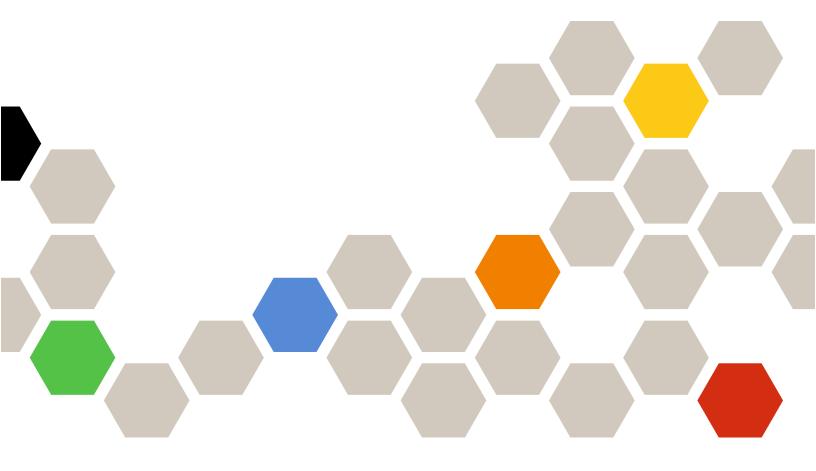


# Lenovo Configuration Pack for Microsoft System Center Configuration Manager Installation and User Guide



Version 6.3

### Note

Before using this information and the product it supports, read the information in Appendix A "Notices" on page 115.

Second Edition (September 2016)

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# About this publication

This guide provides instructions for installing Lenovo Configuration Pack for Microsoft System Center Configuration Manager and using it to author and manage Lenovo configuration data in your environment.

## **Conventions and terminology**

Highlighting conventions and terminology used in these topics are described in this section.

Paragraphs that start with a bold **Note**, **Important**, or **Attention** are notices with specific meanings that highlight key information.

Note: These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

The following table describes some of the terms, acronyms, and abbreviations, if any, used in this document.

Term/Acronym	Definition
ASU	Advanced Settings Utility
Configuration Item	A grouping of Setting Collections defined and managed by the Lenovo Configuration Pack.
DCM	Desired Configuration Management
DCMConfiguration Baseline	A Configuration Baseline composed of other configuration items. The baseline can be assigned to the SCCM client collection. You can evaluate these baselines on the endpoint.
DCMconfiguration item	The fundamental structural unit of a Desired Configuration Management system.
DCMconfiguration setting	A configuration setting that is composed of other configuration settings. You can define the evaluation condition and severity in each configuration setting.
Digest Schema	In Desired Configuration Management (DCM), the digest definition XML Schema Definition (XSD) defines the DCM documents (configuration items). This includes the constraints on the elements, attributes that can appear and their relationship to each other, and what types of data can be in them. The Lenovo Configuration Pack XML file must align with the digest schema standard that can be imported into the DCM server.
IMM	Integrated Management Module
Lenovo Configuration Capture	A tool that captures IMM/uEFI/uEFI (Romley Platform) settings from an Lenovo server, and exports the captured settings to an Lenovo System Configuration Description.
Lenovo configuration data	Lenovo System Configuration Itemconfiguration items, Lenovo System Setting Collections and Lenovo System Settings are collectively called Lenovoconfiguration data.

Table 1. Terms, acronyms and abbreviations

Table 1. Terms, acronyms and abbreviations (continued)

Term/Acronym	Definition
Lenovo Configuration Pack	The Lenovo Configuration Pack is a .cab file that contains configuration items and baselines. You can import configuration items and baselines by importing the Lenovo Configuration Pack into the DCM server.
Lenovo Configuration Pack Editor	An editor that can create and edit Lenovoconfiguration items and Setting Collections, and export Lenovoconfiguration data to an Lenovo Configuration Description.
Lenovo System Configuration Description	An XML file that contains Lenovoconfiguration items and Setting Collections.
Lenovo System Configuration Item	A configuration item that is composed of other LenovoSetting Collections.
Lenovo System Configuration Setting	One Lenovoconfiguration setting defines one property of IMM/uEFI and its expected value, and returns an error when the property is not compliant with the expected value.
Lenovo System Configuration Setting Collection	A setting collection that contains one or more Lenovo System Configuration Settings. In this release, a collection has a firmware type of IMM or uEFI.
SCCM	Microsoft System Center Configuration Manager
uEFI	Unified Extensible Firmware Interface

### Web resources

The following websites provide resources for understanding, using, and troubleshooting System x, Flex System, BladeCenter servers, and systems-management tools.

### Lenovo website for Microsoft Systems Management Solutions for Lenovo servers

Locate the latest downloads for the Lenovo Add-in for Microsoft System Center Virtual Machine Manager:

Lenovo XClarity Integrator for Microsoft System Center website

### Lenovo technical support portal

This website can assist you in locating support for hardware and software:

• Lenovo Support Portal website

### Lenovo ServerProven pages

Obtain information about hardware compatibility with Lenovo System x, BladeCenter, and IBM IntelliStation hardware.

- Lenovo ServerProven: Compatibility for BladeCenter products
- Lenovo ServerProven: Compatibility for Flex System Chassis
- Lenovo ServerProven: Compatibility for System x hardware, applications, and middleware

### Microsoft System Center Configuration Manager

The following websites provide information about Microsoft System Center Configuration Manager 2012:

- Microsoft System Center Configuration Manager 2012 website
- Microsoft System Center Configuration Manager 2007 website

# Chapter 1. Overview

Lenovo Configuration Pack for Microsoft System Center Configuration Manager provides you with the ability to check for IMM/uEFI settings on an Lenovo system. You can use the Lenovo Configuration Pack Editor to create settings for validation on an endpoint.

Lenovoconfiguration data is exported by Lenovo Configuration Pack Editor to a Configuration Pack (.cab) file. The .cab file is then imported to System Center Configuration Manager (SCCM), where it can be utilized by the Desired Configuration Management feature.

Administrators can assign configuration data to specific collections in SCCM. Configuration data includes Visual Basic Script, which invokes the ASU.exe tool to validate an endpoint's compliance.

Lenovo Configuration Pack provides the following support:

### Capture IMM/uEFI/uEFI (Romley Platform) settings

Lenovo Configuration Capture can capture IMM/uEFI/uEFI (Romley Platform) settings from an Lenovo server, and export the captured settings to an Lenovo system configuration description file. The exported configuration description file can then be imported into any Lenovo Configuration Pack Editor.

### Export an Lenovo system configuration data to an SCCM Console:

This feature provides the ability to import configuration items to an SCCM Console and assign them to SCCM client collections.

### Author Lenovo system configuration data:

Lenovo system configuration data is composed of Lenovoconfiguration items, Lenovo configuration Setting Collections, and Lenovoconfiguration settings. In this release, the Lenovo system configuration data scope is IMM/uEFI settings.

### Support IMM/uEFI common settings:

Lenovo Configuration Pack Editor supports some common settings of IMM/uEFI that can help you author Lenovo system configuration setting.

### Export Lenovo system configuration data to a Lenovo Configuration Pack:

Lenovo Configuration Pack contains configuration items and Setting Collections in a .cab file that are determined by DCM standards. Lenovo Configuration Pack can be imported into a DCM server.

### Export Lenovo system configuration data to a configuration description:

This feature provides the ability to share and edit configuration data exported to a configuration description XML file. The configuration description file can contain one or more Lenovoconfiguration items and Setting Collections.

### Import Lenovo system configuration description:

The configuration description XML file can be imported into Lenovo Configuration Pack Editor.

### **Advanced Settings Utility (ASU)**

You can use the Lenovo Advanced Settings Utility (ASU) to modify firmware settings from a command line on various operating-system platforms, such as Red Hat Enterprise Linux, Solaris Unix, MicrosoftWindows, and WinPE.

ASU supports BIOS code, Remote Supervisor Adapter and Remote Supervisor Adapter II firmware, Baseboard Management Controller firmware, Integrated Management Module and more.

Configuration Packconfiguration data does not include ASU.exe. To use Lenovo Configuration Pack for Microsoft System Center Configuration Manager with ASU (v3.60 or a later version) on an Lenovo system endpoint, complete these steps:

- Copy the ASU.exe file (for 32-bit OS) or ASU64.exe file (for 64-bit OS) located in the Lenovo\_Support\ASU \ system directory folder. For example, C:\Lenovo\_Support\ASU\asu.exe and C:\Lenovo\_Support\ASU \asu64.exe.
- 2. Manually record the location of ASU.exe in the registry by updating the *Location* string key to: HKEY\_LOCAL\_MACHINE\SOFTWARE\(Wow6432Node)\Lenovo\ASU\.

For more information about ASU, see Advanced Settings Utility (ASU) website.

# Chapter 2. Installing Lenovo Configuration Pack

The following procedure describes how to install the Configuration Pack.

### Procedure

Step 1. Double click the Lenovo Configuration Pack installer (.exe file). The welcome page for Lenovo Configuration Pack opens.

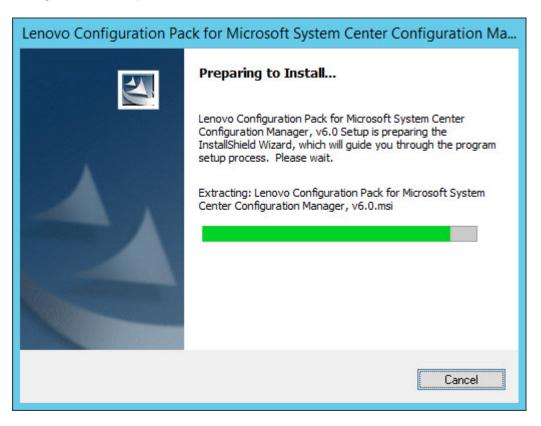


Figure 1. InstallShield Wizard welcome page

Step 2. Click Next to proceed to the License Agreement page.

🛱 Lenovo Configuration Pack for Microsoft System Center 🗕 🗖 🗙
Software License Agreement Please read the following license agreement carefully.
If Licensee is obtaining the Program for purposes of productive use (other than evaluation, testing, trial "try or buy," or demonstration): By clicking on the "Accept" button below, Licensee accepts the IBM International Program License Agreement, without modification. If Licensee is obtaining the Program for the purpose of evaluation, testing, trial "try or buy," or demonstration (collectively, an "Evaluation"): By clicking on the "Accept" button below, Licensee accepts both (i) the IBM International License Agreement for Evaluation of Programs (the "Evaluation License"), without
Read Non-Lenovo Terms
<ul> <li>I accept both the Lenovo and the non-Lenovo terms.</li> <li>I do not accept the terms in the license agreement.</li> <li>InstallShield</li> </ul>
Print < Back Next > Cancel

Figure 2. Software License Agreement

- Step 3. Click I accept both the Lenovo and non- Lenovo terms to accept the license agreement.
- Step 4. Click Next.
- Step 5. On the Destination Folder page, to change the Lenovo Configuration Pack installation directory, click **Change**.

🛃 Lenovo	Configuration Pack for Microsoft System Center Configura 🗴
and the second	ion Folder xt to install to this folder, or click Change to install to a different folder.
	Install Lenovo Configuration Pack for Microsoft System Center Configuration Manager, v6.0 to: C:\Program Files (x86)\Lenovo\Lenovo Configuration Pack\ <u>C</u> hange
InstallShield -	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 3. Destination Folder page

Step 6. Click **Next** to proceed to the Ready To Install the Program page.

😼 Lenovo Configuration Pack for Microsoft System Center Configura 🗙
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield <u>Sack</u> Cancel

Figure 4. Ready to Install the Program page

Step 7. Click **Install** to start the installation process.

🛃 Lenovo	Configuration Pack for Microsoft System Center – 🗖 🗙
	Lenovo Configuration Pack for Microsoft System Center tion Manager, v6.0 ram features you selected are being installed.
P	Please wait while the InstallShield Wizard installs Lenovo Configuration Pack for Microsoft System Center Configuration Manager, v6.0. This may take several minutes.
	Status:
	Copying new files
InstallShield -	
	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 5. Installation status page

Step 8. Click **Finish** to complete the installation.

😸 Lenovo Configuration	Pack for Microsoft System Center Configura
	InstallShield Wizard Completed
A	The InstallShield Wizard has successfully installed Lenovo Configuration Pack for Microsoft System Center Configuration Manager, v6.0. Click Finish to exit the wizard.
	Show the Windows Installer log
	< <u>B</u> ack <u>Finish</u> Cancel

Figure 6. InstallShield Wizard Completed page

# **Chapter 3. Uninstalling Lenovo Configuration Pack**

There are four methods for uninstalling Lenovo Configuration Pack.

### Procedure

- This is the recommended method. Start the Lenovo Configuration Pack installer program by double clicking on the (.exe file). Select the **Remove** option.
- Use the Add or Remove Programs option or for MicrosoftWindows Server 2008, using the Programs and Features option.
- From the Start menu, select the uninstall shortcut.
- Refer to the Lenovo XClarity Integrator Installer (see Lenovo XClarity Integrator Installer User's Guide for more information about uninstalling using Lenovo XClarity Integrator Installer.

### What to do next

If you authored configuration data, you will be notified whether the configuration data folder should be deleted during the uninstall process.

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# Chapter 4. Working with Lenovo Configuration Pack and Microsoft System Center Configuration Manager

The topics in this section describe how to use Lenovo Configuration Pack with Microsoft System Center Configuration Manager 2007 and Microsoft System Center Configuration Manager 2012.

## Using Lenovo Configuration Pack with configuration data

Lenovo Configuration Pack for Microsoft System Center Configuration Manager provides an easy way to author configuration data, which can be imported into the System Center Configuration Manager (SCCM) Desired Configuration Management (DCM) server. The SCCMDCM server assigns configuration data to its clients to evaluate whether the clients are in compliance or not.

### About this task

The following procedure provides an overview of how to use Lenovo Configuration Pack with configuration data on the SCCMDCM server.

### Procedure

• Create configuration data that you want to evaluate.

You can create configuration data using one of the following methods:

- Create configuration data using Lenovo Configuration Pack Editor.

For more information, see "Creating a Setting Collection" on page 13 and "Creating a configuration item" on page 25.

 Capture configuration data from an Lenovo server that has an Integrated Management Module, a uEFI module, or a uEFI (Romley Platform) module.

For more information, see "Running Lenovo Configuration Capture" on page 99.

• Export the created configuration data to the SCCMDCM server.

For more information, see "Exporting configuration items to Lenovo Configuration Pack CAB file" on page 45 and "Importing configuration data into DCM" on page 52.

• Assign and evaluate configuration data on the SCCM client.

For more information, see "Assigning a baseline to a collection" on page 67 and "Evaluating a baseline on an endpoint" on page 70.

## Launching Lenovo Configuration Pack Editor

Lenovo Configuration Pack Editor helps you create and manage configuration data that you can export for use in Desired Configuration Management.

### Procedure

- Step 1. From the **Start** menu, click the Lenovo Configuration Pack Editor shortcut to launch Lenovo Configuration Pack Editor.
- Step 2. Optional: Optional: If this is your first time using Lenovo Configuration Pack Editor, read the "Getting Started" section and then click **Create Setting Collection** to create a firmware setting collection before grouping the Setting Collections into configuration items.

