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Prepared by OS Integration

Compaq Computer Corporation

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## "Quick Setup" with Red Hat Linux 7.1 on the Compaq ProLiant ML330 and ProLiant ML330e Servers

*Abstract:* This document provides information on installing and implementing a Red Hat Linux 7.1 operating system on Compaq ProLiant ML330 and ProLiant ML330e servers.

It includes a step-by-step installation with Red Hat Linux 7.1 and Appendix A provides web resources for additional information on Compaq and Red Hat Linux.

For additional information regarding the configuration of Linux on Compaq ProLiant servers, visit the Compaq and Linux website: <u>http://www.compaq.com/linux</u>. For the latest Linux documentation: <u>http://www.compaq.com/products/servers/linux/whitepapers.html</u> and to view or download the latest "Installing Linux on Compaq ProLiant Servers" "How To":

http://www.compaq.com/products/servers/linux/compaq-howto.html

**Note:** Read this document before installing Red Hat Linux 7.1 on your Compaq ProLiant ML330 or ProLiant ML330e servers.

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"Quick Setup" with Red Hat Linux 7.1 on the Compaq ProLiant ML330 and ProLiant ML330e Servers Integration Note prepared by OS Integration

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# Compaq ProLiant ML330 and ML330e Servers

Designed to meet the growing needs of both small and medium size businesses, the Compaq ProLiant ML330 and the ProLiant ML330e undergoes thousands of hours of quality assurance, integration, optimization, and testing to assure maximum reliability on hardware and software to keep networks up and running continuing to enhance business productivity. Compaq also participates in the Red Hat Linux Hardware Certification Program and our engineers constantly review the Compaq hardware and drivers to ensure compatibility with Red Hat Linux.

## **New Features of Red Hat 7.1 Linux**

The latest release of Red Hat 7.1 Linux positions Red Hat Linux as an enterprise class operating system. Significant improvements over the previous kernel (2.2.x) are apparent in the following areas:

- Supports up to 8 Multiprocessors and 64 GB RAM
- Eliminates the PCI bus limit and makes virtual memory limitless
- Supports a greater number of users and groups and includes a revised scheduler to handle more processes
- Supports USB and IEEE 1394, also referred to as FireWire<sup>TM</sup>, devices.
- Improves multi-threaded network stack

The Red Hat 7.1 kernel (2.4.x) is now configured for 2 GB of virtual memory for the kernel and 2 GB virtual memory for individual processes. Rebuilding the kernel with one of the CONFIG\_{1,2,3} GB options will give either more or less virtual memory to the kernel, allowing process virtual memory to be adjusted as well.

## Using the Compaq System Erase Utility

To begin the installation of Red Hat 7.1 Linux on your ProLiant ML330 or the ProLiant ML330e start with a System Erase. If you do not have a SmartStart CD-ROM and if your ProLiant ML330 or the ProLiant ML330e is not fresh from the factory download the Compaq System Erase Utility at this URL: <u>http://www.compaq.com/support/files/server/us/download/9156.html</u>.

This SoftPaq creates one System Erase Utility diskette. Follow the steps below to use the System Erase Utility.

- 1. Obtain One (1) formatted 1.44-MB diskettes.
- 2. Download the SoftPaq to a directory on your hard drive and change to that directory. The file that is downloaded is an executable with a filename based on the SoftPaq Number.
- 3. From that drive and directory, execute the downloaded file and follow the on-screen instructions. The following files will be created:

QRST5.EXE 276090xx.\_01 README.1ST where "xx" is US (English), or JP (Japanese).

- 4. Run qrst5.exe to create the diskettes.
- 5. After the diskettes have been created, you may delete the SoftPaq file downloaded in step 2 and all files generated.
- 6. To run the Compaq System Erase Utility, power down your computer, place the Compaq System Erase Utility diskette 1 in Drive A:, then power up your computer.

If you have the SmartStart and Support Software CD-ROM, boot the server using the Compaq SmartStart and Support Software CD-ROM. SmartStart supports manual path installation of Linux.

Starting with a system erase ensures you begin the installation process from a known nonconfigured state.

