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HostingDirector IAE Server User Guide



Contents

Chapter 1. Introduction	1	Partition Details Tab.	33
Navigating the Main Window	1	Partition Edit Tab	34
Toolbar	2	IP Management	34
Accessing the HostingDirector IAE Tree	3	IP Ranges	34
Server Level	3	Shared IPs	37
Reseller Level	4	Reserved IPs	40
VDS Level	4	NICs Tab	41
Logging In	4	Users	41
Server Level	5	Users Tab	41
Reseller Level	7	Add New User Tab.	42
VDS Owner Level	7	User Details Tab	43
Logging out	9	Edit User Details Tab	44
Installing SSL Certificate	9	Groups	46
Control Panel	10	Groups Tab	46
		Group Details Tab.	47
		Add Group Details Tab	47
		Log Tab	47
		Process Management Tab	48
		Time Settings	49
		Date and Time Tab	50
		Time Zone Tab.	50
		Restart/Shutdown Tab	51
		Auto Update Tab	51
Chapter 2. The Server Node	11		
Viewing Server Details	11		
Adding and Modifying data in the VDS GUI.	13		
Adding and Modifying Hosting Provider Contact			
Information.	13		
Adding personalized messages to the VDS GUI.	14		
Modifying the Help Files	15		
Usage Statistics	15		
Generating Reports.	16		
Chapter 3. The DNS Node	17		
Adding DNS Records	17		
Modifying DNS Records	18		
Type A	19		
Type NS.	20		
Type Cname	20		
Type MX	20		
Viewing Details	21		
Chapter 4. The Resellers Node	23		
Adding a Reseller	23		
Editing Reseller Properties.	26		
Using the Bandwidth Tab.	27		
Deleting a Reseller.	27		
Chapter 5. The Server Management Node	29		
Resources	29		
General Tab	29		
CPU Usage Tab.	30		
Accounts Tab.	31		
Storage Tab	32		
		Chapter 6. Shared ValueApps.	55
		Chapter 7. The VDSs	57
		The Virtual Dedicated Server.	57
		Types of VDSs	57
		Adding a New VDS	58
		VDS GUI Login.	64
		Changing the IP Address of a Name-based VDS	65
		Scaling a Name-based VDS.	65
		Editing VDS Parameters	67
		The Watchdog Option	68
		Anonymous FTP.	69
		Deleting a VDS	70
		Adding Email and FTP Accounts.	71
		Configuring The Email Account On The Client	72
		Adding a VDS on NFS.	78
		Aliases	80
		ValueApps.	81
		Glossary	85
		Index	89

Chapter 1. Introduction

HostingDirector IAE is a robust management platform providing end-to-end global service automation to meet the burgeoning operational demands of ISPs (Internet Service Provider), ASPs (Application Service Provider), enterprises, and ICSPs (Internal Corporate Service Provider).

HostingDirector IAE overcomes the challenges faced by hosting providers in today's dynamic marketplace. This revolutionary software solution enables providers to realize significant revenue growth resulting from a simplified process of accessing the Internet, accompanied by a reduction in administrative costs.

The features of this Web-hosting platform include:

- **Virtual Dedicated Server (VDS) Technology:** Enables you to create up to 200 virtual servers on a single server, each of which serves a single account or Web site and has a proprietary IP address. HostingDirector IAE enables you to create up to 1000 VDSs on a single server, providing that these VDSs are name-based (name-based VDSs share their IP address with other VDSs). Note, that both types of VDSs can be stored on the same machine. Each VDS allocates a specific amount of space, files, processes and accounts for its services (HTTP, FTP, POP, SMTP). All VDSs can be controlled through one Control panel, facilitating contact to any individual VDS (A VDS owner is also referred to as site owner).
- **Provisioning and Self Provisioning:** Providers can establish software for immediate deployment; the software is then self-provisioned and managed by customers.
- **Pre-tested Open ValueApp Technology:** Point-and-click interface enables you to browse available ValueApps, and install and manage them using a single control panel.
- **Reporting:** Multi-level reporting facility enables precise, accurate allocation of files and disk space quotas for each VDS, and extensive monitoring capabilities.
- **Security:** Layers of internal and external security protect the virtual servers, making the system highly resistant to operational failures and hacker intrusions. The VDS technology provides requisite firewall functionality for each account.

This User guide is intended for a server administrator. Use this guide together with the *HostingDirector Site Owner User Guide*.

Navigating the Main Window

The main window of HostingDirector IAE is comprised of three main sections; the HostingDirector IAE tree, the Details pane and the Toolbar, as displayed in Figure 1 on page 2:

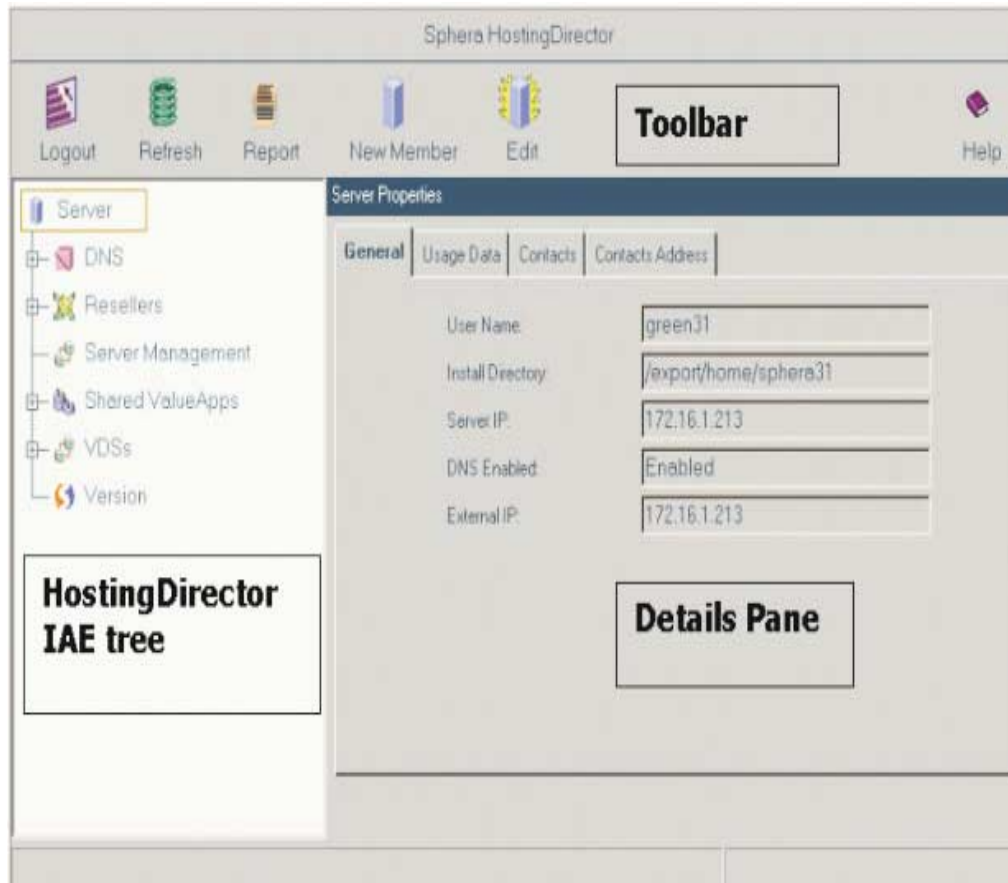


Figure 1. HostingDirector main window

When you select a component in the tree structure, the Details pane displays relevant information for that component.

The HostingDirector IAE tree displays a hierarchical view of the HostingDirector IAE components. You can expand and collapse a branch in the tree by clicking the + or - button respectively. After you select a branch, you can modify its parameters, add a lower level branch, or delete the branch entirely. HostingDirector IAE enables you to build your server hierarchy, and tailor it to your needs.

Each time you select an element in the tree, the Details pane changes to reflect information about the branch. In the Details pane, you define parameters for the selected branch. You can navigate forward and back through the Details pane by clicking the **Next** and **Back** buttons. After you have defined all parameters, click **Finish**.

Toolbar

Buttons in the toolbar change dynamically according to the branch selected in the tree.

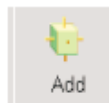
Note: Do not use the **Forward** and **Backward** buttons of your Web browser's toolbar; you might log out



Exit HostingDirector IAE.



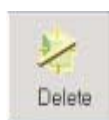
Update information that is displayed.



Add a feature or component.



Modify the parameters of an existing feature.



Remove a feature.

Accessing the HostingDirector IAE Tree

HostingDirector IAE components are displayed in hierarchical form in the HostingDirector IAE tree. You can access the HostingDirector IAE tree at the following levels:

- HostingDirector IAE Server
- Reseller
- VDS

This hierarchy enables you to manage a specific HostingDirector IAE component.

Server Level

The Server level is the highest level in the tree; the following nodes are displayed:

- **Server:** The server enables sharing of resources between multiple users within the same appliance hardware.
- **DNS:** A Domain Name Server is an on-line distributed database system used to map human-readable machine names to IP addresses. The DNS serves as a gateway between the server and the outside world, resolving the domain name and identifying the file directories.
- **Resellers:** A reseller is a special user that owns one or more VDSs, can create new ones, and resells hosting services to customers.
- **Server Management:** Manage resources, IP addresses, users and groups, log files, processes, time settings, restart and shutdown, and auto-updates with the user friendly HTML-based GUI.

- **Shared ValueApps:** Shared ValueApps are software components that are installed once on the machine. They provide additional functionality to the VDSs on a HostingDirector IAE server.
- **VDSs:** A virtual dedicated server (VDS) provides the functionality of a dedicated server in a shared, hosting environment. By adding a VDS, you create a new account or Web site.
- **Version:** Information relating to the active version of HostingDirector IAE.

Figure 2 shows the server level in expanded form.

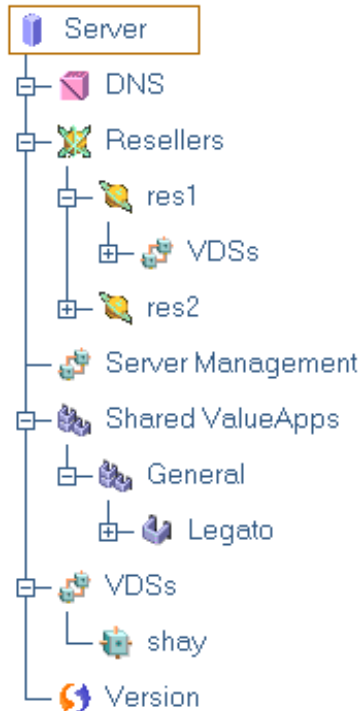


Figure 2. HostingDirector IAE tree

Reseller Level

A reseller buys wholesale hosting services. The reseller then resells the services to individual users.

VDS Level

A VDS owner can be enabled to manage a Web site on a specific server.

Logging In

Note: There are three login levels in HostingDirector IAE.

Sphera HostingDirector IAE requires an identifying user name and password to successfully log in to its system. Depending on your position, you can log in at one of the following levels, also known as roots:

- Server level
- Reseller level

- VDS Owner level

Server Level

A server login enables you to do the following tasks:

- Manage resellers on the server. See Chapter 4, “The Resellers Node” on page 23 for more details.
- Manage server parameters. See Chapter 5, “The Server Management Node” on page 29 for more details.
- Manage VDSs on the server. See Chapter 7, “The VDSs” on page 57 for more details.

To login at the Server level do, the following:

1. Open your browser and type the IP address of the server in the Address field.

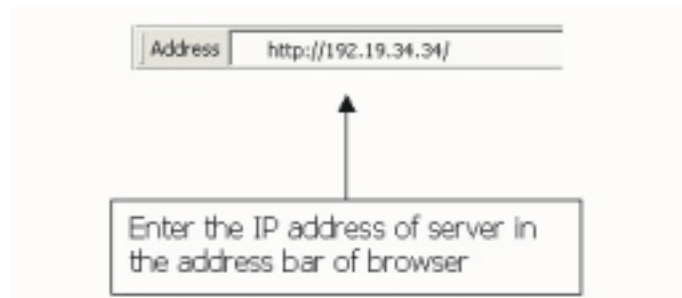


Figure 3. Address field

2. If the SSL certificate is not installed in your computer, the Security Alert window opens (see Figure 4). Click **Yes** to continue.

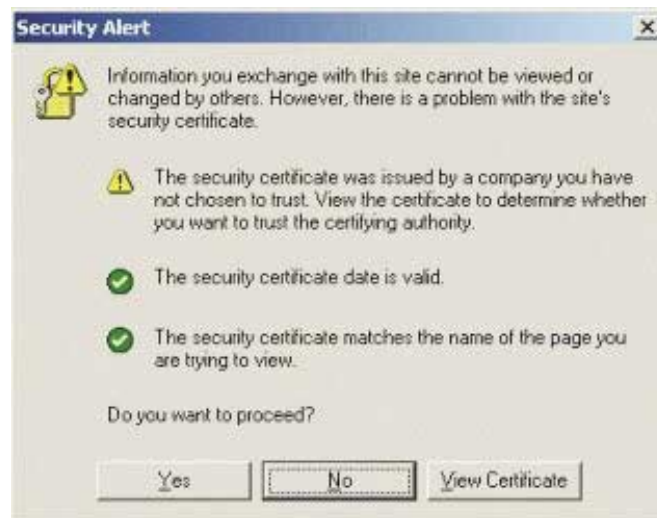


Figure 4. Security Alert window

3. Accept the license statement to proceed to the Control panel. Click the Accept radio button and click **Continue**.



Figure 5. License statement

4. You will be prompted to the login screen. Type the password and user name and choose a preferred language for the session (The help files are in English).

The login screen gives you the option to install an SSL certificate for this GUI (see "Installing SSL Certificate" on page 9).



Figure 6. HostingDirector login screen

5. Click **OK** to confirm the data you entered.
6. The tree structure in the left pane displays the HostingDirector IAE nodes tree (see Figure 7 on page 7).

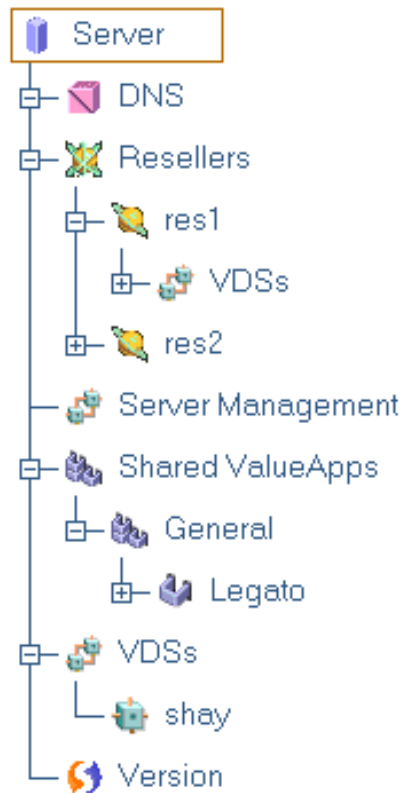


Figure 7. HostingDirector IAE tree - server level

Reseller Level

A reseller buys wholesale hosting services, then resells them to individual users. Resellers can be enabled to manage (read and write) or view (read) one or more VDSs on a specific HostingDirector IAE server (if required, you can deny all reseller permissions). You can add resellers only at the Server level. Login is as follows.

Use the login procedure used for the Server level (see “Server Level” on page 3). Each reseller has a unique user name and password.

VDS Owner Level

A VDS owner can be enabled to manage a Web site. You can add VDSs at the server or reseller level. The VDS owner manages the site using an HTML-base GUI.

To login as a VDS owner, do the following:

1. Open your browser and type the IP address of the VDS in the Address field (The IP address was defined when you added this VDS. See “Adding a New VDS” on page 58 for details).

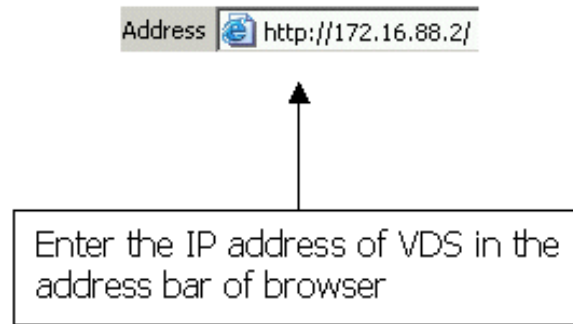


Figure 8. VDS address

Note: If you are using a name-based VDS, type the domain name. If your domain name has not been registered, type *IP address/domain.com*.

2. The Web page shown in Figure 9 opens.

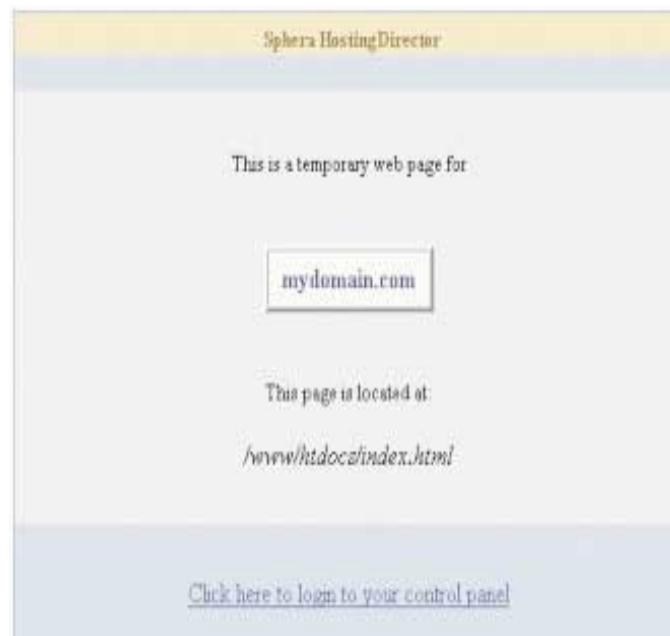


Figure 9. Default Web page

Click the hyperlink **Click here** to login to your control panel.

Note: After you have uploaded your Web site's files to the VDS, type the following address in the Address field of browser:
`http://VDS_domain_name/manager/`.

3. You will be prompted to the login screen shown in Figure 10 on page 9. Type the password and user name in the corresponding fields and choose a preferred language for the session.



Figure 10. Login screen

4. Click **OK** to confirm the data you entered. You perform VDS management tasks with the HTML-based GUI (See the *HostingDirector Site Owner User guide* for more information).

Logging out

To log out securely, you can do one of the following tasks:

- Click the Logout button, located on the toolbar
- Close the browser (recommended for maximum security).

Installing SSL Certificate

Note: Instructions use Microsoft® Internet Explorer 5.0.

To install the SSL certificate:

1. Click the **Click here to install a permanent SSL certificate** hyperlink that appears on the login screen.
2. The following screen is displayed. Choose to open the file.



Figure 11. File Download window

3. The certificate appears on the screen. Click the **OK** button.
4. Click **Next** for all stages of the certificate import wizard. Click **Finish** on the last window.

Control Panel

The GUI used for the server and reseller login levels operates in any Java 1.1-compliant platform and can run within a Web browser. It is recommended that you use the GUI with one of the following browsers:

- Microsoft® Internet Explorer 5.X or a later version.
- Netscape Communicator 4.6 or 6.2.

You can customize the Control panel.

Note: The HostingDirector IAE control panel is a Java applet. The Java virtual machine must be enabled for your browser.