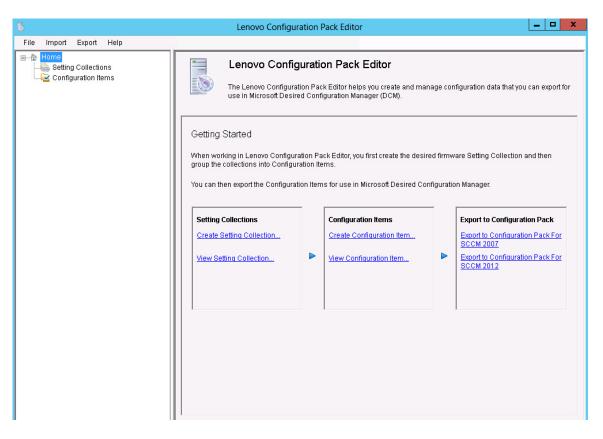


Figure 7. Lenovo Configuration Pack Editor home page

The Lenovo Configuration Pack Editor home page contains the following items:

### Home navigation pane

The navigation pane provides a list of Setting Collections nodes and Configuration Items nodes.

From the navigation pane, you can select a Setting Collection or a Configuration Item, view it in the application window or right-click the selection, and perform the functions listed below.

### Lenovo Configuration Pack Editor application window

The application window provides three functional areas:

### **Setting Collections**

Create Setting Collection

View Setting Collection

### **Configuration Items**

Create Configuration Item

View Configuration Item

### Export to Configuration Pack

Export to Configuration Pack for SCCM 2007

Export to Configuration Pack for SCCM 2012

## **Setting Collection**

A Setting Collection represents a desired object, setting, or value on a server. You can create, view, or modify a Setting Collection.

The Setting Collection pane of the Lenovo Configuration Pack Editor home page has two options:

- **Create Setting Collection** opens the Lenovo Configuration Pack Editor wizard and can assist you with creating a IMM/uEFISetting Collection.
- View Setting Collection displays the Setting Collection list, where you can select, view, modify, and delete an existing Setting Collection.

## **Creating a Setting Collection**

The following procedure describes how to create a Setting Collection.

### Procedure

- Step 1. From the Lenovo Configuration Pack Editor home page, click **Create Setting Collection**. The Lenovo Configuration Pack Editor wizard opens to guide you through creating a Setting Collection.
- Step 2. Enter a **Name** and **Description** for the new setting collection and click **Next**. A name is required, but a description is optional.

Lenovo Configuration Pack Editor - Create Setting Collection	x
General Information Enter a name and (optional) description for your new Setting Collection and click "Next" to continue.	Step 1/3
Name:	
Description:	<
< Back Next > Finish	Cancel

Figure 8. General Information page

Step 3. From the **Setting Type** list, select a setting type for the new Setting Collection. The setting type cannot be modified after it has been created.

Lenovo Configuration Pack Editor - Create Setting Collection	×
Select a setting type and then click "Next".	<b>ENOVO</b> Step 2/3
Setting Type: MM UEFI UEFI(Romley Platform) < Back Next > Finish	Cancel

Figure 9. Setting Collection Information page

Step 4. Click **Next**. The Property Thresholds page opens.

	b Le	enovo Configura	tion Pack Editor -	Create Sett	ing Collection	x
С		perties, "Modify" to n	nodify properties, or "I	Remove" to re		Step 3/3
p	roperty. Then click "Fi	nisn".				0100 0/0
	Add	Modify	Remove			
	Property Name	Comparator	Expected Value	Severity	Remediation State	Remediatic
	<					>
			< Back	Next >	Finish	Cancel

Figure 10. Property Thresholds page

Step 5. Click **Add** to add a new property threshold. The Setting Editor page opens.

Б	Lenovo Configuration Pack Editor - Setting Editor	x
Select the property that you property, type it in the Prope	wish to monitor for compliance. If the property list does not include the desired erty Name field.	
Property Name:	BootModes.SystemBootMode	
Description:	Controls which drivers option ROMs the Boot Manager uses; UEFI Only: UEFI- aware adapters boot loaders; Legacy Only: skips UEFI-aware drivers, runs option ROMs to boot a legacy OS; Both: boots UEFI mode if that fails, then tries legacy boot	< 
Comparator:	Equals Value: UEFI and Legacy	~
Severity:	Information v	
	Remediate noncompliant IMM/UEFI setting values on client automatically. The remediation action may be failed if the target setting is readonly.	
Expected Value:	UEFI and Legacy 🗸	
	otModes.SystemBootMode" "Equals" "UEFI and Legacy", the property is compliant o e, the property is non-compliant and returns a severity of "Information".	n
	OK Cancel Apply	

Figure 11. Setting Editor page

- Step 6. Complete the following fields:
  - **Property Name**: Select a specific IMM, uEFI, or uEFI (Romley Platform) setting, depending on the previous selection for the **Setting Type** on the Selecting Collection Information page.
  - **Comparator**: Each property name in the list has an associated return type, such as: String, Integer, Version and Data Time, which requires that you select a comparator from the items shown in the following table:

Return Type	Comparator	Description
String	Equals	If the evaluation property equals the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.
	Not Equals	If the evaluation property does not equal the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.
	Contains	If the evaluation property contains the Expected Value, the property is compliant on the endpoint. Otherwise, the property is non-compliant.

Table 2. Comparators by return type	Table 2.	Comparators by return type
-------------------------------------	----------	----------------------------

Table 2. Comparators by return type (continued)

Return Type	Comparator	Description			
	One Of	If the evaluation property is one of the values listed for Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Equals	If the evaluation property equals the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Not Equals	If the evaluation property does not equal the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
Integer	Less	If the evaluation property is less than the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
Integer	Less or Equals	If the evaluation property is less than or equal to the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Greater	If the evaluation property is greater than the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Greater or Equals	If the evaluation property is greater than or equal to the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
Version	Equals	If the evaluation property equals the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Not Equals	If the evaluation property does not equal the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Less	If the evaluation property is less than the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Less or Equals	If the evaluation property is less than or equal to the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Greater	If the evaluation property is greater than the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
	Greater or Equals	If the evaluation property is greater than or equal to the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
Doto Time	Equals	If the evaluation property equals the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.			
Data Time	Not Equals	If the evaluation property does not equal the Expected Value, the property is compliant on the endpoint. Otherwise, the property is non-compliant.			

Table 2. Comparators by return type (continued)

Return Type	Comparator	Description
	Less	If the evaluation property is less than the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.
	Less or Equals	If the evaluation property is less than or equal to the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.
	Greater	If the evaluation property is greater than the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.
	Greater or Equals	If the evaluation property is greater than or equal to the Expected Value, the property is compliant on the endpoint. Otherwise, the property is noncompliant.

- **Severity**: Select one of three levels:
  - Information
  - Warning
  - Error

When a Setting is noncompliant with the expected value on the endpoint, the Setting returns the selected severity level.

As you define the settings, the Selection Summary automatically fills the corresponding **property**, **value**, **comparator**, and **severity** fields.

**Note:** You can type a property that does not exist in the property support list, but Lenovo Configuration Pack Editor assumes that the property is a String return type, which means that the Comparator will only list Equals, Not Equals, Contains, and One Of. You must still type an expected value for the property.

In addition, you can set duplicate settings in the Setting Collection.

Step 7. Click Add when you are finished adding the new property threshold.

Len	ovo Configura	tion Pack Editor -	Create Setti	ng Collection	
Property Thresh					enova
lick "Add" to add prope roperty. Then click "Fini:		oony propenies, or P	Kennove to rer	nove a	Step 3/3
Add	Modify	Remove			
Property Name	Comparator	Expected Value	Severity	Remediation State	Remediatio
IMM.BasicAdapter	Equals	Yes	Warning	No	
IMM.HTTPPort	Less or Equals	80	Informati	No	
IMM.HTTPPort	Less	80	Error	No	
IMM.RemotePower	Equals	Yes	Informati	No	
<					>
		< Back	Next >	Finish	Cancel

Figure 12. Property Thresholds page

- Step 8. Optional: Optional: To modify a setting, either select the setting name and click **Modify** or doubleclick the setting name and click **Modify**.
- Step 9. Optional: Optional: To delete a setting, select one or more settings, and click **Remove**.

## **Viewing a Setting Collection**

The following procedure describes how to view a Setting Collection.

### Procedure

• Click View Setting Collection on the home page.

The Setting Collections list is displayed.

ā.	Lenovo Configuration Pack Editor	- 🗆 X
File Import Export Help		
File Import Export Help Home Setting Collections MMS Settings UEFI Settings Collection Configuration Items Configuration Items Sample Lenovo Configuration Items	Configuration Items         A Configuration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Config         New Configuration Item       Delete         Name       Description         Configuration Items Sample       Lenovo Configuration Items	uration Item.

Figure 13. Setting Collections list

• Click on the name of a Setting Collection to view its properties.

5	Lenovo Configuration Pack Editor	_ 🗆 🗙
File Import Export Help		
Home Setting Collections UEFI Settings Collection Configuration Items Configuration Items Sample Lenovo Configuration Items	Setting Collections         A Setting Collection epresents a desired object, setting, or value on a server.         New Setting Collection       Delete         Name       Setting Type       Description         IMM       Lenovo IMM Settings Description         uEFI Settings Collection       UEFI       Lenovo uEFI Settings Description         Details for:       IMM Settings         General       Property Thresholds         Modify       Name:       IMM Settings         Setting Type:       IMM         Description:       Lenovo IMM Settings Description	

Figure 14. Setting Collection properties

• To delete Setting Collections, select one or more items in the list and either click **Delete** or press the **Delete** key.

### Modifying a Setting Collection

The following procedure describes how to modify a Setting Collection.

### Procedure

Step 1. On the **General** tab on the Setting Collections page, click **Modify**. The General Information page opens.

Lenovo Configuration Pack Editor - General Information	x
Name:	
IMM Settings Description:	
Lenovo IMM Settings Description	^
OK Cancel Apply	

Figure 15. General Information page

- Step 2. Edit the **Name** and **Description** fields for the Setting Collection, click **Apply** and then **OK** to save the changes. The collection **Name** and **Description** can be modified, but the **Setting Type** cannot be modified.
- Step 3. Click the **Property Thresholds** tab to display a list of the existing property thresholds.

5	Lenc	ovo Configuratio	on Pack Edit	tor			
File Import Export Help							
Home - Collections	Setting Collect	tions					
IMM Settings     IEFI Settings Collection     Configuration Items     Configuration Items Sample     Lenovo Configuration Items	A Setting Collection rep	presents a desirec	l object, settin	ig, or value on a serve	er.		
	New Setting C	ollection	Delete				
	Name	Se	tting Type	Description			
	IMM Settings	IMI	vi	Lenovo IMM Setting	is Description		
	Details for: IMM	Settings					
	General Property Th	resholds					
	Add	Modify	Remove	]			
	Property Name	Comparator	Expected Va	lue Severity	Remediation State	Remediation Value	Des
	IMM.BasicAdapter	Equals	Yes	Warning	No		Мос
	IMM.HTTPPort	Less or Equals	80	Informati			Cor
	IMM.HTTPPort	Less	80	Error	No		Cor
							Мо
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equals	Yes	Informati	No		
	IMM.RemotePower	Equais	Yes	Informati	No		>

Figure 16. Property Thresholds tab

- Step 4. Select the applicable editing option.
  - To add settings to the property thresholds, click **Add**.
  - To edit a selected property threshold, click **Modify**.
  - To delete selected property thresholds, click **Remove**.

**Note:** When a Setting Collection that is also used in another configuration item is deleted, it is removed from all other configuration items.

### **Duplicating a Setting Collection**

The following procedure describes how to duplicate a Setting Collection.

### Procedure

Step 1. From the navigation pane or from the Setting Collection list, right-click a Setting Collection and click **Duplicate**.

File       Import       Export       Help         Import       File       Home       Setting Collections         Import       Setting Collection       A Setting Collection represents a desired object, setting, or value on a server.         Import       Configuration Items       Sample         Import       Configuration Items       Setting Collection         Import       Delete       Name         Import       Settings       Import         Import       Setting Collection       Delete         Import       Name       Setting Description         Import       Settings       Import         Import       Settings Collection       UEFI         Import       Description       Delete         Import       Settings Collection       UEFI         Import       Details for:       IMM Settings         Import       Details for:       IMM Settings         Import       Details for:       IMM Settings         Import       Setting Collection       UEFI         Import       Details for:       IMM Settings         Import       Settings       General	Б	Lenovo Configura	ion Pack Editor		- 5	x
Setting Collections          Setting Collections         Image: Setting Collection         Image: Setting Collec	File Import Export Help					
Add         Modify         Remove           Property Name         Comparator         Expected Value         Severity         Remediation State         Remediation Value         Des           IMM.BasicAdapter         Equals         Yes         Warning         No         Mod           IMM.HTTPPort         Less or Equals         80         Informati         No         Con           IMM.HTTPPort         Less         80         Error         No         Con	Home     Setting Collections     MM Settings     UEFI Settings Collection     Configuration Items     Configuration Items Sample	A Setting Collection represents a desir New Setting Collection Name S IMM Settings I UEFI Settings Collection C Details for: IMM Settings General Property Thresholds Add Modify Property Name Comparator IMM BasicAdapter Equals IMM.HTTPPort Less or Equals IMM.HTTPPort Less	Delete       Internet ing Type     Description       AM     Lenova IMM Setting       IEFI     Duplicate       Delete     Delete	IS Description gs Decription Remediation State No No	Remediation Value	Des Mod Con Con Mod

Figure 17. Duplicate Setting Collection function

Step 2. In the Duplication Dialog window, enter the **New Name** for the duplicate Setting Collection and click **OK**.

Ь	Lenovo C	onfiguration Pacl	k Editor - Duplication	n Dialog	x
	New Name:	IMM Settings			
			ОК	Cancel	

Figure 18. Duplication Dialog window

**Note:** The name of the duplicate Setting Collection can be the same name as an existing Setting Collection. However, it is recommended that you use a unique name for the duplicate Setting Collection. Also, if you duplicate a Setting Collection that is used by other configuration items, the new duplicate Setting Collection that is created will not be referred to by the other configuration items.

## **Configuration Item**

A configuration item is a grouping of Setting Collections defined and managed by Lenovo Configuration Pack for Microsoft System Center Configuration Manager. You can create, view, or modify a configuration item.

The Configuration Item pane of the Lenovo Configuration Pack Editor home page has two options:

• Create Configuration Item opens the Lenovo Configuration Pack Editor wizard and can assist you with creating a configuration item.

• View Configuration Item displays the configuration item list, where you can select and view an existing configuration item.

## Creating a configuration item

The following procedure describes how to create a configuration item.

### Procedure

Step 1. From the Lenovo Configuration Pack Editor home page, click **Create configuration item**. The Lenovo Configuration Pack Editor wizard opens to guide you through creating a configuration item.

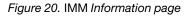
Lenovo Configuration Pack Editor - Create Configuration Item	X
General Information Enter a name and (optional) description for your new Configuration Item and click "Next" to continue.	<b>lenovo</b> Step 1/3
Name:	
Lenovo Configuration Item	
Description:	
Lenovo Configuration Item Include Setting Collections: Lenovo IMM Settings uEFI Setting Collection for Web Site	×
< Back Next > Finish	Cancel

Figure 19. General Information page

Step 2. Enter a **Name** and **Description** for the new configuration item and click **Next**. A name is required, but a description is optional.