- 1. Boot your server using the SmartStart CD-ROM or your bootable floppy disk.
- 2. Select Run System Erase Utility from the Main Menu, then select Yes
- 3. Restart the server

## Special Instructions for the ProLiant ML330e <u>ATA</u> model:

If you are setting up Red Hat 7.1 Linux on a Compaq ProLiant ML330e ATA model follow the instructions below. The Compaq ProLiant ML330e uses the CMD 649 IDE chipset. Support for this chipset is not explicitly present in Linux kernels before 2.4.1.

**IMPORTANT:** Following the completion of the Red Hat 7.1 Linux installation, complete the steps below to enable ATA-100 performance.

- 1. Download the SoftPaq "Compaq IDE Hard Disk Parameter Setting", available at <a href="http://www.compaq.com/support/files/server/us/locate/3061.html">http://www.compaq.com/support/files/server/us/locate/3061.html</a> to a Linux server. This package installs a small shell script to turn on DMA mode on all ATA disk drives installed in the server at boot time causing the IDE subsystem to run in PIO mode by default.
- 2. When the download is completed, extract the software:

Type # tar -xzvf sp16306.tar.gz [Enter]

The following files should be created:

- cpqhdparm-1.0-1.i386.rpm
- readme.txt

### **Installing Red Hat 7.1 Linux**

For this "Quick Setup" guide we will be using the Red Hat 7.1 Linux CD-ROM. Normally, when doing server installations you do not need to install X window (or the GUI interface), but for the purposes of this document we will be configuring the X window system.

We will also use the **Automatic Partitioning** available in Red Hat 7.1. These partitions will be automatically created. If you would like additional information on partitioning your hard drive is available at, <u>http://www.redhat.com/support/docs/howto</u> or you can review the Red Hat 7.1 Linux documentation.

- 1. To begin the Red Hat 7.1 Linux installation.
  - a. Insert the Red Hat Linux CD-ROM into your CD-ROM drive.
  - b. Select the **OK** button and press [Enter].

At this time, the installation program probes your system and attempts to identify your CD-ROM drive. Use the HELP sidebar to the left of the GUI to help guide you through the installation.

- 2. Select the language.
  - a. Select the language you use (i.e., **English** or other language).
  - b. Click the **Next** button.
- 3. Set the Keyboard configuration.
  - a. Select Model of keyboard or Generic (with number of keys).
  - b. Select Layout.
  - c. Select enable or disable for the dead keys.
  - d. Click the Next button.
- 4. Set the mouse configuration.
  - a. Select the **mouse type for your system** or **Generic mouse**. Red Hat 7.1 Linux automatically discovers the following mouse Types: PS2 and bus.
  - b. Select the **Emulate 3 Buttons** checkbox to use a two-button mouse as if it had three buttons (pressing both mouse buttons simultaneously). If you are installing the X Window System Select the Emulate 3 Buttons option to use a three-button mouse.
  - c. Click the **Next** button.

The Welcome Screen appears with information about registering your software.

5. Install options.

The following installation options are available: workstation, server, laptop, custom, or upgrade.

- a. Select Server.
- b. Click the **Next** button.
- 6. Select your disk partitioning type.



#### **Figure1 Partitioning**

a. Select the Automatic partition and REMOVE DATA radio button.

Automatic partitioning removes any existing Linux partitions.

b. Click the **Next** button.

		Red Hat Linu
line Help	Choose partitions to Format	
	🔽 /dev/hda5 /	
Choose Partitions	🔽 /dev/hda1 /boot	
to Format		
Choose the partitions that you would like to format for Red Hat Linux.		
Do you want to check for bad blocks?		
Checking for bad blocks can help prevent data loss by finding the bad blocks on a drive and making a list of them to prevent data from being written to them in the future.		
	Check for bad blocks while formatting	
Hide Help 2 Release Notes		

Figure 2 Choose partitions to Format

7. Format your partitions.

After creating partitions, you are required to format them (see below).

- a. Select /dev/hda5/ and /dev/hda1/boot
- b. Check the Check for bad blocks while formatting box (optional)
- c. Click the Next button.
- 8. Install LILO.

**IMPORTANT:** To be able to boot your Red Hat Linux system, you will need to install LILO (the *LI*nux *LO*ader). LILO can be installed in either: the master boot record (MBR) or the first sector of your boot partition.

If you install LILO in the MBR, when your machine boots, LILO will display a LILO: prompt. You are then able to boot Red Hat Linux. If your system will use only Red Hat Linux, choose the MBR.

