Dell Command | Integration Suite for System Center 2012

Version 4.0

User's Guide

Notes, Cautions, and Warnings

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

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Contents

1

Introduction

This document describes the activities that you can perform with Dell Command | Integration Suite for System Center 2012 on systems running Microsoft System Center 2012 Configuration Manager, System Center 2012 SP1 Configuration Manager and System Center 2012 R2 Configuration Manager.

> **NOTE:** Dell Command | Integration Suite for System Center 2012 version 4.0 is not backward compatible with older versions of Microsoft System Center Configuration Manager. It is recommended to download and use Dell Client Integration Pack 3.1 with Configuration Manager 2007 from **dell.com/downloads**.

What Is New

This release of Dell Command | Integration Suite for System Center 2012 supports the following new features:

- Microsoft System Center 2012 R2 Configuration Manager
- Windows Server 2012 R2
- Dell Command | Configure 3.0
- Dell Command | Monitor 9.0
- WinPE 5.0 for Windows 8.1 clients
- The Intel vPro OOB Management Extensions supports AMT 10

Key Features And Functionalities

Feature	Description
Configuring Windows PreInstallation (PE) environment	This feature enables Configuration Manager to configure and push the customized operating system image on the client system using the features available on Dell Command	Integration Suite for System Center 2012. For more information on configuring the Windows PE environment, see Creating Dell Windows PE Boot Image.
Creating and Importing Dell Client Driver Packages	This feature enables Configuration Manager to configure and push the customized driver packages onto the client system. For more information on creating Dell client driver packages, see Creating Dell Client Driver Packages.
Integration of Dell Command	Monitor 9.x	This feature enables Configuration Manager to use the features available on Dell Command	Monitor version 9.x such as remote management applications, accessing managed node information, manage client state, receiving alerts for client events. For more information on Dell Command	Monitor integration, see Importing Dell Command	Monitor.
Dell Command	Configure 3.x	Dell Command	Configure is a packaged software offering that provides BIOS configuration capability to Dell client systems such as OptiPlex, Latitude, and Dell Precision in an operating system present environment. The feature helps

	configuring the BIOS for Dell client systems using the Dell Command	Configure Self Contained Executable (SCE) package.
Intel vPro Out Of Band Plugin	This is an Out-of-band (OOB) management feature using Intel Active Management Technology (AMT). It is supported through a standalone application running on the Configuration Manager server. This feature provides the core functionality to manage client systems remotely and automatically regardless of the state of the operating system. For more information on Intel vPro Out Of Band Management, see [Dell Intel vPro Out of Band Plugin]().
Dell Warranty	This feature collects the warranty information of the Dell client computers from the Dell support website and stores them on the Configuration Manager. For more information on the Dell Warranty Information Utility, see *Dell Warranty User's Guide* at **dell.com/support/manuals**.
Distribution points	Simplified steps to manage and update the distribution points to push Drivers and other application on to the Client systems in your network.

Supported Client Operating Systems and Dell Devices

For the list of client operating systems and Dell client systems that Dell Command | Integration Suite for System Center 2012 supports, see the **readme.txt** in the installation directory.

Using Dell Command | Integration Suite for System Center 2012

Before you begin using Dell Command | Integration Suite for System Center 2012 , make sure that the target Dell client systems are auto-discovered and present under **All Systems** on the Configuration Manager console. For more information on auto-discover through Configuration Manager, see the Microsoft TechNet article at **technet.microsoft.com/en-us/library/gg682144.**

You can use Dell Command | Integration Suite for System Center 2012 to perform the following tasks:

- Create Dell Windows PE boot image
- Create Dell client driver packages
- Import Dell client packages
- Create a bare-metal task sequence

Managing And Updating Distribution Points

Update the distribution points before creating a task sequence. To update and manage distribution points:

1. Launch the Configuration Manager console.
2. Click **Software Library**.
3. Expand **Overview → Application Management. → Packages** and click **Dell Client Deployment.**
4. Right-click **Client Custom Reboot Script** and click **Distribute Content**.
   The **Distribute Content Wizard** screen is displayed.
5. Click **Next** and follow the on-screen instructions to distribute content to the distribution points.
6. If the packages were not distribute while they were being created, repeat step 3 and step 4 to ensure that the client system is able to access the packages during an operating system installation.

Creating Dell Windows PE Boot Image

To create a Dell Windows PE boot image:

1. Download the **Dell Command | Deploy (WinPE) Driver Library** file from **dell.com/downloads**.
2. Launch the Configuration Manager console.
3. Click **Software Library**.
4. Expand **Overview → Operating Systems**.
5. Right-click **Boot Images** and click **Dell Command | Integration Suite → Dell Command | Deploy (WinPE) Driver Library**.
   The **Dell Command | Deploy (WinPE) Driver Library** screen is displayed.
6. Under the **Select boot image(s) to modify** select the boot images into which you want to insert the drivers.

7. Select the distribution point from the list available under **Select the distribution points to distribute content** to distribute the Boot image automatically once it is created.

   For more information, see [Managing And Updating Distribution Points](#)

8. Under **Specify the source driver library file:**, click **Browse** and select the Dell Windows PE driver **CAB** file. Click **Open**.

9. Under **Specify the WinPE tools file (optional)**, click **Browse** and select the ZIP file containing the Dell Windows PE tools. Click **Open**.

   NOTE: Make sure that the Zip file containing the WinPE tools is no greater than 5MB.

10. Under **Specify the destination network share path (UNC) the boot image(s)** click **Browse** to provide a path to store the Dell WinPE boot images.

11. Click **OK**.

    A progress bar displays the import status.

12. Click **Close**.

    The Dell Windows PE Boot Image is created.