The IMM Information page opens.

Lenovo Configuration Pack Editor - Create Configuration Item	n X
IMM Information	lenovo
Enter the user ID and password, and specify the location of the asu.exe file on the endpoint. Click "Next" to continue.	Step 2/3
Specify the location of the asu.exe file on the endpoint	
C:\Lenovo\ASU\Win32\asu.exe	
< Back Next > Finish	Cancel



- Step 3. Enter a **UserID** and **Password** and then **Confirm the Password** for the IMM on the target server. The UserID and Password are not required if the default account is used on the target IMM. Lenovo Configuration Pack Editor does not check the accuracy of the information entered in the **UserID** and **Password** fields.
- Step 4. In the **Specify the location of the ASU.exe file on endpoint** field, enter an absolute path to the ASU.exe file on the target server. The collection's settings use this path to invoke the ASU.exe file to detect the settings. If you do not type the correct path, it is unable to detect the ASU.exe file as shown in the following figure.

В		Lenovo Configuration Pack Editor - Create Configuration Item
Ente		er ID and password, and specify the location of the asu.exe file on the endpoint.
Clic	Б	Lenovo Configuration Pack Editor - Notification
	i	The Configuration Item will search for asu.exe (v3.60 or above) on the endpoint. Ensure that at least one of these conditions is met for validation, or the Configuration Item will return as "Not Detected".
		1. The asu.exe path is defined in the Location field.
		2. Asu.exe is located at %SystemPartition%\Lenovo_Support\ASU\asu64.exe (for 64-bit OS) or %SystemPartition%\Lenovo_Support\ASU\asu.exe (for 32-bit OS).
		3. The location is defined in the registry key as follows: HKEY_LOCAL_MACHINE\Software\Lenovo\ASU\Location (for 32-bit OS) or HKEY_LOCAL_MACHINE\Software\Wow6432Node\Lenovo\ASU\Location (for 64-bit OS).
		ОК
		< Back Next > Finish Cancel

Figure 21. Asu.exe detection notification window

- Step 5. Optional: Optional: To exit the Notification window, click **OK**.
- Step 6. Click **Next**. The Configuration Items page opens.

В		Lenovo Configu	uration Pack Edi	tor - Create Conf	figuration Item	x
	<b>g Colle</b> ng Collection		to include in this C	onfiguration Item.	la	Step 3/3
1	\dd	Remove				
Name			Setting Type	Description		
<			1	1		>
			< Back	Next >	Finish	Cancel

Figure 22. Configuration Items page

Step 7. Click **Add** to add existing Setting Collections into the configuration item. The Add Setting Collections page opens.

👗 Lenovo Co	onfiguration Pac	k Editor - Add Setting Collections	x
	Add Sett	ing Collections	
Select Setting Collections that y	ou wish to add to th	is Configuration Item.	
Name	Setting Type	Description	
✓ IMM Settings	IMM	Lenovo IMM Settings Description	
uEFI Settings Collection	UEFI	Lenovo uEFI Settings Decription	
✓ SelectAll		OK Cancel Apply	



Step 8. Select the Setting Collections you want to add to the configuration item and click **OK**. A Setting Collection can be used in multiple configuration items.

👃 Lenovo Config	juration Pack Ec	litor - Create Configuration Item	x
Setting Collections Add Setting Collections that you wish	to include in this (		Step 3/3
Add Remove	]		
Name IMM Settings uEFI Settings Collection	Setting Type       Description         IMM       Lenovo IMM Settings Description         UEFI       Lenovo uEFI Settings Decription		
<		Ш	>
	< Back	K Next > Finish	Cancel

- Step 9. To remove any of the Setting Collections from a configuration item, select one or more Setting Collections in the list and click **Remove**. The **Remove** function deletes the selected Setting Collections from the current configuration item, but it does not delete Setting Collections from this list.
- Step 10. Click Finish.

### Viewing a configuration item

The following procedure describes how to view configuration items.

### Procedure

• Click View configuration item on the home page. The Configuration Items list is displayed.

Figure 24. Add Setting Collections list

В	Lenovo Configuration Pack Editor	-			x
File Import Export Help					
Home Setting Collections IMM Settings UEFI Settings Collection Configuration Items Configuration Items Sample Lenovo Configuration Items	A Configuration Items A Configuration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Configuration Item Name Configuration Items Sample Lenovo Configuration Items	igurat	ion It	tem.	

Figure 25. Configuration Items list

• Click on the name of a Configuration Item to view its properties.

ā	Lenovo Configuration Pack Editor	- 🗆 X
File Import Export Help		
Home     Setting Collections     MM Settings     UEFI Settings Collection     Configuration Items     Configuration Items     Lenovo Configuration Items	Configuration Items         A Configuration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Config         New Configuration Item       Delete         Name       Description         Configuration Items Sample       Configuration Items Description         Lenovo Configuration Items       Description	uration Item.
	Details for:       Configuration Items Sample         General       Setting Collections         Modify       Name:         Configuration Items Sample         Description:       Configuration Items Description	×

Figure 26. Configuration item properties

# Modifying a configuration item

The following procedure describes how to modify a configuration item.

#### Procedure

Step 1. On the **General** tab on the Configurations Items page, click **Modify**. The General Information page opens.

Lenovo Configuration Pack Editor - General Information	x
Name:	
Configuration Items Sample	
Description:	
Configuration Items Description	~
Edit Configuration Items	
	~
OK Cancel Apply	
	_

Figure 27. Configuration Pack Editor - General Information page

- Step 2. Edit the **Name** and **Description** fields for the configuration item, click **Apply** and then **OK** to save the changes.
- Step 3. Click the **IMM Account** tab to display the IMM Account information.

5	Lenovo Configuration Pack Editor
File Import Export Help	
Home Setting Collections IMM Settings Configuration Items Configuration Items Sample Lenovo Configuration Items	Configuration Items         A Configuration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Configuration Item.         New Configuration Item       Delete         Name       Description         Configuration Items Sample       Configuration Items Description         Lenovo Configuration Items       Configuration Items Sample         General       Setting Collections         Modify       Name:         Configuration Items Sample       Configuration Items Sample         Description:       Configuration Items Sample         Description:       Configuration Items Sample         Description:       Configuration Items Description         Edit Configuration Items Description       Configuration Items Description         Edit Configuration Items Description       Configuration Items

Figure 28. IMM Account tab

Step 4. Click Modify to enter a new UserID or Password for the IMM on the target server.

**Note:** Lenovo Configuration Pack Editor does not check the accuracy of the **UserID** and **Password** fields. It is recommended that you use the default account to eliminate any errors.

Step 5. In the **Specify the location of the ASU.exe file on endpoint** field, enter an absolute path to the ASU.exe file on the target server. The collection's settings will use this path to invoke the ASU.exe file to detect the settings. If you do not type the correct path, the setting attempts to detect the ASU.exe file as specified in the window shown in the figure below.

В	Lenovo Configuration Pack Editor - Create Configuration Item				
IMM Information					
Click "Nex"	Lenovo Configuration Pack Editor - Notification				
	The Configuration Item will search for asu.exe (v3.60 or above) on the endpoint. Ensure that at least one of these conditions is met for validation, or the Configuration Item will return as "Not Detected".				
	1. The asu.exe path is defined in the Location field.				
	2.Asu.exe is located at %SystemPartition%\Lenovo_Support\ASU\asu64.exe (for 64-bit OS) or %SystemPartition%\Lenovo_Support\ASU\asu.exe (for 32-bit OS).				
	3. The location is defined in the registry key as follows: HKEY_LOCAL_MACHINE\Software\Lenovo\ASU\Location (for 32-bit OS) or HKEY_LOCAL_MACHINE\Software\Wow6432Node\Lenovo\ASU\Location (for 64-bit OS).				
Speci	OK				
	< Back Next > Finish Cancel				

Figure 29. Asu.exe detection notification window

- Step 6. Optional: To exit the Notification window, click **OK**.
- Step 7. Click the Setting Collections tab.

5	Lenovo Configuration Pack Editor	- 🗆 X
File Import Export Help		
Home     Setting Collections     IMM Settings     UEFI Settings Collection     Configuration Items     Configuration Items     Lenovo Configuration Items	Configuration Items         AConfiguration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Configuration Item         New Configuration Item       Delete         Name       Description         Configuration Items Sample       Configuration Items Description         Lenovo Configuration Items       Edit Configuration Items	ration Item.
	Details for: Lenovo Configuration Items General Setting Collections	
	Add Remove	
	Name Setting Type Description	
	IMM Settings IMM Lenovo IMM Settings Description	
	uEFI Settings Collection UEFI Lenovo uEFI Settings Decription	

Figure 30. Setting Collections tab

Step 8. Click **Add** to add existing Setting Collections into the configuration item. The Add Setting Collections page opens.

🚡 Lenovo Co	nfiguration Pac	k Editor - Add Setting Collections	x	
Add Setting Collections				
Select Setting Collections that yo	u wish to add to th	is Configuration Item.		
Name	Setting Type	Description		
✓ IMM Settings □ Lenovo IMM Settings	IMM IMM	Lenovo IMM Settings Description		
✓ uEFI Settings Collection	UEFI	Lenovo uEFI Settings Decription		
<ul> <li>SelectAll</li> </ul>		OK Cancel Apply		

Figure 31. Add Setting Collections selection page

Step 9. Select the Setting Collections you want to add to the configuration item and click **OK**.

**Note:** A Setting Collection can be used for more than one configuration item.

Step 10. To remove Setting Collections from a configuration item, select one or more Setting Collections in the list view, and click **Remove**.

**Note:** If you click **Remove**, the selected Setting Collections will be deleted from the current configuration item, but it will not delete the Setting Collections from other configuration items.

### **Duplicating a configuration item**

The following procedure describes how to duplicate a configuration item.

#### Procedure

Step 1. From the navigation pane or from the configuration item list, right-click a configuration item and click **Duplicate**.

Б	Lenovo Configuration Pack Editor
File Import Export Help	
Home     Setting Collections     MM Settings     Lenovo IMM Settings     Lenovo IMM Settings     Configuration Items     Configuration Items     Lenovo Configuration Items	Configuration Items         A Configuration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Configuration Item.         New Configuration Item       Delete         Name       Description         Configuration Items Sample       Configuration Items Description Edit Configuratio         Lenovo Configuration Items       Duplicate         Delete       Delete
	Add     Remove       Name     Setting Type       IMM     Lenovo IMM Settings Description       UEFI Settings Collection     UEFI

Figure 32. Duplicate Configuration Item function

The Duplication Dialog window is displayed.

В	Lenovo Configuration Pack Editor - Duplication Dialog				
	New Name:	Lenovo Configuration Items			
		OK Cancel			

Figure 33. Duplication Dialog window

Step 2. In the Duplication Dialog window, enter the **New Name** of the configuration item and click **OK**. Although the name of the duplicate configuration item can be the same as an existing configuration item, it is recommended that you use a unique name.

**Note:** After you duplicate a configuration item, the new duplicate configuration item will refer to the same Setting Collection of the source configuration item.

### **Deleting a configuration item**

The following procedure describes how to delete a configuration item.

#### Procedure

Step 1. From the navigation pane or from the configuration item list, right-click a configuration item, and click **Delete**.

The Deletion Dialog window is displayed.

Step 2. Click **OK** to continue with the deletion of the configuration item or click **Cancel** to exit this operation.

Note: The child Setting Collections of a deleted configuration item are not deleted.

### Exporting configuration data to a configuration description file

To enable administrators to author and share configuration data, you can export configuration items and their children, Setting Collections, into a configuration description XML file.

#### Procedure

Step 1. From the Lenovo Configuration Pack Editor menu, click **Export → To Configuration File**.

6	Lene	ovo Configuratio	on Pack Edit	tor	- 🗆 X
File Import Export Help					
Home To Configuration File     Setting     Export to Configuration Pace     Export to Configuration Pace     Le     Le     Le     Configuration Items     Configuration Items     Configuration Items     Lenovo Configuration Items		tion <u>I</u> tem	ing Collection	ns. Click "New Configuration Item" to create a new Cor Description Configuration Items Description Edit Configuratio	figuration Item.
	Details for: General Setting Col Add	Configuration lections Remove	n Iterns Samp	le	
	Name IMM Settings uEFI Settings Collec	IM	xtting Type M EFI	Description Lenovo IMM Settings Description Lenovo uEFI Settings Decription	

Figure 34. Exporting configuration data to configuration file

The Export to Configuration Item(.xml) page opens.

Lenovo Configuration Pac	k Editor - Export to Configuration Description (.xml)
Select the Configuration Item or items th into the Lenovo Configuration Pack Edito	at you wish to export to an XML file. You can then import the XML file or.
Name	Description
<ul> <li>✓ Configuration Items Sample</li> <li>✓ Lenovo Configuration Items</li> </ul>	Configuration Items DescriptionEdit Configuration I
✓ SelectAll	Continue Cancel

Figure 35. Export to Configuration Description (.xml) page

Step 2. Select the configuration items you want to export and click **Continue**. The Export configuration description file Save as window opens.

5	Export to configuration descriptio	n	x
() () () () () () () () () () () () () (	→ Libraries → Documents → → ♂	Search Documents	Q
Organize 👻 New fo	lder		1 🕶 🔞
🔆 Favorites	^ Name	Date modified	Туре
Desktop	Integration Services Script Component	2/26/2013 7:02 AM	File folder
🐌 Downloads	Integration Services Script Task	2/26/2013 7:02 AM	File folder
🗓 Recent places	SQL Server Management Studio	2/26/2013 7:02 AM	File folder
	Visual Studio 2005	2/26/2013 6:53 AM	File folder
🥽 Libraries	Visual Studio 2008	2/26/2013 6:57 AM	File folder
Documents			
🎝 Music			
📔 Pictures			
📕 Videos			
📜 Computer	✓ < Ⅲ		>
File <u>n</u> ame:	onfiguration		Ŷ
Save as <u>t</u> ype:	onfiguration Description (*.xml)		~
) Hide Folders		Save	Cancel

Figure 36. Export configuration description file Save as window

Step 3. Enter a name in the **File name** field and select a file type from the **Save as type** list and then click **Save**. The child Setting Collections of the selected configuration items are also exported automatically.

A message is displayed indicating the export was successful.

Lenovo Configuration Pa	ck Editor - Export to Configuration Description (.xml)	x
Select the Configuration Item or items t into the Lenovo Configuration Pack Edi	that you wish to export to an XML file. You can then import the XML file itor.	
Name	Description	
<ul> <li>Configuration Items Sample</li> <li>Lenovo Configuration Items</li> </ul>	Configuration Items DescriptionEdit Configuration I	
Lenovo Cor Export succee	nfiguration Pack Editor - Information	
	ОК	
SelectAll	Continue	

Figure 37. Export Succeeded message

Step 4. Click OK.

# Importing configuration description XML file

The following procedure describes how to import the configuration description XML file.

#### Procedure

Step 1. From the Lenovo Configuration Pack Editor menu, click Import -> Configuration File.

8	Lenovo Configuration Pack Editor
File Import Export Help	
Configuration File	Configuration Items         A Configuration Item is a grouping of Setting Collections. Click "New Configuration Item" to create a new Configuration Item.         New Configuration Item       Delete         Name       Description         Configuration Items Sample       Configuration Items Description Edit Configuratio         Lenovo Configuration Items       Configuration Items
	Details for: Configuration Items Sample General Setting Collections
	Add Remove
	Name Setting Type Description
	IMM Settings IMM Lenovo IMM Settings Description
	uEFI Settings Collection UEFI Lenovo uEFI Settings Decription

Figure 38. Import Configuration File menu

The Import a Configuration XML file window opens.

