


# **Dell Client Integration Pack for Microsoft System Center 2012 SP1 Configuration Manager And System Center 2012 Configuration Manager**


Version 3.1 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.

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

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# Introduction

This document describes the activities that you can perform with Dell Client Integration Pack for Microsoft System Center 2012 Configuration Manager and Microsoft System Center 2012 SP1 Configuration Manager (DCIP for Configuration Manager.)

**NOTE:** DCIP 3.1 is not backward compatible with older versions of Microsoft System Center Configuration Manager. It is recommended to use DCIP 2.0 with Configuration Manager 2007.

## Topics:

- [What Is New](#)
- [Key Features And Functionalities](#)
- [Supported Operating Systems and Dell Devices](#)

## What Is New

This release of DCIP for Configuration Manager supports the following features:

Feature	Description
<b>Remote Wipe</b>	Remote-format your client's hard disk.
<b>iAMT 9</b>	The Intel AMT vPro OOB Management supports iAMT 9
<b>Configuration Manager 2012 SP1</b>	DCIP 3.1 is supported on systems running Configuration Manager 2012 SP1
<b>Windows 2012</b>	DCIP 3.1 is supported on systems running Windows Server 2012
<b>Windows 8</b>	Deploy Windows 8 on supported client systems

## Key Features And Functionalities

Feature	Description
<b>Configuring Windows Pre-Installation (PE) environment</b>	This feature enables Configuration Manager to configure and push the customized operating system image on the client system using the features available on DCIP. For more information on configuring the Windows PE environment, see <a href="#">Creating Dell Windows PE Boot Image</a> .
<b>Creating and Importing Dell Client Driver Packages</b>	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 <a href="#">Creating Dell Client Driver Packages</a> .
<b>OMCI Integration</b>	This feature enables Configuration Manager to use the features available on Dell OpenManage Client Instrumentation version 8.x (OMCI) such as remote management applications, accessing managed node information, manage client state, receiving alerts for client events. For more information on OMCI integration, see <a href="#">Importing OMCI</a> .
<b>Client Configuration Toolkit 2.x</b>	Dell Client Configuration Toolkit (CCTK) is a packaged software offering that provides BIOS configuration capability to Dell client systems such as OptiPlex, Latitude, and Precision in an operating system present environment. The feature helps configuring the BIOS for Dell client systems using the CCTK Self Contained Executable (SCE) package.
<b>Intel AMT vPro OOB Management</b>	This is an Out-of-band (OOB) management feature using Intel 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 AMT vPro OOB Management, see [Intel vPro OOB Management Extensions](#).

**Dell Warranty Information Utility**

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 Information Utility](#).

**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 Operating Systems and Dell Devices

For information, on the supported configurations for System Center 2012 Configuration Manager, see [technet.microsoft.com/en-us/library/gg682077](http://technet.microsoft.com/en-us/library/gg682077).

## Supported Operating Systems On Client Systems For DCIP

- Windows 8 32-bit
- Windows 8 64-bit
- Windows 8 32-bit Professional
- Windows 8 64-bit Professional
- Windows 7 32-bit Professional
- Windows 7 64-bit Professional
- Windows 7 32-bit Ultimate
- Windows 7 64-bit Ultimate
- Windows Vista 32-bit Business
- Windows Vista 32-bit Ultimate
- Windows XP Professional
- Windows XP x64 Professional

## Supported Dell Client Computers

Latitude Series	OptiPlex Series	Dell Precision Series
Latitude 13	OptiPlex 160	Dell Precision 390
Latitude 2100	OptiPlex 3010	Dell Precision 690
Latitude 2110	OptiPlex 360	Dell Precision M2300
Latitude 2120	OptiPlex 380	Dell Precision M2400
Latitude 5430	OptiPlex 390	Dell Precision M4300
Latitude 5530	OptiPlex 580	Dell Precision M4400
Latitude 6220	OptiPlex 7010	Dell Precision M4500
Latitude 6430	OptiPlex 760	Dell Precision M4600
Latitude 6430ATG	OptiPlex 780	Dell Precision M4700
Latitude 6430S	OptiPlex 9010	Dell Precision M6300
Latitude 6530	OptiPlex 960	Dell Precision M6400
Latitude D530	OptiPlex 970	Dell Precision M6500
Latitude E4200	OptiPlex 980	Dell Precision M6600
Latitude E4300	OptiPlex 990	Dell Precision M6700
Latitude E4310	OptiPlex XE	Dell Precision R5400

<b>Latitude Series</b>	<b>OptiPlex Series</b>	<b>Dell Precision Series</b>
Latitude E4310		Dell Precision R5500
Latitude E5400		Dell Precision T1500
Latitude E5400		Dell Precision T1600
Latitude E5410		Dell Precision T3400
Latitude E5420		Dell Precision T3500
Latitude E5420m		Dell Precision T5400
Latitude E5500		Dell Precision T5500
Latitude E5510		Dell Precision T5600
Latitude E5520		Dell Precision T7400
Latitude E5520m		Dell Precision T7500
Latitude E6220		Dell Precision T7600
Latitude E6400		
Latitude E6400 ATG		
Latitude E6400 XFR		
Latitude E6410		
Latitude E6410 ATG		
Latitude E6420 ATG		
Latitude E6420 XFR		
Latitude E6500		
Latitude E6510		
Latitude E6520		
Latitude XT		
Latitude XT2		
Latitude XT2 XFR		
Latitude XT3		
Latitude Z600		

# Using DCIP With Configuration Manager

Before you begin using DCIP for Configuration Manager, ensure 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](https://technet.microsoft.com/en-us/library/gg682144).