#### LILO configuration

$\mathbf{S}$	Red Hat Linux
Online Help  Conline Help  LILO Configuration  LILO, the Linux LOader, is software that can be used to start Red Hat Linux on your computer. It can also start other operating systems, such as Windows 9x. Here, you'll be asked how (or whether) you want to configure LILO.  Create boot disk: You should create a boot disk if you are not installing LILO on the MBR or if you are not installing LILO at all.  Do not install LILO: You can choose to skip LILO if you do not want to write LILO to your drive. If you have two hard drives with a	Lilo Configuration         Istall LILO         Install LILO
different OS on each drive, you         may prefer to use a boot disk rather         than LILO.         To install LILO, select where you         Image: The select where you         Hide Help         Release Notes	☐ Back > Next

**Figure 3 LILO Configuration** 

- a. Check the **Create Boot disk** checkbox (doing this will allow you to boot Red Hat 7.1 from floppy in the event of a system failure).
- b. Check the Install LILO checkbox.
- c. Check the /dev/hda Master Boot Record (MBR) radio button.
- d. Check the Use linear mode (needed for some SCSI drives) checkbox.
- e. Check the **Default boot image** checkbox.
- f. Type **linux** in the Boot label window.

The partition holding your Red Hat Linux root file system will have a Boot label of linux. If you want to add boot labels for other partitions (or change an existing boot label), click once on the partition to select it. Once selected, you can change the boot label.

g. Click the Next button.

#### **SMP** Motherboards and LILO

If the installation program detects an SMP motherboard on your system, it automatically creates two lilo.conf entries. The two entries in lilo.conf will be linux and linux-up. Linux will then boot by default.

9. Setup your network configurations.

Network       eth0         Configuration       eth0         Choose your network card and whether you would like to configure using DHCP. If you have multiple Ethernet devices, each device will have its own configuration screen. You can switch between device screens, (for example eth0 and eth1); the information you give will be specific to each screen. If you select Activate on boot, your network card will be started when you boot.       Image: Sparky.redhat.com         Gateway:       192.168.0.1         Primary DNS:       207.175.42.153         Secondary DNS:       Ternary DNS:	
If you do not have DHCP client access or are unsure as to what this information is, please contact your Network Administrator. Next enter, where applicable, the IP Address, Netmask, Network,	

Figure 4 Network Configuration

Choose whether you would like to configure your IP address using DHCP

- a. By selecting the **Activate on boot** checkbox, your network interface will start when you boot your server. If you select the DHCP check box , ignore steps b and c.
- b. Type in the IP Address, Netmask, Network, and Broadcast addresses if needed

If you have a fully qualified domain name for the network device, Type it in the **Hostname** field.

- c. Type the **Gateway** and **Primary DNS** (if applicable the **Secondary DNS** and **Ternary DNS**) addresses
- d. Click the **NEXT** button
- 10. Configure your firewall.

Please choose your • • Use default firew	security level: High	Medium	C No firewall
	High	C Medium	C No firewall
Use default firew			E No mewan
	all rules		
🗇 Customize			
Trusted devices:	cipcb0		
Allow incoming:	DHCP SSH Telnet WWW (HTTP) Mail (SMTP) FTP		
Other ports:			
		Allow incoming: DHCP SSH Teinet WWW (HTTP) Mail (SMTP) FTP	Allow incoming:

**Figure 5 Firewall Configuration** 

- a. Select either the **High**, **Medium** or **No Firewall** radio buttons (Selecting High may inhibit your network access ability i.e., internet or intranet)
- b. Select the **Use default firewall rules** or **Customize** radio button to add trusted devices or to allow additional incoming services.

You can allow access to ports not listed here, by listing them in the **Other ports** field. Use the following format: **port:protocol**. To specify multiple ports, separate them with commas.

- c. Click the **Next** button.
- 11. Select your time zone configuration.

You will see two tabs. The first tab allows you to configure your time zone by your location and the second tab allows you to specify a UTC offset such as daylight savings.

- a. Select your Time Zone
- b. Click the **Next** button.
- 12. Establish language support.
  - a. Select the language you use (i.e., **English** or other language).
  - b. Click the **Next** button.
- 13. Configure your account.

