



# APPENDIX **A**

## Red Hat Operating System Installation Tips

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**Date:** 1/10/13

This appendix describes the recommended Red Hat operating system installation procedure in three parts and includes the following sections:

- [Information About Installing Red Hat for Use with ANM, page A-1](#)
- [Red Hat Installation Procedure, page A-1](#)



**Note**

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The screen captures included in this Appendix are from RHEL Update 2 (5.2). You may find slight variations in screen text when using the other supported versions of RHEL Linux 5 (for example, RHEL 5 Update 6). When in doubt, consult the RHEL documentation at <http://www.redhat.com/docs/> for the latest information.

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## Information About Installing Red Hat for Use with ANM

The procedures in this section are intended as a supplement *only* and are not meant to replace Red Hat system requirements and end-to-end installation procedures. Use the procedures in this appendix to avoid library conflicts between ANM and Red Hat Enterprise Linux 5 or 5.5 (base server) that might arise when you select certain optional software packages available with the RHEL installation. The Red Hat Enterprise Linux (RHEL) documentation can be found online at <http://www.redhat.com/docs/>.



**Note**

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If you are installing ANM for the first time on a server where it has never been installed, you *must* install one of the supported Red Hat Enterprise Linux operating systems specified in the “[Server Requirements](#)” section on page 1-35.

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## Red Hat Installation Procedure

The RHEL installation procedure is divided into three parts. The entire procedure should take approximately one hour, depending on any starts and stops you might require. The installation parts are described in [Table A-1](#).

**Table A-1 RHEL Installation Sequence**

Task	Steps
1. Media check and server partitioning—Allows you to inspect the integrity of the physical installation media (CD-ROMs or DVDs), and to make any adjustments to the partitioning of your Linux environment before installation.	“Media Check and Server Partitioning” section on page A-2, Steps 1 through 25.
2. Operating system installation—Allows you to install the operating system and any selected libraries and software packages.	“Operating System Installation” section on page A-10, Steps 27 through 30.
3. Setup Agent guided startup—Allows you to enable, disable, or adjust firewall and other security settings.	“Setup Agent Guided Startup” section on page A-11, Steps 31 through 35.



**Note** We do not recommend that you skip any of these steps even if you plan to make adjustments after the installation of ANM.

### Prerequisites

This topic includes the following prerequisites:

- You have all the RHEL CD-ROMs or DVDs that you purchased or onto which you copied the installation files from the Red Hat website.
- You have verified all system requirements listed in the RHEL documentation at <http://www.redhat.com/docs/> and in the “Preparing to Install Application Networking Manager” section on page 1-1.
- You are logged in to your server as root as described in the “Becoming the Root User” section on page 1-5.

The RHEL installation is one procedure, that for ease of understanding, is divided into three parts and labeled accordingly, as described in [Table A-1](#).

### Media Check and Server Partitioning

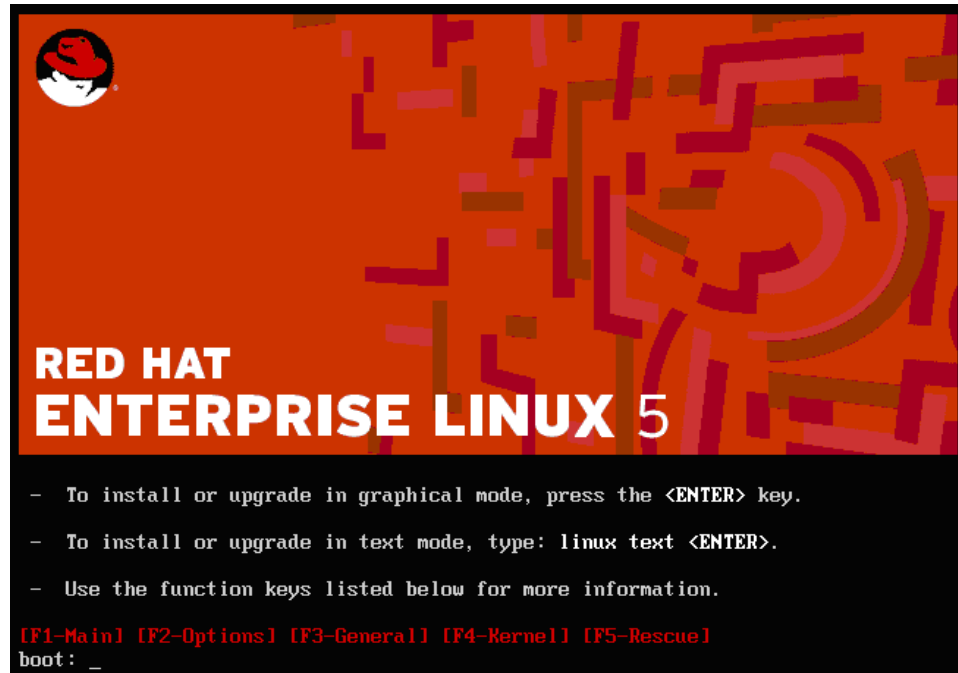
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- Step 1** Insert the first installation CD-ROM or DVD into the server CD-ROM/DVD drive.
- Step 2** Restart the server. This should begin the installation program depending on the BIOS settings that you have set for our Linux server.