Lenov	vo C	onfiguration Pack Editor - Import a Conf	iguration XML file	x				
(a)	▶ Lib	raries 🕨 Documents 🕨 🗸 🗸 🗸	Search Documents	م				
Organize 👻 New fo	Organize 🔻 New folder 🛛 🔠 👻 🛄 🎯							
🚖 Favorites	^	Name	Date modified	Туре				
🛄 Desktop		퉬 Integration Services Script Component	2/26/2013 7:02 AM	File folder				
📜 Downloads		Integration Services Script Task	2/26/2013 7:02 AM	File folder				
📃 Recent places		퉬 SQL Server Management Studio	2/26/2013 7:02 AM	File folder				
		퉬 Visual Studio 2005	2/26/2013 6:53 AM	File folder				
🥽 Libraries	≡	🌗 Visual Studio 2008	2/26/2013 6:57 AM	File folder				
📄 Documents		📋 configuration	9/23/2014 4:07 AM	XML File				
🎝 Music 🔄 Pictures								
Videos								
🖳 Computer								
🊢 Local Disk (C:) 🖾 DVD Drive (D:) S		<		>				
		me:	Configuration XML					
<u>Open</u> Cancel								

Figure 39. Import a Configuration XML file window

Step 2. Select a configuration description XML (.xml) file to import and click **OK**. The Confirm Replace window opens.

占 Len	ovo Configuration Pack Editor - Confirm Repla 🗙						
i	There is already a Setting Collection with the same ID in this editor.						
	Would you like to replace the existing Setting Collection						
	"IMM Settings"						
	modified: 9/22/2014 9:50:48 AM						
	with this one?						
	"IMM Settings"						
	modified: 9/22/2014 9:50:48 AM						
,	Yes <u>A</u> ll No Cancel						

Figure 40. Confirm Replace Setting Collection window

In the Lenovo Configuration Pack Editor program, every Setting Collection and configuration item has a unique identifier (ID). When the same ID has been used, even if the names are different, the Confirm Replace Setting Collection window opens, asking you to confirm that you want to replace the existing configuration data.

**Note:** If you import a Setting Collection that has the same ID as an existing Setting Collection in the configuration item, the imported Setting Collection will replace the existing Setting Collection. The configuration item will refer to the imported Setting Collection regardless of whether its content is the same as the content of the previous Setting Collection.

### Lenovo Configuration Pack CAB file

You can use Lenovo Configuration Pack Editor to export configuration items by saving them as a CAB (.cab) file. The CAB file can then be imported to an SCCM server. The configuration items can also be deployed to SCCM clients to check the IMM/uEFI settings.

The following list provides an overview of how the CAB file is created, imported, and deployed.

- Using Lenovo Configuration Pack Editor, export configuration items to an Lenovo Configuration Pack CAB file. The Export function allows you to export multiple configuration items and their children, known as Setting Collections.
- The Export to Lenovo Configuration Pack GUI configuration items list with selection boxes is composed of the exported configuration item and Lenovo Configuration Pack CAB file link.
- The Lenovo Configuration Pack CAB file can then be imported to an SCCM console as a DCM Configuration Pack.

## Exporting configuration items to Lenovo Configuration Pack CAB file

The following procedure describe how to export the Lenovo Configuration Pack CAB file.

### Procedure

Step 1. From the Lenovo Configuration Pack Editor menu, click Export → Export Configuration item to Configuration for SCCM 2007 or Export Configuration item to Configuration for SCCM 2012, whichever is applicable.

The Export to Lenovo Configuration Pack page opens and provides a list of configuration items, their version number, and a brief description.

Let a configuration Pack For SCCM 2012							
Select the Configuration Item or items that you wish to export to a CAB file. You can then import the CAB file into the SCCM Console as a DCM Configuration Pack.							
Notice:The Configuration Pack can only be imported by SCCM2012 if any property 's auto-remediation is on.							
Name	Version	Description					
Configuration Items Sample	1	Configuration Items DescriptionEdit Configuration I					
✓ SelectAll		Continue Cancel					

Figure 41. Export to Lenovo Configuration Pack for SCCM 2007 page

Step 2. Select the individual configuration items that you want to export or click **Select All**, and then click **Continue**.

**Note:** The version of a configuration item is an internal variable that cannot be modified directly. SCCMDCM uses the version to evaluate whether a configuration item should be updated. When configuration data is updated in Configuration Manager, previous versions are overwritten, providing clients with the latest version for evaluation.

The Export to Lenovo Configuration Pack file window opens.

8	Export to Configuration Pack For SCCM	2012	x
⊜ ⊜ ⊽ ↑ 📑	Libraries → Documents →	Search Documents	Q
Organize 👻 New f	older		::: • 🔞
ጵ Favorites	▲ Name	Date modified	Туре
Desktop	Integration Services Script Component	2/26/2013 7:02 AM	File folder
属 Downloads	Integration Services Script Task	2/26/2013 7:02 AM	File folder
🔚 Recent places	_ 📙 SQL Server Management Studio	2/26/2013 7:02 AM	File folder
	Visual Studio 2005	2/26/2013 6:53 AM	File folder
ز Libraries	Visual Studio 2008	2/26/2013 6:57 AM	File folder
Documents	📋 configuration	9/23/2014 7:33 AM	Cabinet File
🎝 Music	-		
ы Pictures 🔣 Videos			
🖳 Computer	× < III		>
File <u>n</u> ame:	configuration		~
Save as <u>t</u> ype:	Configuration Pack for SCCM2012(*.cab)		~
) Hide Folders		Save	Cancel

Figure 42. Export to Lenovo Configuration Pack for SCCM 2012 window

Step 3. Enter the **File name** and click **Save**. A message is displayed indicating that the export succeeded.

3	Export to Configuration Pack For SCCM 2012	x
into the SCCM Console	n Item or items that you wish to export to a CAB file. You can then import the CAB file as a DCM Configuration Pack. In Pack can only be imported by SCCM2012 if any property 's auto-remediation is on.	
Name	Version Description	
<ul> <li>✓ Configuration Item</li> <li>✓ Lenovo Configura</li> </ul>	Lenovo Configuration Pack Editor - Information       Configuration I         Export succeeded.       OK	
SelectAll	Continue Cancel	

Figure 43. Export Succeeded window

Step 4. Click OK.

For more information about how to manage a configuration item version, refer to the following web page: Microsoft TechNet:: About Content Versions in Desired Configuration Management. website.

### **Exporting configuration items to SCCM Console**

The following procedure describes how to export configuration items directly to the SCCM Console.

#### Procedure

Step 1. From the Lenovo Configuration Pack Editor menu, click **Export → Export to SCCM Console**. The Select the Configuration Item page opens.

Lenovo Configuration Page 1	ack Editor - Export Con	figuration Item to SCCM Consol	e 🗙
Select the Configuration Select the Configuration Item or Item		SCCM Console.	<b>рио</b> . ер 1/3
Name Configuration Items Sample Lenovo Configuration Items	Version 1 1	Description Configuration Items Description	
	< Back N	ext > Export Can	cel

Figure 44. Select the Configuration Item page

Step 2. Select the configuration items you want to export and click **Next**. The SCCM Console position information page opens.

Lenovo Configuration Pack Editor - Export Configuration Item to SCCM Console	x
SCCM Console position information         Ieron           Please input the machine information that the SCCM Console installed         Step	
<ul> <li>The SCCM Console is on the local machine</li> <li>The SCCM Console is on a remote machine</li> </ul>	
Machine Name:	
User Name:	
Password:	
< Back Next > Export Cancel	

Figure 45. SCCM Console position information page

- Step 3. Select one of the following options:
  - The SCCM Console is on the local machine
  - The SCCM Console is on a remote machine, and then enter the following information:
    - Machine Name
    - User Name
    - Password
- Step 4. Click Next. The Configuration Items Information page opens.

Lenovo Configuration Pack Editor - Export Configuration Item to SCCM Console	x
Configuration Items Information       Ieron         Please input the prefix for the Configuration Items and select Configuration Item       Step         type.Then click "Export".It may take a while.       Step	
✓ Add a prefix name for the Configuration Items.	
New Please choose the right type for the Configuration Item	
O For SCCM2007	
For SCCM2012	
< Back Next > Export Cance	I

Figure 46. Configuration Items Information page

- Step 5. Complete the following steps:
  - a. Select Add a prefix name for the configuration items.
  - b. Enter the prefix name.
  - c. Select one of the following SCCM Console types for the configuration item:
    - For SCCM2007
    - For SCCM2012
- Step 6. Click Export. A message is displayed indicating the Export succeeded..

Lenovo Conf	iguration Pack Editor - Export Configuration Item to SCCM Co	nsole	x
	for the Configuration Items and select Configuration Item	Step 3	
🖌 Add a prefix	name for the Configuration Items.		
Please choos	Lenovo Configuration Pack Editor - Information		
	Export succeeded.		
	ОК		
	For SCCM2012		
	< Back Next > Export	Cancel	

Figure 47. Export Succeeded window

- Step 7. Click **OK** to close the Information window.
- Step 8. Click Finish.

### Applying Lenovo Configuration Pack using Microsoft System Center Configuration Manager 2007 console

The information in this section describes how to import configuration data into a Microsoft System Center Configuration Manager (SCCM) server using the Configuration Manager Console.

### Importing configuration data into DCM

The following procedure describes how to import configuration data into Desired Configuration Management (DCM).

### Procedure

Step 1. Open the Configuration Manager Console and expand Desired Configuration Management.

E Configuration Manager Console		
Ele Action View Window Hel	þ	_8×
💠 🔿 🖄 📅 🚺 🗊		
System Center Configuration Manager		Actions
<ul> <li>Site Database (XYZ - 8RS37JSWC)</li> <li>Site Management</li> </ul>	AT :	Configuration Baselines
🖃 🧱 Computer Management	Look for: In All Columns In End Now Gear	New Configuration Baseline
<ul> <li>Collections</li> <li>Conflicting Records</li> </ul>		import Configuration Data
<ul> <li>Connicting Records</li> <li>Software Distribution</li> </ul>	Name CI Version Content Version Categories There are no items to show in this view.	New Folder
🗈 🐻 Software Updates		Rew Search Folder
<ul> <li>Image: State of the state of th</li></ul>	nent la	Give Feedback
🕀 🕋 Software Metering		View >
Reporting Dashboards		New Window from Here
🛨 🃴 Reports		Refresh
<ul> <li>Wisited Reports</li> <li>Summary compliant</li> </ul>		
E E Desired Configuration Man		R Help
Configuration Baselines	New Configuration Baseline	
Configuration Items	Import Configuration Data	
🛨 👸 🖗 Mobile Device Manageme	New Folder	
	New Search Folder Give Feedback	
🕀 🔯 Security Rights 👘	View	
🗉 📑 Tools	New Window from Here	
	Refresh	
	Help	
x	F	л

Figure 48. Import Configuration Data selection

# Step 2. Right-click **Configuration Baselines** or **Configuration Items** and click **Import Configuration Data**.

The Import Configuration Data Wizard opens.

Import Configuration Data	Wizard					X
Choose Files						
Choose Files Summary Progress Confirmation	from other config	tion items and configuration b guration data sources. configuration items or configur			guration Packs, a	nd
	Name	Date Modified	Size			
		There are no items to s	show in	this view.	Adc Delet	
		< Previous		Next > Finish	Can	cel

Figure 49. Import Configuration Data Wizard

Step 3. Click **Add** to select the exported Lenovo Configuration Pack.cab file.The Open .cab file window is displayed.

Open			×
Computer	✓ New Volume (F:) ✓	HG 🔹 💌 🚺 Search	
Organize 👻 📗 Views	▼ 🌈 New Folder		0
Favorite Links	Name 🔺	Date modified     Type     4/27/2011 2:43 PM     File Folder	▼ Size ▼ Tag
Desktop	configuration	5/5/2011 4:00 PM Cabinet File	3 KB
Computer	sys	4/28/2011 4:55 PM Cabinet File	
Documents		2. 6	
Pictures			
Music			
🚱 Recently Changed			
R Searches			
Public			
Folders ^	4		
File <u>n</u> ame:	configuration	Cab files	
		Ope	en Cancel

Figure 50. Selecting the .cab file

Step 4. Click **configuration.Cabinet File** and click **Open** to import the file. A Skip Authenticode signature check? window opens.

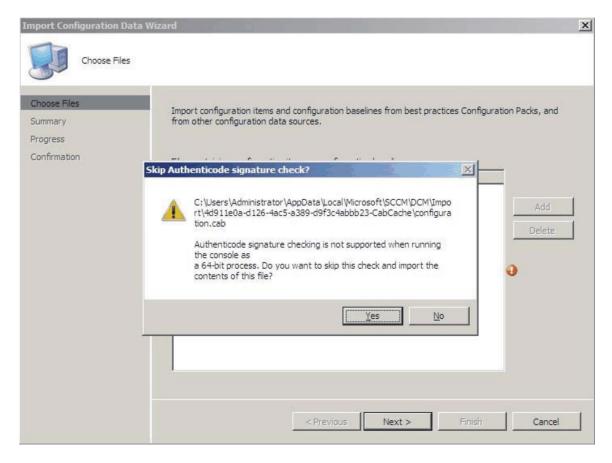


Figure 51. Skip Authenticode signature check window

Step 5. Click **Yes** to skip the signature check and return to the Choose Files page. The Configuration.cab file is displayed in the list.

Import Configuration Data	Wizard	The state				×
Choose Files Summary Progress Confirmation	Import configuration items and from other configuration dat Files containing configuration	a sources.			ration Packs, and	
	Name	Date Modified	Size			
	C: \Users \Administrator \	5/5/2011 4:	3 KB		Add	
					Delete	
		< Previous	Next	t > Einish	Cancel	

Figure 52. Importing the selected .cab file

Step 6. Click **Next** to import the .cab file. The configuration items are displayed in the Details window.

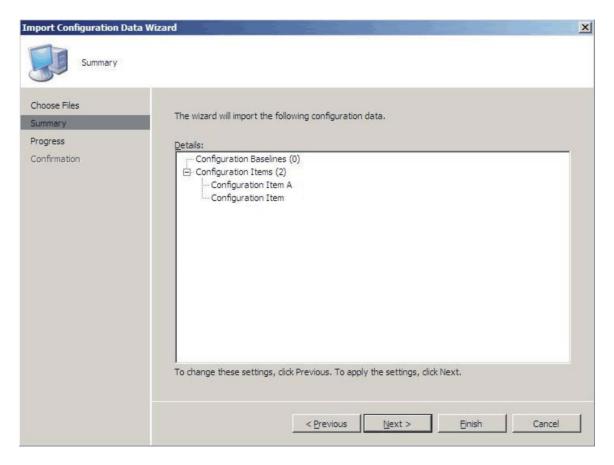


Figure 53. Imported configuration items

Step 7. Click **Next** to apply the settings.

A message is displayed indicating that you have successfully imported the configuration data.