You can use DCIP for Configuration Manager 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

## Topics:

- [Creating Dell Windows PE Boot Image](#)
- [Creating Dell Client Driver Packages](#)
- [CCTK Self-Contained-Executable \(SCE\) File](#)
- [Importing OpenManage Client Instrumentation](#)
- [Managing And Updating Distribution Points](#)
- [Creating A Task Sequence](#)
- [Configuring Task Sequence Actions](#)

## Creating Dell Windows PE Boot Image

To create a Dell Windows PE boot image:

1. Download the **Dell WinPE Driver CAB** file from [support.dell.com](https://support.dell.com).
2. Launch the Configuration Manager console.
3. Click **Software Library**.
4. Expand **Overview > Operating Systems**.
5. Right-click **Boot Images** and click **Dell Client Integration Pack > Import Dell WinPE Driver Package**. The **Dell Client WinPE Boot Image Wizard** screen is displayed.
6. Under the **Select Boot Images 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.
8. Import the WinPE file:

*Using the WinPE drivers cab file*

Under **Path to WinPE drivers cab file**, click **Browse** and select the Dell Windows PE driver **CAB** file. Click **Open**.

If a Dell Windows PE boot image already exists, a message is displayed stating that the image already exists and an overwrite is not possible. Click **OK** to close the dialog box and select a new version of **WinPE Driver CAB** file.

*Using the WinPE Zip file*

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



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



- 9.
10. Under **Network path (UNC) of the destination directory for the images(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**.



A **Dell Client Win7PE Boot Image(<CAB version>) x86** boot image is created under Boot Images.

## Creating Dell Client Driver Packages

To create Dell client driver packages:

1. Download the operating system **CAB** file from **support.dell.com**.
2. Launch Configuration Manager console.
3. Click **Software Library**.
4. Expand **Overview > Operating Systems**.
5. Right-click **Driver Packages** and click **Dell Client Integration Pack > Import Client Driver Package**.  
The **Dell Client Driver Import Wizard** screen is displayed.
6. Click **Browse** to select the Dell Driver Pack file (.CAB).
7. Then select the Architecture for creating driver packages.
8. Select the distribution point from the list available under **Select the Distribution Points to Distribute Content** to distribute the package automatically once it is created.
9. Under **Network path (UNC) of the destination directory for the images(s)** 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 Tech Center site at **delltechcenter.com**.
10. Click **OK**.  
The **Dell Client Driver 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. For example, Vista **CAB** driver packages are stored under the **Dell System CAB Driver Packages** folder with the relevant name specifying the operating system, architecture, and the version of the Vista driver **CAB** file selected.  
 **NOTE:** Importing of drivers may take a long time. During this period, the progress bar may not be updated.
11. Click **Close** to exit the wizard.

## CCTK Self-Contained-Executable (SCE) File


CCTK SCE file allows you to:



 **NOTE:** CCTK SCE files are only available in Dell Client Configuration Toolkit Version 2.0 and higher.

- 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 CCTK SCE Packages

To import CCTK SCE packages:

1. Launch the Configuration Manager console.
2. Click **Software Library**.
3. Expand **Overview > Application Management**.
4. Right click **Packages**, then click **Dell Client Integration Pack > Import Dell CCTK SCE Package**
5. Click **Browse** and navigate to the location of the CCTK SCE file.  
 **NOTE:** The CCTK SCE file is generated by exporting customized settings from the CCTK. For more information, see *Dell Client Configuration Toolkit User's Guide* on **support.dell.com/manuals**.
6. Select a distribution point from the list available under **Select the Distribution Points to Distribute Content** 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.
8. Click **OK**.  
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.
9. After the wizard completes, the CCTK 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 OpenManage Client Instrumentation

To import OMCI:

1. Download the **OpenManage Client Instrumentation** (OMCI) application from **support.dell.com**.
2. Launch the Configuration Manager console.
3. Click **Software Library**.
4. Expand **Overview > Application Management**.
5. Right click **Packages**, then click **Dell Client Integration Pack > Import Dell OMCI DUP Package**.  
The **Dell OMCI Package Import Wizard** screen is displayed.
6. Under **Path to OMCI file** click **Browse** navigate to the location where you have downloaded the OMCI application, select it and click **Open**.
7. Select a distribution point from the list available under **Select the Distribution Points to Distribute Content** to distribute the OMCI package automatically once it is created.
8. Click **Ok**.  
A progress bar is displayed.
9. Click **Close**.  
The **OMCI** package is installed under **Packages**.