**Note** If the installation does not begin after you restarted the server, you may have to stop the program and readjust the BIOS settings for your Linux server. See your system administrator for assistance.

After approximately a minute, the installer window appears as shown in [Figure A-1](#).

**Figure A-1** Red Hat Enterprise Linux 5 Installer Window



**Step 3** From the installer window, choose the GUI (graphical mode) by pressing **Enter**.



**Note** If you do not choose one of the options that are shown in [Figure A-1](#), the installation defaults to graphical mode.

The CD Found window appears. You are offered the choice of testing the CD media before installation.

**Step 4** In the CD Found window, do one of the following:

- Click **OK** to begin testing the media before installation (recommended), and go to [Step 5](#).
- Click **Skip** to skip the media test and start the installation (not recommended unless you are reinstalling or have already tested all installation media), and go to [Step 10](#).

**Step 5** In the Media Check window, Click **Test** to test the CD-ROM or DVD in the drive.

As the check process begins, a smaller Media Check window with progress bar displays the percentage of the check completed. The check process takes approximately 3 minutes. When the check process is done, the Media Check Results window appears.

**Step 6** In the Media Check window, do one of the following:

- Proceed to [Step 7](#) if the Media Check Results window displays a message indicating the CD-ROM or DVD has passed the check.
- Exit the installation and work with your system administrator to do what is needed to get new media so that you can install RHEL safely if a message appears indicating the CD-ROM or DVD did not pass the check.

**Step 7** In the Media Check Results window, click **OK** to return to the Media Check window.

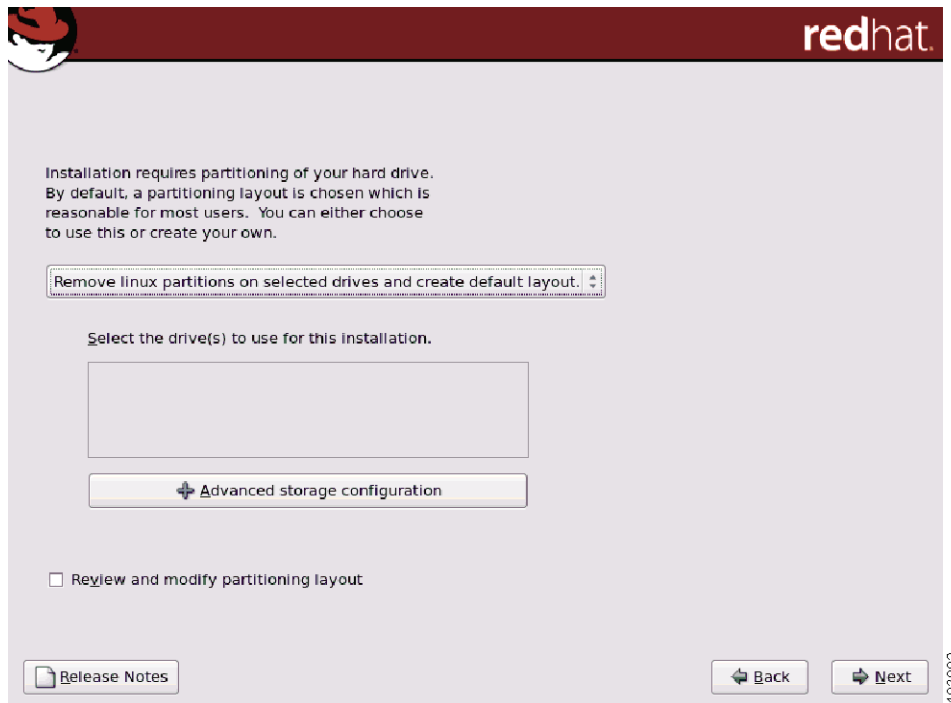
- Step 8** In the Media Check window, click **Eject CD** to eject the CD-ROM or DVD and insert another for testing. The Media Check window with a progress bar appears as described in [Step 5](#).
- Step 9** Repeat Steps 6 through 8 until you have tested all installation media. A confirmation window appears stating that all media has been tested.
- Step 10** In the confirmation window, click **Next** to continue with preinstallation setup tasks. The language and keyboard selection windows appear.
- Step 11** Click **English** for both windows. The Installation Number window appears requesting you enter an installation number. If the version of RHEL you are installing was purchased with additional packages, you most likely received an installation number. The procedures in this appendix require that you do *not* install additional software packages or Web server. Even if you have an installation number, it is important that you do not enter it by clicking **Skip** as noted in [Step 12](#).