Import Configuration Da	ita Wizard
Completing th	ne Import Configuration Data Wizard
Choose Files Summary Progress Confirmation	You have successfully completed the Import Configuration Data Wizard with the following details.
	Configuration Items (2)
	To close this wizard, click Close.
	< Previous Next > Finish Close

Figure 54. Successful completion page

- Step 8. Click **Finish** to exit the Import Configuration Data Wizard and return to the Configuration Manager Console.
- Step 9. In the navigation pane, right-click **Configuration Items** and click **Refresh**. The imported configuration items are displayed in the center pane.

	Configuration Items 2 items found				Actions
Bite Database (XYZ -8RS37JSWCAT. ):     Big Site Management     Computer Management	Look for:	in_ All Columns	<b>•</b> Er	nd Now	Configuration Items
	Name	Type Application	CI Version	Content Version Categorie	New     Sive Feedback
	Configuration Item	Application	1	1	View New Window from Here
<ul> <li>              ■ Software Metering      </li> <li>             ■ Reporting         </li> </ul>					Refresh
<ul> <li>Desired Configuration Management</li> <li>Configuration Baselines</li> <li>Configuration Items</li> <li>Queries</li> <li>Mobile Device Management</li> <li>System Status</li> <li>System Status</li> <li>Security Rights</li> <li>Tools</li> </ul>					Help

Figure 55. Imported configuration items in the Configuration Manager Console

**Notes:** The imported configuration items might have a Lock status. The Lock status is due to one of the following reasons:

- The configuration data is read-only.
- The configuration data were not authored by the SCCM console administrator.

### Viewing configuration item properties

The following procedure describes how to view and edit configuration item properties.

#### Procedure

Step 1. To view the properties for a configuration item, double-click a **configuration item** from the Configuration Items list.

The Lenovo Configuration Item Properties page opens.

Step 2. Click the **Settings** tab. The **Settings** tab provides a list of settings associated with the selected configuration item.

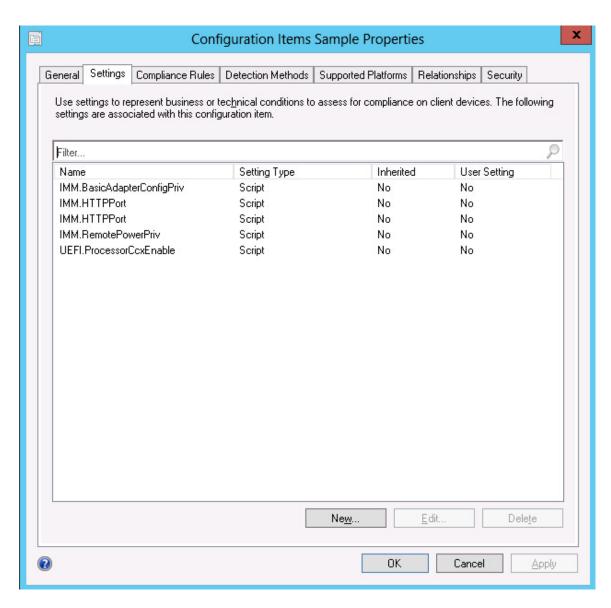


Figure 56. Settings tab

Step 3. To view a setting, double-click a setting or right-click a setting and click Edit.

Step 4. Click the **Detection Methods** tab.

		Conf	iguration Items	Sample Proj	perties		
General	Settings	Compliance Rules	Detection Methods	Supported Plat	forms R	elationships	Security
Specify	y how this a	application is detecte	ed on client devices.				
⊖ Alv	ways assu <u>m</u>	e application is insta	alled				
O Us	se <u>W</u> indows	Installer detection					
	Pro <u>d</u> uct co	ode:					<u>O</u> pen
	Version:						
		pplication is installed	for one or more users				
⊙ <u>U</u> s	se a custom	script to detect this	application				
VB	BScript				~		0p <u>e</u> n
	t fso=Create ieckASULo	Object("Scripting.Fi cation()	leSystemObject'')		^		<u>C</u> lear
	ıb CheckAS m asuName	ULocation()			=		
Co	inst FoundA	SU="Found the loc-	ation of asu.exe.''				
lf (I	fso.FileExist script.Echo	ts("")) Then					
	it Sub	round430					
Ev	entLog=Ev	entLog & '' [Not Fou	nd ASU]: '' & ''''				
col	nst HKEY I	UERY_VALUE = &H LOCAL_MACHINE =	= &H80000002				
Se	Computer = t oReg=Gel	tObject("winmgmts:{	impersonationLevel=ir	mpersonate}!\\'';	8		
stri	Computer &	"\root\default:StdR	egProv'')		~		

Figure 57. Detection Method tab

The **Detection Methods** tab lists the detection method for each configuration item. **Detection Methods** verifies whether the ASU.exe file exists on the endpoint. If the ASU.exe does not exist, the configuration item returns a state of Not Detected, and the children settings group ceases to be validated.

Step 5. When you have finished viewing the configuration item properties, click OK.

### **Creating a baseline**

A configuration item is assigned to an endpoint using a baseline. The following procedure describes how to create a baseline which contains all of the configuration items that you want to validate on the endpoints.

### Procedure

Step 1. In the Configuration Manager Console, expand Desired Configuration Management, right-click **Configuration Baselines** and click **New Configuration Baseline**.

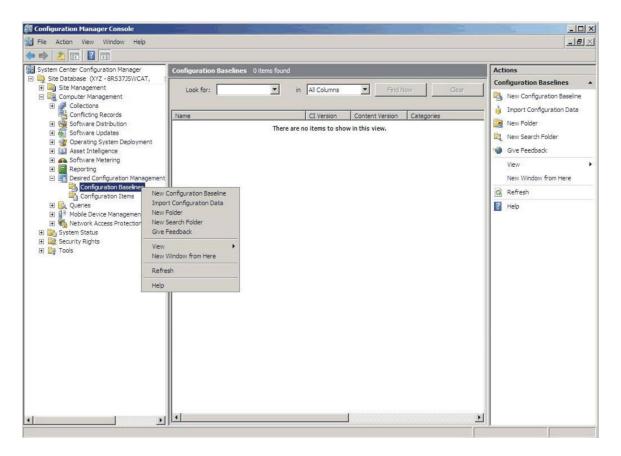


Figure 58. New Configuration Baseline function

The Create Configuration Baseline Wizard opens.

Create Configuration Baseline	Wizard	×
Identification		
Identification Set Configuration Baseline Rule Summary	Specify a unique name and a description for this configuration baseline.	
Progress	Baseline - 1	
Confirmation	Description:	
	To improve searching and filtering, click Categories and assign one or more categories.  Categories  Categories  < Previous  Next > Finish Cancel	
4   F	Carcel	

Figure 59. Create Configuration Baseline Wizard

- Step 2. Enter a unique Name and, optionally, a **Description** for the baseline and then click **Next**.
- Step 3. Click the **applications and general** link to select the configuration items that you want to validate.

Identification Set Configuration Baseline Rule Summary	Specify rules containing configuration items and configuration baselines to define how compliance will be assessed on client computers.
Progress	Rules:
Confirmation	One of the following operating system configuration items must be present and properly configured These applications and general configuration items are required and must be properly configured: If these optional application configuration items are detected, they must be properly configured: These software updates must be present: These application configuration items must not be present: These configuration baselines must also be validated:
	Delete

Figure 60. Applications and general link

The Choose configuration items page opens.

pok for:	<u> </u>	End Now	Eind Now	
Name	Description	Туре	Config	Categ
Configuration Item A Configuration Item	Configuration	Applica App <mark>lica</mark>		

Figure 61. Choose configuration items page

Step 4. Select the configuration items you want to validate on the endpoints and click **OK**. The selected configuration items are displayed beneath the **applications and general** link.

Create Configuration Base	eline Wizard
Set Configurat	tion Baseline Rules
Identification Set Configuration Baseline F Summary Progress	Specify rules containing configuration items and configuration baselines to define how compliance will be assessed on client computers.
Confirmation	One of the following operating system configuration items must be present and properly configuration These applications and general configuration items are required and must be properly configured Configuration Item A Configuration Item If these optional application configuration items are detected, they must be properly configured: These <u>software updates</u> must be present: These <u>application</u> configuration items must not be present: These <u>configuration baselines</u> must also be validated: Delete
•	<pre></pre>

Figure 62. Applications and general link with configuration items

Step 5. Click Finish to exit the Create Configuration Baseline Wizard.

# Assigning a baseline to a collection

You can assign a baseline to a collection to check the settings of clients in that collection. The following procedure describes how to assign a baseline to a collection.

### Procedure

Step 1. In the Configuration Manager Console, right-click the new baseline and click **Assign to a Collection**.

हि Configuration Manager Console			_ 🗆 ×
File Action View Window Help			_ 5 ×
🧇 🄿 🔀 📰 🛛 🖬			
System Center Configuration Manager	Configuration Baselines 1 iten	ns found	Actions
<ul> <li>Q Site Database (XYZ - 8RS37JSWCAT, :</li> <li>Q Site Management</li> </ul>	Look for:	in All Columns     Find Now     Clear	Configuration Baselines
🖂 📴 Computer Management	LOOK TOP:		New Configuration Baseline
Collections	Name	CI Version Content Version Categories	– 🍦 Import Configuration Data
E Groware Distribution	Baseline - 1	1.1.1.1.	New Folder
		Assign to a Collection Export Configuration Data	🚉 New Search Folder
🛨 🛄 Asset Intelligence		Duplicate	Give Feedback
		Disable Baseline View Xml Definition	View 🕨
🖃 🌉 Desired Configuration Management		Manage Categories	New Window from Here
Configuration Baselines Configuration Items		Add  Move Items	Refresh
			I Help
Mobile Device Management     The second		Cut Delete	Baseline - 1
System Status      Security Rights		Refresh	Assign to a Collection
Tools		Properties	🧯 Export Configuration Data
		Help	Duplicate
			(     Disable Baseline
	•		
	General Rules Relationships		Manage Categories
	Pa	-	
			D. Move Items
	Name: Baseline	e-1	🔏 Cut
	Description:	<u> </u>	🗙 Delete
		<u>_</u>	Refresh
	Properties:		Properties
	Name	Value	Help
4 <b>I</b>	Туре	Baseline	
	1		-,

Figure 63. Assign to a Collection function

The Choose Collection page of the Assign Configuration Baseline Wizard opens.

Assign Configuration Base	line Wizard
Choose Collection	n
Choose Baselines Choose Collection Set Schedule Summary Progress Confirmation	Select a collection that contains the computers to be targeted with the selected configuration baselines.
	< Previous Next > Einish Cancel

Figure 64. Choose Collection page

Step 2. Click Browse to select a target client collection and then click Next.

ssign Configuration Base	eline Wizard
Choose Baselines Choose Collection	Specify when the configuration baseline will be assessed for compliance by computers in the target collection.
Set Schedule Summary Progress Confirmation	<ul> <li>Simple schedule</li> <li>Bun every:</li> <li>Custom schedule</li> <li>No custom schedule defined.</li> <li>Customize</li> </ul>
	< Previous Einish Cancel

Figure 65. Set Schedule page

- Step 3. Select a schedule for the baseline validation.
  - Simple schedule
  - Custom schedule
- Step 4. Click **Finish** to exit the Assign Configuration Baseline Wizard.

# Evaluating a baseline on an endpoint

A baseline and its child configuration items are automatically evaluated (the settings for configuration items are checked) according to the schedule you created or selected. You can also advance a baseline evaluation as follows:

### Procedure

- Step 1. To ensure that an endpoint can be found on the SCCM server and that the SCCM client agent is installed, select the applicable endpoint.
  - For a 32-bit endpoint, click Control Panel → Configuration Manager.
  - For a 64-bit endpoint, click Control Panel → View 32-bit Control Panel Items → Configuration Manager.

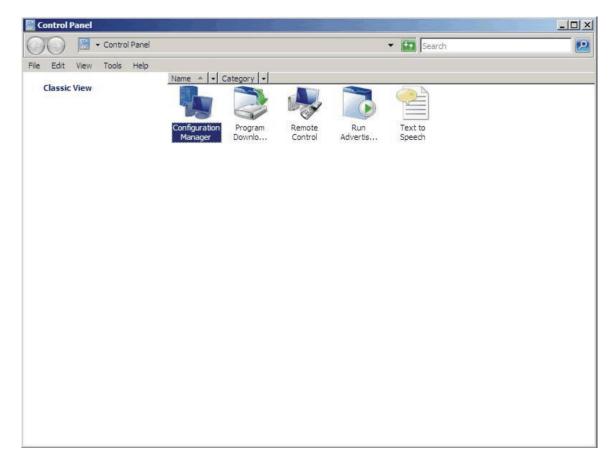


Figure 66. Configuration Manager in Control Panel folder

The Configuration Manager Properties window opens.

Step 2. On the Actions tab, select Machine Policy Retrieval & Evaluation Cycle and then click Initiate Action.

A message is displayed notifying you that the action has been initiated.

Configuration Mana	ger Properties		? ×	
General Components You can initiate actions currently installed on yo	s to occur on the Con		er components	e Run Advertis
Actions:				
Branch Distribution P Discovery Data Colle File Collection Cycle Hardware Inventory ( Machine Policy Retrie Software Inventor Software Metering Software Updates User Policy Retrie Windows Installer	ction Cycle Cycle eval & Evaluation Cyc <b>y Machine Policy R</b>	s <b>le</b> Retrieval & Eva 1 has been initiate	<b>luation Cycle</b> d. It may take seve	eral minutes to
1				ОК
		Initia	te Action	
	ОК	Cancel	Apply	

Figure 67. Action Initiated window

Step 3. Click OK.

After a few minutes, the baseline is displayed under the **Configurations** tab.

Step 4. If the baseline is not displayed, click **Refresh**.

Name	Version	Last Evaluati		
Baseline - 1	1.00	5/5/2011 5:	Error	Idle

Figure 68. Configurations tab

**Note:** If the baseline does not display in the Configuration Baseline list view after few minutes, verify that the SCCM client agent can be found on Configuration Manager Console, as shown in the following figure.

E Configuration Manager Console						
📳 File Action View Window Help						
💠 🔿 🙍 🖬						
System Center Configuration Manager	All Windows Server Sy	rstems 1 items found				
Site Database (XYZ - 8RS37JSWCAT Site Management Site Management Computer Management	Look for:	▼ in A	l Columns	Find Now	Clear	r
E Gollections	Name	Resource Type	Domain	Site Code	Client	Approv
<ul> <li>All Active Directory Security</li> <li>All Desktops and Servers</li> <li>All User Groups</li> <li>All User Groups</li> <li>All Users</li> <li>All Windows 2000 Profession</li> <li>All Windows Mobile Decket P</li> <li>All Windows Mobile Pocket P</li> <li>All Windows Mobile Pocket P</li> <li>All Windows Mobile Smartphi</li> <li>All Windows Mobile Smartphi</li> <li>All Windows Mobile Smartphi</li> <li>All Windows Server 2003 Sy</li> <li>All Windows Wobile Smartphi</li> <li>All Windows Mobile Smartphi</li> <li>All Windows Server 2003 Sy</li> <li>All Windows Vostation or</li> <li>All Windows XP Systems</li> <li>Test Collections</li> <li>Conflicting Records</li> <li>Software Distribution</li> <li>Software Distribution</li> <li>Constant System Deployment</li> </ul>	BRS37JSWCAT	System	W2K8EE	XYZ	Yes	Approv

Figure 69. SCCM Client Agent Status

Step 5. Select the baseline and click **Evaluate**. After a few minutes, the **View Report** button is available.