## Managing And Updating Distribution Points

You should 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 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 **Dell Client Deployment** 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 Client Integration Pack > Create Bare Metal Client Deployment Template**.  
The **Create Dell Client Deployment Task Sequence** 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 CCTK package has been previously created, then a task sequence template is created while configuring the system BIOS. The CCTK package is selected by default and the command line to run the SCE on the target system is populated automatically. However, if a CCTK package has not been created then a message **No CCTK package has been detected. Please import CCTK SCE to be able to change BIOS configuration** is displayed. You can still configure the system BIOS but a package will not be selected.  
If you do not select the **Configure BIOS** option, the **Configuring your System BIOS** option is unavailable.
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 **Dell Client Deployment** 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 CCTK version 2.0 or later is installed on a the target system to create a BIOS Package.

**NOTE:** While configuring the BIOS, if more than one CCTK package exists then the latest CCTK 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](http://technet.microsoft.com/en-us/library/jj938037.aspx).

### Exporting The BIOS Configuration File

Launch the CCTK standalone application. For more information, see the *Dell Client Configuration Toolkit Version 2.0 User's Guide* on [support.dell.com/manuals](http://support.dell.com/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 Configuration Manager application package. For more information, see [Importing CCTK](#).
- or
- Using the CCTK standalone application. For more information, see [Using the Standalone Application](#).

## Using The Standalone Application

You can apply SCE on the target system using the CCTK 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\CCTK\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\CCTK\SCE>"<filename>" --valsetuppwd=<password string>
```

Example of providing system password:

```
C:\Windows\CCTK\SCE>"<filename>"--valsypwd=<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.

# Dell Warranty Utility

The Dell Warranty Info Tool helps to retrieve the Dell Warranty Information for a list of systems. The systems are specified with their service tags.

You can use DCIP Warranty Information Utility to perform the following tasks:

- Collect warranty information of Dell client systems from Dell servers
- Export service-tags from Configuration Manager database to a CSV File
- Copy warranty information to a database from CSV file
- Generate reports

**NOTE:** Enable the SQL Server Reporting Services to build Warranty Reports. For more information, see the Configuration Manager documentation at [technet.microsoft.com](http://technet.microsoft.com).

## Topics:

- [Launching The Warranty Utility](#)
- [Configuring The Warranty Utility](#)
- [Retrieving The Warranty Information](#)
- [Exporting Service-Tags From Configuration Manager To A CSV File](#)
- [Copying CSV Results To A Database](#)
- [Generating Reports](#)

## Launching The Warranty Utility

To launch the Warranty Utility:

*On systems running Windows Server 2008 or older:*

Click **Start > All Programs > Dell > Client Integration Pack for Microsoft ConfigMgr 2012 > Warranty Utility**.

*On systems running Windows Server 2012:*

Launch the **Start** screen, **Dell > Client Integration Pack for Microsoft ConfigMgr 2012 > Warranty Utility**.

## Configuring The Warranty Utility

Before you run the Warranty utility, configure the following parameters to gather the warranty information.

1. Launch the Warranty Utility.

For more information, see [Launching The Warranty Utility](#).

2. Enter `Dell.WarrantyInfo.exe setup_config` to store the configuration in the Windows Registry. For more information, see [Saving The Configuration To The Registry](#).

**NOTE:** To save the configuration information into a file, enter `Dell.WarrantyInfo.exe setup_config config_file=<name of the file>`. For more information, see [Saving The Configuration To A File](#).

3. Configure the following parameters:

**NOTE:** To skip a certain setup parameters like **Proxy Domain**, press enter key without any input.

- a. Proxy User Domain of the server (if set).
- b. Proxy User Name of the server (if set).
- c. Proxy Password of the server (if set).
- d. Proxy server address (if set).


 **NOTE:** Enter the proxy server as `http://proxyserver[:portnumber]/` where the port number is optional.

- e. Desired output format - **.csv**, **.xml**, or database (**.db**).
- f. Connection string for the Configuration Manager database.
- g. **WMI Namespace** for Configuration Manager.
- h. Fully Qualified Domain Name or IP address of the system hosting Configuration Manager.

## Saving The Configuration To The Registry

To save the Warranty Utility configuration to the registry, enter the following command `Dell.WarrantyInfo.exe setup_config` in the Warranty Utility. Enter all the configuration information required to setup the warranty utility, for more information, see [Configuring the Warranty Utility](#).

The configuration parameters are stored in the **HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Dell\ClientIntegrationPack\Warranty** registry location.


 **NOTE:** The password is stored in an encrypted form.

## Saving The Configuration To A File

To save the Warranty Utility configuration to a file, enter the following command `Dell.WarrantyInfo.exe setup_config config_file=admin.cfg` (where `admin.cfg` is the name of the configuration file.)

Enter all the configuration information required to setup the warranty utility, for more information, see [Configuring the Warranty Utility](#).

 **NOTE:** If the output format is `.csv` or `.xml` file, the Configuration Manager connection database string will not be available.

