.

Importing Knowledge Bases

You can import knowledge bases that have been previously backed up or created on other Parallels H-Sphere systems. An imported knowledge base is automatically added to Parallels H-Sphere.

To import a knowledge base:

- 1. In your Tech Support Admin account control panel, select **KnowledgeBase**Admin from the **Support Center** menu;
- 2. Click the Browse button next to Import Knowledge Base:



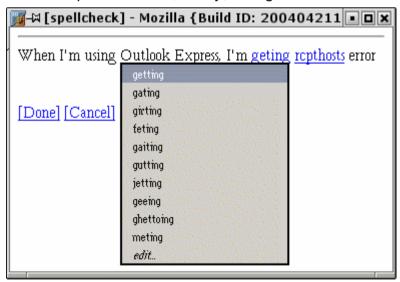
3. Select the database file, then click Upload.

Spellcheck

Knowledge Base allows checking answers to trouble tickets and knowledge base records for spelling.

> To spellcheck records:

1. Click the **spellcheck** link under the message field. Pop-up window shows with misspelled words, if any, being underlined:



- Point your mouse to a misspelled word and a number of suggestions shows.
- 3. Choose the correct variant and click **Done**.

Search

Knowledge base has a search function. It allows not just viewing suggestions in trouble tickets, but also searching the queries with the search utility.

> To find an answer to your question:

1. Go to Search Knowledge Base in the Support Center menu. At the top of the page, Search function shows.

Alternatively, go to **KnowledgeBase Admin** and click **Edit** next to the knowledge base. At the top of the page, **Search** function shows.

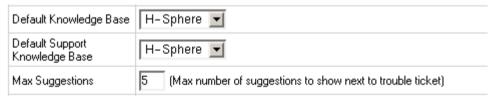


- 2. Enter query in the Search field.
- **3.** Select the category from the drop-down box.
- **4.** Click **Search**. The list of search results appears showing relative categories in brackets.

Settings

Here you will learn how actually to make knowledge base work in your trouble ticket system. You can set a default knowledge base and the number of suggestions it will put in trouble tickets. To do this:

1. Select TechSupport in the Settings menu.



- 2. On the page that appears, choose the Default Knowledge Base that will be available for **end users** as well as TechSupport admins and TechSupport assistants in the control panel from Support Center -> KnowledgeBase.
- 3. Choose the Default Support Knowledge Base that will be used to suggest trouble ticket answers to all TechSupport admins and TechSupport assistants. Clicking the necessary suggestion will automatically fill out answer box for the ticket.

Note: you can choose between other suggestions, edit and change your answer to make it most suitable for the question.

- **4.** Set the maximum number of suggestions to show in trouble tickets.
- 5. Click Save.

Custom Jobs

Custom Jobs allow you to track the additional services you offer to your customers. This could be any type of job such as web design and development, installations, support, or even marketing services. You can use it to track services you offer both for resellers and end users. Resellers also have this facility to work with their end users.

In this section:

Adding Custom Jobs	532
Adding Tasks to Custom Jobs	
Tracking Custom Job Status	

Adding Custom Jobs

- > To assign a Custom Job to a particular account:
- 1. Find the account (on page 413) using the **Search** utility.
- 2. Click the Account ID to go to the account details:

<u>User name</u>	Account ID
dimtest	1226

3. Click Custom Jobs in the Control Panel User section:



In the bottom frame, the Custom Jobs form will appear.

4. Enter the description of the custom job and add it by clicking the button:



The custom job will appear in the list right above the form you have filled out.

5. Click the ID of the custom job you have just created. You will see the details and a form to add tasks to the custom job.

Adding Tasks to Custom Jobs

A custom job consists of tasks. Task involves its own duration in hours and rate per working hour.

> To add a task to a custom job:

1. Click the ID of the custom job. The following form will appear:



Description: enter the essence of the task.

Rate: enter the fee for this task per hour.

Time: enter time in hours necessary to complete this task.

Note: optionally, enter note about this task.

- 2. Click Add Task. The task will appear above the form.
- 3. Optionally, add anote to this custom job in the Add a Note field.

Mind that tasks as well as custom jobs will appear in the user control panel. This way your customers can see what should be or has been done.

Tracking Custom Job Status

You can use controls to set the status of the custom job. This status will reflect on the user control panel. To set status, click the custom job ID on the Custom Jobs page and refer to the **Status field**:

Custom Job# 36	
Subject	test
Entered By	admin
Started	Jul 19, 2005 3:53:56 PM
Ended	-
Time	0.0
Amount	0.0
Description	test
Status	NEW 🗾 💽 🔀 🙍 🔟

 Click Finish if the job is completely done. It will show as FINISHED on the user panel.

Note: Upon clicking **Finish**, the corresponding billing entry will immediately appear in customer's online invoice and user will be charged total fee for the Custom Job. It will also show the time when the job was completed in the **ENDED** field on the Custom Job page.

- Click Start to mark the job as active. It will show as IN PROGRESS on the user panel.
- Click Cancel to mark the job as stopped. It will show as CANCELED on the user panel.
- Click Abort to mark the job as ABORTED. This won't delete the job from the list
- Click On Hold to mark the job as pending. It will show as ON HOLD on the user panel.

Custom job entries will be accessible by your customers in Support Center -> Custom Jobs.

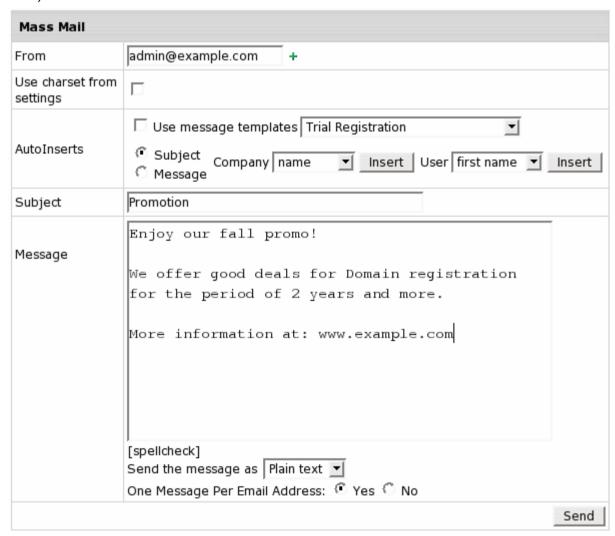
Mass Mail

Oftentimes, you will need to send emails to multiple users, e.g: newsletters. Mass mail feature allows to send one message to a number of users.

- > To send a newsletter to a group of customers:
- 1. Select accounts (on page 413) using the Search utility.
- 2. Click the Mass Mail link at the bottom of the search results page:



3. Compose the message or choose the system notification template (on page 122):



From: the e-mail address messages will be sent from.

Note: This email is automatically filled in from **Settings -> Tech Support ->** Default Email From (on page 522). You can change it if necessary.