Name	Version	Last Evaluati	and the second sec	
Baseline - 1	1.00	5/5/2011 5:	Error	In

Figure 70. Configurations tab with available View Report button

Step 6. Select the baseline and click **View Report** to review the report.

### The Evaluation Report view

An evaluation report is generated for the baseline you select. However, there are some situations when the evaluated setting (script) does not return any value.

There are several reasons why this might occur:

- The endpoint does not have an Integrated Management Module (IMM).
- The endpoint has the IMM, but the evaluated setting cannot be found on the endpoint.
- The wrong user ID and password were used to connect to the IMM.
- The ASU.exe file version is not v3.60 or later.
- The evaluation timed out (5 minutes). System Center Configuration Manager (SCCM) sets the time limit.

Setting/Object Name	Setting/Object Type	Setting/Object Description	Constraint Name	Constraint Description	Severity	Constraint	Instance Data	Current Value
IMM.CIMOverHTTPPort	Script	Configure the IMM port assignment for "IBM Systems Director over HTTP." min="0" max="65535" default="5988"	Instance count validation	The validation of the number of instances of an object or setting	Information	(number(count (ns_Scopeld_550a3dbb-8f51-47a7- 86ac- eef6929722ab_this:Setting_a006e5d1- 83e7-4c9b-bc0c-748ec061f2be)) >number(0))		0
IMM.PowerRestorePolicy	Script	mode of operation if a power loss occurs. This setting can also be configured via BIOS F1 setup. Restore: Restores system to the same state it was before power failed.	Instance count validation	The validation of the number of instances of an object or setting	Information	(number(count (ns_ScopeId_550a3dbb-8f51-47a7- 86ac- eef6929722ab_this:Setting_afeee205- 85be-4fa3-9782-8de1bf9d0792)) >number(0))		0

Figure 71. Evaluated setting with no value returned

**Note:** If the evaluated setting does not return a value, the SCCM client agent deems the setting as noncompliant on the endpoint, and ranks its severity level as Information. The evaluation report does not specify the cause. To determine the cause, you must check the logs in the Windows Event Viewer for details. The following figure provides an example of the Windows Event Viewer logs.

Event Viewer (Local)	Application Nu	mber of events: 436				
Custom views Windows Logs	Level	Date and Time	Source	Event ID	Task C	^
Application	<ol> <li>Information</li> </ol>	11/4/2014 3:00:32 AM	Lenovo Configuration Pack, v5.6	100	None	-
Security	<ol> <li>Information</li> </ol>	11/4/2014 3:00:28 AM	Lenovo Configuration Pack, v5.6	100	None	
Setup	<ol> <li>Information</li> </ol>	11/4/2014 3:00:23 AM	Lenovo Configuration Pack, v5.6	100	None	
System	<ol> <li>Information</li> </ol>	11/4/2014 3:00:21 AM	ESENT	326	General	
Forwarded Events	<ol> <li>Information</li> </ol>	11/4/2014 3:00:21 AM	ESENT	105	General	
Applications and Services Lo	<ol> <li>Information</li> </ol>	11/4/2014 3:00:20 AM	ESENT	102	General	
📑 Subscriptions	<ol> <li>Information</li> </ol>	11/4/2014 3:00:12 AM	Windows Error Reporting	1001	None	
	<ol> <li>Information</li> </ol>	11/4/2014 12:54:47 AM	SceCli	1704	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:27:15 AM	LoadPerf	1000	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:27:15 AM	LoadPerf	1001	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:26:30 AM	Security-SPP	903	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:26:30 AM	Security-SPP	16384	None	
	🕕 Error	11/3/2014 11:26:00 AM	Security-SPP	8198	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:25:57 AM	Security-SPP	902	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:25:57 AM	Security-SPP	1003	None	
	🕕 Error	11/3/2014 11:25:57 AM	Security-SPP	8198	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:25:57 AM	Security-SPP	1066	None	
	<ol> <li>Information</li> </ol>	11/3/2014 11:25:56 AM	Security-SPP	900	None	
	(i) Information	11/3/2014 11:24:58 AM	RestartManager	10001	None	~
	General Detai Log Name: Source: Event ID: Level:	15	Logge <u>d:</u> Task Category: <u>K</u> eywords:			
	<u>U</u> ser:		Compute <u>r</u> :			
	OnCode					Go to 🖌

Figure 72. Windows Event Viewer logs

# **Running Homepage Summarization**

The Homepage Summarization function provides a summary of the configuration compliance status for each System Center Configuration Manager (SCCM) client.

#### Procedure

Step 1. In the Configuration Manager Console, right-click **Desired Configuration Management** and click **Run Homepage Summarization**.

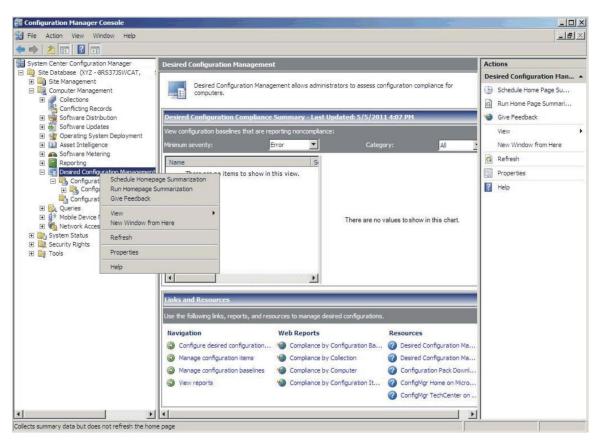


Figure 73. Run Homepage Summarization function

Step 2. After a few minutes, right-click **Desired Configuration Management** again and click **Refresh**. The assigned baseline report is displayed.

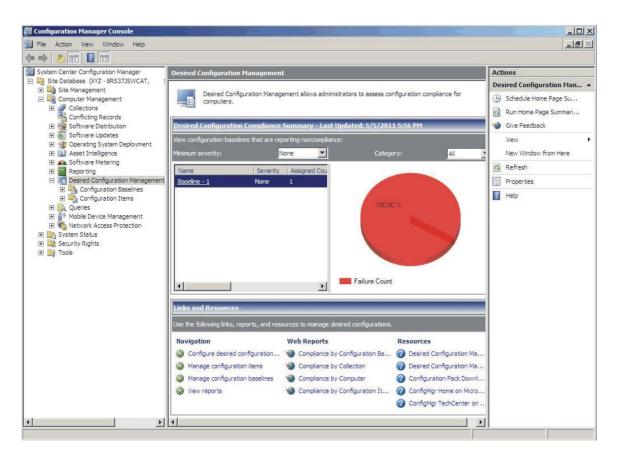


Figure 74. Baseline report

Step 3. To view the report, in the View configuration baselines that are reporting noncompliance window, click the baseline name. The report is displayed to the right.

**Note:** The Configuration Manager Console must have **Report access** enabled, otherwise you cannot open the report view.

## Applying Lenovo Configuration Pack using Microsoft System Center Configuration Manager 2012 console

The information in this section describes how to import configuration data into the Microsoft System Center Configuration Manager 2012 (SCCM) server using the Configuration Manager Console.

## Importing configuration data into DCM

The following procedure describes how to import configuration data into Desired Configuration Management (DCM).

### Procedure

Step 1. Open the Configuration Manager Console and expand **Desired Configuration Management**.

Folder Tools System Center	2012 Co	onfiguratio	n Manager ((	Connected to 1	3B - sccm-13B	)						- 8 ×
Home Folder												^ 🔞
Create Import Saved Configuration Item Configuration Data Searches	-											
Create Search												
← → ▼ 🕋 \ → Assets and Compliance →	Overvi	ew 🕨 Con	npliance Setting:	s ▶ Configuratio	on Items							- 2
Assets and Compliance	Configu	uration Item	s 0 items									
4 👺 Overview	Search										🗙 🔎 Search	Add Criteria 🔻
💄 Users	lcon	Name	*	Туре	Device Type	Revision	Child	Relationships	User Setting	Date Modified		
Nevices												
💰 User Collections						0	No items fo	ound.				
Device Collections												
퉖 User State Migration												
Asset Intelligence												
🗒 Software Metering												
Compliance Settings												
Configuration Items												
🔄 Configuration Baseli 🎇 Create Configura	tion Item											
🚮 User Data and Profil 🔖 Import Configura	tion Data											
Endpoint Protection     Folder		•										
ssets and Compliance												
Software Library												

Figure 75. Import Configuration Data function

Step 2. Right-click **Configuration Baselines** or **Configuration Items**, and click **Import Configuration Data**.

The Import Configuration Data Wizard opens.

\$	Impor	t Configuration Data Wiza	ard	X
Select Files				
Select Files Summary Progress Confirmation	configuration I Import configuration from other configuration	n items and configuration baselines	from best-practices Configuration	
	Filter			Q
	Name	Date Modified	Size	
		There are no items to sh	iow in this view.	G
	🗌 Cr <u>e</u> ate a new c	opy of the imported configuration b		Remove
	0	< <u>P</u> revious	Next > Summary	Cancel

Figure 76. Select Files function

Step 3. Click **Add** to select the exported Lenovo Configuration Pack.cab file. The Open .cab file window is displayed.

,	Оре	en			
🕤 🕘 🔻 🕇 📑 🕨 Lil	oraries 🕨 Documents 🕨		✓ C Search	n Documents	م ر
Organize 👻 New folder				÷== <b>•</b>	
☆ Favorites	Name	Date modified	Туре	Size	
📃 Desktop	🐌 Integration Services Script Component	2/26/2013 7:02 AM	File folder		
鷆 Downloads	🌗 Integration Services Script Task	2/26/2013 7:02 AM	File folder		
🔢 Recent places	퉬 SQL Server Management Studio	2/26/2013 7:02 AM	File folder		
	퉬 Visual Studio 2005	2/26/2013 6:53 AM	File folder		
🥽 Libraries	🍌 Visual Studio 2008	2/26/2013 6:57 AM	File folder		
Documents	🗎 configuration	9/23/2014 7:35 AM	Cabinet File	5 KB	
🁌 Music 📃					
📔 Pictures					
H Videos					
🖳 Computer					
Local Disk (C:)					
🖾 DVD Drive (D:) SC					
📬 Network 🗸 🗸					
	ame: configuration		V Cabir	net files (*.cab)	~
				Open Ca	ancel

Figure 77. Selecting the exported .cab file

Step 4. Click **Configuration .cab Cabinet File** and click **Open** to import the file. A **Verify Publisher** window opens.

<b>&gt;</b>	Import Configuration Data Wizard	x
Select Files		
Select Files Summary Progress Confirmation	Specify the files from which to import configuration items and configuration baselines Import configuration items and configuration baselines from best-practices Configuration Packs and from other configuration data sources. Files that contain configuration items or configuration baselines:	
	Configuration Manager	1
	The publisher of configuration.cab file could not be verified. Are you sure that you want to import this file?	•
	<u>Y</u> es <u>N</u> o	
_		
	Add Remove	]
	Create a new copy of the imported configuration baselines and configuration items	
	Previous     Next >   Summary   Cancel	

Figure 78. Publisher Check window

Step 5. Click **Yes** to import the file. The Configuration.cab file is displayed in the list.

\$	Import Co	onfiguration Data Wizard	t	x
Select Files				
Select Files Summary Progress Confirmation	configuration bas	ns and configuration baselines fro	m best-practices Configuration Packs a	nd
	Filter Name configuration.cab	Date Modified 9/23/2014 7:35:34 AM	Size 4.25 KB	2
	Cr <u>e</u> ate a new copy o	of the imported configuration base	Add <u>R</u> emove	
	0	< <u>P</u> revious <u>N</u> e	xt > <u>S</u> ummary Car	icel

Figure 79. Importing the selected .cab file

Step 6. Click **Next** to import the .cab file. The configuration items are displayed in the details window.

3	Import Configuration Data Wizard	x
Summary		
Select Files	Confirm the configuration data to be imported:	
Summary		
Progress Confirmation	The wizard will import the following configuration data.	
	Details:	
	Configuration Baselines (0) Configuration Items Lenovo Configuration Items Configuration Items Sample	
	To change these settings, click Previous. To apply the settings, click Next.	_
	< Previous     Next >     Summary     Cancel	

Figure 80. Confirm the configuration data

Step 7. Click **Next** to apply the settings. A message is displayed indicating that you have successfully

A message is displayed indicating that you have successfully completed the Import Configuration Data Wizard. The Details window has a list of the imported configuration items.

\$	Import Configuration Data Wizard	x
Confirmation		
Select Files Summary Progress	Completing the Import Configuration Data Wizard You have successfully completed the Import Configuration Data Wizard with the following details.	
Confirmation	Details: Configuration Baselines (0) Configuration Items (2) Configuration Items Sample [Success] Configuration Items Sample [Success]	
	L To close this wizard, click Close.	
	< Previous     Next >     Summary     Close	

Figure 81. Successful completion

- Step 8. Click **Close** to exit the Import Configuration Data Wizard.
- Step 9. Right-click **Configuration Items** and click **Refresh**. The imported configuration items are displayed in the window.

Greate Scaren									
← → ▼ 👔 \ → Assets and Compliance →	Overvie	w      Compliance Settings     Configura	ation Items						
Assets and Compliance < 0	Configu	ration Items 3 items							
4 👺 Overview	Search								×
🙎 Users	lcon	Name	Туре	Device Type	Revision	Child	Relationships	User Setting	Date Modified
🖳 Devices	<b>1</b>	Configuration Items Sample	Application	Windows	1	No	No	No	11/4/2014 7:15 AM
💰 User Collections		Lenovo Configuration Items	Application	Windows	2	No	Yes	No	11/3/2014 8:03 AM
	<b>1</b>	lenovo items1	Application	Windows	1	No	Yes	No	11/3/2014 8:42 AM
🐁 User State Migration									
<ul> <li>Asset Intelligence</li> </ul>									
Catalog									
inventoried Software									
Hardware Requirements									
🕞 Software Metering									
<ul> <li>Compliance Settings</li> </ul>									
Configuration Items									
Configuration Baselines									
🙀 User Data and Profiles									
Endpoint Protection									
n Assets and Compliance									
👘 Software Library									
Monitoring									
Administration								11-5. · · · · ·	ivate Windows

Figure 82. Imported configuration items

**Notes:** The imported configuration items might have a Lock status. The Lock status is due to one of the following reasons:

- The configuration data is read-only.
- The configuration data were not authored by the SCCM console administrator.

### Viewing configuration item properties

The following procedure describes how to view and edit configuration item properties.

#### Procedure

Step 1. To view the properties for a configuration item, double-click a **configuration item** from the Configuration Items list.

The Lenovo Configuration Item Properties page opens.

Step 2. Click the **Settings** tab. The **Settings** tab provides a list of settings associated with the selected configuration item.