 **NOTE:** The password is stored in an encrypted form.


## Retrieving The Warranty Information

1. If the system on which Warranty Utility is installed has access to Configuration Manager and is able to connect to the internet (including through proxy):
  - a. Launch the Warranty Utility.  
For more information, see [Launching The Warranty Utility](#).
  - b. Configure the Warranty Utility.  
For more information, see [Configuring The Warranty Utility](#).
  - c. To retrieve the warranty information through WMI:
    - Using the configuration settings saved to the registry, enter the following command: `Dell.WarrantyInfo.exe get_info internal_sccm`.
    - Using the configuration settings saved to a file, enter the following command: `Dell.WarrantyInfo.exe get_info internal_sccm config_file=<name of the file>`.

The warranty information of the Dell client systems are retrieved and saved in the desired output format. If the desired output format is `.csv`, or `.xml`, the files are saved in the current directory.
  - d. To retrieve the warranty information through the Configuration Manager database:
    - Using the configuration settings saved to the registry, enter the following command: `Dell.WarrantyInfo.exe get_info internal_sccm_db`.
    - Using the configuration settings saved to a file, enter the following command: `Dell.WarrantyInfo.exe get_info internal_sccm_db config_file=<name of the file>`.

The warranty information of the Dell client systems are retrieved and saved in the desired output format. If the desired output format is `.csv`, or `.xml`, the files are saved in the current directory.
2. If the system on which Warranty Utility is installed has access to Configuration Manager and is unable to connect to the internet (including through proxy):

- a. Launch the Warranty Utility.  
For more information, see [Launching The Warranty Utility](#).
  - b. Configure the Warranty Utility.  
For more information, see [Configuring The Warranty Utility](#).
  - c. Export the Dell client system's service-tags from Configuration Manager to a CSV file.  
For more information, see [Exporting Service-Tags From Configuration Manager To A CSV File](#).
  - d. Copy the generated CSV file to a system with an active internet connection and the DCIP Warranty Utility installed.
  - e. While configuring the Warranty Utility on the system with an active internet connection, set the desired output format to .csv or .xml only.  
For more information, see [Configuring The Warranty Utility](#).
  - f. To retrieve the warranty information for the service-tags saved in the CSV file:
    - Using the configuration settings saved to the registry, enter the following command: `DellWarrantyInfo.exe get_info MyTags.csv`.
    - Using the configuration settings saved to a file, enter the following command: `DellWarrantyInfo.exe get_info MyTags.csv config_file=<name of the file>`.

 **NOTE:** The `MyTags.csv` contains the list of services-tags retrieved in **Step C**.
  - g. Copy the CSV results to the Configuration Manager database.  
For more information, see [Copying CSV Results To A Database](#).
3. Generate a report to view the retrieved warranty information for the Dell client systems.  
For more information see, [Generating Reports](#).

## Exporting Service-Tags From Configuration Manager To A CSV File


In order to retrieve a list of service tags present in the Configuration Manager inventory and export them to a .csv file, you can use the `export_svc_tags` command.

To retrieve the warranty information through WMI:

- Using the configuration settings saved to the registry, enter the following command: `Dell.WarrantyInfo.exe export_svc_tags tags.csv`.
- Using the configuration settings saved to a file, enter the following command: `Dell.WarrantyInfo.exe export_svc_tags tags.csv config_file=<name of the file>`.


To retrieve the warranty information through Configuration Manager database:

- Using the configuration settings saved to the registry, enter the following command: `Dell.WarrantyInfo.exe export_svc_tags tags.csv internal_sccm_db`.
- Using the configuration settings saved to a file, enter the following command: `Dell.WarrantyInfo.exe export_svc_tags tags.csv internal_sccm_db config_file=<name of the file>`.

 **NOTE:** The `export_svc_tags` command generates a .csv file in the current directory.

## Copying CSV Results To A Database

To copy the warranty information from a .CSV file to the Configuration Manager database use the `csv_to_db` command.

 **NOTE:** The connection strings specified in the configuration file or registry is used.

To copy the warranty information to the Configuration Manager:


- Using the configuration settings saved to the registry, enter the following command: `Dell.WarrantyInfo.exe csv_to_db <name of the .csv file>`.
- Using the configuration settings saved to a file, enter the following command: `Dell.WarrantyInfo.exe csv_to_db <name of the .csv file> config_file=<name of the file>`.



# Generating Reports

There are three report templates stored in the same location where you have installed the Dell Warranty utility. `ActiveSystem.rdl`, `AllSystems.rdl`, and `SystemsWithWarranty.rdl`. These reports have the following placeholders for the database connection string:

`<!--PROVIDER-->`, `<!--CONNECTION_STRING-->`, and `<!--INTEGRATED_SECURITY-->`.

 **NOTE:** The templates are in **rdl** (Report Definition Language) format. To view or edit the file on systems running Windows 2008 R2 server install **Microsoft Report Viewer**.

 **NOTE:** The SRS Templates generated by the **Dell Warranty Module** are compatible with the Reportbuilder v2.0 or greater.

