
TPM activation using CCTK SCE in an SCCM environment

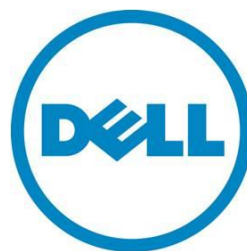
A Dell technical white paper

Dell | Product Group

Md Sahid Shaik

Palani Raja

Muneer K



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Introduction

Dell Client Configuration Toolkit (CCTK) is packaged software that provides configuration capability to Dell client systems such as OptiPlex, Latitude, and the Dell Precision workstation. You can configure the client systems using either a Graphical User Interface (GUI) or a Command-line Interface (CLI.)

CCTK and SCE

CCTK is a Dell tool used to configure BIOS settings on Dell Business Client systems.

SCE is a Self-contained Executable with an .exe extension. An SCE is a zero-touch program and is created by a CCTK user interface. SCE contains the BIOS configuration in a file that you export using a CCTK user interface.

Scope

This white paper shows how to enable TPM activation on target client systems using the CCTK SCE in a SCCM environment.

This document is not intended to explain TPM. Knowledge of TPM is required.

http://support.dell.com/support/topics/global.aspx/support/kcs/document?c=us&cs=555&l=en&s=biz&docid=DSN_E75E35123E8AC4D0E030030ABD623A10&isLegacy=true

Prerequisites

Prerequisites for the server:

- Install Microsoft SCCM 2007/2012 and discover target client systems.
- Install Dell Client Configuration Tool kit 2.x.
- User should have Administrator access.

Prerequisites for target client systems:

- Trusted Platform Module (TPM) must be present.
- TPM must not be currently owned.
- TPM must be in a deactivated state.
- Setup/Admin password is not set.

Note: Dell recommends that this solution is first tested using your test environment before deploying in a production environment.

Enabling a TPM activation using CCTK SCE in an SCCM Environment

Use the following steps:

- I. Create CCTK SCE for:
 - a. [Setup password](#)
 - b. [TPM activation](#)
- II. Deploy CCTK SCE packages using Microsoft SCCM:
 - a. [Package wizard creation for TPM activation](#)
 - b. [Program wizard for Setup Password](#)
 - c. [Program wizard for TPM activation](#)
 - d. [Program wizard to restart client systems](#)
 - e. [Advertisement to run Setup Password program](#)
 - f. [Advertisement to run TPM activation program](#)
 - g. [Advertisement to run restart client systems program](#)
 - h. [Create and update distribution points](#)
- III. [Initiate Client Action Using the Configuration Manager](#)
- IV. [Summary](#)

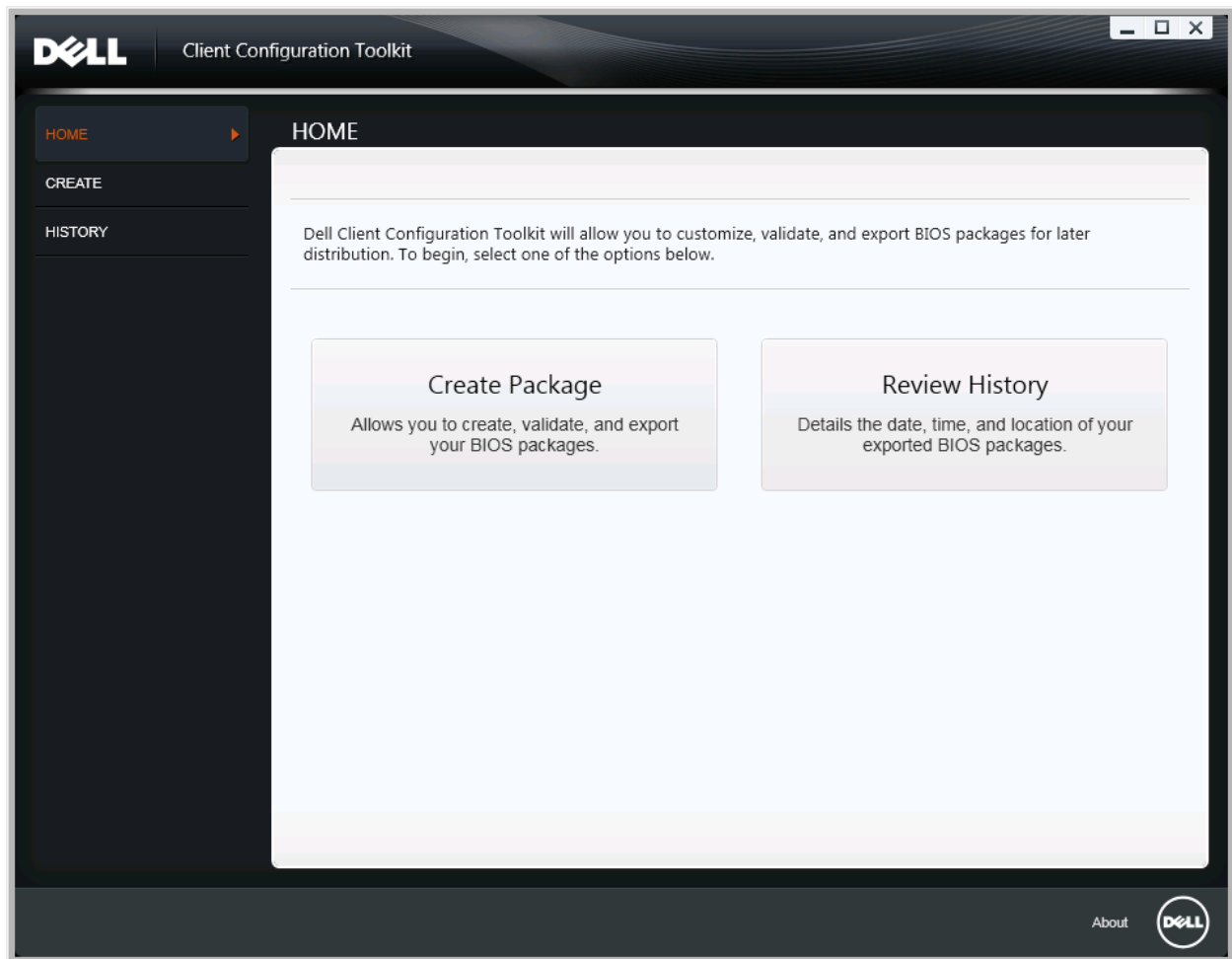
Creating CCTK SCE packages for Setup Password

1. Invoke the CCTK GUI.
2. Go to **Start > All Programs > Dell > CCTK GUI**.

Note:- For information on CCTK Installation, refer the following link:

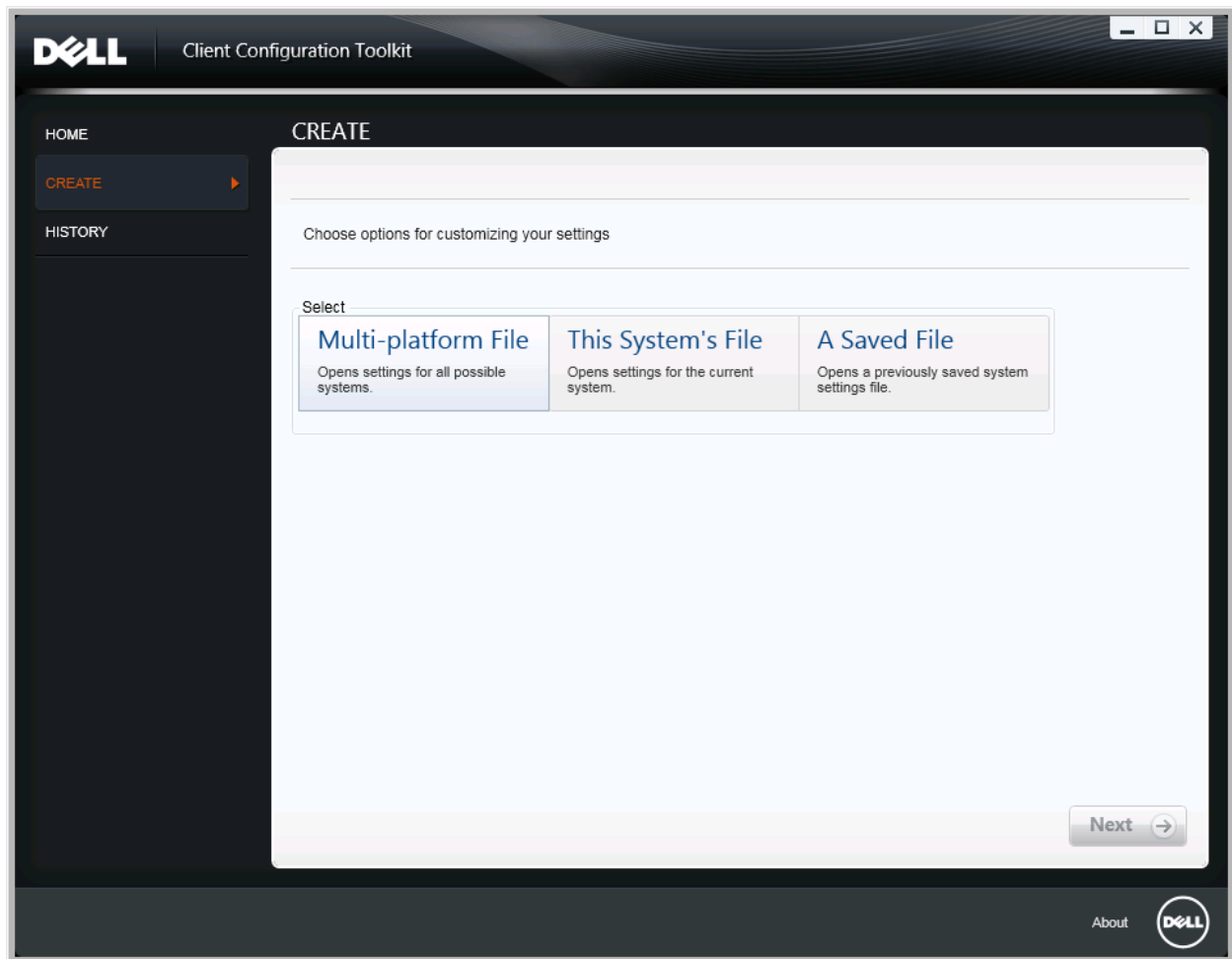
<http://support.dell.com/support/edocs/SOFTWARE/smcctk/2.1/IG/CCTK2.1IG.pdf>

Figure 1. Dell Client Configuration Toolkit



3. Click **Create Package**.

Figure 2. Customize your settings.



4. Click **Multi-platform File**.
5. Search for **setuppwd**.

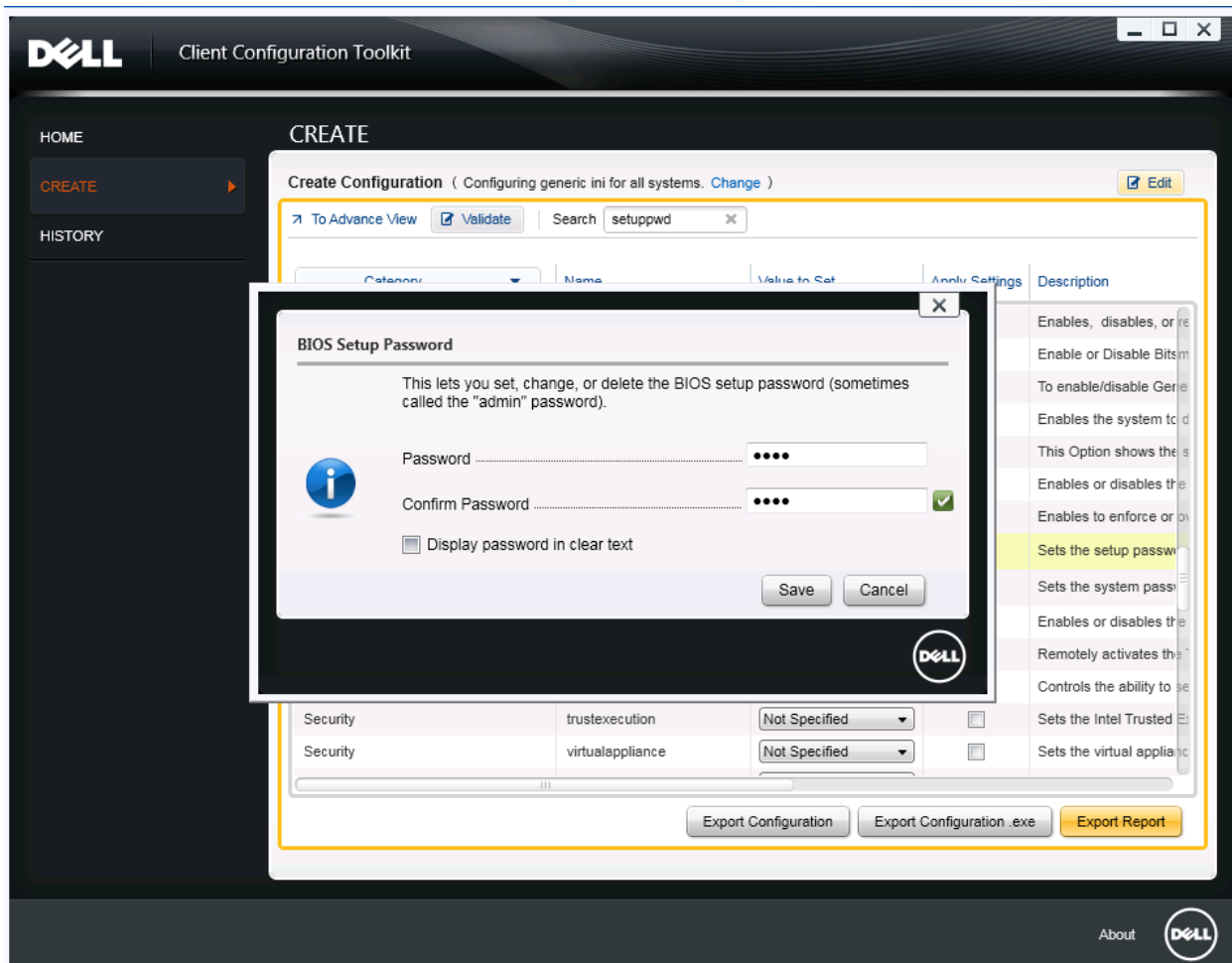
Figure 3. Searching for setuppwd.

The screenshot shows the Dell Client Configuration Toolkit (CCTK) interface. The 'CREATE' tab is active, and the search bar contains the text 'setuppwd'. The table below lists various configuration items, with the 'setuppwd' item highlighted in yellow. The 'Value to Set' column for 'setuppwd' shows a masked password field.

Category	Name	Value to Set	Apply Settings	Description
Power and Performance Management	fanctrflovrd	Not Specified	<input type="checkbox"/>	Controls the speed of th
Security	admsetuplockout	Not Specified	<input type="checkbox"/>	Enables or disables the
Security	bezelir	Not Specified	<input type="checkbox"/>	Sets the ESM configura
Security	bisreq	Not Specified	<input type="checkbox"/>	Enables, disables, or re
Security	bitsmart	Not Specified	<input type="checkbox"/>	Enable or Disable Bitsm
Security	genencryption	Not Specified	<input type="checkbox"/>	To enable/disable Gen e
Security	chasintrusion	Not Specified	<input type="checkbox"/>	Enables the system to d
Security	chassisintrustatus	Not Specified	<input type="checkbox"/>	This Option shows the
Security	cpuxdsupport	Not Specified	<input type="checkbox"/>	Enables or disables th
Security	strongpwd	Not Specified	<input type="checkbox"/>	Enables to enforce or ov
Security	setuppwd	<input type="checkbox"/>	Sets the setup passwor
Security	syspwd	<input type="checkbox"/>	Sets the system passwo
Security	tpm	Not Specified	<input type="checkbox"/>	Enables or disables the
Security	tpmactivation	Not Specified	<input type="checkbox"/>	Remotely activates the

6. Enter the BIOS or setup password.

Figure 4. Setting the BIOS password.



7. Click **Save**.

Figure 5. Create Configuration screen.

DELL Client Configuration Toolkit

HOME
[CREATE](#)
 HISTORY

CREATE

Create Configuration (Configuring generic ini for all systems. [Change](#)) [Edit](#)

[To Advance View](#) [Validate](#) Search:

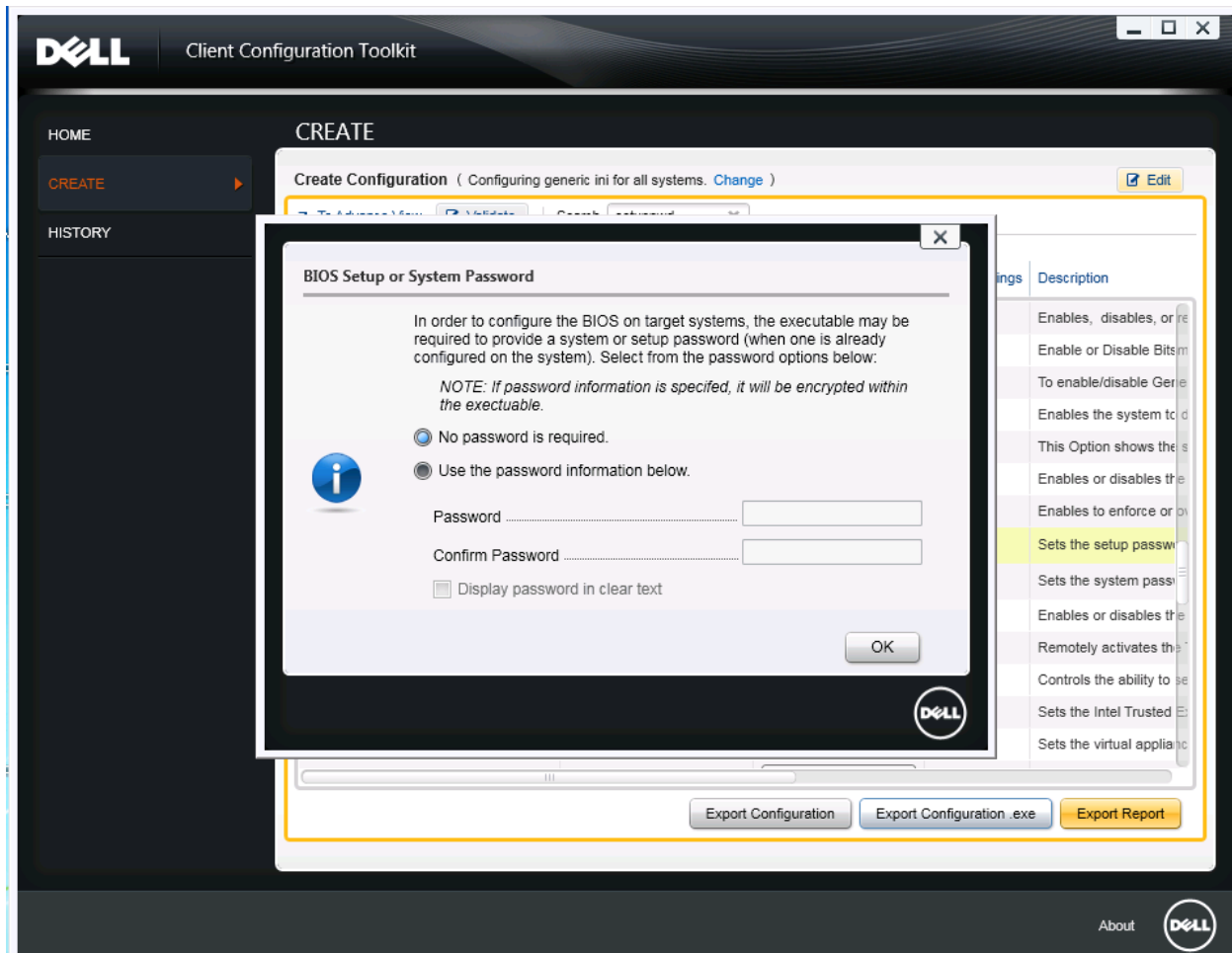
Category	Name	Value to Set	Apply Settings	Description
Security	bisreq	Not Specified	<input type="checkbox"/>	Enables, disables, or re
Security	bitsmart	Not Specified	<input type="checkbox"/>	Enable or Disable Bitsm
Security	genencryption	Not Specified	<input type="checkbox"/>	To enable/disable Gen e
Security	chasintrusion	Not Specified	<input type="checkbox"/>	Enables the system to d
Security	chassisintrustatus	Not Specified	<input type="checkbox"/>	This Option shows the s
Security	cpuxdsupport	Not Specified	<input type="checkbox"/>	Enables or disables the e
Security	strongpwd	Not Specified	<input type="checkbox"/>	Enables to enforce or on
Security	setuppwd	<input checked="" type="checkbox"/>	Sets the setup passw
Security	syspwd	<input type="checkbox"/>	Sets the system pass
Security	tpm	Not Specified	<input type="checkbox"/>	Enables or disables the
Security	tpmactivation	Not Specified	<input type="checkbox"/>	Remotely activates the
Security	pwdlock	Not Specified	<input type="checkbox"/>	Controls the ability to se
Security	trustexecution	Not Specified	<input type="checkbox"/>	Sets the Intel Trusted E
Security	virtualappliance	Not Specified	<input type="checkbox"/>	Sets the virtual applianc

Export Configuration Export Configuration .exe **Export Report**

About **DELL**

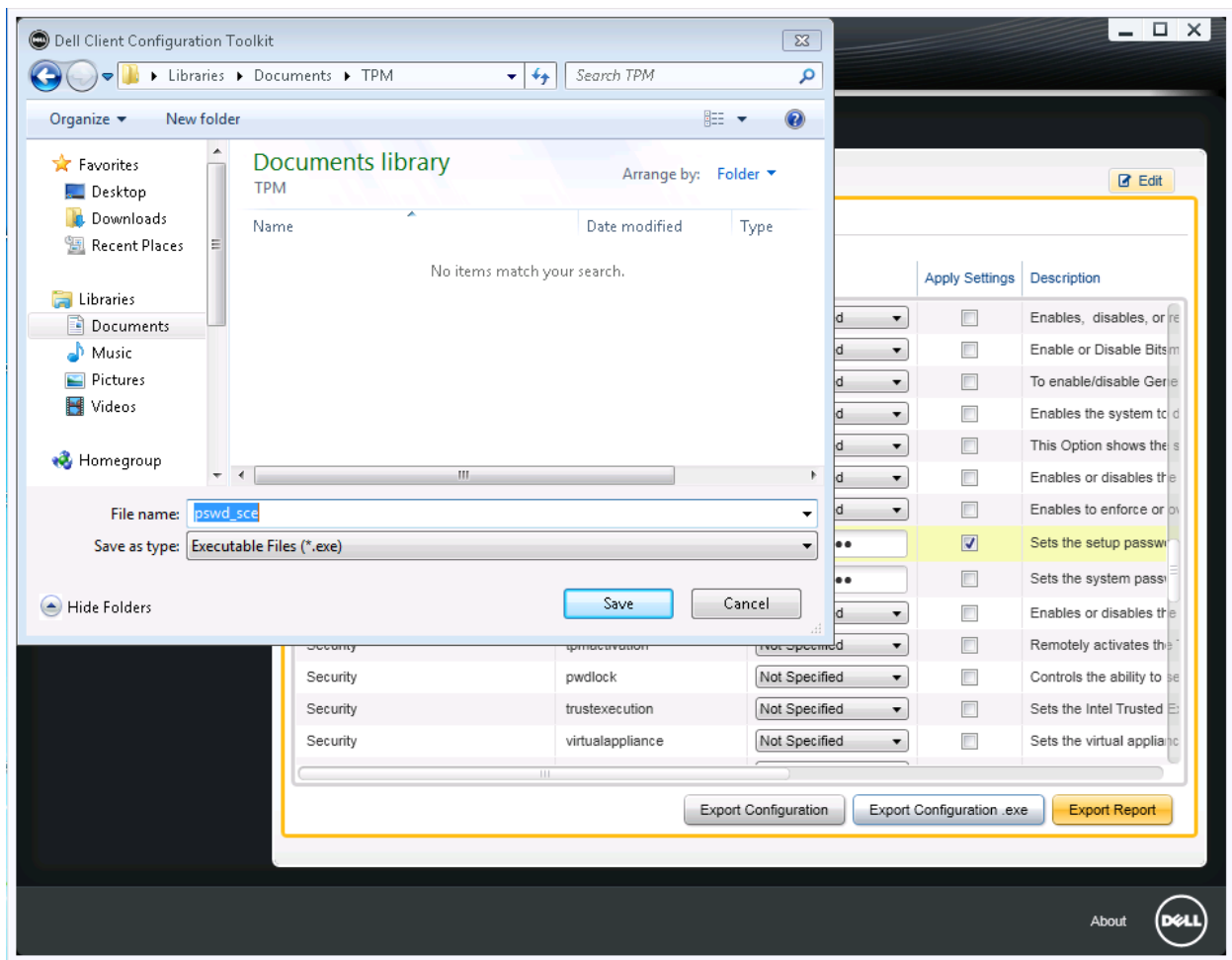
8. Click **Export Configuration .exe**.