**Note** Even if you have an installation number, do not enter it when prompted. If you enter an installation number you could inadvertently install additional packages that might conflict with the software libraries that are automatically installed with ANM.

- Step 12** In the Installation Number window, click **Skip**. A warning window appears.
- Step 13** Click **OK**. A partitioning window appears as shown in [Figure A-2](#).

**Figure A-2** Red Hat Enterprise Linux 5 Partitioning Window



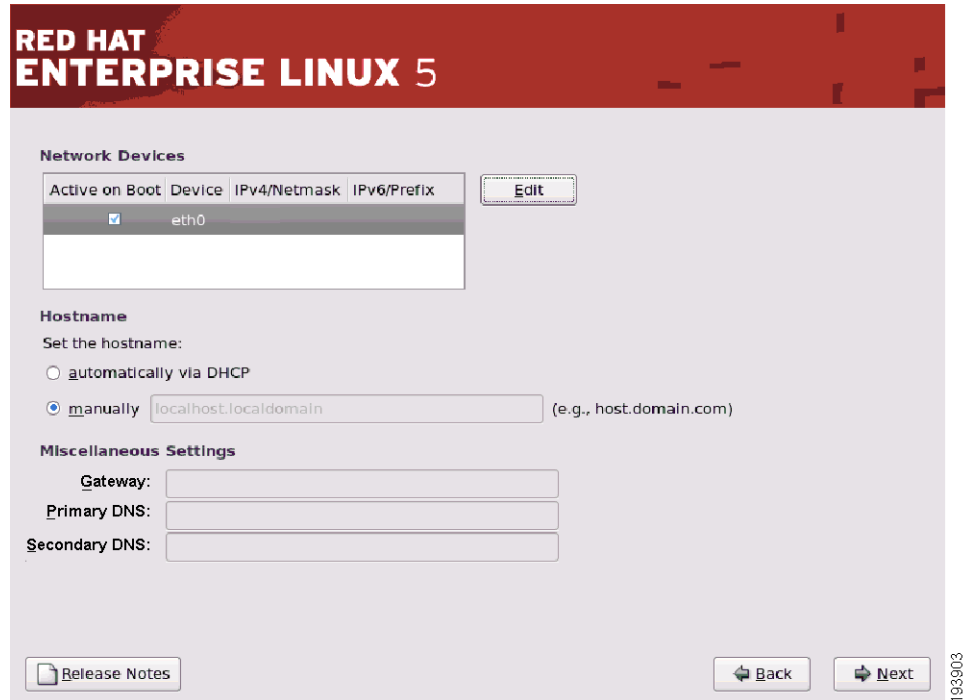
From the partitioning window, you can remove existing partitions if any or modify an existing hard drive layout to accommodate RHEL. Partitioning, which is the default, causes a reformatting of your hard drive.

