

Dell™ Systems Build and Update Utility 1.1

User's Guide

Notes and Cautions



NOTE: A NOTE indicates important information that helps you make better use of your computer.



CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

Information in this document is subject to change without notice.

© 2008 Dell Inc. All rights reserved.

Reproduction of these materials in any manner without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: *Dell*, the *DELL* logo, *PowerEdge*, and *OpenManage* are trademarks of Dell Inc.; *Microsoft*, *Windows*, and *Windows Server*, are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries; *VMware* is a registered trademark and *ESX Server* is a registered trademark of VMware, Inc. in the United States and/or other jurisdictions; *SUSE* is a registered trademark of Novell, Inc. in the United States and other countries; *Red Hat* and *Red Hat Enterprise Linux* are registered trademarks of Red Hat, Inc. in the U.S. and other countries.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

December 2008

Contents

1	About This Document	7
	Who Should Read This Document?	7
	How Will This Document Help Me?	7
	How Do I Use This Document?	7
2	Dell Systems Build and Update Utility Overview	11
	What Is The Systems Build and Update Utility?	11
	What Are The Key Features?	11
	Overview of Functionalities	12
3	Before You Begin Using The Dell Systems Build and Update Utility	15
	Prerequisites And Requirements	15
	Supported Operating Systems	17
	Supported Systems	18
	Are There Other Dell Documents I Might Need?	18
	How Do I Get Technical Assistance?	19

4	Launching the Systems Build and Update Utility	21
5	Using The Systems Build and Update Utility	25
	Flexibility That Systems Build and Update Utility Offers	25
	Using The Systems Build and Update Utility In Different Scenarios	27
	Updating Your System Firmware	27
	Configuring Your System Hardware	28
	Installing Operating System	30
	Deploying Your Current ("Bare-Metal") Dell System	32
	Deploying More Than One System With the Same Configuration	34
	Deploying More Than One System With Slightly Different Configuration	36
	Deploying Multiple Systems of Different Models	37
	Deploying Multiple Systems With The Same Configuration For Different Operating Systems	38
	Reusing Configuration Files	39
	Using Systems Build and Update Utility After Operating System Installation	41
6	Important Information and Frequently Asked Questions	45
	Firmware Update	45
	Important Information	45
	Frequently Asked Questions	45

Hardware Configuration	46
Server Operating System Installation	48
Important Information	48
Frequently Asked Questions	49
Update Utility Creation	50
Important Information	50
Frequently Asked Questions	50
Content Manager	51
Important Information	51
Frequently Asked Questions	52
Glossary	53
Index	55

About This Document

It is strongly recommended that you read this section, "Dell Systems Build and Update Utility Overview," and "Before You Begin Using The Dell Systems Build and Update Utility" before proceeding further.

Who Should Read This Document?

This document is for system administrators who are responsible for deploying and updating Dell™ PowerEdge™ systems in their organizations.

How Will This Document Help Me?

This document introduces you to the Dell Systems Build and Update Utility, and includes best practices on how to make the product effective in helping you streamline your deployment and update procedures for Dell systems.

- If you are a first-time user of this product, this document will help you set up your systems prior to, during, and after using the Dell Systems Build and Update Utility.
- If you are an existing user of the Systems Build and Update Utility, this document will help you understand how to leverage the utility modules in an interlinked manner to create a customized deployment media.

This document focuses only on setting up your Dell systems to use the Dell Systems Build and Update Utility effectively and efficiently, and the possible scenarios in which to use this utility.

How Do I Use This Document?

This document provides an overview of the various modules of the Dell Systems Build and Update Utility and the possible scenarios in which you might use them. However, it does not cover all scenarios and possibilities. For specific information on Dell products whose functionalities are now provided by the Dell Systems Build and Update Utility, see "Are There Other Dell Documents I Might Need?."

Depending on the Dell systems you want to deploy, redeploy or update, it is recommended that you use the document as follows.

Table 1-1. Organization of Information in This Guide

Topics	For Dell systems	For Dell PowerEdge SC systems
Information on this document, its intended audience, purpose, and organization	"About This Document"	"About This Document"
Overview of the Dell Systems Build and Update Utility and what functionalities it offers	"Dell Systems Build and Update Utility Overview"	"Dell Systems Build and Update Utility Overview"
What you need before proceeding to use the Dell Systems Build and Update Utility and where to get other information that you may need while using this utility	"Before You Begin Using The Dell Systems Build and Update Utility"	"Before You Begin Using The Dell Systems Build and Update Utility"
Important information about launching the Systems Build and Update Utility and pointers to user scenarios	"Launching the Systems Build and Update Utility"	"Launching the Systems Build and Update Utility"
Possible scenarios in which you can use the Systems Build and Update Utility	"Using The Systems Build and Update Utility"	"Using The Systems Build and Update Utility" (as applicable)
Important information and frequently asked questions (FAQs) about the Firmware Update module	"Firmware Update"	Not applicable
Important information and FAQs about the Hardware Configuration module	"Hardware Configuration"	Not applicable

Table 1-1. Organization of Information in This Guide (continued)

Topics	For Dell systems	For Dell PowerEdge SC systems
Important information and FAQs about the Server Operating System Installation module	"Server Operating System Installation"	"Important Information and Frequently Asked Questions"
Important information and FAQs about the Update Utility Creation module	"Update Utility Creation"	Not applicable
Important information and FAQs about the Content Manager tool	"Content Manager"	"Content Manager"

Now that you have an idea of what this document is about and how to use it to easily access the information you want, see "Dell Systems Build and Update Utility Overview" to get an overview of Dell Systems Build and Update Utility and the functionalities it offers.

Dell Systems Build and Update Utility Overview

This section provides an overview of the Dell™ Systems Build and Update Utility. This section helps you to understand the functionalities that the Dell Systems Build and Update Utility provides to update and deploy your Dell systems.

What Is The Systems Build and Update Utility?

The Dell Systems Build Update and Utility is an integrated tool for deployment and update of your Dell systems. It has modules such as **Server OS Installation**, **Firmware Update**, **Update Utility Creation**, and **Hardware Configuration**. These modules enable you to update BIOS and Firmware in the pre-operating system environment, apply these settings on the current system or on multiple systems, and install the operating system.

For example, if you have bought a new Dell system, you can use Systems Build Update and Utility to update the system firmware (if required), configure your system hardware, and install a supported operating system. If you have an existing Dell system, you can use Systems Build Update and Utility to update to the latest firmware, modify the hardware configuration, and install a new operating system. You can perform these operations on your existing system (one-to-one) or create a bootable media for a set of multiple systems (different platforms) of your choice.

What Are The Key Features?

The key features of the Systems Build and Update Utility are:

- The three modules mentioned above (**Server OS Installation**, **Firmware Update**, and **Hardware Configuration**) are interlinked in such a manner that you can configure all the three modules in one go and apply the configuration as required.
- You can apply **Hardware Configuration** settings to your current system in the same session.

- You can create customized bootable media to deploy multiple systems (different platforms) of your choice.
- You can easily deploy your newly purchased Dell systems for which you had already created a bootable media. This is possible because of the multisystem configuration file (.csv file) that you must create and save in a centralized network location.
- You can use the import and export configuration feature (**Apply/Export Configuration**) in Systems Build and Update Utility to export your system configuration for future use. You can use this configuration file (after minor modifications) to deploy similar systems by using the import feature. Importing such a configuration file will also pre-populate all the graphical user interface (GUI) fields with values that you saved and exported for future use.

Overview of Functionalities

Table 2-1 lists the functionalities of the Dell Systems Build and Update Utility to deploy and update your Dell systems.

