

Sun Cobalt

Important Safeguards

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5. Electrical Shock

To reduce the risk of electrical shock, do not disassemble or tamper with the power supply assembly. Opening or removing the power supply may expose you to dangerous voltage or other risks. Incorrect reassembly can cause electric shock when this product is subsequently used.

6. Top Cover

You must remove the cover of your Sun Cobalt server appliance to add cards, memory or internal storage devices. Be sure to replace the top cover before powering on your server appliance.

7. Modifications to equipment

Do not make mechanical or electrical modifications to the equipment. Sun Microsystems, Inc. is not responsible for regulatory compliance of a modified Sun Cobalt product.

8. Ventilation

The fan openings on the Sun Cobalt RaQ 550 server appliance are provided for

Preface

— “Servicing the Sun Cobalt RaQ 550 server appliance” on page 219 explains how to upgrade and service the server appliance.

— “Product Specifications” on page 229 lists the technical specifications for the Sun Cobalt RaQ 550 server appliance.

— “Licenses” on page 235 lists licensing information.

— “Glossary” on page 243 provides a glossary of terms.

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Introduction

The Sun Cobalt RaQ™ 550 server appliance is a powerful and versatile network server. It fits easily within an existing network, and provides virtual hosting

Customer Service and Technical Support

For Sun Cobalt™ product information, visit the Sun Cobalt section of the Sun Web site at the URL

<https://ebusiness.sun.com/OSCSW/svcportal?pageName=CobaltHome>
<http://kno>

Setting up the Sun Cobalt RaQ 550 server appliance

This chapter guides you through the process of connecting and configuring the Sun Cobalt RaQ™ 550 server appliance for your network. A typical setup process takes less than 15 minutes, after which you can begin using all of the services on the server appliance.

If the server appliance has been configured previously for a different network, refer to “Setup work,

Front view of the Sun Cobalt RaQ 550 server appliance

Figure 2. Front view of the server appliance

1. The _____ signal Ethernet, hard disk drive and Web activities as well as overall system health status.

Rear view of the Sun Cobalt RaQ 550 server appliance

Figure 3. Rear view of the server appliance

1. The

Configuring the Sun Cobalt RaQ 550 server appliance manually

The LCD shows the following:

```
PRIMARY IP ADDR:
000.000.000.000
```

A blinking cursor appears on the second line of the LCD display. The following steps explain how to enter the required network information for the primary network interface (I). The secondary network interface (II) is configured similarly. 2

To enter the IP address for the Sun Cobalt RaQ 550 server appliance:

1. Use the arrow buttons on the LCD console to enter the IP address assigned to the server appliance.
2. Press the button to accept the IP address.

If the IP address is valid, the following prompt appears:

Phase 2: Setting up with the Web Browser

The remainder of the setup process is performed through a Web browser running on a computer on your network. Use one of the following standard Web browsers:

- Macintosh OS9: Internet Explorer 5 or Netscape™ 4.78
- Macintosh OSX: Internet Explorer 5.1
- Windows 98/NT/2000: Internet Explorer 5.5 and 6.0 or Netscape 4.78

Once the setup process is complete, the Sun Cobalt RaQ 550 server appliance can

License Agreement

The first screen the eItup Wizard presents is the Binary Code screen. A portion of this screen is shown in Figure 7.

You must accept the terms of the License Agreement to use the eun Cobalt RaQ 550 server appliance. Click at the bottom of the screen to indicate

Password Guidelines

Use the following guidelines when choosing a password:

1. Use between three and sixteen alphanumeric characters.

The valid characters include: a-z A-Z 0-9 % ! @ \$ ^ & * - _ = \ | . , / ? ; : +

2. Use both upper- and lower-case letters.



Note: A password is case-sensitive.

3. Do not use a proper name.
4. Do not use a word found in a dictionary.
5. Do not use a date.
6. Do not use a command word.
7. Do not use a string of consecutive keys on a keyboard (for example, “qwerty”).

Time Settings

On the Time Settings portion of the screen, you can set the day, date, time and time zone.

Click the right arrow at the bottom to move to the next screen.

RAID Setup

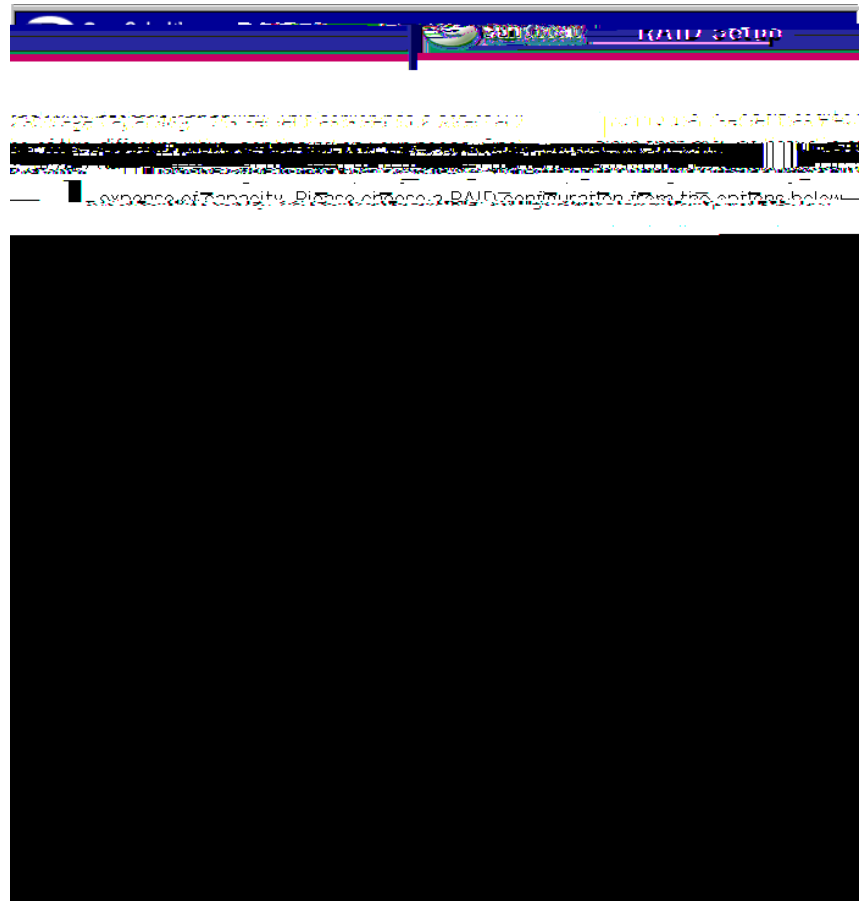
Use the RAID Setup screen in Figure 9 to select the two internal disks to operate in either RAID 0 mode or RAID 1 mode.