	Red Hat Linu
Account Configuration Note: Setting up a root account and password is one of the most important steps during your installation. Your root account enables you to install packages, upgrade RPMs and do most system maintenance. Logging in as root gives you complete control over your system and is very powerful. You should be sure to use the root account only for administration. Create a non-root account for your general use and su - to gain root access when you need to fix something quickly. These basic rules will minimize the chances of a typo or incorrect command doing damage to your system. Enter a password for the root account. The password must be at least six characters in length	Account Configuration

Figure 6 Account Configuration

Setting the Root Password - Administrator ONLY

- a. Type in your [password] (must be at least six characters long)
- b. Then [type to confirm password]

#### **Setting Up User Accounts**

- a. Enter an account name.
- b. Then enter and confirm a password for that user account. Enter the full name of the account user and press **Add**. Your account information will be added to the account list, and the user account fields will be cleared so that you can add another user.
- c. Click the Next button.

You can also choose **New** to add a new user. Enter the user's information and use the **Add** button to add the user to the account list. Use **Edit** or **Delete** for user accounts you have created and no longer need.

14. Select the packages to install.

GNOME and KDE are graphical user interfaces (desktop environments) similar to Windows allowing you to navigate the Linux landscape effortlessly. Before these two packages evolved, Linux users had to memorize many shortcuts and commands, then Type them at the command line to navigate or accomplish tasks. It is recommended that you select at least one of these packages if you are not a Linux or UNIX guru.

	Red Hat Lii	nux
line Help	Package Group Selection	
Selecting Package	Printer Support	
<b>Groups</b> Select the package groups that you	X Window System	
want to install. To select a package group, click on the check box beside it.		
To select packages individually, you must check the <i>Select</i> I <i>ndividual Packages</i> box at the		
bottom of the screen.	Mail/WWW/News Tools	
	DOS/Windows Connectivity	
	Graphics Manipulation	
	Games	
	Select individual packages Total install size: 994M	

Figure 7 Selecting Package Groups

- a. To select packages individually, check the **Select Individual Packages** check box at the bottom of the screen.
- b. Select the **Packages to Install** check boxes (choose Printer Support, X Window System, either KDE or GNOME, Mail/WWW/News Tools, DOS/Windows Connectivity and Graphics Manipulation)

Selecting **Everything** installs all the packages included with Red Hat Linux. You need approximately 1.7 GB of free disk space.

c. After selecting the components you wish to install, you can select or deselect individual packages using your mouse.

Check the **Total install size** in the lower right portion of the screen to be certain you have sufficient disk space available.

d. Click the Next button.

> 🛅 Amusements	1	Package	Size (MB)		
🗖 📥 Applications		-			
🗀 Archiving		abiword	10		
🛅 CPAN	3 5003 60	✓ emacs ✓ emacs-X11	23 6		
🛅 Communications		emacs-X11	ь 24		
Cryptography		I emacs-leim	24 4		
🛅 Databases		emacs-nox	3		
Editors		I gedit	1		
Engineering		ied gean	1		
🛅 File		ied-common	2		
🛅 Internet 🥅 Multimedia		ied-xjed	1		
Multimedia 💼 Networking			1		
Productivity		nvi-m17n	2		
Publishing		nvi-m17n-canna	1		
System		🔲 nvi-m17n-nocanna	a 1		
Text		🗹 psgml	1		
Development		🗖 semi	2		
Documentation		semi-xemacs	2		
Textensions		🔲 vim-X11	2		
		🔲 vim-enhanced	1		
		Vomare	68		
al install size: 994M				Select all in group	Unselect all in gro
Japanese		T vamare		Select all in group	

**Figure 8 Individual Package Selections** 

**NOTE:** To select an individual package, double-click the checkbox beside the package name. The package information will appear at the bottom of the screen. You can also select or deselect all packages listed within a particular group by clicking on the **Select all in group** or **Unselect all in group** buttons.

- a. At the bottom of the screen, under the list of missing packages, an **Install packages to satisfy dependencies** checkbox is selected by default. By leaving this checked, the installation program will resolve package dependencies automatically by adding all required packages to the list. The **Unresolved Dependencies** screen will only appear if you are missing items needed by the packages you selected.
- b. Click the **Next** button.
- 15. Configure authentication.

To configure the NIS option, you must be connected to an NIS network and have your passwords and other network information ready.