- Use charset from settings: message encoding will be set based on the language selected by the customer.
- Use Message Templates: check this box to send system notifications (on page 122). In this case, any info you enter in the message body will be ignored.
- Autoinserts: Use this feature to convert your mass mails into personalized letters. When
 composing a mass mail, insert generic variables that will be replaced with individual
 recipient's name, e-mail address, etc.
- Subject: enter a subject of the message.
- Message: enter a message to be sent to all customers. Remember: if you use message templates, this message will be ignored.
- Spellcheck: allows checking your mail messages for spelling. To do it:
 - 1. Click the **spellcheck** link under the message field. Pop-up window shows with misspelled words, if any, being underlined:
 - 2. Point your mouse to a misspelled word and a number of suggestions shows.
 - 3. Choose correct variants and click Done.
- Send the message as: Select HTML to apply formatting to your message, e.g.:

<i>text in italic</i>

b>text in bold

ul>

unordered list (bullet)

unordered list (bullet)

One Message Per Email Address:

- **-Yes -** only one message will be sent to an address, regardless of how many accounts use it.
- -No the message is sent to every account's e-mail address even if it is the same for different accounts.
- **4.** Click **Send** to send the message.

Crash Report

Crash Report is an Parallels H-Sphere package that integrates crash report interface to administrator's Control Panel. It allows reporting your Parallels H-Sphere problems to Parallels H-Sphere support directly from your administrator control panel. Problem reports will include basic information about CP version, kernel, system Java and database, and major packages installed on the affected boxes to make fixing the problem easier.

Also, the package provides extended server information about Parallels H-Sphere *nix physical servers: Java/Tomcat/database versions, major packages installed on a server (Apache, Bind, mail, etc.).

Crash report is available only in admin CP.

In this section:

Installation	537
Update	538
Changing E-Mail Address Where Reports Are Sent	
Sending Crash Reports	
Extended Physical Server Information	

Installation

- > Log into your CP server as To log in as the cpanel user:
- **1.** Log in as root first:

\$ su -1

- 2. Log in as the cpanel user:
- # su -l cpanel
- Download (http://download.hsphere.parallels.com/downloads/index.html#crash_report) the latest Crash Report package.
- Install the package (See Developer Guide for the instructions).

Update

- > To update a crash report package to a newer version:
- 1. Log into your CP server as cpanel user
- 2. Uninstall the older Crash Report package installed on your CP:

```
java psoft.hsp.tools.PkgUnInstaller-pkg-name=CrashReport
```

- 3. Restart H-Sphere.
- 4. Download the latest Crash Report package.
- 5. Install the package.
- 6. Restart H-Sphere again after a new package version has been installed.

Changing E-Mail Address Where Reports Are Sent

All problem reports will be sent to PSoft support by default. You must be registered at our Support Page (http://www.swsoft.com/en/support/hsphere/form/) first.

If you need to change this e-mail address, set the CRASH_REPORT_MAIL property in ~cpanel/shiva/psoft config/hsphere.properties:

Log into your CP server as To log in as the cpanel user:

1. Log in as root first:

```
$ su -1
```

- 2. Log in as the cpanel user:
- # su -l cpanel
- Edit ~cpanel/shiva/psoft_config/hsphere.properties. Set the e-mail address for sending reports., e.g.:

```
CRASH REPORT MAIL=hs-crash@example.com
```

When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

 /usr/local/etc/rc.d/apachecp.sh stop killall -9 java sleep 10 /usr/local/etc/rc.d/apachecp.sh start to apply changes.

Sending Crash Reports

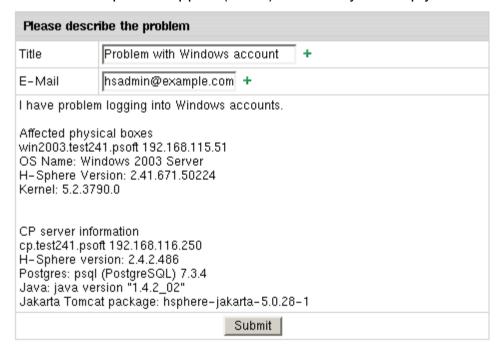
- > To create and send a crash report:
- 1. Pass to the Support Center menu and select Crash Report:



2. On the page that shows, describe the problem in the text area, select affected physical boxes and click **Preview**.

Please describe the problem		
Please describe the nature of the problem and how it can be repeated. Include as much information as you can, this will help to solve your problem faster		
I have problem logging into Windows user accounts		
Choose affected physical boxes		
Cp.test18.psoft 192.168.116.18 [255.255.255.0]		
win.test.psoft 192.168.112.55 [255.255.255.0]		
Preview		

3. On the page that shows you will see preview of your report the way Parallels H-Sphere support will see it. Enter the **Title** for the report and your **Email**. Parallels H-Sphere support (techs) will send you a reply to this e-mail.



4. Click Submit to send the report.

Crash reports will be sent to Parallels H-Sphere support by default or to the e-mail set in the ~cpanel/shiva/psoft_config/hsphere.properties file in the CRASH_REPORT_MAIL property (on page 537).

Extended Physical Server Information

After the Crash Report package is installed, you will be able to view additional information about *nix physical boxes in physical server info in administrator CP. For CP server, it will show the Java and Jakarta Tomcat versions, and the system PostgreSQL version. For other servers, it will give the versions of packages for major services (Apache, Bind, mail, etc.)

In the **E.Manager** -> **Servers** -> **P.Servers** menu, click the magnifying glass icon in front of a *nix physical server to view its server info. You will see the following information at the bottom of the page:

ion "1.4.2_02"		
tgreSQL) 7.3.4		
jakarta-5.0.28-1		
Packages		
hsphere-openssl-0.9.7c-1		
hsphere-frontpage-5.0-9		
hsphere-cpanel-javart-2.4-8		
hsphere-script-runner-1-10		
hsphere-modlogan-0.8.13-0		
hsphere-sudo-1.6.8p1-0		
hsphere-bind-8.4.5-1		

Virtual Private Server

Parallels H-Sphere VPS feature integrates virtual private server hosting into H-Sphere. Install H-Sphere VPS software on a separate physical box and add this box to your Parallels H-Sphere cluster. This software is then identified as a logical VPS server and run by a number of packages that may vary depending on your operating system (for full list of VPS packages, check the list of packages for your Parallels H-Sphere version).

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Providing VPS Hosting

This document describes final steps you need to perform in Parallels H-Sphere interface to provide VPS hosting. We presume that you have already installed Parallels H-Sphere VPS software to a separate box. Before your users will be able to signup to virtual server plans and receive virtual servers in their use, you need to perform the following steps.

In this section:

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Step 2. Add IP Range to Logical Server	
Step 3. Enable User Signup on Logical Server	
Step 4. Enable in Globals	
Step 4. Create VPS Plans	

Step 1. Add VPS Network Gateway

Use our sysadmin documentation to add VPS Network Gateway.