Note: You cannot later reverse the RAID configuration without data loss. If only a single disk is installed, the screen will not appear. Unless configured otherwise, the server appliance operates in RAID-1 mode (disk mirroring).

Click the right arrow at the bottom to move to the next screen.

Figure 9. RAID Setup



Completing configuration with the Setup Wizard

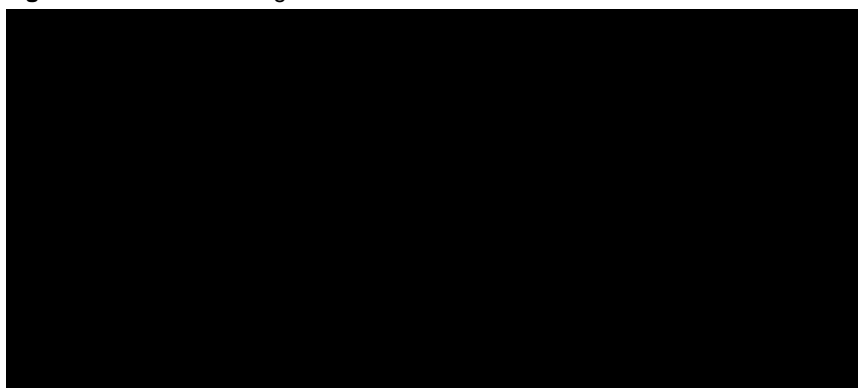
When you complete the screen, click the right arrow at the bottom.

Once the Sun Cobalt RaQ 550 server appliance has been configured, the screen shown in Figure 11 appears.



Note: If you changed the system time in the System Settings screen, you may be presented with the login screen.

Figure 11. Server Management on the user interface



There are four tabs at the top of the screen:

- Server Management (for details, see Chapter 4, “Server Management”)
- Site Management (for details, see Chapter 5, “Site Management”)
- BlueLinQ (for details, see Chapter 6, “BlueLinQ”)
- Personal Profile (for details, see Chapter 7, “Personal Profile”)

The buttons on the left side of user interface provide access to the information and functions on this site. Move the mouse pointer over the menu buttons and a description of the user interface features appears in the help text frame at the bottom.

The icons in the upper-left-hand corner of the screen are described below:

Help icon

icons . 955.2(A0 separate browser)25.1(User window)25.1(window options displaying a list of PDF files)

Software Notification icon

Services

This chapter offers a brief overview of the services available on the Sun Cobalt RaQ™ 550 server appliance.

These services include:

- Web publishing (see “Publishing Web pages using FTP” on page 38)
- Redundant array of independent disks Level 1 (RAID-1) and Level 0 (RAID-0) (see “RAID-1 and RAID-0 support” on page 40)
- Back up and restore data (see “Back up and restore data” on page 44)
- Secure sockets layer (SSL) (see “Secure sockets layer (SSL)” on page 44)
- Simple Network Management Protocol (SNMP) (see “Simple Network Management Protocol (SNMP)” on page 45 and “SNMP” on page 65)

The features accessible from the Personal Profile screen are:

- Account
- Email

“209.48.0.0” to the “Relay email from these hosts/domains” field of the Email Parameters menu. If your ISP gives you a list of 30 networks used by 30 points-of-presence (which are regional ISP offices) across the country and your clients can dial in from any of them, then you must trust all 30 networks or

Developing Web pages

The Sun Cobalt RaQ 550 server appliance automatically provides a default home page for each individual user. It also supports a broad range of Web publishing capabilities that allow both novice and expert users to build and publish custom Web pages.

FrontPage 2002 Server Extensions

The Sun Cobalt RaQ 550 server appliance includes the FrontPage 2002 Server Extensions, which allow you to use the FrontPage client application to publish and edit Web content easily. You can create and post Web pages using standard style templates and pre-configured tools—including form processing and search tools. It is not necessary to know anything about FTP or other file transfer protocols.

Server-side scripting languages

The Sun Cobalt RaQ 550 server appliance supports both the Active Server Pages (ASP) and PHP scripting languages. These features are enabled on a per-site basis (see the “Web Settings” table under **0**).

Like CGI scripts, you can develop ASP and PHP scripts on your desktop machine

By default, the files you upload using an FTP-based application are stored in your personal directory; the directory path is:

`/home/sites/<sitename>/users/<username>`

Syste5 health monitoring

Server Management on the user interface is available only when you log in under the user name *admin*. Besides the options on the standard user interface, there are two other options: the Administration menu and the BlueLinQ. See Figure 13.

Resetting the Administrator password

If you simply want to change the Administrator password for the server appliance, you can do so through the Server Desktop UI.

If you forget the Administrator password for the server appliance, you can reset the password. This is done in two steps:

- a. Clear the password through the LCD console.
- b. Enter a new password for the

Clearing the password through the LCD console

To clear the Administrator password for the server appliance:

1. On the LCD console, hold down the button for approximately 2 seconds.

The LCD screen displays:

SELECT:

SETUP NETWORK

2. Press the button until the following message appears on the LCD screen:

SELECT:

RESET PASSWORD

Accessing Server Management

Server Administrators

The Server Administrators section is where you create and manage server administrator accounts. Creating separate server accounts. Creating separate other than the *admin* group allows the Administrator to allow trusted third parties to manage the server. Server accounts. Creating separate can be created to have all the same powers, except for managing the accounts. Creating separate controlled from the

Configure the Administrator Options:

1. Move extra abilities that this server administrator account should be allowed from the _____ column to the _____ column.