Table 2-1. Dell Systems Build and Update Utility Functionalities

You Want To	Go To	For
Update your system firmware (Baseboard Management Controller [BMC], Dell Remote Access Controller [DRAC], Redundant Array of Independent Disks [RAID]) and BIOS in a pre-operating system environment.	"Updating Your System Firmware"	Dell systems (excluding PowerEdge SC systems)
Configure your system hardware.	"Configuring Your System Hardware"	Dell systems (excluding PowerEdge SC systems)
Install an operating system on your system	"Installing Operating System"	Dell systems (including PowerEdge SC systems)

Table 2-1. Dell Systems Build and Update Utility Functionalities (continued)

You Want To	Go To	For
Customize the Server Update Utility and use it to update your Dell system one-to-one (requires an operating system on your system).	"Using Systems Build and Update Utility After Operating System Installation"	Dell systems (excluding PowerEdge SC systems)
Download the latest Server Update Utility ISO image from Dell online at ftp.dell.com .	"Using Systems Build and Update Utility After Operating System Installation"	Dell systems (including PowerEdge SC systems) NOTE: Content Manager runs on supported Microsoft Windows and Linux operating systems.
Create your customized repository using the <i>Dell Server Updates</i> DVD or from Dell online at ftp.dell.com in the post-operating system environment.	"Using Systems Build and Update Utility After Operating System Installation"	Dell systems (including PowerEdge SC systems) NOTE: Content Manager runs on supported Microsoft Windows and Linux operating systems.
Create your customized repository using the <i>Dell Server Updates</i> DVD in the pre-operating system environment.	"Update Utility Creation"	Dell systems (including PowerEdge SC systems)
Check for the latest updates by comparing your local or customized repository with the Dell online repository at ftp.dell.com .	"Using Systems Build and Update Utility After Operating System Installation"	Dell systems (including PowerEdge SC systems) NOTE: Content Manager runs on supported Microsoft Windows and Linux operating systems.

Now that you have an overview of Dell Systems Build and Update Utility and what functionalities it offers, read "Before You Begin Using The Dell Systems Build and Update Utility" to see what you should have before you begin using Dell Systems Build and Update Utility in your environment.

Before You Begin Using The Dell Systems Build and Update Utility

This section lists the prerequisites you require before proceeding to use Dell™ Systems Build and Update Utility and where to get other information that you may need while using this utility.

Prerequisites And Requirements

You should have a Dell system with:

- Minimum memory of 512 MB
- CD drive or DVD drive

Table 3-1 lists the prerequisites and requirements for Dell Systems Build and Update Utility.

Table 3-1. Prerequisites And Requirements

Module	Prerequisites And Requirements
Generic Prerequisites And Requirements	<ul style="list-style-type: none">• To make effective use of Systems Build and Update Utility, you will need at least two multiple network shares (either Network File System [NFS] or Samba. If you do not have network connectivity for the system you are deploying, ensure that you have multiple USB keys.• If you are planning to deploy multiple systems using Systems Build and Update Utility, Dell recommends that you create a multisystem configuration file (.csv file) that contains information about all your systems on your network. (Information includes the service tag, host name, IP addresses, subnet mask, operating system(s) ISO file name(s), product keys, DRAC IP address, and Domain Name System (DNS) IP addresses.) Save this file on a common network share or a USB key. Systems Build and Update Utility will not validate the file but use it during actual deployment. When you want to apply your customized bootable media on a group of similar systems, you will be prompted by Systems Build and Update Utility to browse and locate the multisystem configuration file.• A common network share or a USB key to export your configuration for later use. Similarly, if you want to import your previously saved configuration, the files exported in the earlier session must be available on a network share or on a USB key.• A common network share or a USB key to save your customized bootable image.• A common network share to save logs for each system on your network share. These logs can be a useful reference if you want to troubleshoot any problem your systems might have encountered during deployment.

Table 3-1. Prerequisites And Requirements (continued)

Module	Prerequisites And Requirements
Server Operating System Installation	<ul style="list-style-type: none">• Operating system media; or, a network share or a USB key on which to save the operating system ISO image.• <i>Dell Systems Management Tools and Documentation</i> DVD (if you want to install Dell OpenManage™ System Administrator). This is not applicable for Dell PowerEdge™ SC systems.• Basic knowledge of Redundant Array of Independent Disks (RAID)
Firmware Update	<ul style="list-style-type: none">• DVD drive• <i>Dell Server Updates</i> DVD or <ul style="list-style-type: none">• A network share with the Server Update Utility content• Knowledge of setting up the Network File System (NFS) or Microsoft® Windows® share
Update Utility Creation	<ul style="list-style-type: none">• DVD drive• <i>Dell Server Updates</i> DVD or <ul style="list-style-type: none">• A network share with the Server Update Utility content• Knowledge of setting up Network File System (NFS) or Microsoft Windows share• Network share or USB key to store the customized repository
Hardware Configuration	<ul style="list-style-type: none">• Basic knowledge of BIOS, RAID, Baseboard Management Controller (BMC), and Dell Remote Access Controller (DRAC)

Supported Operating Systems

For the list of operating systems that the Dell Systems Build and Update Utility supports, see the **readme.txt** in the **root** folder or the *Dell Systems Software Support Matrix* on the Dell Support website at **support.dell.com** or the *Dell Systems Management Tools and Documentation* DVD.

Supported Systems

For the list of Dell systems supported for this version of the Dell Systems Build and Update Utility, see the **readme.txt** in the **root** folder or the *Dell Systems Software Support Matrix* on the Dell Support website at **support.dell.com** or the *Dell Systems Management Tools and Documentation* DVD.

Are There Other Dell Documents I Might Need?

In addition to this guide and the Dell Systems Build and Update Utility online help, you might need to refer the following documents to get details on specific Dell Systems Build and Update Utility modules and/or Dell OpenManage products. These documents are available on the Dell Support website at **support.dell.com** and the *Dell Systems Management Tools and Documentation* DVD.

- The *Dell OpenManage Installation and Security User's Guide* provides additional information about performing an unattended installation of Server Administrator on systems running supported Windows, Red Hat® Enterprise Linux® Server, and SUSE® Linux Enterprise Server operating systems.
- The *Dell OpenManage Server Administrator Compatibility Guide* provides compatibility information about Server Administrator installation and operation on various hardware platforms (or systems) running supported Windows, Red Hat Enterprise Linux Server, and SUSE Linux Enterprise Server operating systems.
- The *Dell Remote Access Controller 4 User's Guide* provides comprehensive information about using the **RACADM** command line utility to configure a Dell Remote Access Controller (DRAC) 4.
- The *Dell Remote Access Controller 5 Firmware User's Guide* provides comprehensive information about using the **RACADM** command line utility to configure a DRAC 5.
- The *Dell Chassis Management Controller User's Guide* provides comprehensive information about using the controller that manages all modules in the chassis containing your Dell system.

- The *Integrated Dell Remote Access Controller User's Guide* provides information about installation, configuration, and maintenance of the Integrated Dell Remote Access Controller (iDRAC) on management and managed systems.
- The *Dell Remote Access Controller/Modular Chassis User's Guide* provides information about installation, configuration, and maintenance of the Dell Remote Access Controller/Modular Chassis (DRAC/MC).
- The *Dell Remote Access Controller Racadm User's Guide* provides comprehensive information about using the **RACADM** command line utility.
- The *Dell Baseboard Management Controller Utilities User's Guide* provides information about configuring a managed system to use the BMC Management Utility to manage your system through its BMC.
- The *Dell Update Packages User's Guide* provides information about obtaining and using Dell Update Packages as part of your system update strategy.
- The *Dell OpenManage Deployment Toolkit User's Guide* provides information on how to run Linux DUP in the Dell-provided or in your customized Embedded Linux (ELI) environment including the required dependencies.
- The *Dell OpenManage Deployment Toolkit Command Line Interface Reference Guide* provides information on the command line utilities to configure system features.
- The *Server Update Utility User's Guide* provides information on how to identify and apply updates to your system.
- The *Dell Systems Software Support Matrix* provides information about the various Dell systems, the operating systems supported by these systems, and the Dell OpenManage components that can be installed on these systems.

How Do I Get Technical Assistance?

If at any time you do not understand a procedure described in this guide or if your product does not perform as expected, help tools are available to assist you. For more information about these help tools, see "Getting Help" in your system's *Hardware Owner's Manual*.

Additionally, Dell Enterprise Training and Certification is available; see www.dell.com/training for more information. This service may not be offered in all locations.