Chapter 2. The Server Node

When you select the Server node in the HostingDirector IAE tree, you can perform the following tasks:

- View server details
- Add data to the VDS GUI
- View usage statistics
- Generate reports

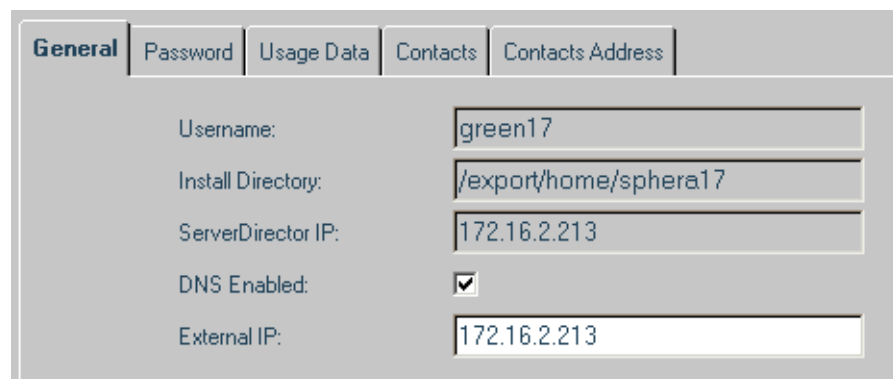
These tasks are described in the following sections.

Viewing Server Details

You can view server details using the tabs located in the Details pane.

To view server details, click the server node and then click **Edit**. Five tabs are displayed, as follows:

- The **General** tab displays the user name, install directory path and IP address details for the server.



The screenshot shows a window with five tabs: **General**, Password, Usage Data, Contacts, and Contacts Address. The **General** tab is active and displays the following fields:

Username:	green17
Install Directory:	/export/home/sphera17
ServerDirector IP:	172.16.2.213
DNS Enabled:	<input checked="" type="checkbox"/>
External IP:	172.16.2.213

Figure 12. General tab

- The DNS Enabled check box indicates whether this HostingDirector IAE server supports DNS.
- The External IP field displays the IP address of the server that is open to the Internet (NAT).
- Click the **Password** tab to change the login password. Type the new password in the **New Password** field and retype it in the **Retype Password** field. Click the **OK** button.

General **Password** Usage Data Contacts Contacts Address

Enter new password:
 Passwords should be 6 - 8 characters long.
 Only printable ASCII characters are valid, excluding %, !, ;, ###.

New Password:

Retype Password:

Figure 13. Password tab

- Click the **Usage Data** tab to display server log details.

Usage Data Details:

Write to Log:

Log File Name:

Figure 14. Usage Data Details

- The **Write to log** field indicates whether a log file will be generated. The **Log File Name** field indicates the location of the file. To change the status of the **Write to Log** field, click **Edit**. The Write to Log field now appears as a check box.

Usage Data details:

Write to Log:

Log File Name:

OK Cancel

Figure 15. Write to log field

- Select the **Write to Log** check box to change its status and click **OK**.
- Click the **Contacts** tab to enter WHP details. There are three check boxes.

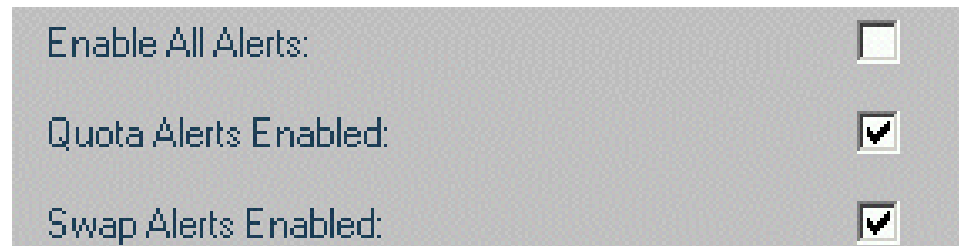


Figure 16. Contacts tab

Enable All Alerts

Select this check box to provide email message alerts for all site owner login levels (Server, Reseller, VDS).

Quota Alerts Enabled

Select this check box to provide email message alerts for site owners when the following occur:

- Ninety percent of the disk/file quota of VDS message is reached.
- VDSs whose watchdog did not succeed in starting the HTTP process.
- VDSs that exceeded their HTTP Max accounts (virtual hosts quota).
- VDS system files that have been modified.
- VDSs and resellers that reached 90% of bandwidth quota.

Messages are sent every 12 hours at 10:00 and 22:00 (10:00 AM and 10:00PM).

Swap Alerts Enabled

Select this check box to provide email messages for server administrators who have almost reached their Swap quota. The messages are sent every hour when Swap utilization reaches 80% of resources or the total Swap size is zero.

VDS owners who did not enter their email addresses will not receive alerts.

Server administrators who did not enter their email addresses will not receive alerts, and their corresponding VDSs and resellers will receive email messages from `postmaster@VDS_domain_name.com`.

For more information on the Contacts and Contacts Addresses tabs, see “Adding and Modifying data in the VDS GUI”.

Adding and Modifying data in the VDS GUI

Server and Reseller login levels can modify the HTML-based VDS GUI (A Reseller must have Full Control privileges to modify the VDS GUI).

Adding and Modifying Hosting Provider Contact Information

This section describes how to add and modify hosting provider details that appear in the Contacts panel of the VDS owner HTML GUI.



Figure 17. Adding contacts information

To add or modify hosting provider contact information:

1. Click the Server node.
2. Click **Edit**.
3. Click the **Contacts** tab and enter the contacts details.

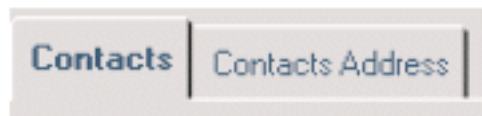


Figure 18. VDS Contacts Tab

4. Click on the **Contacts Address** Tab and enter the address details.
5. Click **OK**. The details you entered in steps 3. and 4. will appear in the VDS owner HTML GUI.
6. Click any VDS that appears under this server and click the **Contacts** tab to verify that all information was entered correctly.

Adding personalized messages to the VDS GUI

To add personalized messages to the Overview panel of the VDS GUIs that are under server:

1. Proceed to the following path using FTP: /www/htdocs/php/skins/default/dev
2. Download the following files:
 - moreinfo.ini
 - newfeatures.ini
3. Open the files and enter the text that you want to appear in the VDS GUIs. It is recommended that you not change the HTML tags.
4. Upload the files to the same path and overwrite original files.

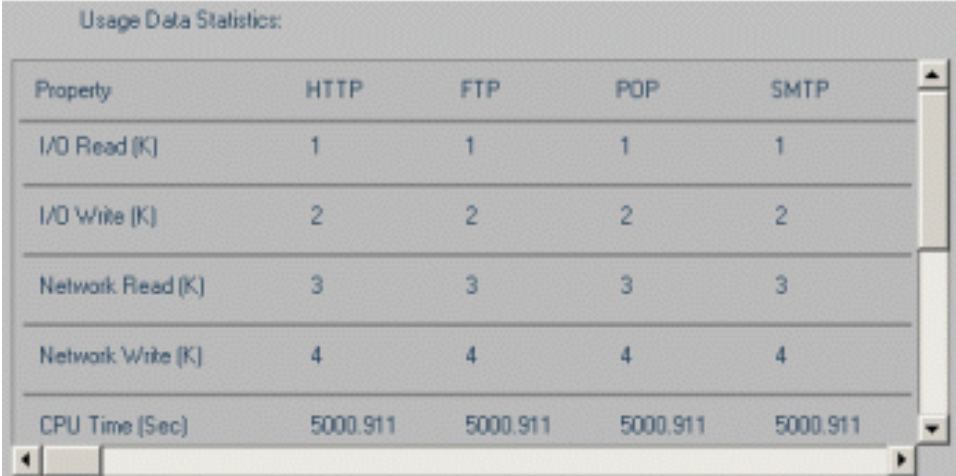
Modifying the Help Files

HostingDirector gives the Server and Reseller login levels the ability to modify the HTML help files (A Reseller must have Full Control privileges to modify the VDS GUI). To modify these files, do the following:

1. Proceed to the following directory via FTP: <Primary VDS Base>/www/htdocs/php/skins/default/runtime/help/
This directory includes all the HTML help files for the VDS GUI.
2. Open the file in an HTML editor.
3. Make your modifications.
4. Overwrite the original file with the modified file by saving the new file with the original file name in the same directory.

Usage Statistics

The Usage Data Statistics panel provides details about the resources each VDS uses. To view these details, click any VDS node and then click the Usage Statistics tab.



Property	HTTP	FTP	POP	SMTP
I/O Read (K)	1	1	1	1
I/O Write (K)	2	2	2	2
Network Read (K)	3	3	3	3
Network Write (K)	4	4	4	4
CPU Time (Sec)	5000.911	5000.911	5000.911	5000.911

Figure 19. Usage Data Statistics

There are details about the following services: HTTP, FTP, POP, and SMTP.

Each service has the following properties:

- **I/O Read:** The amount of KB that has been read on the local server. For example, data read from the hard disk of the server is included.
- **I/O Write:** The amount of KB that has been written on the local server. For example, data written to the hard disk of the server is included.
- **Network Read:** The amount of KB that has been read from the network. For example, data received from the FTP client to the FTP server is included.
- **Network Write:** The amount of KB that has been written to the network. For example, data sent from the FTP server to the FTP client is included.
- **CPU Time:** Total of the amount of time the CPU actually spends on a given process.

To set all properties to zero, do the following:

1. Click **Edit** on the toolbar.

2. Click the **Usage Statistics** tab.
3. Click **Reset** on the **Usage Statistics** panel.

To generate a report that includes this data click **Report** on the toolbar. See “Generating Reports” for more information.

Generating Reports

You can use HostingDirector to generate reports in both XML and text (.txt) format.

To generate reports on the HostingDirector server, do the following:

1. Click **Report**.
2. Click the **Parameters** tab. Specify the type of report you need and the format. See Figure 20 for an example.

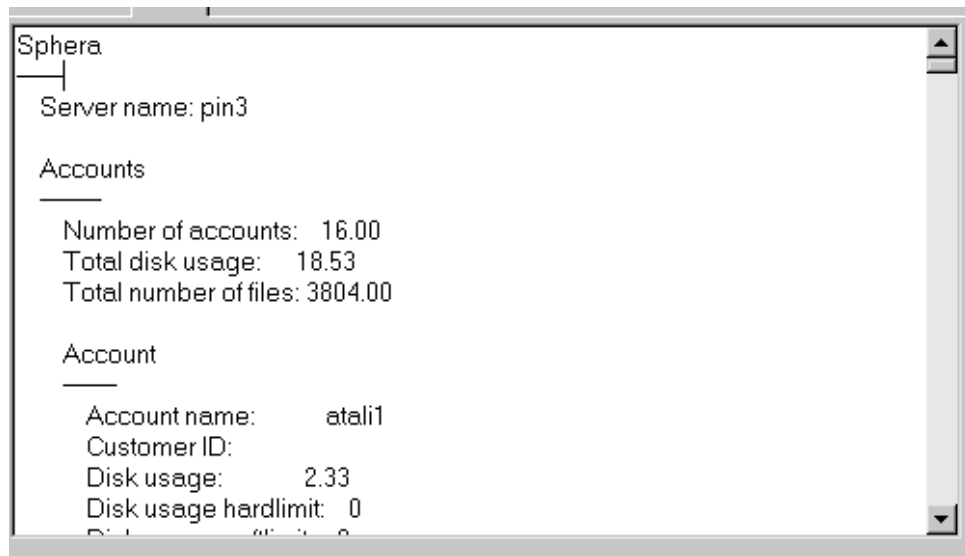


Report Type: Usage Report

Report Format: Text

Figure 20. Report parameters

3. Click **Generate**. The Data panel opens. The report is displayed in the Data panel.



```
Sphera
├──
│   Server name: pin3
│
│   Accounts
│   ───
│   Number of accounts: 16.00
│   Total disk usage: 18.53
│   Total number of files: 3804.00
│
│   Account
│   ───
│   Account name: atali1
│   Customer ID:
│   Disk usage: 2.33
│   Disk usage hardlimit: 0
```

Figure 21. Report Example

Chapter 3. The DNS Node

A Domain Name Server (DNS) is an online distributed database system used to map human-readable machine names into IP addresses.

The DNS in the server runs in the following way:

- Each server has a BIND that manages all its VDSs (unless DNS is disabled on server).
- The BIND Database is refreshed every time a VDS is added or removed, or VDS domains are modified.

These features make a secure and stable environment, and enable you to view DNS details, create new sub domain DNS records and modify them as needed.

The server performs the following tasks:

- It executes updates in the configuration files of the BIND.
- It restarts the BIND of the server in order to activate database changes.

For more information on BIND go to the following Web site:
<http://www.isc.org/products/BIND/>

Note: The BIND version in HostingDirector server is 8.2.3-REL.

There are two levels for adding and setting the DNS zone files:

- **Server level:** Use the Server level to modify the DNS zone files template. DNS records on the server are the template DNS database for all its VDSs. Adding or editing DNS values from the server level will change all future domain names of new VDSs
- **VDS level:** Adding or editing a DNS record on a specific VDS changes only its domain DNS database; domain hosts, sub-domains, aliases, and mail exchange definitions.

Adding DNS Records

There are three types of DNS records:

- Type A - Translates a domain name to an IP address.
- Type NS - Defines Subdomains.
- Type Cname (Canonical name) - Creates an alias for an existing domain name.
- Type MX (Mail exchanger) - Identifies domains that process email messages.

You can add DNS records to a specific VDS or to a server.

To add a DNS record on the server level:

1. Click the DNS node under the server node.
2. Click the **Default DNS Records** tab.
3. Click **Add**.

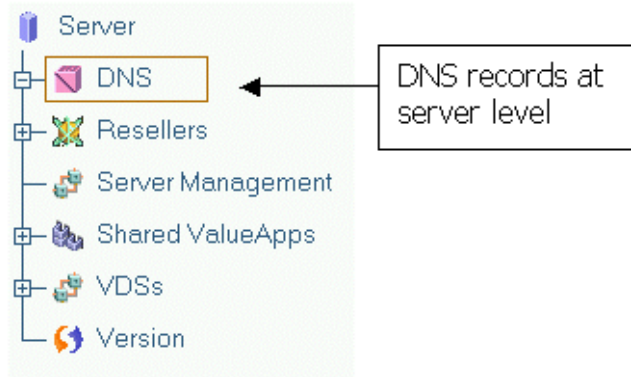


Figure 22. Server level DNS records

To add a DNS record on a specific VDS:

1. Click the node of the specific VDS whose DNS records you wish to modify.
2. Login to the VDS GUI.
 - a. Click the **General** tab.
 - b. Enter field values.
3. Proceed to the Domains Settings category.
4. Click the **DNS Records** tab. Refer to the VDS GUI help files for more information.

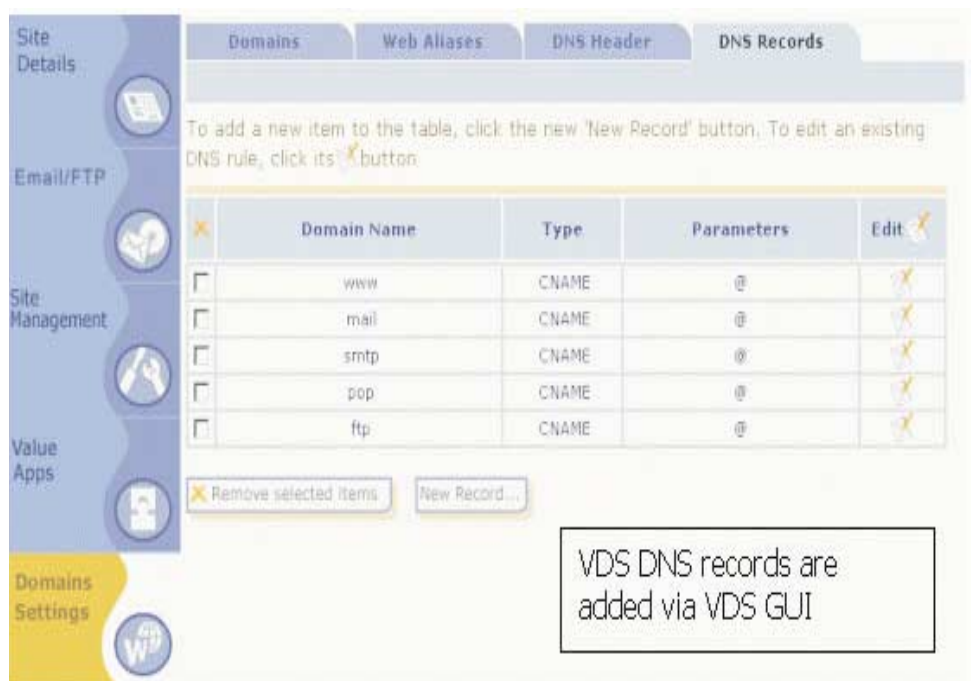


Figure 23. VDS DNS records

Modifying DNS Records

To modify a DNS record on the server level:

1. Click the DNS node under the server node.

2. Click the **Default DNS Records** tab.
3. Click the record you wish to modify.

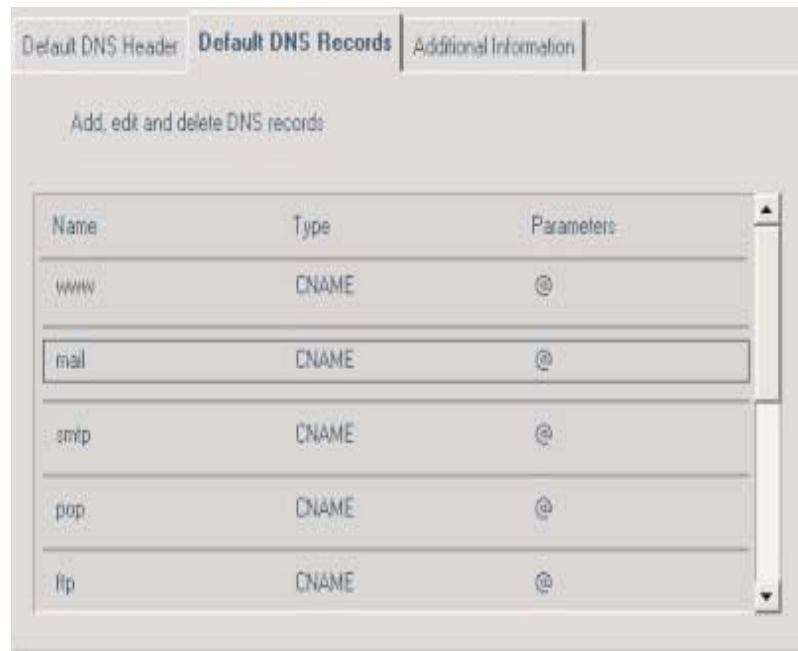


Figure 24. Selecting a record

4. Click **Edit**.
5. Enter modifications, and click **OK**.

Type A

Type A (address) translates a domain name to an IP address.

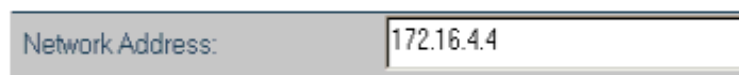
1. Click on the Default DNS Records tab and then press the **Add** button.
2. Type the domain name and choose **Type A**. Click **Next**.



The screenshot shows a form with two fields. The first field is labeled "Name:" and contains the text "test". The second field is labeled "Type:" and is a dropdown menu with "A" selected.

Figure 25. DNS record type A

3. Type the IP address in the **Network Address** field:



The screenshot shows a form with one field labeled "Network Address:" containing the IP address "172.16.4.4".

Figure 26. Network Address field

4. Click **Finish**.

Type NS

Type NS defines sub-domains. For example, creating the **support** sub-domain in <domain name> will result in the domain name **support.<domain name>**.

