

Microsoft System Center 2012 Configuration Manager RTM Operating System Deployment

Apr .1 2012



1. Deploy Environment Introduction :

This operations process including four servers.

1. DC :

Role : ADDS + ADCS + DHCP

OS : Windows Server 2008 R2 Enterprise Edition with SP1

IE : IE 9.0

IP : 192.168.0.100/24

DNS: 192.168.0.100

2. ConfigMgr2012 :

Role : SC2012 ConfigMgr RTM + SC2012 ConfigMgr Database

OS : Windows Server 2008 R2 Enterprise Edition with SP1

IE : IE 9.0

IP : 192.168.0.101/24

DNS : 192.168.0.100

3. Client :

Role : Domain Member and SC2012 ConfigMgr RTM Client

OS : Windows 7 Enterprise Edition with SP1 x64

IE : IE 9.0

IP : 192.168.0.200/24

DNS : 192.168.0.100

4. BareMetal :

2. Deploy Active Directory :

- 1) Logon to **DC** server , installing **ADDS**、**ADCS** and **DHCP** . Domain name is **Contoso.msft** . Active Directory forest functional level is **Windows Server 2008 R2**.

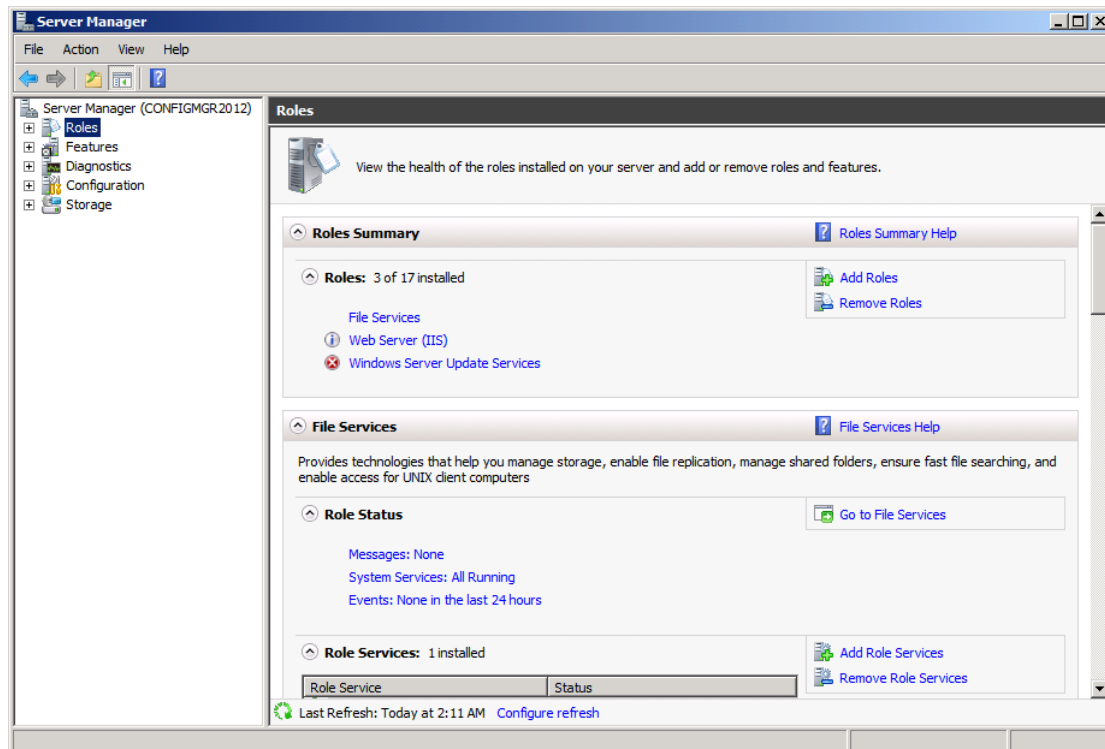
This process is no longer described in this part.

3. Deploy and Configure SC2012 ConfigMgr RTM :

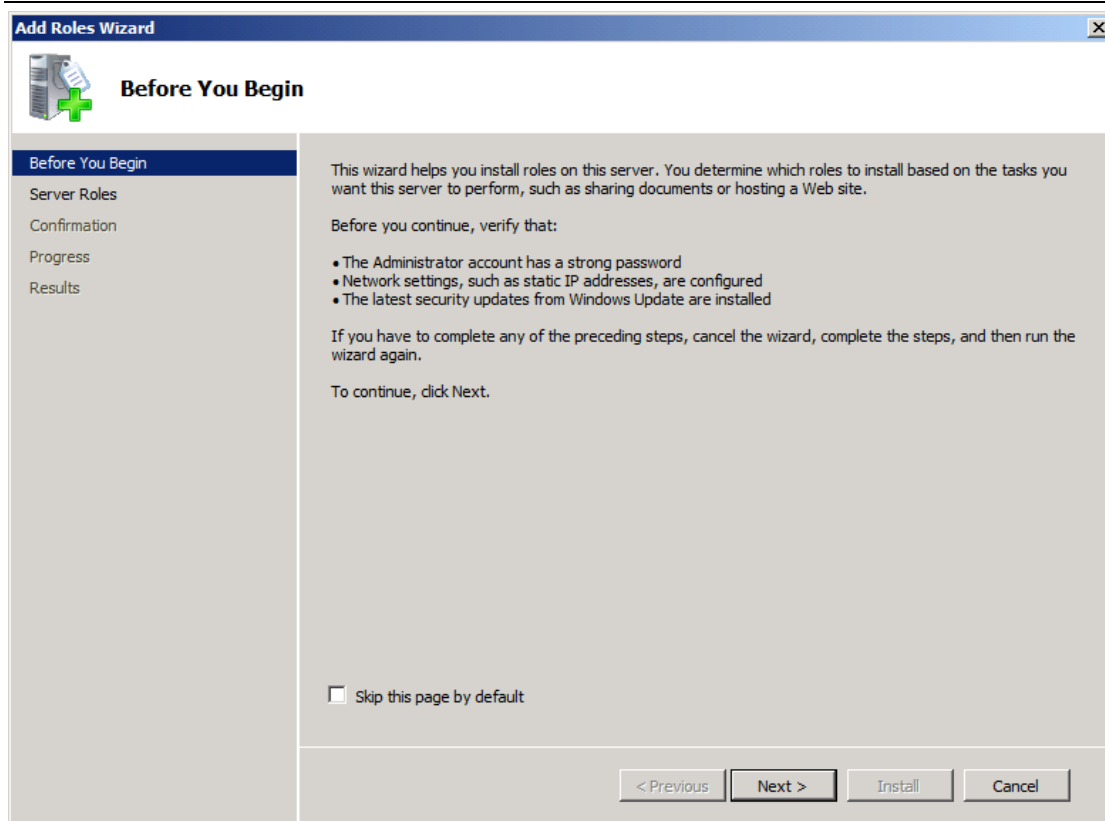
- 1) This process is no longer described in this part. You can reference 《**System Center 2012 Configuration Manager RTM Deployment Document**》 .
- 2) Default as you have already deployed and no any error.
- 3) SC2012 ConfigMgr RTM need to configuration , about this part , you can reference 《 **System Center 2012 Configuration Manager RTM Configure Document**》

4. Configuring a Distribution Point to Support PXE :

1) Logon to **ConfigMgr2012** server , on the **Start** menu , point to **Administrative Tools** , and then click **Server Manager** , in the tree pane , click **Roles** :

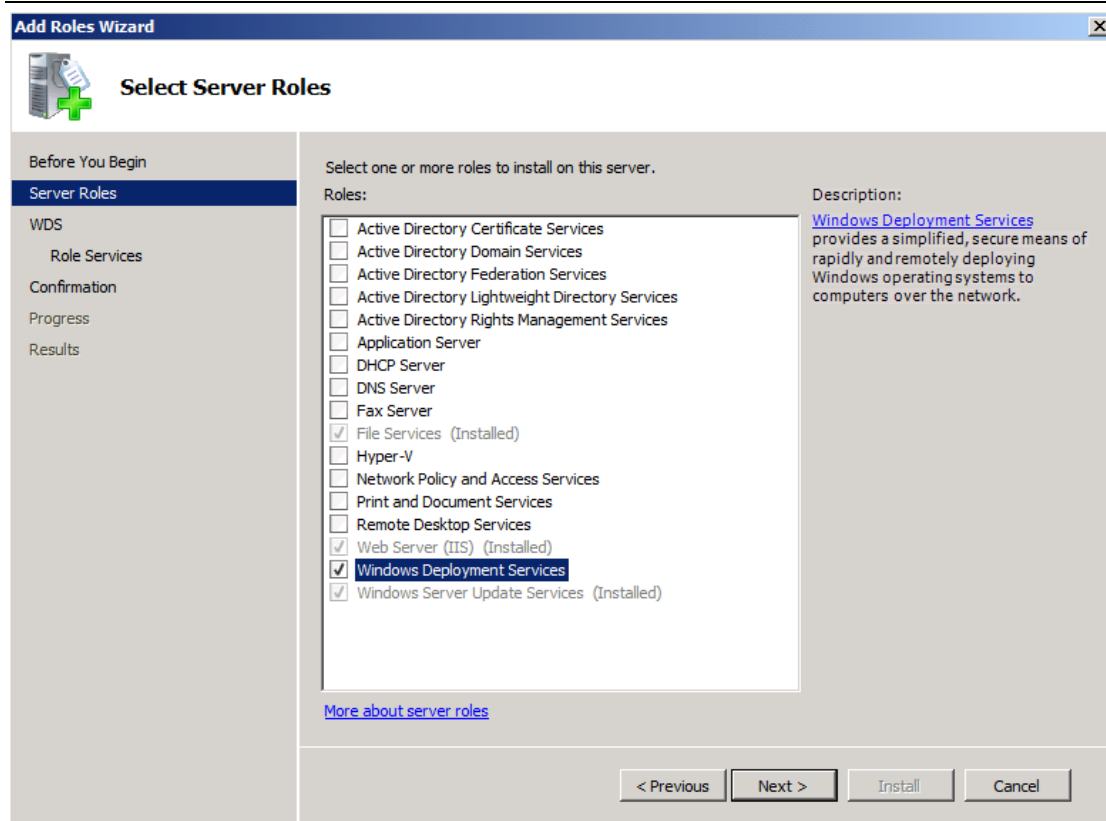


2) In the results pane , click **Add Roles** , the **Add Roles Wizard Before You Begin** dialog box appears :



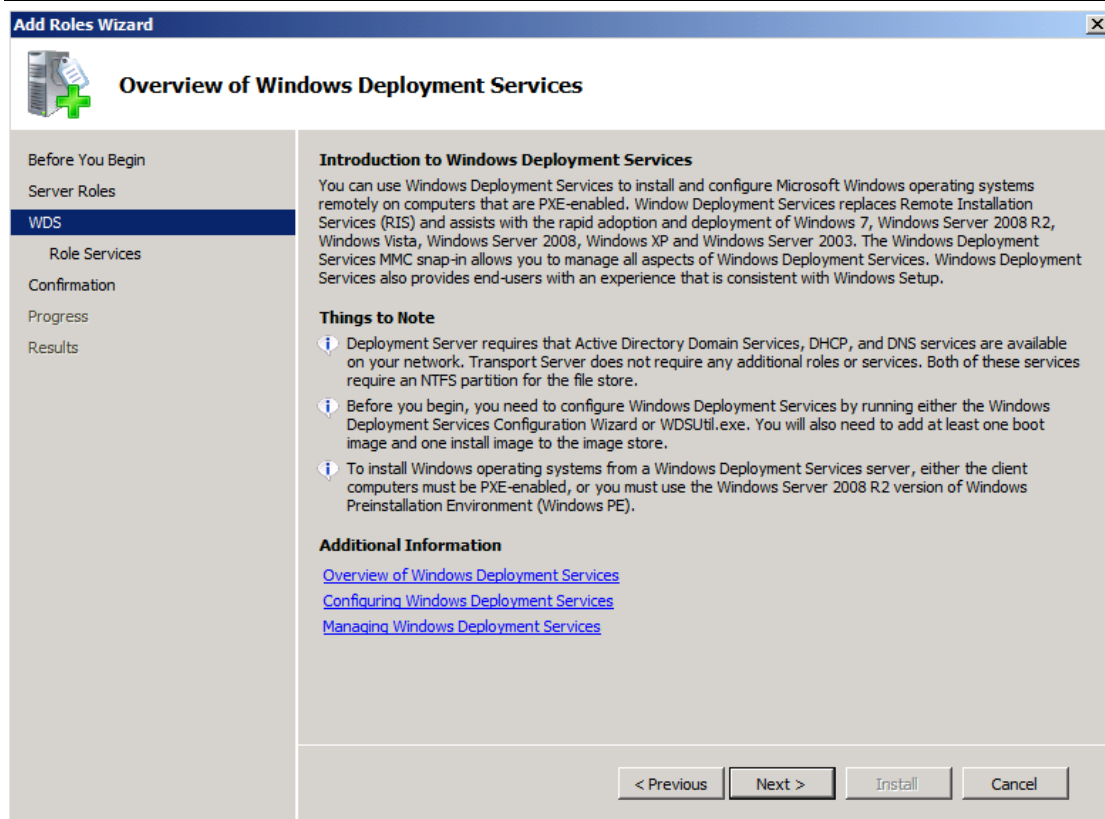
3) Click **Next** , the **Select Server Roles** dialog box appears , under **Roles** , click

Windows Deployment Services :

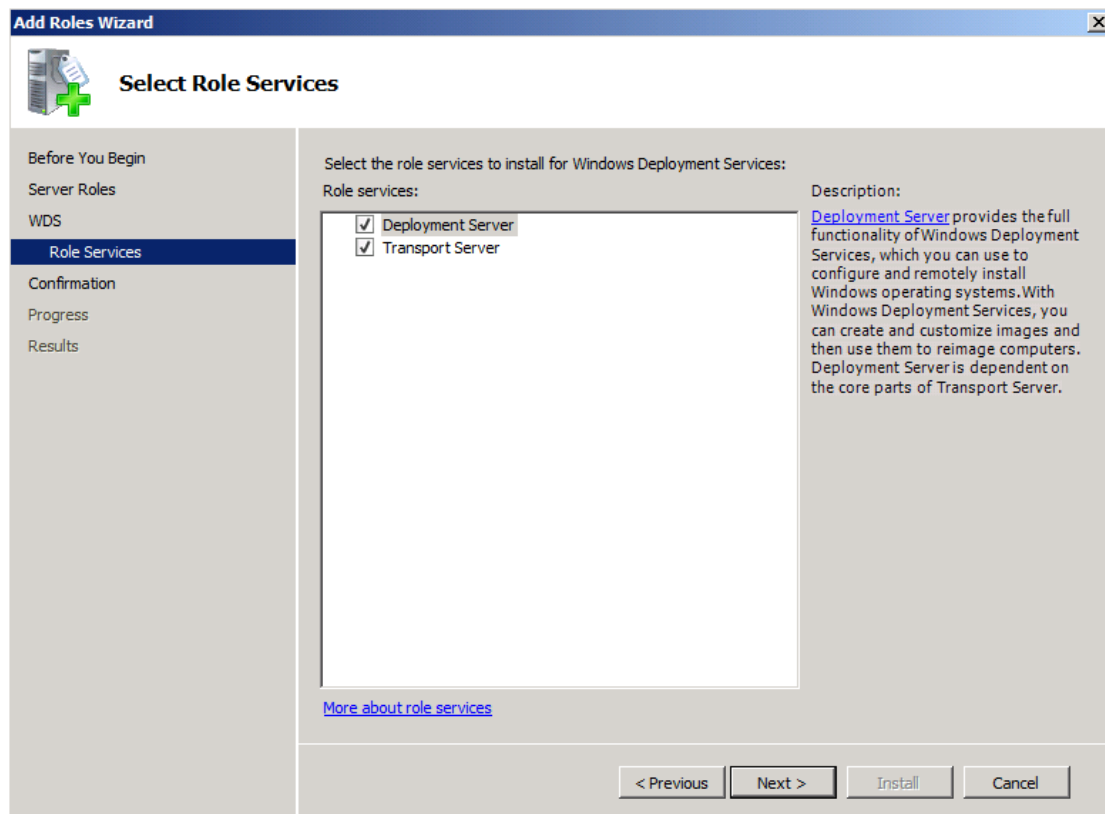


4) Click **Next** , the **Overview of Windows Deployment Services** dialog box appears :