Launching the Systems Build and Update Utility

To launch the Dell™ Systems Build and Update Utility:

- 1 Insert the *Dell Systems Management Tools and Documentation* DVD in your system drive.
- 2 Reboot your system.

The boot menu screen displays.

Figure 4-1 shows the boot menu screen.

Alternately, you can launch the Systems Build and Update Utility on a remote system as follows:

- 1 On your client system, access the Dell Remote Access Controller (DRAC) 4 or DRAC 5 GUI.
- 2 Click the **Media** tab.
- 3 The **Virtual Media** screen displays.



NOTE: If the Virtual Media Active X Control is not installed on the system, you will be prompted to install it before you proceed.

- 4 Ensure that the attribute for **Attach/Detach Status** is **Attached**.

To access the location of the Systems Build and Update Utility bootable media or the ISO image of the *Dell Systems Management Tools and Documentation* DVD, select your system drive location or browse against **ISO Image File**, as appropriate.

Click **Connect**.

- 5 The **Virtual Media Status** screen displays. The *Dell Systems Management Tools and Documentation* media is now connected to your host system.

Click **Power Management**.

- 6 To boot the host system to the Systems Build and Update media, select **Power Cycle System** under **Power Control Operations**.
Click **Apply**.
Click **Console**.
- 7 The **Console Redirection** screen displays.
Click **Connect**.
You can now access the boot menu screen on your host system from your client system and proceed to use Systems Build and Update Utility remotely.

Figure 4-1. Boot Menu Screen

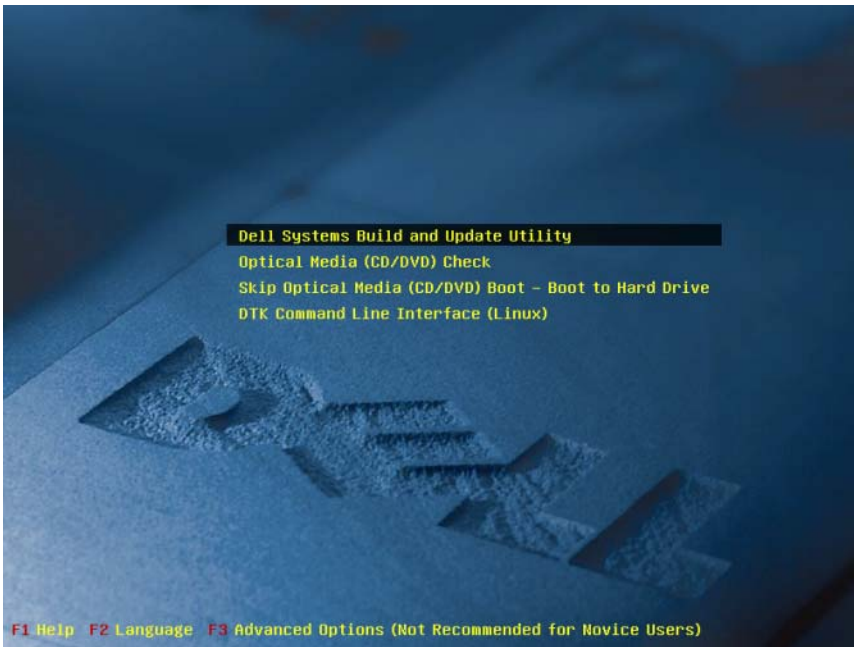


Table 4-1 lists the options and their descriptions available on this screen.

Table 4-1. Boot Menu Options

Boot Menu Option	Does This For You
Dell Systems Build and Update Utility	Takes you to the Dell Systems Build and Update Utility Home screen.
Optical Media (CD/DVD) Check	Checks if the <i>Dell Systems Management Tools and Documentation DVD</i> you inserted has any errors.
Skip Optical Media (CD/DVD) Boot - Boot to Hard Drive	Enables you to boot from your system hard drive.
DTK Command Line Interface (Linux)	Takes you to the Deployment Tool Kit (DTK) Command Line Interface (only on systems running Linux). NOTE: This option is not available on Dell PowerEdge™ SC systems.
F1 Help	Takes you to the navigation help.
F2 Language	Enables you to choose the language.
F3 Advanced Options	Activates the DTK Command Line Interface (Linux) option. NOTE: This option is not available on Dell PowerEdge SC systems.

Depending on your requirement, you may want to use Systems Build and Update Utility in any of the following possible scenarios:

- Updating Your System Firmware
- Configuring Your System Hardware
- Installing Operating System
- Deploying Your Current ("Bare-Metal") Dell System
- Deploying More Than One System With the Same Configuration
- Deploying More Than One System With Slightly Different Configuration
- Deploying Multiple Systems of Different Models
- Deploying Multiple Systems With The Same Configuration For Different Operating Systems
- Reusing Configuration Files
- Using Systems Build and Update Utility After Operating System Installation

Using The Systems Build and Update Utility

This section describes the flexibility that Systems Build and Update Utility offers to deploy and update your systems and also the various scenarios in which you can use the Dell™ Systems Build and Update Utility. However, this section does not cover all the possible update and deployment scenarios in which you can use the Systems Build and Update Utility. At any point during your update and deployment process, see the online help for details about a particular screen.

Flexibility That Systems Build and Update Utility Offers

- **Choice of configuration:** Depending on your deployment and update requirement, you can configure all the three modules (**Firmware Update**, **Hardware Configuration**, and **Server Operating System Installation**), any one of the modules, or a combination of the modules.
- **Choice of when to apply the configuration:** You can either apply the configuration of your choice immediately or save it for later using the **Apply/Export Configuration** feature.

- **Choice of configuring systems:** The **Apply/Export Configuration** feature in Systems Build and Update Utility allows you to deploy and update your current system and/or multiple systems or multiple systems of different models.
 - You can perform the following deployment/update operations on your current system:
 - apply firmware updates
 - configure hardware (BIOS, DRAC, RAID, and so on)
 - install operating system
 - launch post-operating system install scripts
 - You can perform the following deployment/update operations for multiple systems:
 - export the configuration scripts (for all three modules or a combination of your choice) for future use.
 - generate a bootable image that contains, among others, the update packages for specific generation(s) of system(s), applicable hardware configuration scripts (BIOS, DRAC, RAID, and so on), operating system installation details and link to the source CD/DVDs on the network, and launch points to install the operating system.
- **Choice of creating bootable media:** You can create a bootable media for a set of systems of your choice. Then, boot each of the systems (that you selected when creating the bootable media) using this bootable media (saved as an image). If you select the USB drive as the destination for the image, Systems Build and Update Utility gives you the option to make the USB device bootable and directly boot the system with the device.
- **Unattended update and deployment:** When you boot your system using the bootable media (CD/DVD/USB drive), the scripts on the bootable media you created will apply the firmware updates, apply the hardware configuration, and finally install the operating system, as applicable. All through this update and deployment process, you will not be prompted for any information, making this an unattended update and deployment of your system.

Using The Systems Build and Update Utility In Different Scenarios

This subsection describes some of the possible scenarios in which you can use the Systems Build and Update Utility. These scenarios are meant to give you an idea on how to effectively use the Systems Build and Update Utility. They are not necessarily the only way to use this tool nor are these the only scenarios in which you can use this tool. Dell recommends that at any point during your update and deployment process, you see the online help for details about a particular screen.

Updating Your System Firmware

If you have purchased a newly released Dell PowerEdge™ system, it will have the latest firmware. However, if more than a quarter has passed since the release of your system, you may have to update the firmware.

- 1 On the **Dell Systems Build and Update Utility Home** screen, click **Configure** against **Firmware Update** or click **Firmware Update** on the left-hand pane.

The **Repository Selection** screen in the **Firmware Update** module displays.

- 2 Specify either the local or the remote repository location where your update files (repository) reside. (For details, see "Firmware Update")
- 3 Click **Continue**.
- 4 The **Firmware Update** inventories your system, generates a comparison report on the **Comparison Report** screen. This screen displays a comparison of the currently installed version of each component on the existing system with the repository component version for the same system. It also indicates the components that need to be updated and the components that can be downgraded.