1. Configure the settings in the table:

Chapter 4: Server Management

- ☐ . Use this to turn on host name lookups for the Web server. This causes the server appliance to do a DNS lookup on the client IP address when it connects to the server and record it in the log files. This host name information is then available in the server appliance usage Web reports. Without this feature, only client IP addresses are reported in the Web server usage domain report.

 - ☐ . This is the maximum number of requests that can be made to the server at any instance. Each connection requires its own Web server process. If this number is exceeded, clients will receive a message that the server is busy and will be asked to try again later. This setting is useful for controlling the load on your server. The maximum number of Web servers is limited by the amount of RAM installed in this server.

 - ☐ .
-

FTP

Selecting the _____ menu item brings up the _____ () screen shown in Figure 17.

Figure 17. FTP Settings screen

1. Configure the settings in the table:

- _____ . Use this to turn File Transfer Protocol (FTP) functionality on or off. Anonymous FTP access is configured by going to guestShare.
- _____ . Enter the maximum number of allowed connections per minute. New connections will be denied if the connection rate has reached this limit.

DNS

The Domain Name System (DNS) is a vital and integral part of the Internet. Setting up DNS correctly on your Sun Cobalt RaQ 550 server appliance is very important. For this reason, we have created an appendix solely for explaining DNS. See Appendix B, “Domain Name System,” on page 167.

SNMP

If the SNMP agent is enabled, you can use SNMP software to remotely monitor server information such as CPU utilization and network traffic.

You can specify the Simple Network Management Protocol (SNMP) communities that can have read-only and read-and-write access to this SNMP agent.

The default read-only access community is “public.”

The default read-and-write access community is “private.”

To specify the SNMP communities:

1. Select . The SNMP Settings table appears; see Figure 20.

Figure 20. SNMP Settings table

•.

2. Configure the following settings:

Security

The Security section allows you to manage certificates and server security. The following submenus are available:

- Scan Detection
- Buffer Overflow
- SSL

Scan Detection

IP port scanning is the act of systematically scanning a computer's IP addresses. Port scanning can be malicious in nature if someone is looking for a weakened

2. To create a new self-signed certificate, click and configure the selections as follows:
 - . The city in which the organization is located or registered. It is important that this information is correct and can be verified with a local, regional, or national government, or other official organization.
 - . The state, province, or region in which the abovety in is located. It is important that this information is correct and can be verified with a local, regional, or national government or other official organization.



Note: In some cases, the state and province information does not apply, depending on the country and how it is divided into different areas.

- . Select the country in which the organization that will use this certificate is located or registered. It is important that this information is correct and can be verified with a local, regional, or national government or other official organization.
 - . The official name of the organization owning this certificate. In order to obtain a signed certificate from a certificate authority, the organization name and location must be verifiable with a local, regional, or national government or other official organization. In addition, the certificate authority must be able to verify that the person requesting the certificate is the owner or employee of the named organization.
 - . The division or unit of the organization that is using this certificate. This is optional, but may be usefu4 if the person applying for a signed certificate is an employee of a subsidiary of a larger organization.
 - . The email address to be contacted for information about this certificate.
 - . The date after which the certificate should no longer be considered valid by client software attempting to connect to this server.
3. Click to create a certificate signing request. The Signing Request Information for Server Desktop screen appears; see Figure 25.

Figure 28. TCP/IP Settings screen

The screenshot shows the 'TCP/IP Settings' screen. At the top, there are two tabs: 'Primary Settings' and 'Interface Aliases'. Below the tabs, there are several sections for configuring network settings. The 'Host and Domain Name' section includes a 'Host Name' field with the value '63:77:128:10' and a 'Domain Name' field with the value 'example.com'. The 'IP Address' section has a text input field with the value '192.168.1.1'. The 'IP Network Mask' section has a text input field with the value '255.255.255.0'. The 'MAC Address' section has a text input field with the value '00:10:50:04:CA:58'. A 'Save' button is located at the bottom left of the screen.

- Enter the IP address or addresses of your local domain name server or servers. A domain name server translates textual host names and domain names into numerical IP addresses and vice-versa. Enter a series of four numbers between 0 and 255 separated by periods. For example, 192.168.1.1 is a valid entry. Leaving this field empty will prevent this machine from finding other machines by host name or domain name and will cause networking difficulties.



Note: Be sure to enter the IP address of your DNS server(s) here. Otherwise, the Simple Mail Transfer Protocol (SMTP) will not work. SMTP is used for transferring electronic mail messages.

For more information, see Appendix B, “Domain Name System,” on page 167.

- . Enter the IP address of the local network gateway for

3. Click . The Static Route List table appears; see Figure 29.

If you have more than one router or gateway on a local area network (LAN),

3. Click

The IP Address Allocation menu is used to specify an acceptable IP address range for the Ethernet ports for the server. Later, when an IP address is assigned

3. Configure the Setting a Bandwidth fields:

-

Power

To specify the Power Options settings:

1. Select . The UPS Settings
screen appears; see Figure 41.

Figure 41. UPS Settings screen



2. Configure the UPS Settings fields.

You can choose three states:

- The UPS control on the server appliance is disabled
- The server appliance is a UPS master
- The server appliance is a UPS slave.

This menu is used to configure the server time settings. To specify the Time settings:

1. Select . The Time Settings

Figure 42. Time Settings screen

2. Configure the Time Settings fields.

- . Set the current date and time.
- . Set the proper time zone.
- (). Enter the network address or fully qualified domain name of a Network Time Protocol (NTP) server to which your system date and time will be periodically synchronized. You can find a list of other publicly available NTP servers at:

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

Click this menu item to display system information for the server appliance, such as serial numbers and MAC addresses. This menu can also be used to register the

Maintenance

The Maintenance section allows you to perform server maintenance such as system-wide backup, storage control and maintenance.