Creating Dell Client Driver Packages

To create Dell client driver packages:

1. Download the operating system **Dell Command | Deploy (System) Driver Library** file from **dell.com/downloads**.

2. Launch Configuration Manager console.

3. Click **Software Library**.

4. Expand **Overview → Operating Systems.**

5. Right-click **Driver Packages** and click **Dell Command | Integration Suite → Dell Command | Deploy (System) Driver Library**.

   The **Dell Command | Deploy (System) Driver Library Import Wizard** screen is displayed.

6. Under **Specify the source driver library file:**, click **Browse** to select the Dell Driver Pack file (.CAB).

7. Select your client system's model.

8. Select either the **x86** or **x64** architecture for creating driver packages.

9. Select the distribution point from the list available under **Select the distribution points to manage and update:** to distribute the package automatically once it is created.

10. Under **Specify the destination network share path (UNC) for the driver library content:** click **Browse** to provide a path to store the Dell Driver Packs.

    NOTE: For Microsoft Windows XP operating systems, the **Storage Driver Package** option in the **Task Sequence Editor** is enabled. Select the appropriate storage driver during Microsoft Windows XP system deployment to avoid a continuous reboot with the following error: 0x0000007B (INACCESSIBLE_BOOT_DEVICE). For more information on the appropriate storage driver selection, see the Dell TechCenter site at **delltechcenter.com**.

11. Click **OK**.

    The **Dell Command | Deploy (System) Driver Library Import Wizard** progress is displayed. Driver packages are created and stored under the **Dell System CAB Driver Packages** folder according to the operating systems architecture selected.

    NOTE: Importing of drivers may take a long time. During this period, the progress bar may not be updated.

12. Click **Save** to save the path to the driver packages.

13. Click **Close** to exit the wizard.

Dell Command | Configure Self-Contained-Executable (SCE) File

Dell Command | Configure SCE file allows you to:

- customize configurations
- export a customized configuration to apply the same settings on a target client system
- export both supported and unsupported options
- customize your BIOS configuration

Importing Dell Command | Configure SCE Packages

To import Dell Command | Configure SCE packages:

1. Launch the Configuration Manager console.
2. Click **Software Library**.
3. Expand **Overview → Application Management.**
4. Right click **Packages**, then click **Dell Command | Integration Suite → Import Dell Command | Configure Package**.

   The **Dell Command | Configure Package Import Wizard** screen is displayed.
5. Click **Browse** and navigate to the location of the Dell Command | Configure SCE file.

   NOTE: The Dell Command | Configure SCE file is generated by exporting customized settings from the Dell Command | Configure. For more information, see *Dell Command | Configure User's Guide* on **dell.com/support/manuals**.

6. Select a distribution point from the list available under **Select the distribution points to manage and update** to distribute the package automatically once it is created.
7. Click **OK**.

   If a package already exists on the Configuration Manager, a message is displayed asking if you would like to recreate or continue. If you select **No**, the process does not recreate the package, otherwise the package is removed from Configuration Manager and a new package is created.

   NOTE: If the following error message is displayed **Invalid SCE file**, then select a valid SCE package in step 5.

   After the process is complete, a new package is created.

   NOTE: To see the details of the newly created package, browse to **Packages → Dell Client Packages** on the Configuration Manager console. The newly created package is under Dell Client Packages.

8. After the wizard completes, the Dell Command | Configure SCE Software Package is created under **Packages**. Associate these packages with task sequence for pre-OS deployment or use them as software package during post-OS configuration.

Importing Dell Command | Monitor

To import Dell Command | Monitor:

1. Download the **Dell Command | Monitor** application from **dell.com/download**.
2. Launch the Configuration Manager console.
3. Click **Software Library.**
4. Expand **Overview → Application Management.**
5. Right click **Packages,** then click **Dell Command | Integration Suite → Import Dell Command | Monitor Package**.

   The **Dell Command | Monitor Package Import Wizard** screen is displayed.
6. Under **Specify the Dell Update Package (DUP) file to create the package** click **Browse** navigate to the location where you have downloaded the Dell Command | Monitor DUP file, select it and click **Open.**
7. Select a distribution point from the list available under **Select the distribution points to manage and update** to distribute the Dell Command | Monitor DUP file automatically after it is created.
8. Click **Ok.**

   A progress bar is displayed.
9. Click **Close.**

   The **Dell Command | Monitor** DUP file is installed under **Packages.**

Creating A Task Sequence

Task sequences are used to capture an operating system image, configure its settings, and deploy the image on a set of Dell client systems. You can create a task sequence in two ways:

- Create a Dell-specific task sequence, which has a set of pre-specified actions, using the **Client Operating System Deployment Task Template** template.
- Create a custom task sequence where you can add custom actions to the task sequence.

Creating A Task Sequence Using The Dell Client Deployment Template

To create a task sequence using the Dell Client Deployment template:

1. Launch the Configuration Manager console.
2. Click **Software Library**.
3. Expand **Overview → Operating Systems.**
4. Right-click **Task Sequences,** then click **Dell Command | Integration Suite → Create Operating System Deployment Task Sequence**.

   The **Client Operating System Deployment Task Template** window is displayed.
5. Enter the name of the task sequence in **Task Sequence Name** field.
6. Under **Client Hardware Configuration**, select the hardware items that you want to configure in this task sequence.

> **NOTE:** If you select the **Configure BIOS** check box and a Dell Command | Configure package has been previously created, then a task sequence template is created while configuring the system BIOS. The Dell Command | Configure package is selected by default and the command line to run the SCE on the target system is populated automatically. However, if a Dell Command | Configure package has not been created then a message that no Dell Command | Configure package has been detected is displayed. You can still configure the system BIOS but a package will not be selected.