Step 2. Add IP Range to Logical Server

- > To add IP range to logical server:
- 1. Select L.Servers in the E.Manager -> Servers menu.
- 2. You will be taken to the list of all logical servers in the system. Choose the VPS server to edit.
- 3. Fill in data below Add IP range:



IPs' type must be set to **Virtual private server IP**. Each VPS leased to your users takes a free Virtual private server IP.

If all virtual private server IPs on this logical server are taken, no users will be able to signup under VPS plans.

Step 3. Enable User Signup on Logical Server

- 1. Go to E.Manager -> Servers -> L.Servers and choose a server.
- 2. Click the red button Off to make it On:



Step 4. Enable in Globals

Make sure Virtual private server is enabled in Globals (on page 132).

Step 4. Create VPS Plans

- Create VPS plan (on page 265).
- 2. Go to Plans -> Manage and turn Signup on for this plan.

Parallels H-Sphere VPS Templates

VPS template is a predefined set of RPMs to install/remove/upgrade a certain service, tool or application (e.g. BIND, Webalizer etc.). Basically, template is a structured file with the list of RPM packages, including their names, full version and platform architecture. Starting with Parallels H-Sphere 3.1 Beta 1, you can manage the VPS Application, VPS Extra and VPS Core templates via CP interface.

Parallels H-Sphere VPS Application Templates are OS independent RPMs that include:

- dns-server
- ftp-server
- mail-server
- mysql-server
- pgsql-server
- samba-server
- web-server

Parallels H-Sphere VPS Extra Templates are the custom set of RPMs that will be provided to your users depending on their OSs. On different OSs different Extra VPS templates can be installed.

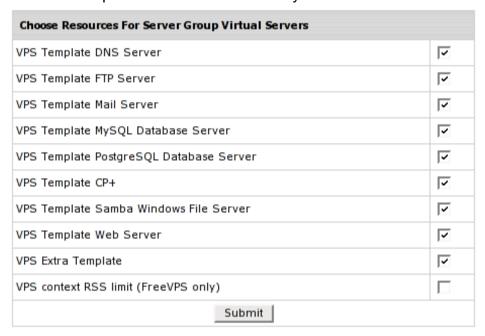
Parallels H-Sphere VPS Core Templates are the basic services, libraries, and tools of Parallels H-Sphere VPS. Starting with Parallels H-Sphere 3.1 Beta 2, your users can update Parallels H-Sphere VPS Core templates from their CP.

In this section:

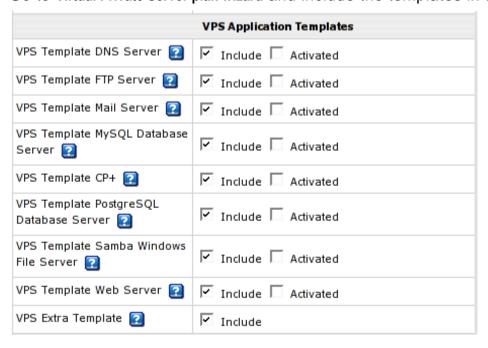
Adding H-Sphere VPS	l emplates5	4ر	5
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Adding H-Sphere VPS Templates

- **1.** Make sure you have already installed Parallels H-Sphere VPS software to a separate box.
- 2. Go to Server groups in E.Manager->Servers
- 3. Click on the Edit icon next to your VPS Server group
- **4.** Add the templates to be available for your users:



5. Go to **Virtual Private Server plan wizard** and include the templates in the plan:



Parallels Virtuozzo Containers

Parallels H-Sphere 3.3 introduced support for Parallels Virtuozzo Containers version 4.0 and higher (http://www.parallels.com/en/products/virtuozzo/). This chapter is dedicated to Parallels Virtuozzo Containers implementation in Parallels H-Sphere and will explain how to set up Parallels Virtuozzo Containers servers and plans.

In this chapter:

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Creating Virtuozzo Plan Groups	550
Signing Up Users for Virtuozzo Plans	

Setting Up Parallels Virtuozzo Containers Node Server

- ➤ To set up a Parallels Virtuozzo Containers node server dedicated for Parallels H-Sphere hosting:
- **1.** Prepare a Unix or Windows box that meets requirements for Parallels Virtuozzo Containers installation.
- 2. Install Parallels Virtuozzo Containers to the box according to the Parallels Virtuozzo Containers installation instructions (http://www.parallels.com/products/virtuozzo/docs/). Make sure Parallels Virtuozzo Containers version is at least 4.0.0.457 for Linux and 4.0.0.014 for Windows.
- Log into the Parallels Virtuozzo Containers control panel as root, go to Setup > Network and set the IP range for Virtuozzo container hosting management through Parallels H-Sphere.
- 4. Go to Setup > Container Samples to create and configure a Virtuozzo container sample with default settings for the creation of new containers for Parallels H-Sphere users. While configuring the sample, please pay a special attention to the following parameters:
 - General Settings > Offline Management. If the vpp and vpp-plesk boxes are checked, you will provide your users with the access to Virtuozzo Power Panel where they could perform configurations overriding the restrictions of their Virtuozzo plan. This may well be your business strategy, but in this case make sure you won't put the prices on the Virtuozzo plan resources that could be configured by users via their Power Panels.
 - Network. Make sure you have chosen the Routing Network mode. The bridged network mode is not possible for Virtuozzo hosting in Parallels H-Sphere.
 - Resources. For PVC for Linux, make sure you have selected SLM resource management from the Memory Management Mode drop-down box.
- Return to the Parallels H-Sphere administrator control panel and go to E.Manager > Add P.Server to add a physical server for Parallels Virtuozzo Containers hosting.
 - For Unix server, specify the root login and password.
 - For Windows server, specify the administrator's login and password.
 - In the OS Type field, specify Virtuozzo.
 - Add the Virtuozzo Server group to the server.
- **6.** Go to **E.Manager > Add L.Server** and create a Virtuozzo logical server for the physical server just created.

Important: Only one Virtuozzo logical server is available for a Virtuozzo physical server! You cannot add any other logical servers (like Web or Mail).

- Group: choose the Virtuozzo Server group.
- Server Type: choose Virtuozzo.
- Server: select the Virtuozzo physical server just added.

Now your Parallels Virtuozzo Containers server is installed into Parallels H-Sphere. You now need to create a new Virtuozzo plan to provide Virtuozzo hosting for users.

Note: Parallels H-Sphere Control Panel also provides the **Virtuozzo Migration** cron running hourly. You can view it in **E.Manager> Background Jobs**. If some Container was migrated manually to another Virtuozzo Hardware Node, the cron will reset appropriate host id for this Container in the Parallels H-Sphere system database.

Creating Virtuozzo Plans

- To create a new Virtuozzo plan for user hosting:
- 1. Go to Plans > Create.
- 2. Click the icon next to Virtuozzo Plan Wizard.
- **3.** On the first page of the Plan Wizard, configure common H-Sphere resources, and click **Next**.

A page prompting to create a Virtuozzo plan based on one of the available Virtuozzo Container samples is displayed. Resellers also see prices for each sample, in parentheses next to sample names.