	Red Hat Linux
line Help	Authentication Configuration
	Enable MD5 passwords
Authentication	F Enable shadow passwords
Configuration	Enable NIS
You can skip this section if you will	NIS Domain:
not be setting up network	Use broadcast to find NIS server
passwords. If you are unsure, ask your system administrator for	NIS Server:
assistance.	Enable LDAP
Unless you are setting up an NIS	LDAP Server:
password, you will notice that both	LDAP Base DN:
MD5 and shadow are selected. Using both will make your system	Use TLS lookups
as secure as possible.	Enable Kerberos
<ul> <li>Enable MD5 Passwords ——</li> </ul>	Realm:
allows a long password to	KDC:
be used (up to 256 characters) instead of the standard eight letters or less.	Admin Server:
<ul> <li>Use Shadow Passwords provides a very secure method of retaining passwords for you. The password filed in the</li> </ul>	▼

**Figure 9 Authentication Configurations** 

- a. Select the **Enable MD5 passwords** check box (allows a long password to be used (up to 256 characters)
- b. Select the **Enable shadow passwords** check box (provides a secure method for retaining passwords)
- c. Select the Enable NIS check box to run a group of computers in the same Network Information Service domain with a common password and group file. You can choose from the following two options: NIS Domain allows you to specify the domain or group of computers your system belongs or Use broadcast to find NIS server allows you to broadcast a message to your local area network to find an available NIS server.
- d. Select the Enable LDAP check box to use LDAP for some or all authentication. Choose from the following options: LDAP Server to allow access to a specific server by providing an IP address and LDAP Base DN to look up user information by its Distinguished Name (DN).
- e. Select the **Use TLS lookups** check box to allow LDAP to send encrypted user names and passwords to an LDAP server before authentication.
- f. Select the **Enable Kerberos** checkbox (a secure system for providing network authentication services).

There are three options to choose from here:

- (1) **Realm** allows access to a network that uses Kerberos, composed of one or a few servers and a potentially large number of clients.
- (2) **KDC** grants access to the Key Distribution Center (KDC) a machine that issues Kerberos tickets (TGS) and

- (3) Admin Server allows you to access a server running kadmind.
- g. Click the Next button.

16. Configure the GUI X Configuration tool.

#### **Configuring Your Videocard**

The next step is to configure an X server for your system.

line Help	X Configuration
	In most cases your video hardware can be probed to automatically determine the best settings for your display.
X Configuration	If the probed settings do not match your hardware select the correct setting below:
Although, the installation program probes to determine the best video card for your system, you can choose another video card if needed	
Once you have selected your video card, choose the amount of video RAM present on your card.	S3 801/805 with Chrontel 8391 S3 801/805 with S3 GenDAC S3 801/805 with SC1148{2,3,4} RAMDAC S3 801/805 with SC1148{5,7,9} RAMDAC
If you decide that the values you have selected are incorrect, you can click the <b>Restore original</b> values button to return to the suggested probed settings.	S3 864 (generic) S3 864 with ATT 20C498 or 21C498 S3 864 with SDAC (86C716) S3 864 with STG1703 S3 868 (generic) S3 868 with ATT 20C409
You can also choose to <b>Skip X</b> <b>Configuration</b> if you would rather configure X after the installation or not at all.	S3 868 with ATT 20C498 or 21C498 S3 868 with SDAC (86C716) S3 86C260 (VIRGE/MX) S3 86C260 (VIRGE/MX+) S3 86C325 (VIRGE) S3 86C325 (VIRGE) S3 86C357 (VIRGE/GX2)
	Video card RAM: 2 MB Store original value

Figure 9 X Configuration

Xconfigurator presents a list of video cards for you to choose from.

- a. Select your **Videocard** (select the ATI Rage XL for the ML330 and ML330e) from the list using your mouse, then let Red Hat detect it.
- b. Click the **Next** button.

If your video card does not appear on the list, Xconfigurator may not support it. Check the Red Hat Hardware Compatibility List (HCL) available at <a href="http://hardware.redhat.com/hcl/genpage2.cgi">http://hardware.redhat.com/hcl/genpage2.cgi</a>.

#### **Configuring Your Monitor**

Xconfigurator will then display a listing of monitors. You can either use the monitor that is auto detected or select a different monitor.

a. Select your Compaq Monitor Type or a Generic from the list

**IMPORTANT:** If your monitor does not appear on the list, select the most appropriate **Generic** model available. Do not select a monitor *similar* to your monitor unless you are certain that the monitor you are selecting does not exceed the capabilities of your monitor. Doing so may damage your monitor.

b. Click the Next button.