Figure 6. Setting the BIOS Setup or System Password.



9. Click **OK** and provide the SCE file name.

Figure 7. The SCE for Setup password is complete.



9. The SCE for Setup password is complete

Activating SCE for TPM

1. Search for tpm. The row containing tpm is highlighted.

Figure 8. Searching for tpm.

The screenshot shows the Dell Client Configuration Toolkit (CCTK) interface. The main window is titled 'CREATE' and contains a 'Create Configuration' section. A search bar at the top right of the configuration table contains the text 'tpm'. The table lists various configuration settings, with the 'tpm' row highlighted. The dropdown menu for the 'tpm' value is open, showing 'Not Specified', 'off', and 'on' options. The 'tpmactivation' row is also visible below it.

Category	Name	Value to Set	Apply Settings	Description
Security	cpuxdsupport	Not Specified	<input type="checkbox"/>	Enables or disables the
Security	strongpwd	Not Specified	<input type="checkbox"/>	Enables to enforce or
Security	setuppwd	<input checked="" type="checkbox"/>	Sets the setup password
Security	sypwd	<input type="checkbox"/>	Sets the system password
Security	tpm	Not Specified	<input type="checkbox"/>	Enables or disables the
Security	tpmactivation	off	<input type="checkbox"/>	Remotely activates the
Security	pwdlock	Not Specified	<input type="checkbox"/>	Controls the ability to
Security	trustexecution	Not Specified	<input type="checkbox"/>	Sets the Intel Trusted
Security	virtualappliance	Not Specified	<input type="checkbox"/>	Sets the virtual appliance
Security	vaphysicalpresenceconfirm	Not Specified	<input type="checkbox"/>	Sets the VA Physical Presence
Security	sfenabled	Not Specified	<input type="checkbox"/>	Enables the verification
Storage	hdfreefallprotect	Not Specified	<input type="checkbox"/>	Enables/Disable hard drive
Storage	hddfailover	Not Specified	<input type="checkbox"/>	Specifies which device is
Storage	hddprotection	Not Specified	<input type="checkbox"/>	Enables or disables the

At the bottom of the configuration table, there are three buttons: 'Export Configuration', 'Export Configuration .exe', and 'Export Report'.

- From the drop-down list, select tpm as **on** and tpmactivation as **activate**.

Figure 9. Selecting activate from the drop-down list.

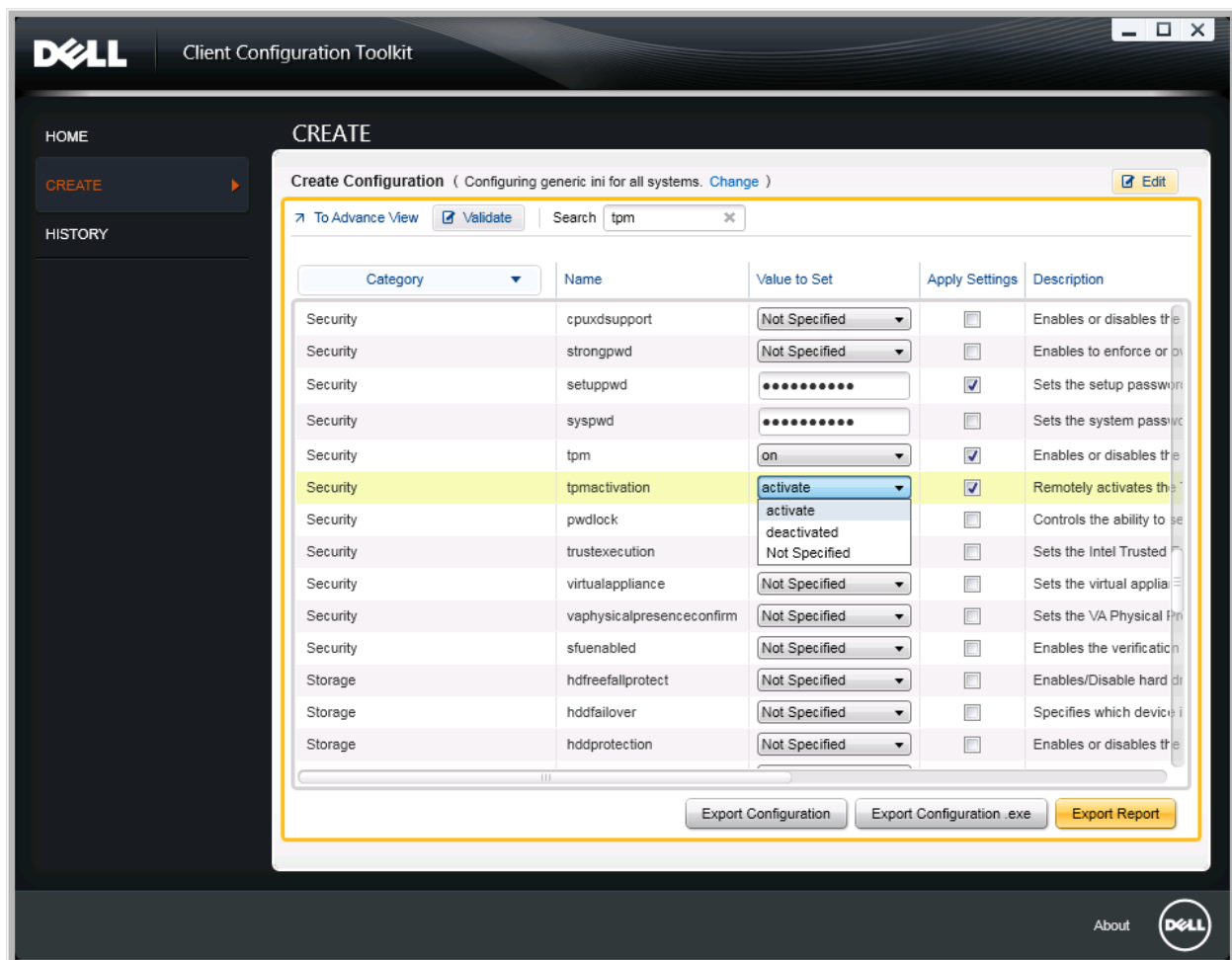
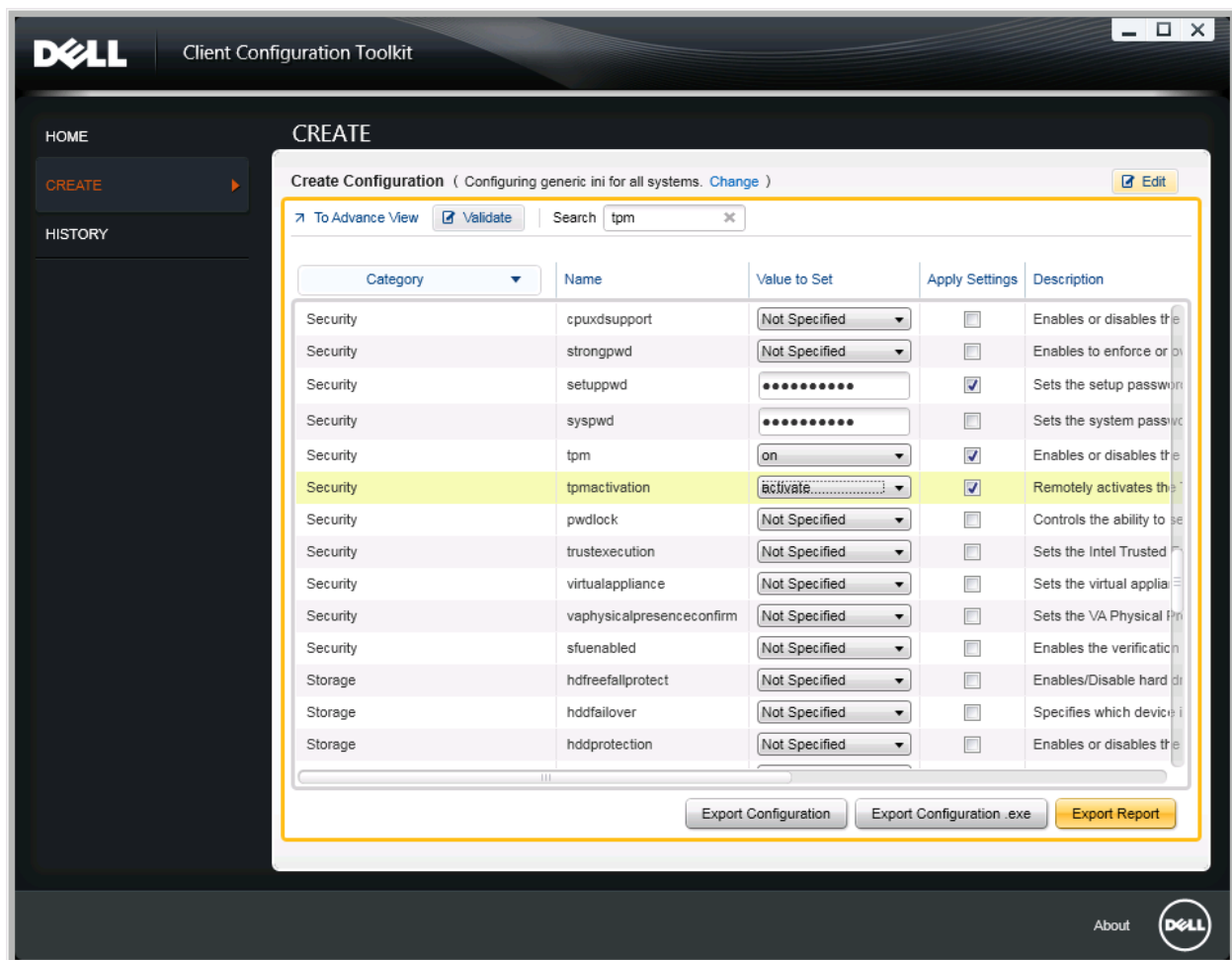
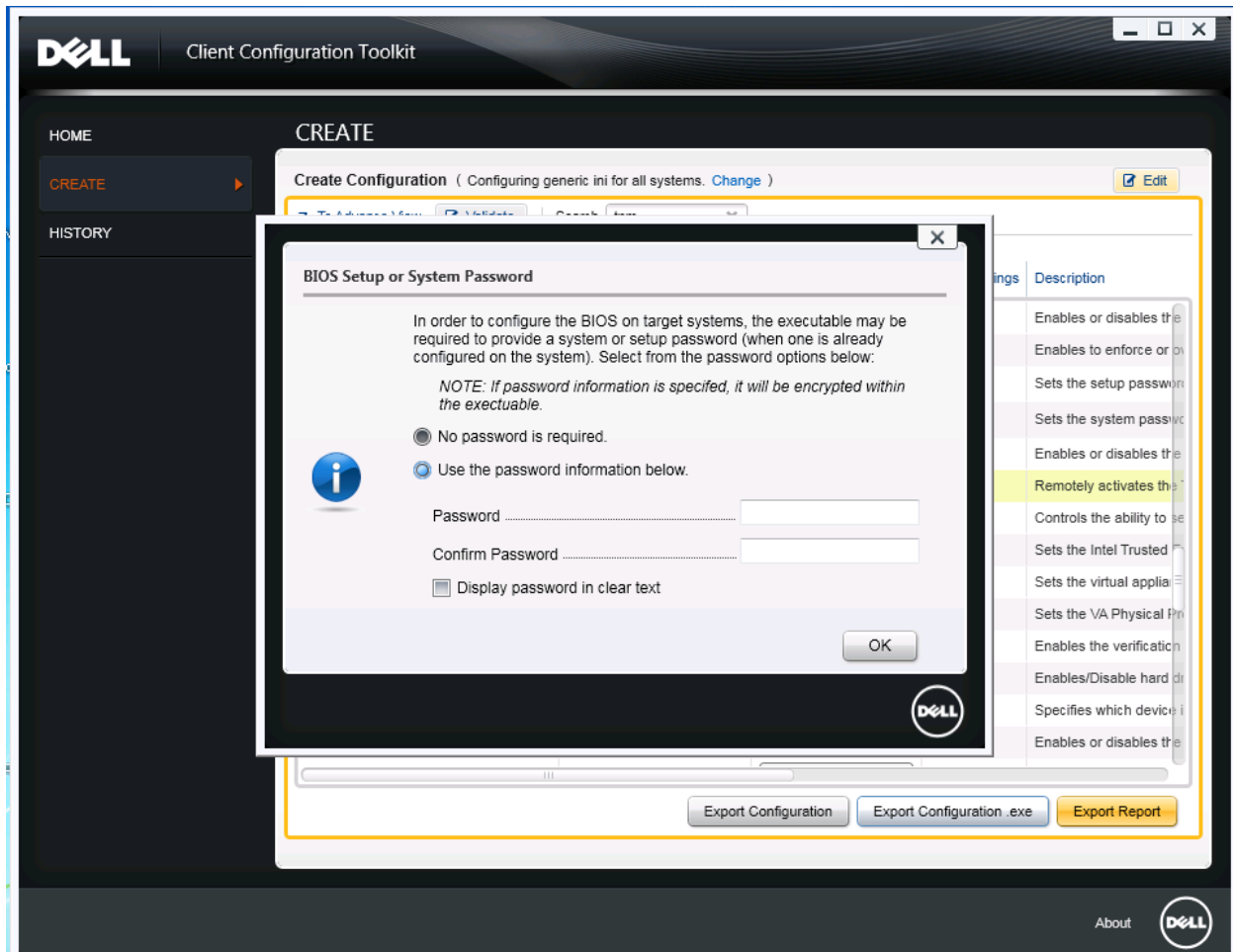


Figure 10. Selecting Export Configuration .exe.



10. Click **Export Configuration .exe**.

Figure 11. Select *Use the password information below*.



11. In the BIOS Setup or System Password dialog, select **Use the password information below** to specify the password mentioned during Setup password creation.
12. Click **OK** and provide the SCE file name.

Figure 12. Typing in the password.

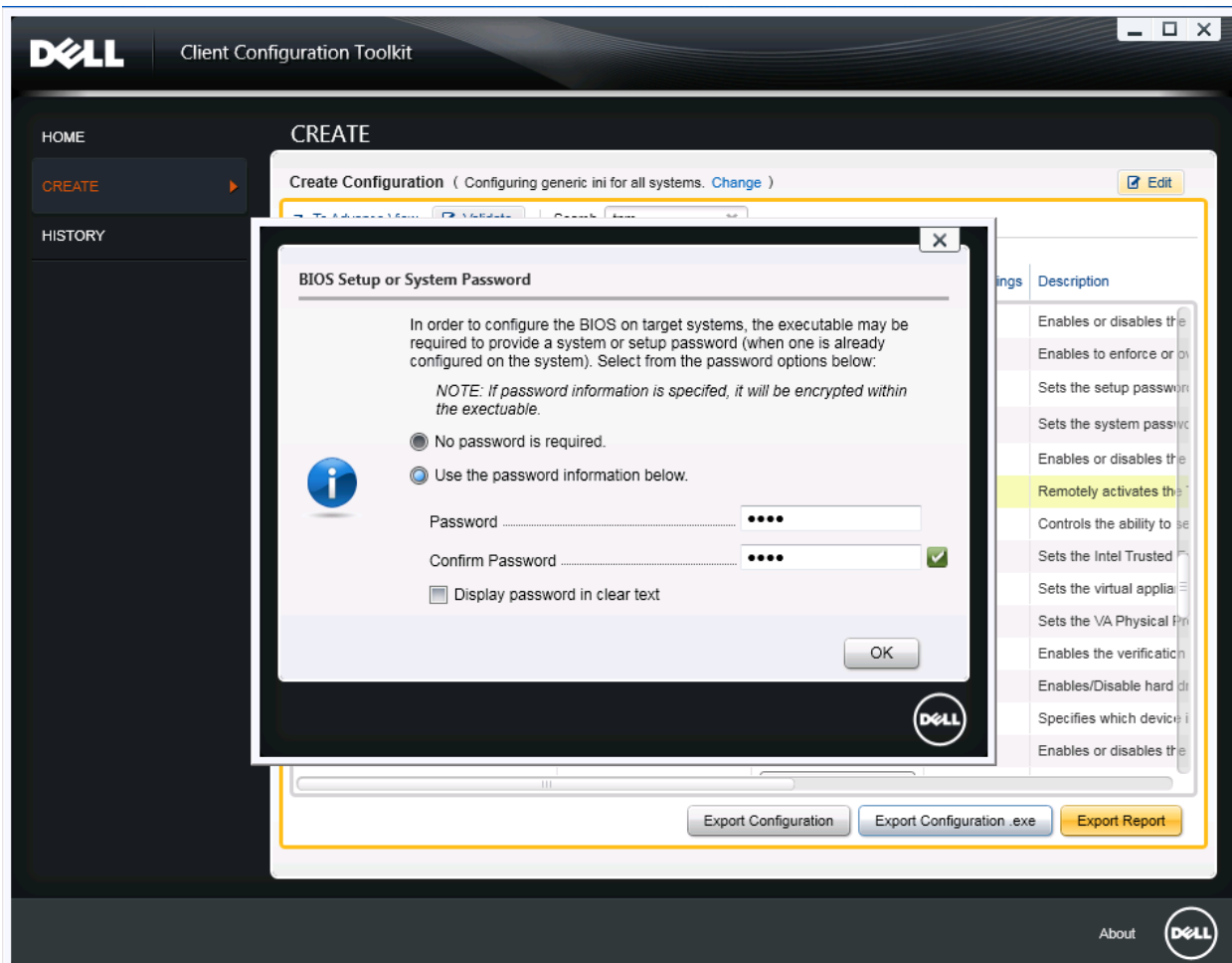
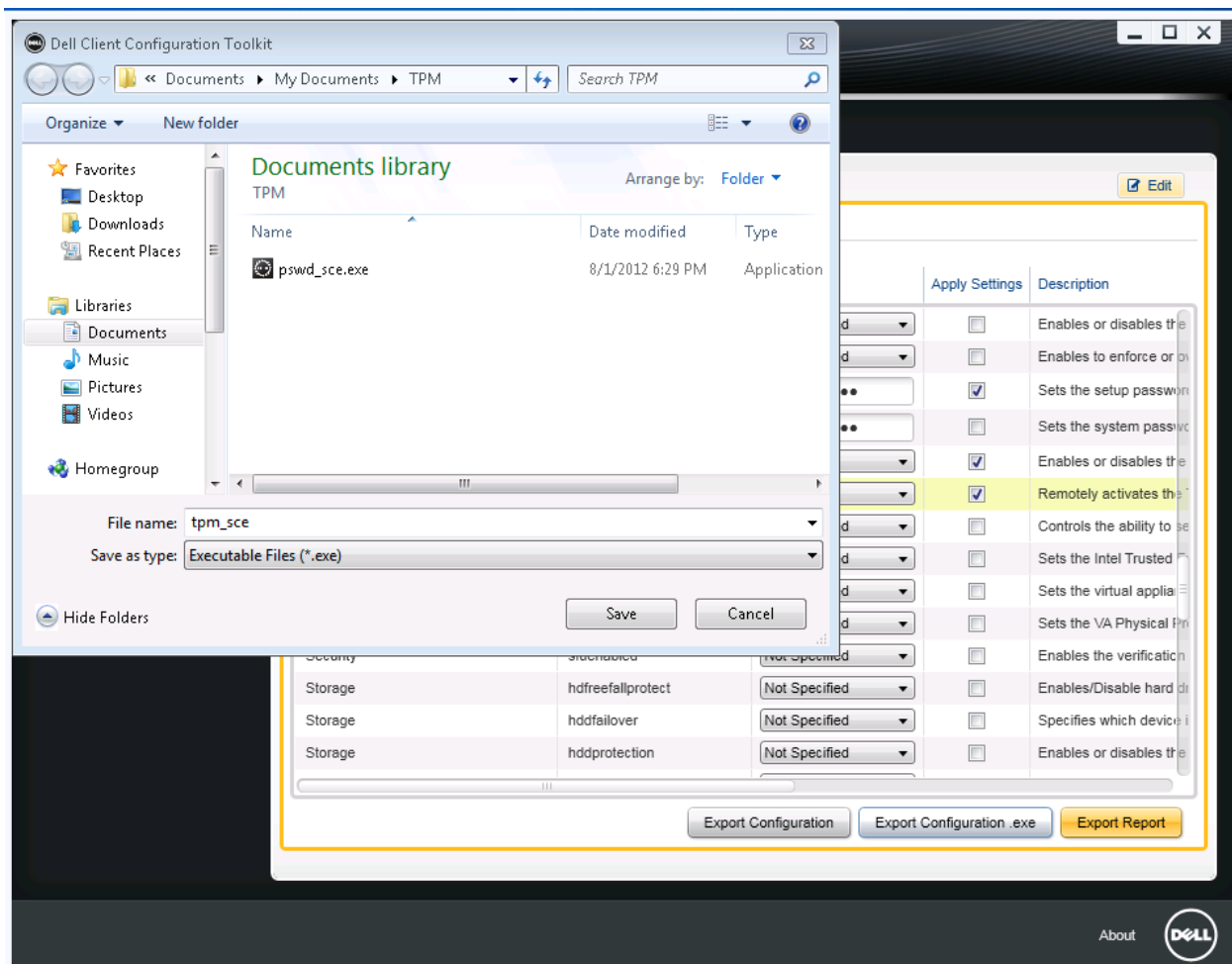


Figure 13. SCE is ready.