7. Under **Network (Admin) Account**, enter the domain administrator account name and password.
8. Under **Operating System Installation**, select the operating system installation type. The options are:
   - Use an OS WIM image
   - Scripted OS install
9. Select an operating system package from the **Operating system package to use** drop-down menu.
10. If deploying Windows XP operating system select **sysprep.inf** info file from the **Package with Sysprep.inf info** drop-down menu.
11. Click **Create**.
   A confirmation message is displayed.

Configuring Task Sequence Actions

Select **Client Operating System Deployment Task Template** from the Task Sequence Editor, to edit the various actions in the Task Sequence.

Configuring The System BIOS

The **Configure BIOS** option is enabled on the task sequence after adding **Dell Client Configuration**. Make sure that Dell Command | Configure version 3.0 or later is installed on the target system to create a BIOS Package.

> **NOTE:** While configuring the BIOS, if more than one Dell Command | Configure package exists then the latest Dell Command | Configure package is selected. The older packages are available under **Dell Client Packages**, to select an older package, click **Browse** and select the older package while configuring the Task sequence. For more information on creating a Task Sequence, see Creating a Task Sequence.

> **NOTE:** Switching the client-systems **Boot Modes** (both UEFI or Legacy BIOS), is not supported through the Task Sequence editor. For more information, see **technet.microsoft.com/en-us/library/jj938037.aspx**.

Exporting The BIOS Configuration File

Launch the Dell Command | Configure standalone application. For more information, see the *Dell Command | ConfigureDell Command | Configure Version 3.0 User's Guide on* **dell.com/support/manuals**.

Prerequisites For Exporting

The following are the prerequisites for exporting:

- The BIOS options is configured.
- The **Apply Settings** check box of the option is selected.

Export the configuration in the following formats:

- **Self-Contained Executable** — Click **Export Configuration.exe** on the **Create Configuration** screen to export the configuration settings as a SCE (.exe file).

A **Validation Password** dialog box is displayed prompting the user to provide a password. If you have configured the system or setup password in the target system, type the same system or setup password in the **Validation Password** dialog box. This option to set the password is optional.

- **Report** — Click **Export Report** to export the configuration settings as read-only .html file. If you have configured the system or setup password in the exporting file, see Password Protection Dialog Box.
- **Configuration file** — Click **Export Configuration** to export the configuration settings as a .cctk or .ini file. If you have configured the system or setup password in the exporting file, see Password Protection Dialog Box.
- **Shell script** — The shell script is used to configure a Linux system.The shell script is generated at the same location where SCE file is exported and contains the same configuration as that of the SCE file.

Exporting Options Without Setting Values

You can export certain options without specifying any values. The options are **asset** and **propowntag**.

To export **asset** and **propowntag** without specifying any values, select the **Apply Settings** check box of the corresponding option and export.

Password Protection Dialog Box

If you have configured the system or setup password in the exporting file (configuration file or report), a password protection dialog box is displayed. To export the file with the password as clear text, click **Continue**. To hide the password and export, click **Mask**. If you have chosen to hide the password, in the configuration (.cctk or .ini) file, the **setuppwd** is displayed as <password removed> indicating that password is hidden.

Applying SCE On The Target System

You can apply SCE on the target system in one of the following ways:

- Using the Dell Command | Configure application package. For more information, see Importing Dell Command | Configure SCE Packages.

or

- Using the Dell Command | Configure standalone application. For more information, see Using the Standalone Application.

Using The Standalone Application

You can apply SCE on the target system using the Dell Command | Configure standalone application in one of the following ways:

- Double-click the SCE, or
- From the command prompt, navigate to the directory where SCE is located, and type the name of the SCE file.
  Example:

```
C:\Windows\DCC\SCE>"<filename>"
```

SCE silently installs the settings on the target system. When the installation completes, SCE generates a text file with the same name at the same location. The text file contains all the applied options and the status of execution for the SCE file.

If you have configured a setup or system password on the target system, and while exporting SCE if you have not provided the same password in the **Validation Password** dialog box (for more information, see Exporting The BIOS Configuration File), SCE cannot be applied on the target system. However, while applying SCE from the command prompt, you can provide the setup or system password of the target system.

Example of providing setup password:

```
C:\Windows\DCC\SCE>"<filename>" --valsetuppwd=<password string>
```

Example of providing system password:

```
C:\Windows\DCC\SCE>"<filename>"--valsyspwd=<password string>
```

Apply Operating System Image

> NOTE: Before you begin this task, ensure that you have the required operating system image file (**.wim** file) under the **Operating System Images** tree in ConfigMgr.

To apply operating system image:

1. From the left-hand side of the **Task Sequence Editor**, under **Deploy Operating System**, click **Apply Operating System Image**.
2. You can choose from the following options:
   - Apply operating system from a captured image
   - Apply operating system from an original installation source
3. After selecting from the above options, click **Browse**.
4. Browse and select the operating system image or package.
5. Under **Select the location where you want to apply this operating system** select the **Destination** and **Drive Letter**.
6. Click **OK.**

You have successfully applied an operating system image.

Apply Driver Packages

To apply driver packages:

1. From the left hand side of the **Task Sequence Editor**, under **Deploy Operating System** click **Apply Driver Package**.
2. **Browse** and select the **Dell Client Driver Packages**. The list of driver packages available in the **Dell Deployment Pack** is displayed.
3. Select a package for Dell client system and click **Apply**.

You have successfully added drivers.

3

Dell Intel vPro Out of Band Plugin

Dell Intel vPro Out of Band Plugin provides an out-of-band management solution through a stand-alone application on the system running on Dell Command | Integration Suite for System Center 2012. The application allows you to remotely manage client systems regardless of the state, the system power or operating system is in.