#### **Custom Configuration**



**Figure 11 Custom Configuration** 

- a. Choose the correct color depth and resolution for your X configuration.
- b. Click the **Test Setting** button to try out this configuration.
- c. If you installed both GNOME and KDE, choose which one to use as your default desktop environment
- d. For the Login Type Select **Graphical** radio button (Do this unless you have special needs, booting into a graphical environment is recommended)
- e. Click the Next button.
- 17. Prepare for the install.

You will now see a screen preparing you for the installation of Red Hat Linux

#### **Installing Packages**

You will now see bars showing the packages you selected with their total progress, size and the summary as they are being installed.

Installing Packages	Installing Packages Package: vim-common-6 Size: 10,076 KBytes Summary: The common fil		n of the VIM editor.	
We've gathered all the information needed to install Red Hat Linux on your system. It may take a while to	Package Progress:			
install everything, depending on how many packages need to be	Status	Packages	Size	Tim
nstalled.	Total	483	998 M	0:27.2
	Completed Remaining	128 355	248 M 750 M	0:06.4 0:20.3
		<b>T</b> r	e <b>d</b> hat	-

#### Figure 12 Installing Packages

a. Click the **Next** button.

After pressing the **Next** button, partitions will be written and packages will be installed. To cancel this installation process, hit your computer's Reset button or use the **Ctrl+Alt+Del** to restart your machine

18. Boot Disk Creation

**IMPORTANT:** When performing a partitionless installation, you must create a boot disk. Without this diskette, Red Hat Linux will not boot.

## **Red Hat Linux**



Figure 13 Boot Disk Creation

- a. Insert a blank, formatted diskette into your diskette drive,
- b. Click the **Next** button.
- c. Remove it from your diskette drive and label it clearly (Don't lose it or destroy it, you may need it one day)
- 19. Complete the installation.

The installation program will now prompt you to prepare your system for reboot.

a. Remove all media from the diskette drive or the CD in the CD-ROM drive

After the power-up sequence has completed, you should see the LILO GUI prompt Do one of the following things:

- b. Press [Enter] (LILO's default boot)
- c. Select the boot label, followed by [Enter]
- d. After a timeout period, LILO will automatically boot the default entry
- e. Following this you should see one or more screens of messages scroll by, then you should see the GUI login screen

You have now completed the installation of Red Hat 7.1.

#### If You Experience Problems

Red Hat 7.1 Linux stores the installation log at */tmp/install.log*. If you experience problems during the installation refer to this log to determine which steps completed normally.

Check Appendix A for website support for Red Hat Linux 7.1 and Compaq ProLiant servers

For more information see the *Official Red Hat Linux Getting Started Guide* online at <u>http://www.redhat.com/support/manuals</u> and the Red Hat Linux errata pages available at, <u>http://www.redhat.com/support/errata</u>.

### **Compaq Related Questions and Answers**

#### Where can I get more information on Compaq and Linux?

The Compaq Linux website hosts an array of information, such as the distributions Compaq supports, white papers, customer advisories, support matrices, and a direct link to all Linux SoftPaqs for servers and storage options located at, <u>http://www.compaq.com/linux/</u>

#### **Does Compaq have Open Source projects?**

Compaq is hosting a number of ongoing open source software projects running on ProLiant platforms. The Compaq open source website contains engineering projects, technical papers, news and articles from within the Compaq open source community. Compaq also aids in the support of Linux by regularly contributing software to the Linux kernel. Visit us at, <a href="http://www.opensource.compaq.com/">http://www.opensource.compaq.com/</a>

#### Why start with a system erase?

Starting with a system erase ensures you begin the installation process from a known nonconfigured state.

#### How do I perform a system erase?

Boot from the SmartStart CD-ROM and choose System Erase from the Main Menu.

## How do I get to the main menu of SmartStart if all that shows is a boot: instead of the graphical menu when booting to the SmartStart CD?

One method is to build and use the System Erase Diskette. Create this diskette from the Compaq Disk Builder by inserting the SmartStart CD-ROM into a system running Microsoft Windows; the Autorun feature automatically starts the Disk Builder Program.