- 4. Choose a sample from the drop-down list and click Next.
- **5.** Click **Next** to go to the price settings for the default billing period. Here, pay attention to the Virtuozzo-specific options:
 - Virtuozzo container CPU limit. Set up prices for CPU limit (in percents) allocated for each Virtuozzo container.
 - Virtuozzo container number of processes limit. (For Windows hosting only) Set up limits on the number of processes run by any Container.
 - Virtuozzo container memory limit. Set up prices for memory limit (in MBs) allocated for each Container.
 - Virtuozzo container IP address. Take prices for IPs dedicated to Virtuozzo containers' hosting.
 - Access to Virtuozzo Container Control Panels, Virtuozzo container repair, Virtuozzo container backup. Set up prices for the options explained above.
- 6. Click Next to complete the Plan Wizard.

The newly created plan appears in the list of plans. It is disabled for signup by default.

- 7. Click the red square icon in the **Signup Access** column for this plan to enable signup.
 - The icon turns to the green triangle.
- **8.** To sign up a new user for this plan, click the looking glass icon next to the plan's name.

Creating Virtuozzo Plan Groups

Virtuozzo plans can be grouped to provide Parallels H-Sphere users with a possibility to switch to other Virtuozzo hosting plans within a group.

- > To create a group of Virtuozzo hosting plans:
- 1. Go to Plans > Groups.
- 2. In the Available Plans column, check boxes next to Virtuozzo plans you wish to group. Type in the name of a new group and click Add Group.
- **3.** A new group will show up in the **Plan Groups** column. Now any user signed up to one of the plans in the group will be able to switch to another plan in this group.

Note: User requests to change Virtuozzo plans are processed by the VirtozzoApplTemplatesCron background job (on page 135).

Signing Up Users for Virtuozzo Plans

Parallels H-Sphere provides the special signup wizard for Parallels Virtuozzo Containers users.

- ➤ To sign up a new user for a Virtuozzo plan from the Parallels H-Sphere administrator control panel:
- 1. Go to Plans > Manage.
- 2. Click the lookup icon next to the Virtuozzo plan you wish to sign up a user to.
- 3. The Virtuozzo plan signup wizard will start. Click **Next** to pass to the first step.
- 4. Check Accept to accept the license agreement and click Next.
- 5. Fill out your user information form and click Next.
- 6. Choose your Parallels H-Sphere user login and password and click Next.
- 7. Set your Virtuozzo container name and root password to the container. Click **Next** to complete the signup. The Virtuozzo container will be automatically created on one of the IPs within the IP range set in Parallels Virtuozzo Containers control panel.

Parallels H-Sphere administrator is also provided with a special search form for Parallels Virtuozzo Containers users. The form is available from the **Search > Virtuozzo Users** menu.

Parallels Sitebuilder Integration

Parallels H-Sphere 3.3 and up introduces full integration with another Parallels product, Parallels Sitebuilder, a powerful and yet easy-to-use tool for creating and publishing user Web sites.

Parallels Sitebuilder bundled with Parallels H-Sphere is installed on the Control Panel physical server and is by default accessed at: http://IP:8080/, where *IP* is a separate IP bound to the Parallels H-Sphere Control Panel box specially for the Parallels Sitebuilder control panel.

Parallels Sitebuilder requires that the following PHP modules are enabled in Parallels H-Sphere:

- ionCube PHP accelerator (on page 70);
- SQLite PHP4/5 extension:
- DOM XML PHP4 extension.

In this chapter:

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Configuring Access to Parallels Sitebuilder Plans from Parallels H-Sphere Pla		
Migrating from Parallels SiteStudio to Parallels Sitebuilder	. 55	6

Setting Up Parallels Sitebuilder

In case of fresh Parallels H-Sphere 3.3+ installation, Parallels Sitebuilder is being added at one of the steps of Parallels H-Sphere Installation Wizard.

> To install Parallels Sitebuilder during the Parallels H-Sphere installation:

- **1.** On the list of physical servers, click the **pencil** icon next to the Control Panel physical server.
- 2. On the list of logical servers for the Control Panel physical server, click the pencil icon next to the Control Panel logical server.
- **3.** On the Logical Server page, set the following parameters under the Additional options section:
 - Sitebuilder IP/Mask: set the Parallels Sitebuilder IP and mask and click Set to apply. You must specify a separate IP for Parallels Sitebuilder bound to the Parallels H-Sphere Control Panel server.
 - Sitebuilder MySQL database location: choose MySQL database from the list and click Submit.
 - Sitebuilder MySQL database user: enter the Parallels Sitebuilder database user.
- **4.** Proceed with the Installation Wizard. At the end, Parallels Sitebuilder will be installed with Parallels H-Sphere.

Note: You must restart Parallels H-Sphere after the Installation Wizard. When restarting the Control Panel, make sure that you are logged in to the CP server as root.

For Linux:

```
/etc/rc.d/init.d/httpdcp stop
killall -9 java
sleep 10
/etc/rc.d/init.d/httpdcp start
```

For FreeBSD:

```
/usr/local/etc/rc.d/apachecp.sh stop
killall -9 java
sleep 10
/usr/local/etc/rc.d/apachecp.sh start
```

See the Parallels H-Sphere Installation Guide for details.

If you updated Parallels H-Sphere to 3.3+, you will need to set up Parallels Sitebuilder later on.

> To set up Parallels Sitebuilder after the Parallels H-Sphere update:

- 1. Go to E.Manager > Sitebuilder > Web/API connection. On the page that appears click the pencil icon to pass to the Parallels Sitebuilder configuration the Parallels H-Sphere Control Panel's logical server. Another way is to go to E.Manager > L.Servers and to click the Control Panel logical server to pass to its settings. Set the following parameters under the Additional options section:
 - Sitebuilder IP/Mask: set the Parallels Sitebuilder IP and mask and click Set to apply. You must specify a separate IP for Parallels Sitebuilder bound to the Parallels H-Sphere Control Panel server.
 - Sitebuilder MySQL database location: choose MySQL server from the list and click Submit.
- 2. Go to E.Manager > Update and run the update procedure on the Control Panel server.
- **3.** Restart Parallels H-Sphere. Now Parallels Sitebuilder is installed on the Parallels H-Sphere Control Panel server.
- ➤ After Parallels Sitebuilder is installed, configure Parallels Sitebuilder control panel login settings:
- 1. Go to E.Manager > Sitebuilder > Web/API connection and fill out the form that appears:
 - Protocol: choose http (default option) or https (administrator should configure secure connection in Parallels Sitebuilder according to its documentation) from the drop-down box.
 - Login: Parallels Sitebuilder administrator login (admin by default).
 - Password: Parallels Sitebuilder administrator password (admin by default, change it as soon you log into the Parallels Sitebuilder control panel).
 - Host name: Parallels Sitebuilder host name.
 - Port: 8080 by default.
- 2. Click **Submit** to apply changes.