Legato NetWorker™ Backup Settings

To specify the Legato NetWorker Backup settings:

1. Select . The

4. Click the green *pencil* icon to set up the disk. The Setup Disk screen appears; see Figure 48.

Figure 48. Setup Disk screen

Email

To configure email usage information for display:

1. Select [Configure Email Reporting Options](#). The Configure Email Reporting Options screen appears; see Figure 53.
2. Enter the start and end dates for email activity to be included in the report.
3. Click [View Report](#) to display a summary of the email activity.

Figure 53. Configure Email Reporting Options screen



Disk

To display the statistics for disk usage on a virtual site, follow these steps:

1. Select [1 1 TUsage](#). The 1 1 TUsage screen appears; see Figure 54.

Figure 54. 1 1 TUsage screen



2. Click the [Disk Usage](#) tab.

The 1 1 TUsage table displays the disk usage by partition name; see Figure 54.

3. Click the [Total Size](#) tab.

The 1 1 TUsage table displays the disk usage by site host name; see Figure 55.

Figure 55. Sites Tab screen

4. Click the tab.

The Disk Usage table displays the disk usage by user; see Figure 56.

Figure 56. All Users screen

5. Click the tab.

The Disk Usage table lists the types of notifications to be sent when the user or the site exceed the allocated disk space; see Figure 57.



Note:

Figure 57. Notifications Settings screen

The status of each of the above items is indicated by a green, yellow, red or e

Settings menu selection

This menu item allows you to configure Active Monitor Settings. To configure Active Monitor settings:

1. Select . The Active
Monitor Settings screen appears; see Figure 61.

Figure 61. Active Monitor Settings screen

2. Configure the Active Monitor Settings fields:
 - 4
Turn Active Monitor on or off. Enabling this functionality allows specific system components to be regularly checked for proper operation. These system components can be selected in the
 - 4
()/ 4 () (

Site Management

Introduction

The Sun Cobalt RaQ™ 550 server appliance is designed to host multiple virtual sites. A virtual site is an individual location on the Internet, such as `www.efgh.com` or `www.xyz.com`. Each virtual site can have a unique set of users who can send and receive email, publish Web pages, or upload and download files through FTP. A virtual site can also provide anonymous FTP access and SSL.

The server appliance can host a large number of IP-based virtual sites. The number of virtual sites depends on the amount of hard disk drive space available on the server appliance, the amount of hard disk drive space allocated for each site, the amount of traffic generated on each site and the amount and complexity of the dynamic Web content on each site (for example, ASP, CGI, PHP and others). Dynamic Web content on an individual site induces a much heavier load on the server than does static content.

Administrator privileges

This section describes the features available to a *Server Administrator* and a *Site Administrator* on the SuT Cobalt RaQ 550 server appliance.

A *Site Administrator* is allowed to do the following:

Site Management screen (for Server Administrator)

When you log in as a Server Administrator and go to Site Management, the Site Management screen appears with the

sho

Search Virtual Sites

The .0804 67[(Sear)2018(Sich V)37(Siiral)-8045.2ites

Figure 64. Advanced Search screen

Virtual tT2wist

Figure 66. Add Virtual Site screen

ADD NEW VIRTUAL SITE	
IP Address	<input type="text"/>
Host and Domain Name	<input type="text"/>
Web Server Aliases (optional)	<input type="text"/>
Email Server Aliases (optional)	<input type="text"/>
Content Management System	<input type="text"/>
Maximum Allowed Disk Space (MB)	<input type="text" value="100"/> (1 - 170,000)
Maximum Allowed Number of Users	<input type="text" value="100"/>
Automatic DNS Configuration	<input checked="" type="checkbox"/>
Services and Features	
Anonymous FTP	<input type="checkbox"/> Enable <div> <div>Maximum Allowed Disk Space (MB)</div> <div><input type="text" value="20"/></div> <div>Maximum Simultaneous Connections</div> <div><input type="text" value="10"/></div> </div>
Enable JSP and Servlets	<input type="checkbox"/>
Enable ASP	<input type="checkbox"/>
Enable PHP Scripts	<input type="checkbox"/>
Enable Common Gateway Interface (CGI)	<input type="checkbox"/>
Enable Server-Side Includes (SSI)	<input type="checkbox"/>
Enable FrontPage Server Extensions	<input type="checkbox"/> Enable <div> <div>webmaster Password</div> <div><input type="password"/></div> <div>(Enter Again)</div> </div>
Enable APOP	<input type="checkbox"/>
Enable Shell Access	<input type="checkbox"/>
Enable SSL	<input type="checkbox"/>
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

Editing the virtual site templ.te

There are many advantages for setting defaults for the virtual sites. For example, since multiple sites can share an IP address, a default IP address can be set for all new virtual sites added. Also, since it is common for many sites to share a common domain name, it can be desirable to set a default domain name for your virtual sites.

2. Use the tab to configure the default network, user and disk limits, and email settings for new virtual i fis. See [Figure 5-1](#).
- . The default IP address that will be filled in when adding a i fi. To use the server appliance, you require an IP address or range of IP addresses.



Note: The Sun Cobalt RaQ 550 server appliance supports name-based virtual i fis, allowing many i fis to share a i ngle IP address. You can create many virtual i fis using the same IP address (for example, 192.168.25.77) as long as the fully qualified domain name for each i fi is different (for example, both *www.efgh.com* and *www.xyz.com* can use 192.168.25.77 as their IP address).

- . The default domain to which new i fis will belong. Each virtual i fi also requires a domain name (for example, *efgh.com* or *xyz.com*).

You must register the domain name. Visit the Internet Corporation for Assigned Names and Numbers (ICANN) at <http://www.icann.org> for a list of accredited domain-name registrars.



Note: The Sun Cobalt RaQ 550 server appliance can serve as the DNS server and provide the host name.

- . The maximum disk space on the server appliance in megabytes (MB) available to a i fi for files.
- . The maximum number of user accounts that a i fi can have.
- . Specify an email address to receive messages that are addressed to unknown users and mailing lists. If left blank, email addressed to unknown users or mailing lists will not be accepted. If the specified address does not exist, mail to unknown users and mailing lists may be rejected just as if no address was specified.