You can use Dell Command | Integration Suite for System Center 2012 with the Dell Intel vPro Out of Band Plugin to perform the following tasks:

- **USB Provisioning** — provision and setup Intel AMT enabled client systems
- **System Discovery** — discover and add newly provisioned client systems
- **Client Configuration** — configure client system's settings like:

    - **Power Profile** — configure and apply the preferred power policy
    - **Boot Order** — configure or change the boot order
    - **BIOS settings** — configure and update the BIOS settings
    - **BIOS passwords** — clear, set, or specify the length of your **Administrator** and **System** passwords
- **Operations** — perform remote operations like:

    - **KVM Connect** — set up and run KVM sessions
    - **Power Management** — remotely manage power settings
    - **Wipe Client Data** — remotely format client hard drivers
- **Reports** — generate reports for Hardware Inventory, Battery information, Out-of-band Manageability, and Provisioned Systems.
- **Task Queue** — monitor task progress and details

Software Prerequisites

Before setting up Intel vPro OOB Management Extensions on your computer:

- Prepare Active Directory Domain Services for out-of-band management. For more information see the Microsoft TechNet article at **technet.microsoft.com/en-us/library/gg682051.**
- Provision your system running Dell Command | Integration Suite for System Center 2012 to run Intel Active Management Technology (AMT). For more information on AMT provisioning see the Microsoft TechNet article at **technet.microsoft.com/en-us/library/gg712319.**
- Download and install Intel Setup and Configuration Service (Intel SCS) 8.x or higher
- Export the provisioning certificate hash to all the AMT client systems you want to manage through your system running Dell Command | Integration Suite for System Center 2012 . For more information, see USB Provisioning.
- For In-Band shutdown to work correctly the system running Dell Command | Integration Suite for System Center 2012 needs to have Windows Powershell version 2.0 installed and WinRM configured. For more information on configuring WinRM, see Configuring WinRM.
- When using Dell Command | Integration Suite for System Center 2012 out-of-band provisioning for clients, verify that the Microsoft System Center Configuration Manager agent is not installed on those

clients. If the Configuration Manger agent has been installed on client systems and the agent is detected by Configuration Manger, then you can use Configuration Manger in-band provisioning with those client systems.

> **NOTE:** You can perform the check by using the Configuration Manger console to view the client column of Configuration Manger collections.

Launching The Intel vPro OOB Management Extensions

Launch the **Start** screen, browse to the list of **Apps** and click **Intel vPro OOB Management Extensions**.

Database and Password Configuration

The window is displayed the first time you launch the Dell Intel vPro Out of Band Plugin. You can configure the following settings using the **Dell Intel vPro Out of Band Plugin Database and Password Configuration** window.

1. Retrieve and select the available **SCCM SQL Server** option from drop-down list.
2. Select the type of SQL Server Security (Integrated or Username / Password) you want to set.
3. Retrieve and select the available **SCCM Database** from the drop-down list.
4. Configure the **Windows Account** settings.
5. Configure the **AMT ME Account** settings.

Configuring WinRM

On client system, if WinRm has not been configured type the following command on an administrative command prompt.

> **NOTE:** Configure the client systems firewall to accept WinRM commands.

The WinRM is configured.

1. Enter **winrm quickconfig**.
2. Press **y** to continue if prompted **Do you want to configure winrm?**
3. **winrm set winrm/config/client @{AllowUnencrypted="true"}**
4. **winrm set winrm/config/client/auth @{Digest="true"}**
5. **winrm set winrm/config/client @{TrustedHosts="MANAGEMENT_SERVER_IP_ADDRESS"}**

Settings

On the **Settings** window you can configure and set the preferences for different components of the application like:

- Account Setup
- KVM
- Task Queue
- Logging

Account Setup

You can set up and configure the account through which you want to manage your AMT enabled client systems.

1. Launch the Intel vPro OOB Management Extensions.

    For more information, see [Launching The Intel vPro OOB Management Extensions.](#).
2. Click the settings icon.
3. On the **Settings** screen, The **Account Setup** tab is displayed.
4. You can configure the following settings:
    *   Configure the **Operating System** account information.
    *   Configure the **AMT Management Engine** account information.
5. Click **OK**.

KVM

Allows you to specify the duration of your KVM and User Consent sessions to time out.

1. Launch the Intel vPro OOB Management Extensions.

    For more information, see [Launching The Intel vPro OOB Management Extensions.](#).
2. Click the settings icon.
3. On the **Settings** screen, click **KVM**.

    The **KVM** tab is displayed.
4. Specify the time for the User Consent session to time out using the **User consent response timeout**.
5. Specify the time for the KVM session to time out after a period of inactivity using the **Session Timeout** .

    NOTE: Setting the value to zero disables the time out session.
6. Click **OK**.

Task Queue

This feature allows you to limit the number of completed tasks and displayed in the **Task Queue** window.

1. Launch the Intel vPro OOB Management Extensions.

    For more information, see [Launching The Intel vPro OOB Management Extensions.](#).
2. On the **Home** screen, click the settings icon.
3. On the **Settings** screen, click **Task Queue**.

    The **Task Queue** tab is displayed.
4. To have your **Task Queue** automatically refresh, switch **Refresh Automatically** to **On**.
5. Set the **History Limit** to the number of tasks you wish to retain in the database (1 – 1000).

    NOTE: Only completed, canceled, or aborted tasks are removed as new tasks are created.
6. Click **OK**.

Logging

Set the preferences for the level of logging, and location of the logs you want to capture by Dell Command | Intel vPro Out of Band.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. On the **Home** screen, click the settings icon.