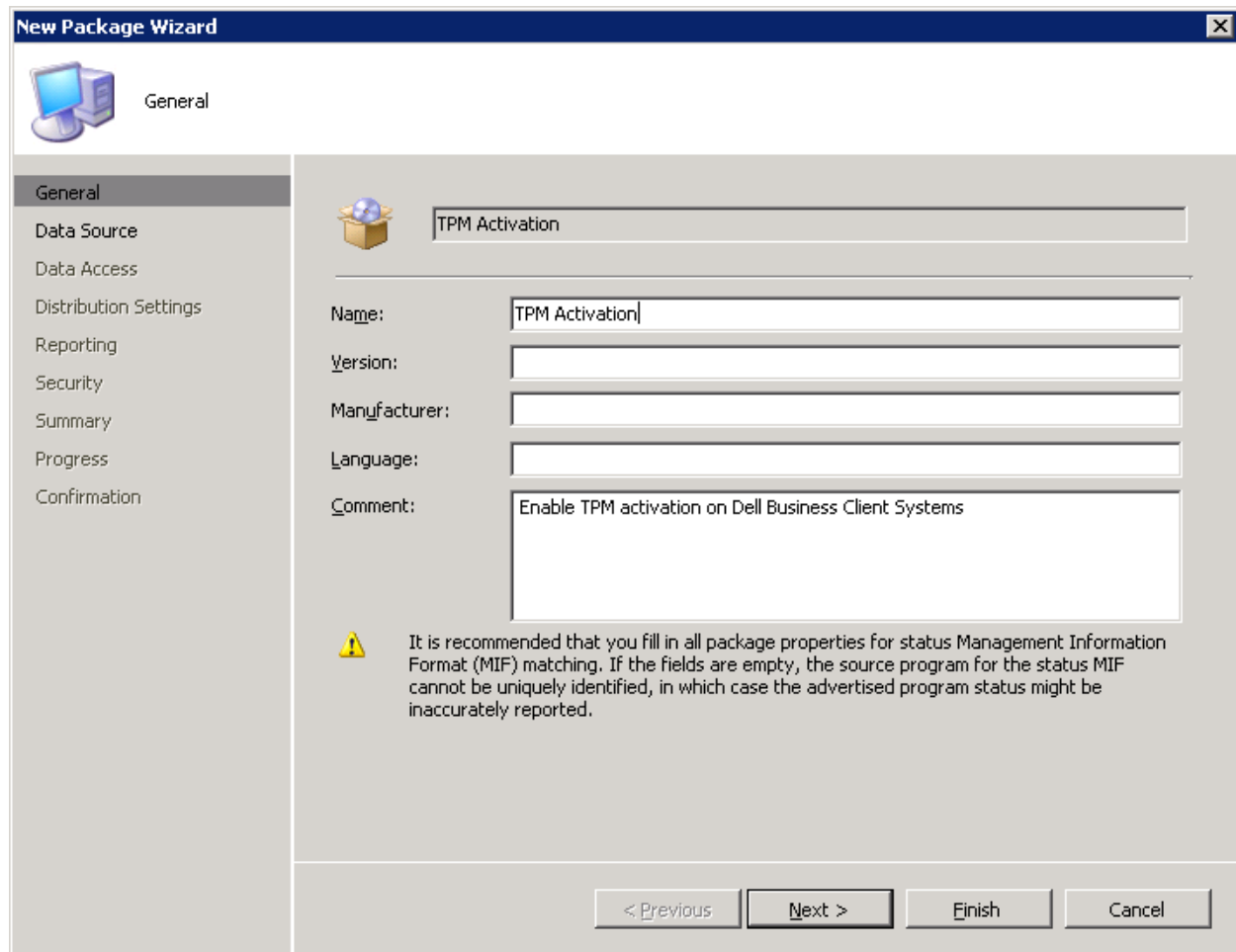


13. The SCE for TPM activation has completed successfully.

Deploying CCTK SCE packages using Microsoft SCCM

1. Launch the Microsoft Configuration Manager Console.
2. Navigate to component **Management > Software Distribution > packages**.
3. Right-click **Packages** and click **New**, then **Package.X**
4. In the **New Package Wizard**, specify the Package name.

Figure 14. Naming the package.



The screenshot shows the 'New Package Wizard' dialog box with the 'General' tab selected. The package name is 'TPM Activation'. The comment is 'Enable TPM activation on Dell Business Client Systems'. The 'Next >' button is highlighted.

New Package Wizard

General

TPM Activation

Name: TPM Activation

Version:

Manufacturer:

Language:

Comment: Enable TPM activation on Dell Business Client Systems

It is recommended that you fill in all package properties for status Management Information Format (MIF) matching. If the fields are empty, the source program for the status MIF cannot be uniquely identified, in which case the advertised program status might be inaccurately reported.

< Previous Next > Finish Cancel

14. Click Next.

Figure 15. Specifying if the package has source files.

New Package Wizard

Data Source

Specify whether this package contains source files. If it does, specify the initial location of the files and set additional source file options.

☒ This package contains source files

Source version:

Source directory: \\10.94.172.132\smbspkg **Set...**

☐ Use a compressed copy of the source directory

☒ Always obtain files from the source directory

☐ Update distribution points on a schedule **Schedule...**

☐ Persist content in the client cache

☐ Enable binary differential replication

< Previous Next > Finish Cancel

5. Specify the Source directory where the CCTK SCE files are stored.
6. Click **Next**.

Figure 16. Data Access screen.

New Package Wizard

Data Access

Specify where this package is stored on distribution points. These settings apply to all distribution points receiving the package.

☒ Access the distribution folder through common ConfigMgr package share

☐ Share the distribution folder

Share name:

Package update settings

☐ Disconnect users from distribution points

Number of retries before disconnecting users:

Interval between user notification and disconnection (minutes):

< Previous Next > Finish Cancel

15. Select Access the distribution folder through common ConfigMgr package share.

16. Click Next.

Figure 17. Distribution Settings screen.

The screenshot shows the 'New Package Wizard' window with the 'Distribution Settings' tab selected. The left sidebar lists the following steps: General, Data Source, Data Access, Distribution Settings (highlighted), Reporting, Security, Summary, Progress, and Confirmation. The main area contains the following settings:

- Specify the sending priority and the preferred sender to use when sending the package to child sites.**
 - Sending priority:** High (selected in a dropdown menu)
 - Preferred sender:** <No Preference> (selected in a dropdown menu)
- Branch distribution point content settings**
 - ☒ Automatically download content when packages are assigned to branch distribution points
 - ☐ Make this package available on protected distribution points when requested by clients inside the protected boundaries
 - ☐ Administrator manually copies this package to branch distribution points
- Operating system deployment settings**
 - These settings apply only during the WinPE phase of a run command line task sequence step.
 - ☐ Allow this package to be transferred via multicast (WinPE only)
 - ☐ Encrypt multicast packages
 - ☐ Transfer this package only via multicast

At the bottom right, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

7. Select the Sending priority as **High**.
8. Click **Next**.

Figure 18. Setting the MIF settings.

New Package Wizard

Reporting

General
Data Source
Data Access
Distribution Settings
Reporting
Security
Summary
Progress
Confirmation

Specify how Management Information Format (MIF) files generated by clients apply to this package.

☒ Use package properties for status MIF matching


☐ Use these fields for status MIF matching:

MIF file name:

Name:

Version:

Publisher:

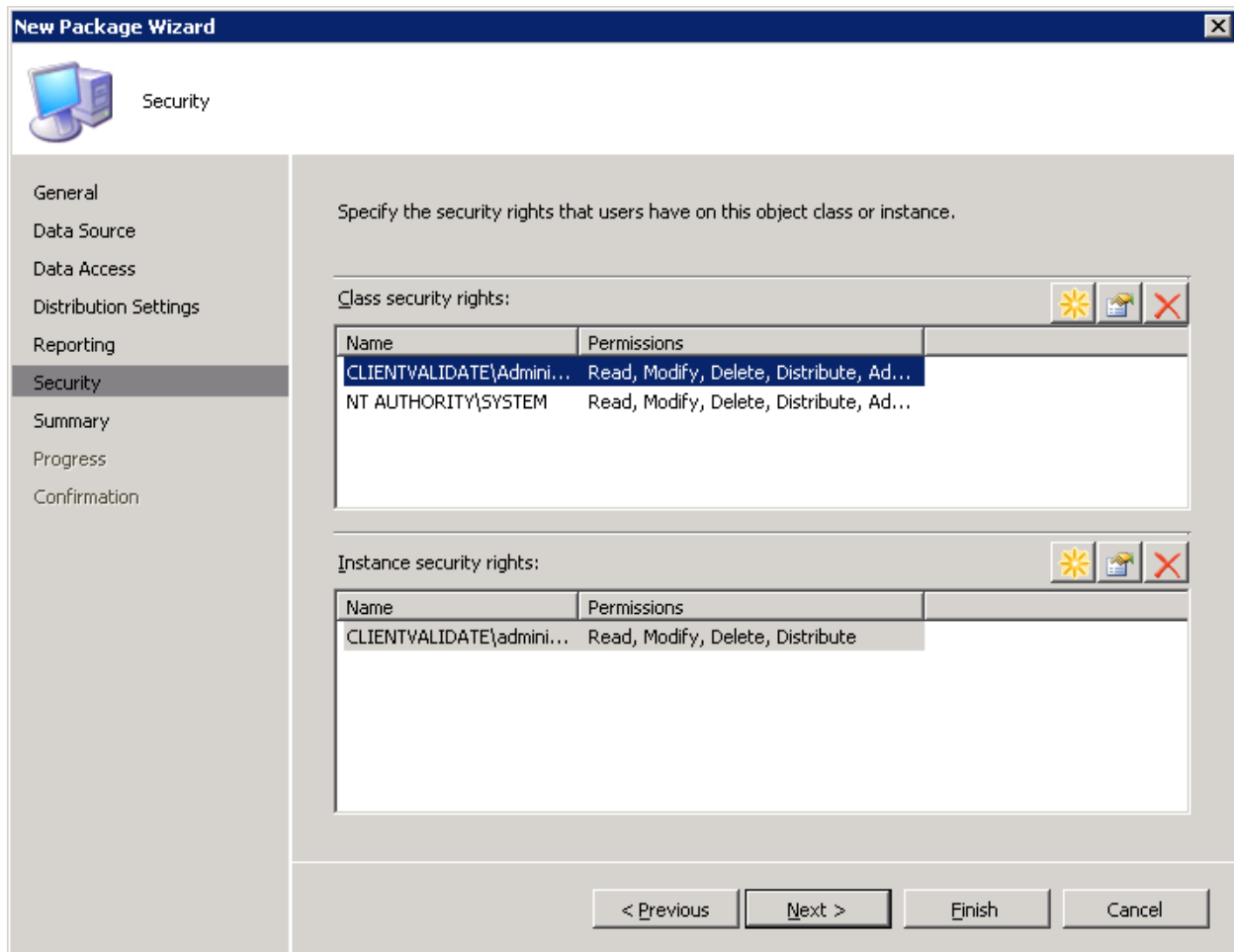
 It is recommended that you fill in all package properties for status Management Information Format (MIF) matching. If the fields are empty, the source program for the status MIF cannot be uniquely identified, in which case the advertised program status might be inaccurately reported.

< Previous Next > Finish Cancel

9. Select **Use the package properties for status MIF matching**.

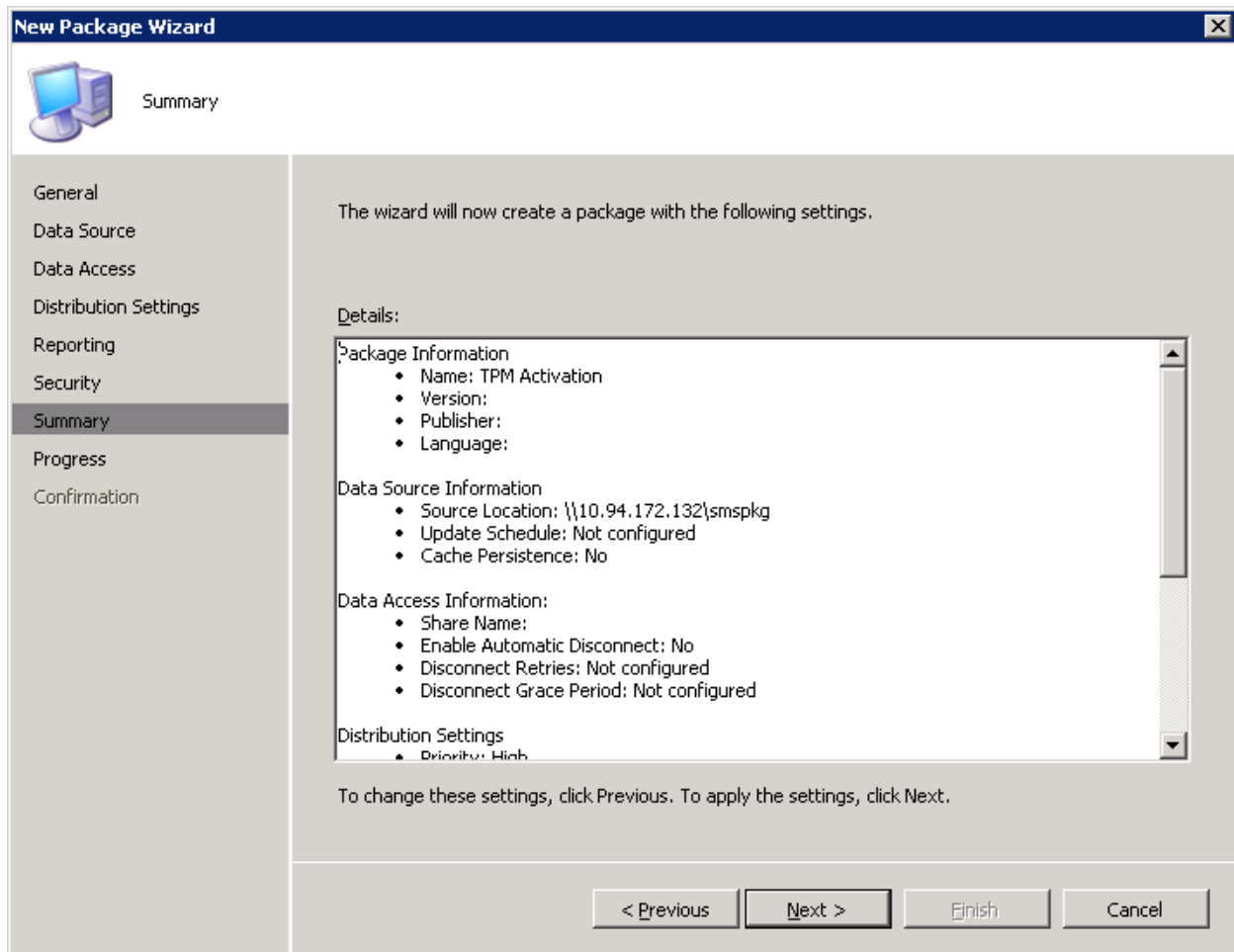
10. Click **Next**.

Figure 19. Specifying the security rights.



11. Specify the Security rights.
12. Click Next.

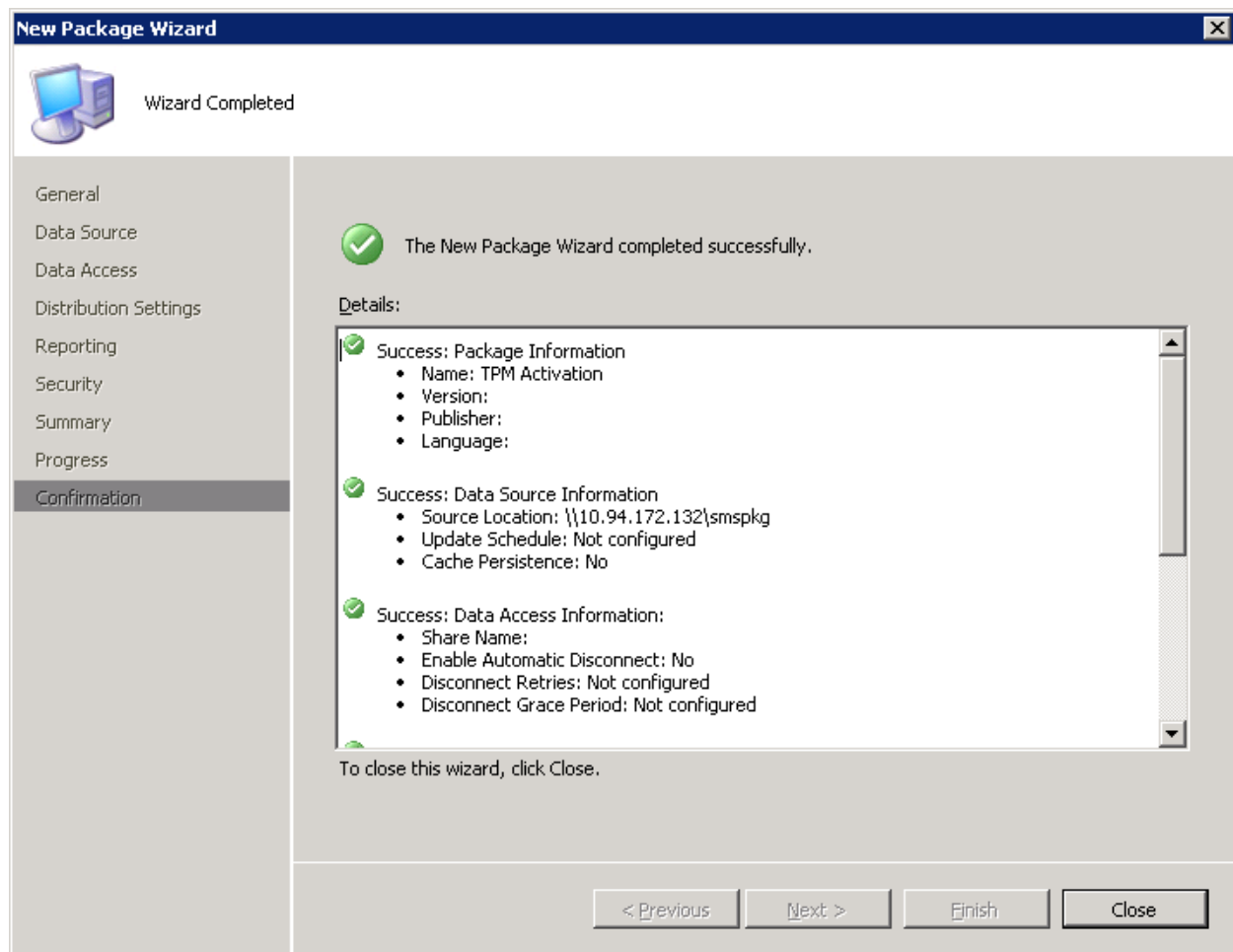
Figure 20. Summary results.



17. Click **Next**.

The new package was created successfully as shown below.

Figure 21. Wizard is completed.



Program wizard for Setup Password creation

Use the New Program Wizard to create a program for a software distribution package, specifying general information, program requirements, runtime environment, and other information for the new package.

1. In the Configuration Manager console, navigate to **System Center Configuration Manager > Site Database > Computer Management > Software Distribution > Package > <package name>**.
2. Right-click **Programs**, point to **New**, and then click **Program**.
3. In the New Program Wizard, specify the Program name.
4. Browse and specify the command line as SCE file name followed by /nolog option.x

For example: passwd_sce /nolog

The above SCE package contains the BIOS Configuration file to create Setup password.

5. Click **Next**.

Figure 22. Using default options.

The screenshot shows the 'New Program Wizard' dialog box with the 'General' tab selected. The left sidebar contains a list of tabs: General, Requirements, Environment, Advanced, Windows Installer, MOM Maintenance, Summary, Progress, and Confirmation. The main area contains the following fields and options:

- Name:** Program1
- Comment:** To create Setup Password
- Command line:** pswd_sce.exe /nolog (with a 'Browse...' button)
- Start in:** (empty text box)
- Run:** Normal (dropdown menu)
- After running:** No action required (dropdown menu)
- Category:** (empty dropdown menu)

At the bottom, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

7. Retain the default options and then click **Next**.

Figure 23. Selecting the program requirements.