- . Automatic DNS configuration manages DNS records for this site. Web and qSil server aliases are

4. Use the **Web** tab to configure Web options, such as scripting languages. See Figure 69.

The following items are explained more fully under the section titled “Web” on page 132.

- **Allow the use of JavaServer Pages™ (JSP™)** software and Servlets.
- **Enable the use of active server pages (ASP).**
- **Enable the use of PHP scripts.**
- **()**. Enable the use of CGI applications.
- **-**. Enable the use of Server-Side Includes.
- . Check the box to have FrontPage Server Extensions turned on by default when creating a new site.

Figure 69. Edit Virtual Site Template—Web tab



5. Use the _____ tab to modify settings for anonymous FTP. Anonymous FTP is explained more fully in the section titled “Anonymous FTP” on page 134.
 - Activate the _____ checkbox to enable anonymous FTP for the site.
 - _____ . Enter the limit in megabytes (MB) for anonymous FTP uploads.
 - _____ . Enter the maximum number of anonymous FTP users that can be connected to the server at one time.

Site Management screen (for Site Administrator)





When you log in as a Site Administrator and go to Site Management, the Site Management screen appears, showing 3 tabs: Overview, Settings, and Users. The Overview tab is selected by default.


Managing Virtual TD[

When you click the crayon icon in the Virtual Site List screen as a Server Administrator (see Figure 65, “Virtual Site List screen,” on page 108), or when you come to Site Management as a Site Administrator, the rtual S1ent35i”TJT*[Figure72

The following bullet items represent the fully expanded menu items on the left side of the [Administration](#) screen. These are the functions and services that the Administrator can manage. They are explained in this section.

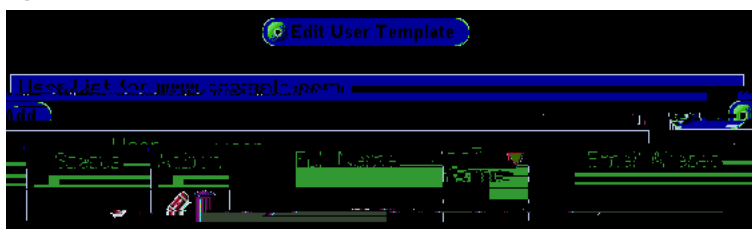
- UseS Management (see page 119)
 - UseS List
 - Import
 - Export
- Mailing Lists
- General Settings
- Services (see page 132)
 - Web
 - Anonymous FTP (only available to ServeS Administrator)
 - Email
 - Shell (only available to ServeS Administrator)
- Web Deployment
- SSL (only available to ServeS Administrator)
- Usage Information (see page 140)
 - Web

-  (). Enter additional name1 under which the user will receive email. Enter characters containing only lowercase alphanumeric characters, periods, hyphens and underscores. The default value is the lowercase first and last name of the user separated by a period. For example, john.doe is a valid entry.
-  (). Enter additional information or comments about the user here.

4. Click  to save the settings.

After a user has been added, the new user is listed in the User List screen (see Figure 75).

Figure 75. User List screen



Use the green *pencil* icon to modify the user settings or the red *trash can* icon to delete the user.

When you click the green *pencil* icon to modify user settings, the Modify User Settings screen appears (see Figure 76).

Figure 76. Modify User screen

Creating a TSV text file

The first step in importing a list of users is to generate a text file in the required format. The file format used is called tab-separated-value (TSV) format and contains a separate line for each user you want to add. Each line contains the

Mailing Lists

This menu item is used to manage mailing lists. A mailing list allows a discussion

2. Click the tab and configure the settings:
 - . Enter the name of the mailing list. Please enter only lowercase alphanumeric characters, hyphens and underscores. For example, sales is a valid entry.
 - . Enter additional information or comments about the mailing list here.
3. Click the tab.

The dialog box shown in Figure 81 appears.

Figure 81. Add Mailing Lists screen (Subscriber tab)

4. Configure the settings:
 - . Click the button to select the local users that are subscribers to this mailing list. The dialog boxes shown in Figure 82 appear. They allow you to search for and add users to the mailing list.
 - . Enter the remote users (Figure 81) that are subscribers to this mailing list. Remote users are users who do not have accounts on this server appliance. Please enter a properly formatted email address. For example, user@example.com is a valid entry.

Figure 82.

- . Select a subscription policy for the mailing list.
 - . Any user may subscribe.
 - . An e/F4 confirmation is required to subscribe.
 - . The approval of the list owner is required before subscribing.

- . Select the maximum size in kilobytes or megabytes allowed for messages sent to this mailing list. Messages

General Settings

This menu item is used to modify settings for this site and configure some services.

Selecting the General Settings menu item brings up the Virtual Site Settings screen; see Figure 84.

Figure 84. Virtual Site Settings screen

1. Configure the settings:

- IP Addressngs . Entergure IP address offigure tal e 84.-6.5491.871.82 TD(•)Tj/F53.sT

Services

This menu item is used to configure various services for the site.

Web

This menu item is used to configure Web 4.m in me1]ch ame1crim ing langugems

Email

Figure 89. Web Archive (.war) List/GSreen 1. Click to add a Web Archive list;/Gee Fig

Usage Information

Use this menu item to view information about resource usage for this site.

Web

This menu item is used to configure Web usage information for display.

1. Selecting this menu item brings up the Configure Web Reporting Options screen; see Figure 92.

Figure 92. Configure Web Reporting Options screen



2. Enter the start and end dates for Web activity to be included in the report.
3. Click **4** to display a summary of the Web activity.

FTP

This menu item is used to configure FTP usage information for display.

1. Selecting this menu item brings up the Configure FTP Reporting Options screen; see Figure 93.

Figure 93. Configure FTP Reporting Options screen



2. Enter the start and end dates for FTP activity to be included in the report.
3. Click **4** to display a summary of the FTP activity.

Email

This menu item is used to configure email usage information for display.

1. Selecting this menu item brings up the Configure Email Reporting Options screen; see Figure 94.

Figure 94. Confi

Settings

BlueLinQ

This chapter describes how to use BlueLinQ to check for and install new or updated software packages.