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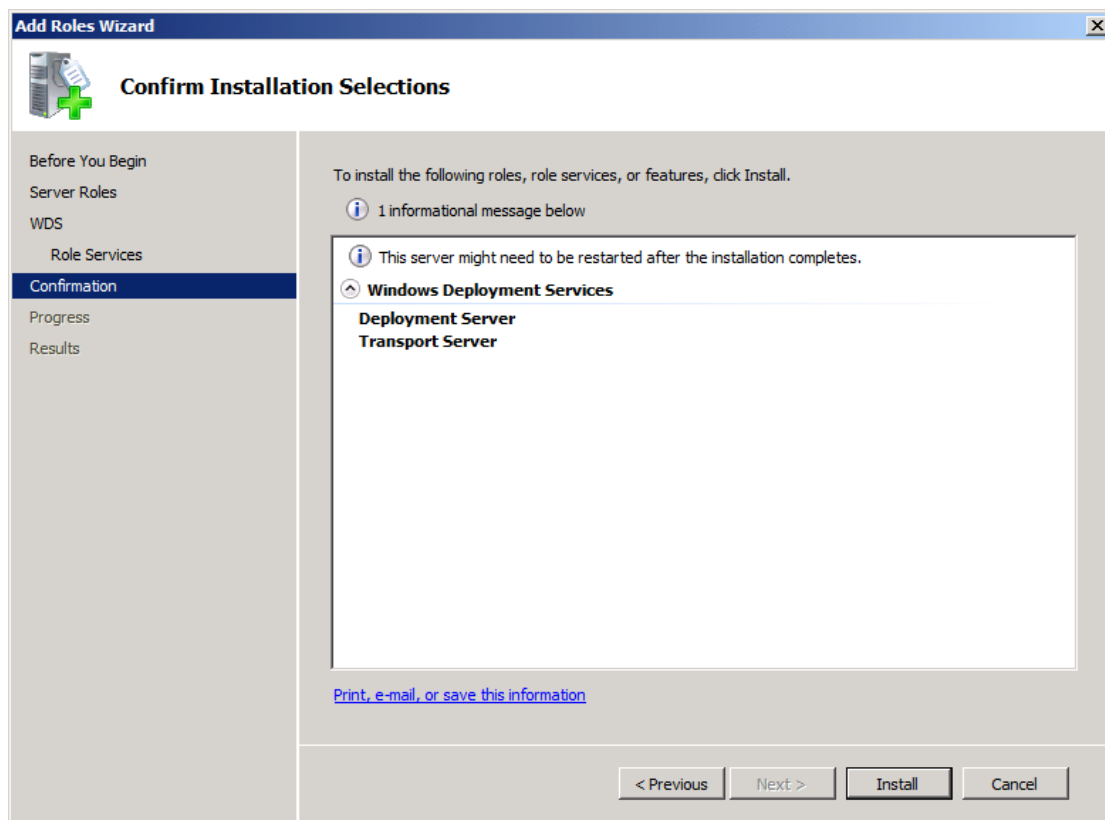


5) Click **Next** , the **Select Role Services** dialog box appears :

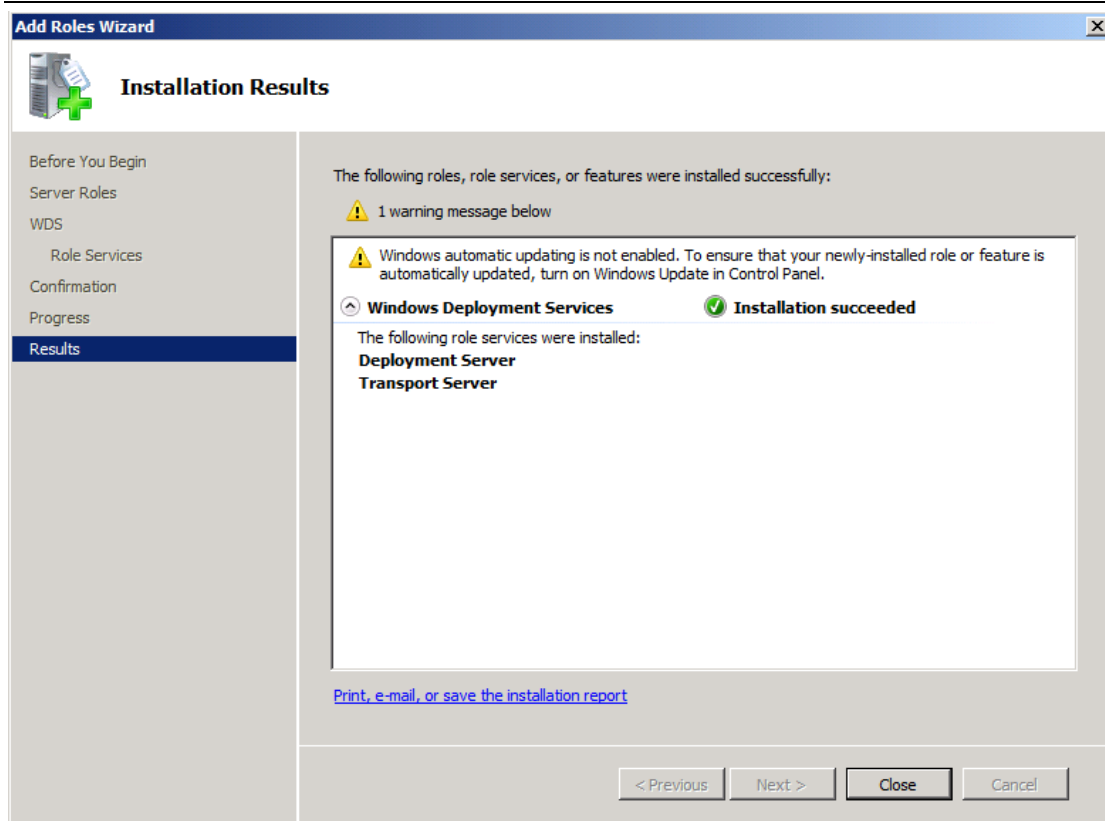


Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

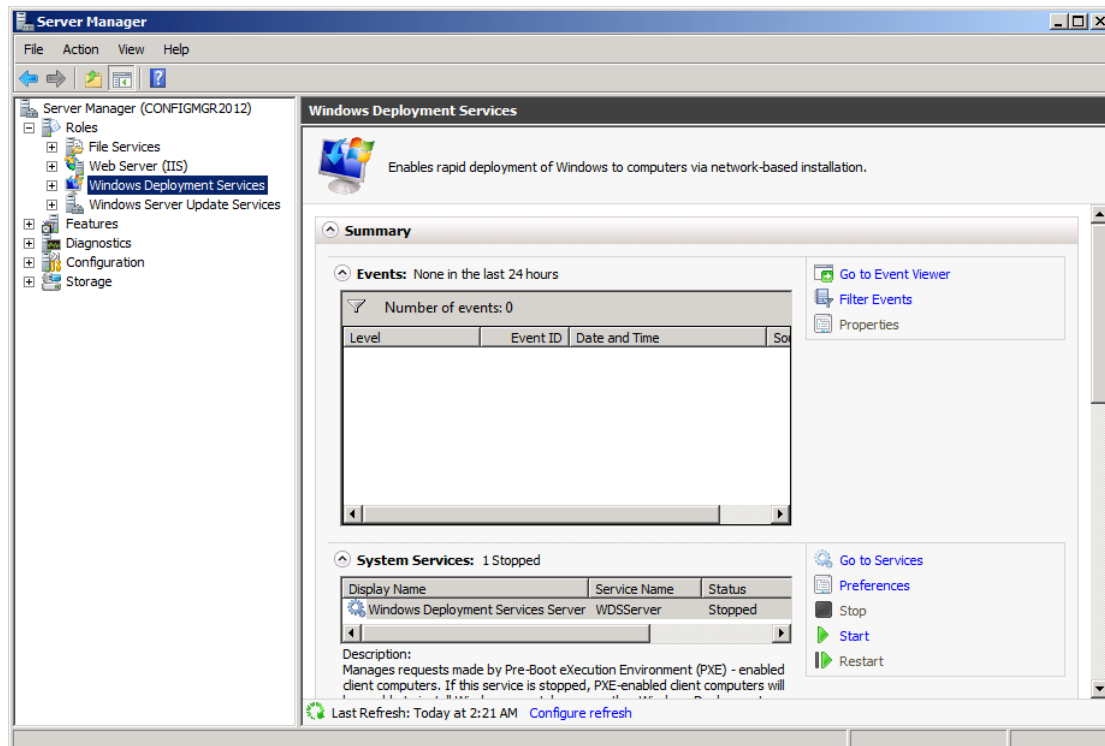
6) Click **Next** , the **Confirm Installation Selections** dialog box appears :



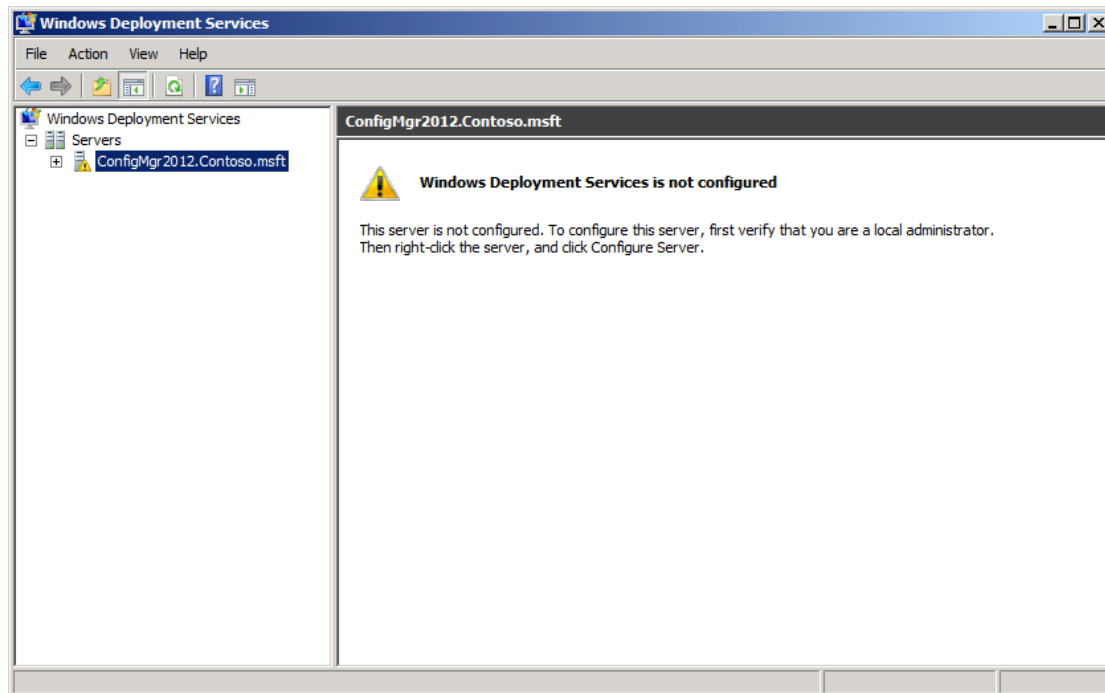
7) Click **Install** . The **Windows Deployment Services** role is installed . When complete , the **Add Roles Wizard Installation Results** dialog box appears indicating that the installation was successful :



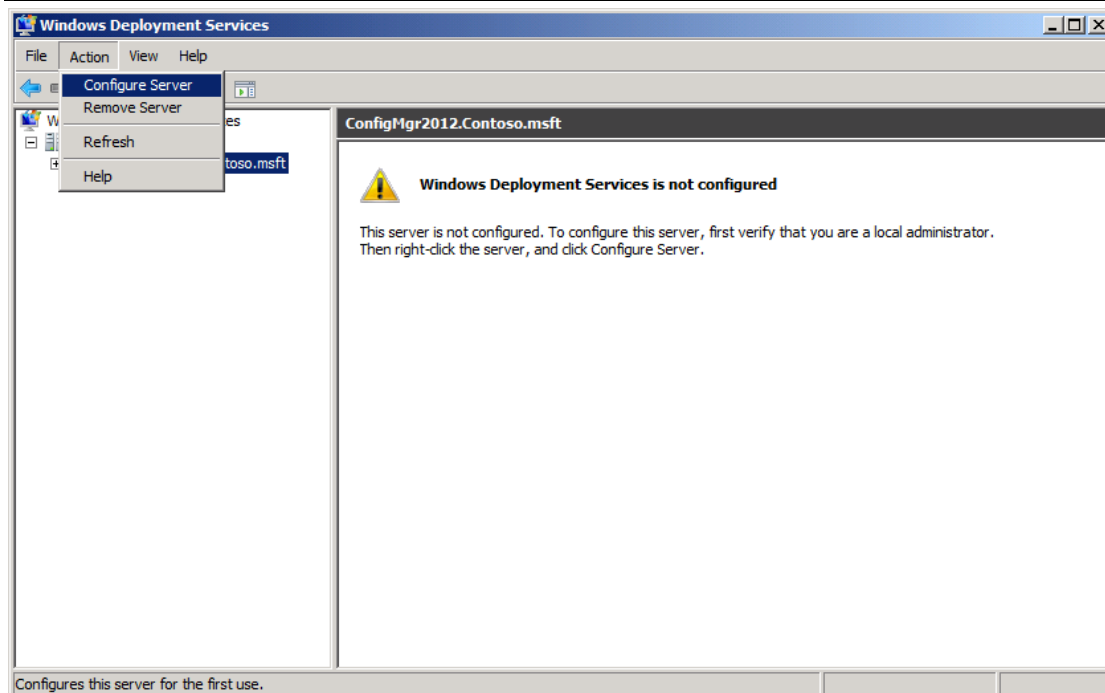
8) Click **Close** , the **Server Manager** window appears , the **Windows Deployment Services** is now listed as an installed role :



9) Close **Server Manager** window . On the **Start** menu , point to **Administrative Tools** , and then click **Windows Deployment Services** , the **Windows Deployment Services** window appears , in the tree pane , expand **Servers** , and then click **ConfigMgr2012.Contoso.msft** :

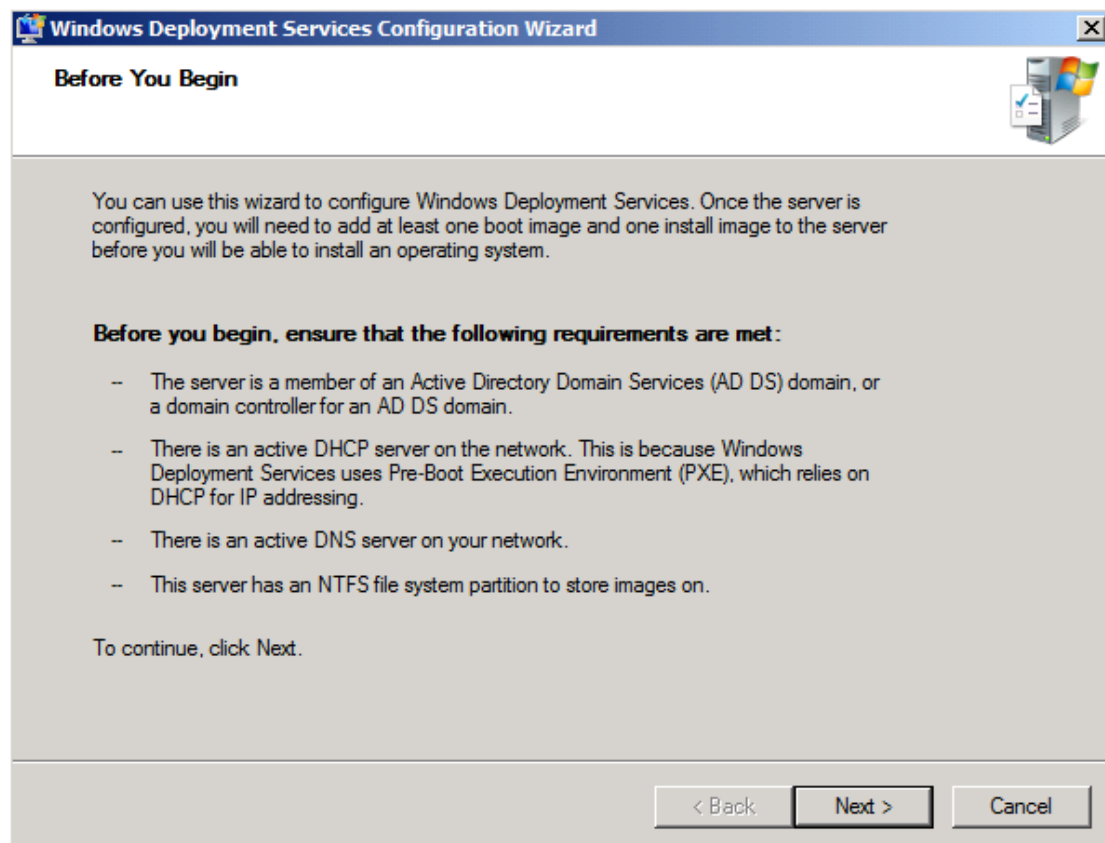


10) On the **Action** menu , click **Configure Server** :