**Step 14** Click **Remove Linux partitions on selected drive and create default layout**. A dialog box displays “Are you sure that you want to do this?” because this action will reformat your drive and delete all previous setup partitions.

**Step 15** Click **Yes**.

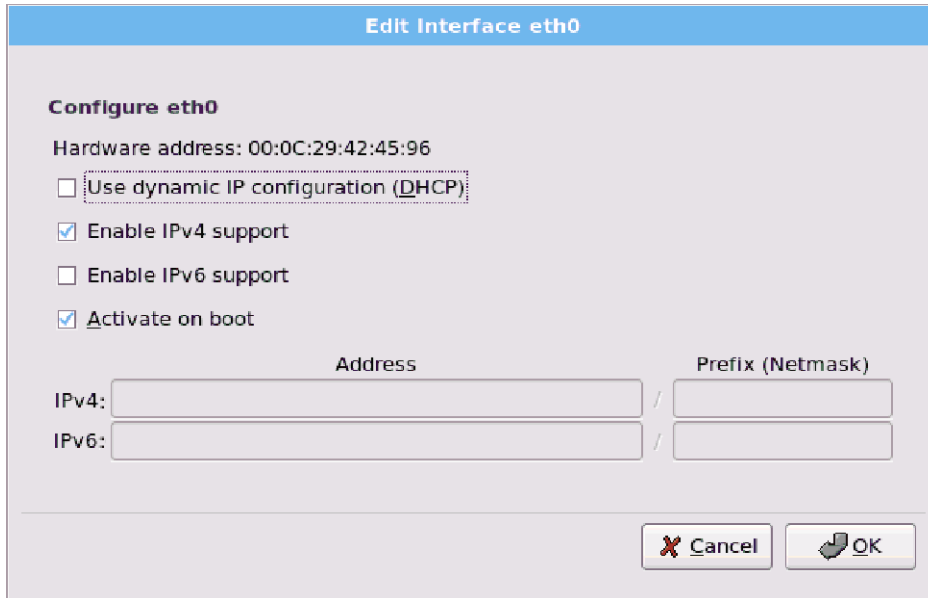
The Network Devices/Hostname/Miscellaneous Settings window appears as shown in [Figure A-3](#). The installation program automatically detects any network devices that you have and displays them in the Network Devices list.

**Figure A-3** Network Devices, Hostname, and Miscellaneous Settings Window



- Step 16** In the Network Devices/Hostname/Miscellaneous Settings window, click **Edit**.  
The Edit Interface eth0 window appears as shown in [Figure A-4](#).

**Figure A-4** Edit Interface eth0 Window



- Step 17** In the Edit Interface eth0 window, check the **Enable IPv4 support** checkbox and the **Activate on boot** checkbox.



**Note** Make sure the Use dynamic IP configuration and Enable IPv6 support checkboxes are unchecked.

The IPv4 IP Address and Prefix (Netmask) fields in the lower portion of the window displayed in [Figure A-4](#) are no longer be grayed out.

- Step 18** In the IPv4 IP Address and Prefix (Netmask) fields, enter the IPv4 IP address and netmask.  
**Step 19** Click **OK**.

The Network Devices/Hostname/Miscellaneous Settings window appears.

- Step 20** In the Network Devices/Hostname/Miscellaneous Settings window, check the **Manually** check box to enter the server settings for ANM, (see [Figure A-5](#)).

**Figure A-5** Network Devices, Hostname, and Miscellaneous Settings Window

**RED HAT  
ENTERPRISE LINUX 5**

**Network Devices**

Active on Boot	Device	IPv4/Netmask	IPv6/Prefix	Edit
<input checked="" type="checkbox"/>	eth0			

**Hostname**

Set the hostname:

automatically via DHCP

manually  (e.g., host.domain.com)

**Miscellaneous Settings**

Gateway:

Primary DNS:

Secondary DNS:

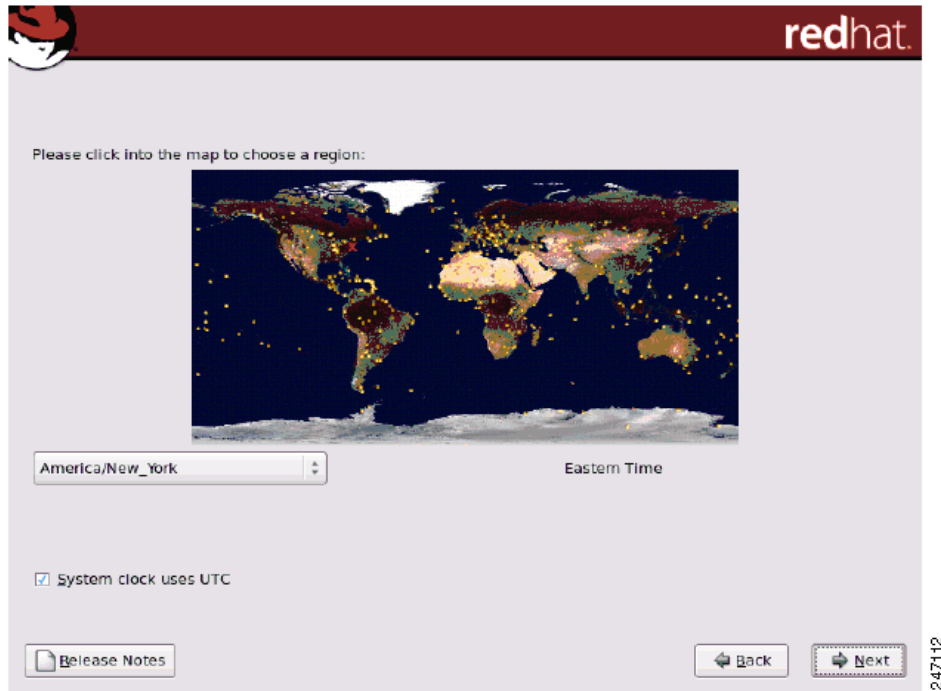
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- Step 21** In the Network Devices/Hostname/Miscellaneous Settings window, enter the following information in the Miscellaneous Settings fields:
- Server hostname.
  - Gateway IP address.
  - Primary domain name server.
  - Secondary domain name server.

**Step 22** Click **Next**.

A world map window appears with a UTC check box that is checked by default as shown in [Figure A-6](#).

**Figure A-6** Time Zone Map with UTC Settings Checkbox

**Step 23** In the world map window, do one or both of the following:

- Click the region of the world on the map where your server is located (or the one for which you would like the time zone set).
- (Optional) Uncheck the **UTC** checkbox if you do not want timestamps to appear in Universal Coordinated Time (atomic time).



**Note** These choices affect the clock that ANM uses when it generates events.



**Step 24** Click **Next**.

A Root Password Configuration Settings dialog box appears as shown in [Figure A-7](#).