NOTE: You can selectively upgrade components depending on your requirement. However, you cannot perform selective downgrades.

- 5 If all components on your system are up-to-date, no action is required. If you want to compare your system component status with respect to a different version of the Server Update Utility, click **Back**. Provide the location of the Server Update Utility on the **Repository Selection** screen and click **Continue**.

If there are components to be updated, select the required components and click **Go Back to Home Page**.



NOTE: At this stage, all the information about the repository and the selections you made on the **Comparison Report** screen are saved by Systems Build and Update Utility. These updates will be applied during the actual deployment.

- 6 To update your current system, click **Apply/Export Configuration** on the **Dell Systems Build and Update Utility Home** screen. The **Configure Apply/Export Options** screen displays.
- 7 Select the **Apply Configuration to Current System** option. Click **Apply/Export**.
- 8 The progress bar displays after which your system reboots with the firmware updates configured.



NOTE: For more information on the specific **Firmware Update** screens and what you can do on each screen, see the Dell Systems Build and Update Utility online help.


Configuring Your System Hardware

On Your Current System

- 1 On the **Systems Build and Update Utility Home**, click **Configure** against **Hardware Configuration** or click **Hardware Configuration** on the left-hand pane.
- 2 The **Configuration Status Summary** screen displays. To configure the components (RAID, DRAC, BIOS, and so on), click on the individual component buttons.
- 3 After you configure fields on each component screen, ensure that you click **Save Settings** before you navigate away from the screen. Once you complete this process, go back to the **Systems Build and Update Utility Home**.
- 4 Click **Apply/Export Configuration**.

- 5 The **Configure Apply/Export Options** screen displays.
- 6 You can export the hardware configuration for later use (select **Export Configuration**). The **Apply Configuration to Current System** is selected by default.
Click **Apply/Export**.
- 7 The configuration you saved in step 3 will now apply to your system and the progress bar displays. After the configuration is applied, your system reboots automatically. Your system is ready with the updated configuration.

For Multiple Systems

- 1 On the **Systems Build and Update Utility Home**, click **Change** against **System(s) Selection** on the left-hand pane. The **Select System(s)** screen displays.
 **NOTE:** To generate a bootable ISO image to deploy multiple systems, you must select the required system on the **Select System(s)** screen. This is true even when you want to deploy multiple systems that are the same model as your current system on which you are running **Systems Build and Update Utility**.
- 2 Select the system(s) per your requirement. Click **Save Settings**.
- 3 You are taken to the **Systems Build and Update Utility Home**. The list under **System(s) Selection** is now populated with the systems selected above.
- 4 On the **Systems Build and Update Utility Home**, click **Configure** against **Hardware Configuration** or click **Hardware Configuration** on the left-hand pane.
- 5 After you configure fields on each component screen, ensure that you click **Save Settings** before you navigate away from the screen.
Once you complete this process, go back to the **Systems Build and Update Utility Home**.
- 6 Click **Apply/Export Configuration**.
- 7 The **Configure Apply/Export Options** screen displays.

- 8** You can export the hardware configuration for later use (select **Export Configuration**).
Select **Create Auto-Deployment Bootable Image** and click **Destination** to provide the location where you want to save the bootable ISO image. The **ISO Save Location** screen displays. (If you choose to save the ISO image to a USB key and select the option to make the USB key bootable, you can skip the step to burn the CD/DVD.)
Click **Continue**.
- 9** The ISO image is generated and saved in the location you specified in the step above.
- 10** Burn the ISO image using any CD/DVD burning software onto a CD/DVD.
- 11** Boot the target system with the CD/DVD or USB key.
- 12** The deployment starts automatically and you will not be prompted for any inputs. The system will reboot as and when required until the process is complete. Your system is ready with the updated configuration.

Installing Operating System

- 1** On the **Systems Build and Update Utility Home**, click **Configure** against **Server OS Installation** or click **Server OS Installation** on the left-hand pane.
- 2** The **Set the Date and Time** screen displays. Make the required changes and click **Continue**.
- 3** The **Select an Operating System to Install** screen displays. Select the appropriate operating system (let us say you select **Windows 2003 Server Service Pack 2** operating system), choose whether to create a utility partition or no, and click **Continue**.
- 4** The **Select RAID Configuration** screen displays. You can choose to apply the RAID configuration that you specified while configuring your system hardware in the **Hardware Configuration** module or retain the existing RAID configuration on your system. Click **Continue**.
- 5** The **Configure the Disk Partition for Microsoft Windows 2003 Server Service Pack 2** screen displays (based on the operating system you chose in step 3). Select the file system for boot partition, enter the size of the virtual disk available, and click **Continue**.

- 6 The **Network Adapter(s) Configuration** screen displays. Enter the appropriate information about the network adapters on your system. Click **Continue**.
- 7 The **Enter Configuration Information for Microsoft Windows 2003 Server Service Pack 2** screen displays (based on the operating system you chose in step 3). Fill in the appropriate fields and click **Continue**.
- 8 The **Operating System Installation Summary** screen displays. You can change your configuration settings until this point by clicking **Back**. To save your configuration, click **Go Back to Home Page**. See step 9. To apply the configuration on your system immediately, click **Apply Now**. This launches step 12 through step 15 to install the operating system on your current system.

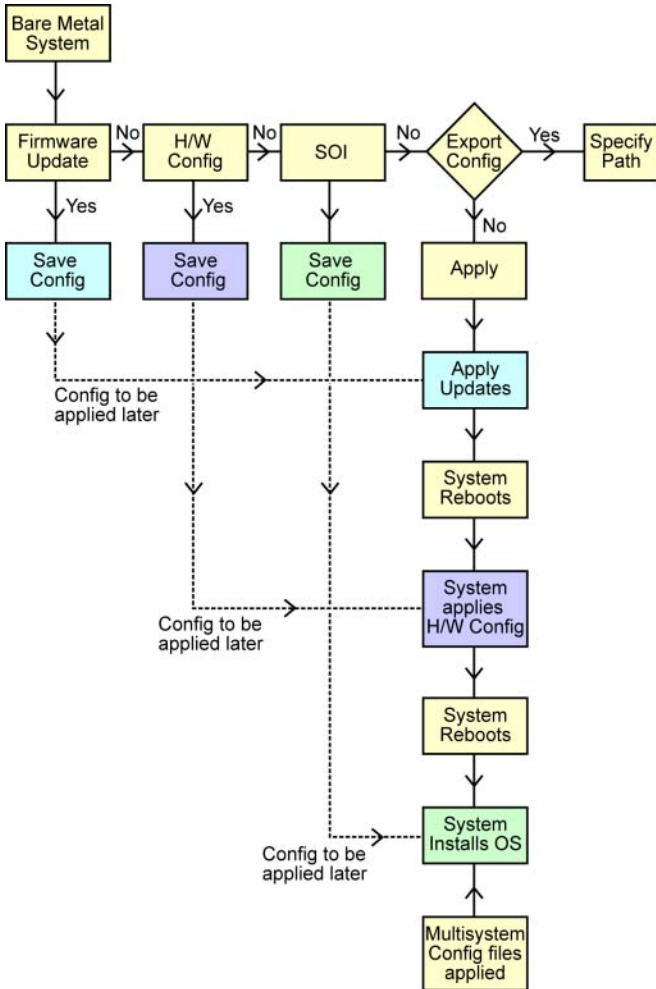




NOTE: The **Apply Now** option is enabled only if you have not selected any system on the **Select System (s)** screen.

- 9 The **Systems Build and Update Utility Home** screen displays. Click **Apply/Export Configuration**.
- 10 The **Configure Apply/Export Options** screen displays. You can export the operating system installation configuration for later use (select **Export Configuration**). The **Apply Configuration to Current System** is selected by default. Click **Apply/Export**.
- 11 The **Script Generation Progress** screen displays.
- 12 Next, the deployment progress screen displays. If you selected the option to install the Dell OpenManage Server Administrator on the **Enter Configuration Information for Microsoft Windows 2003 Server Service Pack 2** screen, you are either prompted for the Server Administrator CD or the Server Administrator .exe copies from the DVD to a local destination on your system.
- 13 You are prompted to install the operating system CD/DVD.
- 14 SBUU copies the operating system files to your system.
- 15 The operating system installer launches. Your system may reboot multiple times. Your system is ready with the operating system and server administrator installed.