New Program Wizard

Requirements

General
Requirements
Environment
Advanced
Windows Installer
MOM Maintenance
Summary
Progress
Confirmation

A program's requirements determine whether it is appropriate for a particular computer.

Estimated disk space:

Maximum allowed run time (minutes):

☒ This program can run on any platform

☐ This program can run only on specified client platforms:

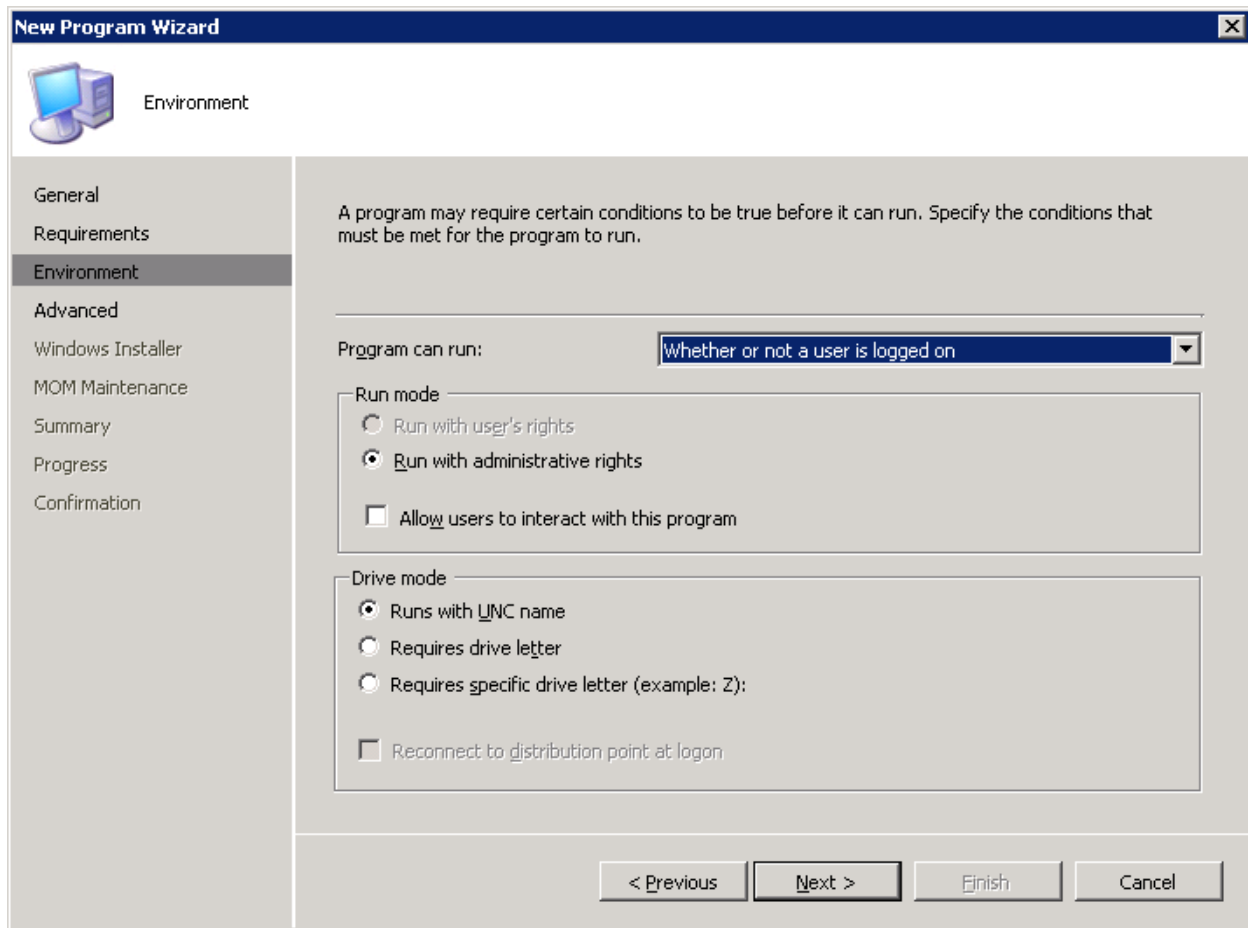
- ☐ All IA64 Windows Server 2003 (Non R2)
- ☐ All IA64 Windows Server 2008
- ☐ All x64 Windows 7
- ☐ All x64 Windows Server 2003 (Non R2)

Additional requirements:

< Previous Next > Finish Cancel

8. Select the program “can run” option.

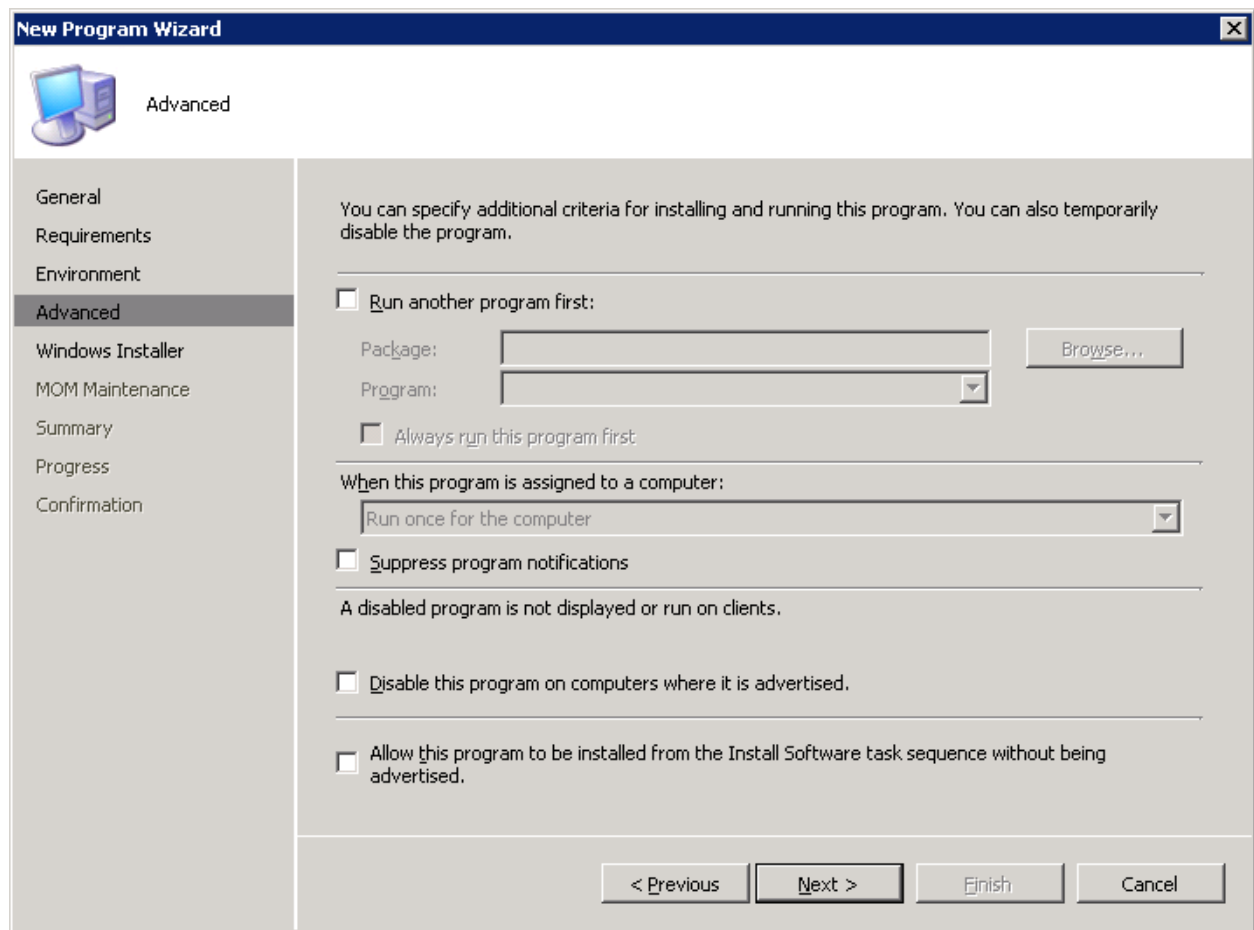
Figure 24. Selecting options to run the program.



9. In this example we have selected “Whether or not a User is logged on.”

10. Click **Next**.

Figure 25. Choosing additional program options.



11. Click **Next**.

Figure 26. Specifying the Windows Installer product information to enable installation source management.

The screenshot shows the 'New Program Wizard' dialog box with the 'Windows Installer' tab selected. The left sidebar contains the following tabs: General, Requirements, Environment, Advanced, Windows Installer (selected), MOM Maintenance, Summary, Progress, and Confirmation. The main area contains the following text: 'If you enable installation source management for this program, the .msi file will automatically return to the package files on an available distribution point to reinstall or repair the installation. Specify the Windows Installer product information to enable installation source management.' Below this text are two instructions: 'Click Import to specify the product code and the Windows Installer file.' and 'Click Clear to clear these fields and disable installation source management of this product.' There are two input fields: 'Windows Installer product code:' and 'Windows Installer file:'. At the bottom right of the main area are two buttons: 'Import...' and 'Clear'. At the bottom of the dialog box are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

New Program Wizard

Windows Installer

General
Requirements
Environment
Advanced
Windows Installer
MOM Maintenance
Summary
Progress
Confirmation

If you enable installation source management for this program, the .msi file will automatically return to the package files on an available distribution point to reinstall or repair the installation. Specify the Windows Installer product information to enable installation source management.

Click Import to specify the product code and the Windows Installer file.

Click Clear to clear these fields and disable installation source management of this product.

Windows Installer product code:

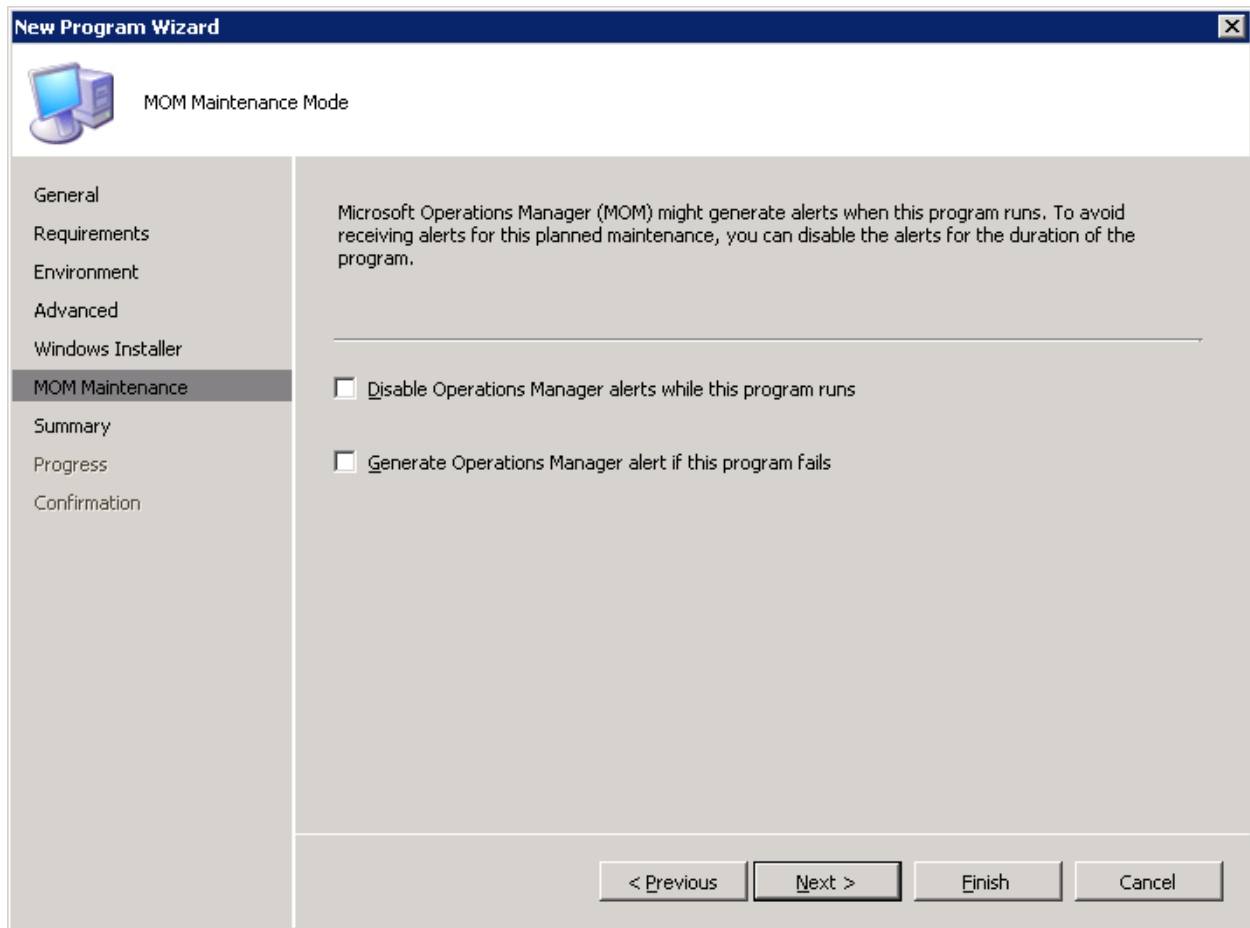
Windows Installer file:

Import... Clear

< Previous Next > Finish Cancel

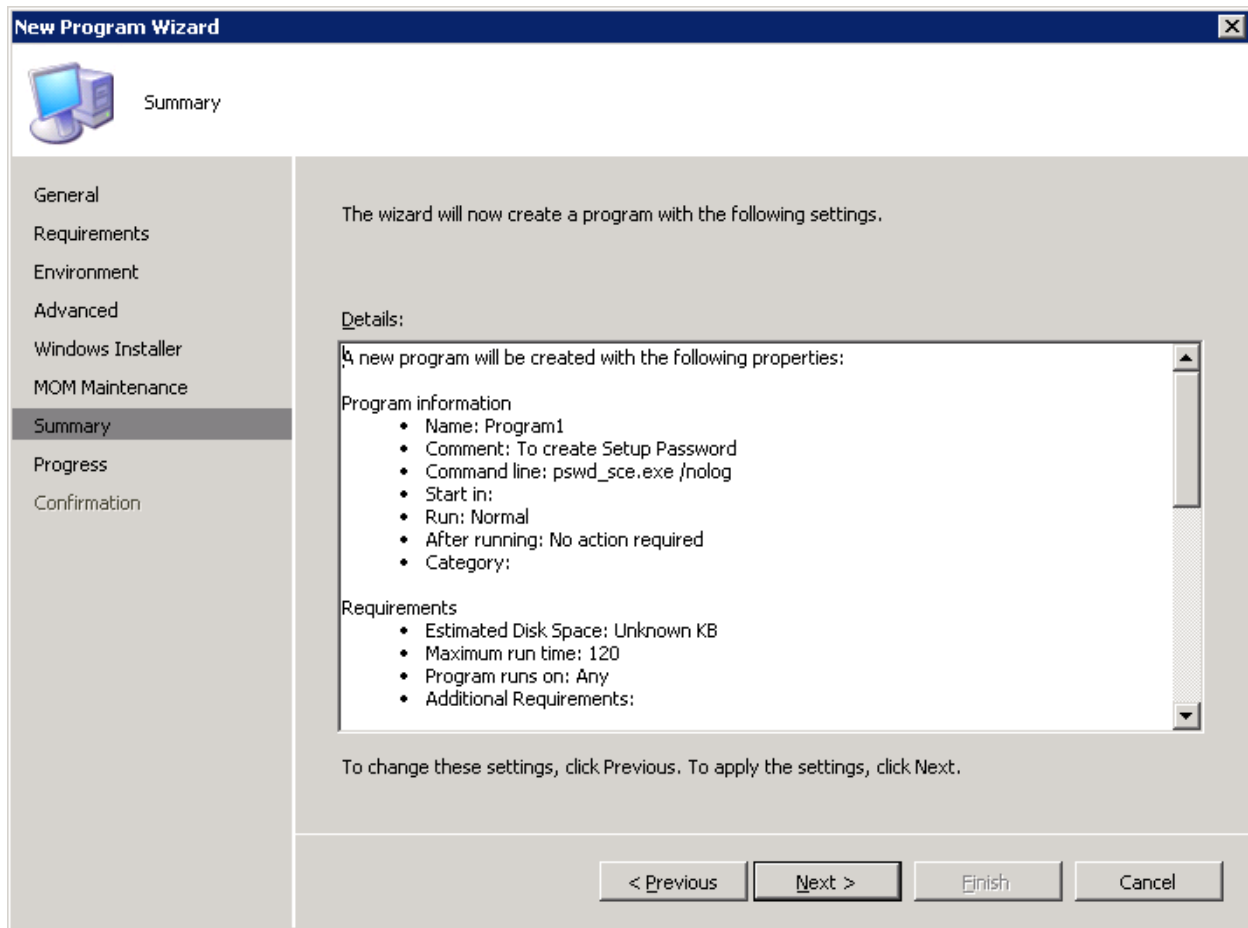
12. Click **Next**.

Figure 27. MOM options



13. Click **Next**.

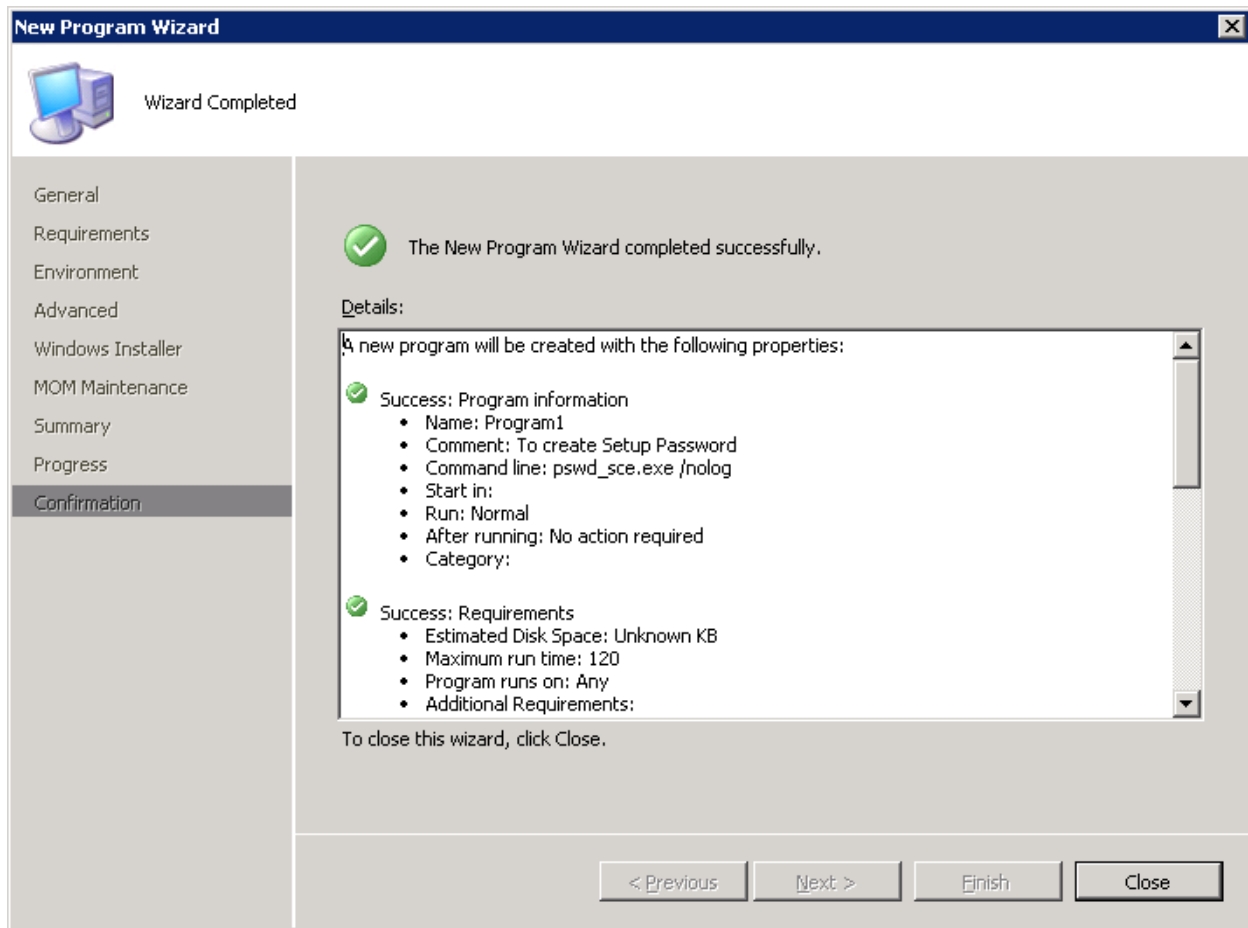
Figure 28. Summary details.



14. Click **Next**.

The New Program Wizard screen confirms successful creation, as shown below.

Figure 29. Successful wizard completion.



Program wizard for TPM activation

1. Follow the [steps mentioned in the section Program wizard for Setup Password creation](#)
2. Browse and specify the command line as SCE file name followed by /nolog option.

For example: tpm_sce /nolog

The above SCE package contains the BIOS Configuraiton file for TPM activation.