1. Click on the **Default DNS Records** tab and then press the **Add** button.
2. Type the sub-domain name and choose **Type NS**. Click **Next**.



Name: support
Type: NS

Figure 27. DNS record type NS

3. Type the domain name or IP address of the Primary Name Server.



Name Server (name or IP): sphera.com

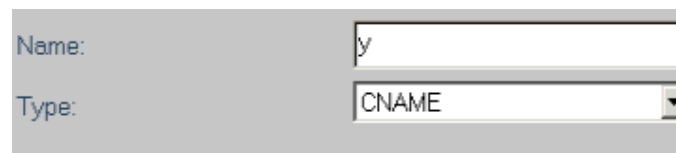
Figure 28. Name Server field

4. Click **Finish**.

Type Cname

Type Cname (canonical name) creates an alias name for an existing domain name. For example, creating the alias **y.sphera.com** for the domain name **yellow.sphera.com**.

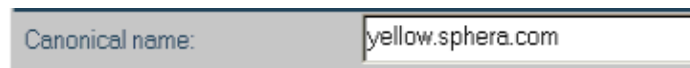
1. Click on the **Default DNS Records** tab and then press the **Add** button.
2. Type the alias name and choose the type **Cname**. Click **Next**.



Name: y
Type: CNAME

Figure 29. DNS record type Cname

3. Type the domain (canonical) name:



Canonical name: yellow.sphera.com

Figure 30. Canonical name field

4. Click **Finish**.

Type MX

Type MX (mail exchanger) is used to choose domains that will process email messages.

1. Click on the **Default DNS Records** tab and then press the **Add** button.
2. Type the email account name and choose **Type MX**. Click **Next**.

Name: sales_mgr
Type: MX

Figure 31. DNS record type MX

3. Type the preference number for this domain (the lowest number has the highest preference) in the **Preference** field.
4. Type the domain that will process the email in the **Mail** field.
5. Click **Finish**.

Viewing Details

Click the **Default DNS Header** tab to display the following DNS zone file parameters:

Email Email address of the top level provider.

Refresh

The time interval for a slave to receive updated information from its master. This field is relevant only if you manage a slave BIND on a different server.

Retry If Refresh does not produce updated information in the time stated, the Retry value is the interval (number of seconds) after which Refresh is tried again.

Expire If Retry does not produce updated information, the Expire value is the length of time during which Refresh is still in effect.

Time to Live (TTL):

The amount of time during which the data in the slave remains valid. This field is relevant only if you manage a slave BIND on a different server.

The example below shows the **DNS header** panel:

Email: dnsmaster.sphera.com
Refresh (sec): 10800
Retry (sec): 3600
Expire (sec): 604800
Minimum TTL (sec): 86400

Figure 32. DNS header panel

Click the **Default DNS Records** tab to display details about the current DNS records, including the DNS name and type.

Name	Type	Parameters
did	NS	aaa.bbb.com.
elady.com	NS	200.200.253.234

Figure 33. Default DNS Records panel

The **Additional Information** tab is available only if the machine is connected to a cluster (Sphera ClusterDirector).

The **Default DNS IP** field is the IP address of the default primary name server.

The **Available DNS Addresses** field contains a list of all existing IP addresses of primary name servers.

To change the IP address of the default primary name server do the following:

1. Click the IP address that you want to change in the **Available DNS Addresses** field.
2. Click **Set**.

The chosen IP address appears in the **Default DNS IP** field.

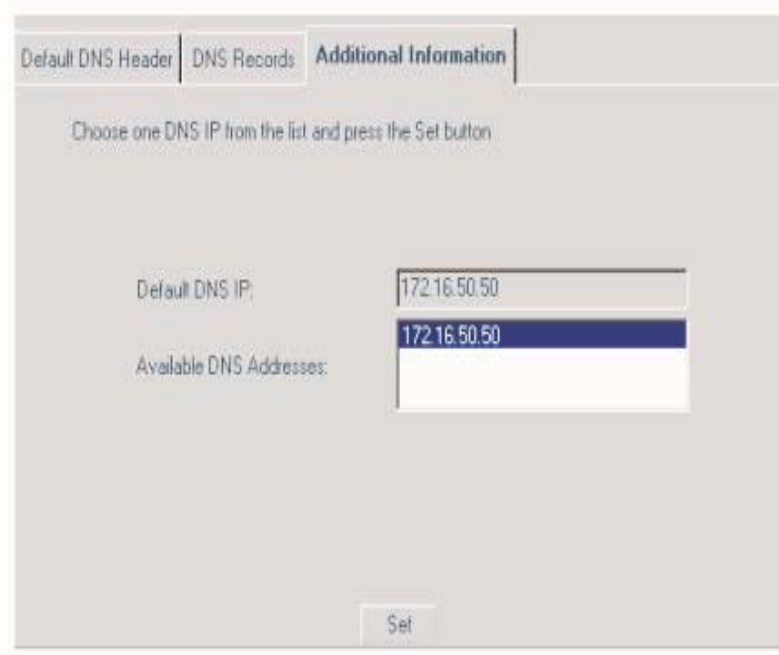


Figure 34. Additional Information panel

Chapter 4. The Resellers Node

Resellers are special users that are enabled to manage one or more VDSs and to resell hosting services to individual users.

Adding a Reseller

To add a reseller, do the following:

1. Expand the **Resellers** branch in the tree structure
2. Click **Add**. The **Add New Reseller** panel is displayed.
3. Do the following:
 - a. In the **Reseller Name** field, type a meaningful name that identifies the reseller.
 - b. In the **Description** field, type a brief description for the reseller.



The screenshot shows a form with two input fields. The first field is labeled 'Reseller Name:' and contains the text 'Sell123'. The second field is labeled 'Description:' and contains the text 'Reseller in NJ'.

Figure 35. Identify Reseller

4. Click **Next**.
5. Do the following:
 - a. In the **New Password** field, type a password for the reseller.
 - b. In the **Retype Password** field, retype the password.



The screenshot shows two password input fields. The first field is labeled 'New Password:' and contains a masked password represented by asterisks. The second field is labeled 'Retype Password:' and also contains a masked password.

Figure 36. Enter Password

6. Click **Next**.
7. Do the following:
 - a. Select a partition for the reseller files in the **Partition Name** drop-down menu.
 - b. In the **Permissions** field, select the type of access you want the reseller to have. The options are **No Access**, **Read** or **Full Control**.
 - c. In the **Max IP Based Accounts** field, type the maximum number of IP-based VDSs that the reseller can add. The value 0 means no assigned accounts (not an unlimited number of accounts).
 - d. In the **Max Name Based Accounts** field, type the maximum number of name based VDSs that the reseller can add. The value 0 means no assigned accounts (not an unlimited number of accounts).
 - e. In the **Account Base Directory** field, type a base directory to which reseller accounts can be added.

Partition Name:	/export/home
File System Type:	ext2
Permissions:	Full Control
Max IP Based Accounts:	0
Max Name Based Accounts:	0
Account Base Directory:	/resellers/today

Figure 37. Reseller resources

8. In the next window you are prompted to enter the amount of space to allocate to the reseller. This becomes the reseller's hard limit for allocated space. Three initial fields indicate the following information:
 - **Partition:** Partition where the reseller account is stored.
 - **Reserved Space:** Space already reserved for resellers and VDSs accounts.
 - **Available:** Space available for resellers and VDSs accounts. Enter the amount of space you wish to allocate to the reseller in the **Hard Limit** field and click **Next**.

Note: Zero is not a valid number in the **Hard Limit** field.

Enter the amount of disk space (in MB) that will be allocated to reseller
Reseller will not be able to exceed this limit

Partition:	/export/home
Reserved Space (MB):	152
Available (MB):	10968
Hard Limit (MB):	50

Back Next **Next** Cancel

Figure 38. Setting Reseller Space Allocation

9. In the next window you are prompted to enter the number of files allocate to the reseller. This becomes the reseller's hard limit for number of files. Three initial fields indicate the following information:
 - **Partition:** Partition where the reseller account is stored.
 - **Reserved Space:** Number of files reserved for resellers and VDSs accounts.
 - **Available:** Number of files available for resellers and VDSs accounts.

Enter the number of files you wish to allocate to the reseller in the **Hard Limit** field and click **Next**.

Note: Zero is not a valid number in the **Hard Limit** field

Enter the number of files that will be allocated to reseller. Reseller will not be able to exceed this limit.

Partition:	/export/home
Reserved:	15000
Available:	1635585
Hard Limit:	5000

Back Next Finish Cancel

Figure 39. Setting Reseller File Allocation

- In the next window you are prompted to enter the bandwidth quota for this reseller. When the reseller exceeds its soft limit, a mail notification is sent to the reseller owner and server administrator. If you select the **Block when hard quota reached** check box, the reseller will no longer receive bandwidth when it exceeds the hard limit. Resellers are blocked until the counters are reset either manually or on a schedule. If the check box is not selected, an email message is sent to the reseller owner and server administrator when the VDS exceeds the hard limit.

Add New Reseller - Step 6 of 9

Define the Bandwidth Quota for the reseller. Bandwidth is accumulated for all the VDSs under the reseller.

Soft Limit(MB):	9
Hard Limit(MB):	10
Block when hard quota reached:	<input type="checkbox"/>

Figure 40. Setting Reseller Bandwidth Quota

- Click **Next**. You can allocate both IP ranges and a shared IP address to a reseller. From the **Available** menus, select an IP address range or shared IP address for the reseller to use. Click **Add**. The selected IP appears in the **Selected** lists.

Select from the list of available IP ranges displayed in the "Available" menu. Highlight the IP range you wish to allocate to the reseller and click the "Add" button. The selected IP appears in the "Selected" menu. To remove IP range, choose the selected IP and click on the "Remove" button.

Available Ranges: all	Add >	Selected Ranges: default
Available Shared IPs: share1	< Remove	Selected Shared IPs: share2

Back Next Finish Cancel

Figure 41. Setting Reseller IP Ranges

Repeat this process for all IP address ranges and shared IP addresses you want to add. To remove IP ranges or shared IP addresses, highlight the IP range or shared IP you want to remove and click **Remove**.

12. Click **Finish**. The new reseller is established and appears in the tree structure.

Note: Resellers (with full access or read privileges) can view all the accounts (VDSs) under their control by logging in as reseller, using their reseller name and password.

Editing Reseller Properties

The Server login level can modify the properties of all resellers that exist on the server. To edit a reseller's properties, do the following:

1. Expand the **Resellers** branch in the tree structure.
2. Click on the Reseller node you wish to edit.
3. Click **Edit**.
4. Click the tab whose properties you wish to edit, for example, click the **File Quota** tab.

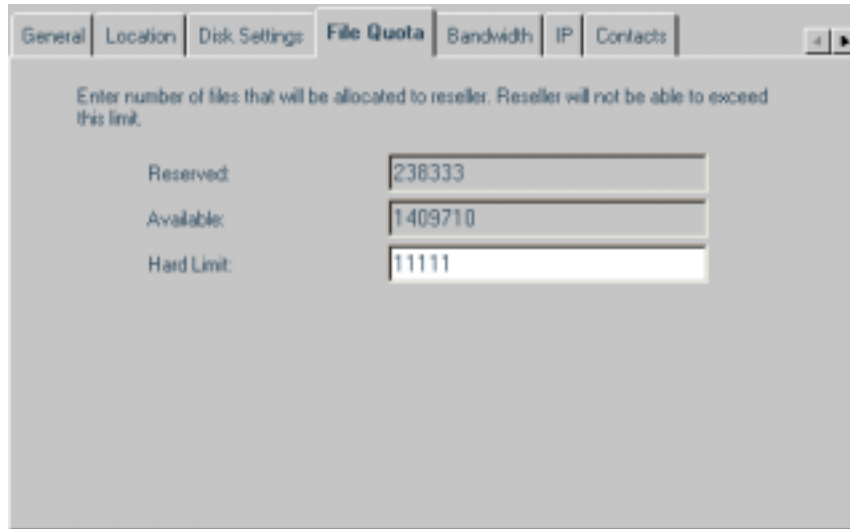


Figure 42. Modifying the File Quota Properties

5. Enter the changes in the appropriate fields.
6. Click **OK**.

Using the Bandwidth Tab

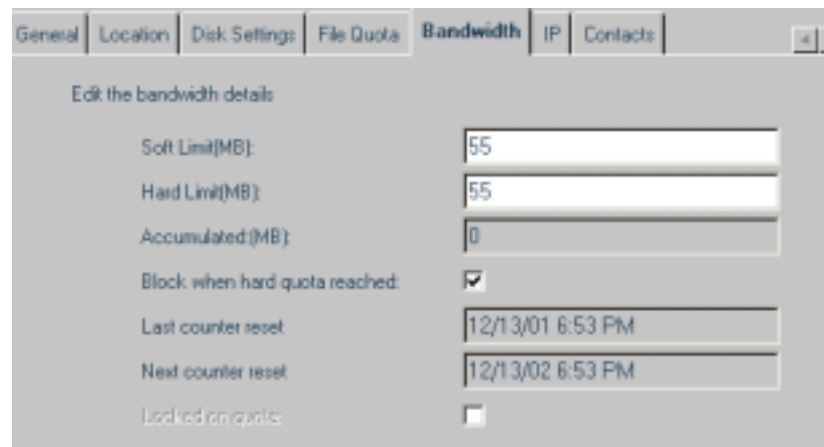


Figure 43. Bandwidth Tab

If you selected the **Block when hard quota reached** check box (step 9 on page 24) and the VDS reaches its quota, all VDS services will be halted. The **Locked on quota** check box enables the reseller to block or unblock bandwidth to VDSs that have exceeded their bandwidth quota. However, if no more space was allocated, then the VDS or reseller is blocked again as soon as any communication is requested.

Deleting a Reseller

To delete a reseller do the following:

1. Expand the **Resellers** branch in the tree structure.
2. Click the node of the reseller you wish to delete.
3. Click **Delete**.

4. You are prompted to confirm the deletion.



Figure 44. Reseller Deletion Confirmation

5. Click **Yes** to confirm the deletion.

Chapter 5. The Server Management Node

The Server Management node panel contains the following information:

- **Resources:** Server resources data.
- **IP Management:** Administer and monitor your IP address pool. You can create, edit and delete IP address ranges, and view physical interfaces and the ranges allocated to them.
- **Users & Groups:** Grant or restrict special privileges to users for particular tasks by creating and managing User IDs (UIDs) and User Group IDs (GIDs).
- **Log:** View a variety of log files on a Server's processes, accounts, and utilized resources.
- **Process Manager:** Monitor processes running on the server and execute the following signals:
 - SIGHUP
 - SIGINT
 - SIGQUIT
 - SIGKILL
 - SIGALRM
 - SIGTERM
 - SIGUSR1
 - SIGUSR2
 - SIGSTOP
- **Time Settings:** Set the date and time of the machine or connect to a Network Time Protocol (NTP) server.
- **Restart/Shutdown:** End session and restart or shutdown the machine.
- **Auto Update:** Download and install new updates and packages to your server.

Resources

The Resources panel contains the following tabs:

- General
- CPU Usage
- Accounts
- Storage
- Partition Details
- Modifying Partition

General Tab

The **General** tab displays the following information:

General information	
Server time	18:14:04
Uptime	8:00 Hours
Load average	0.12 0.07 0.01 (1 min, 5 min, 15 min)
Number of concurrent users	1

Figure 45. General Information

- **Server Time:** Displays your machine's time settings.
- **Uptime:** Amount of time the server has been up and running.
- **Load average:** The system load averages for the past 1, 5, and 15 minutes.
- **Number of concurrent users:** Number of users that are currently logged into the machine.


Memory information (MB)		
Total	125.38	
Used	114.66	91%  Used 114.66/125.38
Free	10.71	

Figure 46. Memory Information

- **Total:** Total memory available (in MB).
- **Used:** Memory that is currently occupied (in MB).
- **Free:** Free memory that is currently available (in MB).


Swap information (MB)		
Total	258.82	
Used	7.51	3%  Used 7.51/258.82
Free	251.31	

Figure 47. Swap Information

- **Total:** Total space used as the virtual memory extension of the machine's real memory
- **Used:** Swap memory that is currently occupied (In MB).
- **Free:** Swap memory that is currently available.

Click **Refresh** to view updated information on resources.

CPU Usage Tab

The **CPU Usage** tab displays the following information:

Processes information	
Sleeping	141
Stopped	0
Zombie	0
Running	1
Total	142

Figure 48. Processes Information

- **Processes Information:** Number of processes that are currently in the following modes:
 - Sleeping
 - Stopped
 - Zombie
 - Running
 - Total number of processes

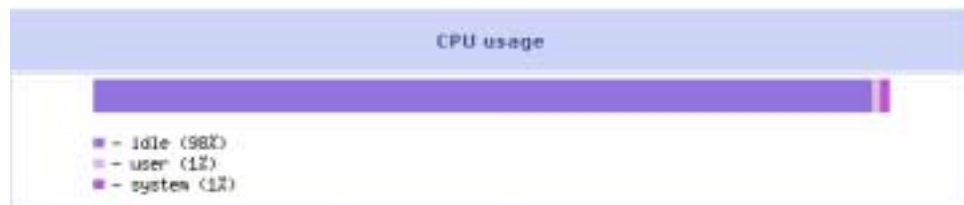


Figure 49. CPU Usage

- **CPU Usage:** A graph displays current CPU Usage.
 - **Idle:** Percentage of the CPU that is not being utilized.
 - **User:** Percentage of the CPU that is utilized by all users.
 - **System:** Percentage of the CPU that is utilized by system process.

Number	Vendor	Model name	Cache (KB)	Frequency (MHz)
0	GenuineIntel	Pentium III (Coppermine)	256	651.484553
1	GenuineIntel	Pentium III (Coppermine)	256	651.484553

Figure 50. CPU Properties

- **CPU(s) Properties:** Number of CPUs in machine and their basic properties.

Click **Refresh** to view updated information on CPU usage.

Accounts Tab

The **Accounts** tab displays resource utilization data on all accounts that are currently in the machine. This includes both reseller and VDS accounts.

- To view reseller accounts, click the **Resellers** hyperlink. A list of all resellers on the machine is displayed:

Name	CPU usage (%)	Virtual memory (MB)	Resident memory (MB)	Total processes	Logged users
shay	0.0	2.71	2.61	4	0

Figure 51. Reseller List

- To view VDS accounts, click the **Users** hyperlink. A list of VDSs on the machine is displayed.

Name	CPU usage (%)	Virtual memory (MB)	Resident memory (MB)	Total processes	Logged in instances
bin	0	0.12	0.07	1	0
bond1	0	1.34	1.29	2	0

Figure 52. User List

In some cases, additional accounts are displayed on additional pages. To view the next page, select the page number from the drop down menu.



Figure 53. Page Selection

Click **Refresh** to view updated information on accounts.

Storage Tab

The **Storage** tab displays data on available disks and partitions:

- The first table provides data on disks in the machine.

Disks

Hard Disk	Size (MB)	Status
/dev/hda	14676	Used

Figure 54. Disk Data Table

- The second table displays data on disk partitions:

Name	Type	Device	Usage	Available (MB)
/	ext2	/dev/hda5	58% Used 57/98 MB	0
/export/home	ext2	/dev/hda9	58% Used 7456/12988 MB	5344
/home/integ	nfs	gold:/raid/fs1/integration/integ	94% Used 55268/58844 MB	3526
/home/marko	nfs	gold:/raid/fs1/users/marko	94% Used 55268/58844 MB	3526
/home/michael	nfs	gold:/raid/fs1/users/michael	94% Used 55268/58844 MB	3526
/home/nirb	nfs	gold:/raid/fs1/users/nirb	94% Used 55268/58844 MB	3526
/tools/continuous	nfs	gold:/raid/fs3/continuous	53% Used 5392/10888 MB	4638

Figure 55. Disk Partition Information

To view more details about a specific partition, click the **Details** hyperlink.