## **Appendix A - Web Resources**

In addition to hardware and software products, Compaq also provides information enabling you to stay current on the latest developments and assisting you in making deployment decisions. Table 1 lists Compaq resources on the web.

#### Table 1. Compaq web resources

Item	Web Location
<b>Compaq and Linux website -</b> support for Linux includes close alliances with the major Linux distributions, contributions to open source projects, and expansion of our portfolio of solutions, technology, and services to incorporate support for Linux.	http://www.compaq.com/linux/
<b>Compaq Resource Paq for Linux</b> contains utilities, technical documentation, software drivers, and customer support information for administrators and users of Compaq server products	http://www.compaq.com/products/servers/linux/linuxpaq.ht ml
<b>Compaq SmartStart for Servers</b> provides everything you need to get your servers up and running with full Compaq support.	http://www.compaq.com/products/servers/SmartStart/index. html
<b>Compaq OpenSource</b> contains a listing of current opensource projects and additional information regarding the opensource movement.	http://opensource.compaq.com/
Compaq System ROMPaqs are available for Compaq industry-standard server products.	http://www.compaq.com/support/files/server/us/index.html
<b>Customer Advisories</b> inform you of any known problems and workarounds because of a Service Pack release.	http://www.compaq.com/support/techpubs/Customer_advis ories/index.html
<b>Compaq ActiveUpdate</b> offers proactive notification and delivery of the latest software updates. Do not waste time searching the web. Subscribe to Compaq ActiveUpdate for automatic delivery of software updates for your Compaq servers, desktops, workstations, and portables.	http://www.compaq.com/products/servers/management/acti veupdate/index.html
<b>Compaq Intelligent Manageability</b> products maximize the availability, performance and operations of all Compaq servers, storage systems, workstations, desktops, and portables. Compaq, with its partners, offers best-in-class industry standard management systems to deploy, operate, and maintain your hardware investment. This website also provides tools, guides, and information to reduce expense, minimize complexity, and speed execution.	http://www.compaq.com/manage
<b>Compaq ActiveAnswers</b> gives you the benefit of our experience to help manage your system and reduce the time, risks, and complexity associated with deploying solutions.	http://www.compaq.com/activeanswers
Press releases and Communiqués announce the availability of new products and versions.	http://www.compaq.com/newsroom/pr
<b>Compaq Server Software Download Center website</b> provides the capability to download device drivers, utilities, services, and BIOS required for Compaq ProLiant servers.	http://www.compaq.com/support/files/server/us/index.html
White Papers (complete listing) inform you of ways to optimize your environment and obtain the maximum benefit from software enhancements.	http://www.compaq.com/support/techpubs/whitepapers/inde x.html

Information specific to Linux and Red Hat can be found at the locations listed in Table 2.

#### Table 2. Linux and Red Hat resources on the web

Item	Location
The Official Red Hat Linux 7.1 Reference Guide available at the official Red Hat web site. This reference contains useful information about your Red Hat Linux system. From fundamental concepts, such as the structure of the Red Hat Linux filesystem, to the finer points of disk partitioning and authentication control.	http://www.redhat.com/support/manuals/RHL-7.1-Manual/ref- guide/
The Official Red Hat Linux Customization Guide contains information on how to customize your Red Hat Linux system to fit your needs. If you are looking for step- by-step, task-oriented guides for configuring and customizing your system.	http://www.redhat.com/support/manuals/RHL-7.1- Manual/customization-guide/
Red Hat "How To" sites for Tips and FAQs' contains These documents are provided to help you install, set up, and trouble shoot your Linux system.	http://www.redhat.com/support/docs/howto
<b>Red Hat Certified Hardware list</b> is available to assist you in the selection of hardware.	http://www.redhat.com/support/hardware
Red Hat Manuals and Documentation These are the same guides that come with Red Hat's boxed products.	http://www.redhat.com/apps/support/documentation.html
Red Hat Hardware Compatibility List (HCL) to assist you in the selection of hardware and ensure compatibility.	http://hardware.redhat.com/hcl/genpage2.cgi
<b>Red Hat News</b> - find current and past press releases about Red Hat's products, services, and partnerships.	http://www.redhat.com/about/press_releases.html
Red Hat Errata contains the most recent information about important updates, fixes, and corrections for Red Hat Linux	http://www.redhat.com/support/errata
Linux Kernel Information – find the latest information about the Linux kernel	http://www.kernel.org/