3. On the **Settings** screen, click **Logging**.

   The **Logging** tab is displayed.

4. Select one of the following options from the **Log Level** drop-down menu:
   - **None** — no logs are captured.
   - **Normal** — typical logging for client systems operating normally. This **Log Level** is the recommended setting.
   - **Debug** — detailed logging for troubleshooting unexpected issues.

5. Click **Browse...** to choose the location where your log files are created.

6. To view existing logs, click **View Folder**.

7. Click **OK**.

USB Provisioning

Before Intel Active Management Technology-based client systems are managed out-of-band, provision the client systems for AMT.

Provisioning Using A USB Device

The client systems on the network have to procure a digital provisioning certificate before deploying Intel vPro AMT management application using remote configuration.

To export your certificate hash to the client systems using a USB storage device:

1. Launch the Dell Intel vPro Out of Band Plugin.

   For more information, see [Launching The Dell Intel vPro Out of Band Plugin](#).

   The **USB Provisioning** screen is displayed.

2. Enter your Management Engine (ME) password in the **Current Password** section, and then enter a **New Password** for AMT and confirm it.

   > 📝 **NOTE:** The AMT password must contain a minimum of eight characters made up of uppercase, lowercase, numbers, and nonalphanumeric characters excluding **:**, **_**, and **"**.

3. Under **USB Key** click **Browse** and point to the location of the USB storage device.

4. Select the file format for your USB storage device.

5. Select the **Enable remote configuration of user consent policy** option if you want to allow the administrator to override the client system's user consent policy.

6. Select the type of **Hash Algorithm** required for your out-of-band management environment.

7. Select the **OOB Provisioning (enabling will start hello packets immediately)** option if you want to send hello packets immediately.

8. Select the **Consumable Records** option to record the systems that are provisioned.

9. Browse and select the **Certificate File** you want to apply on your client systems for AMT provisioning.

10. Enter a name for the certificate file.
11. Click **Create Key**.

    The USB provision key is created.
12. Click **Export...**.

    The USB provisioning key is exported to the USB storage device.

Client Configuration

Allows you to configure the Power Profile, Boot Order, BIOS Settings, and BIOS Passwords on the target client systems.

Configuring Power Profile

Define the various power profiles on the client systems managed by Dell Command | Intel vPro Out of Band. You can control functions like Wake-up On Lan (WOL), ON, OFF after power loss, and so on, in the different power states (S0 to S5) of your client system.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see <u>Launching The Intel vPro OOB Management Extensions.</u>.
2. Click **Client Configuration → Power Profile**.
3. Select the power policy for your Desktop and/or Mobile computers. Click **Next**.

   The **Select Clients** tab is displayed.
4. Search for client systems to which you want to apply the power packages.
5. From the **Discovered clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.
6. Click **Next**.

   The **Schedule Task** tab is displayed.
7. You can either choose to apply the changes immediately or schedule it to run later.

   Depending on your schedule, select one of the following options:

   • **Run now** — the changes to the Power Profiles are immediately applied.
   • **Run At** — the changes to the Power Profiles are queued in the **Task Queue**.

     📝 NOTE: You can launch the **Task Queue** to view the list of completed and pending tasks.

     📝 NOTE: If your client systems are not connected to the network, run the task again after the client system is coming back online..
8. Provide a name to the task you are running and click **Next**.

   The **Summary** tab is displayed.
9. Click **Finish**.

   The Task Queue window is opened and depending on how you scheduled the task, it starts running immediately or will be queued.

Configuring the Boot Order

Change or configure the boot order on the targeted client-systems. On client systems with Legacy Boot Devices, the Boot Order feature allows you to make permanent or one-time boot sequence changes.

NOTE: This **Boot Order** feature is not supported in **UEFI** boot mode.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. Click **Client Configuration** → **Boot Order**.

3. The table lists all the possible Boot devices. Change the boot order by:

   - Moving the boot devices up or down the order by clicking the **Up** or **Down** arrows at the bottom of the table.
   - Disabling boot devices by selecting or deselecting the check-box next to the Boot Device.

4. Select one of the configuration options:

   - **One-time boot configuration** — If you want the boot-order to be changed for only one reboot cycle.

     NOTE: The boot-order is permanently changed if this option is not selected.

   - **Continue on error** — If you want the task execution to continue to subsequent clients systems when an error occurs, select the **Continue on error** option. Otherwise, task execution stops on the first client system where an error is encountered.

   - **Reboot client after applying changes** — If you want to reboot the client systems after applying changes.

5. Click **Next**.

   The **Select Clients** tab is opened.

6. Search for client systems to which you want to apply the Boot Order changes to.

7. From the **Discovered clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

8. Click **Next**.

   The **Schedule Task** tab is displayed.

9. You can either choose to apply the changes immediately or schedule it to run later.

   Depending on your schedule, select one of the following options:

   - **Run now** — the changes to the Boot Order is immediately applied and displays the **Running** status in the **Task Queue**.

   - **Run At** — the changes to the Boot Order is queued in the **Task Queue**.

     NOTE: You can launch the **Task Queue** to view the list of completed and pending tasks.

   NOTE: If your client systems are not connected to the network, run the task again.

10. Provide a name to the task you are running and click **Next**.

    The **Summary** tab is displayed.

11. Click **Finish**.

    The Task Queue window is opened and depending on how you scheduled the task, it starts running immediately or will be queued.

Configuring BIOS Settings

This feature allows you to remotely configure, change, and reset the BIOS settings on one or several client systems.

NOTE: The supported BIOS configuration options vary for each client system.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. Click **Client Configuration** → **BIOS Settings**.