You can use the `generate_srs_templates` command to generate the report definition files using the report templates. The placeholders are substituted with the database connection string specified by you either in the registry or the configuration file. To run the report:

- Using the configuration settings saved to the registry, enter the following command: `Dell.WarrantyInfo.exe generate_srs_templates`.
- Using the configuration settings saved to a file, enter the following command: `Dell.WarrantyInfo.exe generate_srs_templates config_file=<name of the file>`.

You can view these reports using the reporting services of the Configuration Manager or using the Report Builder services. For more information, see [Reporting Services of the Configuration Manager](#).

## Reporting Services Of The Configuration Manager

To use the reporting services of Configuration Manager:

1. Install SQL Server Reporting Services (SSRS).  
For more information, see the Configuration Manager documentation at [technet.microsoft.com](http://technet.microsoft.com).
2. Navigate to reports using `http://<servername>/reports`.
3. Import RDL Template provided with the DCIP Warranty Utility. Provide a suitable name to the report.  
For more information, see the Configuration Manager documentation at [technet.microsoft.com](http://technet.microsoft.com).
4. After running the Warranty Utility, the **DellWarrantyInformation** table is created in the Configuration Manager database.
5. Run the reports to generate Custom Reports provided by Dell.

## Viewing Reports Using Report Builder

To view reports using report builder:

1. Download **SQL Server Report Builder version 2.0** or higher.
2. Open the report using this installed Report Builder and Run the report to view the data.

# Dell Intel vPro AMT Plugin

Dell Intel vPro AMT Plugin provides an out-of-band management solution through a stand-alone application on the system running on Dell Client Integration Pack (DCIP) for Configuration Manager. 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 Client Integration Pack for Configuration Manager with the Dell Intel vPro AMT Plugin to perform the following tasks:

- USB Provisioning
- Perform client configuration like
  - Configuring power profile
  - Configuring the boot order
  - Configuring the BIOS settings
  - Configuring BIOS passwords
- Perform remote operations like remote wipe of client hard drives, perform power management, and KVM sessions
- Generate reports
- Enable client logs across the network and collect hardware inventory
- Monitor task progress and details

## Topics:

- [Software Prerequisites](#)
- [Launching The Dell AMT vPRO Plugin](#)
- [Database and Password Configuration](#)
- [USB Provisioning](#)
- [Client Configuration](#)
- [Operations](#)
- [Generating Reports](#)
- [Application Preferences](#)
- [Task Queue](#)

## Software Prerequisites

Before setting up Dell Intel vPro AMT Plugin 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](https://technet.microsoft.com/en-us/library/gg682051).
- Provision your system running DCIP for Configuration Manager 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](https://technet.microsoft.com/en-us/library/gg712319).
- Export the provisioning certificate hash to all the AMT client systems you want to manage through your system running DCIP for Configuration Manager. For more information, see [USB Provisioning](#).
- For In-Band shutdown to work correctly the system running DCIP for Configuration Manager needs to have Windows Powershell version 2.0 installed and WinRM configured. For more information on configuring WinRM, see [Configuring WinRM](#).
- When using DCIP for Configuration Manager out-of-band provisioning for clients, verify the Microsoft System Center 2012 Configuration Manager agent is not installed on those clients. If the Configuration Manager agent has been installed on client systems and the agent has been detected by Configuration Manager, then you can use Configuration Manager in-band provisioning with those client systems.

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

# Launching The Dell AMT vPRO Plugin

To launch the Dell Intel vPro AMT Plugin:

*On systems running Windows Server 2008 or older:*

Click **Start > All Programs > Dell > Client Integration Pack for Microsoft ConfigMgr 2012 > Dell AMT Plugin**.

*On systems running Windows Server 2012:*

Launch the **Start** screen and click **Dell AMT Plugin**.

## Database and Password Configuration

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

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.





## USB Provisioning

Before Intel Active Management Technology-based client systems is managed out-of-band by Dell Intel vPro AMT Plugin, you must provision them 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 AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen, click **USB Provisioning**.  
The **USB Provisioning** window is displayed.
3. 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 non-alphanumeric characters excluding :, \_, and ".  
 **NOTE:** For AMT5 or older, select the **Format Drive** option and format the USB storage device to a **FAT 16** file format.
4. Browse and point to the location of the USB storage device.
5. The application will detect and select the file format of your USB storage device.  
 **NOTE:** For AMT version 5 or older use setup file version **2** or **2.1**, for AMT version **6** to **9** use setup file version **3** or **4**.
6. 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.
7. Depending on the version of AMT you are targeting select the **Setup File Version** from the drop-down list.  
 **NOTE:** The Hash Algorithm **SHA256** and **SHA384** are available for setup file version 3 or higher only.
8. Select the type of **Hash Algorithm** depending of the type of Setup File Version you have selected.



9. Select the **OOB Provisioning (enabling will start hello packets immediately)** option if you want to send hello packets immediately.
10. Select the **Consumable Records** option to record the systems that are provisioned.
11. Browse and select the **Certificate File** you want to apply on your client systems for iAMT provisioning.
12. Enter a name for the certificate file.
13. Click **Export....**  
The USB provisioning file is exported to the USB storage device.

## Client Configuration

Allows you to control various Dell Intel vPro AMT Plugin settings on the target client systems.