Partition Details Tab

The first table provides basic information on the selected partition:

Selected Partition:

Name	Device	Usage
/	/dev/hda7	55% Used 54/98 MB

Figure 56. Selected Partition Information

The second table provides data on files and disk quota:

- **Required Space / Disk Quota:** Space that is allocated from a partition for the proper functionality of HostingDirector. It is recommended that you keep the default field values.
- **Required Space / Files Quota:** Files that are allocated from a partition for the proper functionality of HostingDirector. It is recommended that you keep the default field values.
- **Reserved Space/ Disk Quota:** Total space already allocated for VDSs and resellers.
- **Reserved Space / Files Quota:** Total number of files already allocated for VDSs and resellers.

	Reserved Space	Required Space	Usage
Disk quota (MB)	0	50	55% Used 54/98 MB
Files quota	0	1000	29% Used 7985/26184

Figure 57. Disk and File Quota Table

To edit the required space or number of files, click the **Edit Required Space** hyperlink.

Partition Edit Tab

The Partition Edit tab displays the following properties for you to edit:

- **Required Space Quota:** Space that is allocated from a partition for the proper functionality of HostingDirector. It is recommended that you keep the default field values.
- **Required Files Quota:** Files that are allocated from a partition for the proper functionality of HostingDirector. It is recommended that you keep the default field values.

To edit these properties:

1. Enter the new quotas in the **Required Space** and **Required Files** fields.
2. Click **OK**.

Type:

Required space (MB):

Required files:

Figure 58. Partition Edit Tab

IP Management

IP management enables you to administer and monitor your IP address pool. You can create, edit, and delete IP address ranges and shared IP addresses. You can also view physical interfaces and the ranges allocated to them.

IP Ranges

The following tabs contain information about viewing, creating, modifying, and deleting IP address ranges:

- Ranges
- Range Details
- Add New Range

- Range Edit

Ranges Tab

Using IP address ranges enables you to manage your IP address pool. The **Ranges** tab enables you to view, edit, create and delete IP ranges.

The main table displays the following information:

- **Name:** Name of the IP range.
- **Enable:** Either true or false. VDSs can be allocated only to IP addresses belonging to enabled ranges.
- **Initial IP Address:** First IP address of the range.
- **End IP Address:** Last IP address of the range.
- **Occupied IP Addresses:** Number of IP addresses that belong to this range and are currently occupied.
- **NIC:** Network Interface Card. The IP range is connected to the specified physical interface.

✓	Name	Enable	Initial IP Address	End IP Address	Occupied IP Addresses	NIC
<input type="checkbox"/>	default	true	172.16.36.1	172.16.36.255	5	eth0

Figure 59. IP Ranges Tab

To delete an IP range:

1. Select the check box that is next to the IP range you wish to delete.
2. Click the **Remove Selected Items** button.

Range Details Tab

The **Range Details** tab includes information on individual IP ranges.

Name:	default
Initial IP Address:	172.16.36.1
End IP Address:	172.16.36.255
Network Mask:	255.255.0.0
Broadcast IP Address:	172.16.255.255
Enable:	true
Assigned NIC:	eth0

Figure 60. Range Details Information

- **Name:** Name of the IP range.
- **Initial IP Address:** First IP address of the range.
- **End IP Address:** Last IP address of the range.
- **Network mask:** Network mask for the IP range.
- **Broadcast IP address:** Broadcasting address for this range. The default for this field is automatically created based on the IP address and the network mask.
- **Enable:** Either true or false. VDSs can be allocated only to IP addresses with enabled ranges.

- **Assigned NIC:** Network Interface Card. The IP range is connected to the specified physical interface.

The second table displays the IP addresses of the range that are occupied and their assigned domain names.

IP Address	Domain Name	NIC
172.16.36.1	bond1.com	eth0
172.16.36.2	t.com	eth0

↑

Domain names are for demonstration purposes only.

Figure 61. Assigned Domain Names

To modify the parameters of an IP range click the **Edit** button.

Add New Range Tab

Name:	<input type="text" value="range2"/>
Initial IP Address:	<input type="text" value="172.16.2.1"/>
End IP Address:	<input type="text" value="172.16.2.11"/>
Network Mask:	<input type="text" value="172.16.255.255"/>
Broadcast IP Address:	<input type="text" value="172.16.2.11"/>
Enable:	<input checked="" type="checkbox"/>
Assigned NIC:	<input type="text" value="eth0"/>

Figure 62. Add New Range Information

To add a new IP range enter the following information:

- **Name:** Name of the IP range. The name must consist of lowercase printable ASCII characters.
- **Initial IP Address:** First IP address of the range.
- **End IP Address:** Last IP address of the range.
- **Network Mask:** Network mask for the IP range.
- **Broadcast IP Address:** Broadcasting address for this range. The default for this field is automatically created based on the IP address and the network mask.
- **Enable:** Either true or false. VDSs can be allocated only to IP addresses with enabled ranges.
- **Assigned NIC:** Network Interface Card. IP range is connected to specified physical interface.

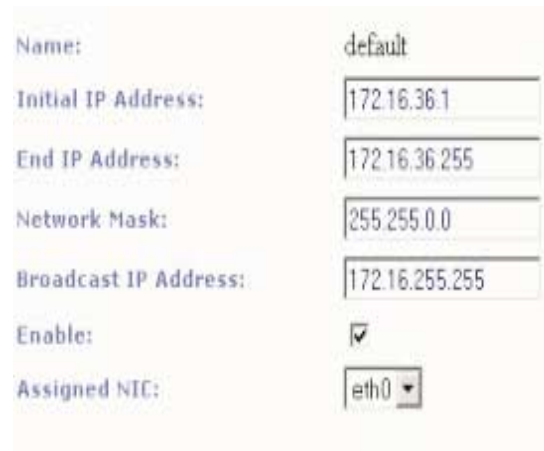
Click **Add**.

Range Edit Tab

The **Range Edit** tab enables you to modify the properties of the IP range.

To edit an IP range:

1. Enter the changes in the fields that you want to modify.
2. Click **Update**.



The screenshot shows a form with the following fields and values:

Name:	default
Initial IP Address:	172.16.36.1
End IP Address:	172.16.36.255
Network Mask:	255.255.0.0
Broadcast IP Address:	172.16.255.255
Enable:	<input checked="" type="checkbox"/>
Assigned NIC:	eth0

Figure 63. Range Edit Panel

Shared IPs

The following tabs contain information about viewing, deleting, modifying, and creating shared IP addresses:

- Shared IPs
- Shared IP Details
- Edit Shared IP
- New Shared IP

Shared IPs Tab

A shared IP address enables you to allocate more than one VDS (Name based VDSs) to the same IP address. It is ideal in situations where the server has more VDSs than available IP addresses.

By using a shared IP address, the user can install up to 1000 name-based VDSs on a single IP address.

The Shared IPs panel includes the following information for each shared IP address:

- **Name:** Name of the shared IP address.
- **IP Address:** IP address of the shared IP address.
- **VDSs:** Number of name-based VDSs that are currently using the shared IP address.
- **Assigned NIC:** Network Interface Card. The shared IP is connected to the specified physical interface.

✓	Name	IP Address	VDSs	Assigned NIC
<input type="checkbox"/>	share1	172.16.101.101	3	eth0

Figure 64. Shared IPs

To delete a shared IP:

1. Select the check box that is next to the shared IP you wish to delete.
2. Click the **Remove Selected Items** button.

Shared IP Details Tab

The Shared IP Details tab includes extensive information on IP addresses.

Name:	default
IP Address:	172.16.95.45
Network Mask:	255.255.0.0
Broadcast IP Address:	172.16.255.255
Auto Raise IP:	Enabled
Assigned NIC:	eth0

Figure 65. Shared IP Details Information

- **Name:** Name of the IP range.
- **IP Address:** IP address of the shared IP.
- **Network Mask:** Network mask for the shared IP.
- **Broadcast IP Address:** Broadcasting address for this shared IP. The default for this field is automatically created based on the IP address and the network mask.
- **Enable:** Either true or false. Name-based VDSs can only be allocated to shared IP addresses that are enabled.
- **Assigned NIC:** Network Interface Card. The IP address is connected to the specified physical interface.

The second table displays the VDSs that are using the shared IP address.

Domain Name	NIC
green1212.qasphera.com	eth0
green800.qasphera.com	eth0
shays.com	eth0
phptest.devspheara.com	eth0

Figure 66. VDS List

To modify the parameters of a shared IP address click the Edit button.

Edit Shared IP Tab

The **Edit Shared IP** tab enables you to modify the properties of a shared IP.

Name:	default
IP Address:	172.16.95.45
Network Mask:	255.255.0.0
Broadcast IP Address:	172.16.255.255
Auto Raise IP:	<input checked="" type="checkbox"/>
Assigned NIC:	eth0

Figure 67. Edit Shared IP Panel

- **Name:** Name of the shared IP.
- **IP Address:** IP address of the shared IP.
- **Network Mask:** Network mask for the shared IP.
- **Broadcast IP Address:** Broadcasting address for this shared IP. The default for this field is automatically created based on the IP address and the network mask.
- **Auto Raise IP:** Select the check box to enable automatic IP raising. By default, automatic IP raising is enabled.
- **Assigned NIC:** Network Interface Card. The IP address is connected to the specified physical interface.

To edit a shared IP:

1. Enter the changes in the fields that you want to modify.
2. Click the **Update** button.

New Shared IP Tab

To add a new shared IP, enter the following information:

Name:	shared7
IP Address:	172.172.5.4
Network Mask:	172.172.0.0
Broadcast IP Address:	172.172.255.255
Auto Raise IP:	<input checked="" type="checkbox"/>
Assigned NIC:	eth0

Figure 68. New Shared IP Panel

- **Name:** Name of the shared IP address.
- **IP Address:** IP address of the shared IP.
- **Network Mask:** Network mask for shared IP.
- **Broadcast IP Address:** Broadcasting address for this shared IP. The default for this field is automatically created based on the IP address and the network mask.

- **Auto Raise IP:** Select the check box to enable automatic IP raising. By default, automatic IP raising is enabled.
- **Assigned NIC:** Network Interface Card. The IP address is connected to the specified physical interface.

Click **Add**.

Reserved IPs

The following tabs contain information about viewing and deleting reserved IPs:

- Reserved IPs
- Reserved IP Details

Reserved IPs Tab

Reserved IPs are IP addresses that want to keep unoccupied for future use. (The server can still use a reserved IP, however, they are not binded to one of the following ports: 80, 110, 25, 21).

The table displays a list of reserved IPs and their network interface card (NIC).

	IP Address	NIC
<input type="checkbox"/>	172.16.1.213	eth0

Figure 69. Reserved IPs Panel

To delete a reserved IP:

1. Select the check box that is next to the IP you wish to delete.
2. Click **Remove Selected Items**.

Reserved IP Details Tab

This tab includes details about each reserved IP address.

IP Address:	172.16.1.213
Network Mask:	255.255.0.0
Broadcast IP Address:	172.16.255.255
Raise at Restart:	Disabled
Assigned NIC:	eth0

Figure 70. Reserved IP Details Panel

- **IP Address:** IP address of the reserved IP.
- **Network Mask:** Network mask for the reserved IP.
- **Broadcast IP Address:** Broadcasting address for this reserved IP. The default for this field is automatically created based on the IP address and the network mask.
- **Assigned NIC:** Network Interface Card. The IP address is connected to the specified physical interface.

To modify the parameters of a reserved IP address, click **Edit**.

NICs Tab

The NICs tab includes a detailed list of all the physical interfaces to IP addresses.

The main table displays a list of all IP addresses and their corresponding domain names and NICs.

IP Address	Domain Name	NIC
172.16.1.213		eth0
172.16.2.213	green21.net	eth0
172.16.3.213		eth0

Figure 71. NICs Panel

Users

The following tabs provide information about viewing, deleting, adding, and modifying users:

- Users
- Add New User
- User Details
- Edit User Details

Users Tab

The **Users** tab provides information about the machine's users. It enables you to view, edit, create and delete users.

<input type="checkbox"/>	User Name	User ID	Group(s)	Comments
<input type="checkbox"/>	adi	1025	users	Adi Shlomo
<input type="checkbox"/>	adm	3	adm,lp,sys,tty	adm
<input type="checkbox"/>	amos	1086	users	Amos 64271
<input type="checkbox"/>	andrei	1085	nt	Andrei Kalkov
<input type="checkbox"/>	andann	1067	users	Anton
<input type="checkbox"/>	aris	1001	users	
<input type="checkbox"/>	arie21	110	gs	David N
<input type="checkbox"/>	arieb	1093	tsupport	Ariel Barkan
<input type="checkbox"/>	arnonl	1081	users	Arnon Laudon
<input type="checkbox"/>	ashers	1066	users	Asher Shatzky

Figure 72. Users Panel

To delete a user:

1. Select the check box that is next to the user name you wish to delete.
2. If you want to delete a user and all the user's files, click **Remove Selected Users**. Select to remove user with or without associated files.

In some cases, additional accounts are displayed on succeeding pages. To view the next page, select the page number from the drop-down menu.



Figure 73. Page Selection

Add New User Tab

To add a new user, do the following from the Add New User panel:

1. Enter the following information:
 - **User Name**
 - **User ID**
 - **Password:** Select between a locked or non-locked password. A locked password is for users who cannot log in as root. It is used for special services that need their own ID but that do not have an actual user. If the password is not locked then you must enter the **Password** and **Retype Password** field values.
 - **Default shell:** Select a default shell environment for the user.
 - **Comment:** More details on the user. You can leave this field blank.

Figure 74. Add New User Panel

Click **Next**.

2. Select a path for the user files by entering it in the **Home Directory** field.

Figure 75. Home Directory Field

3. The next table includes the following information:
 - **Capacity:** Maximum number of files and disk space that can be stored.
 - **Used:** Occupied files and disk space.
 - **Available:** Total disk space and number of files that are free.

- Enter the hard and soft limit for both disk space and number of files. A user with a zero quota has an unlimited account. When the user reaches the soft limit, seven days are given to drop back below the soft limit. After that, the system behaves as if the user has exceeded the quota, and no additional files can be stored. A user cannot exceed its hard limit.

Quota	Disk(MB)	Files
Capacity:	98	26104
Used:	63	7228
Available:	0	17876
Hard Limit:	<input type="text" value="0"/>	<input type="text" value="0"/>
Soft Limit:	<input type="text" value="0"/>	<input type="text" value="0"/>

Figure 76. Setting Hard and Soft Limits

- Click **Next**.
- Select groups that the user will belong to by selecting the group name in the left window and then clicking the >> button. To remove a group, select a group from the right window and click the << button. You can also select the default group that the user will belong to from the **Default** drop-down menu.

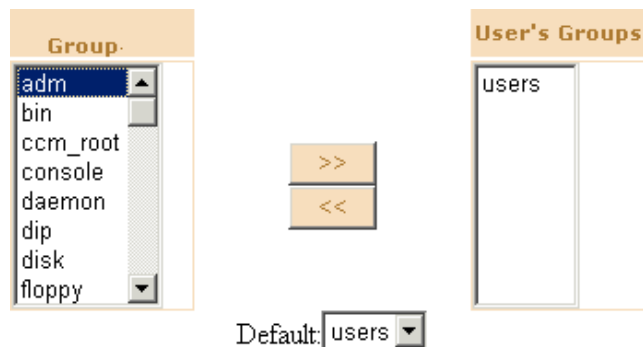


Figure 77. Assigning Groups

- Click **Add**.

User Details Tab

The **User Details** tab includes the following information:

- The first table includes basic data about the user.

User Name:	adi
User ID:	1025
Home Directory:	/home/adi
Default Shell:	/bin/tcsh
Comment:	

Figure 78. User Details

- The second table includes data on the files and space quotas set for the user. A user with a zero quota has an unlimited account. When the user reaches the soft limit, seven days are given to drop back below the soft limit. After that, the system behaves as if the user has exceeded the quota, and no additional files can be stored. A user cannot exceed its hard limit.

Quota	Disk(MB)	Files
Hard Limit:	0	0
Soft Limit:	0	0

Figure 79. User Hard and Soft Limit Values

- The last table displays the groups that the user belongs to.

User's Groups
users

Figure 80. User's Groups

To edit a user's data, click **Edit**.

Edit User Details Tab

To modify user details, do the following:

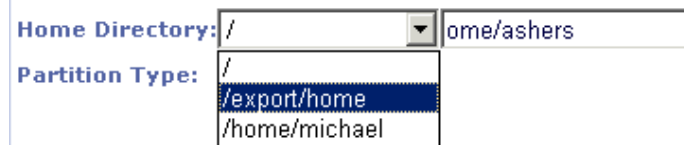
1. Modify one or more of the following fields:
 - **User Name**
 - **User ID**
 - **Password:** Select between a locked or nonlocked password. A locked password is for users who cannot log in as root. It is used for special services that need their own ID. If the password is not locked, then you must enter the **Password** and **Retype Password** values.
 - **Default shell:** Select a default shell environment for the user.
 - **Comment:** More details on the user. You can leave this field blank.

User Name:	<input type="text" value="ron"/>
User ID:	<input type="text" value="1055"/>
<input checked="" type="radio"/> Use Password	<input type="radio"/> Locked Password
Password:	<input type="password" value="*****"/>
Retype Password:	<input type="password" value="*****"/>
Default Shell:	<input type="text" value="/bin/tcsh"/> ▾
Comment:	<input type="text" value="root"/>

Figure 81. Edit User Details Panel

Click the **Next** button.

2. Select a path for the user files by entering it in the **Home Directory** field.



The screenshot shows a form with two fields. The first field is labeled "Home Directory:" and contains the text "/home/ashers". The second field is labeled "Partition Type:" and has a dropdown menu open, showing three options: "/", "/export/home" (which is highlighted), and "/home/michael".

Figure 82. Home Directory

The next table includes the following information:

- **Capacity:** Maximum number of files and disk space that can be stored.
 - **Used:** Occupied files and disk space.
 - **Available:** Total disk space and number of files that are free.
3. Enter the hard and soft limit for both disk space and number of files. A user with a zero quota has an unlimited account. When the user reaches the soft limit, seven days are given to drop back below the soft limit. After that, the system behaves as if the user has exceeded the quota, and no additional files can be stored. A user cannot exceed its hard limit.

Quota	Disk(MB)	Files
Capacity:	98	26104
Used:	63	7228
Available:	0	17876
Hard Limit:	<input type="text" value="0"/>	<input type="text" value="0"/>
Soft Limit:	<input type="text" value="0"/>	<input type="text" value="0"/>

Figure 83. Edit User Quotas

Click **Next**.

4. Select groups that the user will belong to by selecting the group name on the left window and then clicking the >> button. To remove a group, select a group from the right window and click the << button. You can also select the default group that the user will belong to from the Default drop down menu. The default group is the group that will be assigned to the user at log in.

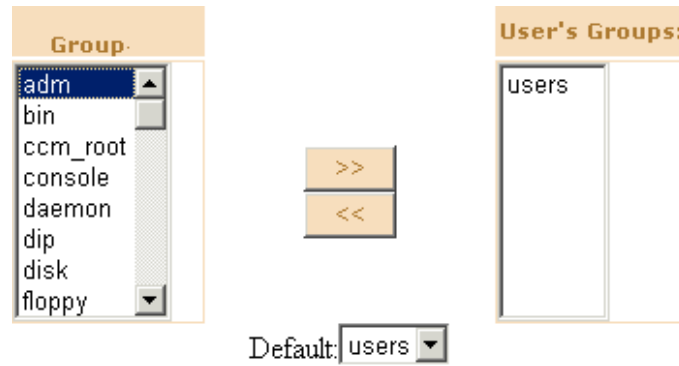


Figure 84. Edit User Group

5. Indicate whether the resulting modifications will change the following:
 - Home directory moves after update.
 - Files' user ID is changed.
 - Files' group ID is changed.