Deploying Your Current ("Bare-Metal") Dell System

In this scenario, you can update and deploy your current system.



- 1 To update your system firmware, click **Configure** against **Firmware Update** on the **Dell Systems Build and Update Utility Home** screen, or click **Firmware Update** on the left-hand pane. For details on the **Firmware Update**, see "Firmware Update." For details on how to use the **Firmware Update**, see step 1 through step 5 under "Updating Your System Firmware").
 - 2 To configure your system hardware, click **Configure** against **Hardware Configuration** on the **Systems Build and Update Utility Home** or click **Hardware Configuration** on the left-hand pane. You can configure hardware components such as BMC, BIOS, RAID, RAC, and so on, as required. (For details on the Hardware Configuration module, see "Hardware Configuration." For details on how to use the Hardware Configuration, see "Configuring Your System Hardware").
-  **NOTE:** Ensure that you configure RAID, else you will not be able to proceed beyond the **Configure RAID** screen in the **Configure Server Operating System Installation** module.
- 3 After making changes on any of the screens in **Hardware Configuration**, ensure that you click **Save Settings**. This stores all the values you modified or entered.
-  **NOTE:** If you navigate to a different screen without clicking **Save Settings**, the changes you made will be lost.
- 4 After you finish configuring your system hardware components, click **Configure** against **Server OS Installation** on the **Systems Build and Update Utility Home** or click **Server OS Installation** on the left-hand pane to proceed with configuring your system operating system installation. (For details on the Server OS Installation, see "Important Information and Frequently Asked Questions". For details on how to use the Server OS Installation, see "Installing Operating System").
 - 5 Once you have completed configuring the three modules, you can view, edit, or reset the configuration for the modules by clicking the **View**, **Edit**, or **Reset** options respectively.
 - 6 On the **Systems Build and Update Utility Home**, click **Apply/Export Configuration**.

7 The **Configure Apply/Export Options** screen displays. Provide your inputs as required and click **Continue**.



NOTE: You can choose to configure the multisystem configuration file, so that system settings will be taken from this file. (See Table 3-1 for details on the multisystem configuration file.)



NOTE: If the **Exit on Failure** option is checked, any failure during a module update will cause Systems Build and Update Utility to exit. If this option is cleared, in case of any failure during actual deployment, Systems Build and Update Utility will proceed to the next module operation. However, this may cause your system to become unstable.



NOTE: Clear the **Exit on Failure** option only if you are sure that the failure is known and will not adversely affect your system.



NOTE: For more information on the specific fields on the **Select Options** screen, see the Dell Systems Build and Update Utility online help.

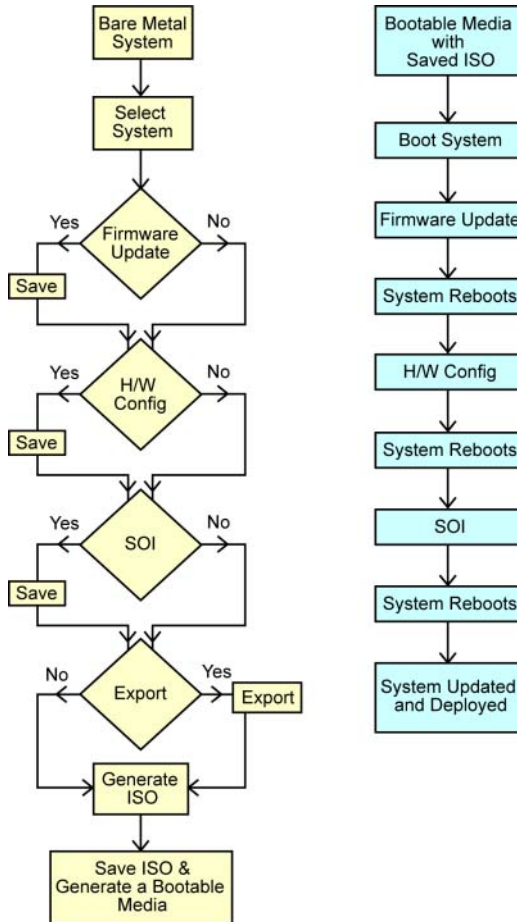
8 The progress screen displays, after which the unattended update/deployment begins.

9 If you have provided inputs to update your system firmware, the firmware update begins, using the configuration you saved. If any of the firmware updates requires a system reboot, your system will reboot automatically. Then, Systems Build and Update Utility will continue with hardware configuration and operating system installation, as per your configuration.

This completes your current system update and deployment. Your system is ready with all the required settings/configurations/updates and the operating system installed.

Deploying More Than One System With the Same Configuration

In this scenario, you can deploy more than one supported system with the same configuration (that is, having the same cards, controllers, hard drive, memory, and so on); for example, 50 Dell PowerEdge™ R710 systems.



1 On the Systems Build and Update Utility Home, click Change against System(s) Selection on the left-hand pane. The Select System(s) screen displays.



NOTE: Ensure that you click **Select Systems** before proceeding to the next step. Else, the option to save the ISO image (**Create Auto-deployment Bootable Image**) will not be enabled on the **Select Options** screen.

2 Click PowerEdge R710 from the Supported Systems list (for this example) and click on the right arrow.

- 3 Click **Save Settings** and return to the **Systems Build and Update Utility Home**.
- 4 To configure the Systems Build and Update Utility modules, follow step 1 through step 5 (under "Deploying Your Current ("Bare-Metal") Dell System").
- 5 On the **Systems Build and Update Utility Home**, click **Apply/Export Configuration**.
- 6 The **Configure Apply/Export Options** screen displays.
- 7 Select the **Create Auto-deployment Bootable Image** option and click **Destination** to specify the location where you want to save the ISO image. (You can also export the configuration you saved in the steps above to a location of your choice.)
- 8 On the **ISO Save Location** screen, specify the location where you want to save the ISO image and click **Continue**. (If you choose USB as the location, you can also make the USB bootable. See the online help for details.)
- 9 The **Configure Apply/Export Options** screen displays.
- 10 Click **Apply/Export**.
- 11 The ISO image is created. You can create a bootable media (CD/DVD) or use the bootable USB to boot the systems you want to update/deploy.

Deploying More Than One System With Slightly Different Configuration

In this scenario, you can deploy more than one supported system with slightly different configuration. Here, you will still configure, say, 50 PowerEdge R710 systems – the systems may have different cards, controllers, hard drive, memory, and so on. However, for the update and deployment to work as in the scenario above, the following conditions must be met:

- the same type of controller (that is configured) must be present (that is, whether the controller is onboard or in the slot). For controllers in slot, the controller must be on the same slot as configured.
- the configured RAID level must be supported by the existing controller (Serial Attached SCSI [SAS] 5 and SAS 6 controllers require a minimum of 2 disks).
- the configured RAID policy must be supported by the current controller.

- the number of disks must be the same or more.
- the disk sizes are the same or more.
- the available disks must be of the same type – a mix of SAS, small computer system interface (SCSI), and Solid State Disk (SSD) will not be supported.

Once the above criteria are satisfied, you can follow step 1 through step 11 (under "Deploying More Than One System With the Same Configuration") to update and deploy more than one system with slightly different configuration.

Deploying Multiple Systems of Different Models

In this scenario, you can deploy multiple systems of different models; for example, you can deploy 25 PowerEdge R710 systems, 50 PowerEdge R610 systems, and 25 PowerEdge T610 systems.