3. Click **Next**.

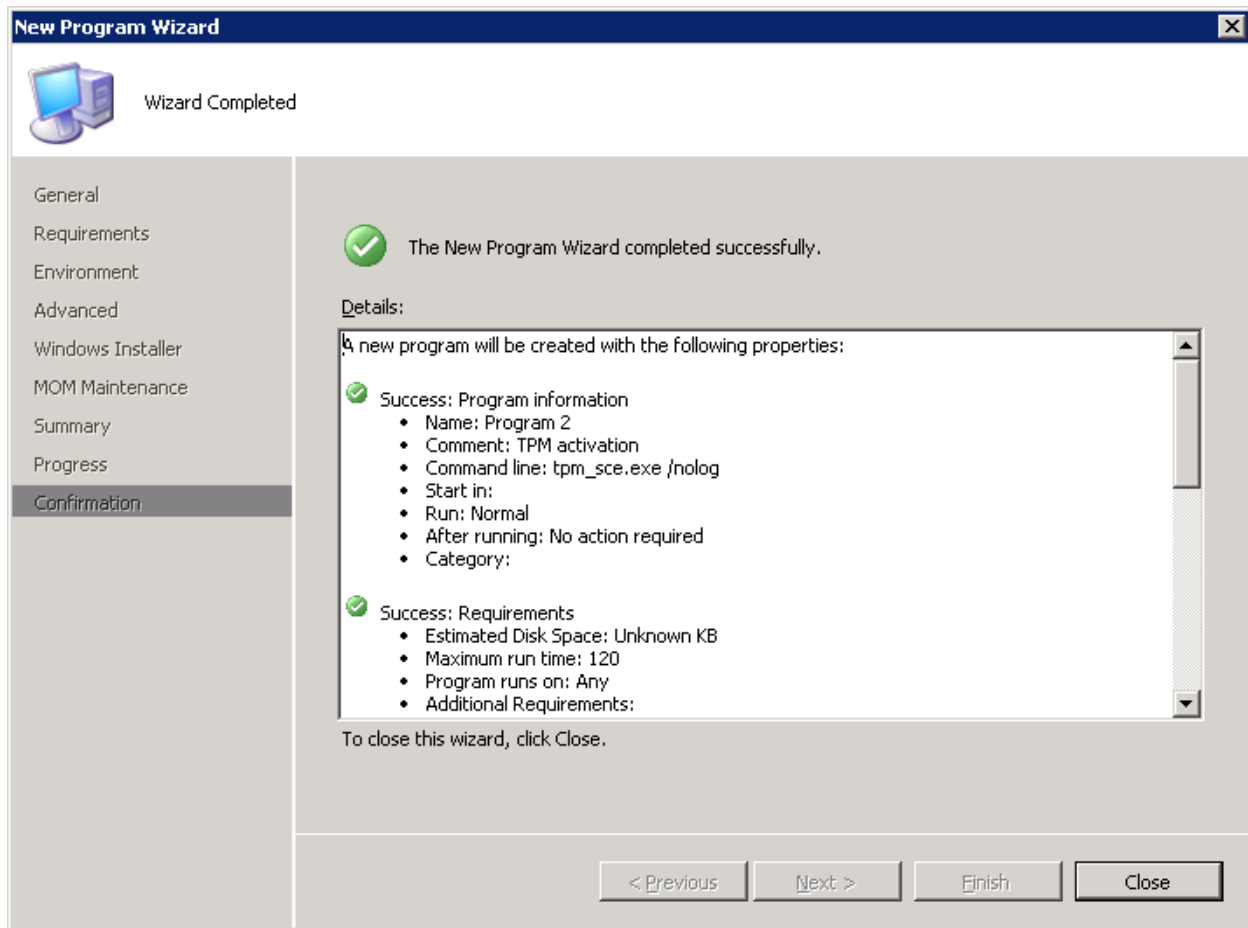
Figure 30. Naming the program.

The screenshot shows the 'New Program Wizard' dialog box with the 'General' tab selected. The 'Name' field contains 'Program 2'. The 'Comment' field contains 'TPM activation'. The 'Command line' field contains 'tpm_sce.exe /nolog'. The 'Start in' field is empty. The 'Run' dropdown menu is set to 'Normal'. The 'After running' dropdown menu is set to 'No action required'. The 'Category' dropdown menu is empty. The 'Next >' button is highlighted.

4. Click **Next** and then follow the same steps mentioned [above](#).

The successfully created program is confirmed in the following screen.

Figure 31. Successfully completed program.



Restarting client systems using the New Program Wizard

1. Follow the same steps mentioned [above](#).
2. Browse and specify the command line as the batch file, which contains system restart command.

For example: restart.bat

The above bat file contains the system restart command as “shutdown -r -t 0”.

3. Click **Next**.

Figure 32. Naming the program.

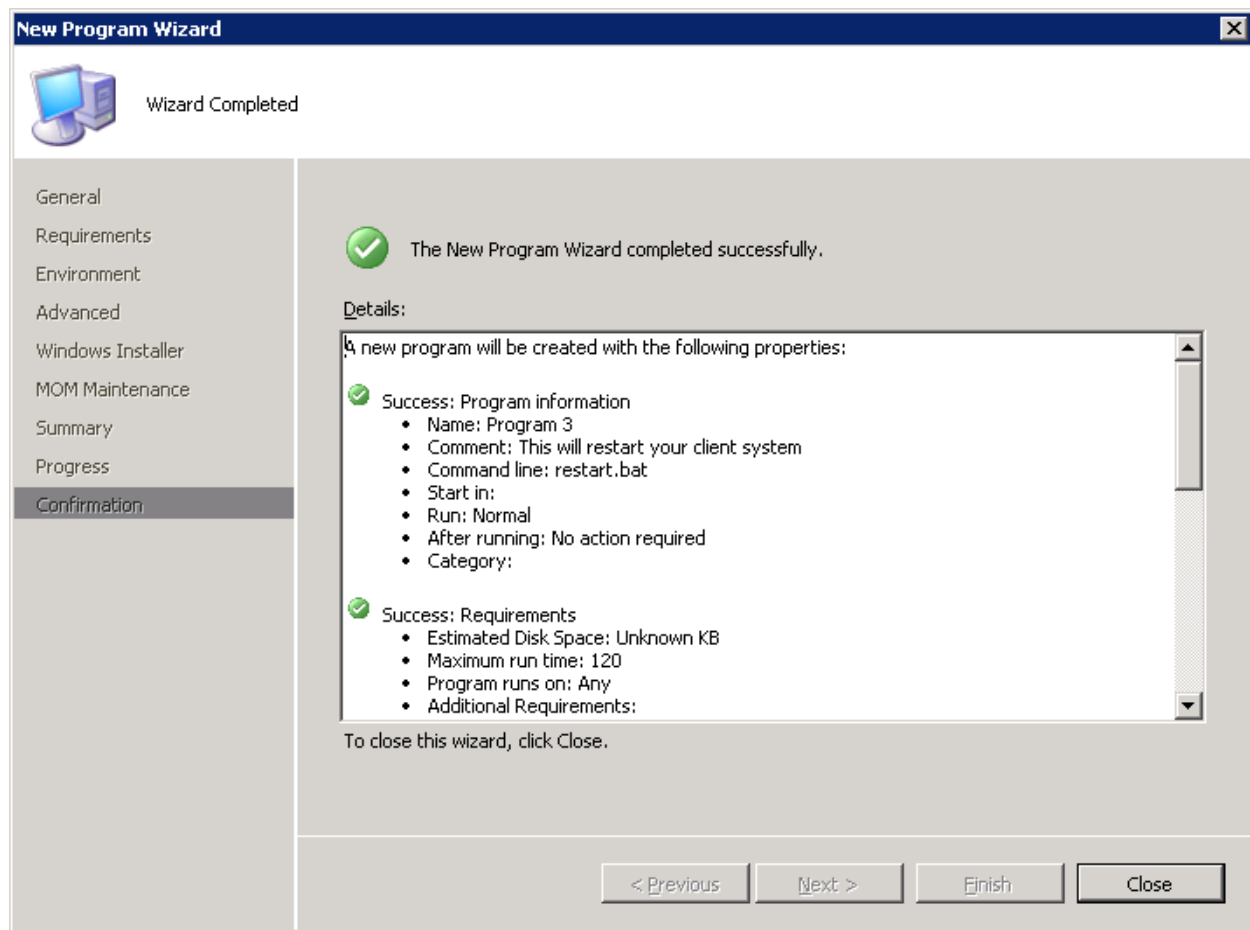
The screenshot shows the 'New Program Wizard' dialog box with the 'General' tab selected. The left sidebar lists the following steps: General, Requirements, Environment, Advanced, Windows Installer, MOM Maintenance, Summary, Progress, and Confirmation. The main area contains the following fields and options:

- Name:** Program 3
- Comment:** This will restart your client system
- Command line:** restart.bat (with a 'Browse...' button)
- Start in:** (empty text box)
- Run:** Normal (dropdown menu)
- After running:** No action required (dropdown menu)
- Category:** (empty dropdown menu)

At the bottom, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

4. Click **Next**, and then follow the same steps mentioned [above](#).
5. Confirm the New Program Wizard created successfully using the screen below.

Figure 33. Confirming wizard success.

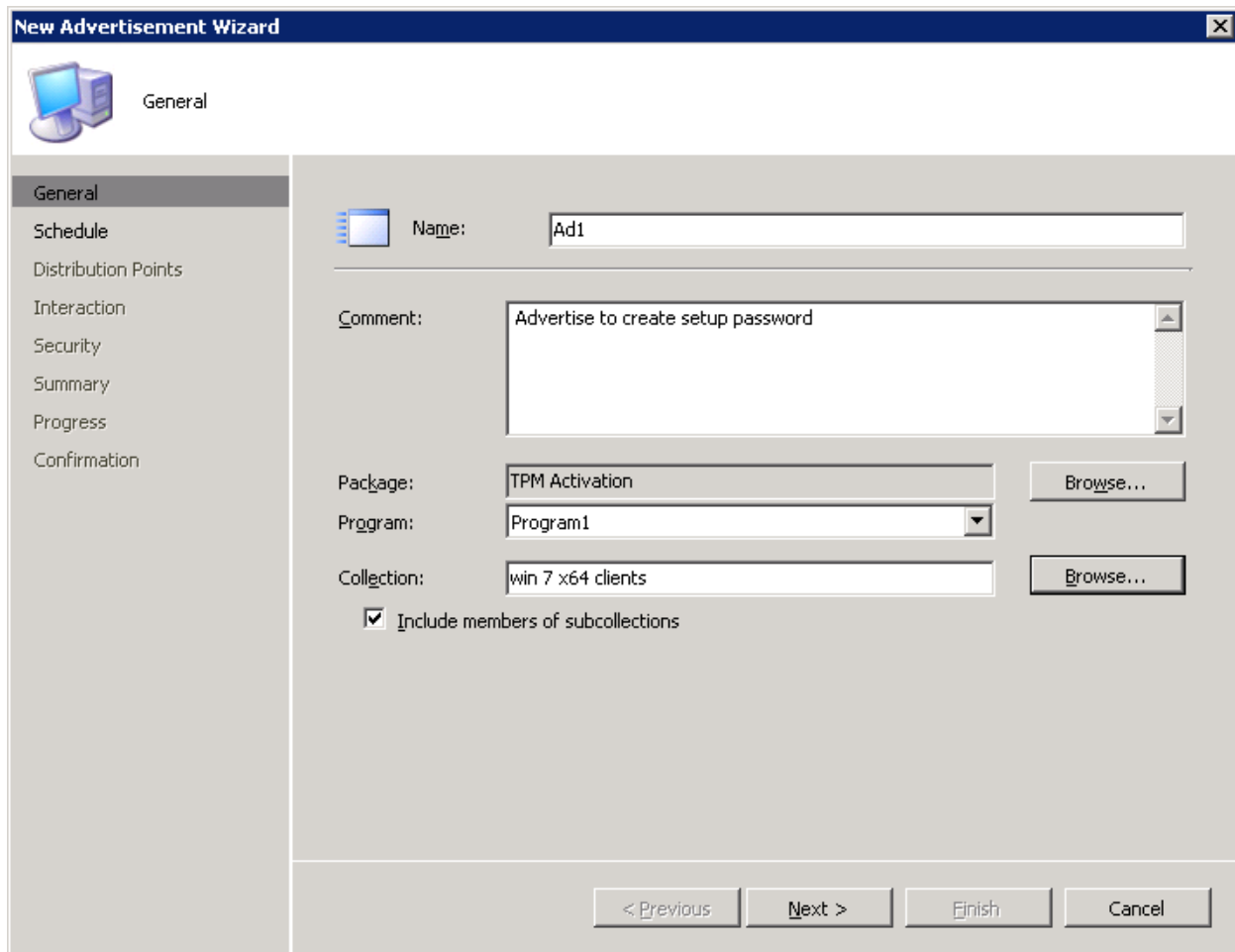


Creating an advertisement to run a Setup Password program

Create an advertisement that causes a Setup password program to run on a collection of clients.

1. In the Configuration Manager console, navigate to **System Center Configuration Manager > Site Database > Computer Management > Software Distribution**.
2. Right-click **Advertisements**, point to **New**, and then click **Advertisement**.
3. Specify an Advertisement name , Package Name , Program Name (for Setup Password) and Collection.
4. Click **Next**.

Figure 34. Specifying the advertisement name.

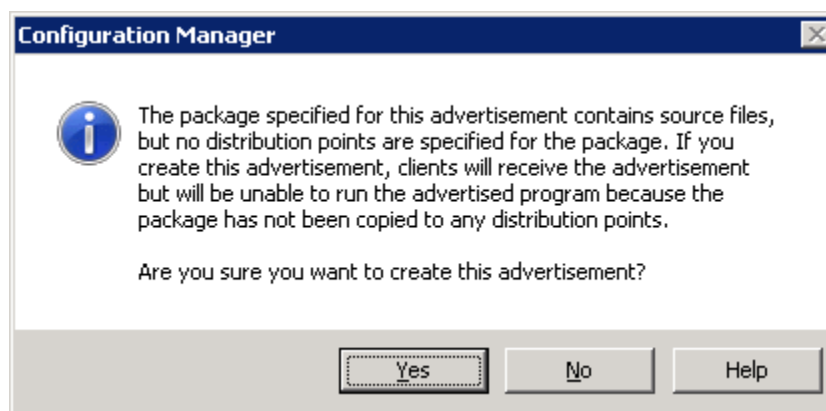


The 'New Advertisement Wizard' dialog box is shown with the 'General' tab selected. The left sidebar lists the steps: General, Schedule, Distribution Points, Interaction, Security, Summary, Progress, and Confirmation. The main area contains the following fields and controls:

- Name:** A text box containing 'Ad1'.
- Comment:** A text box containing 'Advertise to create setup password'.
- Package:** A text box containing 'TPM Activation' with a 'Browse...' button to its right.
- Program:** A dropdown menu showing 'Program1'.
- Collection:** A text box containing 'win 7 x64 clients' with a 'Browse...' button to its right.
- Include members of subcollections:** A checked checkbox.

At the bottom, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

a. Configuration Manager warning dialog.



The 'Configuration Manager' warning dialog box displays an information icon and the following text:

The package specified for this advertisement contains source files, but no distribution points are specified for the package. If you create this advertisement, clients will receive the advertisement but will be unable to run the advertised program because the package has not been copied to any distribution points.

Are you sure you want to create this advertisement?

At the bottom, there are three buttons: 'Yes', 'No', and 'Help'.

Figure 35. Click “Yes” of Configuration Manager dialog to create the advertisement.Specifying a run schedule.

New Advertisement Wizard

Schedule

General
Schedule
Distribution Points
Interaction
Security
Summary
Progress
Confirmation

Specify when the program will be advertised to members of the target collection. You can also create an assignment to make the program mandatory.

Advertisement start time:
8/ 1/2012 5:10 PM ☐ UTC

☒ Advertisement expires:
8/ 2/2012 5:10 PM ☐ UTC

Mandatory assignments:

As soon as possible

☐ Enable Wake On LAN

☐ Ignore maintenance windows when running program

☐ Allow system restart outside maintenance windows

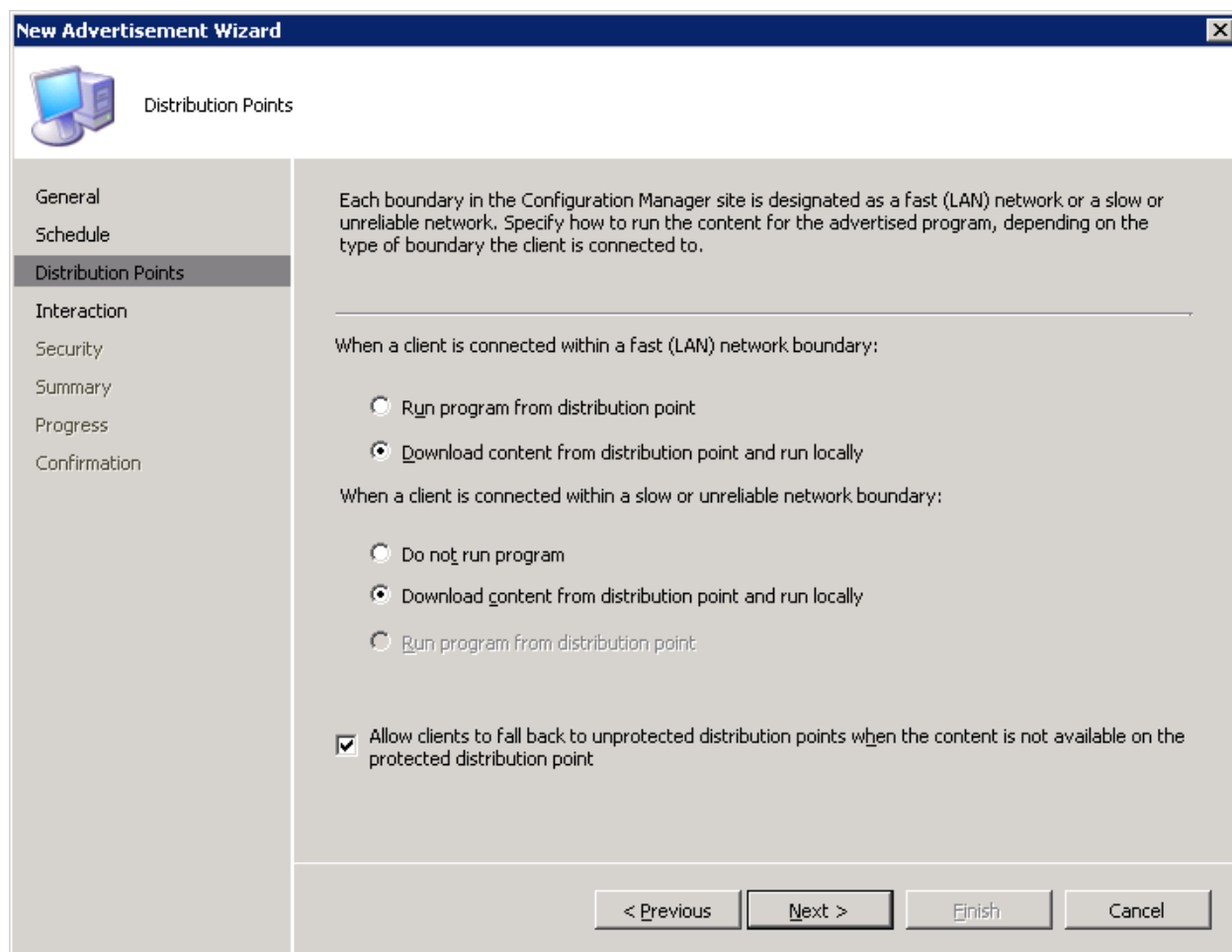
Priority: High

Program rerun behavior: Rerun if failed previous attempt

< Previous Next > Finish Cancel

5. Specify the run schedule.
6. Click Next.

Figure 36. Specifying how to run the content for the advertise program.



The screenshot shows the 'New Advertisement Wizard' dialog box, specifically the 'Distribution Points' step. The left sidebar contains a list of steps: General, Schedule, Distribution Points (highlighted), Interaction, Security, Summary, Progress, and Confirmation. The main area contains the following text: 'Each boundary in the Configuration Manager site is designated as a fast (LAN) network or a slow or unreliable network. Specify how to run the content for the advertised program, depending on the type of boundary the client is connected to.'

When a client is connected within a fast (LAN) network boundary:

- ☐ Run program from distribution point
- ☒ Download content from distribution point and run locally

When a client is connected within a slow or unreliable network boundary:

- ☐ Do not run program
- ☒ Download content from distribution point and run locally
- ☐ Run program from distribution point

☒ Allow clients to fall back to unprotected distribution points when the content is not available on the protected distribution point

At the bottom right, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

5. Specify the distribution point, and then click **Next**.

Figure 37. Specifying the security rights.