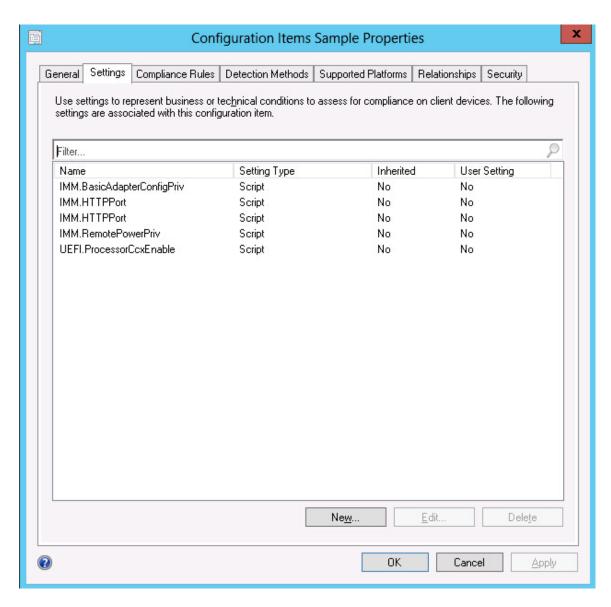


Figure 83. Settings tab

- Step 3. To view a setting, double-click a setting or right-click a setting and click Edit.
- Step 4. Click the **Detection Methods** tab.

]	Conf	iguration Items	Sample Propert	ies	
General	Settings Compliance Rules	Detection Methods	Supported Platforms	Relationships	Security
Specify	y how this application is detecte	ed on client devices.			
O Alv	vays assu <u>m</u> e application is insta	alled			
O Us	e <u>W</u> indows Installer detection				
	Product code:				<u>O</u> pen
	⊻ersion:				
		for one or more users			
⊙ <u>U</u> s	e a custom script to detect this	application			
VB	Script			v	Op <u>e</u> n
	fso=CreateObject("Scripting.FileckASULocation()	leSystemObject'')		^	<u>C</u> lear
	b CheckASULocation()			=	
Din	n asuName nst FoundASU="Found the loca	ation of any eve "			
Co	nst NotFound='''' iso.FileExists('''')) Then	adon of asu, exe.			
Ws	script.Echo FoundASU t Sub				
Els	e				
COL	entLog=EventLog & '' [Not Fou nst KEY_QUERY_VALUE = &H	0001			
strü	nst HKEY_LOCAL_MACHINE = Computer = ''.''				
Se str0	t oReg=GetObject("winmgmts:{ Computer & "\root\default:StdR	impersonationLevel=ir egProv'')	npersonate}!\\'' &	~	
2			ОК	Cance	Apply
9			UK	Cance	- Abbia

Figure 84. Detection Method tab

The **Detection Methods** tab lists the detection method for each configuration item. **Detection Methods** verifies whether the ASU.exe file exists on the endpoint. If the ASU.exe does not exist, the configuration item returns a state of Not Detected, and the children settings group ceases to be validated.

Step 5. When you have finished viewing the configuration item properties, click OK.

## **Creating a baseline**

A configuration item is assigned to an endpoint using a baseline. The following procedure describes how to create a baseline which contains all of the configuration items that you want to validate on the endpoints.

### Procedure

- Step 1. In the Configuration Manager Console, expand Desired Configuration Management.
- Step 2. Right-click Configuration Baselines and click New Configuration Baseline.

	Create Configuration	Baseline	
pecify general informat	tion about this configura	ation baseline	
Name: B Description:	aseline sample		
compliance by this configuration t	nfiguration items, configuration base baseline. This configuration baseline items are evaluated only if the relev	e will be assessed as comp	liant if all the items
Configuration data:			
Configuration data:			P
	Type	Purpose	Revision
Filter	There are no items to show i	n this view.	Revision
Filter	There are no items to show i		
Filter Name Add  Chan	There are no items to show i	n this view.	

Figure 85. Create Configuration Baseline function

The Create Configuration Baseline wizard opens.

Step 3. Enter a unique Name and, optionally, a Description for the baseline, and then click Add.

1		Create Configura	ation Baseline		x
	Specify general information	n about this confi	guration baseline		
		p. we statistic			1
	Name: Bas	eline sample			]
	Description:			^	
				~	
	Configuration data:			Q	
	Name	Туре	Purpose	Revision	]
		There are no items to a	show in this view.		
		Purpose 🔻	Change Revision	Remove	
	<ul> <li>Configuration Items</li> </ul>				
	Software Updates	hing and filtering:			
	Configuration Baselines			Categories	
(			OK	Cancel	

Figure 86. Add Configuration Items

Step 4. Click the **Configuration Items** link to select the configuration items that you want to validate.

Available configuration iter Filter				Ş
Name	Туре	Latest Revision	Description	Status
Configuration Items S lenovo items1	Application Application	Revision 1 Revision 1	Configuration Items Descrip	Enabled Enabled
		Add	<u>R</u> emove	
	ill be added to thi			
onfiguration items that wi Filter Name	ill be added to thi Type			Status

Figure 87. Configuration Items list

Step 5. Click **OK** to exit the wizard.

# Assigning a baseline to a collection

You can assign a baseline to a collection to check the settings of clients in that collection. The following procedure describes how to assign a baseline to a collection.

### Procedure

Step 1. In the Configuration Manager Console, right-click the new baseline and click **Deploy**.

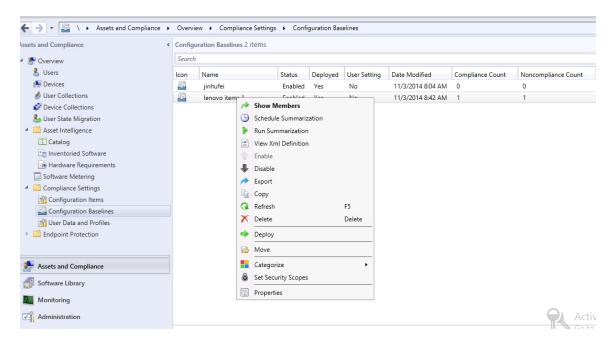


Figure 88. Deploy to a Collection function

The Deploy Configuration Baselines wizard opens.

Deploy Configuration E	aselines x
Select the configuration baselines that you want to	e deploy to a collection
Available configuration baselines:	Selected configuration baselines:
Filter	Filter
jinhufei Add >	lenovo items 1
Remediate noncompliant rules when supported	
Allow remediation outside the maintenance window	
<u>G</u> enerate an alert:	
When compliance is below:	
Date and time: 11/ 4/2014 Generate System Center Operations Manager alert	✓ 7:58 AM
Select the collection for this configuration baseline deployment. Collection: Schedule	Browse
Specify the compliance evaluation schedule for this configuration baseline	
● Simple schedule <u>B</u> un every: 7 ♀ Days ♥	
<u>R</u> un every: 7 ♀ Days ♥ ○ <u>C</u> ustom schedule	
No custom schedule defined.	C <u>u</u> stomize
0	OK Cancel

Figure 89. Assign Configuration Baseline function

**Note:** To remediate the noncompliant settings, click **Remediate noncompliant rules when supported**. When this option is selected, nothing happens if a setting is compliant. If a setting is non-compliant, System Center Configuration Manager attempts to change the non-compliant setting to the expected value. The remediation option might not always be successful.

- Step 2. In the Select the collection for this configuration baseline deployment section, click **Browse** and to select a target client collection.
- Step 3. Select a schedule for the baseline validation.
  - Simple schedule
  - Custom schedule
- Step 4. Click **OK**.

# Evaluating a baseline on the endpoint

A baseline and its child configuration items are automatically evaluated (the settings for configuration items are checked) according to the schedule you created or selected. You can also advance a baseline evaluation as follows:

### Procedure

- Step 1. To ensure that an endpoint can be found on the SCCM server and that the SCCM client agent is installed, select the applicable endpoint.
  - For a 32-bit endpoint, click Control Panel → Configuration Manager.
  - For a 64-bit endpoint, click Control Panel → View 32-bit Control Panel Items → Configuration Manager.

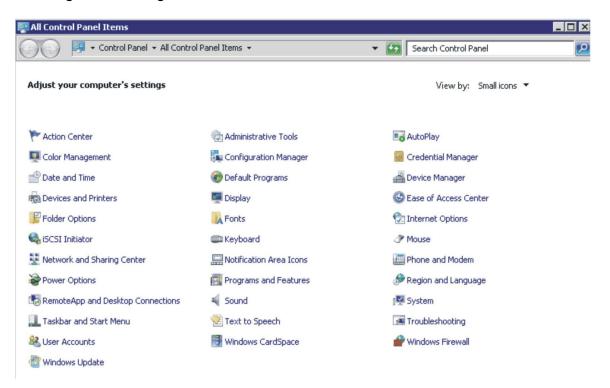


Figure 90. Configuration Manager in Control Panel folder

The Configuration Manager Properties window opens.

Step 2. On the Actions tab, select Machine Policy Retrieval & Evaluation Cycle, and then click Initiate Action.

A message is displayed notifying you that the action has been initiated.

Configuration Man	ager Properties	? ×
ina anno can	Actions Advanced Updates Config s to occur on the Configuration Manager o our computer.	
Actions:		
Discovery Data Colle File Collection Cycle Hardware Inventory Machine Policy Retri		ation Cycle
Software Updates User Policy Retrie Windows Installer	The action has been initiated. complete.	It may take several minutes to
		OK
	Initiate . OK Cancel	Action

Figure 91. Action Initiated window

Step 3. Click OK.

After a few minutes, the baseline is displayed beneath the **Configurations** tab.

Step 4. If the baseline is not displayed, click **Refresh**.

Configuration Man	ager Propert	ies	×
General Cache	Components Configu	Actions	Site Site
Assigned configurati	on baselines:		
Name	Revision	Last Evaluati	Complian Eva
Baseline	1	N/A	Unknown Idle
•			
Evaluate	•	View Report	Refresh
	01	K Cano	Apply

Figure 92. Configurations tab

Step 5. Select the baseline, and click **Evaluate**. After a few minutes, the **View Report** button is available.

General Cache	Component: Confi	s   Actior igurations	ns   S   Netwo	iite ork
Assigned configuration	n baselines:			
Name	Revi	Last Evaluati	Complian	Eval
Baseline Sample	2	11/15/2012	Non-Com	Idle
				<u>•</u>
▲ Evaluate		View Report	Refres	h

Figure 93. Configurations tab with View Report button available

Step 6. Select the baseline and click **View Report** to review the report.

### **The Evaluation Report view**

An evaluation report is generated for the baseline you select. However, there are some situations when the evaluated setting (script) does not return any value.

There are several reasons why this might occur:

- The endpoint does not have an Integrated Management Module (IMM).
- The endpoint has the IMM, but the evaluated setting cannot be found on the endpoint.

- The wrong user ID and password were used to connect to the IMM.
- The ASU.exe file version is not v3.60 or later.
- The evaluation timed out (5 minutes). System Center Configuration Manager(SCCM) sets the time limit.

#### Summary:

Name	Revision	Туре	Baseline Policy	Compliance State	Non- Compliance Severity	Discovery Failures	Non- Compliant Rules	Remediated Rules	Conflicting Rules
Test	1	Baseline		Non-Compliant	Information	0	5	3	0
Test	1	Application Configuration	Required	Non-Compliant	Information	0	5	3	0

Figure 94. Summary of evaluated results

**Note:** If the evaluated setting does not return a value, the SCCM client agent deems the setting as noncompliant on the endpoint, and ranks its severity level as Information. The evaluation report does not specify the cause. To determine the cause, check the logs in the Windows Event Viewer for details. The following figure provides an example of the Windows Event Viewer logs.

8				Event Vi	ewer		
File Action View Help							
🗢 🔿 🙍 🖬 🚺							
🛃 Event Viewer (Local)	Application Nu	mber of events: 436					
Custom Views	Level	Date and Time	Source	Event ID	Task C		^
▲ Windows Logs Application	(i) Information	11/4/2014 3:00:32 AM	Lenovo Configuration Pack, v5.6	100	None		
Security	(i) Information	11/4/2014 3:00:28 AM	Lenovo Configuration Pack, v5.6	100	None		
Setup	(i) Information	11/4/2014 3:00:23 AM	Lenovo Configuration Pack, v5.6	100	None		
System	(i) Information	11/4/2014 3:00:21 AM	ESENT	326	General		
Forwarded Events	(1) Information	11/4/2014 3:00:21 AM	ESENT	105	General		
Applications and Services Lo	i i i	11/4/2014 3:00:20 AM	ESENT	102	General		
Subscriptions	(i) Information	11/4/2014 3:00:12 AM	Windows Error Reporting	1001	None		
	(1) Information	11/4/2014 12:54:47 AM	SceCli	1704	None		
	(i) Information	11/3/2014 11:27:15 AM	LoadPerf	1000	None		
	(i) Information	11/3/2014 11:27:15 AM	LoadPerf	1001	None		
	(1) Information	11/3/2014 11:26:30 AM	Security-SPP	903	None		
	(1) Information	11/3/2014 11:26:30 AM	Security-SPP	16384	None		
	Error	11/3/2014 11:26:00 AM	Security-SPP		None		
	(1) Information	11/3/2014 11:25:57 AM	Security-SPP	902	None		
	(i) Information	11/3/2014 11:25:57 AM	Security-SPP		None		
	Error	11/3/2014 11:25:57 AM	Security-SPP		None		
	(1) Information	11/3/2014 11:25:57 AM	Security-SPP		None		
	(i) Information	11/3/2014 11:25:56 AM	Security-SPP		None		
	(1) Information	11/3/2014 11:24:58 AM	RestartManager	10001			
	General Detai	Is					×
							^
	Log Name:						=
	Source:		La servite				-
	-		Logge <u>d</u> :				
	Event ID:		Task Category:				
	Level:		Keywords:			6	) Action
	User:		Compute <u>r</u> :				ACTIVA
	OnCode						Go to 🖌

Figure 95. Windows Event Viewer logs

This figure provides a view of the DCM log with remediated rules.

#### **Remediated Rules:**

Remediated Rule:

Rule Name	Rule Description	Setting Name	Setting Type	Setting Description	Instance Data			Instance Data		
rule Description				Configure the IMM Global Login Setting "Account	Expression	Instance Source	Previous Value	Remediated Value		
	IMM AccountSecurity Script	Script	security level." Select the authority level associated with this login id.	Equals High security settings	Property = Line[0]	Legacy security settings	High security settings			

Remediated Rule:

Rule Name	Rule Description	Setting Name	Setting Type	Setting Description	Instance Data				
	rule Description	ion IMM.DefPasswordExp Script		Configure the IMM Global Login Setting "Default Password Expired". To		pression	Instance Source	Previous Value	Remediated Value
rule			configure this setting, "Custom security settings" must be selected as the AccountSecurity level. Specify whether or not the default password is exprired on the next login.			Property = Line[0]	Disabled	Enabled	

#### Figure 96. Remediated Rules

## **Running Lenovo Configuration Capture**

The Lenovo Configuration Capture function captures IMM, uEFI, and uEFI (Romley Platform) settings from an Lenovo server, and exports the captured settings into a configuration description.xml file.

#### About this task

To start Lenovo Configuration Capture, click the **Lenovo Configuration Capture** shortcut from the **Start** menu. Lenovo Configuration Capture can also be launched on computers that do not have Lenovo Configuration Pack installed by copying the ILenovo Configuration Pack.exe file onto those computers.

#### Procedure

Step 1. Launch the Lenovo Configuration Capture wizard. The Welcome page opens.