Licensing Parallels Sitebuilder Accounts

By default, Parallels H-Sphere license purchased from the Parallels store also includes license for 3000 Parallels Sitebuilder sites. However, it is valid only in case of Parallels Sitebuilder built in Parallels H-Sphere.

To view the statistics on Parallels Sitebuilder accounts, hosts and sites in Parallels H-Sphere, and how many of them are covered by your license, go to **E.Manager** > **Sitebuilder** > **Site Admin Usage**.

Configuring Access to Parallels Sitebuilder Plans from Parallels H-Sphere Plans

- > To add Parallels Sitebuilder plans to be available from Parallels H-Sphere:
- 1. First, you should create plans in the Parallels Sitebuilder control panel. Log into Parallels Sitebuilder as admin (by default, the fresh Parallels Sitebuilder installation bundled with Parallels H-Sphere will have the user admin and password admin) and go to Users > Plans > Add New Plan. For details on creating plans in Parallels Sitebuilder please refer to Parallels Sitebuilder documentation at http://www.parallels.com/products/sitebuilder/docs/.
- 2. Return to Parallels H-Sphere administrator panel and go to E.Manager > Sitebuilder > Plans. Plans that have just been created in Parallels Sitebuilder will be listed under the Sitebuilder plans registered on the Sitebuilder side and not available for H-Sphere customers section.
- 3. Click the arrow up icon next to a respective plan to make it available in Parallels H-Sphere. It will immediately be shown in the Sitebuilder plans that can be used by H-Sphere customers section.
- 4. To make these plans available to users, go to the Plans menu and either create a new hosting plan or click an existing plan to edit its resources. Under the Other section find Sitebuilder and check Include to include the Parallels Sitebuilder resource. Click Next. You will be forwarded to the page where you can select the available Parallels Sitebuilder plans and set Setup and Monthly prices for each available Parallels Sitebuilder plan.

Important: Parallels Sitebuilder plans sell packs of sites, while Parallels H-Sphere charges for accounts, not sites. It means that users will actually buy a pack of **X** sites managed by Parallels Sitebuilder, where **X** is the maximum number of sites set up in the selected Parallels Sitebuilder plan. So, if a Parallels Sitebuilder plan covers 10 sites, and your Parallels H-Sphere user plan provides only 3 domains for a user, this user will still pay for the 10-site Parallels Sitebuilder resource. Therefore, Parallels H-Sphere administrator should configure Parallels Sitebuilder plans in accordance with Parallels H-Sphere plans.

5. After you saved the Parallels H-Sphere hosting plan settings, users signed to these plans will be able to access the Parallels Sitebuilder resource. Users should go to Domain Settings > Web Options on their control panels and check the Sitebuilder Site resource to enable Parallels Sitebuilder for a domain. For details, please refer to Parallels H-Sphere User Guide.

Migrating from Parallels SiteStudio to Parallels Sitebuilder

Users signed up to plans with Parallels Sitebuilder enabled are recommended to migrate their sites published by Parallels SiteStudio to Parallels Sitebuilder. Parallels H-Sphere administrator provides a trial period when a user could test Parallels Sitebuilder functionality. At the end of the trial period the user who wishes to go on with Parallels Sitebuilder will be charged according to the selected Parallels Sitebuilder plan.

> To configure the trial period duration:

- 1. Go to E.Manager > Sitebuilder > Site Studio Migration.
- 2. Set the trial period parameters:
 - Trial period warning: days of the trial period when the notification of its end will be sent to a user.
 - Trial period end: days after the notification when a user will be charged for the Parallels Sitebuilder resource.
- 3. Click Submit.
- **4.** The migration itself will become available for Parallels H-Sphere users from their control panels. For details, please refer to the Parallels Sitebuilder section of the *Parallels H-Sphere User Guide*.

Third Party Products

This chapter considers third party products integrated in Parallels H-Sphere.

In this chapter:

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Adding Miva Merchant Licenses	
Affiliate Programs	
Kanoodle™ Support	
AWStats Support	
SpamAssassin Configuration Manager	
MS Exchange Hosting	

Urchin

Urchin Web Analytics software (http://www.urchin.com/products/index.html) provides detailed metrics about a website's visitor activity. It is is a 100% browser-based administrator system allowing to easily manage user access levels, groups, and affiliations. Urchin produces usage reports in HTML format for viewing with a standard web browser, reporting for up to 100 sites included in base license. It reports in 10 languages with all reports generated on-the-fly and exportable to Excel or other formats.

Urchin will help your customers:

- * *Track* overall site traffic, including unique visitors, referrals, domains, and search engines
- * Analyze and improve the quality and loyalty of web site's traffic
- * *Make more money* by maximizing the effectiveness of the search engine optimization and cost-per-click advertising

Urchin software analyzes website log files and delivers fast, interactive reports and graphics on every aspect of website's traffic and visitors.

Urchin is easy to install and allows viewing reports in seven languages, with clear explanations of what shows in each report.

Urchin is an essential tool for web designers, marketing professionals, webmasters, and anyone interested in the success of their web business. Urchin is modular, so one can buy the licenses that best fit their needs.

Urchin Base Module - Start tracking up to 100 sites today for only \$895! The Urchin Base Module reports unique visitors and sessions, requested pages, downloads, page errors, length of sessions and pageviews, referrals, entrance and exit pages, click paths, bounce rates, browser and platform details, robot activity, and much more.

Urchin Campaign Tracking Module - Find out which search words, search engines, marketing initiatives, and ad content create conversions, so you can target your marketing dollars. Identify click fraud, conduct A/B tests, and get complete ROI reporting. Get leads that turn into customers, and start making more money today.

Urchin E-Commerce Module - View advanced shopping cart analysis on your e-commerce site. See revenue by referrals, search terms, and domains. Locate your buyers - by country, by state, and by city. The Urchin E-commerce Module integrates with all the major shopping carts.

Urchin Load Balancing Module - Urchin is used on the largest and most heavily trafficked web sites in the world. Track any size site over any number of servers, just by adding Load Balancing Modules.

Urchin 100 Profile Pack - Track even more sites, just by adding Profile Packs.

Miva Kit (intro)

Miva kit is Miva Merchant (http://www.miva.com/products/merchant) and Miva Empresa (http://www.miva.com/products/empresa).

Miva Merchant is an e-commerce solution that gives access to the tools you need to develop, maintain, and grow a thriving online store.

Miva is a trusted e-commerce solution provider, enabling tens of thousands of online businesses across the internet. Miva kit is based on a solid foundation of proven proprietary technology, supported by an established network of e-commerce hosts, solution developers, and store designers.

Miva Merchant requires Miva Empresa for web server XML scripting, e-commerce and database capabilities. Like all third party commercial products, Miva Empresa and Miva Merchant are purchased and installed separately from Parallels H-Sphere.

How Does It Work?