**Figure A-7** Root Password Configuration Settings Dialog Box



**Step 25** In the Root Password and Confirm fields, enter and confirm your root password.

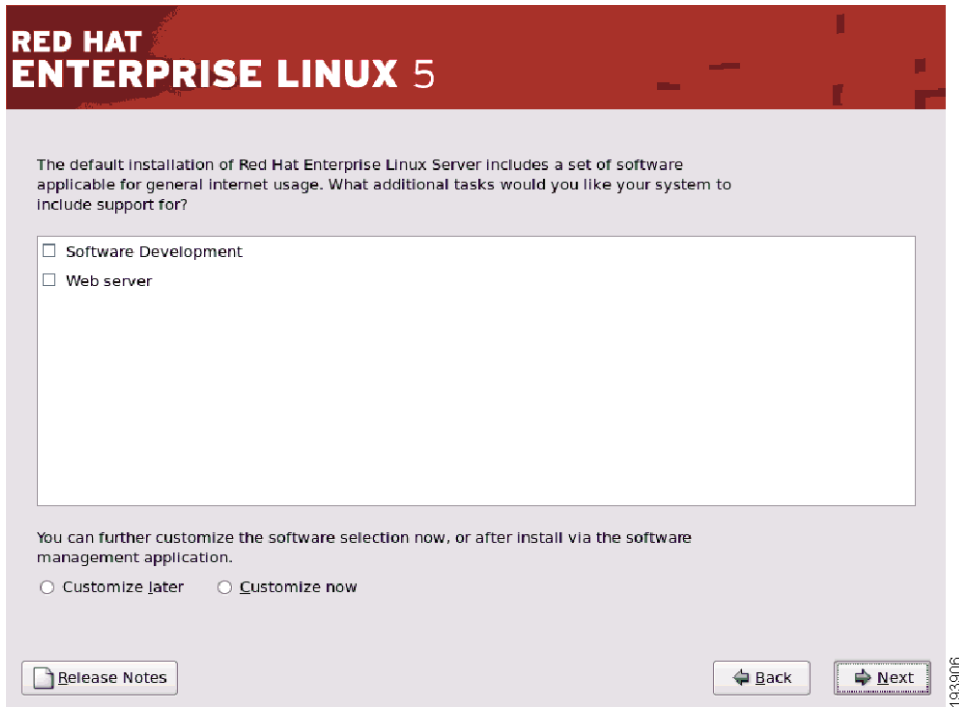
**Step 26** Click **Next**.

Steps [27](#) through [30](#) guide you through the operating system installation itself.

### Operating System Installation

In the Software Development Web Server Selection window, a progress bar appears indicating that the installation is being retrieved. The progress bar fills in approximately in one minute, and then a Software Development/Web server selection window appears as shown in [Figure A-8](#).

**Figure A-8** Software Development Web Server Selection Window



In the Software Development Web Server Selection window, you will see two checkboxes; Software Development, and Web server. Do not check either checkbox.



**Note** It is essential for the proper functioning of ANM that you do not install *any* Software Development (optional packages or SDK) or Web server.

**Step 27** Click **Next**.

A window with a progress bar appears indicating that dependencies and packages selected for installation will be installed (even though you did not select any optional packages).

**Step 28** Click **Next** to begin the installation.

The following message displays: “Click next to begin installation of Red Hat Enterprise Linux Server. A complete log of the installation can be found in the file ‘/root/install.log’ after rebooting your system. A kickstart file containing the installation options selected can be found in the file ‘/root/anaconda-ks.cfg’ after rebooting the system.”

**Step 29** In the Software Development Web Server Selection window, click **Next**.  
A window that lists the number of CD-ROMs needed for installation appears.



**Note** This step is your last chance to return to earlier screens and change your selections, return to the beginning of the installation program, or perform a media check by choosing **Back**. If you want to continue with the installation, proceed to Step 30. If you want to discontinue the installation, click **Back**.

**Step 30** In the CD-ROMs Needed for Installation window, click **Continue**.

The installation proceeds with a separate progress bar window for each CD-ROM or DVD. You are prompted to change media when a new CD-ROM is required to complete the installation. A splash screen displays “Congratulations! Your Red Hat Enterprise Linux installation is now complete!” when the installation is finished.



**Note** This part of the installation takes approximately 10 minutes. When it is finished, you will see a message that asks you to remove the final CD-ROM or installation DVD and reboot the server. You will now be taken through the RHEL Setup Agent process. Your server automatically reboots.

#### Setup Agent Guided Startup

After the server reboots a Red Hat welcome window appears followed by a Setup Agent window that tells you that there are a few more steps before your system is ready to use.

**Step 31** In the Setup Agent window, click **Forward**.

The RHEL License Agreement appears in a separate window. You need to scroll down through the text and click **Forward** to indicate your agreement.

**Step 32** In the RHEL License Agreement window, click **Forward**.

The Red Hat Firewall window appears.

**Step 33** In the Red Hat Firewall window, click **Enable Firewall**.



**Caution** Disabling the firewall is a security risk. We do *not* recommend that you do so.

**Step 34** Check the following checkboxes:

- Firewall Enable
- SSH
- Secure WWW (HTTPS)
- Telnet
- WWW (HTTP)

A confirmation window appears asking you to confirm your choices.

**Step 35** In the confirmation window, do one of the following:

- Click **Yes** to continue with Setup
- Click **No** to return to the Firewall window and redo your selections.