### Configuring Power Profile

You can control various functions like Wake-up On Lan (WOL), ON, OFF after power loss, and so on, in the different power states (S0 to S5) of the Dell client system.

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen, click **Client Configuration**.
3. On the **Client Configuration** window, click **Power Profile**.
4. Select the power package for your desktop and/or mobile computers. Click **Next**.  
The **Select Clients** tab is displayed.
5. Search for client systems to which you want to apply the power packages.
6. Select the client systems to which you want to install the power packages on and click **Add**.
7. Click **Next**.  
The **Schedule Task** tab is displayed.
8. You can either choose to apply the package immediately or schedule it to run at a later time.
9. Provide a brief description of the package you are applying and click **Finish**.
10. Depending on the schedule, select one of the following options:
  - **Run now** — the package is immediately applied and displays the **Running** status in the **Task Queue**.  
 **NOTE:** If the Dell client systems are not connected to the network, you have to run the task again.
  - **Run At** — the package is queued in the **Task Queue**.  
 **NOTE:** You can launch the **Task Queue** to view the list of completed and pending tasks.

### Configuring The Boot Order

Change or configure the boot order on the targeted client-systems.

 **NOTE:** This feature is not supported on client systems with UEFI BIOS.

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen, click **Client Configuration**.
3. On the **Client Configuration** window, click **Boot Order**.  
The **Boot Order** tab is displayed.
4. The table on the left side lists all the possible Boot devices. Change the boot order by:
  - Moving the boot devices up or down the order by clicking on the **Up** or **Down** arrows at the bottom of the table.
  - Disabling boot devices by clicking on the on/off toggle switch.
5. Select one of the configuration options:
  - **One-time configuration** — the boot-order is changed for only one reboot cycle.

- **Permanent configuration** — the boot-order is permanently changed.
- If you want the Task execution to continue to subsequent clients systems when an error occurs, select the **Continue on error** check box. Otherwise, Task execution will stop on the first client system where an error is encountered.
 

**NOTE:** The **Re-Run** task feature will allow you to pick up processing a Task that is partially complete.
  - If you want to reboot the client systems after applying changes select the **Reboot after applying changes** check box.
  - Click **Next**.  
The **Select Clients** tab is opened.
  - Search for client systems you want to apply the **Boot Order** changes.
  - Select the client systems you want to apply the **Boot Order** changes and click **Add**.
  - Click **Next**.  
The **Schedule Task** tab is displayed.
  - You can either choose to apply the changes immediately or schedule it to run at a later time.
  - Provide a brief description of the changes you are applying and click **Finish**.
  - Depending on the schedule, select one of the following options:
    - **Run now** — the **Boot Order** 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, you have to run the task again.
    - **Run At** — the **Boot Order** changes are queued in the **Task Queue**.
 

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

## Configuring BIOS Settings

This feature allows you to configure and change the BIOS settings.





- Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
- On the **Home** screen click **Client Configuration**.
- On the **Client Configuration** window, click **BIOS Settings**.  
The **BIOS Settings** tab is displayed.
- Make the changes you want to the BIOS settings for the client-systems and select the check box under **Apply**.
- If you want the Task execution to continue to subsequent clients systems when an error occurs, select the **Continue on error** check box. Otherwise, Task execution will stop on the first client system where an error is encountered.
- Select the **Reboot after applying changes** check box if you want to reboot after applying changes.
- You can load predetermined/default BIOS values through the **BIOS Attribute Config Source**:
  - BIOSAttributeConfig.xml — load BIOS settings from the BIOSAttributeConfig.xml file contained in the install folder.
  - Defaults — load the factory settings.
- Click **Next**.  
The **Select Clients** tab is displayed.
- Search for the client-systems you want to update the BIOS attributes.
- Select the client-systems you want to update the BIOS attributes and click **Add**.
- Click **Next**.  
The **Schedule Task** tab is displayed.
- You can either choose to apply the changes immediately or schedule it to run at a later time.
- Provide a brief description of the BIOS attribute changes you are applying and click **Finish**.
- 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**.
 

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

## Setting BIOS Passwords

The feature allows you to set passwords, clear passwords, or change the length requirements for a client system's Administrator and/or System passwords.


1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen click **Client Configuration**.
3. On the **Client Configuration** window, click **BIOS Passwords**.  
The **BIOS Passwords** tab is displayed.
4. Select one of the following options:
  - **Clear** — clear either the **Admin** or **System** password.  
 **NOTE:** To clear the **Admin** password you have to clear the **System** password as well.
  - **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.
5. If you want the Task execution to continue to subsequent clients systems when an error occurs, select the **Continue on error** check box. Otherwise, Task execution will stop on the first client system where an error is encountered
6. If you want to reboot after applying changes select the **Reboot after applying changes** check box.
7. Click **Next**.  
The **Select Clients** tab is displayed.
8. Search for the list of client systems that you want to change the BIOS passwords.
9. Select the client systems you want to change the BIOS passwords and click **Add**.
10. Click **Next**.  
The **Schedule Task** tab is displayed.
11. You can either choose to apply the password changes immediately or schedule it to run at a later time.
12. Provide a brief description of the changes your are applying and click **Finish**.
13. 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, you have to 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.