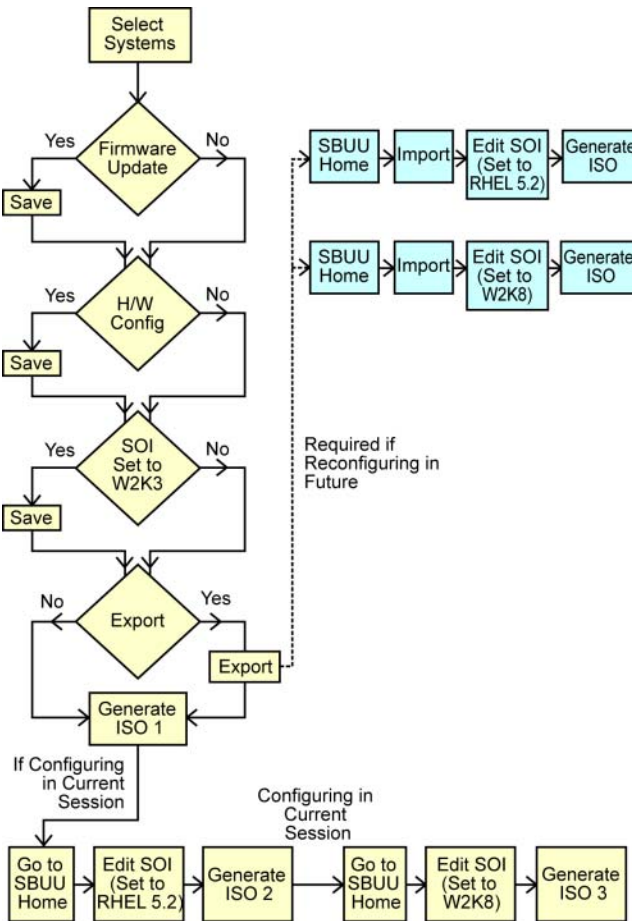
Important!

- *Ensure that you select multiple systems that you want to deploy on the **Select System(s)** screen.*
- *The **Firmware Update** module displays all the update packages for the systems you selected. Depending on the system model, you must select what components need to be updated.*
- *The **Hardware Configuration** module displays all the configuration options under different tabs. Ensure that you select all relevant options for all the systems you selected.*
- *The list of operating systems displayed in the **Server Operating System Installation (SOI)** module are a subset of supported operating systems that can be installed across the selected systems. This means, if you select systems that have no supported operating systems in common, the **SOI** module will not display any operating system and you will not be to proceed with your deployment process.*

To deploy multiple systems of different models, follow step 1 through step 11 (under "Deploying More Than One System With the Same Configuration").

Deploying Multiple Systems With The Same Configuration For Different Operating Systems

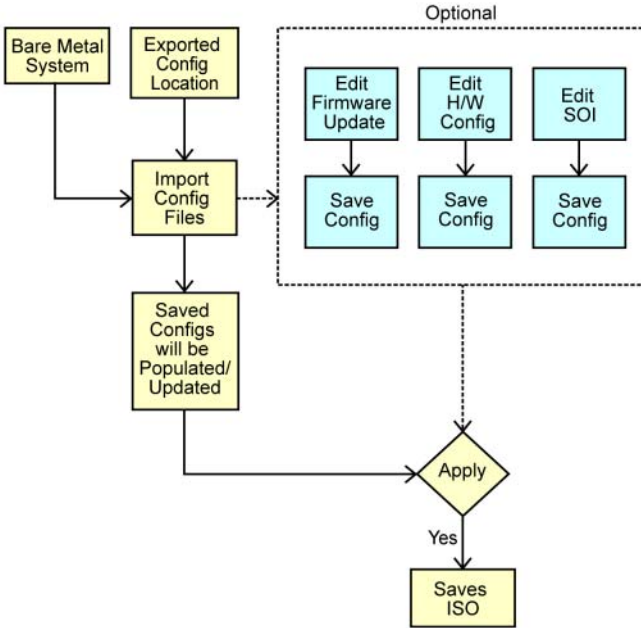
In this scenario, you can update and deploy multiple systems with the same configuration for different operating systems; for example, you have 100 PowerEdge R710 systems. You want to deploy 25 systems with Microsoft® Windows® Server 2003 operating system, 50 systems with Red Hat® Enterprise Linux® 5.2 operating system, and 25 systems with Windows Server® 2008 operating system.



- 1** Let us say you choose to first create a bootable media to deploy Windows Server 2003 operating system. Follow step 1 through step 11 to create the bootable image for Windows Server 2003 operating system. (Ensure that you select Windows Server 2003 on the **Select an Operating System to Install** screen in the **SOI** module.)
- 2** If you also choose to export the configuration, you can use this configuration later (in another session) by importing it by clicking **Import Saved Configuration** on the **Systems Build and Update Utility Home** screen.
- 3** Again, on the **Systems Build and Update Utility Home** screen, click **SOI**. On the **Select an Operating System to Install** screen, select Red Hat Enterprise Linux 5.2.
- 4** Once you finish configuring the **SOI** module, you can follow the same procedure as earlier to export the configuration for Red Hat Enterprise Linux 5.2 operating system and generate another ISO image.
- 5** Again, follow the above steps 2 through 4 to configure and generate an ISO image for Windows Server 2008 operating system.
- 6** You now have three ISO images for the three operating systems you want to install on multiple systems. Create three different bootable media for the three ISO images respectively. Boot the corresponding number of systems with the corresponding bootable media to install the required operating systems.

Reusing Configuration Files

In this scenario, you can reuse (by importing) a configuration file that you created and exported in an earlier session. You can use this configuration file and create multiple ISO images with slightly different configuration. This configuration can be for the current system or for multiple systems. However, you need to create a separate ISO image for every variation of the multiple systems deployment. For the current system, you can directly apply the configuration you imported (and if required, modified slightly).



Important!

- Once you import the configuration file, all the GUI fields will be populated.
- You can edit the Firmware Update Configuration, Hardware Configuration, and Configure SOI modules as required. However, ensure that you do not make any changes on the System(s) Selection screen; if you do so, all existing configuration for the three modules will be reset.

- 1 On the Systems Build and Update Utility Home, click **Import Saved Configuration**.
- 2 The **Import Configuration** screen displays. Select the location from where you want to import the configuration file. Click **Continue**.
- 3 The progress screen displays, followed by the **Imported Configuration File Details** screen.

- 4 Click **Systems Build and Update Utility Home**.
- 5 You can edit the existing configuration for the **Firmware Update**, **Hardware Configuration**, and **SOI** modules; then, you can create the ISO image for this configuration. (Follow step 4 through step 11 under "Deploying More Than One System With the Same Configuration").

Using Systems Build and Update Utility After Operating System Installation

Accessing the Content Manager

- If your system is running on a supported Microsoft® Windows® operating system:
 - From the *Dell Systems Management Tools and Documentation* DVD, the autorun GUI displays when you insert the DVD. Select the **Content Manager** option. The **Select an Operation to Perform** screen displays.
- If your system is running on a supported Linux operating system:
 - From the *Dell Systems Management Tools and Documentation* DVD, go to `/contentmanager/lin/lincontent.tar`. Extract the `lincontent.tar` file to a location of your choice and run the `./contentmanager` script to launch the `contentmanager` application from this location.

If you are running the **Content Manager** for the first time on a supported Linux operating system, you must run `cabextract-1.2-1.i386.rpm` located under the `/rpms` folder in the location where you extracted the `lincontent.tar`.



NOTE: **Content Manager** does not run on SUSE® Linux Enterprise Server version 9 operating systems.



NOTE: For more information on the specific **Content Manager** screens and what you can do on each screen, see the **Content Manager** online help.

Creating The Customized Repository Using Content Manager

- 1 On the **Select an Operation to Perform** screen, select **Create Custom Server Update Utility**. Click **Next**.
- 2 The **Select Source and Destination** screen displays.
If you want to customize the *Dell Server Updates* DVD, select the DVD as the source (under **Select Server Update Utility Source**).
Else, select **Dell Online Website** as the source.
Under **Proxy Settings**, specify the proxy settings to connect to the Dell online website.