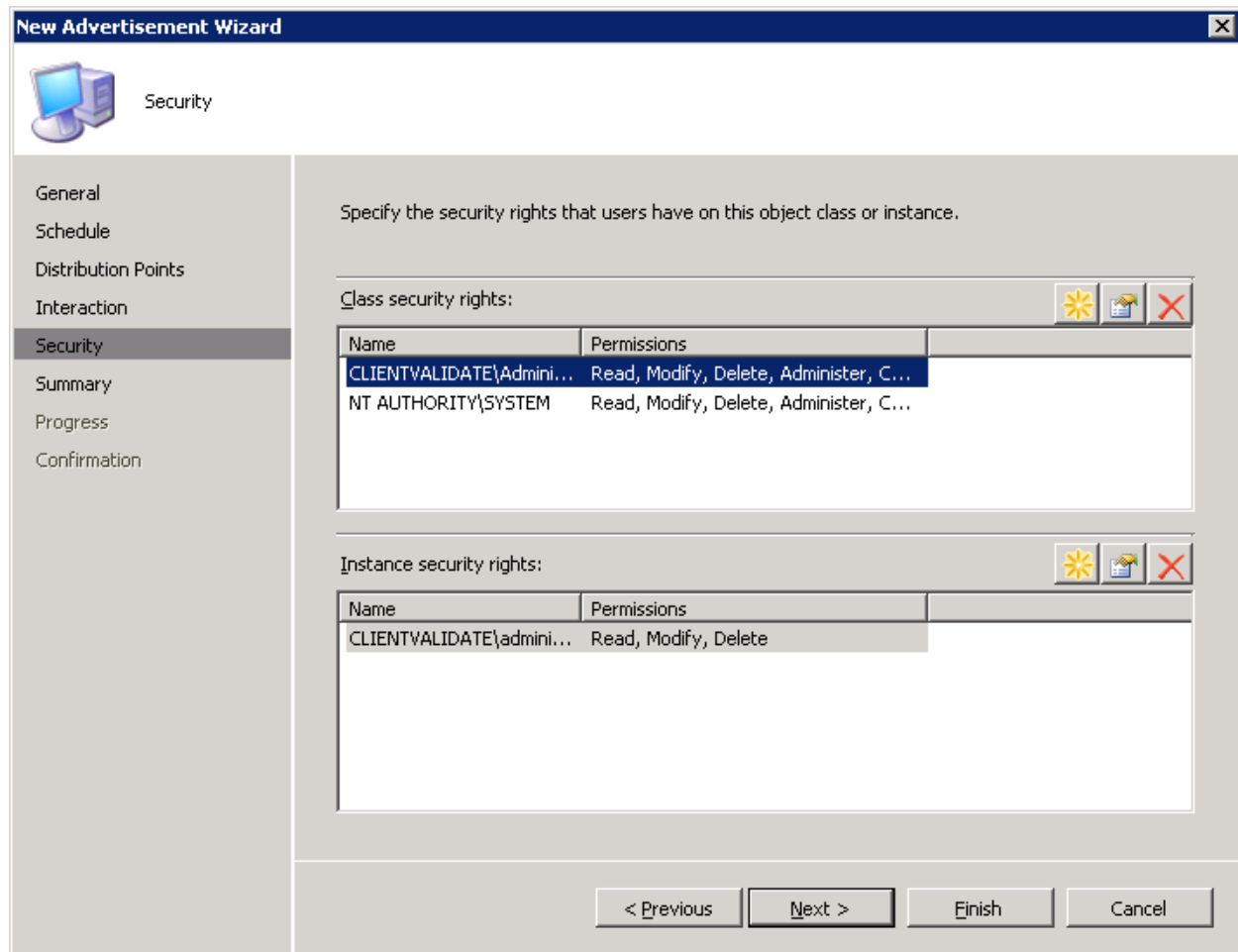
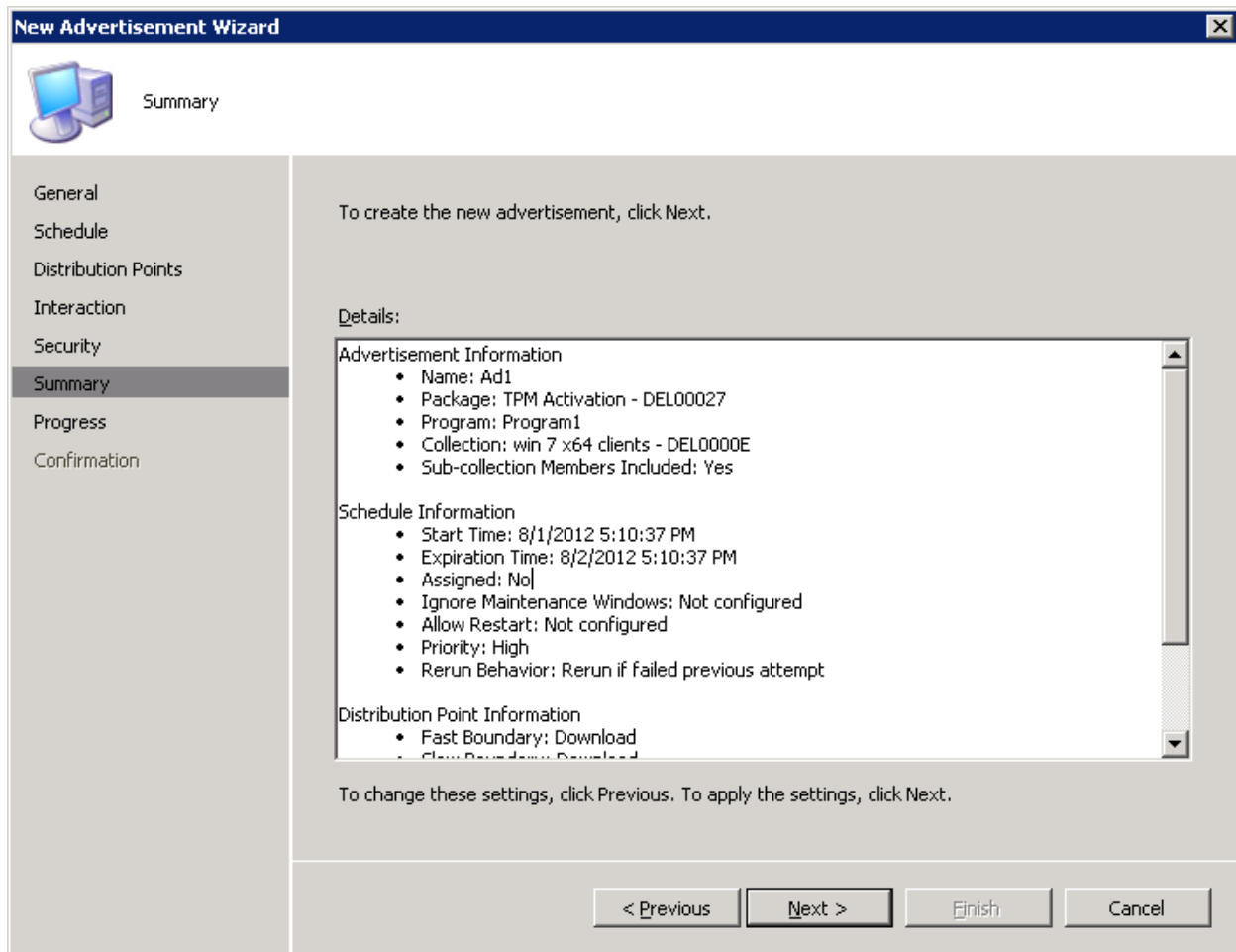


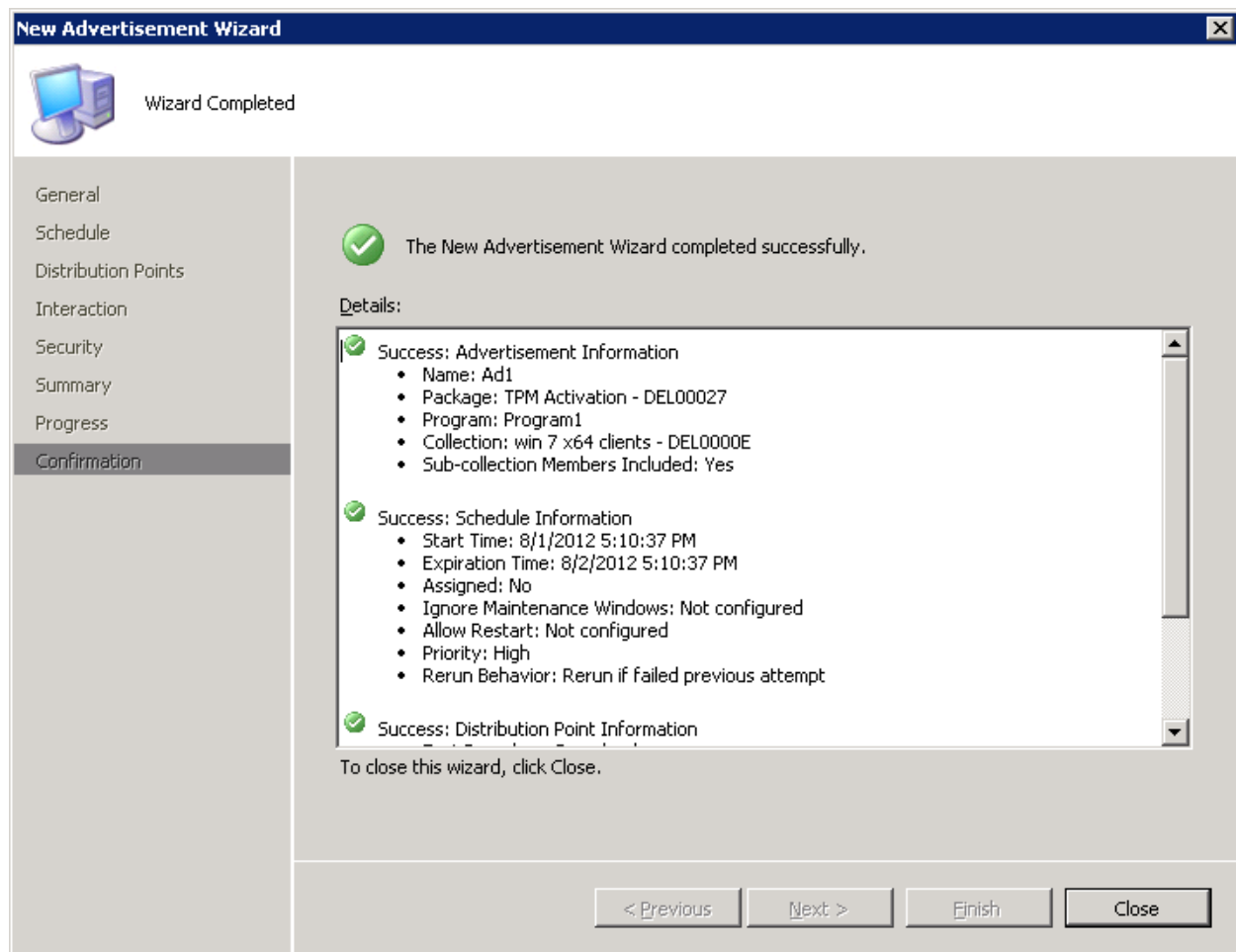
Figure 38. Summary of your configuration.



6. Click Next

New Advertisement for Setup password program is created.

Figure 39. Successful advertisement completion.



Creating an advertisement to run TPM activation program

Create an advertisement that causes a TPM activation program to run on a collection of clients.

1. In the Configuration Manager console, navigate to **System Center Configuration Manager > Site Database > Computer Management > Software Distribution**.
2. Right-click **Advertisements**, point to **New**, and then click **Advertisement**.
3. Specify the Advertisement name , Package Name , Program Name (for TPM activation) and Collection.
4. Click **Next**.

Figure 40. Naming the advertisement.

The screenshot shows the 'New Advertisement Wizard' dialog box with the 'General' tab selected. The left sidebar contains a list of tabs: General, Schedule, Distribution Points, Interaction, Security, Summary, Progress, and Confirmation. The main area contains the following fields and controls:

- Name:** A text box containing 'Ad2'.
- Comment:** A text area containing 'This will Enable TPM activation'.
- Package:** A text box containing 'TPM Activation' with a 'Browse...' button to its right.
- Program:** A dropdown menu showing 'Program 2'.
- Collection:** A text box containing 'win 7 x64 clients' with a 'Browse...' button to its right.
- Include members of subcollections:** A checked checkbox.

At the bottom of the dialog are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

5. Click **Next**
6. Make sure that for this Advertisement that the start time is later than the previous one.

Figure 41. Scheduling the advertisement.

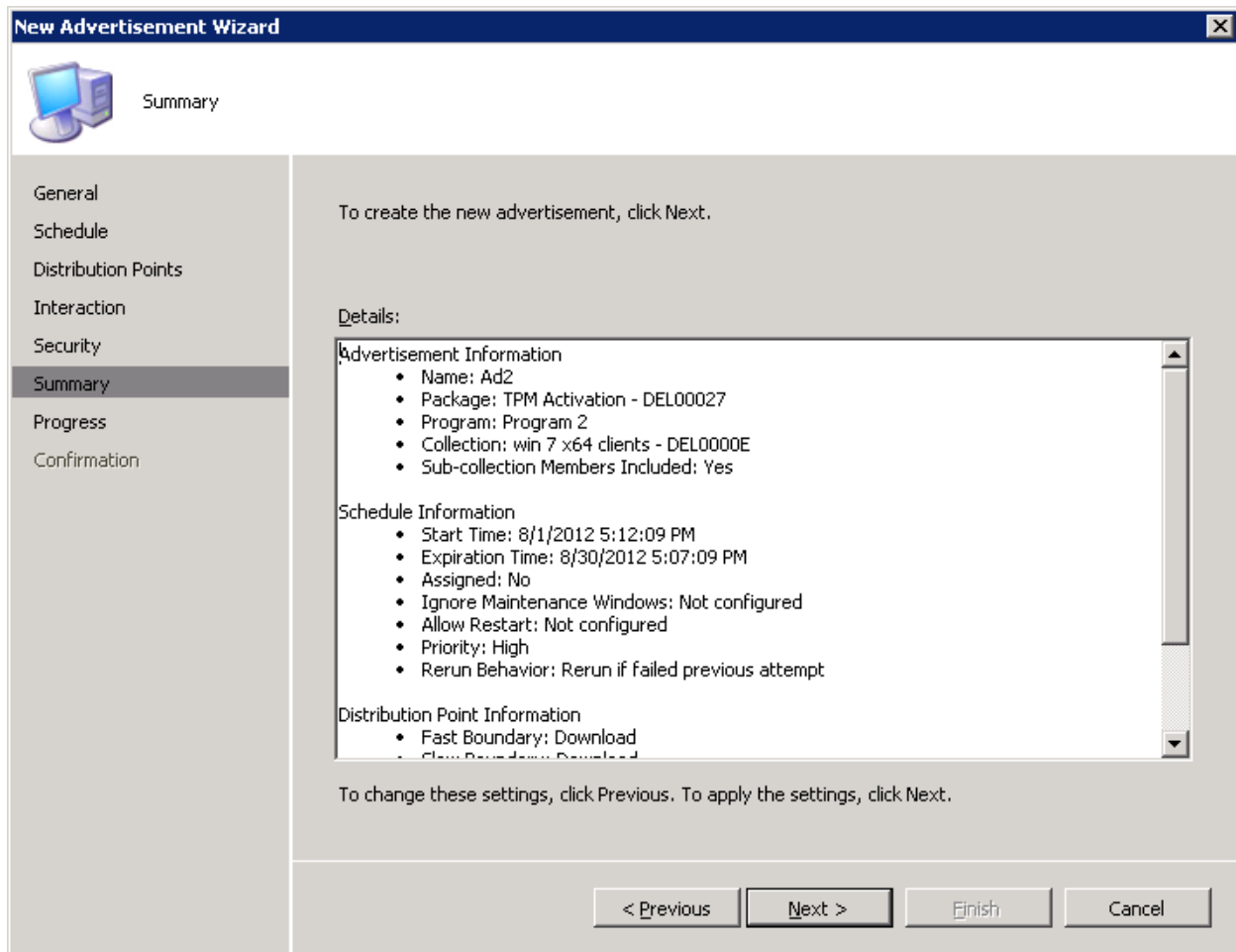
The screenshot shows the 'New Advertisement Wizard' window with the 'Schedule' tab selected. The left sidebar contains the following options: General, Schedule (selected), Distribution Points, Interaction, Security, Summary, Progress, and Confirmation. The main area contains the following settings:

- Specify when the program will be advertised to members of the target collection. You can also create an assignment to make the program mandatory.
- Advertisement start time: 8/ 1/2012 5:12 PM (UTC checkbox is unchecked)
- Advertisement expires: 8/30/2012 5:07 PM (UTC checkbox is unchecked)
- Mandatory assignments: As soon as possible (with icons for sun, document, and X)
- Enable Wake On LAN (checkbox is unchecked)
- Ignore maintenance windows when running program (checkbox is checked)
- Allow system restart outside maintenance windows (checkbox is unchecked)
- Priority: High (dropdown menu)
- Program rerun behavior: Rerun if failed previous attempt (dropdown menu)

At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

7. Click **Next** and follow the same steps mentioned above during Creating an advertisement to run a Setup Password program

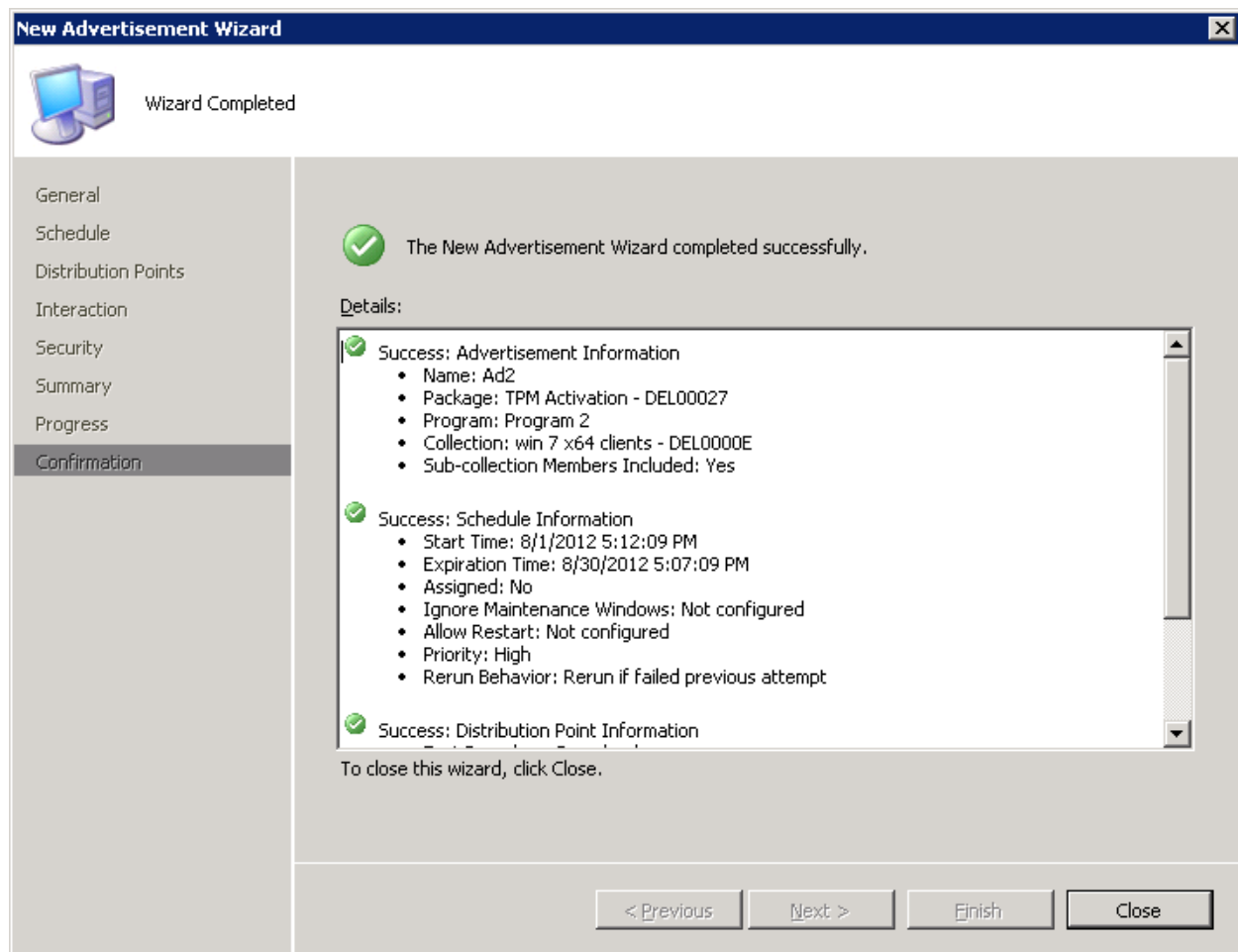
Figure 42. Summary of actions.



8. Click **Next**.

The new advertisement for TPM activation program is created.

Figure 43. The New Advertisement Wizard successfully completed.



Creating an advertisement to run restart client systems program

Create an advertisement that causes a restart program to run on a collection of clients.

1. In the Configuration Manager console, navigate to **System Center Configuration Manager > Site Database > Computer Management > Software Distribution**.
2. Right-click **Advertisements**, point to **New**, and then click **Advertisement**.
3. Specify Advertisement name , Package Name , Program Name (for system restart) and Collection.
4. Click **Next**

Figure 44. Creating a new advertisement.

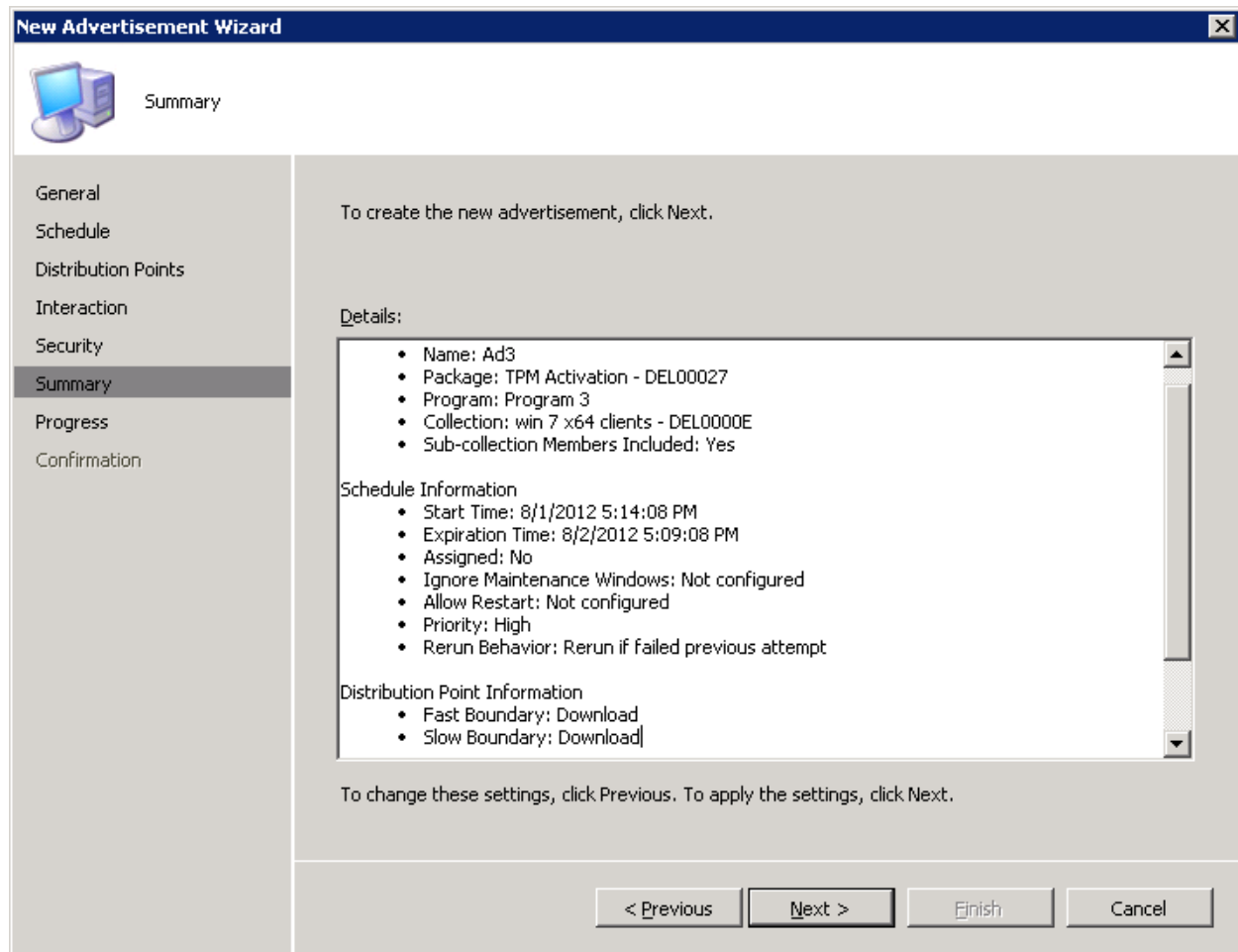
The screenshot shows the 'New Advertisement Wizard' dialog box with the 'General' tab selected. The left sidebar lists the steps: General, Schedule, Distribution Points, Interaction, Security, Summary, Progress, and Confirmation. The main area contains the following fields and controls:

- Name:** A text box containing 'Ad3'.
- Comment:** A text area containing 'This will restart the system'.
- Package:** A text box containing 'TPM Activation' with a 'Browse...' button to its right.
- Program:** A dropdown menu showing 'Program 3'.
- Collection:** A text box containing 'win 7 x64 clients' with a 'Browse...' button to its right.
- Include members of subcollections:** A checked checkbox.