## Operations

This feature allows you to remote-format Dell client system's hard drives, cold and warm reboot the Dell client-systems and setup KVM sessions.


### Wipe Client Disk

 **CAUTION:** This operation will delete all the data on your client systems.

 **NOTE:** The remote-wipe of client hard drive takes several minutes to complete.




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

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen, click **Operations**.
3. On the **Operation** tab, click **Wipe Client Disk**.
4. After selecting **Wipe Client Disk** 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 Disk](#).  
 **NOTE:** To schedule a Remote Wipe Client Disk operation, the client must be accessible through a network.
- **Retrieve** — to retrieve status of client system's hard disk wipe. For more information, see [Retrieving Wipe Client Disk Status](#).


## Scheduling Wipe Client Disk

Wipe Client Disk feature will format the hard disks of the Dell client systems. To schedule a Wipe Client Disk:



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. Select the client systems you want to view the reports and click **Add**.
4. Click **Next**.
5. The **Schedule Report** tab is displayed.
6. You can either choose to apply the task immediately or schedule it to run at a later time. Depending on your schedule, select one of the following options:
  - Run now — the wipe client disk operations are immediately applied and displays the Running status in the Task Queue.  
 **NOTE:** If your client systems are not connected to the network, you have to run the task again.
  - Run At — wipe client disk operations are 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 Task you are applying and click **Finish**.  
 **NOTE:** It is recommended to run the **Retrieve Wipe Client Disk Status** task to make sure that the hard drives of the client systems have been formatted successfully. For more information see, [Retrieving Wipe Client Disk Status](#).

## Retrieving Wipe Client Disk Status

 **NOTE:** **Retrieve** requests the status of the Wipe Client Disk Operation.



 **NOTE:** After the remote hard drive wipe command has been issued from the server to the client system, the status in the report changes to **Complete**. The format process on the client system will begin only after the status changes to **Complete**.

To retrieve the status:

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. Select the client systems you want to view the reports. Click **Add**.
4. Click **Next**.
5. The **Retrieve Client Status** tab is displayed.
6. You can either choose to apply the task immediately or schedule it to run at a later time. Depending on your schedule, select one of the following options:
  - Run now — the status of Wipe Client Disk operations is immediately retrieved and displays the Running status in the Task Queue.  
 **NOTE:** If your client systems are not connected to the network, you have to 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 Task you are applying and click **Finish**.

## Performing Power Management

To Reboot and Shutdown your remote client-systems:

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen click **Operations**.
3. On the **Operation** window, click **Power Management**.  
The **Power Management** tab is displayed.
4. Select the power control operation you want to execute on the client-systems from the drop-down list.
5. Click **Next**.  
The **Select Clients** tab is displayed.
6. Search for the client-systems you want apply the Power Management changes.
7. Select the client-systems you want to apply the Power Management changes and click **Add**.
8. Click **Next**.  
The **Schedule Task** tab is displayed.
9. You can either choose to apply the task immediately or schedule it to run at a later time.
10. Provide a brief description of the task you are applying and click **Finish**.
11. 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 your client systems are not connected to the network, you have to 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.

## Establishing KVM Sessions

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

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the DCIP's **Home** screen click **Operations**.
3. On the **Operation** window, click **KVM Connect**.  
The **KVM Connect** tab is displayed.
4. Search for the list of client systems on which you want establish KVM sessions.
5. Select the client system on which you want to start the KVM session and click **Start**.

## Generating Reports

This feature allows you to generate and view OOB Manageability, Provisioning, Battery Health of notebook client-systems, and Hardware Inventory reports.

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen click **Reports**.
3. On the **Welcome** screen you can generate the following reports:
  - **OOB 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 from all the active 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. Select the client systems you want to view the reports and click **Add**.
4. Click **Next**.
5. The **Schedule Report** tab is displayed.
6. You can either choose to apply the Task immediately or schedule it to run at a later time.
7. Provide a brief description of the Task you are applying and click **Finish**.

 **NOTE:** Schedule reports creates a task that populates data about client systems.

## Retrieving 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. Select the client systems you want to view the reports. Click **Add**.
4. Click **Next**.
5. The **Retrieve Report** tab is displayed.
6. **Print**, **Copy**, or **Export** the report.

 **NOTE:** The report is exported as a Microsoft Excel (**.xlsx**) file.

 **NOTE:** Retrieving reports requests a report for whatever data has been collected by the scheduled reports.

## Application Preferences

On this screen you can configure and set your preferences for different components of the application like:

- Data Base(DB) and Passwords
- KVM Setup
- Logging
- Task Queue

## DB and Passwords

You can configure where the task requests, and configuration data are stored.

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the **Home** screen, click **Preferences**.
3. On the **Welcome** screen, click **DB & Passwords**.  
The **DB & Passwords** tab is displayed.
4. You can configure the following settings:
  - Retrieve and select the available **SCCM SQL Server** option from drop-down list.

- Select the type of SQL Server Security (Integrated or Username / Password) you want to set.
- Configure your **Windows Account** settings.
- Configure your **AMT ME Account** settings.