Click **Update** to activate the changes.

Groups

The following tabs provide information about viewing, deleting, and adding groups:

- Groups
- Group Details
- Add Group Details

Groups Tab

The **Groups** tab provides information about the machine's groups. It enables you to view, edit, create and delete groups.

✓	Group Name ▼	Group ID	Users
<input type="checkbox"/>	aaa	2268	0
<input type="checkbox"/>	adm	4	3
<input type="checkbox"/>	bin	2	3
<input type="checkbox"/>	ccm_root	70	2
<input type="checkbox"/>	console	31	0
<input type="checkbox"/>	daemon	12	3
<input type="checkbox"/>	dip	40	0

Figure 85. Groups Panel

To delete a group:

1. Select the check box that is next to the group name you wish to delete.
2. Click **Delete**.

In some cases, additional accounts are displayed on succeeding pages. To view the next page, select the page number from the drop-down menu.



Figure 86. Page Selection

Group Details Tab

The **Group Details** tab includes the following information:

- Group names
- Corresponding group IDs.

Name	User ID
bin	1
daemon	2
root	0

Figure 87. Group Details Panel

Add Group Details Tab

To add a new group, do the following from the Add Group Details panel:

1. In the **Name** field, enter a name for the new group.
2. Click **Auto group ID** or **User defined group ID**:
 - **Auto group ID**: The ID of the group is implemented automatically.
 - **User defined group ID**: The user enters the ID number for the new group.
3. Click **Update**.

Name:

Group ID selection:

Auto group ID

User defined group ID

Group ID:

Figure 88. Add Group Panel Tab

Log Tab

The **Log** tab enables you to use filters to view the specific log files that you are interested in.

To view log files:

1. Select number of lines to display from the drop-down menu.
2. Select the type of log files that you want to view.
3. If applicable, enter a string that should appear in the log files. For example, type reload.
4. Select the **All dates** radio button, or select a specific time period.
5. Click **Refresh**.

Log files that match the filters you have entered will appear on the screen.

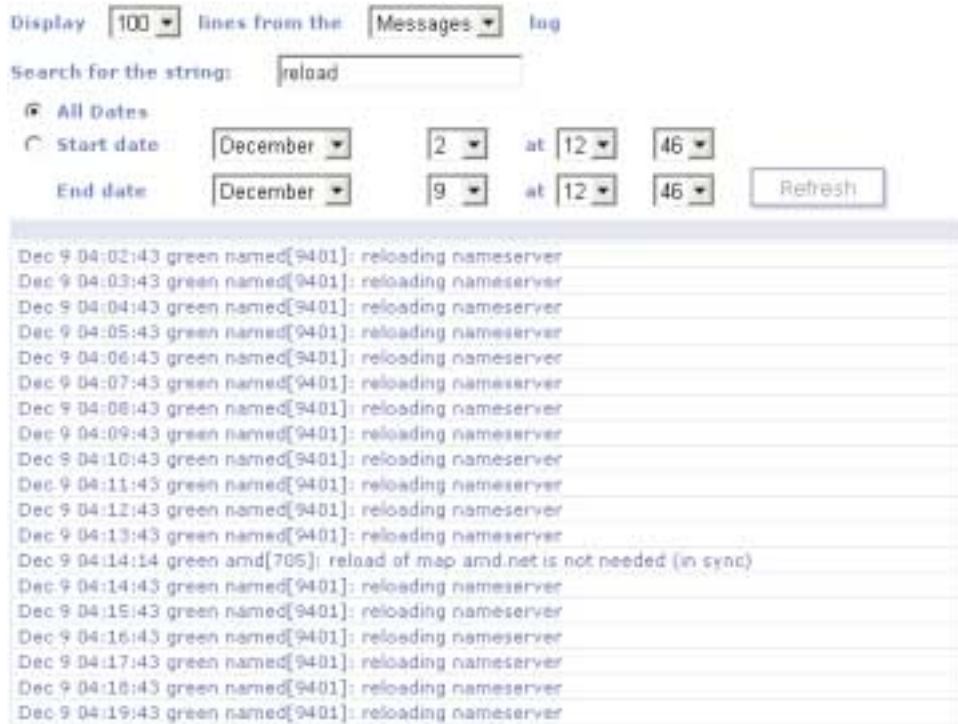


Figure 89. Viewing Log Files

In some cases, additional information is displayed on succeeding pages. To view the next page, select the page number from the drop-down menu.

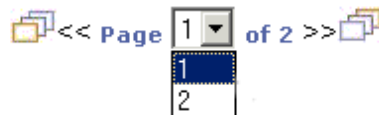


Figure 90. Page Selection

Process Management Tab

The **Process Management** tab enables you to monitor processes running on the server and to execute the following signals:

- SIGHUP
- SIGINT
- SIGQUIT

- SIGKILL
- SIGALRM
- SIGTERM
- SIGUSR1
- SIGUSR2
- SIGSTOP

The **Process Management** tab enables you to use filters to view the specific processes that you are interested in.

To view processes:

1. Select the filter fields that you want to use.
2. Click **Refresh**.

Processes that match the filters you have entered will appear on the screen.

✓	PID	PPID	User	CPU (%)	Virtual Memory (MB)	Resident Memory (MB)	Start Time	Command	Command Line
<input type="checkbox"/>	3	1	root	0	0.12	0.07	Dec06	kupdate	[kupdate]

Figure 91. Filtered Record

In some cases, additional information is displayed on succeeding pages. To view the next page, select the page number from the drop-down menu.



Figure 92. Page Selection

To send a signal to selected processes:

1. Select the check box that is next to the process you wish to send a signal to.
2. Select a signal from the drop-down menu.

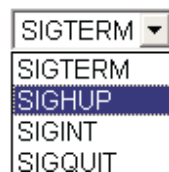


Figure 93. Signal Selection

3. Click **Send**.

Time Settings

The following tabs enable you to set the date, time, time zone, and connect to a Network Time Protocol (NTP):

- Date and Time
- Timezone

Date and Time Tab

Set the date and time of the machine or connect to an NTP server.

To set the date and time:

1. Select the desired date and time from the drop-down menus.

Date			Time	
December ▾	09 ▾	2001 ▾	13 ▾	50 ▾
Month	Day	Year	Hour	Minutes

Figure 94. Setting the Date and Time

2. Click **Update**.

The new time settings are now registered in the server.

To connect to a Network Time Protocol (NTP) server:

1. Enter the server name or IP address.

Enter host name or IP address of NTP server

Figure 95. Identifying the NTP Server

2. Click **Update**.

The server will now retrieve time settings from NTP server.

For more information on NTP, see the following Web site:

<http://www.eecis.udel.edu/~mills/ntp/servers.htm>.

Time Zone Tab

To set a new time zone for the server:

1. Select the appropriate region, country, and city from the drop-down menus.
2. Select the **Apply time settings changes in all VDSs** check box if you want to apply this feature.
3. Click **Update**.

Select Region:	Americas ▾
Select Country:	United States (Americas) ▾
Select City:	New_York ▾

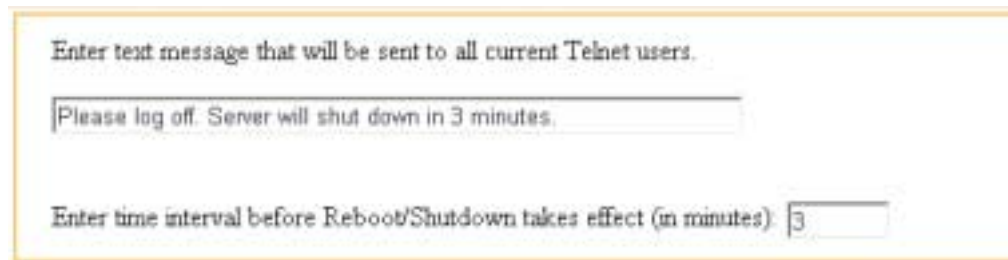
Apply time settings changes in all VDSs

Figure 96. Setting the Time Zone

Restart/Shutdown Tab

The **Restart/Shutdown** tab enables you to define parameters for shutting down or restarting the server:

1. Enter a text message for telnet users.
2. Enter the time interval before which restart or shutdown occurs.



The screenshot shows a configuration window with a yellow border. At the top, it says "Enter text message that will be sent to all current Telnet users." Below this is a text input field containing "Please log off. Server will shut down in 3 minutes." At the bottom, it says "Enter time interval before Reboot/Shutdown takes effect (in minutes):" followed by a numeric input field containing the value "3".

Figure 97. Restarting and Shutting Down the Server

To restart the server, click **Restart Server**. During the restart process, the server and all associated Web sites will be inaccessible.

To shutdown server, click **Shutdown Server**. During the shutdown process, the server and all associated Web sites will be inaccessible.

Auto Update Tab

Download and install new updates and packages to your server using the **Auto Update** tab.

Select one of the following options:

- Download packages
- Install packages
- View download status
- View installed packages



Two buttons are shown: "Next >>" and "Cancel".

Figure 98. Auto Update Panel

1. Select one of the auto update options and click **Next**.
2. Do one of the following:
 - If you have selected to download packages:
 - a. Select to download packages from an IBM or other FTP server. If you have chosen the latter, then enter the path for the FTP server.
 - b. Click **Next**.

IBM FTP Site
 FTP Server
 Path:

Figure 99. Select FTP Server

- c. Select the software packages to download. Before applying any software updates, make a backup of configurations and all other appliance data.
- d. Click **Download**.
- If you have selected to install packages, then do the following:
 - a. Select local repository, CD, or local file system. Enter a path if you have chosen a local file path.
 - b. Select the packages to install from the list and click **Install Update**.
- To view download status:
 - a. Click the **View download status** radio button from the list and click **Next**.
Select one of the following options:
 - Download packages
 - Install packages
 - View download status
 - View installed packages

Figure 100. View Download Status

- b. A table showing the status of all packages being downloaded is displayed. You can stop one or more downloads by selecting the package in the table and clicking the **Stop Download** button.
- To view installed packages:
 - a. Click the **View installed packages** radio button from the list and click **Next**.

Select one of the following options:

- Download packages
- Install packages
- View download status
- View installed packages

Figure 101. Choosing to View Installed Packages

- b. A table showing the status of all downloaded packages is displayed. You can now install each of the downloaded packages.

Chapter 6. Shared ValueApps

Shared ValueApps are software components that you install to give the VDSs on a HostingDirector server additional functionality. To install a shared ValueApp on a specific VDS, you must perform two installations.

1. **Server Side:** Installing the shared ValueApp, an example of which is given in this chapter. For example, installing the ColdFusion® shared ValueApp.
2. **Client Side:** Installing a ValueApp by the same name on the VDS. For example, installing the ColdFusion® ValueApp.

Note: There are no VDS installations for Open SSH and Legato Client ValueApps.

You can browse the available Shared ValueApps in the various categories and select which you want to install.

To install a shared ValueApp on a specific server:

1. Select the Shared ValueApp node in the HostingDirector IAE tree.

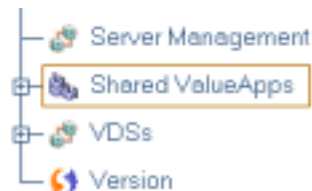


Figure 102. Selecting the Shared ValueApp Node

2. Select one of the categories on the **Details** pane. A list of all available shared ValueApps will appear on details pane.
3. Select the shared ValueApp you wish to install and click **Install**.

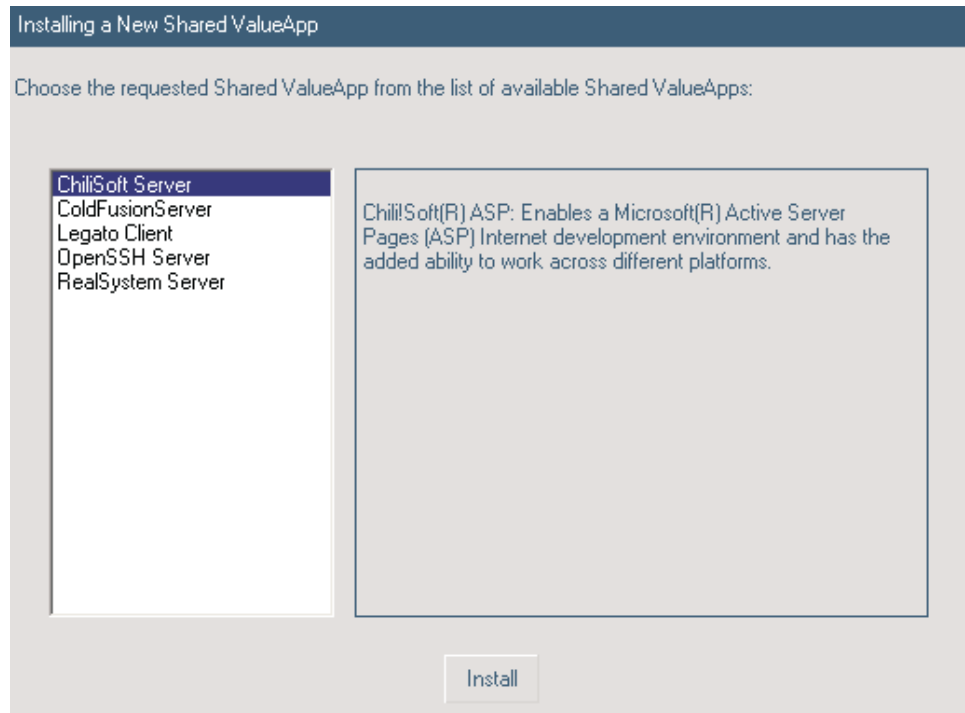


Figure 103. Installing Shared ValueApp

Depending on the type of shared ValueApp you are installing, further details may be required. Click **Finish** when you have entered all of the required details. The newly installed shared ValueApp appears in the tree structure under the appropriate shared ValueApp category.

Note: For the Legato Client, the backup utility cannot be used to restore a virtual user or any other applications that have been deleted or renamed after the backup.

Chapter 7. The VDSs

A server is composed of one or more VDSs. A VDS provides the functionality of a dedicated server in a shared, virtual hosting environment. By adding a VDS, you create a server for one of your clients. A wizard guides you through setting account details such as IP and domain name, and capabilities and quotas for the VDS. Each xSeries Hosting Appliance can have up to 200 VDSs.

The Virtual Dedicated Server

HostingDirector enables you to create up to 1000 VDSs on a single server, provided that these VDSs are name-based (name-based VDSs share their IP address with other VDSs). Both types of VDSs can be stored on the same machine.



Figure 104. Virtual Dedicated Server

Firewall-like capabilities in the VDS allow or deny access of specific IPs. Every VDS allocates a specific number of MB, files, processes, and accounts for its services (HTTP, FTP, POP, SMTP). All VDSs can be controlled through one Control panel, facilitating contact to any individual VDS.

Types of VDSs

There are two types of VDS:

- **Name-based VDS:** A VDS whose IP address is shared with other VDSs (the other VDSs are also name-based VDSs). The name-based VDS has the benefits of a regular VDS. Some of these benefits include:
 - Robust security and extensive permission-based model
 - Simple creation of name-based VDS through the GUI
 - Easy management through an intuitive, easy to use, wizard-based control panel
 - Instant creation of HTTP, email and FTP accounts
 - Point and click installation of popular pre-tested applications
 - Exceptional multi-level reporting facility enables precise, usage-based billing, accurate allocation of files and disk-space quotas for each VDS, and extensive monitoring capabilities

- The **IP based** VDS is also termed VDS. This is a VDS that has its own proprietary IP address. An IP based VDS has the following unique features:
 - A number of ValueApps applications require a dedicated IP address. These applications include:
 - Counter
 - Darwin Streaming Server
 - IMP
 - Open SSH
 - Open SSL
 - VeriSign
 - Max processes limit is not supported in Named Based VDSs.
 - A name-based VDS owner cannot administrate subdomains under the account.
 - FTP and POP user names in named based VDSs are limited to the following prolonged format: user_name@domain_name.top_level_domain. For example, jane@sphera.com instead of jane.

A HostingDirector server can store both name-based VDSs and regular VDSs. This hybrid capability enables WHPs to provision these unique executions:

- Changing the shared IP address of a name-based VDS on the fly.
- Scaling from a name-based VDS to a regular VDS.
- Restricting the number of name-based VDSs allocated for each reseller.

Adding a New VDS

You can add a new VDS to a server quickly and easily. You simply select a server on the tree structure, add a VDS to the server, and configure all required VDS parameters. The following instructions are for adding an IP-based VDS or a name based VDS.

1. Select the VDS node in the HostingDirector IAE.
2. Click the **Add** button on the toolbar. The Add New Virtual Dedicated Server window is displayed.
3. In the **VDS User Name** field type the name of the account. In the next field type the description of the domain. Click **Next**.
4. In the **New Password** field, type a password for this account. Retype the password and click **Next**.

Note: Passwords must be 6 to 8 characters long; only printable ASCII characters are valid.
5. Select a method of IP allocation from the following options (this will also define the type of VDS that you will create):

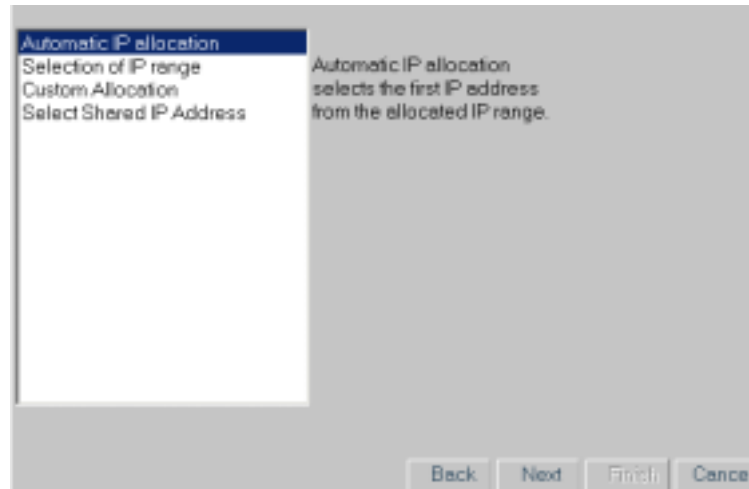


Figure 105. IP Allocation

- **Automatic IP allocation:** Select this option for HostingDirector to automatically select the first available IP address from the available ranges. Selecting this option creates a VDS with a proprietary IP address. You must create at least one IP range for this option to work (IP ranges are created on the Server Management node, in the IP Management category.)
- **Selection of IP range:** Select this option to assign the VDS with the first available IP address from your chosen range. You must create at least one IP range for this option to work (IP ranges are created on the IP Management node.) Selecting this option creates a VDS with a proprietary IP address.
- **Custom Allocation:** Select this option to configure all IP address parameters manually. Selecting this option creates a VDS with a proprietary IP address. You will need to input the following details when selecting this option:
 - In the **Physical Interfaces** field, select a physical interface for this IP address from the drop-down list. HostingDirector IAE automatically determines the physical interfaces available in your system.
 - In the **IP address** field, type a unique IP address for this VDS.
 - In the **Network mask** field, type a network mask for this IP address. The default value is 255.0.0.0.
 - In the **Broadcast address** field, type a broadcast IP address. The default value is automatically created based on the IP address and network mask.
 - In the **Support Multicasting** field, select the check box to enable multicasting support. By default, multicasting support is enabled.
 - In the **Auto raise IP** field, select the check box to enable automatic IP raising. By default, automatic IP raising is enabled.