Lenovo Configuration Capture	x
Welcome Welcome to the Lenovo Configuration tool, click Next to continue.	<b>lenovo</b> . Step 1/6
The Lenovo Configuration Capture tool captures the local IMM/UEFI settings. These settings are saved to the Configuration Description XML file. The Configuration Description can be imported to the Lenovo Configuration Pack Editor.	
≺ <u>B</u> ack <u>N</u> ext > <u>F</u> inish	<u>C</u> ancel

Figure 97. Welcome page

- Step 2. Select one of the following options for appointing the ASU tool.
  - Use the built-in ASU file
  - Please select an ASU (.exe) file and click **Browse** to make a file selection.

Lenovo Configuration Capture	x
Select ASU File Please appoint the ASU tool.You can use the built-in ASU file or you can specially appoint a local ASU file.	Step 2/6
<ul> <li>Use the built-in ASU file</li> <li>Please select a ASU(.exe) file</li> </ul>	
C:\ASU\asu64.exe	
< <u>B</u> ack <u>N</u> ext > <u>F</u> inish	<u>C</u> ancel

Figure 98. Selecting the ASU file

Step 3. Click **Next** to display the General Information page. This page automatically collects information from the local computer.

Б	Lenovo Configuration Capture	x
General Informat	for this capture. Click Next to continue.	Step 3/6
Product Name is 03, Name:	, and Machine Type/Model is IBM System X3250 M5 -[5458AC1]	
Description:	<pre>     Eack Next&gt; Einish </pre>	<u>C</u> ancel

Figure 99. General Information page

Step 4. Click **Next** on the General Information page. The Lenovo Configuration Capture wizard starts collecting the local computer's IMM/uEFI/uEFI (Romley Platform) settings.

Lenovo Configuration Capture	x
General Information         Ier           Enter a name and description for this capture. Click Next to continue.         Ier	Step 3/6
Product Name is 03, and Machine Type/Model is IBM System X3250 M5 -[5458AC1]	
Name: The captured IBM System X3250 M5 -[5458AC1]- settings	
Description:	
Collecting information from local computer, please wait	
< <u>B</u> ack <u>N</u> ext > <u>F</u> inish	<u>C</u> ancel

Figure 100. Collecting information

After a few minutes, the Lenovo Configuration Capture wizard finishes collecting the settings. The Select Settings page opens, which lists the captured settings.

Step 5. Select the settings you want to export.

🚡 Lene	ovo Configuration Capt	ure	x
Select Settings The Select Settings page provides a list of all the Next to continue.	IMM/UEFI settings. Click to selec		Step 4/6
IMM Settings UEFI Settings The following is IMM setting list		Selected Count:	232/232
<ul> <li>Property Name</li> <li>IMM.AccountSecurity</li> <li>IMM.AdapterConfigNetworkS</li> <li>IMM.AdvancedAdapterConfig</li> <li>IMM.AuthorityLevel.1</li> <li>IMM.AuthorizationMethod</li> <li>IMM.Authoration1</li> </ul>	Property Value Legacy security settings No Supervisor authorization will be do	Description Configure the IMM Glob	
<ul> <li>IMM.AutoNegotiate1</li> <li>IMM.AutoROMPromotion</li> <li>IMM.BasicAdapterConfigPriv.1</li> </ul>	Yes Enabled No III < Back Next :	Configure the IMM Adva	<u>Cancel</u>

Figure 101. IMM settings

l Se	ttings uEFI Settings		
The	following is UEFI setting list		Selected Count: 250/250
	Property Name	Property Value	Description
V	uEFI.CkeLowPolicy	Disable	Enable/Disable CKE Low Policy
2	uEFI.Com1ActiveAfterBoot	Disable	Active after boot Settings.
~	uEFI.Com1BaudRate	115200	Set your Baud Rate.
~	uEFI.Com1DataBits	8	Set your Data bits.
~	uEFI.Com1FlowControl	Disable	Flow Control Settings.
~	uEFI.Com1Parity	None	Set your Parity.
~	uEFI.Com1StopBits	1	Set your Stop Bits.
~	uEFI.Com1TextEmul	ANSI	Set your Terminal Emulation.
~	uEFI.Com2ActiveAfterBoot	Disable	Active after boot Settings. 👻
4			<b>&gt;</b>

Figure 102. uEFI settings

Lenc	ovo Configuration Capt	ture X
Select Settings The Select Settings page provides a list of all the I Next to continue.	MM/UEFI settings. Click to sele	ct the settings. Click Step 4/6
IMM Settings UEFI Settings The following is UEFI(Romley Platform	n) setting list	Selected Count: 49/49
<ul> <li>Property Name</li> <li>DevicesandlOPorts.ActiveVid</li> <li>DevicesandlOPorts.Com1Act</li> <li>DevicesandlOPorts.Com1Ba</li> <li>DevicesandlOPorts.Com1Da</li> <li>DevicesandlOPorts.Com1Fl</li> <li>DevicesandlOPorts.Com1Pa</li> <li>DevicesandlOPorts.Com1St</li> <li>DevicesandlOPorts.Com1Te</li> </ul>	Property Value Onboard Device Disable 115200 8 Disable None 1 ANSI III	Description       ^         If Add-in Device is selected, vid       ■         Active after boot Settings.       >         Set your Baud Rate.       >         Set your Data bits.       Flow Control Settings.         Set your Parity.       >         Set your Stop Bits.       >         Set your Terminal Emulation.       ✓
	< <u>B</u> ack <u>N</u> ext :	<u> </u>

Figure 103. UEFI (Romley Platform) settings

**Note:** The capture can fail when the local computer does not have an IMM, a uEFI or a uEFI (Romley Platform) module, or if the IMM account information is incorrect. If the capture fails, click the **Information** link to view more information.

ᡖ Lenovo Configuratio	n Capture	×
Select Settings The Select Settings page P Next to continue.	orovides a list of all the IMM/UEFI settings. Click to select the settings. Click	<b>lenovo</b> . Step 4/6
IMM Settings UEF	Settings	1
	Lenovo Configuration Capture - Information	
Show Log File	< Back Next > Finish	Cancel

Figure 104. Incorrect IMM account is incorrect

Step 6. Select the settings that you want from the Select Settings page and click **Next**. The Export page lists settings that you can export to a Configuration Description.xml file.

Due u esta bleve e	Duananti Malua	Two	Description
Property Name	Property Value Enable	UEFI(	Description Optimized Boot will load a minim
BootModes.OptimizedBoot BootModes.QuietBoot	Enable	UEFI(	Disabling Quiet Boot will show s
BootModes.SystemBootMode	UEFI and Legacy	UEFI(	Controls which drivers option R.
DevicesandIOPorts.ActiveVideo		UEFI(	If Add-in Device is selected, vide.
Devicesand/OPorts.Com1Acti		UEFI(	Active after boot Settings.
Devices and OP orts. Com 1 Ba	115200	UEFI(	Set your Baud Rate.
Devicesand/OPorts.Com1Dat	and the second	UEFI(	Set your Data bits.
DevicesandIOPorts.Com1Flo	Disable	UEFI(	Flow Control Settings.
DevicesandIOPorts.Com1Par	None	UEFI(	Set your Parity.
DevicesandIOPorts.Com1Sto	1	UEFI(	Set your Stop Bits.
DevicesandIOPorts.Com1Ter	ANSI	UEFI(	Set your Terminal Emulation.
DevicesandIOPorts.Com2Acti	Disable	UEFI(	Active after boot Settings.
Export To:			Browse

Figure 105. Export Page

Step 7. Click Next. The Export Successfully Completed page opens.

튏 Lenovo Configuration Capture			×
Export Successfully Comp	leted		lenovo
Capture Finished.			Step 6/6
🔽  The Lenovo Configuration Captur	re tool successfully e	exported the settings to	: C:\captured .xml.
Open the Configuration Descr	iption XML file folder		
🗖 Show Log File	< <u>B</u> ack	Next > E	inish <u>C</u> ancel

Figure 106. Export Successfully Completed

**Note:** You can export the captured configuration description file into any Lenovo Configuration Pack Editor to manage. For more information, see "Creating a configuration item" on page 25.

# Chapter 5. Hardware and software support

The topics in this section describe the hardware and software that is supported by Lenovo Configuration Pack for Microsoft System Center Configuration Manager.

#### Supported Microsoft System Center products

Lenovo Configuration Pack for Microsoft System Center Configuration Manager supports the following Microsoft System Center products:

- Microsoft System Center Configuration Manager 2012
- Microsoft System Center Configuration Manager 2012 R2
- Microsoft System Center Configuration Manager 2012 SP1
- Microsoft System Center Configuration Manager 2007 R2
- Microsoft System Center Configuration Manager 2007 SP2

#### Supported client systems

Lenovo Configuration Pack for Microsoft System Center Configuration Manager supports the following client systems:

Product family name	Machine type
Lenovo Flex System x240 M5 Compute Node	2591, 9532
Lenovo Flex System x440 Compute Node	7167, 2590
Lenovo Flex System x280,x480,x880 X6 Compute Node	4258
Lenovo Flex System x240 Compute Node	7162, 2588
Lenovo NeXtScale nx360 M5	5465
Lenovo NeXtScale nx360 M5 DWC	5467, 5468, 5469
Lenovo System x3550 M5	5463
Lenovo System x3650 M5	5462

#### Table 3. Supported Lenovo systems

#### Table 4. Supported IBM systems

Product family name	Machine type
IBM BladeCenter HS22	7870, 1936, 7809, 1910
IBM BladeCenter HS22V	7871, 1949
IBM BladeCenter HS23	7875
IBM BladeCenter HS23E	8038, 8039
IBM Flex System x220 Compute Node	7906, 2585
IBM Flex System x222 Compute Node	7916
IBM Flex System x240 Compute Node	8737
IBM Flex System x280 X6 / x480 X6 / x880 X6 Compute Node	7903
IBM Flex System x440 Compute Node	7917

Table 4. Supported IBM systems (continued)

Product family name	Machine type
NeXtScale nx360 M4	5455
IBM System x 3100 M4	2582
IBM System x 3100 M5	5457
IBM System x 3200 M2	4367, 4368
IBM System x 3200 M3	7327,7328
IBM System x 3250 M2	7657, 4190, 4191, 4190
IBM System x 3250 M3	4251, 4252, 4261
IBM System x 3250 M4	2583
IBM System x 3250 M5	5458
IBM System x 3300 M4	7382
IBM System x 3400 M2	7836, 7837
IBM System x 3400 M3	7378, 7379
IBM System x 3500 M2	7839
IBM System x 3500 M3	7380
IBM System x 3500 M4	7383
IBM System x 3530 M4	7160
IBM System x 3550 M2	7946, 4198
IBM System x 3550 M3	7944, 4254
IBM System x 3550 M4	7914
IBM System x 3620 M3	7376
IBM System x 3630 M3	7377
IBM System x 3630 M4	7158
IBM System x 3650 M2	7947, 4199
IBM System x 3650 M3	7945, 4255, 5454
IBM System x 3650 M4	5466, 7158, 7915
IBM System x 3650 M4 HD	5460
IBM System x 3750 M4	8722, 8733, 8752
IBM System x 3850 X6 / x3950 X6	3837
IBM System x iDataPlex dx360 M2 server	7321, 6380, 7323
IBM System x iDataPlex dx360 M2 server dx360 M3	6391

### Supported operating systems for client machines

Lenovo Configuration Pack for Microsoft System Center Configuration Manager supports the following operating systems:

• Windows Server 2003 SP2/R2

- Windows Server 2003 SP2/R2 x64
- Windows Server 2008 SP1/SP2
- Windows Server 2008 SP1/SP2 x64
- Windows Server 2008 SP1/R2
- Windows Server 2012 R2

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# Chapter 6. Troubleshooting

Use this section to troubleshoot and resolve problems with Lenovo Configuration Pack for Microsoft System Center Configuration Manager.

- If you experience any issues when using Lenovo Configuration Pack Editor, you can check the log file information in the InstallationFolder\logs folder. The logs folder is automatically deleted when the product is uninstalled.
- If you want to export the evaluation logs for Lenovo Configuration Pack on the endpoint, follow these steps:
  - 1. After the evaluation, launch Event Viewer.
  - 2. Expand Windows Logs.
  - 3. Right-click Application node, and click Save Events as.

You can also use the following methods to check whether the property exists and the IMM account is correct:

- Get the specific IMM/uEFI property by typing the following command:asu.exe showpropertyname

For example, asu.exe show IMM.HTTPPort

- Get the specific IMM/uEFI property with the account by typing the following command:asu.exe show propertyname --user UserID--password Password

For example, asu.exe show IMM.HTTPPort --user admin --password esW2Ad

In the Evaluation Report View section, if the script cannot get the evaluated setting, it does not return a
value, and the SCCM client agent deems the evaluated setting to be non-compliant. You can get the
details about this evaluated setting from the application logs in Windows. The following terms are used in
the application log:

#### [Not Found ASU]

The ASU.exe file was not found in the specified location.

#### [TargetOS]

The version of the current operating system: either 64-bit or 32-bit.

#### [Found ASU]

The location of the ASU.exe file.

#### [Property]

The name of the evaluated property.

#### [Set ACCOUNT]

Reflects whether users set the IMM account in Lenovo Configuration Pack Editor.

#### [TimeOut]

Indicates whether the evaluation has timed out.

#### [Return Code]

The return code for the ASU.exe file. If the evaluated setting can be found, the return code is 0. Otherwise, the return code is larger than 0. For more details about ASU return codes, see the Advanced Settings Utility (ASU) website..

#### [Error Output]

If the evaluated setting is not found, this code records the reason for the failure.

### [Output]

If the evaluated setting is found, this code records the ASU.exe file search result.

- Lenovo Configuration Capture records a log file in the Lenovo\_Support\DCM\logs folder of the system driver during the launching process. For example, if your system drive is C:, then the log file is recorded under the C:\Lenovo\_Support\DMC\logs\ folder.
- Lenovo Configuration Capture can capture all IMM/IMM/uEFI/uEFI (Romley Platform) settings from the Lenovo server, but some captured settings may not be included in the common setting list of Lenovo Configuration Pack Editor. Lenovo Configuration Pack Editor cannot list the values of those settings after they are imported; the editor assumes the type for those settings is String type.

Б	Lenovo Configuration Pack Editor - Setting Editor	
Select the property that you wish to monitor for compliance. If the property list does not include the desired property, type it in the Property Name field.		
Property Name:	MM.PowerRestorePolicy	
Description: mode of operation if a power loss occurs. This setting can also be configured via BIOS F1 setup. Restore: Restores system to the same state it was before power failed.		
Comparator:	Equals Value: Restore V	
Severity:	Information V	
Remediate noncompliant IMM/UEFI setting values on client automatically. The remediation action may be failed if the target setting is readonly.		
Expected Value:	Restore v	
When the property "IMM.PowerRestorePolicy" "Equals" "Restore", the property is compliant on the endpoint. Otherwise, the property is non-compliant and returns a severity of "Information".		
	OK Cancel Apply	

Figure 107. Lenovo Configuration Pack Editor - Setting Editor page

In Figure 107 "Lenovo Configuration Pack Editor - Setting Editor page" on page 114, the **IMM. DuplexAutoDisable** property is not in the common setting list of Lenovo Configuration Pack Editor, and the **Description** and **Expected Value** fields are empty. Lenovo Configuration Pack Editor assumes that the type for the **IMM.DuplexAutoDisable** property is String. For details about the different types, see Table 2 "Comparators by return type" on page 16.

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