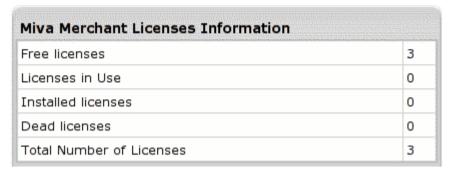
- 1. A user logs into the control panel and activates the Miva resource.
- 2. Parallels H-Sphere finds an available license in the database and allocates it to this user.
- **3.** The cgi-bin and mivadata directories are created inside the user's site directory, if only they haven't been created earlier.
- **4.** miva.cgi is copied into the cgi-bin directory.
- **5.** miva.cgi is registered in the config file, in which the mivaroot and mivadata variables are defined. mivaroot is configured to be the same as DocumentRoot for Miva-enabled site. mivadata is defined as the mivadata directory outside this user's site.
- **6.** Permissions to these directories along with their content are changed.
- 7. Now the user can activate Miva Merchant. Miva Merchant is created using a web-based form containing the fields required by Miva Merchant, though a user can activate the original Miva Merchant installer by entering his site URL followed by /cgi-bin/mivavm?/Merchant2/setup.mvc or his site URL followed by /Merchant2/setup.mvc.

Adding Miva Merchant Licenses

If you have Miva Merchant installed, do the following steps to add Miva licenses:

- 1. Enter your administrator control panel.
- 2. Select Miva Merchant Licenses from the E. Manager -> 3rd party Tools menu.
- **3.** Enter the numbers of purchased licenses, separating them by hard returns, in the **Add new licenses here** section.
- 4. Click Submit Query.

The statistics and status of Miva licenses show in the **Miva Merchant Licenses Information** section:



- Free licenses are the licenses available to users.
- Licenses in Use are the licenses reserved by user accounts but not yet used by any domains.
- Installed licenses are the licenses reserved by an account and used by a domain with Miva Merchant setup.
- Dead licenses are the licenses already used up. Such licenses can't be re-used.
- 'Total number of licenses' include all the above licenses.

Note: Miva licenses are not transferrable between domains: a license once used for a domain can't be used by another domain. If Miva is turned off for the domain, the license acquires 'dead' status. But once Miva is turned on again for this domain, the system will activate the dead license.

You can edit Miva license number if you entered it incorrectly:

- 1. Click the Change icon next to the license number.
- 2. Enter a new number in the field.
- 3. Click Submit Query.

To remove Miva license from the control panel, click the **Delete** icon.

Affiliate Programs

You can add up to five external affiliate program (referral program) scripts. Parallels H-Sphere passes signup info (e.g. account number, amount, etc.) to an affiliate program script so the latter can track signups and produce relevant reports.

Affiliate commission is based on *completed signups* (physically created user accounts), not visits or clicks.

Also Parallels H-Sphere supports *moderated signups* which include:

- moderated credit card payments
- all check payments and bank transfers
- payments with web processors (e.g. PayPal, WorldPay, 2CheckOut, and GestPay)

Trial signups: On the other hand, a non-moderated trial registration is treated as a sales transaction, and the affiliate is given credit for it.

In this section:

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How Do Affiliate Programs Work?

Affiliate programs involve four types of players:

- Affiliate Program Company/Server;
- Affiliate Site potential customers are referred from;
- Your Parallels H-Sphere Server;
- Potential Parallels H-Sphere Customer.

This process is as follows:

- 1. You place a referral link (text or banner) on an Affiliate Site.
- 2. The Potential Customer visits the affiliate site and clicks this link. It sends a request to Affiliate Program Server with an assortment of variables that define the affiliate transaction (such as the unique ID of the exchange participant).
- 3. Affiliate Program Server sets cookies in Potential Customer's browser about which Affiliate Site, text link, banner advertisement, or product link was used in the exchange. This cookie will identify the open transaction.
- **4.** Next, a new record is opened in the database of referrals on the Affiliate Program Server. The opened record consists of two parts—the first one is filled with customer-related data, the second one remains empty.
- **5.** Then Potential Customer is redirected to your signup page.
- 6. Once the signup is complete, Parallels H-Sphere sends a request to each of the Affiliate Servers (if you have more than one). Only one of them (depending on cookie) will start the affiliate program; the other servers will ignore the request. For each Affiliate Program, this request would have to pass different parameters, which has to be configured in Parallels H-Sphere interface. At the same time, Affiliate Program Server reads cookies from the customer's browser.
- **7.** The affiliate program finds the related database record using the cookie information and fills it with the received signup data. Then, it opens a new sale transaction.

How Do I Set Up an Affiliate Program?

Different affiliate programs work differently. Please read documentation for the affiliate program you have chosen.

1. Install and configure affiliate software on your server according to the included instructions. This software will track referrals from affiliate websites that promote your hosting services.

- 2. Read the instructions on how to make the signup confirmation link for the affiliate program you have chosen. The link must contain variables required for the affiliate program to authenticate a sales transaction.
- **3.** Go to your Admin control panel and select **Affiliate Program** in the **Settings** menu.
- **4.** On the page that appears, make up the signup confirmation link as required by the instruction:



Sales Refferal URLs amount \blacksquare http://example.kkk.tst?amount=\${amount}&acc_id=\${account_id}&us Insert amount \blacksquare http://example.kkk.tst?a=1111111&acc_id=\${account_id}&user=\${usi Insert 2 amount \blacksquare Link 3 Insert amount \blacksquare Insert amount \blacksquare Insert Submit

Lead Refferal URLs are launched during signup whether the user is moved to moderation section or not.

Sales refferal URLs are launched when newly created user logs into his CP for the first time, via the same browser when redirected by banner to the signup page.

Use the drop-down box and the **Insert** button to add required parameters to the URL.

Here's another example of an URL:

```
/cgi-
bin/affiliates/sale.cgi?cashflow=${amount}&goods=${user_name}
```

- Click the Submit button. Now Parallels H-Sphere will execute this URL after each customer signup for the affiliate software to track the signups.
- **6.** Have the referral link placed on affiliate sites to refer Internet users to your signup page.
- **7.** Now your affiliate program is ready for use.

Kanoodle™ Support

Parallels H-Sphere provides an interface to sign up as a Kanoodle.com Referral Partner. An account with Kanoodle.com will enable your company to issue FREE \$5.00 Kanoodle.com Pay-Per-Click advertising accounts to your hosting clients. It's free money your clients can use to promote their websites on Kanoodle's search engine network simply for hosting their websites with you!

Kanoodle.com is one of the world's largest search engines feeding search results to Infospace, HotBar, MetaCrawler, WebCrawler, CNET Search, IxQuick, Galaxy and over 9,700 other search enabled websites. Kanoodle powers more than 750 Million searches per month through their network. Giving your clients maximum visibility for their websites, and a much greater return on their advertising investment.

The FREE \$5.00 incentive from Kanoodle.com can be promoted as an instant signup bonus, or a value-added addition to your services. Kanoodle's Referral Partner program is an excellent way to help your clients drive 100% targeted traffic to their websites and increase their sales. As they drive more traffic to their sites with Kanoodle, they may need additional services and extra bandwidth. Resulting in more dollars in your company's pocket!