Under **Select Custom Server Update Utility Destination**, select the path where you want to save the customized Server Update Utility content.
Click **Next**.
- 3 The **Select Operating Systems and Platforms** screen displays. Select the operating systems and platforms and complete the wizard to get your customized repository. Click **Next**.
- 4 The **Summary** screen displays. The option selected, source location, destination location, selected operating system(s), and the supported platform(s) are displayed.
Click **Finish** to create the customized repository. A new custom catalog is created in the destination directory you specified.

Using The Customized Repository

Once you have created the customized repository (either on the USB key or on a network share), access the customized repository from the system that you want to update.

For example, to use a customized repository saved on a USB key:

- 1 Insert the USB key in the system you want to update.
- 2 Launch Windows Explorer.
- 3 Locate the USB key drive.
- 4 Navigate to the custom repository folder.
- 5 Double-click the **suu.exe** to launch the customized update utility.

For details on the update utility, see the *Dell™ OpenManage™ Server Update Utility User's Guide*.

Getting Server Update Utility Application Using Content Manager

- 1** From the **Select an Operation to Perform** screen, select **Download Server Update Utility ISO image** and click **Next**.
- 2** The **Select Source and Destination** screen displays.
Under **Select Download Source**, select **Dell Online Website** to download the ISO image from **ftp.dell.com**.
Under **Proxy Settings**, specify the proxy settings to connect to the Dell online website.
Under **Select Download Destination**, specify the path where you want to save the Server Update Utility ISO image after downloading it from the Dell online website.
Click **Next**.
- 3** The **Summary** screen displays.
Click **Finish** to download the Server Update Utility ISO image. The progress screen displays the status of the download.
- 4** Using any CD/DVD burning software, burn the image onto a CD/DVD.
- 5** Insert the CD/DVD in the system where you want to update the firmware and drivers.
- 6** If your system is running on a Windows operating system, the CD/DVD will autorun to launch the Server Update Utility application.
If your system is running on a Linux operating system, launch the Server Update Utility application from the CD/DVD. For example:

```
suu -g
```

Comparing Local Repository with the Dell Online Repository Using Content Manager

- 1** From the **Select an Operation to Perform** screen, select **Check for Server Update Utility Updates** and click **Next**.
- 2** The **Select Source and Destination** screen displays.
Under **Select Update Source**, select **Dell Online Website** if your source repository content is on the Dell online website.
Under **Proxy Settings**, specify the proxy settings to connect to the Dell online website.
Under **Select Update Destination**, specify the destination repository to compare with the Dell online website repository.
Click **Next**.
- 3** The **Summary** screen displays.
Click **Finish** to compare the repositories.

The **Result** screen displays a comparison report between the source and destination versions for the bundles and packages.



NOTE: This comparison is based on the catalog files available in the source and destination and not the actual content.

Important Information and Frequently Asked Questions

This section contains important information about the different modules in the Dell™ Systems Build and Update Utility, including answers to some frequently asked questions.

Firmware Update

Important Information

The **Firmware Update** module in the Systems Build and Update Utility enables you to update the BIOS and firmware versions of your Dell systems in a pre-operating system environment. This module:

- inventories your system (BIOS, firmware, and drivers)
- enables you to select your own repository
- generates a comparison report (comparison of the currently installed version of each component on the existing system with the repository component version for the same system.)
- enables you to upgrade the system components

Frequently Asked Questions

Q: What is the repository?

A: The repository contains the updated BIOS, firmware, and driver components for Dell systems.

The repository can be:

- a customized repository you create with the **Update Utility Creation** module or the **Content Manager** module
- the *Dell Server Updates* DVD contents that you copy from the DVD or get from the **Content Manager** module

To learn more about the **Content Manager**, see "Content Manager."

Q: What should I do if I face any prerequisite failure during the update process?

A: If you face any prerequisite failure during the update process, see the *Server Update Utility User's Guide* on how to rectify this.

Q: I want to use my custom repository for firmware updates using the Dell Systems Build and Update Utility.

A: If you want to use your custom repository for firmware updates using the Dell Systems Build and Update Utility, you will need a Linux repository. Also, you must ensure that the repository contains updates for the system on which you want to run firmware updates.

Q: What should I do if I want to downgrade the firmware?

A: If you want to downgrade the firmware, you will not be able to do it using the **Firmware Update** module. Use the *Dell Server Updates DVD* to downgrade the firmware on your system.

Q: What should I do if some of the updates fail?

A: If some of the updates fail, reboot your system and try using the latest repository to update the firmware. Also, see the *Server Update Utility User's Guide* for more information.

Q: I want to use a USB key as my source repository.

A: If you are using a USB key as your source repository, insert the USB key when you are prompted.



NOTE: It is recommended that you do not boot your system to Systems Build and Update Utility with the USB key inserted in your system. This is because the Systems Build and Update Utility may not detect a USB key that is inserted before you boot the utility.

Hardware Configuration

Important Information

The **Hardware Configuration** in the Systems Build and Update Utility enables you to configure your system's Baseboard Management Controller (BMC), Dell Remote Access Controller (DRAC), Redundant Array of Independent Disks (RAID), and BIOS.

Once you save the configuration settings for your system's BMC, DRAC, RAID, and BIOS, you can use the tool to generate the **.ini** file, and apply these configuration settings across multiple systems.

Frequently Asked Questions

Q: How do I access the command line interface?

A: To access the command line interface:

From the boot menu, select **DTK Command Line Interface (Linux)**.

Q: How do I know which components to configure?

A: Table 6-1 lists the components you can configure depending on your Dell system.



NOTE: This list is not exhaustive and is only meant as a cheat sheet for your reference.

Table 6-1. Dell Systems And Configurable Components

For Dell Systems	Click The Tabs To Configure
<i>xxlx</i>	<ul style="list-style-type: none">• RAID• BMC/DRAC 5/iDRAC6 → Common• BMC/DRAC 5/iDRAC6 → iDRAC6• BMC/DRAC 5/iDRAC6 → Alert• BMC/DRAC 5/iDRAC6 → Filter• BMC/DRAC 5/iDRAC6 → User• BIOS → Common• BIOS → <i>xxlx</i>• BIOS → Boot Sequence and Security

Q: Where do I get more information on RAID controllers?

A: For details on read, write, and cache policies and supported stripe sizes, see the *Dell OpenManage™ Deployment Toolkit Command Line Interface Reference Guide*.

Q: How do I know which BIOS setup options are available on my system?

A: To see which BIOS setup options are available on your system, go to the boot menu screen, select **DTK Command Line Interface (Linux)**. Use the SYSCFG tool to see the list of options available on your system.

Q: When setting the boot sequence for devices, what happens if I choose a device that is not on my system?

A: The configuration utility selects the boot devices in the sequence that you specify for boot order. However, if you choose a device that is not present on your system, the utility ignores the device, selects the remaining boot devices, and lists them based on the specified order.

Q: What happens if I create a virtual disk by specifying the size?

A: If you create a virtual disk by specifying the size (instead of using the **Maximum possible size** option), subsequent virtual disks that you create will be bound to the controller and the array disk that you selected. This condition is valid until you exhaust all the available space on that array disk.

Q: What happens if I want to delete a virtual disk that is one of the virtual disks that was created using a particular array disk?

A: When you select a virtual disk to delete, and that virtual disk is just one of the virtual disks that was created using a particular array disk, all the virtual disks created on that array disk will be selected for deletion.

Server Operating System Installation

Important Information

The **Server Operating System Installation (SOI)** module in the Systems Build and Update Utility enables you to install Dell-supported operating systems on your Dell systems. **SOI** also maps the operating system you want to install to your system and installs the requisite drivers. It also has a simple interface to configure Dell-supported storage controllers.

You can use **SOI** to:

- deploy an operating system on your "bare-metal" Dell system (that is, your system does not have an operating system installed on it).
- "repurpose" your system (that is, your system already has an operating system installed on it, and you want to install a different operating system).
- extract drivers and save them on a directory on your system.

Frequently Asked Questions

Q: What happens if I install a new operating system on my system that already has an operating system?

A: If you already have an operating system on your system (that is, if you are "repurposing" your system), and you use the **SOI** to install a different operating system, the existing operating system will be removed and data will be deleted from your system.