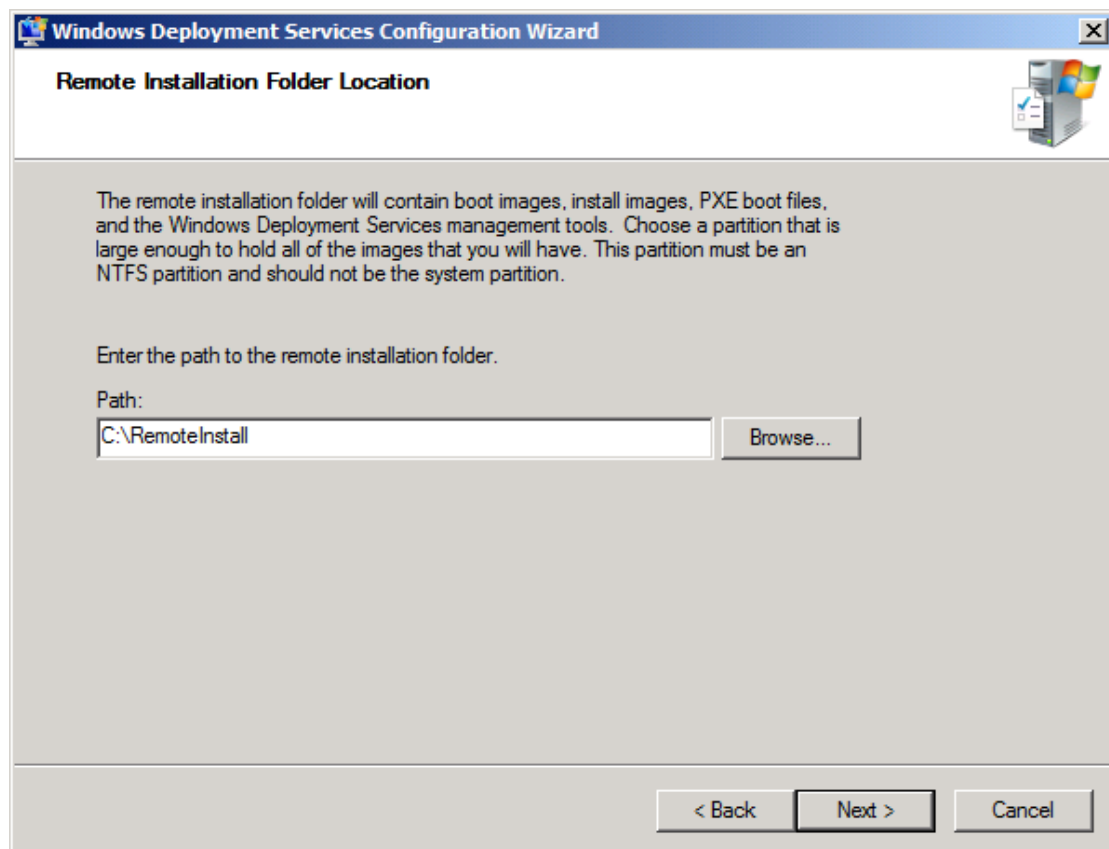


11) The **Windows Deployment Services Configuration Wizard Before You**

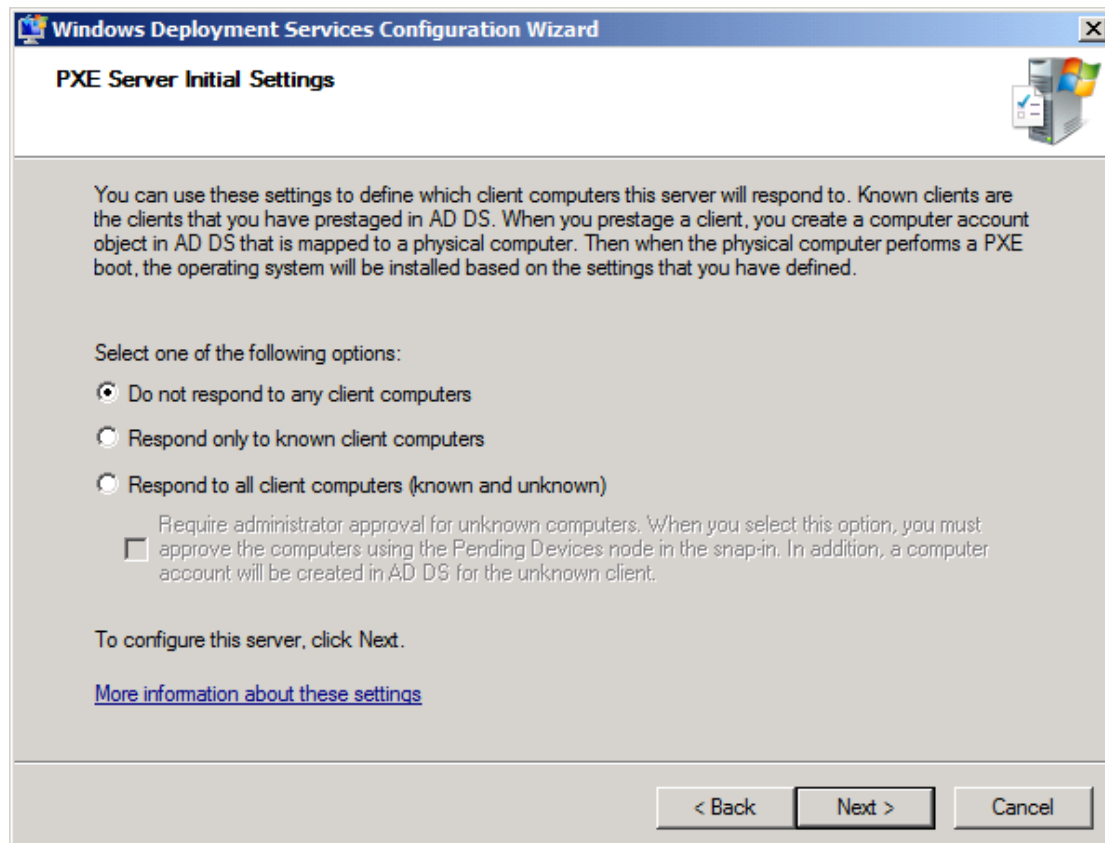
Begin dialog box appears :



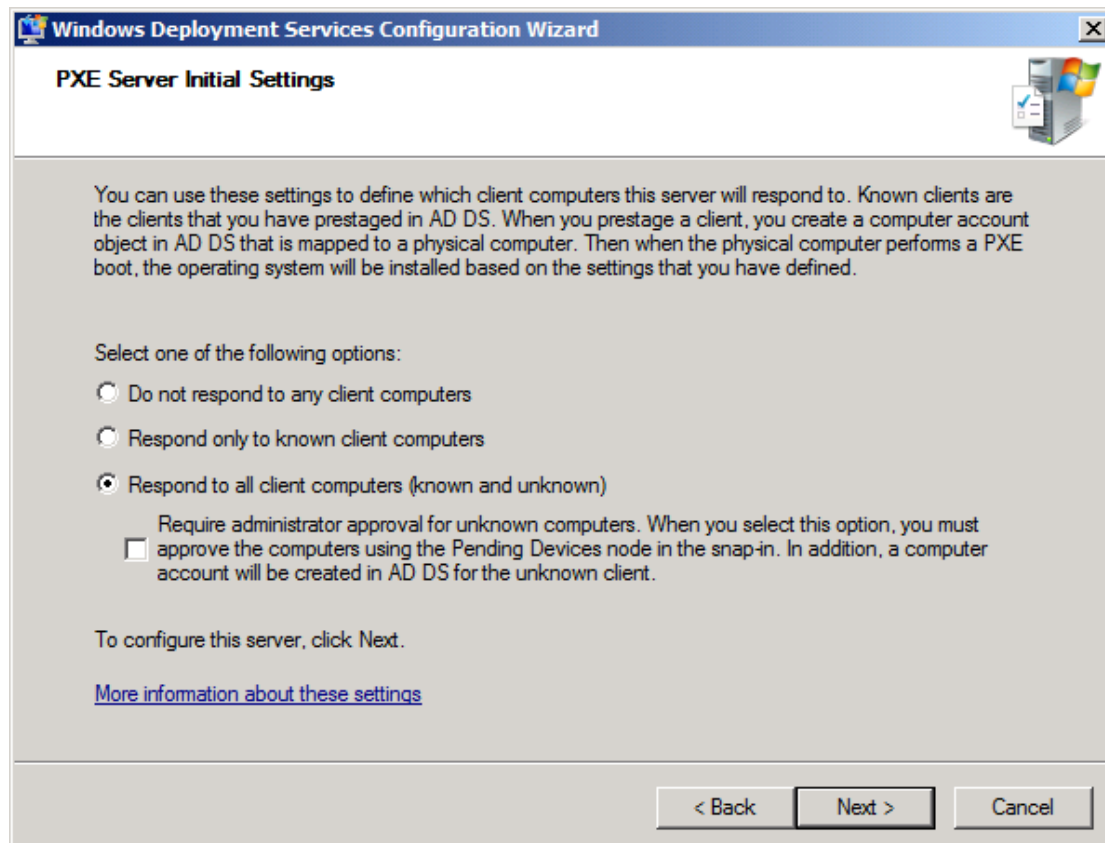
12) Click **Next** , the **Remote Installation Folder Location** dialog box appears :



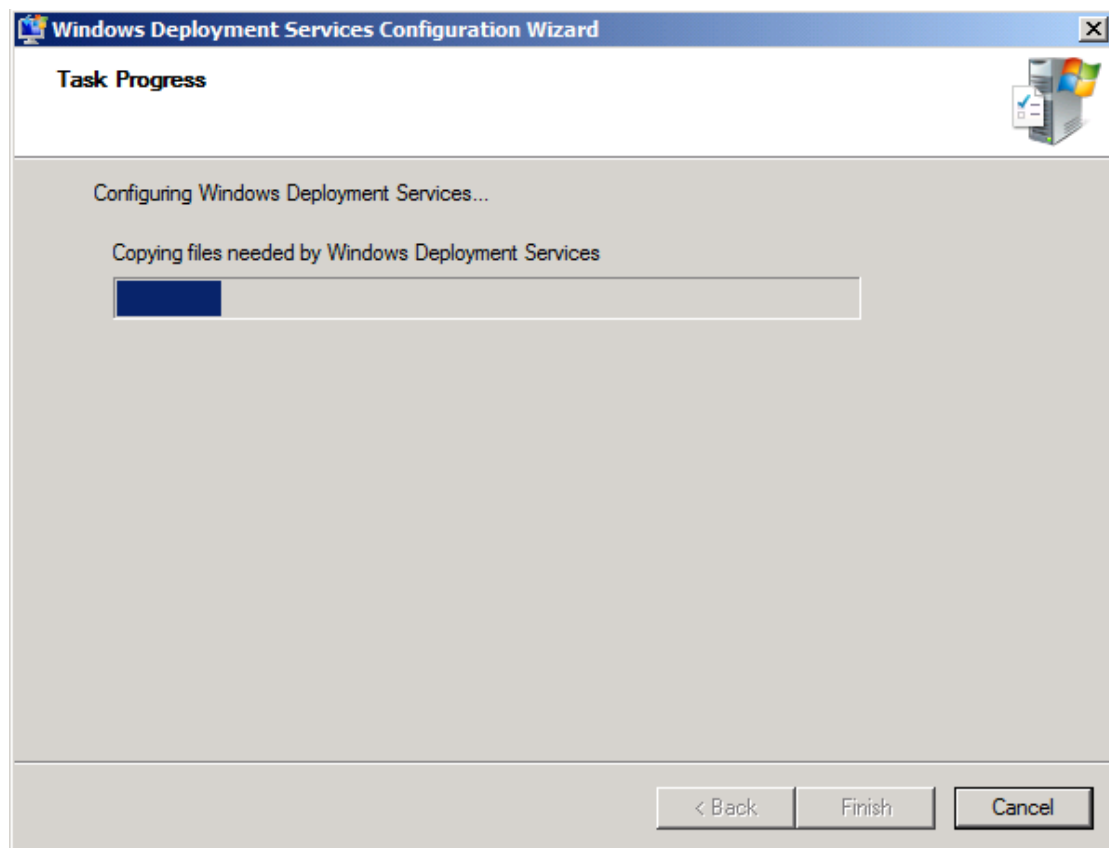
13) Enter the path and then click **Next** , the **PXE Server Initial Settings** dialog box appears :



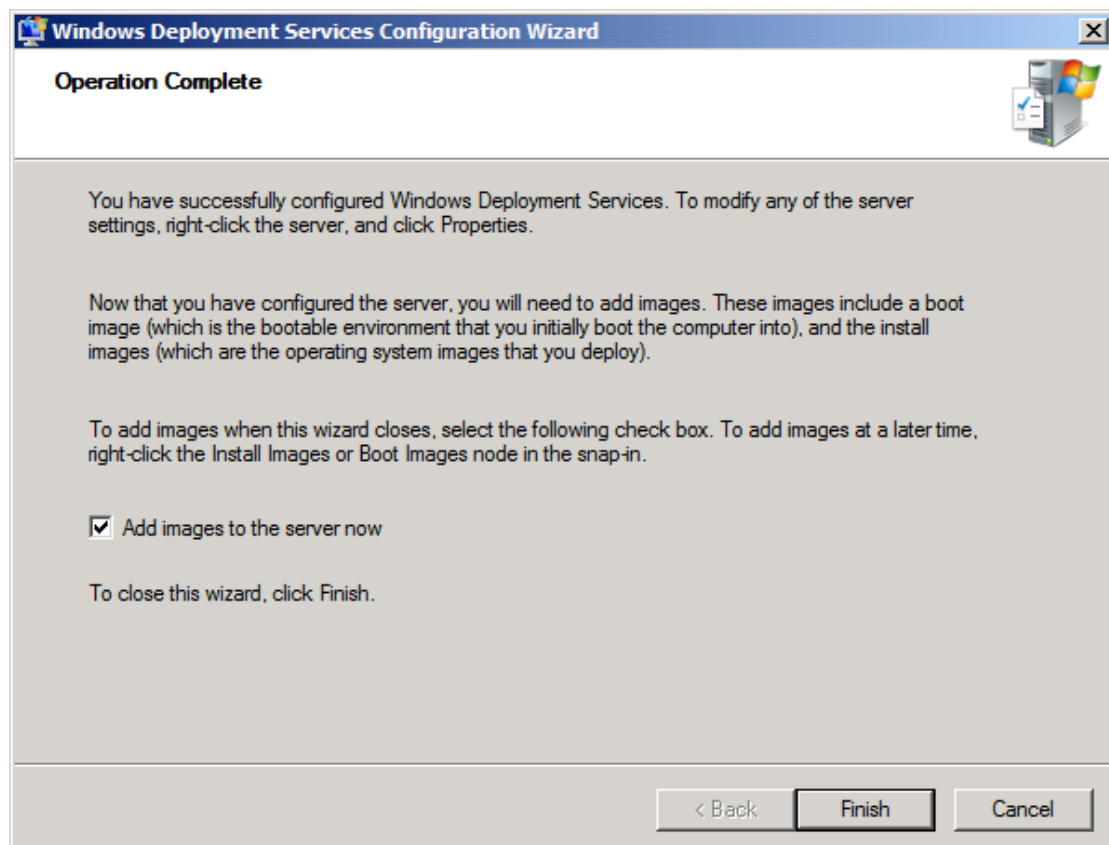
14) Click **Respond to all client computers (known and unknown)** :



15) Click **Next** , the **Task Progress** dialog box appears :

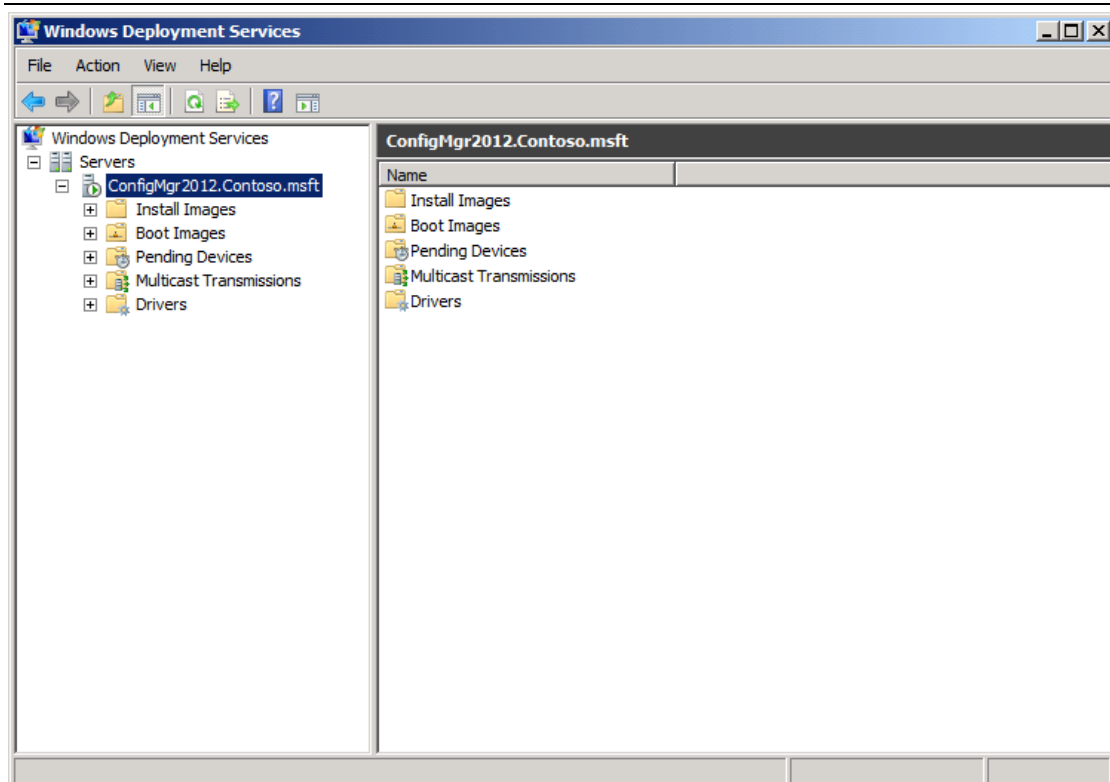


16) When complete , the **Operation Complete** dialog box appears :