Physical interfaces: eth0

IP address: []

Network mask: 255.0.0.0

Broadcast address: []

Support multicasting:

Auto raise IP:

Figure 106. Custom Allocation

- **Select Shared IP address:** A shared IP address allocates the IP to more than one VDS and creates a name-based VDS. You must create at least one shared IP for this option to work. (Shared IP addresses are created on the Server Management node, in the IP management category.)

Click **Next**.

6. The next screen displays the following fields:

- **Domain:** Domain name that is automatically entered. This field can be modified.
- **DNS Enable:** Select this check box to enable communication with this VDS through its domain name.
- **DNS IP:** DNS IP address.
- **In the VDS Enable:** Select this check box if you want the VDS to be activated as soon as it is created.

Click **Next**.

Domain: tebro123.com

DNS enable:

DNS IP: 172.16.8.8

VDS enable:

Figure 107. VDS Settings

7. In the next screen, you choose a partition and home directory for the VDS.
 - Select a partition from the **Partition Name** menu or use the default value.
 - The **Partition Type** field indicates the type of partition the VDS is on. This field value cannot be edited.
 - In the **VDS Directory** field enter the home directory for the VDS or use the default value.

Click **Next**.

Select the partition for VDS account and enter a path for the base directory.

Partition Name:

Partition Type:

VDS Directory:

Figure 108. Allocating Partitions

8. In the following screen, the initial three fields display the following information:
 - **Partition:** Indicates the partition that the VDS will be created on.
 - **Reserved Space:** Space already reserved for other VDSs and resellers.
 - **Available:** Space available for creating VDS.

In the next two fields, enter the space in megabytes (MB) to allocate for this VDS. When the VDS reaches the soft limit, seven days are given to drop back below the soft limit. After that, the system behaves as if the VDS has exceeded the MB quota, and no additional files can be stored. A VDS cannot exceed its hard limit. Click **Next**.

Enter hard and soft limit disk quota. When the VDS owner reaches the soft limit, 7 days are given to drop back below the soft limit. After that, the system behaves as if the VDS owner has exceeded the disk quota, and no additional files can be stored. VDS owner can never exceed the hard limit.

Partition:

Reserved Space(MB):

Available(MB):

Hard Limit(MB):

Soft Limit(MB):

Figure 109. Configuring the Disk Quota

9. In the next screen you define the maximum number of files to be in this VDS. There is also a soft limit to this parameter. The initial three fields display the following information:
 - **Partition:** Indicates the partition that this VDS will be created on.
 - **Reserved Space:** Number of files already reserved for other VDSs and resellers.
 - **Available:** Number of files available for creating this VDS.

In the next two fields, enter the number of files to allocate for this VDS. When the VDS reaches the soft limit, seven days are given to drop back below the soft limit. After that, the system behaves as if the VDS has exceeded the number of files quota, and no additional files can be stored. A VDS cannot exceed its hard limit. Enter the hard and soft limits of this VDS and click **Next**.

Enter hard and soft limit files quota. When the VDS owner reaches the soft limit, 7 days are given to drop back below the soft limit. After that, the system behaves as if the VDS owner has exceeded the files quota, and no additional files can be stored. VDS owner can never exceed the hard limit.

Partition:	/export/home
Reserved Space:	1000
Available:	1654376
Hard Limit:	5000
Soft Limit:	5000

Back Next Finish Cancel

Figure 110. Configuring the File Quota

- In the next two fields, enter the bandwidth quota for this VDS. When the VDS exceeds its soft limit, a mail notification is sent to the VDS owner, and server administrator. If you selected the **Block when hard quota reached** check box, then the VDS will no longer receive bandwidth when it exceeds the hard limit. VDSs are blocked until the next counters are reset manually or by schedule. If check box is clear, an email message is sent to the VDS owner and server administrator when the VDS exceeds the hard limit.

Enter the Bandwidth hard limit for the VDS (in MB)

Soft Limit(MB):	7
Hard Limit(MB):	8
Block when hard quota reached:	<input type="checkbox"/>

Back Next Finish Cancel

Figure 111. Configuring the Bandwidth Quota

- In the next two screens enter the details of the VDS account (address, contacts, and so on.). If you want the VDS user to receive alerts on quota use, select the **Quota Alerts Enabled** check box. Click **Next**.

12. You are now prompted to the HTTP parameters of the VDS:
 - Select **Enable HTTP** to run HTTP communication with the VDS.
 - In the **Max Account** field enter the maximum domain names that will be virtually hosted under this domain.
 - Select **Remote access** to enable telnet and SSH.



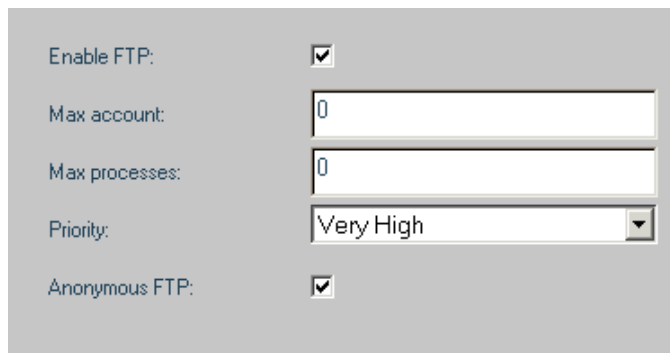
Enable HTTP:

Max account:

Remote access:

Figure 112. HTTP Parameters

13. Assign the FTP parameters of this site (VDS).
 - Select **Enable FTP** to run FTP communication with the VDS.
 - In **Max Account** enter the maximum number of FTP accounts under this VDS (Use 0 for an unlimited quota).
 - Select **Anonymous FTP** to enable anonymous FTP.



Enable FTP:

Max account:

Max processes:

Priority:

Anonymous FTP:

Figure 113. FTP Parameters

14. The next screen has only one field. Define whether the VDS will have email accounts or not. If you **enabled** the email accounts then you will be prompted with two more screens that will define this service.
 - In the first screen, define the POP Service (incoming email). Select the **Enable POP** check box to run POP services on this VDS. In the next two fields define the maximum number of accounts and maximum number of POP processes in this VDS. Finally, select the priority of the POP processes in relation to other accounts.



Enable POP:

Max account:

Max processes:

Priority:

Figure 114. Email Configuration

- In the second screen, define the SMTP service (outgoing email). Select the **Enable SMTP** check box to run SMTP services on the VDS. In the next two fields define the maximum number of accounts and maximum number of SMTP processes in this VDS. The **POP before SMTP** check box refers to a method for authenticating users before they send mail through a mail server. This method does not apply to local email messages (email messages to and from local email accounts). If this feature is enabled, then the user must check for incoming email messages before sending email messages. Finally, select the priority of the SMTP processes in relation to other accounts.
15. The next screens show all the definitions that were previously entered. Click **Next** after reviewing each screen.

You have created the VDS. The new VDS is visible in the HostingDirector IAE tree.

VDS GUI Login

You can log in to a specific GUI of a VDS and use it in the same way that the VDS owner does.

To log in to a VDS GUI:

1. On the HostingDirector IAE, click on the node of the VDS you would like to log in to.

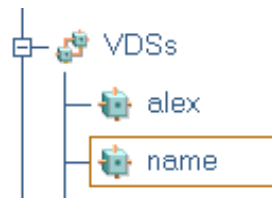


Figure 115. Select VDS

2. Proceed to the **General** tab.
3. Click the **Login to VDS GUI** button. You should now be in the GUI of the VDS.

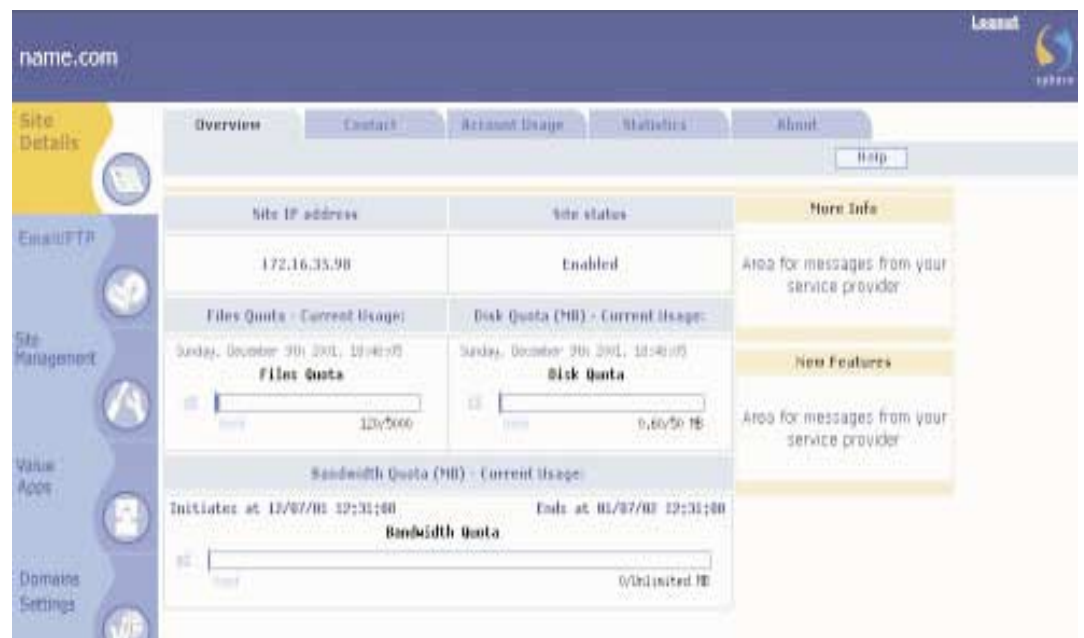


Figure 116. VDS GUI

4. To return to the server GUI, click the **Logout** button of the VDS GUI.

Changing the IP Address of a Name-based VDS

To change the IP address of a name-based VDS:

1. Click the + button on the VDSs node.
2. Click on the name-based VDS whose shared IP address you wish to modify.



Figure 117. VDS Selection

3. Click the **Edit** button on toolbar.
4. Click the **IP** tab on the Details pane.

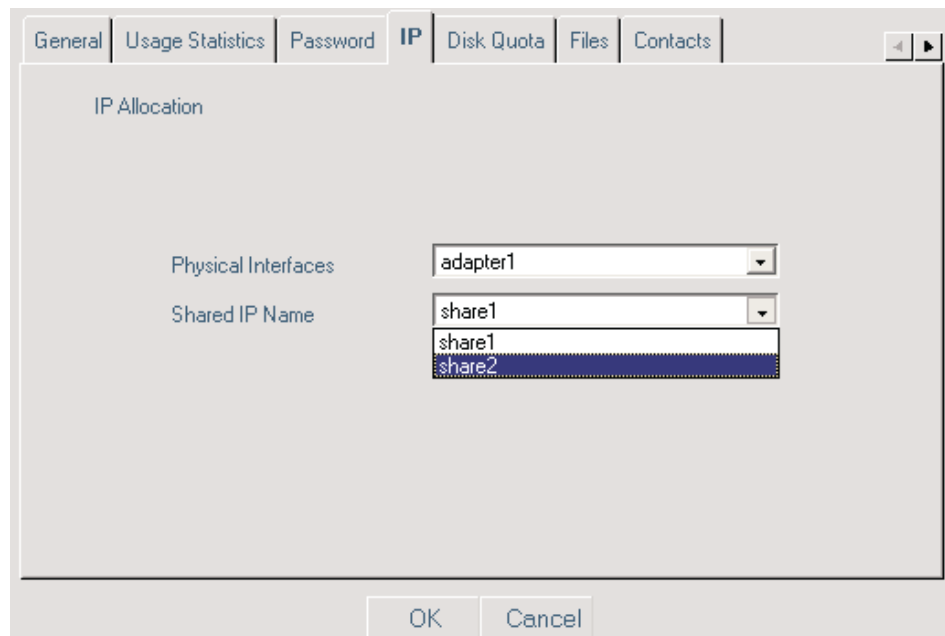


Figure 118. Shared IP Name

5. Select the shared IP name from the **Shared IP Name** drop-down menu.
6. Click **OK**.

Scaling a Name-based VDS

Scaling or upgrading from a name-based VDS to a VDS with a proprietary IP address can be performed without shutting down the server or the VDS. To scale a name-based VDS:

1. Click the + button on the VDSs node.
2. Click the name-based VDS you want to scale (the node of name-based VDS node is round).

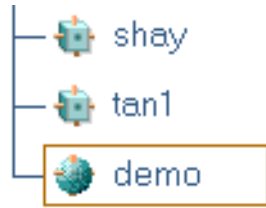


Figure 119. Name-based VDS Node

3. Click the **Scale** button on the toolbar.
4. Select a method of IP allocation from the following options:
 - **Automatic IP allocation:** Select this option for HostingDirector to automatically select the first available IP address from the available ranges. You must create at least one IP range for this option to work. IP ranges are created in the IP Management node of the tree structure. For more information, see “Add New Range Tab” on page 36.
 - **Selection of IP ranges:** Select this option to assign the VDS with the first available IP address from your chosen range. You must create at least one IP range for this option to work. IP ranges are created in the IP Management node of the tree structure. For more information, see “Add New Range Tab” on page 36.
 - **Custom IP allocation:** Select this option to configure all IP address parameters manually.

For this example, choose **Automatic IP allocation**.

5. Select an adapter from the list of available adapters available on the target server or use the default value.

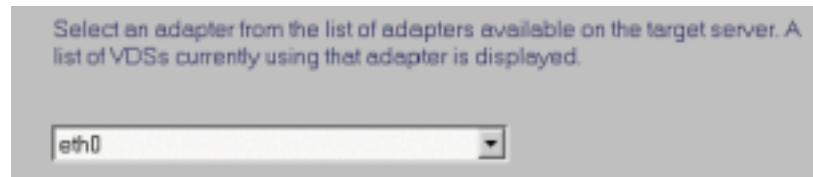


Figure 120. Adapter Selection

6. In the final screen, click **Finish** to complete this process.

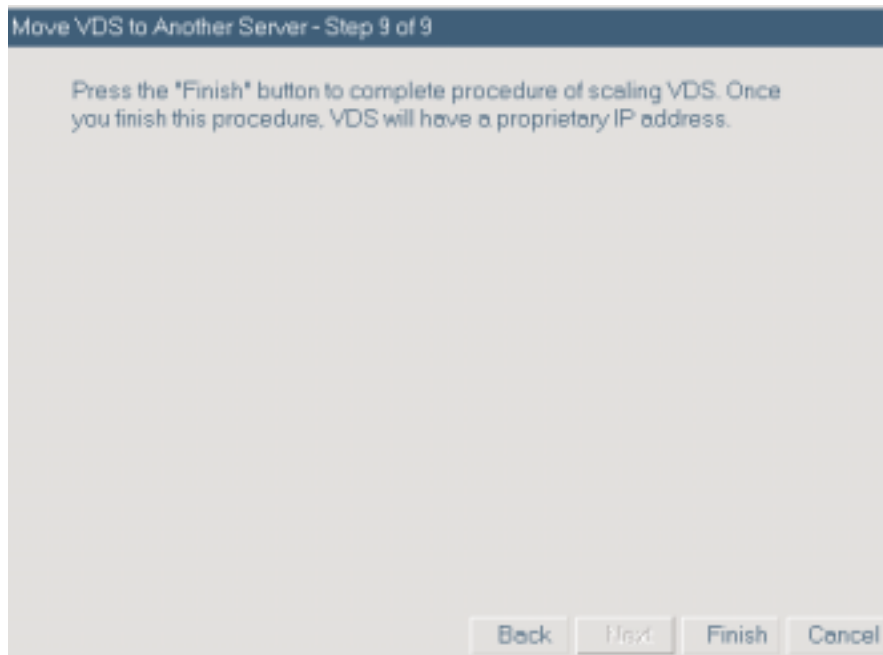


Figure 121. VDS Scaling Completion Screen

The VDS has now been scaled to an IP based VDS. The shape of its node has changed, as shown in Figure 122.



Figure 122. IP VDS Node

Editing VDS Parameters

To edit VDS parameters such as passwords, disk quota, or IP addresses, do the following:

1. On the HostingDirector IAE tree, click on the node of the VDS that you wish to edit.
2. Click the **Edit** button on toolbar.
3. Click on the tab whose data you wish to edit. For example, if you wish to change the disk setting, click the **Disk Settings** tab.
4. Enter new data in the fields you wish to edit and click **OK**.

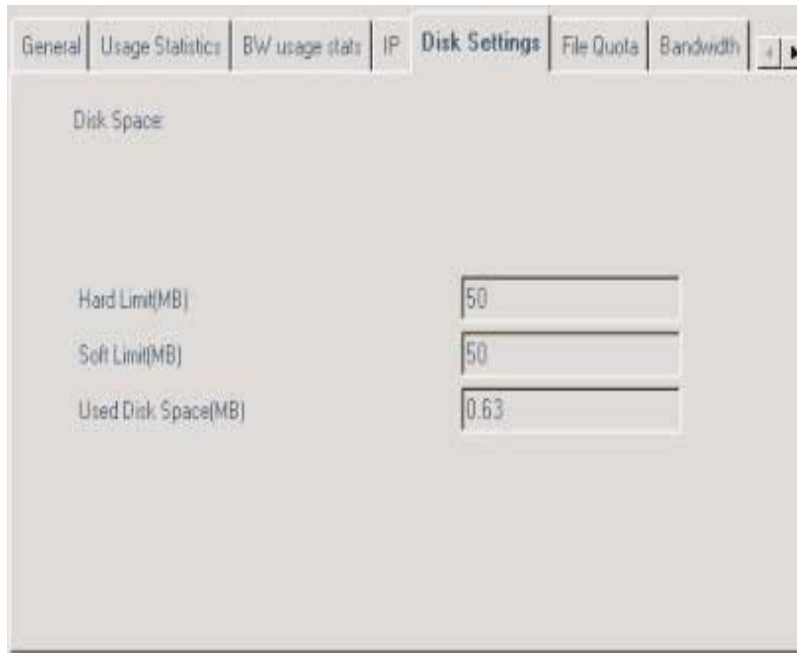


Figure 123. Disk Settings Tab

Fields in this panel were originally defined when adding the VDS. For more information, see. “Adding a New VDS” on page 58.

The Watchdog Option

HostingDirector enables you to use the Watchdog option on any VDS. When enabled, the Watchdog checks every 30 seconds to see whether the site is up. If the site is down Watchdog restarts the HTTP process for the VDS. To disable this option, click on a node of a specific VDS and click the **HTTP** tab. Click the **Stop Watchdog** button.