Q: Can I install Microsoft® Windows Server® 2008 and VMware® ESX Server™ operating systems?

A: Yes, you can. However, for operating systems such as Windows Server 2008 and VMware ESX Server, the native Graphical User Installation tool provided by the operating system installation media is used.

Q: What happens if I disconnect the network connection while I am copying the operating system image from a Server Message Block (SMB) share?

A: If you disconnect the network connection while the operating system image is copying, an error message displays indicating that the network is being disconnected. A **Reboot** button is also enabled. However, the operating system installation process will not resume after you reconnect the network cable.

Q: What happens if I use the **SOI** to configure Redundant Array of Independent Disks (RAID) controllers on my system that has virtual disks configured on the controller?

A: If you have virtual disks configured on your controller and you use the **SOI** to configure RAID controllers on your system, the existing virtual disks will be deleted.

Q: Where will I get information about support for operating systems and RAID controllers?

A: Some operating systems are not supported with some RAID controllers. See the **readme.text** in the **root** folder for details.

Q: Where will I get information on support for storage controllers and operating systems?

A: Depending on the storage controllers on your system, some operating systems may not be supported. See **readme.txt** in the **root** folder or the online help for details.

Update Utility Creation

Important Information

The *Dell Server Updates* DVD contains a repository which includes update packages for supported Dell systems for Microsoft® Windows® and Linux operating systems. The **Update Utility Creation** module in the Dell Systems Build and Update Utility enables you to customize and create a smaller and more compact update utility repository by selecting only the systems and operating systems you require. This custom repository retains the features of the Server Update Utility.

You can use the **Update Utility Creation** module to carry out one-to-one updates on your systems.

Frequently Asked Questions

Q: How do I access Update Utility Creation?

A:

- 1** From the **Dell Systems Build and Update Utility Home** page, click **Create SUU** against **Update Utility Creation** or click **Update Utility Creation** on the left-hand pane.
The **Source Repository Selection** screen in the **Update Utility Creation** module displays.
- 2** Specify either the local or the remote repository location where your source repository resides.
- 3** From here on, the **Update Utility Creation** module will take your inputs on the operating system, the Dell systems that you want to update, and the target location for the customized update utility. After you specify these details, the module will generate a customized update utility. You can now use the customized utility to carry out one-to-one updates on your systems.



NOTE: For more information on the specific **Update Utility Creation** screens and what you can do on each screen, see the **Dell Systems Build and Update Utility** online help.

Q: What is the source repository?

A: The source repository contains the updated BIOS, firmware, and driver components for Dell systems.

The source repository can be the *Dell Server Updates* DVD or the contents you copy to a network share. You can also download the *Dell Server Updates* DVD from Dell online using **Content Manager**.

To know more about the **Content Manager**, see "Content Manager."



NOTE: If you are using a USB key or a network location to save a copy of the *Dell Server Updates* DVD, make sure you copy all the contents, including all the folders in the same directory structure. The **Update Utility Creation** module will not recognize the source within any sub-folder.

Q: What will happen if I create multiple custom repositories in the same location?

A: When you create multiple custom repositories on the same location, the **Update Utility Creation** module will create multiple folders, one for each repository that you created. For example, **CustomRepository**, **CustomRepository1**, **CustomRepository2**, and so on.

Q: I want to use a USB key as the destination location.

A: If you are using a USB key as your destination location for update utility creation, insert the USB key when you are prompted.



NOTE: It is recommended that you do not boot your system to Systems Build and Update Utility with the USB key inserted in your system. This is because the Systems Build and Update Utility may not detect a USB key that is inserted before you boot the utility.

Content Manager

Important Information

The **Content Manager** is a tool in Systems Build and Update Utility that enables you to:

- download the latest Server Update Utility ISO image from Dell online at ftp.dell.com.
- create your customized repository using the *Dell Server Updates* DVD or from the Dell online website.

- save your customized repository on a local or shared location and use it later for system hardware updates in a pre-operating system or post-operating system environments.
- check for the latest updates by comparing your local or customized repository with the Dell online repository at <ftp.dell.com>.

Frequently Asked Questions

Q: How will checking for repository updates help me?

A: By using the **Check for Server Update Utility Updates** operation, you get a detailed report on driver and firmware updates. This will help you evaluate what updates are needed for your system.

Q: What happens if I create a customized repository with only Windows packages?

A: If you create a customized repository with only Windows packages, you cannot update firmware using the **Firmware Update Configuration** module with the customized repository in the Systems Build and Update Utility.

Glossary

BIOS

Acronym for basic input/output system. Your system's BIOS contains programs stored on a flash memory chip. The BIOS controls the following:

- Communications between the microprocessor and peripheral devices, such as the keyboard and the video adapter
- Miscellaneous functions, such as system messages

BMC

Abbreviation for baseboard management controller, which is the controller interface between the DRAC and the managed system's embedded systems management (ESM).

DRAC

The Dell™ Remote Access Controller (DRAC) is a systems management tool that enables users to remotely access, monitor, troubleshoot, repair, and upgrade their systems, independent of the operating system status.

DTK

The Dell OpenManage™ Deployment Toolkit (DTK) is a set of utilities for configuring and deploying Dell PowerEdge™ systems. The DTK is designed for customers who need to build scripted installations to deploy large numbers of systems in a reliable fashion without having to dramatically change their current deployment processes.

ESM

Abbreviation for embedded systems management, which is a set of instruction coding in system software and firmware that notifies a user about potential hardware problems on a system.

Inventory

Inventory is a list of components, such as the BIOS versions, firmware, and drivers installed on your system.

NIC

Abbreviation for the network interface card. The NIC is an adapter circuit board installed in a computer to provide a physical connection to a network.

USB

Abbreviation for Universal Serial Bus. A USB connector provides a single connection point for multiple USB-compliant devices, such as mice, keyboards, printers, and computer speakers. USB devices can also be connected and disconnected while the system is running.

utility partition

A bootable partition on the hard drive that provides utilities and diagnostics for your hardware and software. When activated, the partition boots and provides an executable environment for the partition's utilities.

Windows Preinstallation Environment (Windows PE)

The Microsoft® Windows® Preinstallation Environment (Windows PE) is a minimal Win32 subsystem with limited services, based on the Windows kernel running in a protected mode. It contains the minimal functionality that you need to run Windows Setup, install an operating system from a network share, automate basic processes, and perform hardware validation.

Index

A

- Accessing
Update Utility Creation, 50

B

- Boot Menu
 - accessing, 21
 - options, 23

C

- Configuring System Hardware
 - current system, 28
 - multiple systems, 29
- Content Manager
 - accessing, 41
 - comparing local repository with Dell online repository using, 44
 - creating customized repository, 42
 - FAQs, 52
 - getting Server Update Utility using, 43

D

- Deploying Current System, 32
- Deploying More Than One System With Same Configuration, 34

- Deploying More Than One System With Slightly Different Configuration, 36

- Deploying Multiple Systems of Different Models, 37

- Deploying Multiple Systems With The Same Configuration For Different Operating Systems, 38

F

- Firmware Update
 - FAQs, 45
- Functionalities in brief, 12

H

- Hardware Configuration
 - FAQs, 47
 - what BIOS options on your system?, 47
 - which components to configure for which Dell system, 47

I

- Installing Operating System, 30

L

Launching Systems Build and Update Utility
from DVD, 21
from virtual system using DRAC, 21

M

Multisystem Configuration File, 16

P

Prerequisites
Firmware Update, 17
Generic, 16
Hardware Configuration, 17
Server Operating System Installation, 17
Update Utility Creation, 17
Product overview
functionalities, 12

R

Reusing Configuration Files, 39

S

Server Operating System Installation (SOI)
FAQs, 49
uses, 48

Source Repository
what is, 51

Systems Build and Update Utility
flexibility, advantages, 25
functionalities overview, 12
key features, 11
usage in different scenarios, 27
what is, 11

Systems Build and Update Utility In Post-Operating System Environment, 41

U

Update Utility Creation
FAQs, 50
uses, 50
Updating Your System
Firmware, 27