At the bottom of the dialog are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

5. Click **Next**, and then follow the same steps mentioned in [Creating an advertisement to run a Setup Password program.](#)

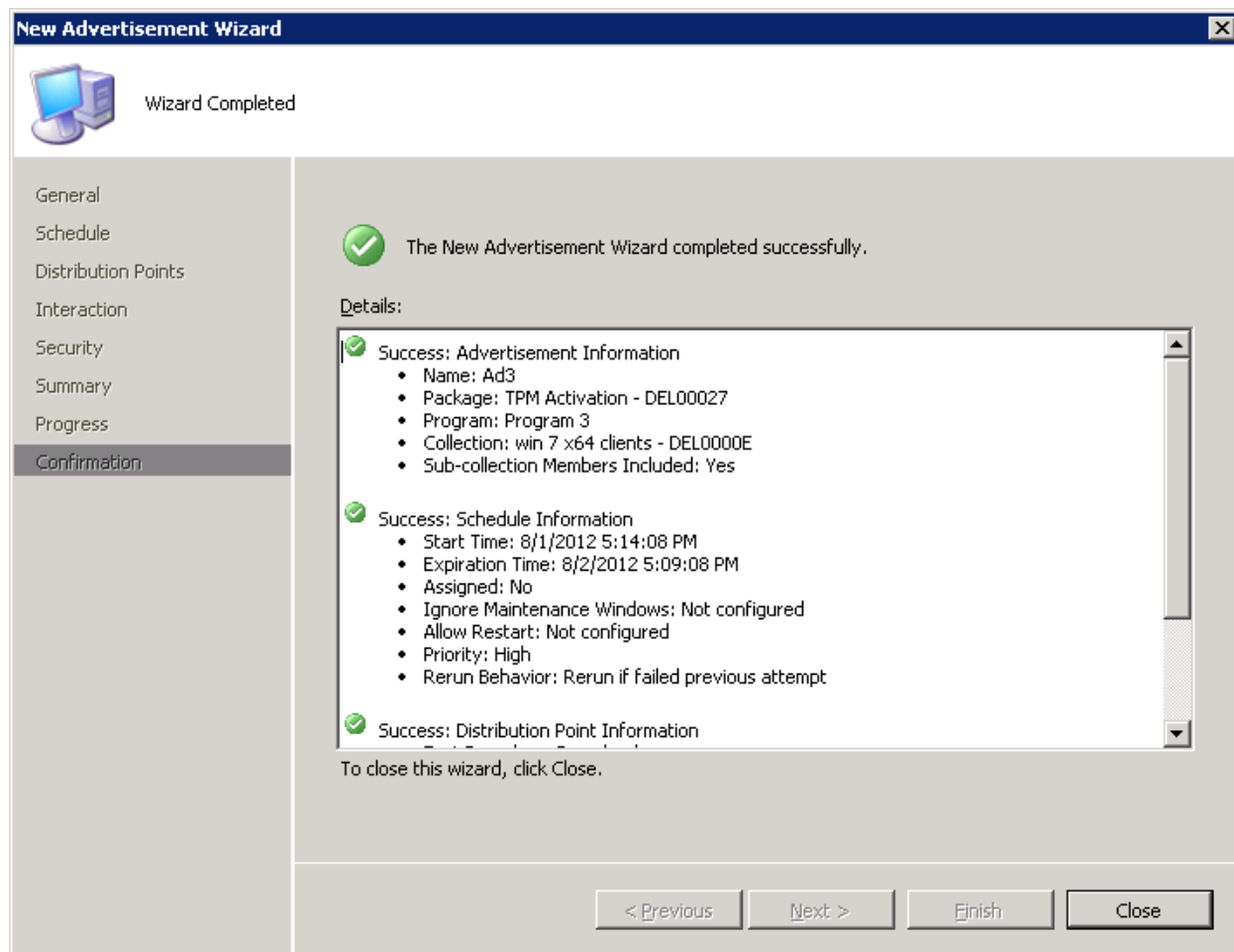
Figure 45. Review summary.



6. Click **Next**.

A new advertisement for system restart program was successfully created.

Figure 46. Confirm wizard completion.

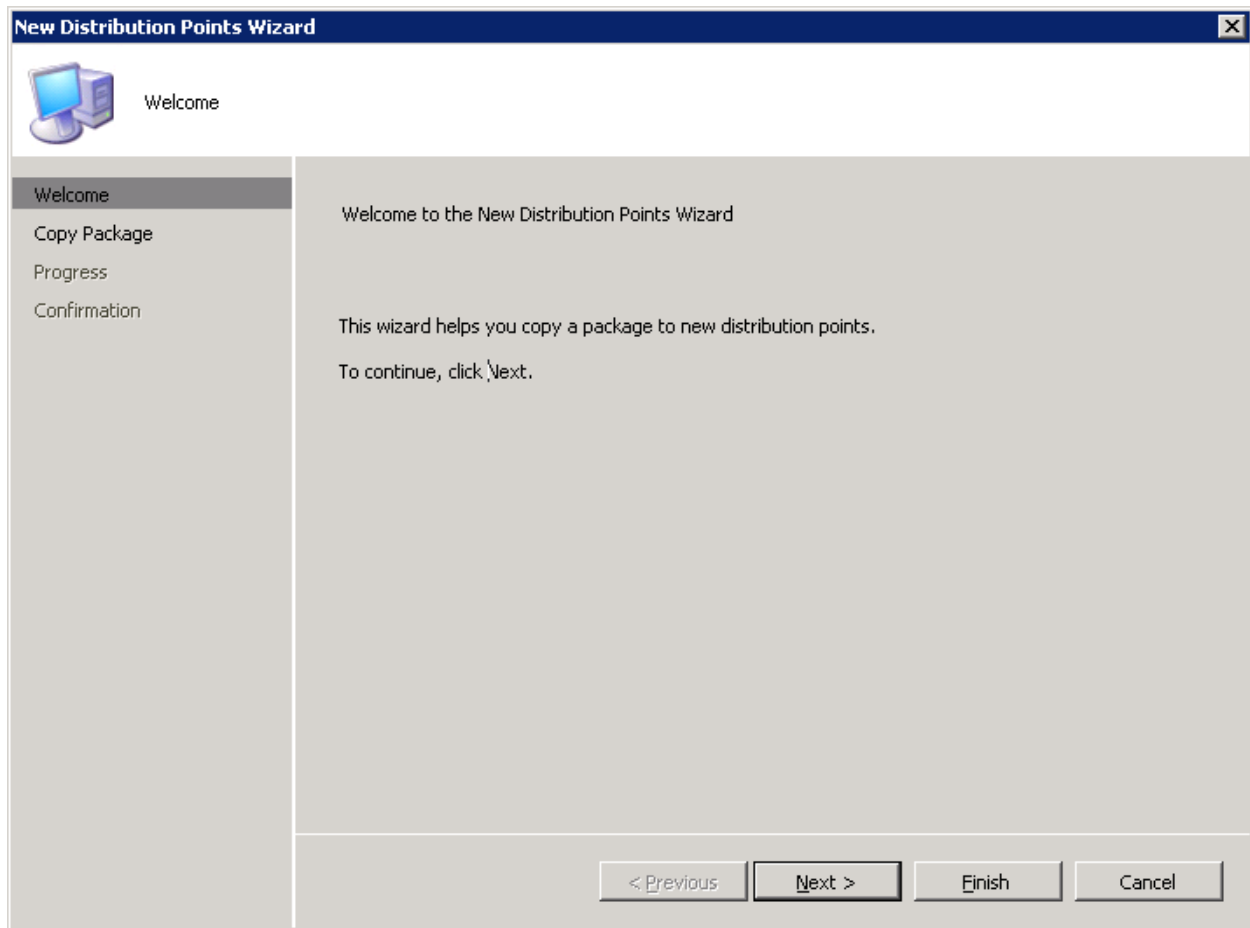


Creating and updating distribution points

Creating distribution points

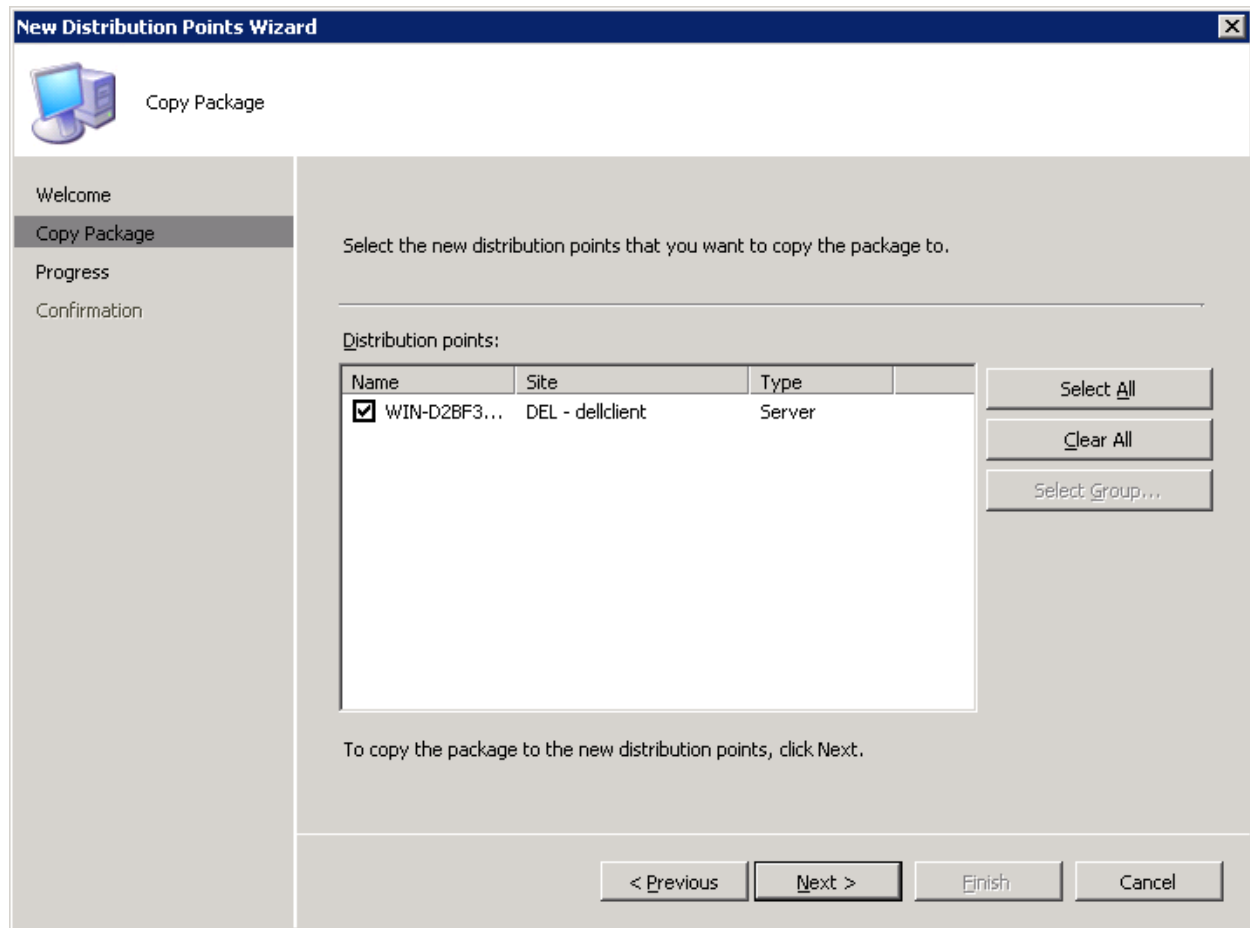
1. In the Configuration Manager console, navigate to **System Center Configuration Manager > Site Database > Computer Management > Software Distribution > Package > TPM Activation > <Distribution Points>**.
2. Right-click **Distribution Points**, and then click **New Distribution Points**.

Figure 47. The New Distribution Points Wizard.



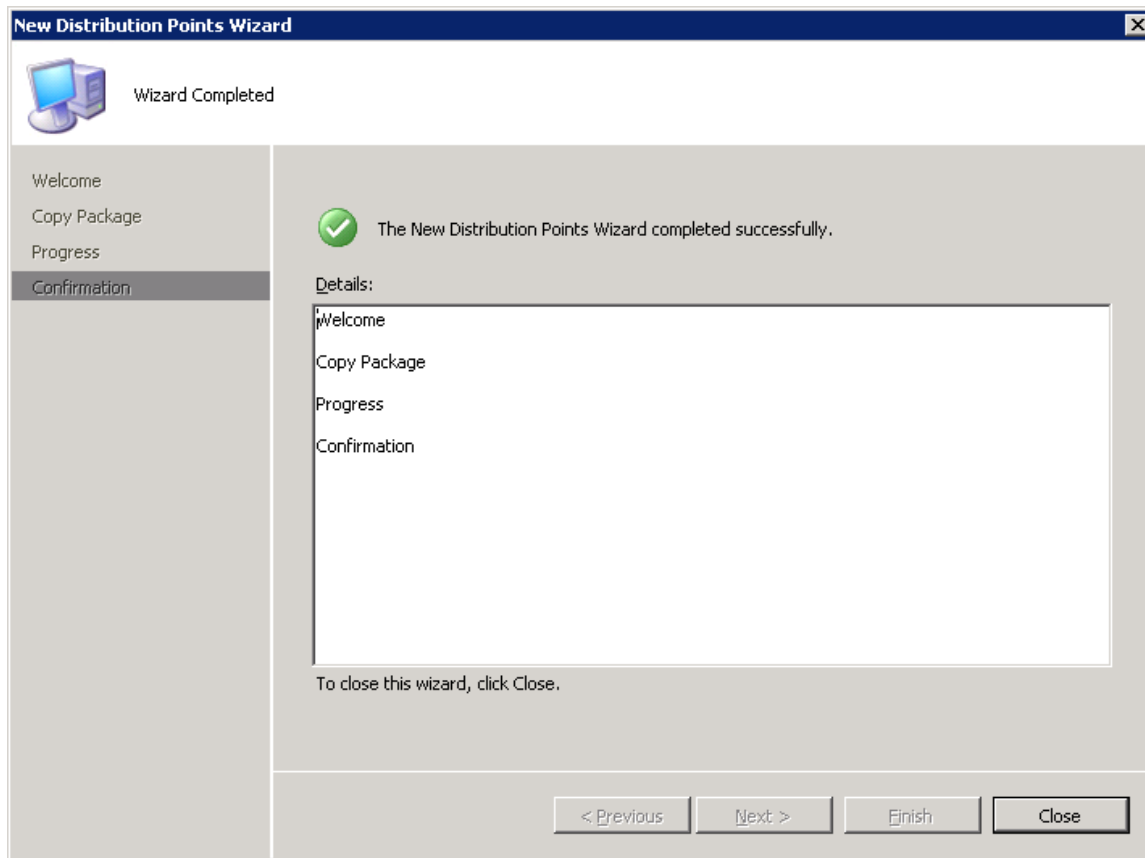
3. In the New Distribution Points Wizard, click **Next**.

Figure 48. Selecting the site server.



4. Select the site server.
5. Click Next.

Figure 49. Confirm successful wizard completion.

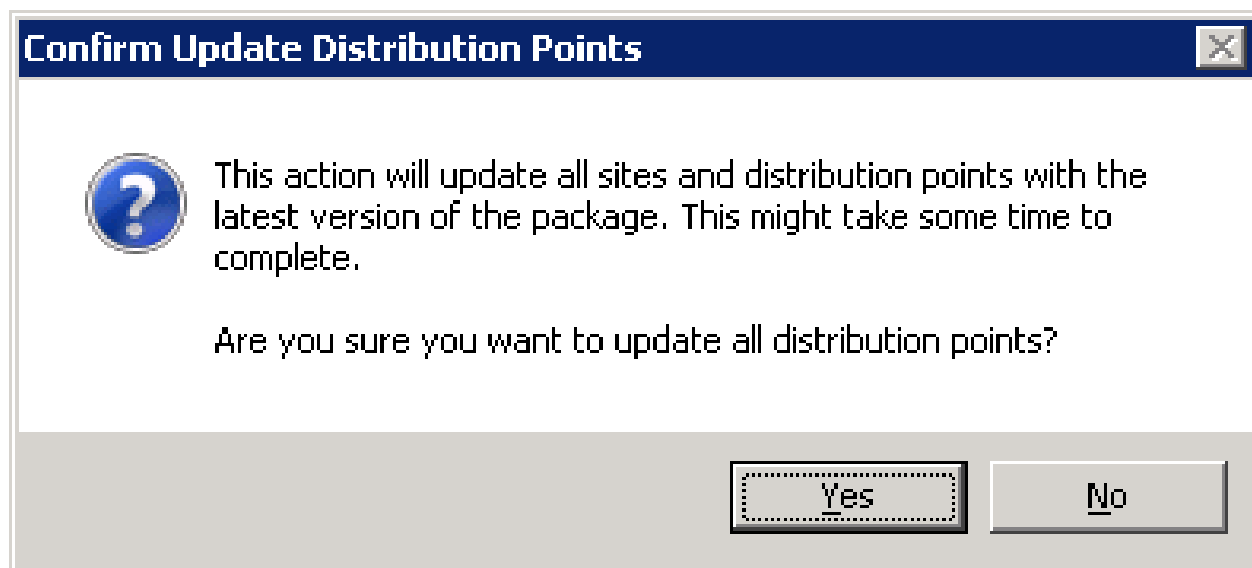


The New Distribution Points have successfully been created.

Update Distribution Points

1. In the Configuration Manager console, navigate to **System Center Configuration Manager > Site Database > Computer Management > Software Distribution > Package > TPM Activation > <Distribution Points>**.
2. Right-click **Distribution Points**, and then click **Update Distribution Points**.

Figure 50. Confirm Update Distribution Points



3. Click **Yes** to Continue.

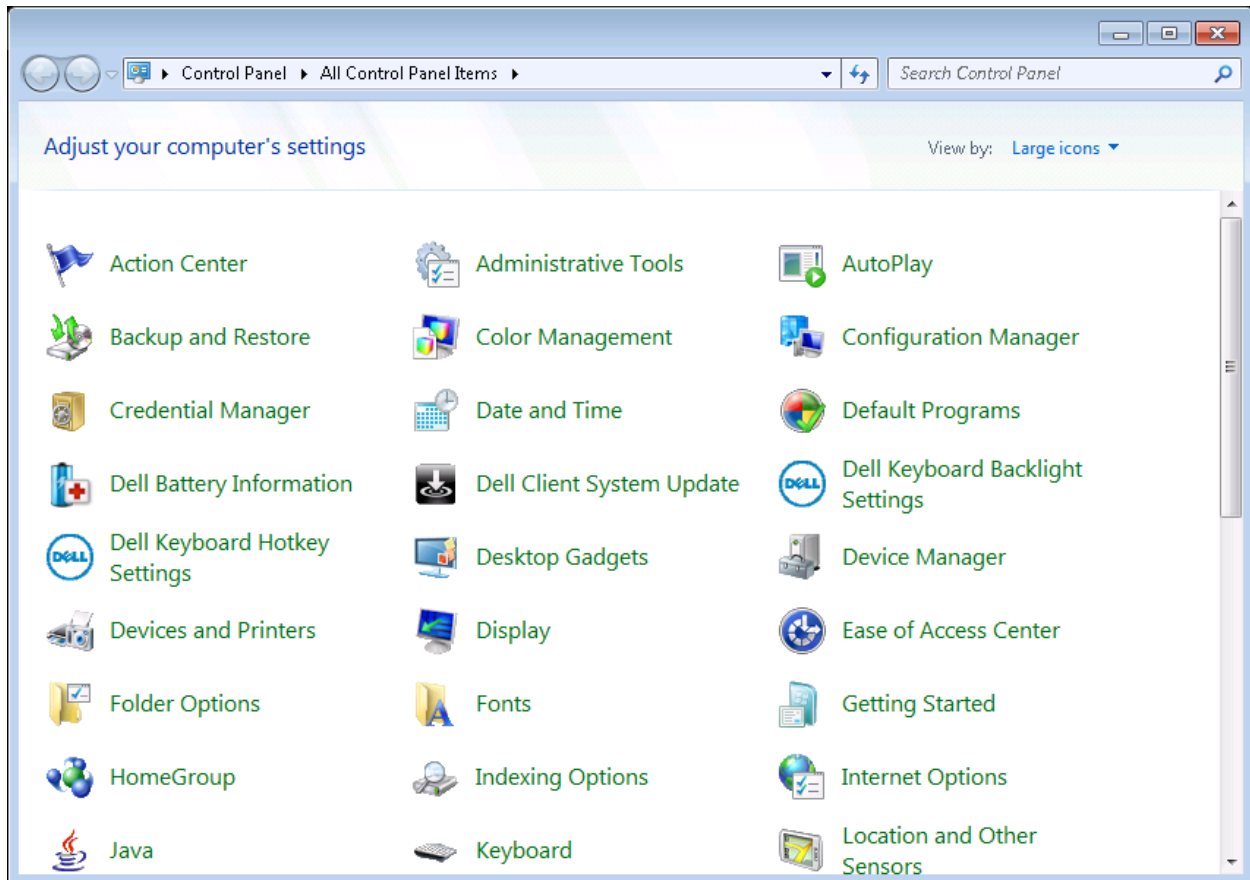
Distribution Points are updated.