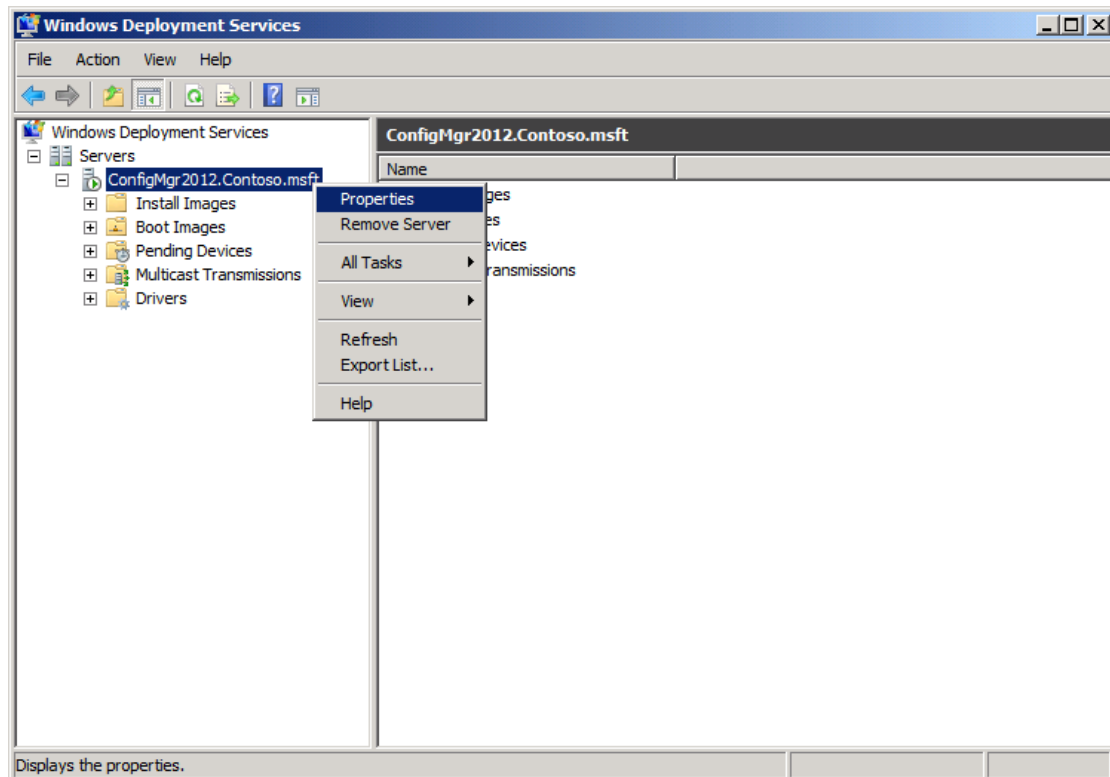


17) Click to clear **Add images to the server now** , and then click **Finish** , notice that the server is now configured :

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18) Right-click **ConfigMgr2012.Contoso.msft** , click **Properties** :

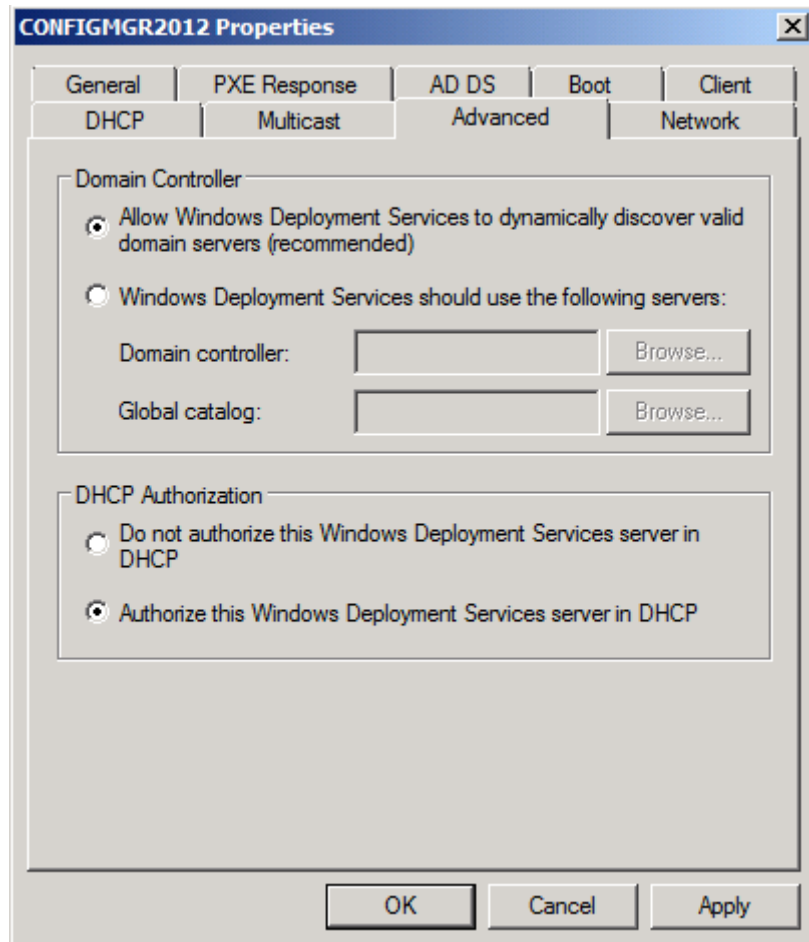


19) The **ConfigMgr2012 Properties** dialog box appears , click **Advanced** tab ,

Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

under the **DHCP Authorization** , click **Authorize this Windows Deployment**

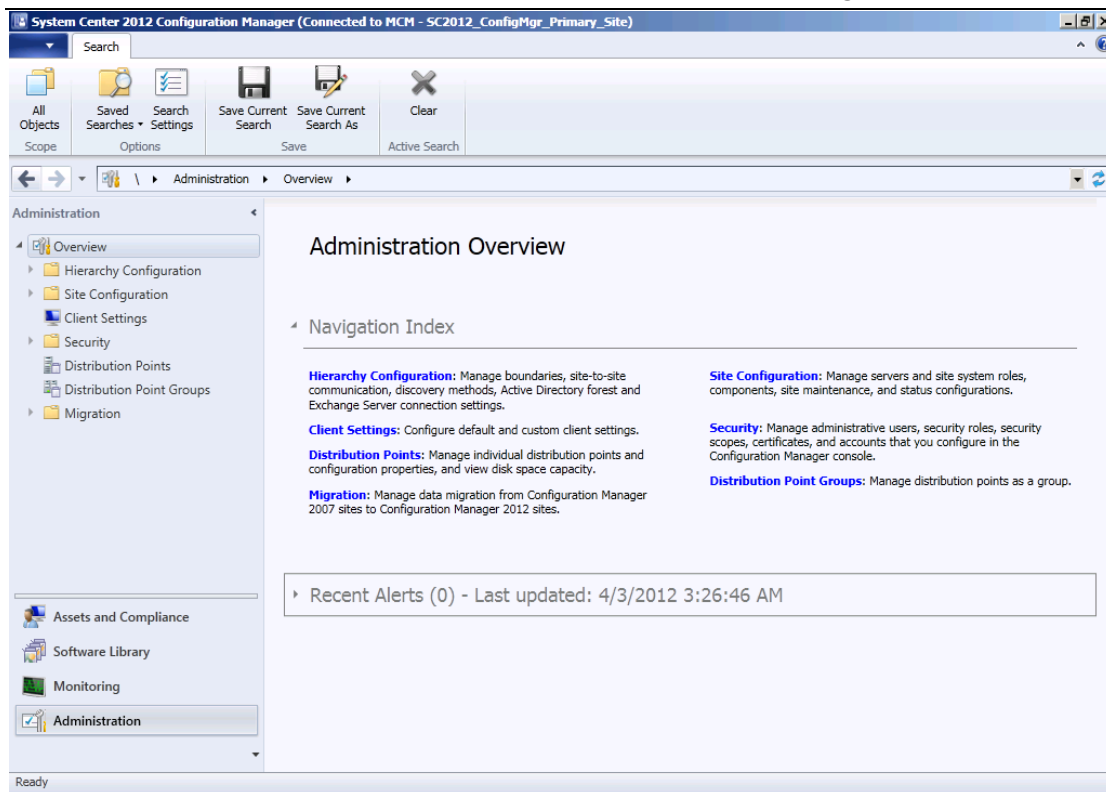
Services server in DHCP :



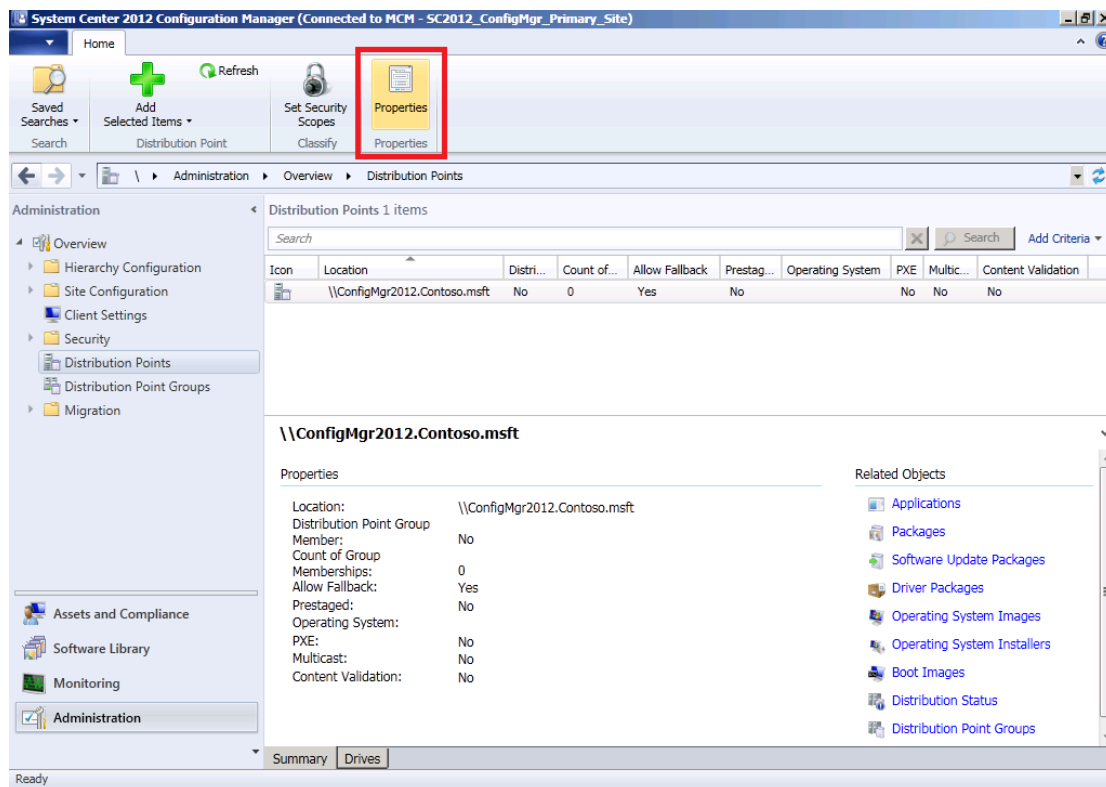
20) Click **Apply** --- **OK** . Close the **Windows Deployment Services** window.

21) On the **Start** menu , point to **All Programs** , point to **Microsoft System Center 2012** , point to **Configuration Manager** , and then click **Configuration Manager Console** , click the **Administration** workspace :

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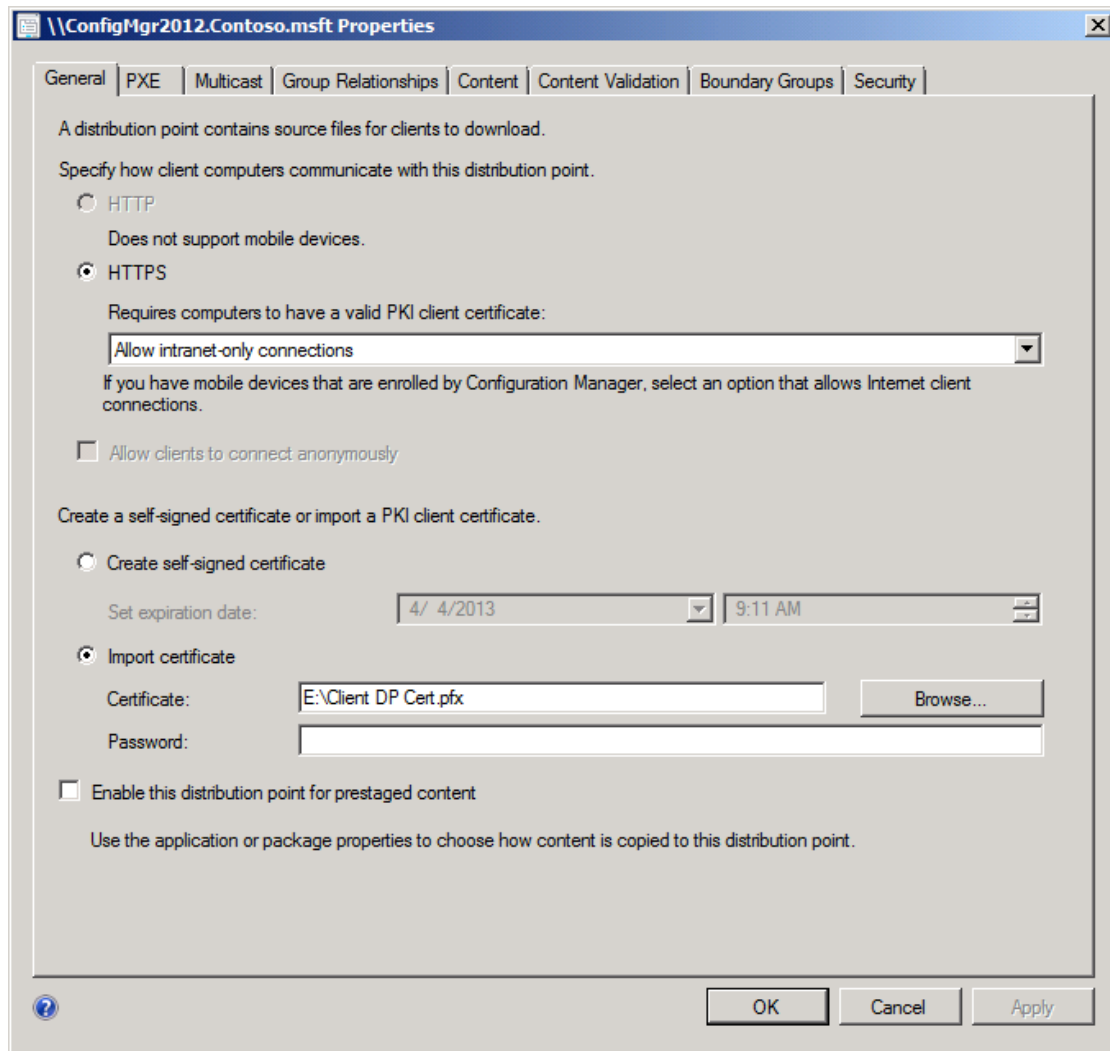


22) Click **Distribution Points** , in the result pane , click **ConfigMgr2012** , and then on the **Ribbon** , click **Properties** :