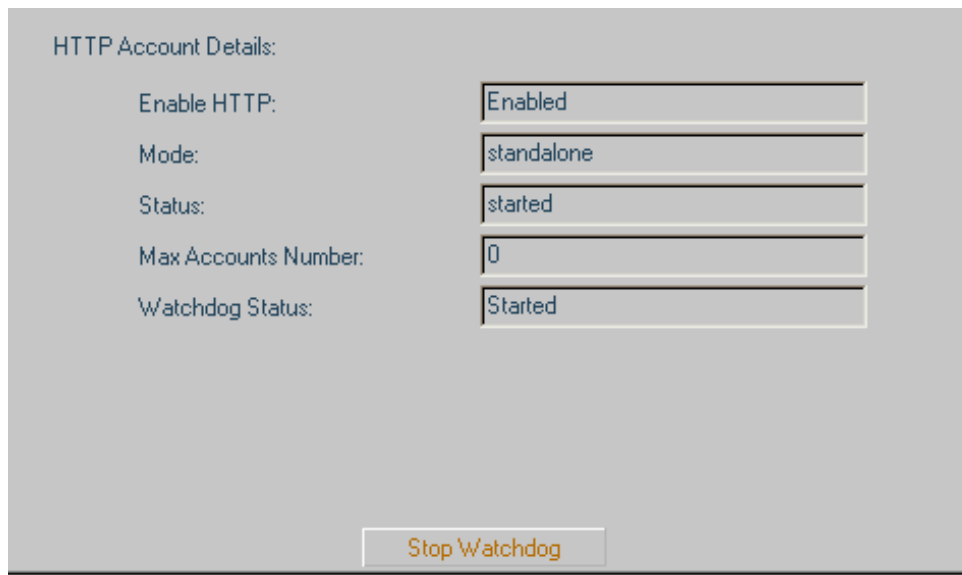


Figure 124. HTTP Account Details Panel - Watchdog Status

The Watchdog Status is now set to Stopped.



Figure 125. Watchdog Status

Anonymous FTP

An anonymous FTP account can be activated only on a VDS with a proprietary IP address. You enable or disable this option when creating a new VDS.

After you have created a VDS, you can disable or enable the anonymous FTP of a specific VDS by doing the following:

1. Click the node of the specific VDS in the HostingDirector IAE tree.
2. Click **Edit**.
3. Click the **FTP** tab.
4. Select or clear the **Anonymous FTP** check box.

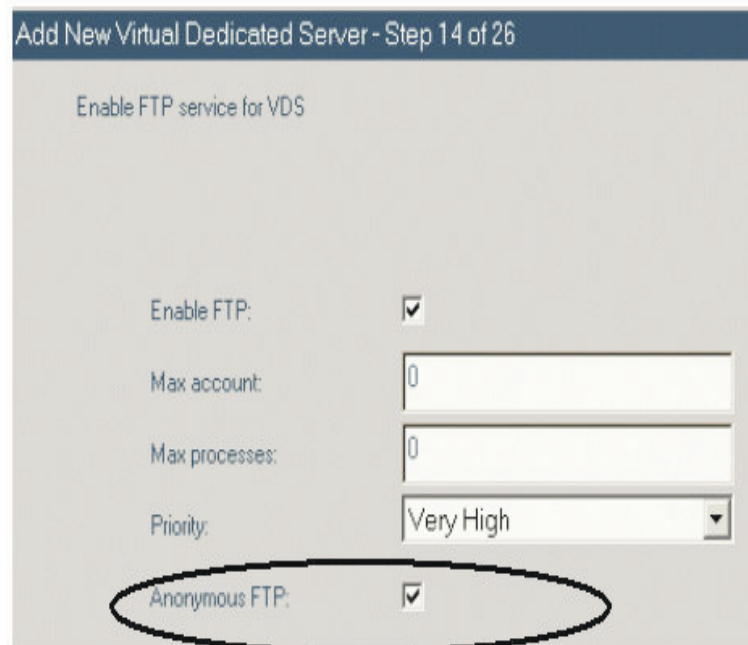


Figure 126. Enable Anonymous FTP

5. Click **OK**.

To define the properties for anonymous FTP, you must login to the VDS GUI (See "VDS GUI Login" on page 64 for more details).

After entering the VDS GUI, click the **Anonymous FTP** tab of the **Email/FTP** category. For more information, refer to the VDS GUI help files.



Figure 127. Anonymous FTP Tab

Deleting a VDS

To remove a VDS from a server do the following:

1. In the HostingDirector IAE tree click the node of the VDS that you wish to delete.

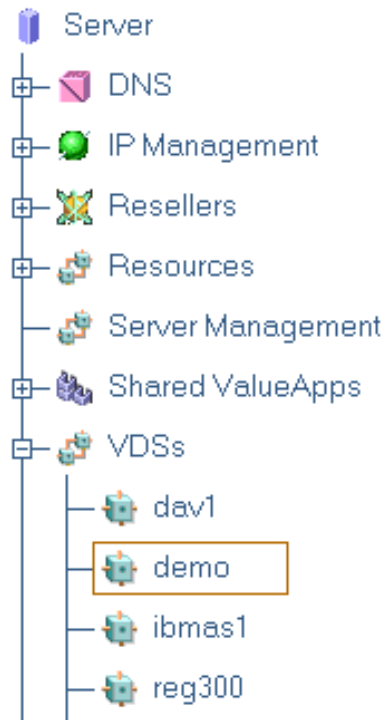


Figure 128. Select VDS

2. Click the **Delete** button on toolbar.
3. You will be prompted to confirm your last action.

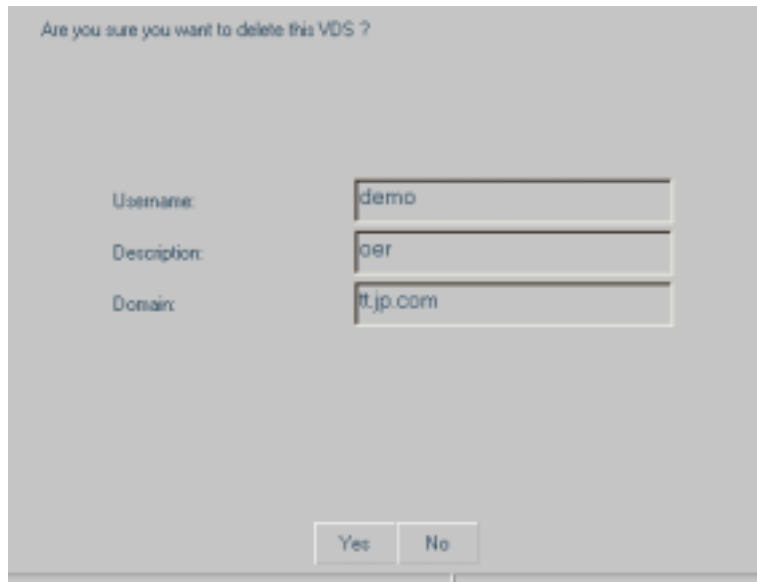


Figure 129. VDS Deletion Confirmation

4. Click **Yes**.

Adding Email and FTP Accounts

Email and FTP accounts are an integral part of any serious Web site. With HostingDirector, defining such accounts is a simple and secure process. You create email and FTP accounts for a specific VDS using the VDS GUI.

To add email accounts, do the following:

1. From the HostingDirector IAE tree, click the node of the VDS that you wish to add an email or FTP account to.
2. Log in to the VDS (See “VDS GUI Login” on page 64 for more information).
3. Click the **Accounts** tab of the **Email/FTP** category.



Figure 130. Accounts Tab

For more information, refer to the help files of the VDS GUI.

Configuring The Email Account On The Client

This section demonstrates how to configure an email account on a client for a VDS with a proprietary IP address. For instructions on how to configure an email account on a client for a name-based VDS refer to “Configuring a Named Based VDS” on page 76. When you have finished adding the email account on the VDS, configure this account on the designated client. The example in this section will demonstrate the configuration through the email application Microsoft Outlook2000.

1. In the main menu of Outlook2000, click **Tools**.
2. Click the **Services** tab in the Services window.
3. Select **Internet E-mail** from the list and click **Add**.

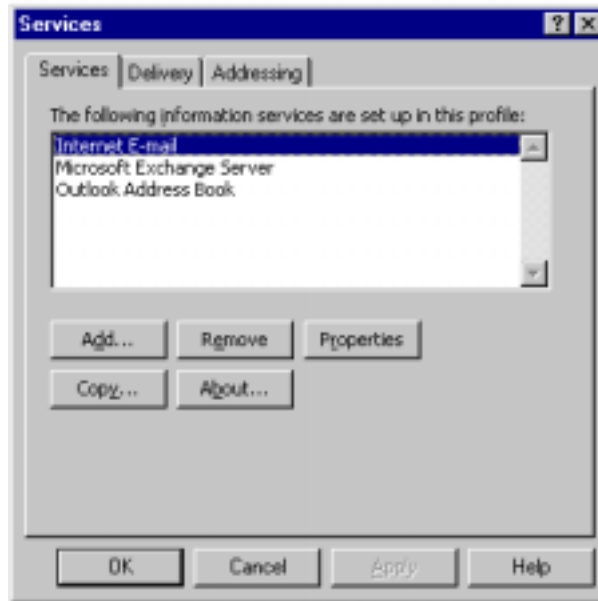


Figure 131. Add Services Window

4. Click **OK** on the Add Service to Profile window.

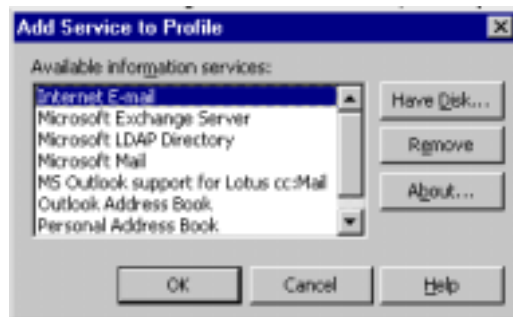


Figure 132. Add Service to Profile Window

5. The Mail Account Properties window opens, in which you will enter all configuration details of the email account. Click the **General** tab.

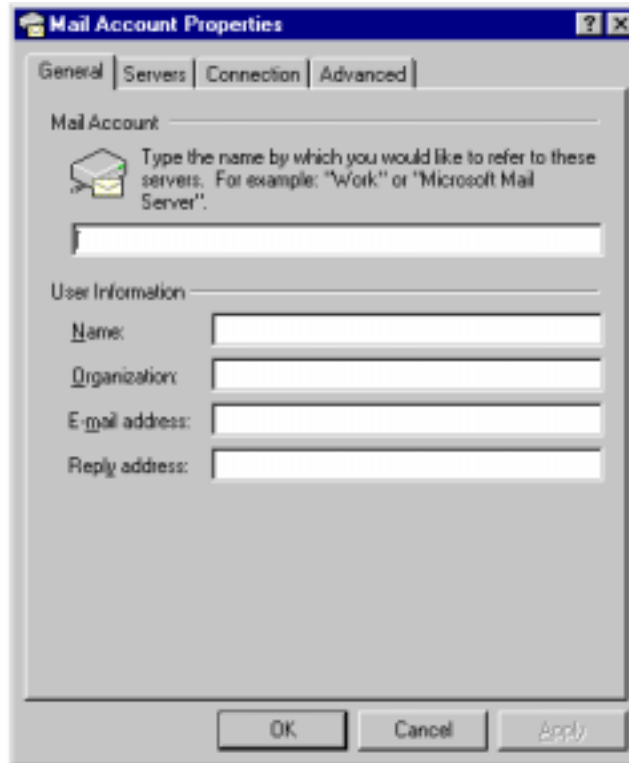


Figure 133. Mail Account Properties Window

6. Type the name of the person that has the email account in the **Name** field.

Name:

Figure 134. Account Name

7. Type the name of the organization that owns this email account in the **Organization** field.

Organization:

Figure 135. Account Organization

8. Type the complete email address in the **E-mail address** field.

E-mail address:

Figure 136. Email Address

- Leave the **Reply address** field blank.
9. Click the **Servers** tab.



Figure 137. Mail Account Properties

10. Type the name of the POP server in the **Incoming mail** field. The name of this server is *pop.vdsname.com*. For example, if the name of the VDS is sphaera, then type *pop.sphaera.com*.

Incoming mail (POP3):

Figure 138. Incoming Mail

11. Type the name of the SMTP server in the **Outgoing mail** field. The name of this server is *smtp.vdsname.com*. For example, if the name of the VDS is sphaera, then type *smtp.sphaera.com*.

Outgoing mail (SMTP):

Figure 139. Outgoing Mail

12. Type the name of the account in the **Account name** field.

Account name:

Figure 140. Account Name

13. In the **Password** field, type the password that you have defined when adding this email account on the VDS.

Password:

Figure 141. Password

14. Click **OK** to confirm this configuration.

Configuring a Named Based VDS

The following instructions are for configuring the email account on a client for a named-based VDS. These instructions use the email application Microsoft Outlook Express 5.5.

1. In the main menu, click **Tools** and then select **Accounts**.
2. Add a new account. In the first screen, type the name of the user in the **Display name** field. Click **Next**.



Figure 142. Display Name

3. Enter the email address of the user in the **Email address** field. Click **Next**.

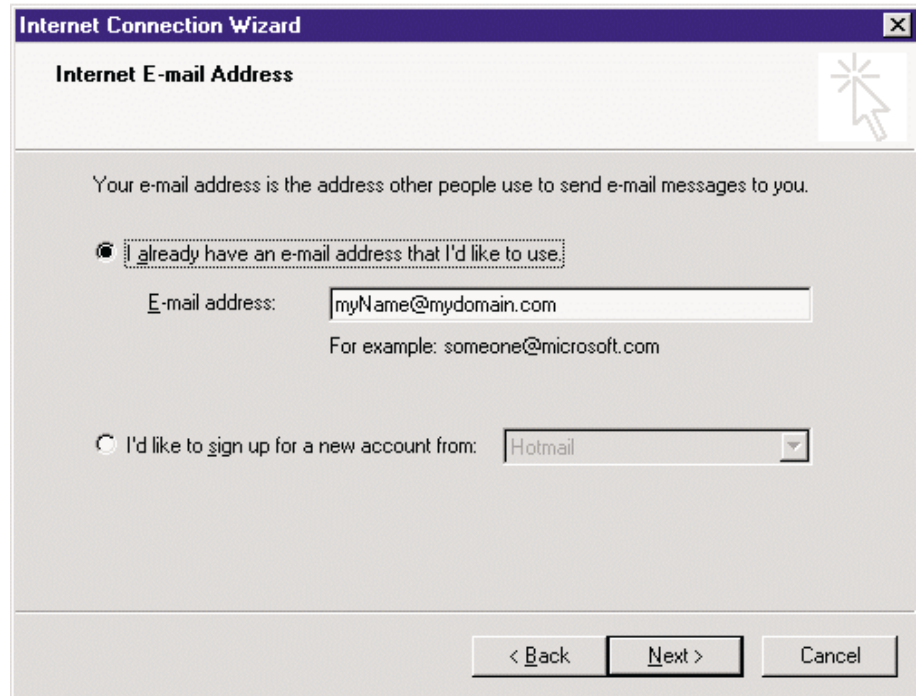


Figure 143. E-mail Address

4. Type the name of the POP server in the **Incoming mail server** field. The name of this server is *vdsname.com*. Type the name of the SMTP server in the **Outgoing mail server** field. The name of this server is *vdsname.com*. Click **Next**.

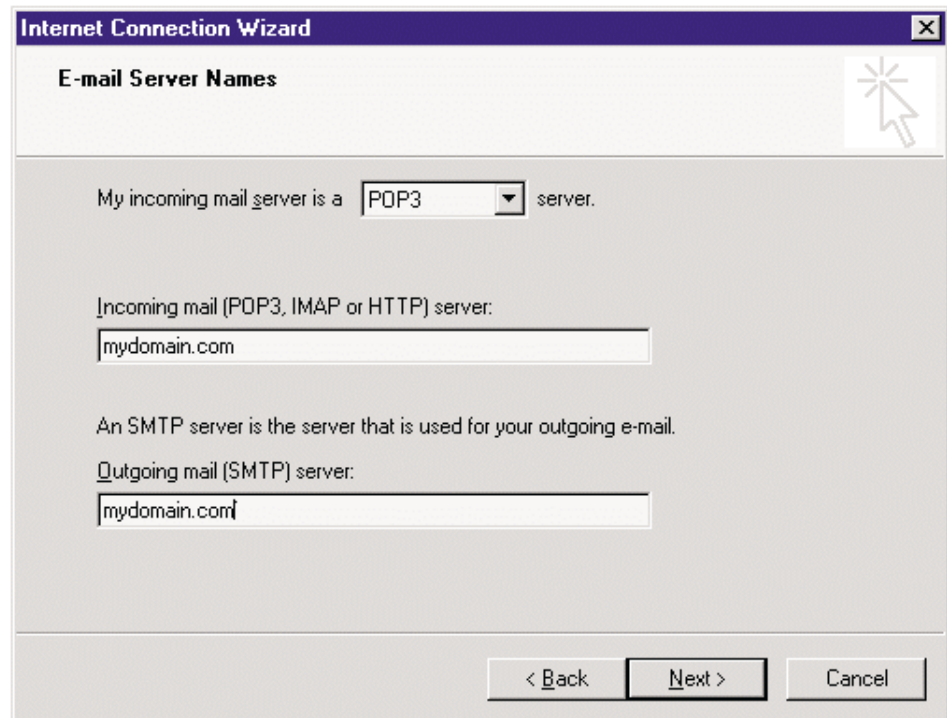


Figure 144. E-mail Server Names

- In the **Account name** field type the full name of the account. The input mask uses the % sign and not the @ sign: username%domain_name. suffix. Type the password of this account in the **Password** field and click **Next**.

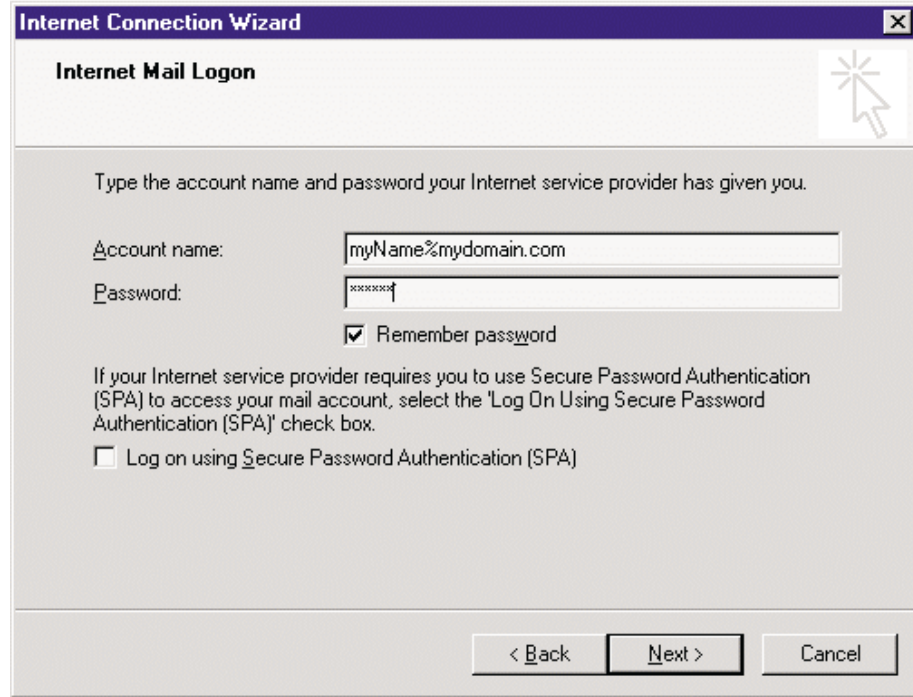


Figure 145. Internet Mail Logon

- Click **Finish** in the last window.

Adding a VDS on NFS

If you choose to add a VDS on an NFS (Network File System) then you need to execute a quota script. This quota script enables support of the quota on NFS.

The following section describes the methods and parameters of the quota script.

Quota Script Requirements

The quota script has five operating methods. The first parameter sets the method type (set quota, sync quota, and so on). The subsequent parameters depend on the first parameter that was set.

Methods and parameters:

quotaOn_user

Start quota on file system.

The script return value:	0	Successful completion
	-1	An error occurred
Parameters	-h	Filter host name
	-rd	Remote directory

Example: /usr/local/bin/Sphera_quota.sh quotaOn_user -h Fsys1 -rd /export/share

checkQuota_user

Rebuild quota database.