Initiating client action using Configuration Manager

Next initiate the Client action on the target client systems to see the advertised programs. For initiating the Client actions on clients, use the following steps:

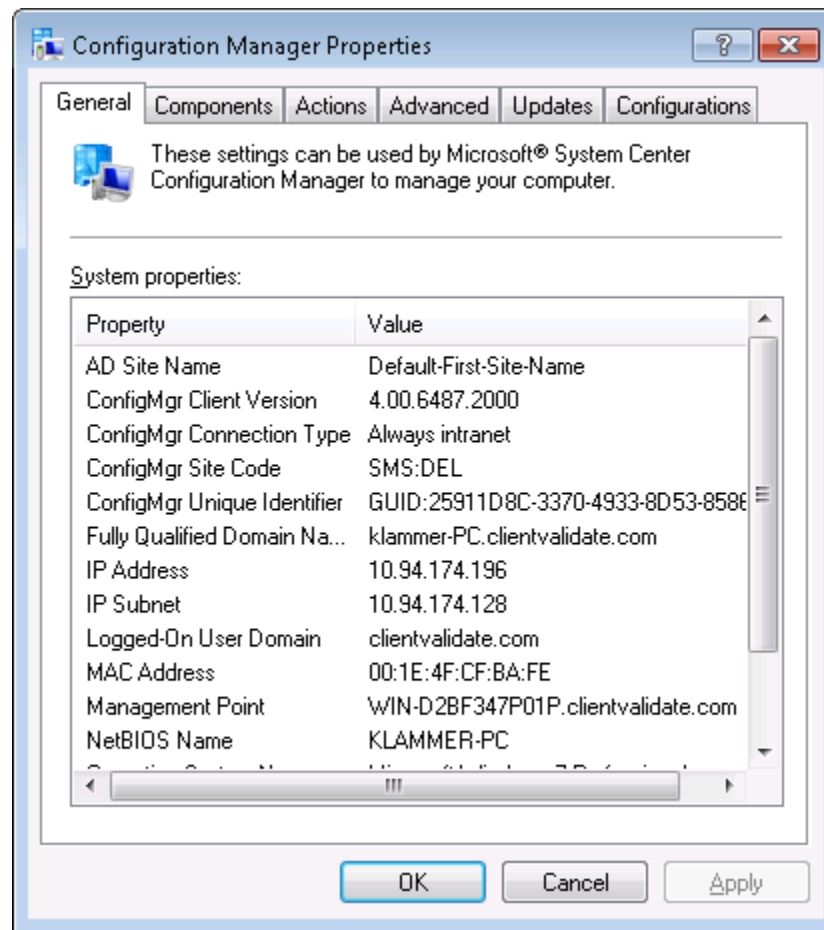
For Windows 7 /Vista Operating systems:

Figure 51. Initiating the Client action on a Window's system.



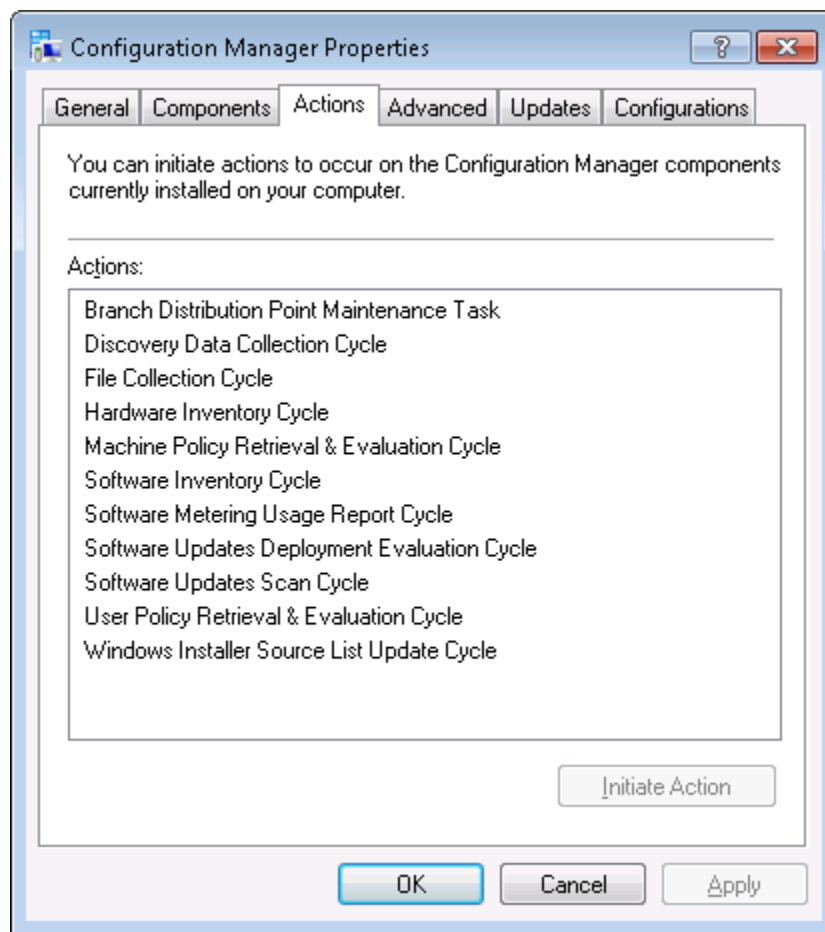
1. Go to Control Panel.
2. Select View by Large icons.
3. Select Configuration Manager.

Figure 52. Configuration Manager Properties window.



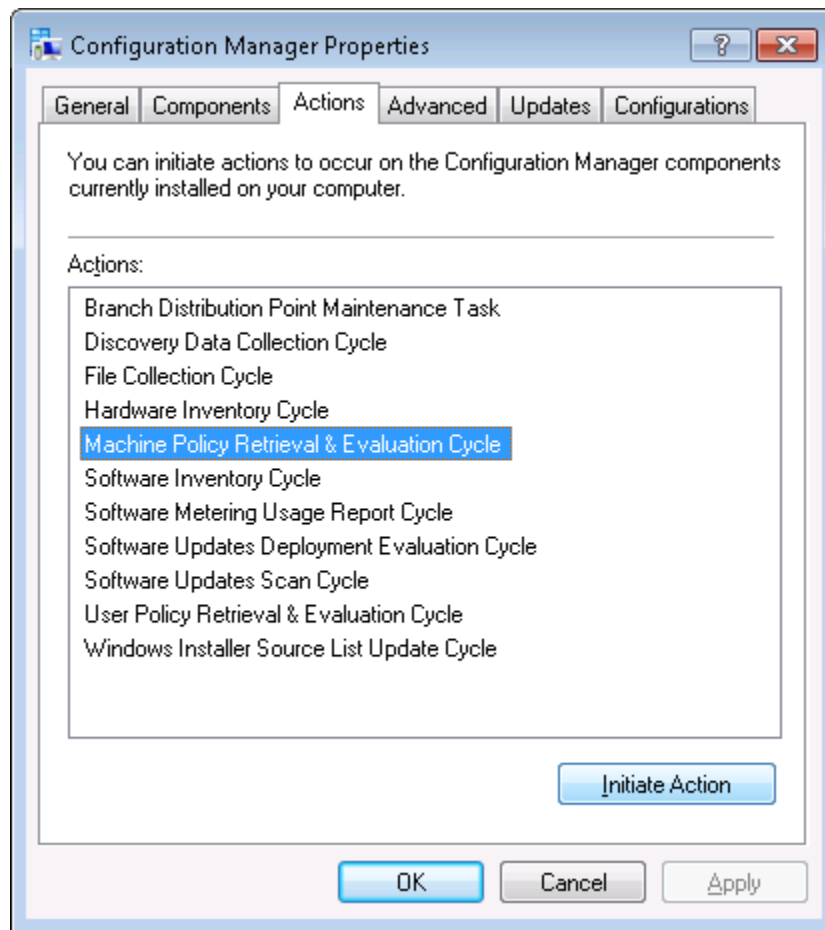
Configuration Manager Properties displays the settings used by your system.

Figure 53. Selecting the Actions tab.



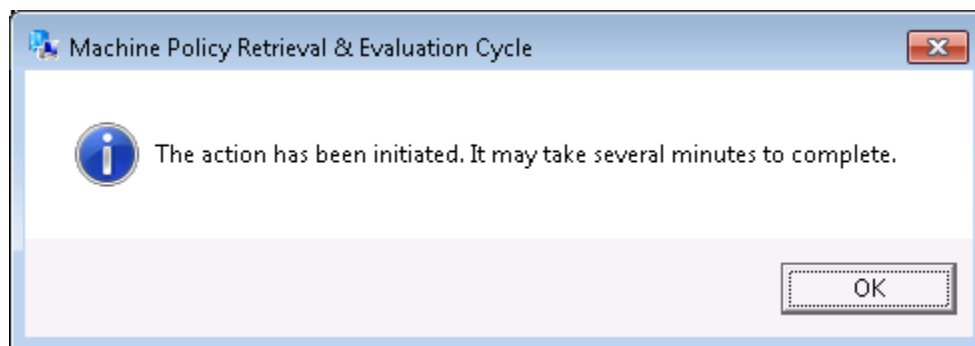
4. On the Configuration Manager Properties window, select **Actions** tab.

Figure 54. Machine Policy Retrieval & Evaluation Cycle.



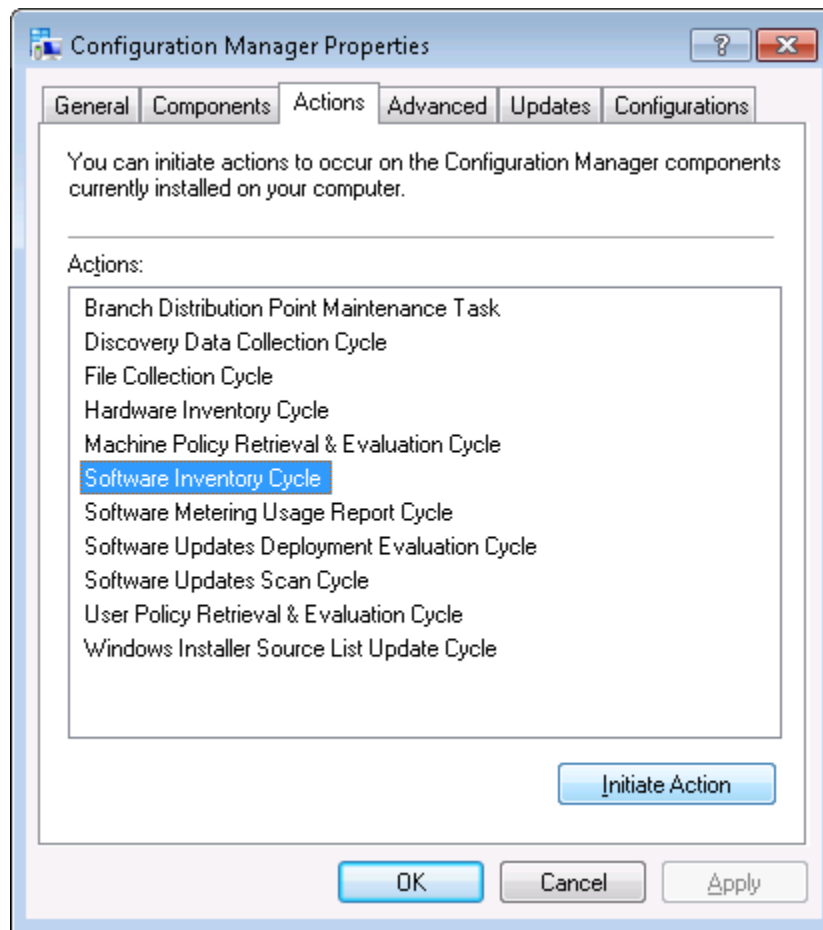
5. Select **Machine Policy Retrieval & Evaluation Cycle**.
6. Click **Initiate Action**.

Figure 55. This action may take a few minutes.



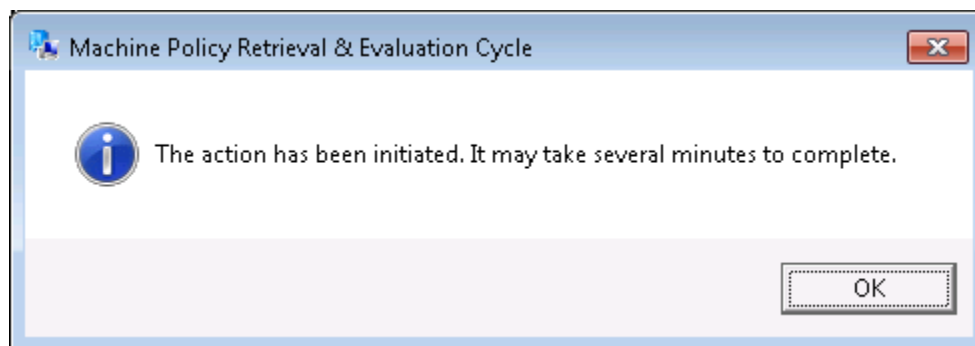
7. Click **OK**.

Figure 56. Software Inventory Cycle.



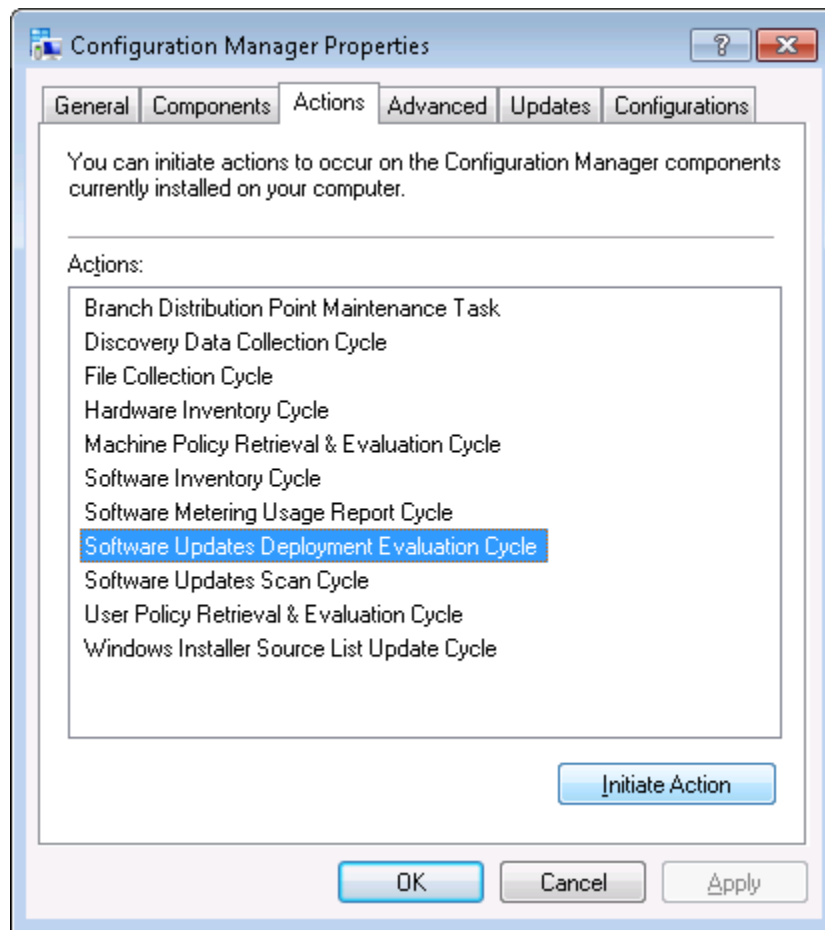
8. Select **Software Inventory Cycle**.
9. Click **Initiate Action**.

Figure 57. This action may take several minutes.



10. Click **OK**.

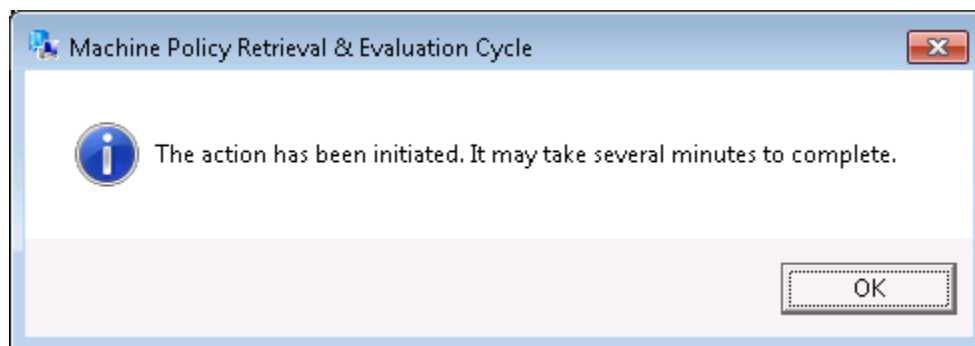
Figure 58. Software Update Deployment Evaluation Cycle.



11. Select **Software Update Deployment Evaluation Cycle**.

12. Click **Initiate Action**.

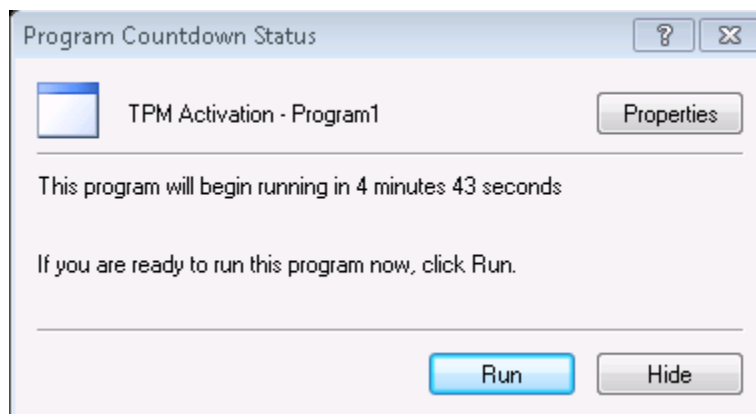
Figure 59. This action may take a few minutes.



13. Click **OK**.

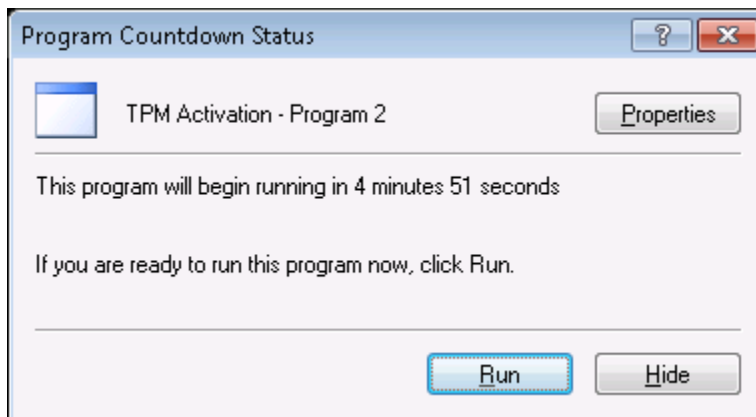
The above cycles initiate the actions on the target systems and display the pop-up.

Figure 60. TPM Activation - Program 1.



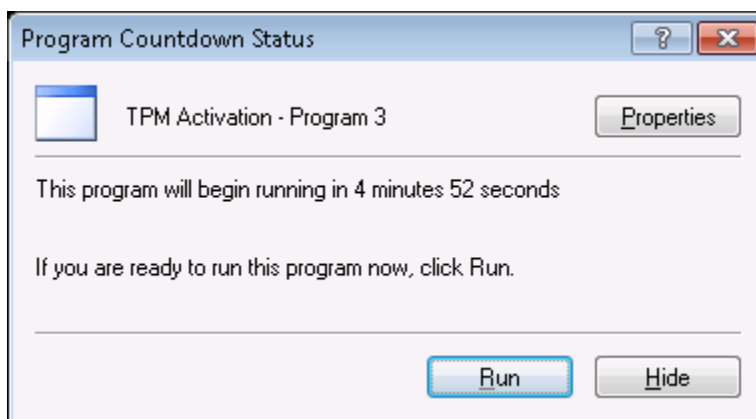
14. Click **Run**.

Figure 61. TPM Activation - Program 2.



15. Click **Run**.

Figure 62. TPM Activation - Program 3.



16. Click **Run**.

The above program - **Program 3** restarts the systems.

Note: Wait until the booting of the operating system completes before taking another action.

Summary

You can successfully verify TPM activation on the target client systems.

Verify this by running CCTK commands like: `cctk --tpm` and `cctk --tpmactivation`, which show output as “on” and “activate” respectively.

Additional Resources

- CCTK on Dell Tech Center
<http://en.community.dell.com/techcenter/systems-management/w/wiki/1952.dell-client-configuration-toolkit.aspx>
- Download latest version of CCTK from [Support.dell.com](http://support.dell.com) or <ftp.dell.com>
- More information: <http://en.community.dell.com/techcenter/systems-management/w/wiki/1773.aspx>
- CCTK Documentation
<http://support.dell.com/support/edocs/SOFTWARE/smcctk/>
[TPM Activation Video](#)