The Kanoodle signup process is completely seamless and automatic. All a client has to do is fill out a short form in their Control Panel and hit 'Submit'. They will instantly receive their free \$5.00 account information from Kanoodle via email. The best part is that the client never leaves their Control Panel during the signup process with Kanoodle. No new windows will open redirecting them to another domain. Just a simple thank you message in the Control Panel telling them to check their email for additional details.

By signing up today your company will be paid a 20% commission on all initial deposits made by your referrals to Kanoodle.com. This can become a substantial revenue stream for your company and is an excellent additional revenue source that you may not have had otherwise. Pay-Per-Click Search is the fastest growing and most effective segment of on-line advertising. Enable your clients to do more, get more, and receive a greater value from their hosting account by setting up your Kanoodle.com Referral Partner account today!

- > To sign up as a Kanoodle.com Referral Partner from Parallels H-Sphere:
- 1. Select Kanoodle from the E. Manager -> 3rd Party Tools menu
- 2. At the bottom of the page that appears, click Create a new trial Advertiser account with Kanoodle
- 3. Enter your details and click Submit.
- **4.** Once your account is created, you will receive a confirmation email from Kanoodle.com

AWStats Support

Parallels H-Sphere supports AWStats (http://awstats.sourceforge.net/), a free tool that generates advanced graphical web server statistics reports. AWStats is set up on each Unix/Linux and Windows web server with Parallels H-Sphere installation or upgrade.

Parallels H-Sphere supports AWStats in http traffic and doesn't work with FTP and Mail traffic stats.

In this section:

Setup	566
Configuration on Unix/Linux	
Configuration on Windows	

Setup

- To enable AWStats in a plan:
- 1. Launch Plan Editor
- 2. Check Include to make AWStats available to users
- 3. Check Activated to have new accounts created with AWStats enabled.

Configuration on Unix/Linux

AWStats has config files for each user domain:

/hsphere/local/home/{user}/{domain.name}/cgibin/awstats.{domain.name}.conf

Also, symlinks to them are created in /hsphere/shared/awstats/wwwroot/cgibin/.

Configuration on Windows

AWStats collects Web statistics with reports generated every 24 hours.

When a user (for example, *usertest*) turns on AWStats for a domain (e.g., mydomain.com), Parallels H-Sphere creates:

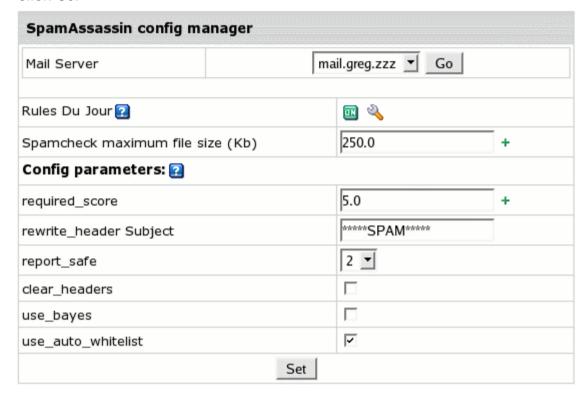
- 1. the AWStats virtual directory in the domain root folder pointing to \HSphere\skeleton\AWStats.
- 2. the AWStats\awstats.log file in the user's log directory (\hshome\usertest\logs\mydomain.com\AWStats\awstats.log) where domain logs for AWStats are collected.
- the AWStats configuration file for a domain (awstats.mydomain.com.conf) in the \HSphere\skeleton\AWStats directory.

The awstats.log file is automatically rotated by AWStats (AWStats removes processed rows from this file). The \HSphere\bin\stats.exe utility updates AWStats statistics daily at 00:01 AM.

The AWStats domain page is password-protected and can be viewed only by the domain owner (password protection is off if Serv-U is used).

SpamAssassin Configuration Manager

- > To configure SpamAssassin from your administrator control panel:
- 1. Select SpamAssassin Manager in the E. Manager -> 3rd Party Tools menu.
- 2. On the page that shows select mail server from the drop-down box and click **Go**.



- 3. Configure parameters for the chosen mail server:
 - Turn Rules Du Jour on and check custom SpamAssassin rule sets (on page 567) whose newer versions you'd like to be automatically downloaded and updated:

Rules Du Jour configuration	
	✓ ANTIDRUG
Custom trusted rule sets 2	☑ BLACKLIST (!)
(Enabling custom trusted rule sets, especially those marked as "!",	☐ BLACKLIST_URI (!)
substantially increases server load.)	□ BOGUSVIRUS
Find out about all the rules.	☐ RANDOMVAL
	SARE_ADULT
	SARE_BAYES_POISON_NXM
	SARE_BML
	SARE_BML_PRE25X
	SARE_EVILNUMBERS0
	SARE_EVILNUMBERS1
	SARE_EVILNUMBERS2
	SARE_FRAUD
	SARE_FRAUD_PRE25X
	SARE_GENLSUBJ
	SARE_GENLSUBJ0
	SARE_GENLSUBJ1
	SARE_GENLSUBJ2
	SARE_GENLSUBJ3
	SARE_GENLSUBJ_ENG
	SARE_HEADER
	SARE_HEADER0
	SARE_HEADER1
	SARE_HEADER2
	SARE_HEADER3
	SARE_HEADER_ENG
	SARE_HIGHRISK
	SARE_HTML
	SARE_HTML0
	SARE_HTML1
	SARE_HTML2
	SARE_HTML3
	SARE_HTML4
	SARE_HTML_ENG
	CARE OREIL

Custom SpamAssassin Rule Sets

- ANTIDRUG intended to detect common "pill spam" however, it is not appropriate for all environments. It may not be appropriate for a medical or pharmaceutical environment.
- BLACKLIST a blacklist of spammers.
- BLACKLIST_URI looks for these domains inside URL's in the message.
- BOGUSVIRUS lists bogus virus warnings and similar.
- RANDOMVAL list of tags spammers sometimes forget to convert in spam.
- SARE_ADULT designed to catch spam with "Adult" material.
- SARE_BAYES_POISON_NXM using lists of words with equal length.
- SARE_BML designed to catch "business, marketing and educational" spam.
- SARE_CODING contain HTML coding rules that detect various spammer tricks applied through HTML coding within messages.
- SARE_FRAUD designed to catch "Nigerian 419", "International Lotto", etc. type scams.
- SARE_HEADER contain Header rules that are not found in other SARE rule sets.
- SARE_OEM tries to detect people selling OEM software to consumers.
- SARE_RANDOM tries to detect common mis-fires on bulk mail software. Many signs are found like: %RND_NUMBER, etc.
- SARE_SPECIFIC rule set which flags specific spam and/or spam from specific spammers.
- SARE_SPOOF tries to detect common spoofing attempts by spammers. Many
 use a Message-ID of one provider but the message was never passed
 through the suggested system.
- TRIPWIRE searches for 3 characters that shouldn't be together. This is based on the English language.
- RANDOMVAL lists tags spammers sometimes forget to convert in spam.
- SARE_EVILNUMBERS lists addresses and phone numbers harvested from spam.
- SARE_GENLSUBJ contains Subject header rules that are not found in other SARE rulesets.
- SARE_HIGHRISK is developed because there are spam signs which readily detect spam, and which in our testing do not flag significant ham, but theoretically there is no reason for such rules not to flag ham. We therefore consider these to be "high risk" rules, useful for many systems at this time, but not suitable for systems that must be very conservative and cautious in their spam detection.
- SARE_HTML contains HTML coding rules that detect various spammer tricks applied through HTML coding within messages.
- SARE_OBFU looks for obfuscation within emails. It looks for the various tricks spammers use to hide their message from spam filters, while keeping their messages readable to humans. It treats these as spamsign.