3. Make the changes you want to the BIOS settings for your client-systems and select the check box under **Apply**.

4. If you want the Task execution to continue to subsequent clients systems when an error occurs, select the **Continue on error** option. Otherwise, Task execution stops on the first client system where an error is encountered.

5. Select the **Continue on unavailable BIOS Setting** option to continue with the BIOS changes if a particular BIOS feature is not available on the client system.

6. Select the **Reboot after applying changes** option if you want to reboot after applying changes.

7. Click **Next**.

   The **Select Clients** tab is displayed.

8. Search for client systems to which you want to apply the Boot Order changes to.

9. From the **Available clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

10. Click **Next**.

    The **Schedule Task** tab is displayed.

11. You can either choose to apply the changes immediately or schedule it to run later.

    Depending on the schedule, select one of the following options:

    - **Run now** — the BIOS setting configuration is immediately applied and displays the **Running** status in the **Task Queue**.

    - **Run At** — the BIOS setting configuration is queued in the **Task Queue**.

      NOTE: You can launch the **Task Queue** to view the list of completed and pending tasks.

    NOTE: If the Dell client systems are not connected to the network, run the task again.

12. Provide a name to the task and click **Next**.

    The **Summary** tab is displayed.

13. Click **Finish**.

    The Task Queue window is opened and depending on how you scheduled the task, it starts running immediately or will be queued.

Setting BIOS Passwords

The feature allows you to manage your BIOS passwords, set passwords, clear passwords, or change the length requirements for the passwords.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. Click **Client Configuration** → **BIOS Passwords**.

   The **BIOS Passwords** tab is displayed.

3. Select one of the following options:

   - **Clear** — clear either the **Admin** or **System** password.

> **NOTE:** Clear the **System** password before clearing the **Admin** password

- **Set** — enter and confirm the **Admin** or **System** password.

  > **NOTE:** Client systems have to reboot after setting the **Admin** or **System** passwords.

- **Length** — you can specify the minimum and maximum length for the **Admin** and **System** password.

4. If you want the Task execution to continue to subsequent clients systems when an error occurs, select the **Continue on error** option. Otherwise, Task execution stops on the first client system where an error is encountered

5. If you want to reboot after applying changes select the **Reboot after applying changes** option.

6. Click **Next**.

   The **Select Clients** tab is displayed.

7. Search for client systems to which you want to apply the Boot Order changes to.

8. From the **Available clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

9. Click **Next**.

   The **Schedule Task** tab is displayed.

10. You can either choose to apply the password changes immediately or schedule it to run later.

    Depending on the schedule, select one of the following options:

    - **Run now** — the BIOS password configuration is immediately applied and displays the **Running** status in the **Task Queue**.

      > **NOTE:** If the Dell client systems are not connected to the network, run the task again.

    - **Run At** — the BIOS password configuration is queued in the **Task Queue**.

      > **NOTE:** You can launch the **Task Queue** to view the list of completed and pending tasks.

11. Provide a brief description of the changes you are applying and click **Next**.

    The **Summary** tab is displayed.

12. Click **Finish**.

    The Task Queue window is opened and depending on how you scheduled the task, it starts running immediately or will be queued.

Operations

This feature allows you to set up KVM sessions, turn off, turn on, and reboot Dell client systems, and remote wipe the hard drives of Dell client systems.

Establishing KVM Sessions

This feature allows you to remotely view the primary or secondary (if present) monitors of your client systems with an Intel Graphics card. For more information, see your client systems documentation on **dell.com/support/manuals**.

> **NOTE:** Before a remote KVM session can be established, enable KVM through the Intel Management Engine BIOS Extension (MEBx) interface.

> **NOTE:** After a period of inactivity if the KVM session times out, re-establish the KVM session. To specify the time-out period, see [KVM](#)

To establish KVM sessions with remote client systems with Intel graphics card:

1. Launch the Intel vPro OOB Management Extensions.

    For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. Click **Operations → KVM Connect**.

    The **KVM Connect** tab is displayed.

3. Search for the list of client systems on which you want to establish KVM sessions.

4. Select a client system on which you want to start the KVM session and click **Connect**.

Performing Power Management

This feature allows you to gracefully shut down or restart your client system, through the Windows operating system enabled by the AMT operation.

> **NOTE:** Windows firewall can block graceful power request by Dell Command | Integration Suite for System Center 2012.

1. Launch the Intel vPro OOB Management Extensions.

    For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. Click **Operations → Power Management**.

    The **Power Management** tab is displayed.

3. Select the power control option you want to run on the client-systems from the drop-down list.

4. Click **Next**.

    The **Select Clients** tab is displayed.

5. Search for client system you want to apply the Power Management changes.

6. From the **Discovered clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

7. Click **Next**.

    The **Schedule Task** tab is displayed.

8. You can either choose to apply the task immediately or schedule it to run later.

    Depending on your schedule, select one of the following options:

    *   **Run now** — the power management changes are immediately applied and displays the **Running** status in the **Task Queue**.

        > **NOTE:** If the Dell client systems are not connected to the network, run the task again.

    *   **Run At** — the power management changes are queued in the **Task Queue**.

        > **NOTE:** You can launch the **Task Queue** to view the list of completed and pending tasks.

9. Provide a brief description of the changes you are applying and click **Next**.

    The **Summary** tab is displayed.

10. Click **Finish**.

Wipe Client Data

> ⚠ **CAUTION: This operation deletes all the data on your client systems.**

> **NOTE:** The remote-wipe of client hard drive may take several hours to complete.