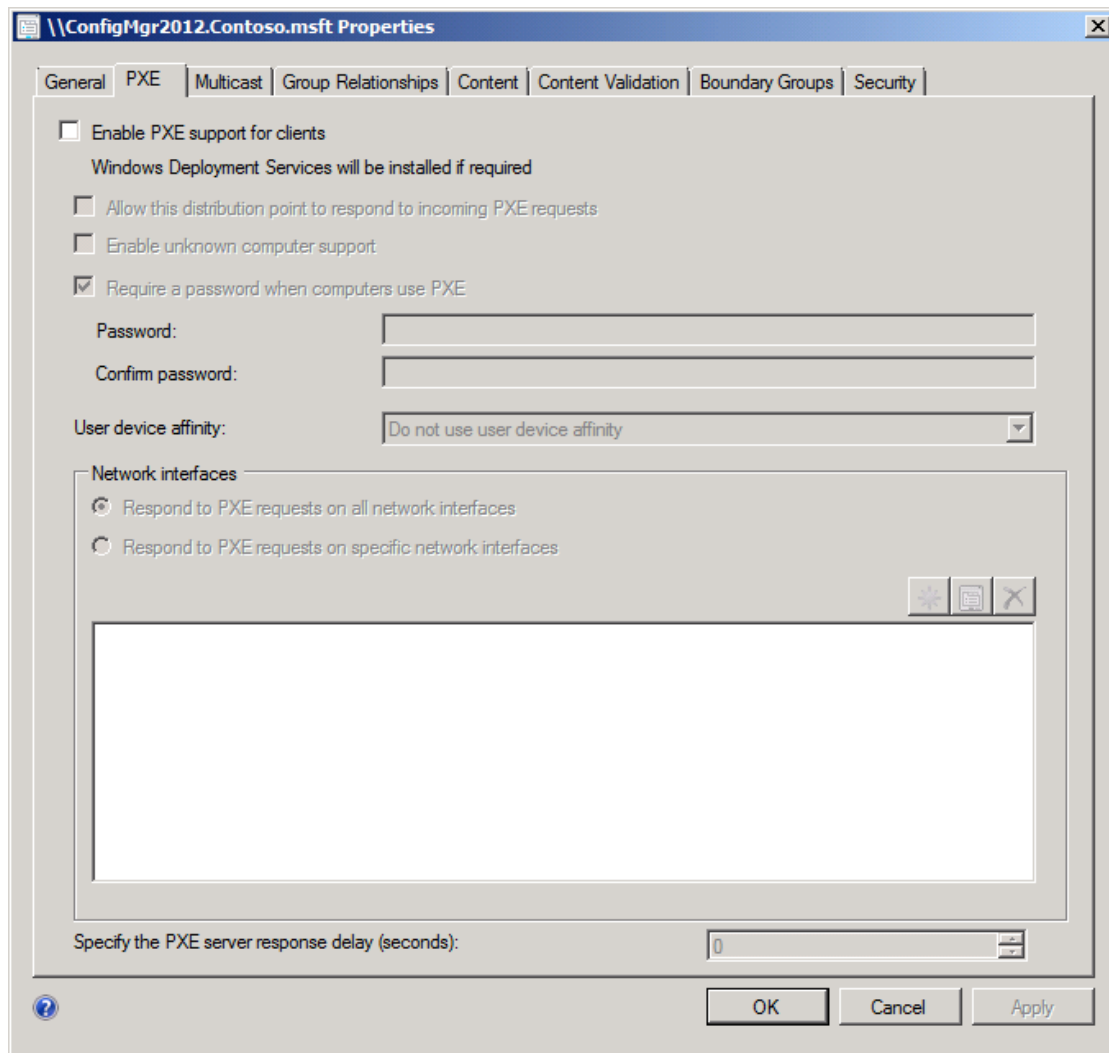


Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

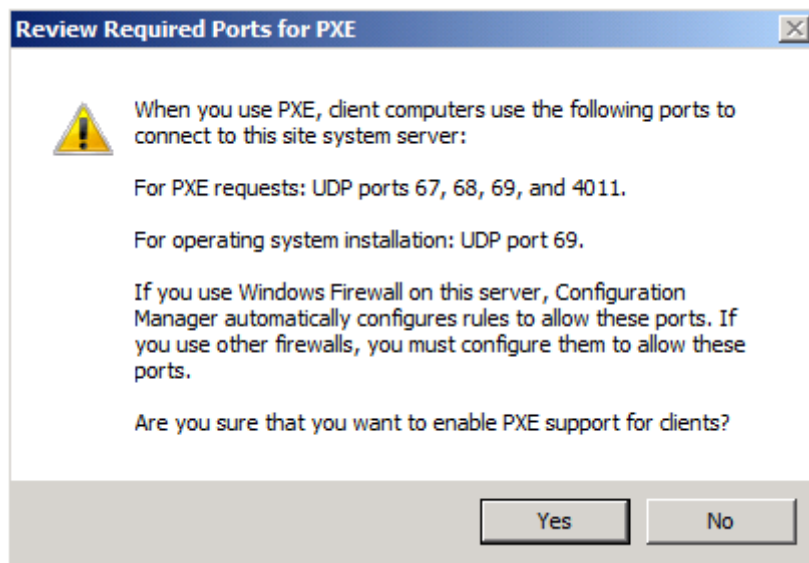
23) The **\\ConfigMgr2012** Properties dialog box appears displaying **General** properties :



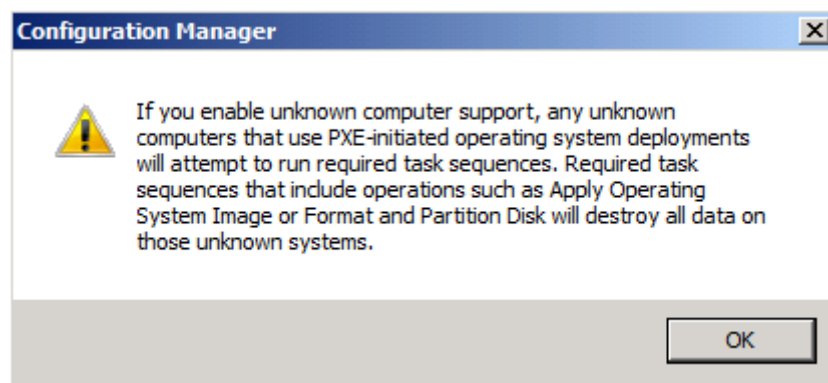
24) Click the **PXE** tab , the **PXE** tab displaying :



25) Select **Enable PXE support for clients** , a **Review Required Ports for PXE** message box appears indicating that specific ports (UDP 67,68,69 and 4011) must be opened in order to respond to PXE requests :



26) Click **Yes** to allow Configuration Manager to open those ports . Click to select both **Allow this distribution point to respond to incoming PXE requests** and **Enable unknown computer support** , a **Configuration Manager** message box appears indicating that with unknown computer support enabled , any unknown computers will attempt to install a new operating system from a mandatory task sequence , and thus may be reimaged and lose data :



27) Click **OK** and to clear **Require a password when computers use PXE** :

The screenshot shows the 'Properties' dialog box for the network resource '\\ConfigMgr2012.Contoso.msft'. The 'PXE' tab is selected. The 'General' sub-tab contains the following settings:

- ☒ Enable PXE support for clients
Windows Deployment Services will be installed if required
- ☒ Allow this distribution point to respond to incoming PXE requests
- ☒ Enable unknown computer support
- ☐ Require a password when computers use PXE
Password:
Confirm password:
- User device affinity:

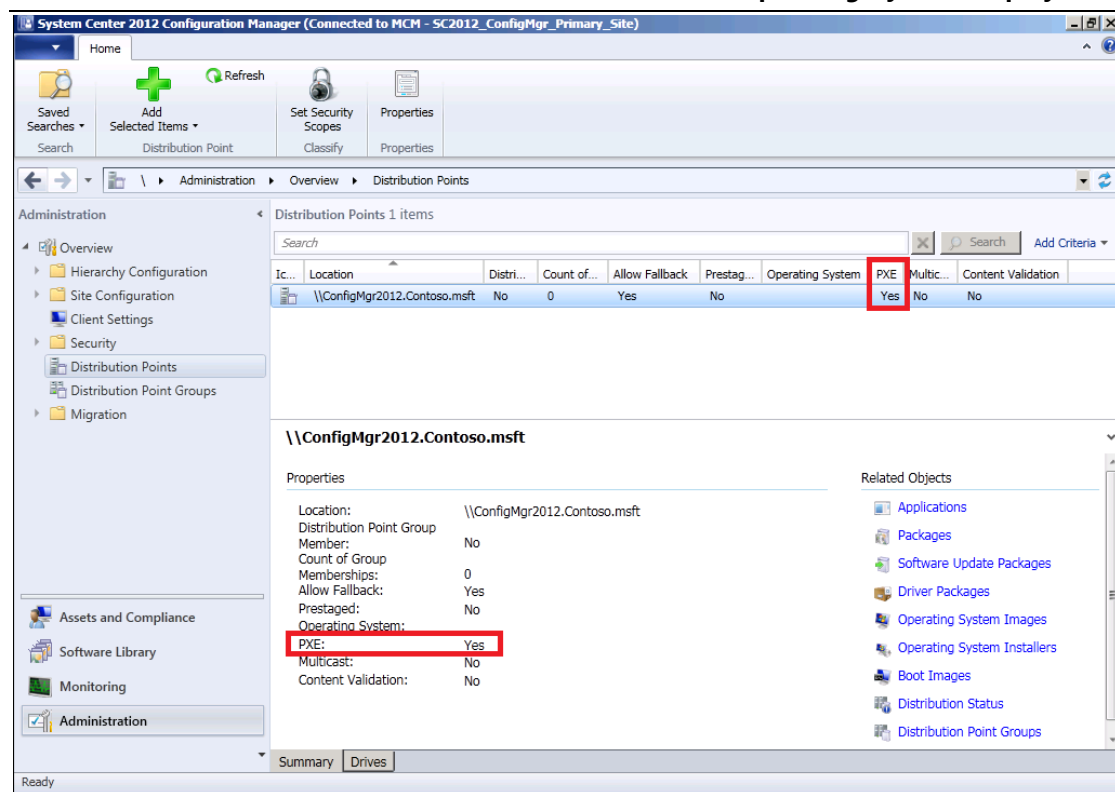
The 'Network interfaces' sub-tab contains the following settings:

- ☒ Respond to PXE requests on all network interfaces
- ☐ Respond to PXE requests on specific network interfaces

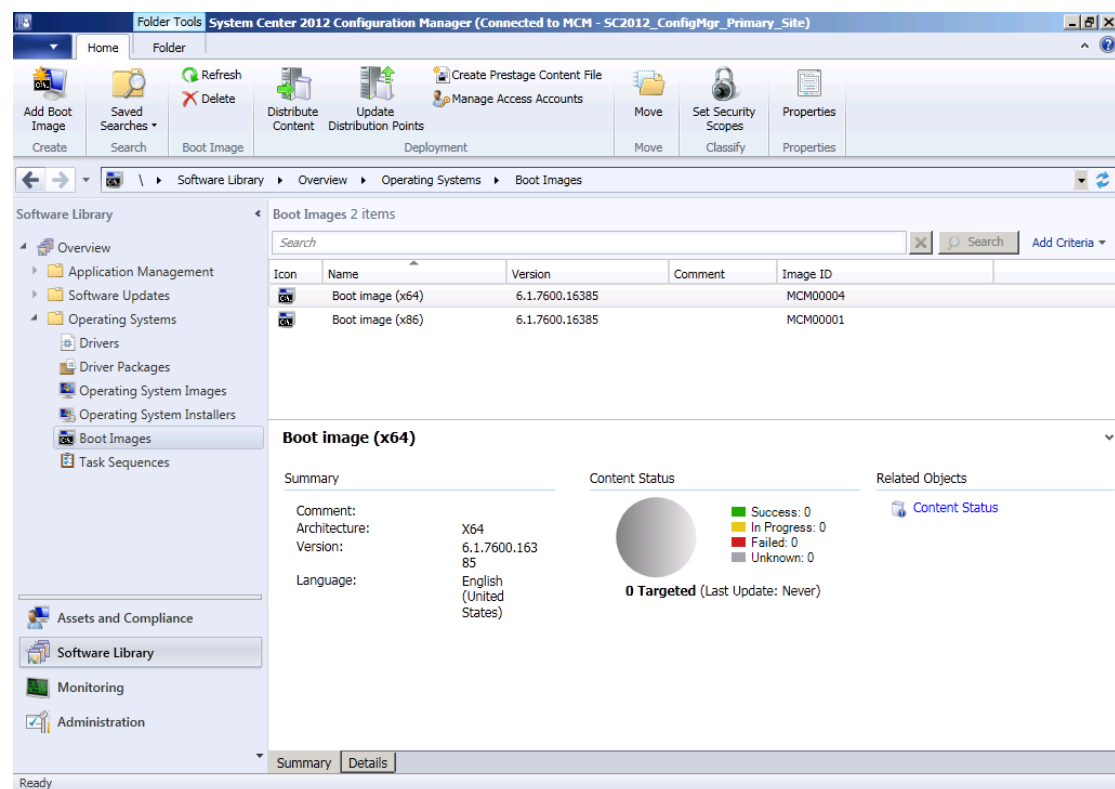
Below the radio buttons is a large empty rectangular box. At the bottom of the dialog, there is a field for 'Specify the PXE server response delay (seconds):' with a value of '0'. The 'OK', 'Cancel', and 'Apply' buttons are at the bottom right.

28) Click **OK** , the distribution points appear in the results pane , you can see the **PXE** status changed to **Yes** :

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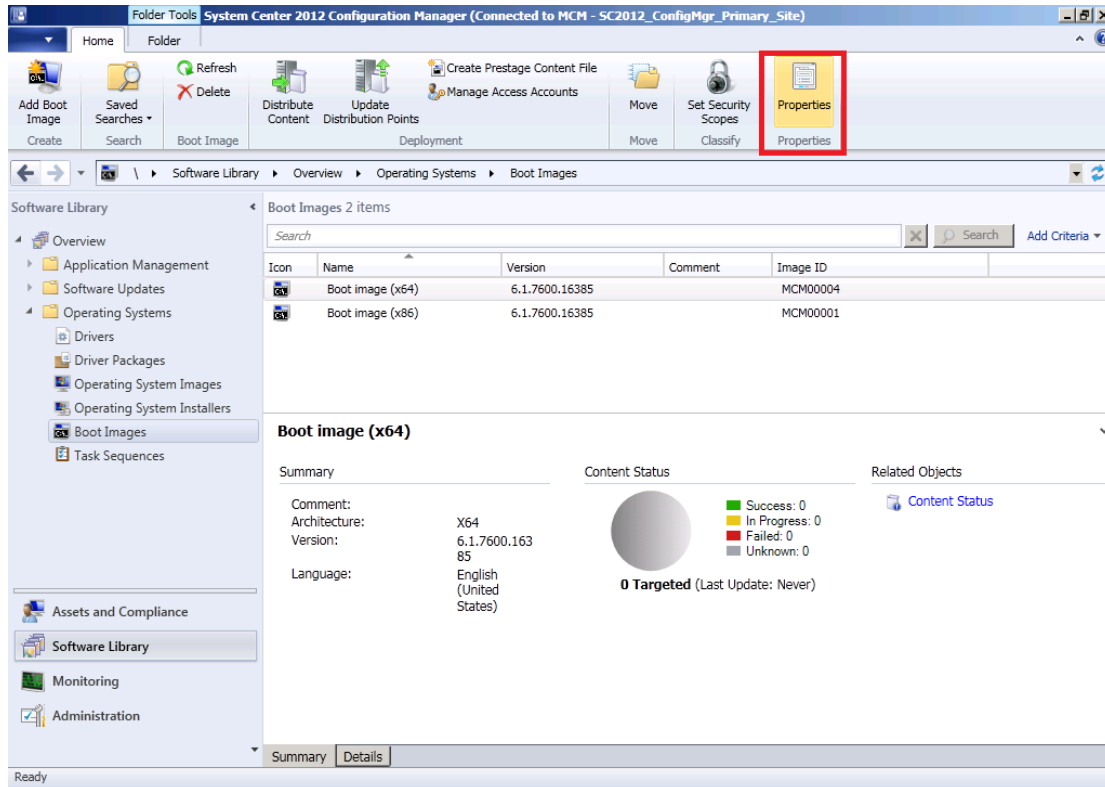


29) Click the **Software Library** workspace , expand **Operating Systems** , and then click **Boot Images** :