- SARE_SPAMCOP_TOP200 contains top 200 spam relays condensed into as few rules as possible.
- SARE_STOCKS contains set of rules for stock spams.
- SARE_UNSUB looks for common unsubscribe phrases and codes in spam.
- SARE_URI contains files look for spamsign in URI links within emails. It is not intended to replace SURBL or BigEvil, but instead will use characteritics that these domain-based tests cannot track.
- ZMI GERMAN contains German ruleset.

Spamcheck maximum file size (Kb)

Set the maximum file size of messages to be checked on spam. For instance, when you set 10Kb, the files that are smaller than 10Kb will be subject to spam check. If the file size exceeds 10Kb, the message will not be checked.

required score

Set the score required before a mail is considered spam. *n.nn* can be an integer or a real number. *5.0* is the default setting, and is quite aggressive; it would be suitable for a single-user setup, but if you're an ISP installing SpamAssassin, you should probably set the default to be more conservative, like 8.0 or 10.0. It is not recommended to automatically delete or discard messages marked as spam, as your users will complain, but if you choose to do so, only delete messages with an exceptionally high score such as 15.0 or higher. End users can choose their own spam check level to override the default one set. The larger the number of hist, the less aggresive spam check level: very_aggressive=2(hits),aggessive=4,normal=7,relaxed=10,permissive=14

rewrite header Subject

Text added to the "Subject:" line of mails that are considered spam. Note that you should only use the *REQD* and *SCORE* tags when rewriting the Subject header unless "report_safe" is 0. Otherwise, you may not be able to remove the SpamAssassin markup via the normal methods.

report safe

If this option is set to 1, an incoming message is tagged as spam, instead of modifying the original message, SpamAssassin will create a new report message and attach the original message as a message/rfc822 MIME part (ensuring the original message is completely preserved, not easily opened, and easier to recover). If this option is set to 2, then original messages will be attached with a content type of text/plain instead of message/rfc822. This setting may be required for safety reasons on certain broken mail clients that automatically load attachments without any action by the user. This setting may also make it somewhat more difficult to extract orview the original message. If this option is set to 0, incoming spam is only modified by adding some "X-Spam-headers and no changes will be made to the body. In addition, a header named X-Spam-Report will be added to spam.

clear headers

Clear the list of headers to be added to messages. You may use this before any add_header options to prevent the default headers from being added to the message. Note that X-Spam-Checker-Version is not removable because the version information is needed by mail administrators and developers to debug problems. Without at least one header, it might not even be possible to determine that SpamAssassin is running.

use_bayes

Whether to use the naive-Bayesian-style classifier built into SpamAssassin. This is a master on/off switch for all Bayes-related operations.

use auto whitelist

Whether to use auto-whitelists. Auto-whitelists track the long-term average score for each sender and then shift the score of new messages toward that long-term average. This can increase or decrease the score for messages, depending on the long-term behavior of the particular correspondent. For more information about the auto-whitelist system, please look at the the *Automatic Whitelist System* section of the README file. The auto-whitelist is not intended as a general- purpose replacement for static whitelist entries added to your config files. Note that certain tests are ignored when determining the final message score: - rules with tflags set to *noautolearn*

4. Click Set.

MS Exchange Hosting

According to Microsoft.com (http://www.microsoft.com/exchange/default.mspx), "Exchange Server, the Microsoft messaging and collaboration server, is software that runs on servers that enables you to send and receive electronic mail and other forms of interactive communication through computer networks. Designed to interoperate with a software client application such as Microsoft Outlook, Exchange Server also interoperates with Outlook Express and other e-mail client applications."

Parallels H-Sphere integrates MS Exchange Server hosting. At the administrator level, a special MS Exchange plan is provided. Users signed up for this plan are enabled to manage MS Exchange mailboxes, SMTP domains and distribution lists.

In this section:

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Enable MS Exchange Hosting in H-Sphere Global Resources	
Configure Microsoft Provisioning Framework	
Configure MS Exchange Plan	

Prepare Servers for MS Exchange Hosting

Before configuring MS Exchange in CP, you must prepare Windows boxes for MS Exchange hosting (See System Administrator Guide).

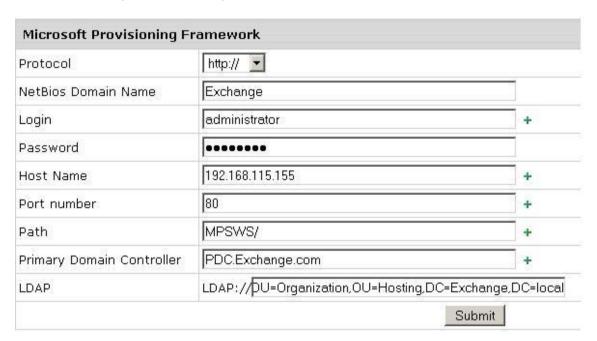
Enable MS Exchange Hosting in H-Sphere Global Resources

MS Exchange hosting is globally disabled by default. Enable it in **Plans** -> **Globals**, under the **Hosting Platforms** section:



Configure Microsoft Provisioning Framework

Go to MS Exchange in the E.Manager menu:



Here:

- Netbios Domain name. Enter Active Directory domain's NetBIOS name.
- Login and Password. Enter credentials for Domain Administrators Group member.
- Host Name. Enter MPF server name or IP.
- Port number. Enter port you are using to access the MPF server (by default, port '80').
- Path. Enter virtual directory name, by default it is MPSWS/
- Primary Domain Controller: domain name of the primary domain controller server
- LDAP: standard LDAP path to the reseller organization unit (reseller unit in terms of H-Sphere users will sign up for MS Exchange hosting plan). Here, OU stands for "Organization Unit", DC=domain_name_part1,DC=domain_name_part2, (Go to Preparing Servers for MS Exchange Hosting > Creating Reseller Organization Unit in System Administrator Guide for details.)

Configure MS Exchange Plan

- 1. Go to Create in the Plans menu and create a plan under Hosted Exchange Plan Wizard.
- 2. In Plans -> Manage, turn Signup Access ON for the newly created MS Exchange plan. After this, users can sign up for this plan and manage MS Exchange hosting in Parallels H-Sphere under their user CP accounts.