The **Wipe Client Disk** feature remotely erases data on supported client system's hard drives.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see Launching The Intel vPro OOB Management Extensions..
2. Click **Operations → Wipe Client Data**.
3. After selecting **Wipe Client Data**, you can perform one of the following actions:

   - **Schedule** — to schedule a time for client system's hard disk wipe. For more information, see Scheduling Wipe Client Data.

     ![note icon] **NOTE:** To schedule a Remote Wipe Client Data operation, the client must be accessible through the network.

   - **Retrieve** — to retrieve status of client system's hard disk wipe. For more information, see Retrieving Wipe Client Data Status.

Scheduling Wipe Client Data

The Wipe Client Data feature remotely erases data on supported client system's hard drives. To schedule a Wipe Client Data:

1. Select **Schedule** and click **Next**.

   The **Select Clients** tab is displayed.
2. Search for client systems to which you want to schedule a remote data wipe.
3. From the **Available clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.
4. Click **Next**.
5. The **Schedule Task** tab is displayed.
6. You can either choose to apply the task immediately or schedule it to run later. Depending on your schedule, select one of the following options:

   - Run now — the wipe client data operations are immediately applied and displays the Running status in the Task Queue.

     ![note icon] **NOTE:** If your client systems are not connected to the network, run the task again.

   - Run At — wipe client disk operations are queued in the Task Queue.

     ![note icon] **NOTE:** You can launch the Task Queue to view the list of completed and pending tasks.
7. Provide a brief description of the Task you are applying and click **Next**.

   ![note icon] **NOTE:** It is recommended to run the **Retrieve Wipe Client Data** task to make sure that the hard drives of the client systems have been formatted successfully. For more information see, Retrieving Wipe Client Data.
8. Click **Finish**.

Retrieving Wipe Client Data Status

![note icon] **NOTE: Retrieve** requests the status of the Wipe Client Data operation.

![note icon] **NOTE:** After the remote hard drive wipe command has been issued from the server to the client system, the task's status changes to **Complete**. The format process on the client system will begin only after the status changes to **Complete**.

To retrieve the status:

1. Select **Retrieve** and click **Next**.

The **Select Clients** tab is displayed.

2. Search for client systems to which you want to retrieve the status of Wipe Client Data.

3. From the **Available clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

4. Click **Next**.

5. The **Schedule Task** tab is displayed.

6. You can either choose to apply the task immediately or schedule it to run later. Depending on your schedule, select one of the following options:

   • Run now — the status of Wipe Client Data operations is immediately retrieved and displays the Running status in the Task Queue.

     ✎ **NOTE:** If your client systems are not connected to the network, run the task again.

   • Run At — the status is queued in the Task Queue.

     ✎ **NOTE:** You can launch the Task Queue to view the list of completed and pending tasks.

7. Provide a brief description of the changes you are applying and click **Next**.

   The **Summary** tab is displayed.

8. Click **Finish**.

Generating Reports

This feature allows you to generate and view detailed reports on Out-Of-Band Manageability, Provisioning, Battery Health of laptop client-systems, and Hardware Inventory reports for single or multiple-client systems. These reports can be exported as a spreadsheet.

1. Launch the Intel vPro OOB Management Extensions.

   For more information, see [Launching The Intel vPro OOB Management Extensions.](#).

2. On the **Home** screen click **Reports**.

3. On the **Welcome** screen you can generate the following reports:

   • **Out Of Band Manageability** — you can see the AMT Management Engine configuration for client systems.

   • **Provisioning** — view the provisioning status of all the client systems in the network.

   • **Battery Health** — view the battery health of all the AMT enabled client systems on the network.

   • **Hardware Inventory** — collect the inventory information of all the client systems on the network.

4. After selecting the type of report you want, you can perform one of the following actions:

   • **Schedule** — for more information, see [Scheduling Reports](#).

   • **Retrieve** — for more information, see [Retrieving Reports](#).

Scheduling Reports

Generate reports for selected client systems on the network. To schedule a report:

1. Click **Schedule**.

   The **Select Clients** tab is displayed.

2. Search for the list of client systems you want to view the reports on.

3. From the **Discovered clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

4. Click **Next**.

   The **Schedule Task** tab is displayed.

5. You can either choose to apply the Task immediately or schedule it to run later. Depending on your schedule, select one of the following options:

   - Run now — the Schedule report task is immediately applied and displays the Running status in the Task Queue.

     ![note icon] **NOTE:** If your client systems are not connected to the network, run the task again.

   - Run At — Schedule report task is queued in the Task Queue.

     ![note icon] **NOTE:** You can launch the Task Queue to view the list of completed and pending tasks.

6. Provide a name to the task and click **Next**.

   The **Summary** tab is displayed.

7. Click **Finish**.

   The Task Queue window is opened and depending on how you scheduled the task, it starts running immediately or will be queued.

Retrieving Reports

![note icon] **NOTE:** Retrieving reports requests a report for the data collected through **Scheduled Reports**.

View existing reports. To retrieve a report:

1. Click **Retrieve**.

   The **Select Clients** tab is displayed.

2. Search for the list of client systems you want to view the reports on.

3. From the **Discovered clients** list select the client systems you want to manage and click the ❯ button to move your selected systems or press the ❯❯ button to move all the discovered Dell clients into the **Selected clients** list.

4. Click **Next**.

5. You can either choose to apply the Task immediately or schedule it to run later.

   Depending on your schedule, select one of the following options:

   - Run now — the Retrieve report task is immediately applied and displays the Running status in the Task Queue.

     ![note icon] **NOTE:** If your client systems are not connected to the network, run the task again.

   - Run At — Retrieve report task is queued in the Task Queue.

     ![note icon] **NOTE:** You can launch the Task Queue to view the list of completed and pending tasks.

6. Provide a name to the task and click **Next**.

   The **Summary** tab is displayed.

