# Dell OpenManage Deployment Toolkit

# Quick Installation Guide



## **Notes and Cautions**



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

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# Introduction

The Dell OpenManage Deployment Toolkit (DTK) includes a set of utilities, sample scripts, and sample configuration files that you need, to deploy and configure your Dell system. You can use DTK to build script-based and RPM-based installation for deploying large number of systems on a pre-operating system environment in a reliable way, without changing their current deployment processes.

### **Documents You Will Need**

- Dell OpenManage Deployment Toolkit Command Line Interface Reference Guide
- Dell OpenManage Deployment Toolkit User's Guide
- Dell Systems Management Tools and Documentation DVD
- Operating system documentation

For a complete list of supported operating systems, BIOS firmware, and hardware, see the *Dell Systems Software Support Matrix* available at support.dell.com/manuals → Software → Systems Management → Dell OpenManage Releases. Click the appropriate product version to access the Support Matrix.

# **Prerequisites**

Before using DTK to deploy Microsoft Windows Pre-installation Environment (PE) or embedded Linux environment (Red Hat Enterprise Linux or SUSE Linux Enterprise Server), ensure you have the following prerequisites:

- Software prerequisites
- Hardware prerequisites

# **Software Prerequisites**

Table 1-1. Prerequisites for Deployment

Windows PE Environment	Embedded Linux Environment
The DTK self-extracting zip file (DTK3.X-WINPE-XX.exe) available on the Dell Systems Management Tools and Documentation DVD or on support.dell.com.	The DTK ISO image available on Dell Systems Management Tools and Documentation DVD or on support.dell.com.
To build Windows PE 2.0: Windows Automated Installation Kit (AIK) 1.1 released with Microsoft Windows Vista SP1 and Windows Server 2008.	Any third party deployment system or tool.
To build Windows PE 3.0: Windows AIK for Windows 7.	All required Linux drivers, operating system drivers, and the Dell utility partition file.
An unzip utility.	All dependant operating system RPM packages that DTK RPMs require
	<b>NOTE</b> : You can use tools such as Yellowdog Updater Modified (YUM), Yet Another Setup Tool (YAST), and Advanced Packaging Tool (APT) to manage RPM dependency issues.
Your operating system software.	Your operating system software.
Knowledge to build Windows PE 2.0 and Windows PE 3.0	

#### **Hardware Prerequisites**

- A workstation or server with the following configuration:
  - 512 MB of RAM for Windows operating system and 200 MB of free hard-drive space for Linux operating system
  - Writable media drive
  - Network access
- An optimally configured Source System with network access
- A Target System with network access (for network deployment) or with a media drive (for local deployment)

# Deployment Overview

DTK offers a complete set of utilities, sample scripts, and RPM packages that can be used to automate the deployment of Dell systems.

Before running the deployment, ensure that you create specific deployment media to facilitate the deployment method you choose. For more information, see the Dell OpenManage Deployment Toolkit User's Guide available on support.dell.com/manuals→ Software→ Systems Management→ Dell OpenManage Deployment Toolkit.

#### **Preparing for Deployment**

If you are using the Windows PE environment:

- Copy or extract DTK utilities, sample scripts, sample configuration files, and drivers provided (in the zip file) to the Windows PE image.
- 2 Organize DTK utilities, script files, configuration files, the operating system installation files, and the requisite system files and drivers on a network share or local media.
- Set up a Source System by using the Dell Systems Build and Update Utility (to install your operating system) and the Systems Service and **Diagnostics Tools** (to load drivers). The Source System acts as a master server that is used to replicate settings to the Target Servers.



**NOTE:** You can also download the latest drivers from the Dell Support website at support.dell.com.

- 4 Generate a system BIOS, BMC, RAID, and/or RAC configuration profile from the Source System. Copy the generated configuration files to a read/write share on the workstation or server.
  - **NOTE**: You can obtain the system BIOS, BMC, RAID, and/or RAC configuration files by booting from DTK Windows PE image and running the **SYSCAP.BAT**, **RAIDCAP.BAT**, and **RACCAP.BAT** scripts.
- **5** Create an operating system answer file that contains unattended operating system software installation information.
- **6** Edit DTK sample script files that access the system configuration files to set up the system BIOS, BMC, RAID, and RAC and then, install an operating system on a *Target Server*.

If you are using the embedded Linux environment:

- 1 Obtain the DTK Linux ISO image, which is a self-contained bootable ISO image.
- **2** Use and customize the sample scripts as per your requirements.
- **3** Set up a *Source System* by using the Systems Build and Update Utility on the *Dell Systems Management Tools and Documentation* DVD (to install your operating system) and the **Systems Service and Diagnostics Tools** (to load drivers).
  - **NOTE:** You can also download the latest drivers from the Dell Support website at **support.dell.com**.
- **4** Generate a system BIOS, BMC, RAID, and/or RAC configuration profile from the optimally configured source system. Copy the generated configuration files to a read/write share onto the workstation or server.
  - **NOTE:** You can obtain the system BIOS, BMC, RAID, and/or RAC configuration files by booting from DTK Linux ISO image and running the **syscap.sh**, **raidcap.sh**, and **raccap.sh** scripts.
- **5** Create an operating system answer file that contains unattended operating system software installation information.
- **6** Install an operating system on a *Target Server*.

#### **Deploying**

To proceed with deployment, ensure that you have prepared all scripts, files, and utilities. You can deploy the Win PE and embedded Linux using one of the following methods:

- Deploy using removable boot media with a network connection (media-based)
- Deploy using removable boot media without a network connection (media-based)
- Network-based deployment (remote)

For information on these methods, see the *Dell OpenManage Deployment Toolkit User's Guide* available on support.dell.com/manuals→ Software→ Systems Management→ Dell OpenManage Deployment Toolkit.