The script return value:	0	Successful completion
	-1	An error occurred
Parameters	-h	Filter host name
	-rd	Remote directory

Example: /usr/local/bin/Sphera_quota.sh checkQuota_user -h Fsys1 -rd /export/share

setQuota_user

Set a user's quota limits.

The script return value:	0	Successful completion
	-1	An error occurred
Parameters	-h	Filter host name
	-rd	Remote directory
	-u	User ID
	-g	User GID
	-n	User name
	-bh	Block hard limit (in local block size)
	-bs	Block soft limit (in local block size)
	-fh	File hard limit
	-fs	File soft limit

Note: In some systems a user must exist in the filer. If this is a requirement of your system, add the user by using this method in the script.

Example: /usr/local/bin/Sphera_quota.sh setQuota_user -h Fsys1 -rd /export/share -u 2001 -n vds1 -g 101 -bh 1000 -bs 900 -fh 1000 -fs 900

delQuota_user

Delete the quota record.

The script return value:	0	Successful completion
	-1	An error occurred

Parameters	-h	Filter host name
	-rd	Remote directory
	-u	User ID
	-n	User name
	-fh	File hard limit
	-fs	File soft limit

Example: /usr/local/bin/Sphera_quota.sh delQuota_user -h Fsys1 -rd /export/share -u 2001 -n vds1

check_user

Verify whether the user already exists on filer.

The script return value:	0	Successful completion
	1	UID exists on filer
	2	Name exists on filer
	-1	An error occurred
Parameters	-h	Filter host name
	-rd	Remote directory
	-u	User ID
	-n	User name

Example: /usr/local/bin/Sphera_quota.sh checkUser --h Fsys1 -rd /export/share -u 2001 -n vds1

The user can set configurable parameters. These parameters are added to the command sent to the quota script.

Usage: <quota script> <method> [<user param 1><user param 2> ...] -h <filer host> -rd <file system path> -u <uid> ...

Aliases

Aliases are shortcuts used to redirect email messages. You can define four types of aliases:

- **Email alias:** An email alias redirects email messages to a specified address.
- **Distribution list alias:** Enables you to send an email message to one address, and have it forwarded to a group of email addresses.
- **Command Line Alias:** Forwards mail to an application for processing. For example, you might want to add users to a mailing list so they can be sent updated information about your product.
- **Catch All:** Forwards all unresolved email messages to specific email address. For example, an email message that has been sent by error to jjjoe@vds_domain_name.com instead of joe@vds_domain_name.com is sent to the lost mail address.

To add an alias, log in to the VDS GUI (See “VDS GUI Login” on page 64) and click the **Aliases** tab of the **Email/FTP** category.



Figure 146. Aliases Tab

ValueApps

ValueApps are software components that give the VDS additional functionality. All VDSs are added using the VDS GUI (see “VDS GUI Login” on page 64) through the ValueApps category.

The following types of ValueApps are available in HostingDirector:

- Web Applications
- Web Development
- Streaming
- Collaboration
- E-Commerce
- Database

Web Applications

WebPasswords Create, delete and manage password-based Web directories. Useful in controlling Web directories for privileged customers and employees.

Urchin Urchin 3 is a high-performance Web site and Web server visitor analysis and reporting system that tells you everything you need to know about the traffic to your site and server. For more information, go to <http://www.urchin.com/>.

HitMatic Counter HitMatic maintains detailed counts of hits to each page, day and month for a year. It also supports tracking groups of pages. Requires the PERL ValueApp. You can install only one instance of this ValueApp.

Site Search Site Search enables you to integrate a keyword search program into your site so that users can search for specific text and HTML documents. It returns

a list of file names that matches the specified keyword(s). Requires mod_PHP ValueApp. You can install only one instance of this ValueApp.

Banner Management ValueApp phpAdsNew is a banner management and tracking system written in PHP. Currently it can manage multiple banners (any size) per client, view daily, overall, and summary statistics, and send statistics to clients using email. It stores all the data in a MySQL database. Requires the mod_PHP and MySQL ValueApps. You can install only one instance of this ValueApp. For more information, go to <http://VDS-IP/plugins/phpAdsNew/Documentation.html>.

Apache Error Message Display a response of your choice as an alternative to conventional error messages such as Error 404. Enables you to display a custom text message or Web page. For more information, go to <http://www.apache.org/>.

Webalizer Analyzes web server data to produce Web site usage reports. For example, the Webalizer can create a chart showing the countries from which your site is accessed. Charts can be viewed with a standard web browser. For more information, go to <http://www.webalizer.com/>.

Web Development

Java Runtime Environment Install Solaris Java runtime environment (JRE) 1.1.8. The JRE is the minimum standard Java platform for running Java programs. It contains the Java Virtual Machine (JVM), Java Core Classes, and supporting files. For more information, go to <http://java.sun.com/products/>.

FrontPage Extensions A set of programs on a Web server that enables users to author, administer, and browse Microsoft FrontPage® extended Web sites, and to add enhanced functionality such as hit counters, search forms, and discussion webs to their sites. For more information, go to <http://www.microsoft.com/frontpage/>.

PERL Script language of choice for Web developers. Libraries for PERL exist for several platforms and PERL's speed and flexibility make it well suited for form processing and on-the-fly web page creation. For more information, go to <http://www.perl.com/pub>.

Python A popular server-side scripting language. Python is used in many situations where dynamism, ease of use, power, and flexibility are required. For more information, go to <http://www.python.org/>.

Mod_PERL This technology gives enhanced speed to the PERL scripts by combining PERL programming language and the power of the Apache HTTP server. Mod_PERL enables you to write Apache modules entirely in PERL. Requires PERL ValueApp. For more information, go to <http://perl.apache.org/>.

Mod_PHP A technology combining the power of PHP scripts and the Apache HTTP server. Enables the writing of Apache pages entirely in PHP, thus enabling PHP code to be inserted directly alongside HTML. For more information, go to <http://www.php.net/>.

Chili!Soft Enables a Microsoft Active Server Pages (ASP) Internet development environment and has the added ability to work across different platforms. For more information, go to <http://www.chilisoft.com/>.

ColdFusion The ColdFusion ValueApp consists of the ColdFusion 4.5.1 Web application server and provides you with a quick way of developing and delivering scalable Web applications. The ColdFusion Shared ValueApp must be installed on the server prior to installing this ValueApp on a specific VDS. For more information, go to <http://www.allaire.com/>.

Streaming

Darwin Enable any VDS to send streaming QuickTime data using RTP and RTSP protocols. Available on Linux Servers only. For more information, go to <http://www.opensource.apple.com/>.

Real Server Streaming realplayer compatible media files across an intranet or the Internet. The Real Server Shared ValueApp must be installed on the server prior to installing this ValueApp on a specific VDS. For more information, go to <http://www.real.com/>.

Collaboration

Guestbook File-based Guestbook ValueApp is a powerful, multi-language PHP-based guest book in English, German, and other languages. Create a Web page where users can leave their contact information and comments. An administrator's module enables you to modify and configure the guest book. Requires mod_PHP ValueApp.

Majordomo List Automatically add and configure a distribution list. Requires Majordomo ValueApp. For more information, go to <http://www.majordomo.com/>.

IMP Enable your users to connect to a Web mail interface, enabling them to send and receive email without the need to configure an email client. Requires MySQL and mod_PHP ValueApps.

SecondSaver The SecondSaver is full-featured Web calendar. SecondSaver can create, manage and send schedules using email to all subscribed users. For more information, go to <http://www.secondsaver.com/>.

Mail Form Creates an HTML mail form in which users can enter their comments and personal details. Data entered by users is then redirected to an email address of your choice. Requires Python ValueApp.

NeoMail Web-based mail reader with advanced features such as sending and receiving messages with multiple attachments and an inline image attachment display. For more information, go to <http://neomail.sourceforge.net/>.

Bulletin Board Set up an electronic messaging system allowing users to exchange information, questions and announcements related to your site. After you install the bulletin board, you can customize and administrate it through a standard Web browser. Customization includes many features such as discussion topics, user registration, and censored words. Requires PERL ValueApp. For more information, go to <http://www.worldwidemart.com/scripts/>.

Auto Responder Automatically replies to emails. Enter a message and an email address of your choice. Your message is automatically sent to anyone who sends emails to this selected address.

E-Commerce

EveryAuction The auction package enables the setting up of an online auction site. EveryAuction lets you set up a site where buyers and sellers come together to create the online auction experience. Requires PERL ValueApp. For more information, go to <http://www.everysoft.com/auction/>.

Freeware Merchant A shopping system that covers all the needs for e-commerce-enabled Web sites. Features include a fully functional shopping cart, web based catalog administration, order administration, and user management. For more information, go to <http://www.merchant-store.com>.

Miva Empesa Enables the server with XML-based Miva Script, commerce processing and database. Miva Script applications running under Miva Empesa execute in a sandboxed data and runtime environment. For more information, go to <http://www.miva.com/>.

Miva Merchant Miva Merchant is a browser-based Storefront Development and Management System. It integrates cataloging, product, fulfillment, maintenance, category management, shopping basket, order, and credit card processing. Requires Miva Empesa ValueApp. For more information, go to <http://www.miva.com/>.

Open SSL This SSL module enables you to equip your Web site with secure Internet transaction capability. It gives you and your customers peace of mind when conducting commerce over the Web. For more information, go to <http://www.openssl.org/source/>.

VeriSign Certificate VeriSign's Web site digital certificates authenticate intranet, extranet, and e-commerce sites, enabling encrypted transactions and communications between browsers and servers across the Internet. For more information, go to <http://www.verisign.com/>

Credit Card Verification Verify credit card numbers based on the mod 10 algorithm. Enables authentication by the credit card digit combination. Confirms the validity and type of credit cards for Visa, MasterCard, and American Express card numbers. Requires mod_PHP ValueApp. You can install only one instance of this ValueApp.

Database

MySQL An SQL-interpreting database client/server primarily geared for UNIX systems but maintained for Windows platforms as well. MySQL enables efficient integration with third-party tools, such as PHP and PERL, enabling you to generate dynamic Web pages through database queries. The MySQL installation directory is /usr/local/mysql. For more information, go to <http://www.mysql.com/>.

PERL MySQL Libs Installs the PERL libraries needed to connect to the MySQL database, thus enabling you to generate dynamic Web pages through database queries. For more information, go to <http://www.cpan.org/>.

PHPMyAdmin phpMyAdmin is intended to handle the administration of MySQL over the Web. For more information, go to <http://www.phpwizard.net/>.

PostgreSQL PostgreSQL is a sophisticated Object-Relational DBMS, supporting almost all SQL constructs, including sub-selects, transactions, and user-defined types and functions. For more information, go to <http://www.postgresql.org/>.

Glossary

A

Account. A HostingDirector IAE account provides the functionality of a dedicated server in a shared, virtual hosting environment. Each account owner can administrate Web site via user friendly control panel. An account is also referred to as a VDS (Virtual Dedicated server) or site.

Aliases. Aliases are shortcuts used to redirect emails. There are four types of aliases:

- **Email aliases** redirect emails to a specified address.
- **Distribution list** aliases allow you to send mail to one address and have it distributed to a group.
- **Command line** aliases forward email to an application for processing.
- **Catch All** alias forwards all unresolved email messages to specific email address.

Anonymous FTP. A method for giving users access to files so that they don't need to identify themselves when logging in. The user enters "anonymous" as a user ID and leaves the password field empty or enters "anonymous".

Apache. Web server of choice to most System administrators. Its open source code and cross platform, compatibility makes this Web server ideal in highly scalable operations.

Apache Error Messages. The Apache error document ValueApp displays a response of your choice as an alternative to conventional error messages such as '404 Not Found'. You can either display a custom text message or redirect the user to any web page.

Auto Responder. Automatically replies to emails. Enter a message and an email address of your choice. Your message will be automatically sent to anyone who sends emails to this selected address.

B

BIND. A software application for the DNS server developed and distributed by the University of California at Berkeley. Many Internet hosts use BIND,

C

Common gateway interface (CGI). Code responsible for describing how server communicates with another application.

Counter. Display a hit counter on your web page showing the number of visits to your web site. The

counter begins at the initial number of your choice and increments with each visit.

Credit Card Verification. Verify credit card numbers based on the mod 10 algorithm. Enables authentication by the credit card digit combination. Confirms the validity of Visa, MasterCard, Novus (Discover), and American Express card numbers.

D

Dedicated IP Account. An account that has an exclusive IP address assigned to it.

DNS. Domain Name Server. A DNS is an on-line distributed database system used to map human-readable machine names into IP addresses. The DNS serves as a gateway between the server and the outside world, resolving the IP address and routing files to their correct directories.

F

File Manager. Manage files on your system through a browser. Edit and password protect HTML files without using Telnet. Requires PERL and Python ValueApps.

FrontPage Extensions. A set of programs on a Web server that allow users to author, administer, and browse Microsoft FrontPage®-extended Web sites, and to add enhanced functionality such as hit counters, search forms, and discussion webs to their sites.

FTP. An Internet protocol for exchanging files between machines.

G

Guestbook. Create a web page where users can leave their contact information and comments. Users can view all submitted comments and there are options to notify you when a user has signed in. Also enables emailing to all registered users.

H

HTML. HyperText Markup Language. Tag language, which describes how a Web page is displayed.

HostingDirector Server IAE. Sphera HostingDirector IAE is a robust management platform providing end-to-end global service automation that utilizes the IBM dedicated Xseries hardware.

I

IP Filtering. IP filtering enables you to control access to your system by permitting or denying access according to IP address. Access can be restricted by VDS, web page, FTP site and mail.

J

Java Runtime Environment. Sun ® Solaris Java runtime environment (JRE) 1.1.8. The JRE is the minimum standard Java platform for running Java programs. It contains the Java Virtual Machine (JVM), Java Core Classes and supporting files.

M

Mail Form. Creates an HTML mail form in which users can enter their comments and personal details. Data entered by users is then redirected to an email address of your choice.

mod_PERL. This technology gives enhanced speed to the PERL scripts by combining PERL programming language and the power of the Apache HTTP server. mod_PERL enables to write Apache modules entirely in PERL.

mod_PHP. A technology combining the power of PHP scripts and the Apache HTTP server. Enables the writing of Apache pages entirely in PHP, thus enabling PHP code to be inserted directly alongside HTML.

N

Name Based Account. An account whose IP address is shared with other accounts.

NFS. The Network File System is an application that lets a user view and optionally store and update files on a remote machine.

O

Open SSL. This SSL module allows you to equip your Web site with secure Internet transaction capability. It gives you and your customers peace of mind when conducting commerce over the Web.

P

PERL. Script language of choice for Web developers. Libraries for PERL exist for several platforms and PERL's speed and flexibility make it well suited for form processing and on-the-fly web page creation.

POP. An Internet protocol for receiving email messages.

Python. A popular server side scripting language. Python is used in many situations where a great deal of

dynamism, ease of use, power, and flexibility are required.

Q

Quota. There are two types of quota:

- **Disk space quota:** Amount of space that account owner is entitled to utilize.
- **Files quota:** Number of files that account owner is entitled to utilize.

R

Reseller. Resellers are special users that are enabled to manage one or more account and to resell hosting services to individual users.

S

Shared IP Address. A shared IP address enables to allocate more than one account to the same IP address.

Simple Search Engine. Allow you to integrate a keyword and Boolean search program into your site so that users can search specified text and HTML documents. It then returns a list of filenames that matched the specified keyword(s).

SSL. Secure Sockets Layer: A program that increases the security of messages that are sent via the Internet.

SMTP. Popular email protocol for sending email messages.

SWAP. Utilization of the hard disk for virtual memory or "swap space".

U

User Account. A user account is a mail and FTP account. Creating a user account allows the user to access his/her password-protected email and files located on the server.

V

ValueApps. ValueApps are software components that you install to give your server additional functionality. You can browse the available ValueApps in the various categories and choose the ones you wish to install.

VDS. A virtual dedicated server (VDS) provides the functionality of a dedicated server in a shared, virtual hosting environment. A VDS is also referred to as an account.

Virtual Hosting. The provisioning of a name based site that has the following services: HTTP, FTP, POP, SMTP.

Virtual Memory. Utilization of machine's hard disk to simulate additional random-access memory.

W

Webalizer. Analyzes web server data to produce web site usage reports. For example, the Webalizer can create a chart showing the countries from which your site is accessed. Charts can be viewed with a standard web browser.

Index

A

alias 80
anonymous FTP 69
Apache Error Message 82
Auto Responder 83
automatic IP allocation 59

B

billing and reporting 16
Bulletin Board 83

C

Chili!Soft 82
ColdFusion 82
control panel 10
Credit Card Validation 84
custom IP allocation 59

D

Darwin 83
data tab 16
DNS node
 adding records 17
 modifying records 18
 type A 19
 type Cname 20
 type MX 20
 type NS 20
 viewing details 21

E

email and FTP accounts 71
email, configuring on the client 72
EveryAuction 83

F

firewall 57
Freeware Merchant 83
FrontPage Extensions 82
FTP and email accounts 71
FTP parameters 63
FTP, anonymous 69
full installation 57

G

generating reports 16
Guestbook 83

H

HitMatic Counter 81
HostingDirector
 features 1
 logging in 4
 logging out 9
 main window 1
 navigation tree

reseller level 4
server level 3
VDS level 4
toolbar 2

I

IMP 83

J

Java 82

L

logging in
 reseller level 7
 server level 5
 VDS owner level 7
logging out 9

M

Mail Form 83
Majordomo List 83
manager applet 4
Miva Empresa 84
Miva Merchant 84
Mod_PERL 82
Mod_PHP 82
mode 58
monitoring 11
MySQL 84

N

name based VDS 57, 58
NeoMail 83

O

Open SSL 84

P

PERL 82
PERL MySQL Libs 84
phpAdsNew 82
phpMyAdmin 84
POP parameters 58
PostgresSQL 84
Python 82

R

Real Server 83
reports
 generating 16
 text 16
 XML 16
reseller level 4
resellers node
 adding a reseller 23

bandwidth tab 27
deleting a reseller 27
editing reseller properties 26

S

SecondSaver 83
server management
 auto update tab 51
 groups
 add group details tab 47
 group details tab 47
 groups tab 46
 log tab 47
 process management tab 48
 restart/shutdown tab 51
 time settings
 date and time tab 50
 time zone tab 50
 users
 add new user tab 42
 edit user details tab 44
 user details tab 43
 users tab 41
server management node
 IP management
 IP ranges 34
 NICs tab 41
 reserved IPs 40
 shared IP 37
 panel contents 29
 resources
 accounts tab 31
 CPU usage tab 30
 general tab 29
 partition details tab 33
 partition edit tab 34
 storage tab 32
server node
 adding and modifying data
 adding personalized messages 14
 hosting provider contact information 13
 modifying help files 15
 panel contents 11
 viewing server data 11
ServerDirector 57, 58, 71, 80
shared ValueApp
 collaboration 83
 database 84
 e-commerce 83
 installing 55
 streaming 83
 web applications 81
 web development 82
simple search engine 81
Site Search 81
SMTP parameters 58
SSL certificate, installing 9
standalone 58

T

toolbar 2

U

Urchin 81
usage data 12
usage statistics 15

V

ValueApps 81
ValueApps technology 81
VDS
 adding new 58
 adding on NFS 78
 changing name based IP address 65
 deleting 70
 editing 67
 GUI login 64
 name based scaling 65
 types 57
VDS GUI, adding and modifying data 13
VeriSign Certificate 84
version 4
virtual hosting 57

W

watchdog 68
Web passwords 81
Webalizer 82
write to log 12

X

XML 16