When you log into the Sun Cobalt RaQ™ 550 server appliance as *admin*, the BlueLinQ tab appears in the top menu bar of the Server Desktop user interface (UI). When you select BlueLinQ, the left menu bar presents commands that allow you to update the Sun Cobalt RaQ 550 server appliance software, add new software and view the installed software. This section describes how to use these commands.

Software Notification icon



The Software Notification icon in the top right corner of the user interface allows you to check for new or updated software packages and to install them if any are found. The icon changes color when new or updated software packages are available. It also changes color when mail is being sent to email accounts specified in the Active Monitor settings section to indicate that new software packages have arrived.

New Software

1. Select [Software](#) or [Software Updates](#). The [Software](#) tab for Sun Cobalt or third-party software appears, as appropriate; see Figure 97.
2. Click [Check for New Software](#) to check availability of new software.
3. Click [Install New Software](#) if you already know the location of new software that you want to install on the Sun Cobalt RaQ 550 server appliance.

Figure 97. Available New Software List table

Updates

1. Select [Available New Software List](#) or [Available Software Updates List](#). The Available Software Updates List table for Sun Cobalt or third-party software appears, as appropriate; see Figure 98.

Figure 98. Available Software Updates List table

2. Click [Refresh](#) to update the list of available software or click [Find New Software](#) if you already know the location of new software that you want to install on the Sun Cobalt RaQ 550 server appliance.
3. Click the green *magnifying-glass* icon to see more detailed information about the software package. The Install Software table appears; see Figure 99.

Figure 99. Install Software table

4. Click . The Install Manually table appears; see Figure 100.

Installed Software

The following packages are installed on the Sun Cobalt RaQ 550 server appliance at the factory; you cannot un-install these packages.

- Sun Cobalt OS
- RAID

It is not usually possible to un-install various updates and additions that have been made to your server appliance through BlueLinQ.

To view the software installed on the server appliance:

1. Select .

Settings

To view or modify the settings for the BlueLinQ feature:

1. Select

2. Configure the fields in the BlueLinQ Settings tables.

Chapter 6: BlueLinQ

- . Specify how frequently the BlueLinQ server is checked for new or updated software packages.

-

Disabling the vacation message

To disable the vacation message:

1. In the Vacation Message section of the table, uncheck the Enable check box.
2. Click

Disk Usage

In the Disk Usage section, you can view the amount of disk space in use, the amount of disk

Viewing the disk usage statistics

To view the Disk Usage statistics:

1. Click Personal Profile.

Click Disk Usage table. The Disk Usage table appears with the usage statistics; see Figure 1



Enabling Interbase 6.0

The Sun Cobalt RaQ 550 server appliance is pre-loaded with InterBase 6.0, an open-source, cross-platform SQL database from Inprise Corporation. InterBase is available at www.interbase.com for more information.

- admin* is a user account that has root access to the server.
2. From the command prompt, if logged using the *admin* user, enter the user

```
su -
```

If logged in as a server administrator, enter:

```
su - root-<username>
```

where *<username>* is the login name for the server administrator account used to connect. 3. Press

6. Locate the line with `gds_db` service. This line is commented out with a `#` symbol.
7. Remove the `#` symbol. This enables `inetd` to launch the InterBase 6.0 database server when requests are made to its port.
8. Save the file and exit the editor.

9. Enter the command

```
killall -HUP inetd
```

This causes the `inetd` server to re-read its configuration file and activate the InterBase 6.0 database server.

10. Enter `exit` to end your session as root.

Serial console port

You can connect a console terminal to the DB-9 connector on the back panel of TJ0 -1.2 T

one stop bit.

5. The first prompt asks for an IP address. Enter the Primary IP address for the server appliance (for example, 10.9.19.55).
6. The second prompt asks for the netmask address. Enter the Primary Netmask for the server appliance (for example, 255.0.0.0).
7. The third prompt asks for the gateway address. Enter the gateway for the server appliance (for example, 10.9.25.254).
8. Confirm the settings that you have entered:
 - Primary IP address: 10.9.19.55
 - Primary Netmask: 255.0.0.0
 - Gateway: 10.9.25.254
9. Another prompt is displayed: [S]AVE / [C]ANCEL

You can power down the server appliance remotely through an ssh or telnet session. To obtain a root shell:

1. Connect to the server appliance using ssh or telnet and log in as the user *admin* or using a server administrator account that has root access enabled.
2. From the command prompt, if logged in as the *admin* user, enter:

```
su -
```

If logged in as a server administrator, enter:

```
su - root-<username>
```

where '*<username>*' is the login name for the server administrator account used to connect.



Note: Only the *admin* user or server administrators can su

3. Press `Enter`. A password prompt appears.
4. Enter the password for the account used to connect to the server appliance in step 1.
5. Enter the command:

```
shutdown -h now
```

The system proceeds through its shutdown sequence and powers down.

Configuration files

If necessary, you can change some of the configuration files for the services on

Customized error Web page1

The Server Administrator or a Site Administrator can replace the default error Web page1 for a virtual site on the Sun Cobalt RaQ 550 server appliance with customized Web server errors.

The errors the server appliance specifically handles with custom files for a virtual site are:

- **404** . —This error page is displayed incorrectly.
- **403** . —This error page is displayed when the permissions of a file or directory so that the Web server cannot access it.
- **404**.
for a file or directory that the Web server cannot find.
- **500**.
dynamic CGI page does not return data to the Web server correctly or cannot be executed.

The default error page1 for these four errors are located in the Web directory for a virtual site under the error subdirectory. The full path to this directory is:

`/home/sites/<sitename>/web/error`



Note: <Sitename> refers to the <hostname.domainname> of the corresponding virtual site.

There are also two buttons on the DNS screen, available under all three tabs.