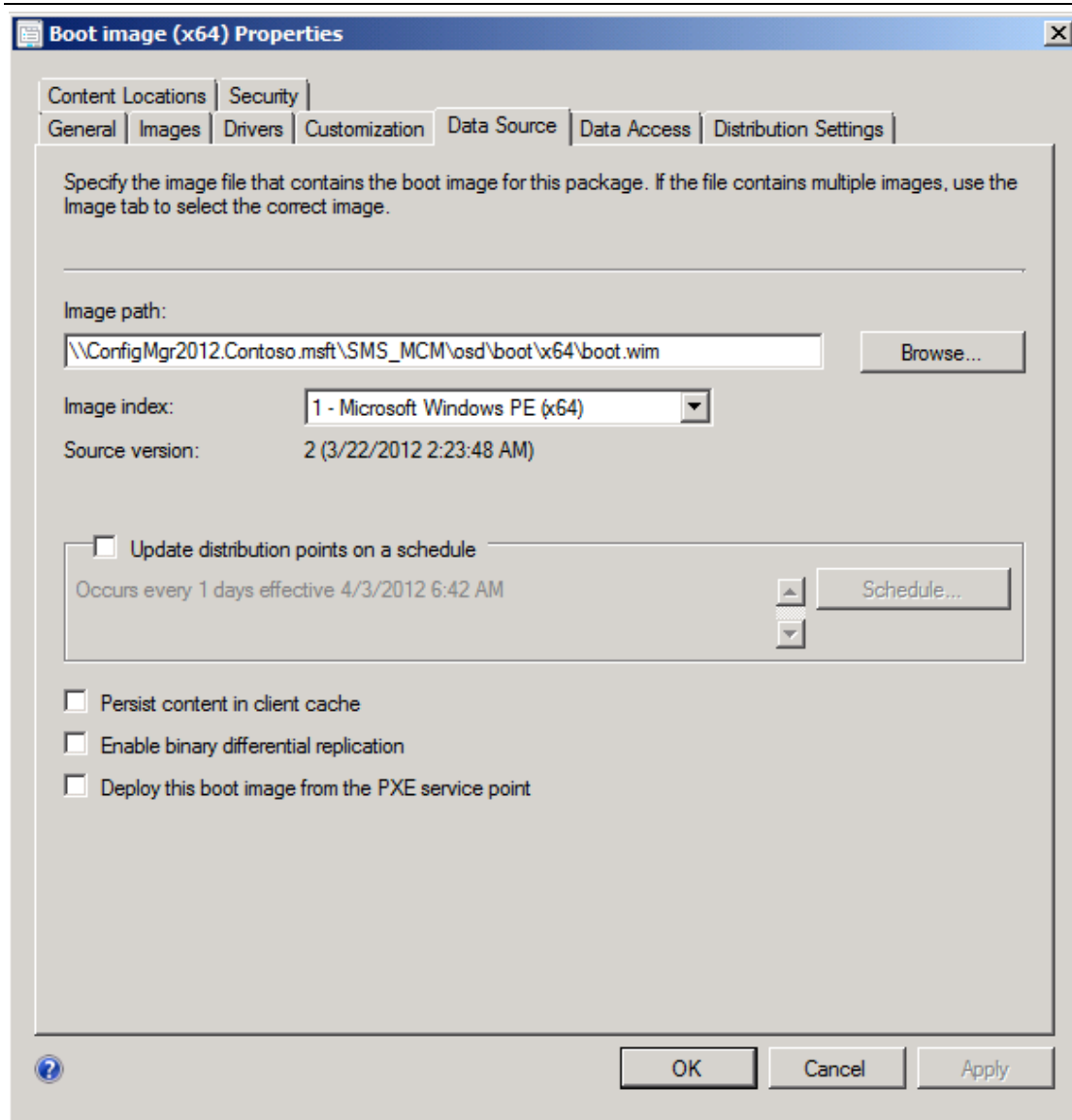


Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

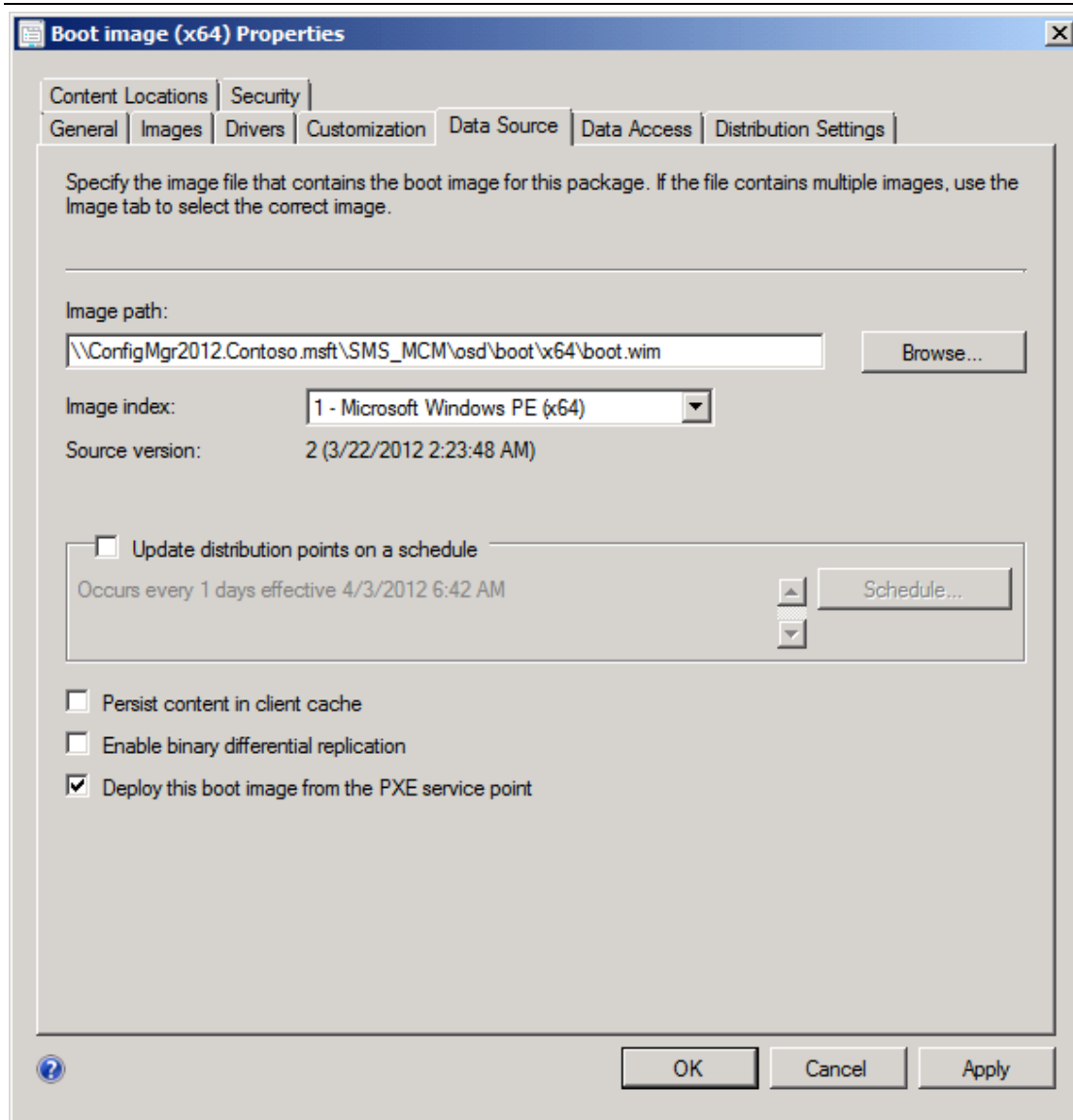
30) The list of boot images appear in the results pane . Click **Boot image (x64)** ,and then on the Ribbon , click **Properties** :



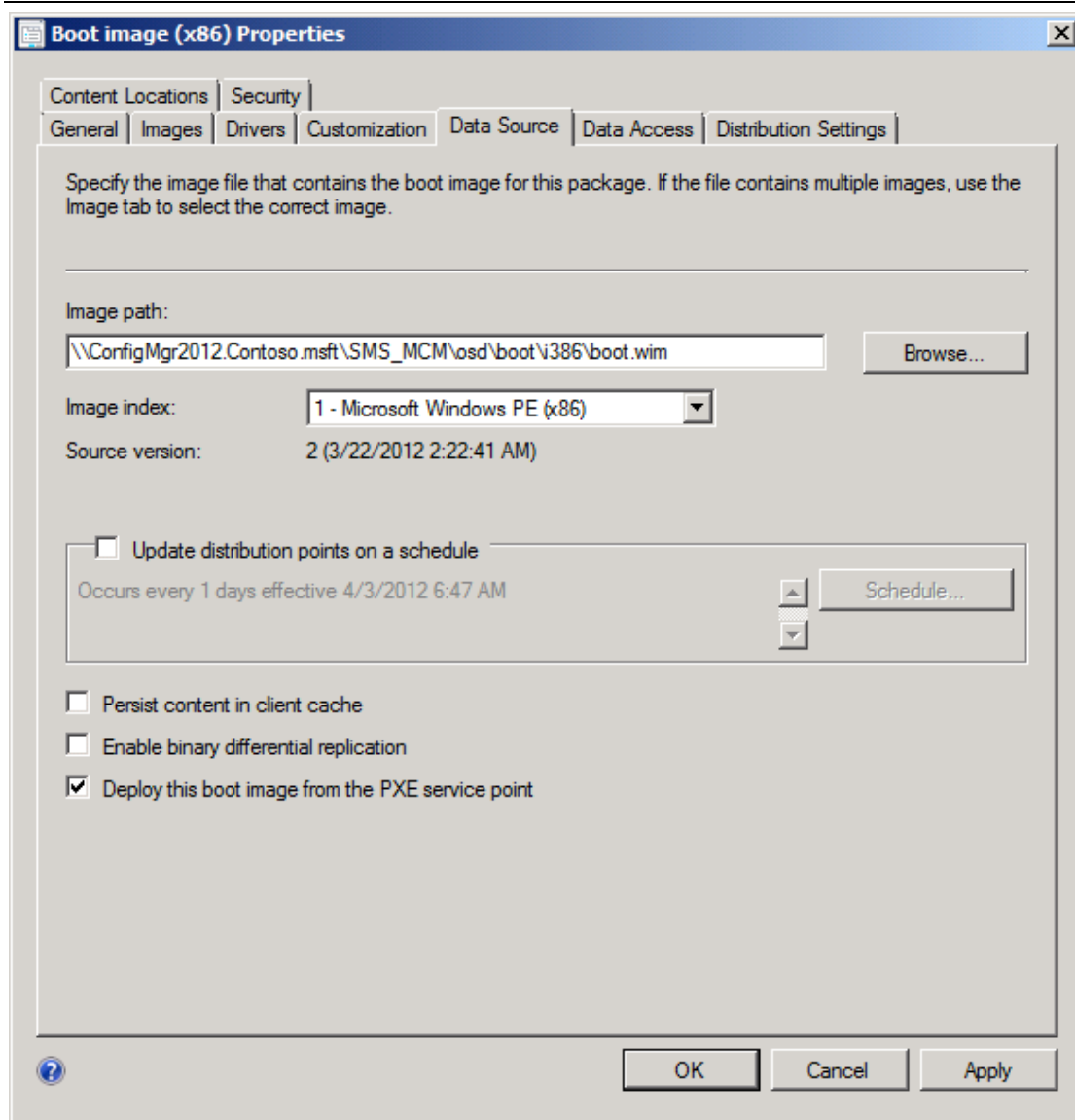
31) The **Boot image (x64) Properties** dialog box appears , click the **Data Source** tab :



32) Select **Deploy this boot image from the PXE service point** :

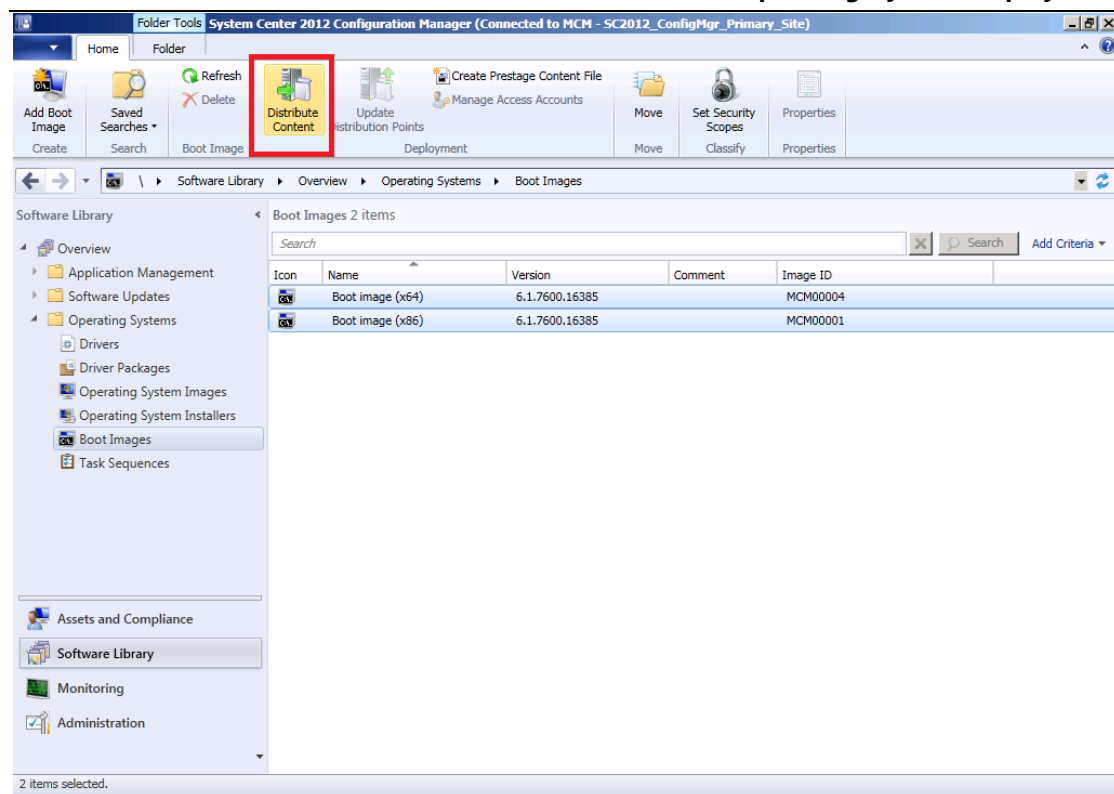


33) Click **OK** . Repeat this steps to enable PXE deployment support for the 32-bit boot image :

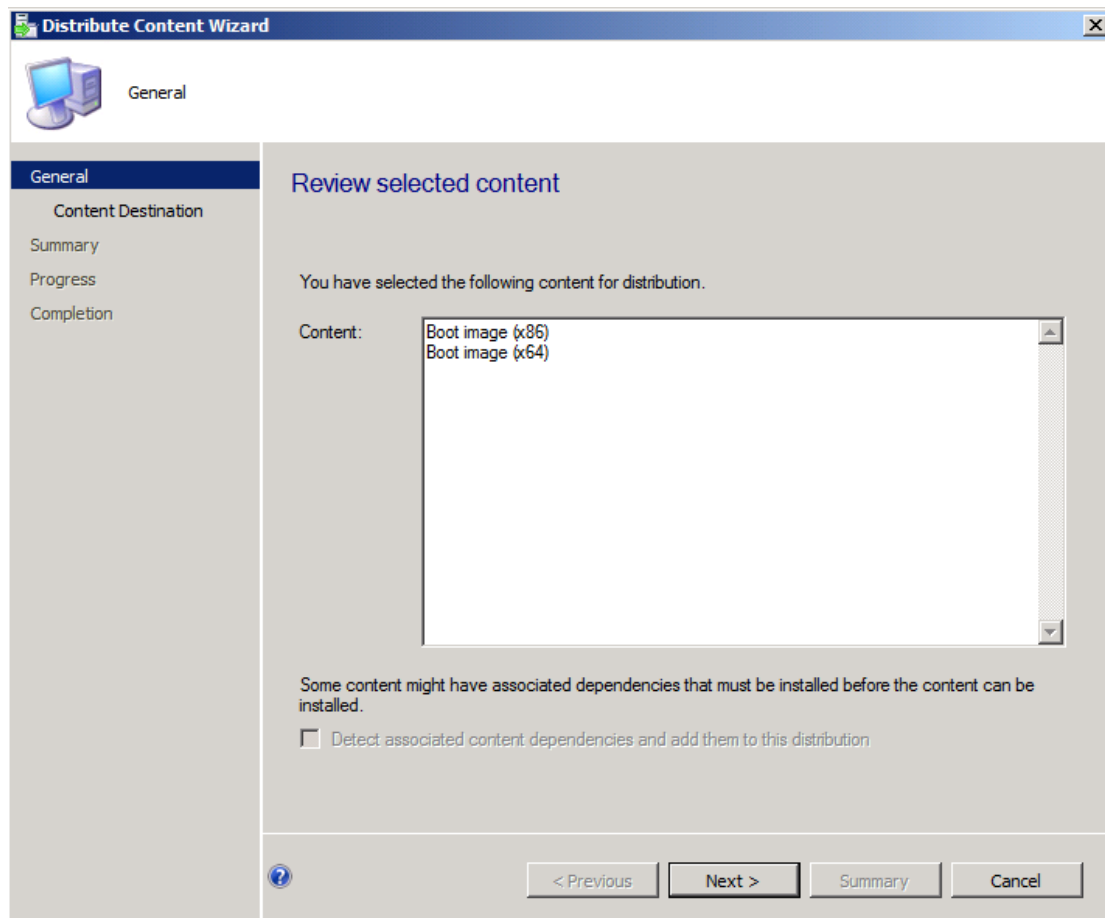


34) Multi-select both **Boot image (x64)** and **Boot image (x86)** , and then on the Ribbon , click **Distribute Content** :

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35) The **Distribute Content Wizard General** dialog box appears :

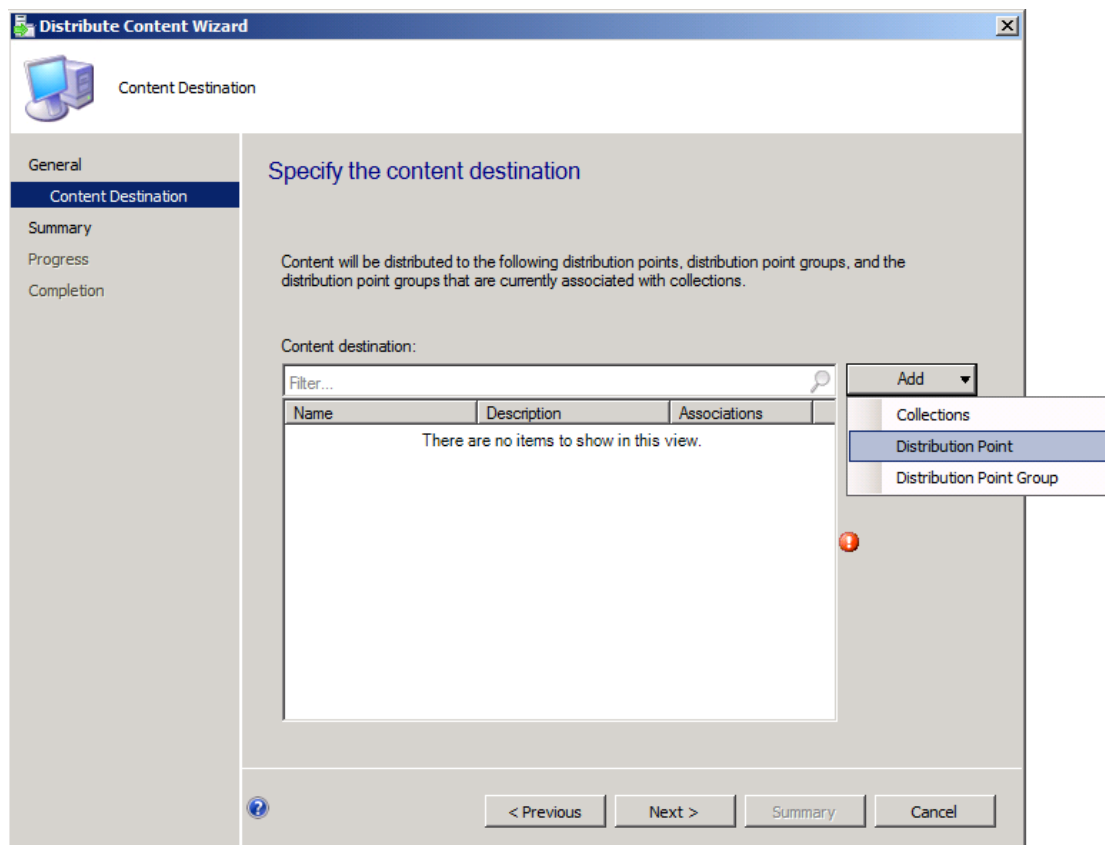


36) Click **Next** , the **Content Destination** dialog box appears :