5. Click **Save** and **Finish**.

## KVM Setup

This feature allows you to configure and setup your Keyboard, Video, and Monitor (KVM) sessions.

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

**NOTE:** If the client system goes to sleep, hibernate state, or shutdown, the current KVM session has to be closed and re-started.

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the DCIP's **Home** screen, click **Client Configuration**.
3. On the **Client Configuration** window, click **KVM Setup**.  
The **KVM Setup** tab is displayed.
4. Select the **Default Video Screen**, that is the screen you want to connect at the start of the KVM session.
5. If you want the user to provide consent, select the **User Consent** check box.
6. Set the time-out through the **User Consent Timeout**.
7. Set the time frame for the KVM session to time-out after a period of inactivity using the **Session Timeout**.
8. Click **Finish**.

## Logging

Set your preferences for the type of logs you want to capture by Dell Intel vPro AMT Plugin. The log files are located in the installation folder.

1. Launch the Dell Intel vPro AMT Plugin.  
For more information, see [Launching The Dell Intel vPro AMT Plugin](#).
2. On the Dell AMT vPro Plugin **Home** screen, click **Application Preferences**.
3. On the **Welcome** screen, click **Logging**.  
The **Logging** screen is displayed.
4. Select one of the following type of Logs from the Log Level drop-down menu:
  - **None** — no logs are captured.
  - **Normal** — typical logging for client systems operating normally. This 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 **Open Containing Folder**.
7. Click **Save** and **Finish**.

## Task Queue Setup

This feature allows you to limit the number of task requests saved and displayed in the window. **Task Queue**

1. Launch the AMT plug-in. For more information, see [Launching the AMT Plug-in](#).
  2. On the DCIP's **Home** screen, click **Preferences**.
  3. On the **Welcome** screen, click **Task Queue**.  
The **Task Queue** tab is displayed.
  4. Set the **Task History Limit** to the number of tasks you wish to retain in the database (1-500).
- NOTE:** The older completed tasks is automatically deleted from the database as new tasks are created.

5. To have your **Task Queue** automatically refresh every 15 seconds, select the **Refresh the task list automatically** check box.

 **NOTE:** To reduce database activity, deselect the **Refresh the task list automatically** box and click **Refresh** on the **Task Queue** to update the Task list.


## Task Queue

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

- **View** — to get detailed information on an individual task in the task queue. Click **Export** to export the information to an excel file.
- **Refresh** — to refresh the task queue.
- **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** will restart 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 will be placed on **Hold** while editing is underway.
- **Clone** — clone pending, completed, and canceled tasks.
- **Cancel** — cancel tasks that are not yet **Completed**.

## 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"}`

# Troubleshooting

This section contains troubleshooting information for the Dell Client Integration Pack for Microsoft System Center Configuration Manager (DCIP for Configuration Manager.)

## Topics:

- [Authenticode Signature](#)
- [Windows XP Installation Fails](#)
- [KVM Over Wireless](#)
- [Hardware Inventory Report Memory Speed is reported as Zero](#)
- [Max Password Length Change](#)
- [KVM Power Control to Boot to OS in S3](#)
- [Windows XP\(x86\) OS Deployment Hangs During Installation](#)
- [Apply Operating System Task Sequence Action Has A Red Bang](#)

## 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/](http://support.microsoft.com/kb/936707/).

## Windows XP Installation Fails

Installation of Windows XP operating system will fail 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 will be 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 back as a result of the Link Preference Timeout expiring, there is no loss of connectivity. There are individual timeout values for the each shutdown/reboot operation (defined in KVMView app.config settings) that can be configured externally:

- LPTimeoutRebootToOS
- LPTimeoutRebootToBIOS
- LPTimeoutRebootToDiagnostics
- LPTimeoutRebootWithIDER
- LPTimeoutShutdown

For more information, see [http://software.intel.com/sites/manageability/AMT\\_Implementation\\_and\\_Reference\\_Guide/DOCS/Implementation%20and%20Reference%20Guide/default.htm](http://software.intel.com/sites/manageability/AMT_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. SCCM Resource Explorer today reports this as 0.

## Max Password Length Change

Some systems BIOS do 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 occurs in both wired and wireless environments.) In such a case, the administrator will need 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/](https://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 a 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**.

## 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](https://support.dell.com/manuals)**.

- The *Dell Client Configuration Toolkit User's Guide* describes the installation and use of the client configuration toolkit (CCTK) to configure various BIOS features for Dell business client platforms.
- The *Dell OpenManage Client Instrumentation User's Guide* describes the installation and the use of the OpenManage Client Instrumentation (OMCI) software.
- The *Hardware Owner's Manual* provides information about your system, installing the system components and troubleshooting your system.

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


### Topics:

- [Obtaining Technical Assistance](#)
- [Contacting Dell](#)

## 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. Visit **[dell.com/support](https://dell.com/support)**
2. Select your support category.
3. Verify your country or region in the Choose a Country/Region drop-down menu at the top of page.
4. Select the appropriate service or support link based on your need.