Advanced DNS

Configuring SOA default values
eri11.F4/F7 1 T f10 0 0 v

Figure B-2. Advanced DNS table

Domain administrator email address

The email address defaults to the user name *admin* of the Sun Cobalt RaQ 550 server appliance. This email address is publicly available and is the administrative contact for the domain or network served. The form `my.name@xyz.T2nsa` can be user name).n

Retry interval

Due to a connection or service failure, a secondary DNS server may be unable to refresh data from the primary server. The secondary DNS server attempts to refresh data after the interval specified for trying again.

Expire interval

A secondary DNS server may be unable to refresh data from the primary server for a prolonged period of time. After the interval specified for expiry, the secondary server stops serving name requests.

Time-to-live period (TTL)

A caching DNS server other than the primary and secondary DNS servers for this domain or network can cache record lookups for the TTL period. During the TTL period, a caching DNS server does not poll the primary or secondary DNS servers for repeated lookups of the same record.

Configuring the server settings

You can also configure the server settings and the zone transfer access control for the DNS server. on the Sun Cobalt RaQ 550 server appliance.

Cache record lookups

Enabling caching, also called recursion, allows resolution of domains and network zones that other name servers are authoritative for. Disabling caching is useful when operating this server on a private network.

Forwarding server

Zone Format

You can create and select a zone file format for delegating subnets on non-octet boundaries that is compatible with your local reverse-delegation method. RFC2317 is the international standard format. Consult your ISP to determine the type of subnet DNS delegation they are using.

The DNS server on the Sun Cobalt RaQ 550 server appliance can support

Primary services

A primary DNS server maintains a list of name records and their associated IP addresses. This list is made available to other DNS servers if your domain is registered with your country-specific domain-naming organization. Your Internet service provider (ISP) can provide you with the IP addresses of the DNS servers for your domain. Figure B-4 shows the IP addresses of the DNS servers for the domain `example.com`.

Selecting a domain

To display the DNS records for a particular domain, click on the Select Domain... pull-down menu and select the domain.

Configuring a Reverse Address (PTR) record

A Reverse Address (PTR) record translates an IP address into a fully qualified

Secondary services




The Administrator can configure a secondary DNS server to provide redundant DNS service to your computers. If the primary DNS server is unavailable, the secondary DNS server takes over.

Figure B-8 shows some sample entries in the Secondary Service List table.

Figure B-8. Sample entries in the Secondary Service List table

Secondary service for a domain

To add a secondary name-server authority for a domain:

1. Select . The DNS Settings table appears.
2. Click  above the table. The Secondary Service List table appears.
3. Select Domain Secondary Service for a domain from the  ...

Forward Address (A) record

Next, create a Forward Address (A) record.






1. Select . The DNS Settings table appears.
2. Click  above the table. The Primary Service List table appears.
3. Select Forward Address (A) Record from the  ... pull-down menu. The  () table appears; see Figure B-12.
 - Leave the Host Name field blank
 - In the Domain Name field, enter mydomain.com
 - In the IP Address field, enter 192.168.10.10
4. Click . The Primary Service List table reappears with the new Forward Address (A) entry.

Figure B-12. Add Ne1(ThT11.a]TJ/F44)am4 11wd.f.570he DNS Sce

Mail Server (MX) record

To add a new domain, use the ... pull-down menu again. In the field of the type of record you select, replace the default domain

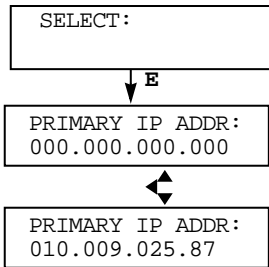
To determine which primary name server contains your domain name:

1. The local name server (the DNS resolver/browser machine) contacts the root domain name server maintained by the several Internet root server authorities.

LCD Menu Options

Setup network menu

Figure C-1. Setup Network LCD menu

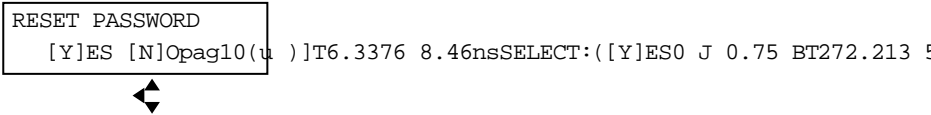




Reset password menu

For additional information, see “Resetting the Administrator password” on page 48.

Figure C-8. Reset password LCD menu



Disaster Recovery with Third-Party Software

The approach used to recover the configuration database using Knox Arkeia works as follows:

Before a backup operation begins, the pre-backup script `cobalt_prebackup` creates an archive of the configuration database in the directory `/var/cobalt/backups`.

Knox Arkeia

Tailoring the backup service

Server-side tailoring is required for Knox Arkeia. Arkeia performs backups with groups of clients called *savepacks*. When adding a Sun Cobalt RaQ 550 server appliance to a savepack on the Knox Arkeia backup server, the three options must be modified to use a pre-backup and post-backup command.

To set these parameters, select the server appliance from the list of clients in the

Files associated with Knox Arkeia tailoring

Table 1 lists the files associated with the Knox Arkeia software. These files are located on the Sun Cobalt RaQ 550 server appliance.

Table 1.

Backing up a server appliance wit/ Knox Arkeia

To back up your server appliance wit/ Knox Arkeia, you must first configure and

4. Select ☐ and configure the Knox Arkeia client on the server appliance.
 - ☐ —Click to enable the check box Enable Client
 - —Enter the fully qualified domain name of the Knox Arkeia backup server
 - —Enter the port number to which your Knox Arkeia backup server is listening. The default port number is 617
5. Click .

After the server appliance has rebooted, ensure that the CCE and Cobalt databases were recovered. Inspect the directory `/var/cobalt/backups/` for files. If `cce.tar` exists and does not have a 'restored' prefix, then you need to run the command:

```
/etc/rc.d/init.d/cobalt_restore start
```

as the root user and reboot the server appliance again.

The Arkeia log window indicates that the following files are “busy” and that it cannot overwrite the files. This is both normal and acceptable.

```
/usr/bin/perl5.00503  
/usr/sbin/httpd  
/usr/sausalito/cced.socket  
/usr/sausalito/sbin/cced  
/usr/knox/bin/nlservd
```

Files from other running processes may also be listed.