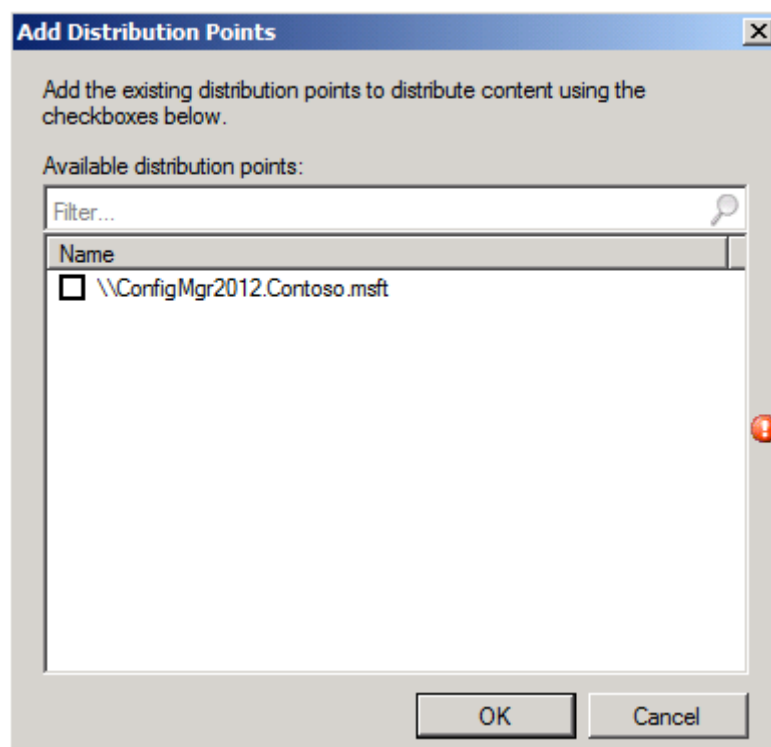
The screenshot shows the 'Distribute Content Wizard' window with the 'Content Destination' step selected in the left-hand navigation pane. The main area is titled 'Specify the content destination' and contains the following elements:

- A text box explaining: 'Content will be distributed to the following distribution points, distribution point groups, and the distribution point groups that are currently associated with collections.'
- A section labeled 'Content destination:' containing a search filter box with the text 'Filter...'. To the right of the filter box are two buttons: 'Add' (with a dropdown arrow) and 'Remove'.
- A table with three columns: 'Name', 'Description', and 'Associations'. The table is currently empty, displaying the message 'There are no items to show in this view.'
- A red exclamation mark icon is located to the right of the table.
- At the bottom of the window, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'.

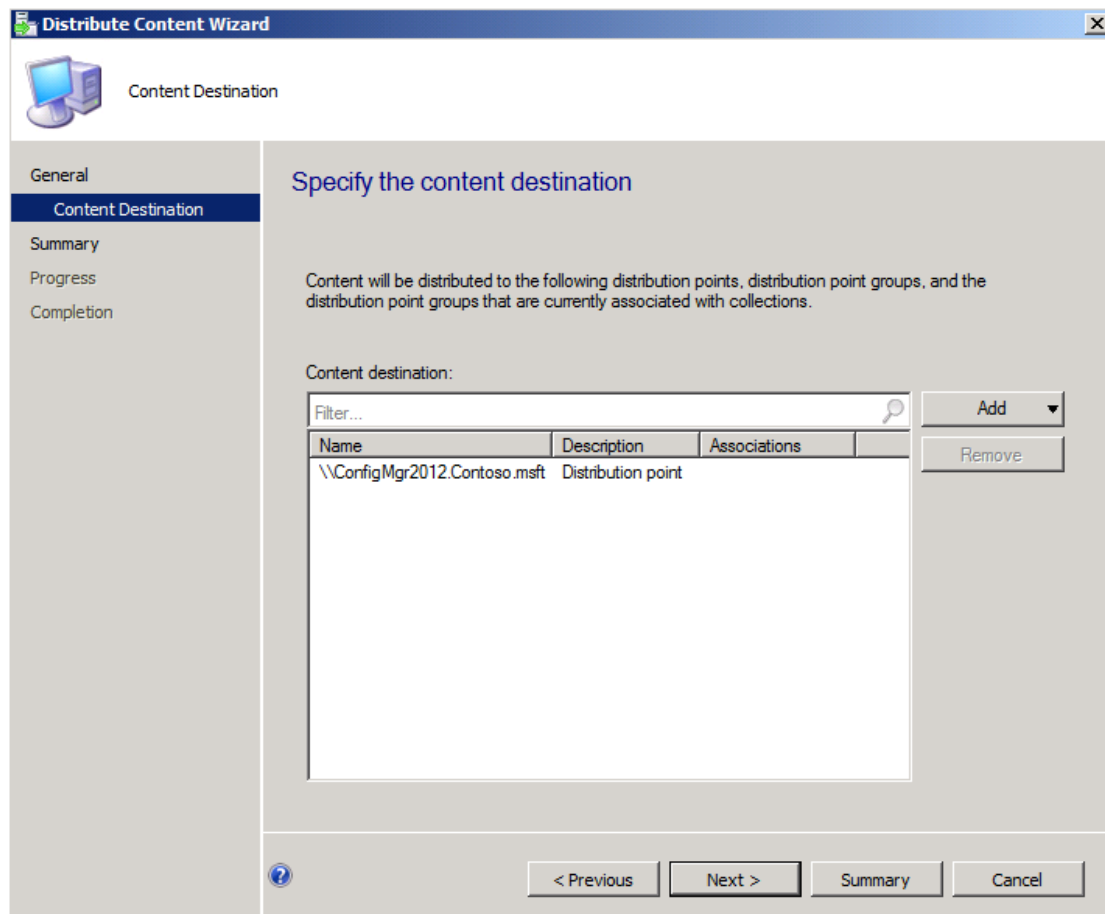
37) Click **Add** , click **Distribution Point** :



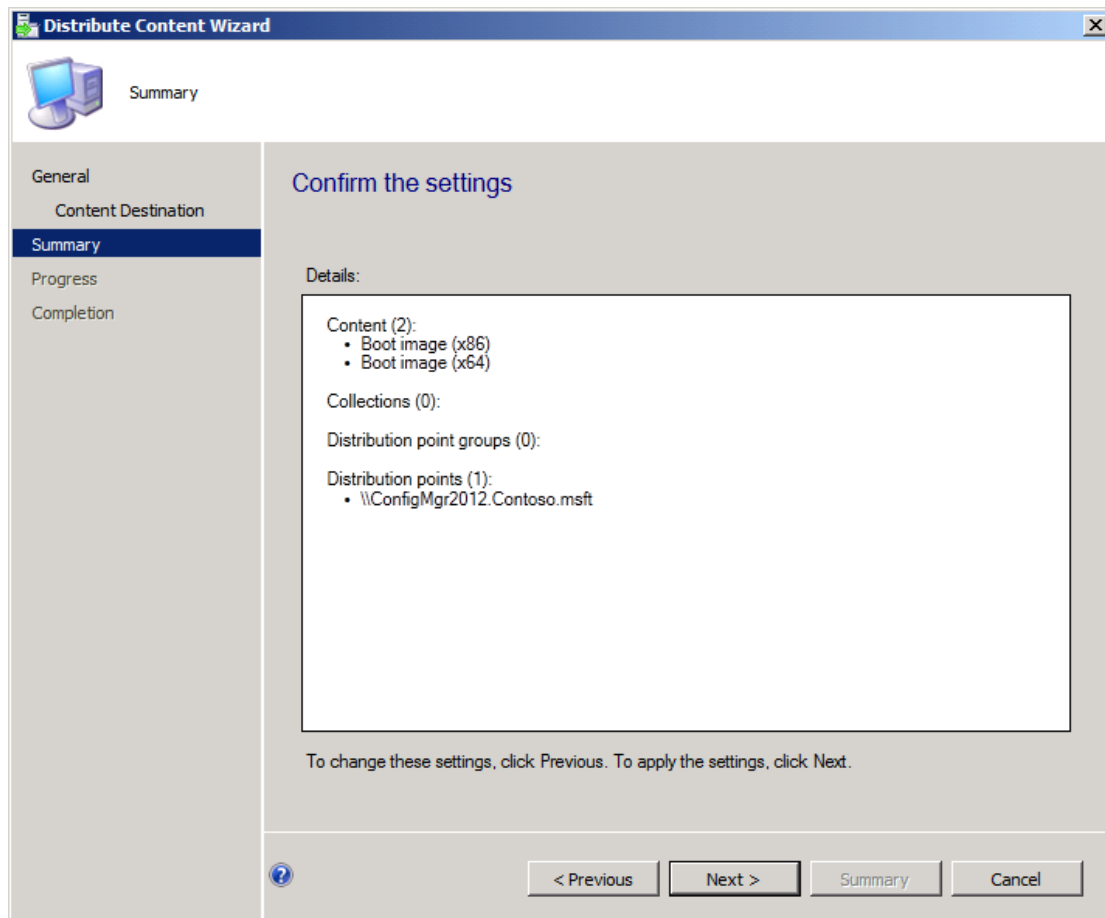
38) The **Add Distribution Points** dialog box appears :



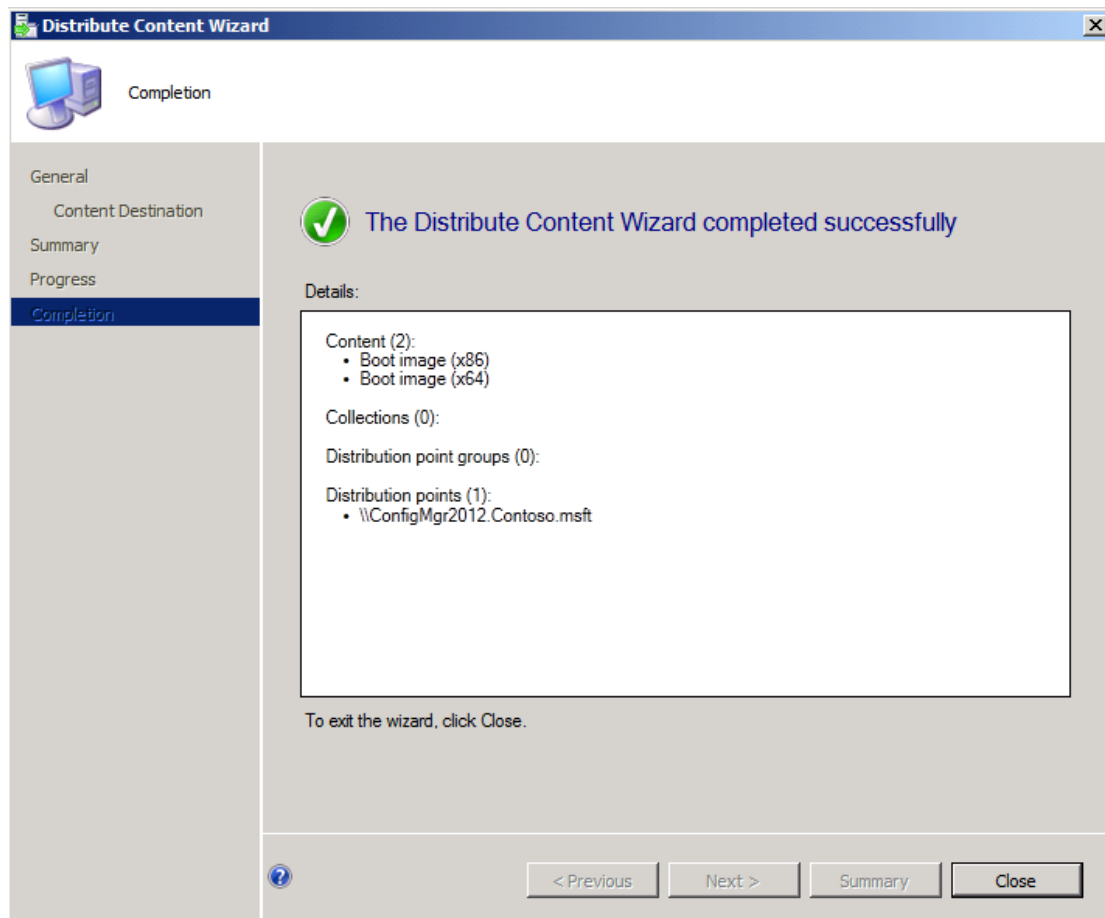
39) Under **Available distribution points** , click to select DP server and then click **OK** :



40) Click **Next** , the **Summary** dialog box appears :

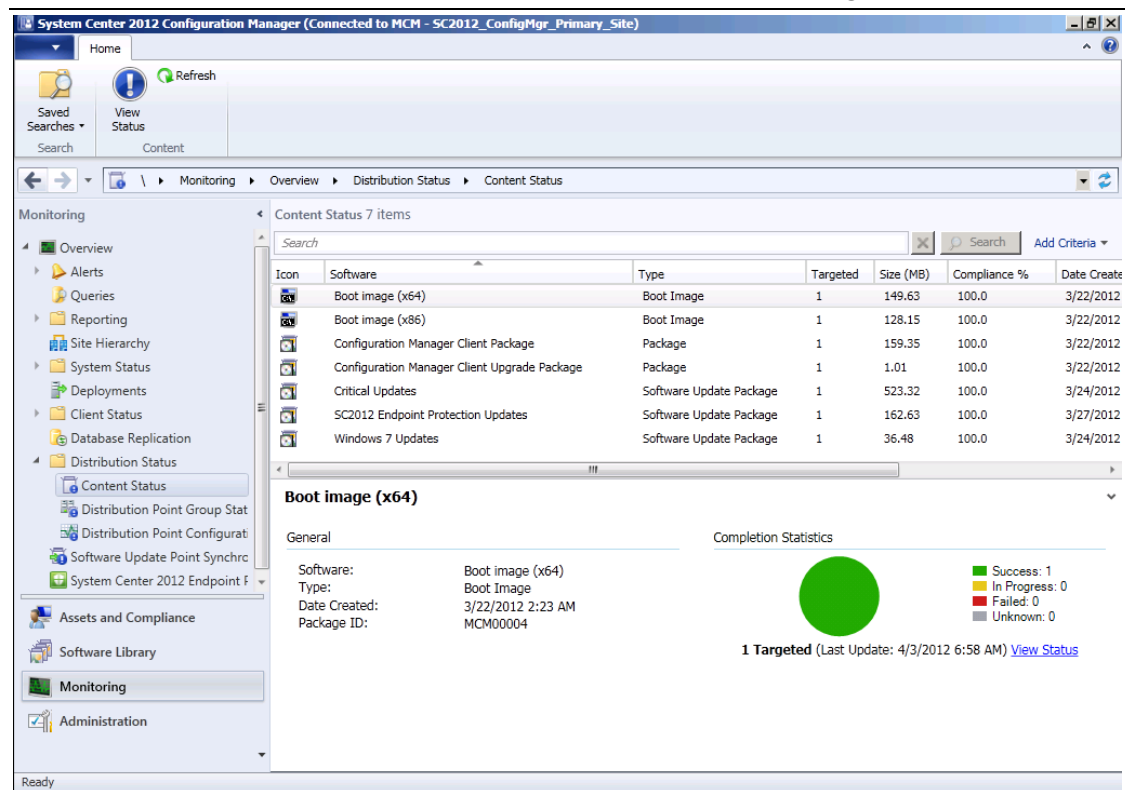


41) Click **Next** , the **Completion** dialog box appears indicating that the wizard completed successfully :



42) Click **Close** , and then click the **Monitoring** workspace , expand **Distribution Status** , and then click **Content Status** :

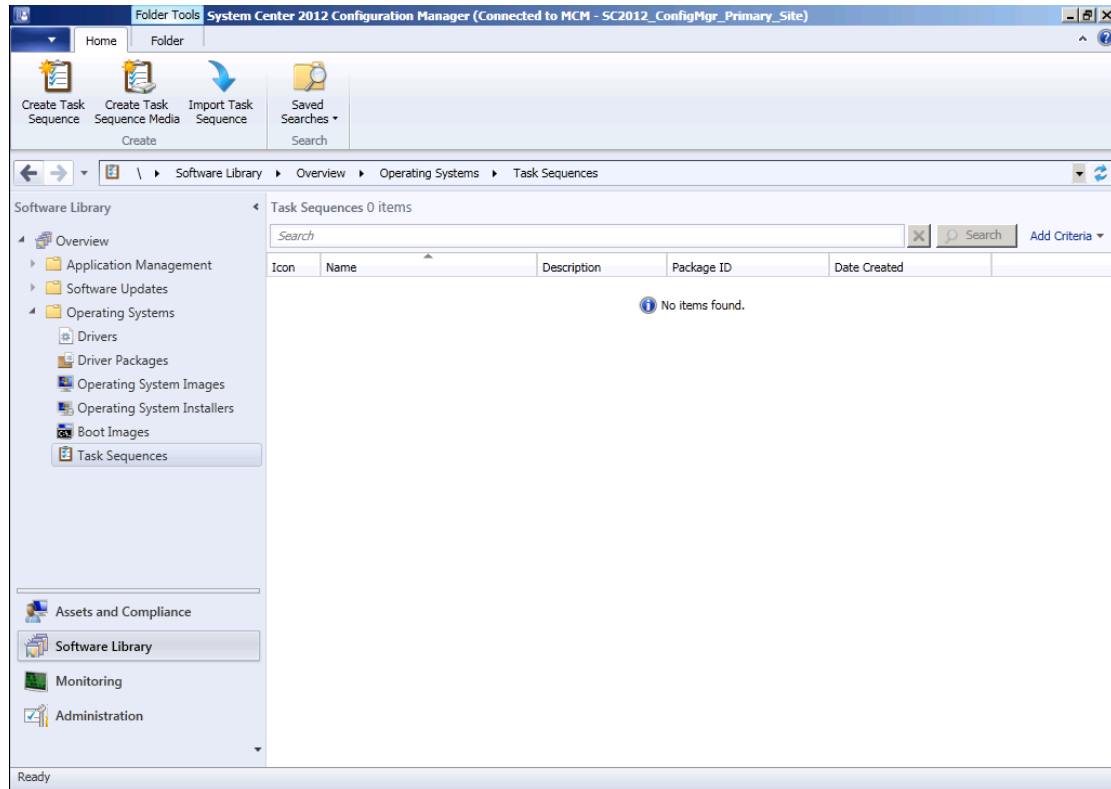
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43) The content distribution status appears in the results pane. Notice that the content for both boot images have been successfully distributed to your distribution point .