7. Click **Finish**.

   The Task Queue window is opened and depending on how you scheduled the task, it starts running immediately or will be queued.

Task Queue

The **Task Queue** window allows you to review scheduled and completed tasks. You can also click:

- **Refresh** — to refresh the task queue.
- **View** — to get detailed information on an individual task in the task queue. Click **Export** to export the information to an excel file.
- **Re-Run** — to re-run an existing task which has failed on client systems while skipping those client systems on which the task has run successfully. If a Task was completed without any errors, then **Re-Run** restarts all client systems in the Task.
- **Retrieve** — executes the Retrieve (instead of the Schedule) path of a report task.
- **Edit** — edit tasks that are pending (waiting to be run). Tasks are placed on **Hold** while editing is underway.
- **Duplicate** — duplicate any pending, completed, and canceled tasks.
- **Cancel** — cancel tasks that are not yet **Completed**.

Troubleshooting

This section contains troubleshooting information for the Dell Command | Integration Suite for System Center 2012 .

Authenticode Signature

If authenticode signature takes longer than usual to start because **.Net** is searching for the signature, follow the steps mentioned in **support.microsoft.com/kb/936707/**.

Windows XP Installation Fails

Installation of Windows XP operating system fails if the mass storage driver to be installed is not selected in the task Sequence. To do this in the **Apply Driver Packages** step ensure that you select the **Mass Storage Driver** that is required for the operating system installation.

KVM Over Wireless

Anytime the user selects **Tools Link Preference → OS owns Wireless**, control of the wireless link is transferred from the Intel Management Engine to the operating system. (ME gains control of the wireless link anytime a shutdown or reboot command is selected from **Tools Power Control**.)

Whenever ME is given control of the wireless link (Link Preference), a timeout value is supplied that indicates how long ME is to maintain control of the wireless link, after which, control is given back to the OS. For example, a user selects Reboot To OS to reboot the client operating system.

In order to maintain the KVM link, ME is first given control of the wireless link. The timeout is set by default to 10 minutes to provide ample time for the system to complete the reboot process. ME will maintain control even after the OS has rebooted if the reboot completes in under 10 minutes. To give control back to the OS immediately, the user must select **Tools → Link Preference → OS owns Wireless**. In that case, the KVM connection is lost during the transfer process. To re-establish the connection, the user must select **Connection → Start**. Also note that when control of the wireless link is automatically reverted as a result of the Link Preference Timeout expiring, there is no loss of connectivity. There are individual timeout values for each shutdown/reboot operation (defined in KVM View app.config settings) that can be configured externally:

- LPTImeoutRebootToOS
- LPTimeoutRebootToBIOS
- LPTimeoutRebootToDiagnostics
- LPTimeoutRebootWithIDER
- LPTimeoutShutdown

For more information, see **http://software.intel.com/sites/manageability/ AM T_Implementation_and_Reference_Guide/DOCS/Implementation%20and%20Reference %20Guide/default.htm.**

Hardware Inventory Report Memory Speed is reported as Zero

This is a DMTF issue where memory speed is defined in seconds. Configuration Manager Resource Explorer today reports this as 0.

Max Password Length Change

Some system BIOS does not support reducing the Maximum password length down from 32. This is known issue being worked on at the time of release of the product.

KVM Power Control to Boot to OS in S3

If after a KVM connection is established, the AMT client enters power state S3 or S4, the KVM connection is lost within 30 seconds of entering the sleep state. (This issue occurs in both wired and wireless environments.) In such a case, the administrator needs to restart the connection (**Connection→ Start**), before issuing a reboot command (OS, BIOS, Diagnostics, IDE-R).

Windows XP(x86) OS Deployment Hangs During Installation

Microsoft Windows XP(x86) operating system deployment hangs while installing drivers that use Kernel Mode Driver Framework (KMDF) version 1.9, such as, Accelerometer device from ST Micro. To resolve this issue, follow the steps mentioned in **support.microsoft.com/kb/2494168/**.

Apply Operating System Task Sequence Action Has A Red Bang

When creating a new Task Sequence using the Bare Metal Client Deployment Template the **Apply Operating System** Task Sequence action has a Red Bang. To resolve this:

1. In the Task Sequence editor, click **Apply Operating System Image**.
2. Select an operating system image by:
    - Selecting **Apply operating system from a capture image** option.
    - Selecting **Apply operating system from an original installation source** option.
3. Click **Browse.**
4. Browse and select the Operating System Image and click **OK.**
5. Deselect the **Use an unattended or Sysprep answer file for a custom installation** option.
6. Click the **Options** tab.
7. Select **Disable this step** option.
8. Click **Apply**.
9. Click the **Options** tab.

10. Deselect the **Disable this step** option.
11. Click **Apply**.

5

Related Reference

In addition to this guide, there are other product guides you should have for reference. You can find the following guides on the Dell Support website at **support.dell.com/manuals**.

- The *Dell Command | Configure User's Guide* describes the installation and use of the **Dell Command | Configure** to configure various BIOS features for Dell business client platforms.
- The *Dell Command | Monitor User's Guide* describes the installation and the use of the **Dell Command | Monitor** software.
- The *Hardware Service Manual* provides information about your system, installing the system components and troubleshooting your system.

For more information on Microsoft System Center Configuration Manager (Configuration Manager), its installation, or features and functionalities. See the Microsoft TechNet site at **technet.microsoft.com** for details on Configuration Manager.

Obtaining Technical Assistance

If at any time you do not understand a procedure in this guide, or if your product does not perform as expected, there are different types of help available. For more information, see **Getting Help** in your system's *Hardware Owner's Manual*.

Contacting Dell

> NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.

30