Backing up a server NetWorker

215 with Legato

To back up your server with Legato NetWorker, you must first configure and enable the NetWorker 215. For more information, see “Legato NetWorker

Su8 Microsystems recommends specifying the “All” save set for the NetWorker. If you must specify individual save sets, you must backup up the following directories together:

Performing a disaster-recovery operation

After completing the preparation steps in the previous section, the Sun Cobalt RaQ 550 server appliance is now ready to be restored.



Important: The `/var` recover operation must complete before the “/” recover operation begins.

Restore the file systems for your server appliance in the following order:

```
/var  
/  
/home  
/voc/<additional storage devices>
```

When the restore process is complete, execute the following command:

```
/usr/sausalito/sbin/diskrestorequotaspl
```

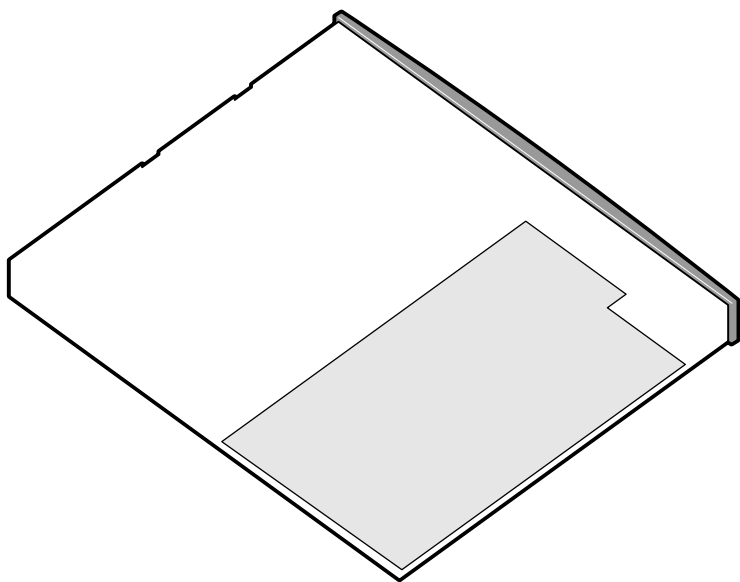
This script sets the configured quota values for the system. When this is complete, reboot the server appliance.



Important: Disaster recovery is not complete until you reboot the server appliance.

The server appliance does not reboot automatically.

Figure E-1. Components in the server appliance



Follow these steps to remove a hard disk drive:

1. Power down and remove the Sun Cobalt RaQ 550 server appliance from the equipment rack. If it is on slide rails, slide it out of the rack.
2. Unplug the AC power cord, then remove the top cover.
3. Locate the drive.

User Manditional memory

Figure E-3. Removing a DIMM



Replace a fan as follows:

1. Login as the server administrator or site administrator and select the menu item.
2. When the “System Status - Overview” screen is displayed, go to the entry and click on the magnifying glass icon. c0501(ws:)TJ0 -1.8 TD[(1.s:)TJ3102

Replacing the fans and power cables

5. The fans (see Figure E-4) snap into their holders and are held by friction. Lift the fans straight up to remove them from their holders.

Note the routing of the fan wiring before removal.

6. Replace the fans using the reverse procedure.
7. Reinstall the top cover, plug in the AC power cord and return the server appliance to the equipment rack.

Figure E-4. Removing the fans and power cables

Replacing the power supply



Caution: The chassis contains electrostatic-sensitive components. Observe proper ESD precautions when removing the top cover of



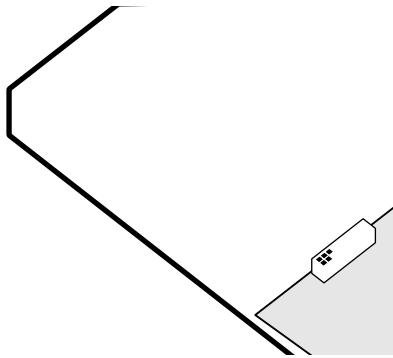
Note:

Replace the power supply as follows:

1. Power down and remove the server appliance from the equipment rack. If it is on slide rails, slide it out of the rack.
2. Unplug the AC power cord, then remove the top cover.

5. Unfasten the two securing screws (A and B) and move the power supply toward the hard disk drive until the AC plug clears the chassis wall.
6. Release the two connectors on the motherboard and remove the power supply.
7. Replace the power supply using the reverse procedure.
8. Reinstall the top cover, plug in the AC power cord and return the server appliance to the equipment rack.

Figure E-5. Removing the power supply



Replacing the battery

Replace the battery as follows:

1. Power down the server appliance and unplug the AC power cord.
2. Remove the top cover.
3. Using a small flathead screwdriver, gently pry the battery out of the battery holder (being careful not to bend the contacts).
4. Install the new battery with the + side up (you should see the + when the battery is installed).

The battery model number is CR2032 and is available in most stores that sell batteries. It is a 3V lithium battery that should last three years.

Product Specifications

Hardware

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Authentication

Internet Message Access Protocol (IMAP)

Internet Message Access Protocol is a standard protocol for accessing email from your local server. IMAP is a client/server protocol in which email is

Name server

A program that constitutes the server half of the DNS client-server mechanism. A name server contains information about a segment of the DNS database and makes it available to a client called a resolver. A resolver is often just a library routine that creates queries and sends them across a network to a name server.

NAT

See *Network Address Translation (NAT)*.

Netmask

See *subnet mask*.

Network Address Translation (NAT)

Peripheral Component Interconnect (PCI)

Simple Mail Transfer Protocol (SMTP)

The TCP/IP standard protocol for transferring electronic mail messages between points on the Internet. SMTP specifies how two mail systems interact and the format of electronic messages exchanged to transfer mail.

Post Office Protocol (POP) page 261

Simple Mail Transfer Protocol (SMTP) page 261

Swap file

A space on a hard disk used as the virtual memory extension of a computer's random access memory (RAM). Having a swap file allows the computer's operating system to pretend that it has more RAM than it actually does. The least-recently-used files in RAM are “swapped out” to your hard disk until