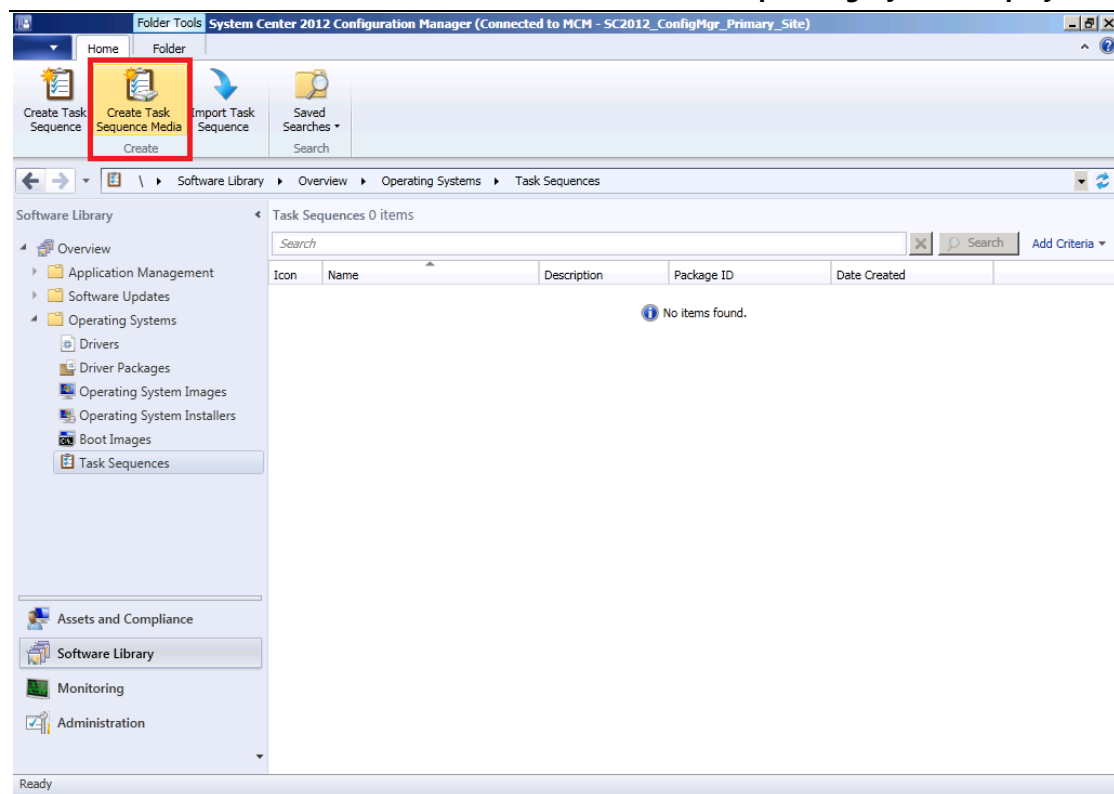
5. Capturing a Reference Computer :

- 1) Click the **Software Library** workspace , click **Task Sequences** :

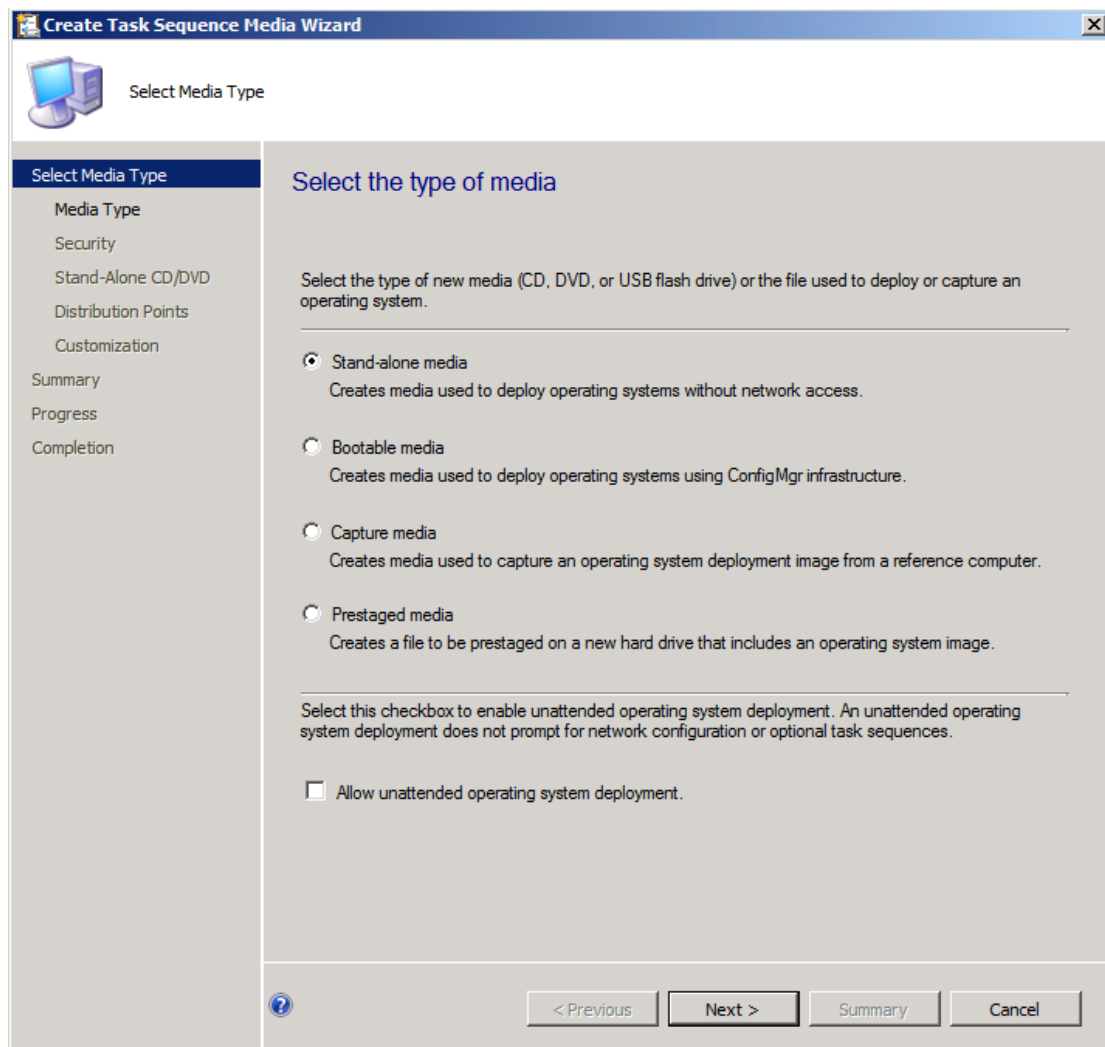


- 2) On the Ribbon , click **Create Task Sequence Media** :

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3) The **Create Task Sequence Media Wizard Select Media Type** dialog box appears :



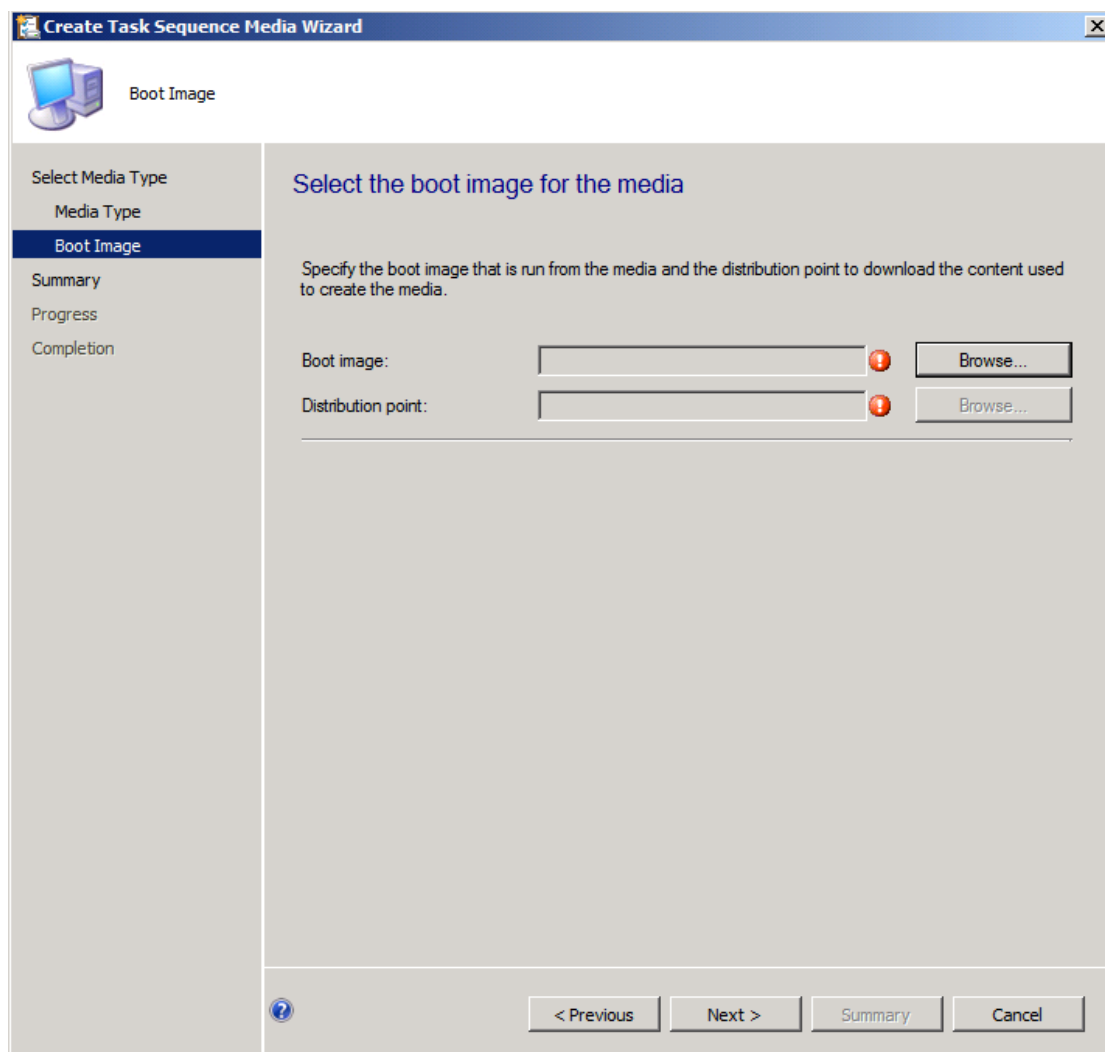
4) Click **Capture media** , and then click **Next** , the **Media Type** dialog box appears :

The screenshot shows the 'Create Task Sequence Media Wizard' window, specifically the 'Media Type' step. The window has a title bar with the text 'Create Task Sequence Media Wizard' and a close button. On the left side, there is a navigation pane with the following items: 'Select Media Type', 'Media Type' (which is highlighted with a blue bar), 'Boot Image', 'Summary', 'Progress', and 'Completion'. The main area of the window is titled 'Specify the media type' in blue text. Below this title, there is a instruction: 'Specify whether the media for this image deployment will use CD/DVD media or USB flash drive.' There are two radio button options: 'USB flash drive' (which is currently unselected) and 'CD/DVD set' (which is selected). Below the 'USB flash drive' option is a text box labeled 'Drive:' followed by a dropdown arrow. Below the 'CD/DVD set' option is a text box labeled 'Media size:' followed by a dropdown arrow. Below these options, there is a paragraph of text: 'Specify the name and path where the output files will be written. If multiple pieces of media are required, a sequence number will be appended to the name for each piece of media.' Below this text is a text box labeled 'Media file:' followed by a red exclamation mark icon and a 'Browse...' button. At the bottom of the window, there is a bar with a help icon (a question mark in a circle) on the left and four buttons on the right: '< Previous', 'Next >', 'Summary', and 'Cancel'.

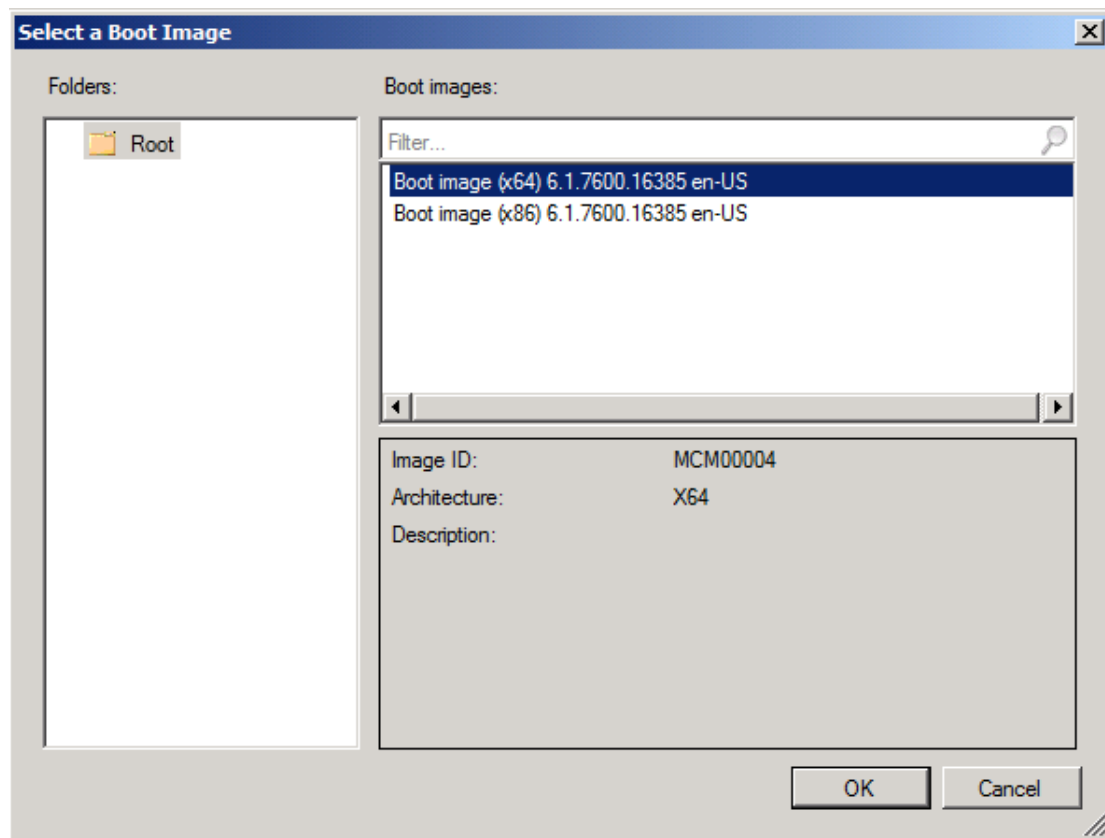
5) In the **Media file** box , type a path :

The screenshot shows the 'Create Task Sequence Media Wizard' window. The title bar reads 'Create Task Sequence Media Wizard'. On the left is a navigation pane with the following items: 'Media Type' (selected), 'Boot Image', 'Summary', 'Progress', and 'Completion'. The main area is titled 'Specify the media type'. It contains the instruction: 'Specify whether the media for this image deployment will use CD/DVD media or USB flash drive.' There are two radio button options: 'USB flash drive' (unselected) and 'CD/DVD set' (selected). Below the 'USB flash drive' option is a 'Drive:' dropdown menu. Below the 'CD/DVD set' option is a 'Media size:' dropdown menu. Further down, there is a text box for 'Media file:' containing the path 'E:\CaptureCD.iso', followed by a 'Browse...' button. At the bottom of the window are four buttons: a help icon (?), '< Previous', 'Next >', 'Summary', and 'Cancel'.

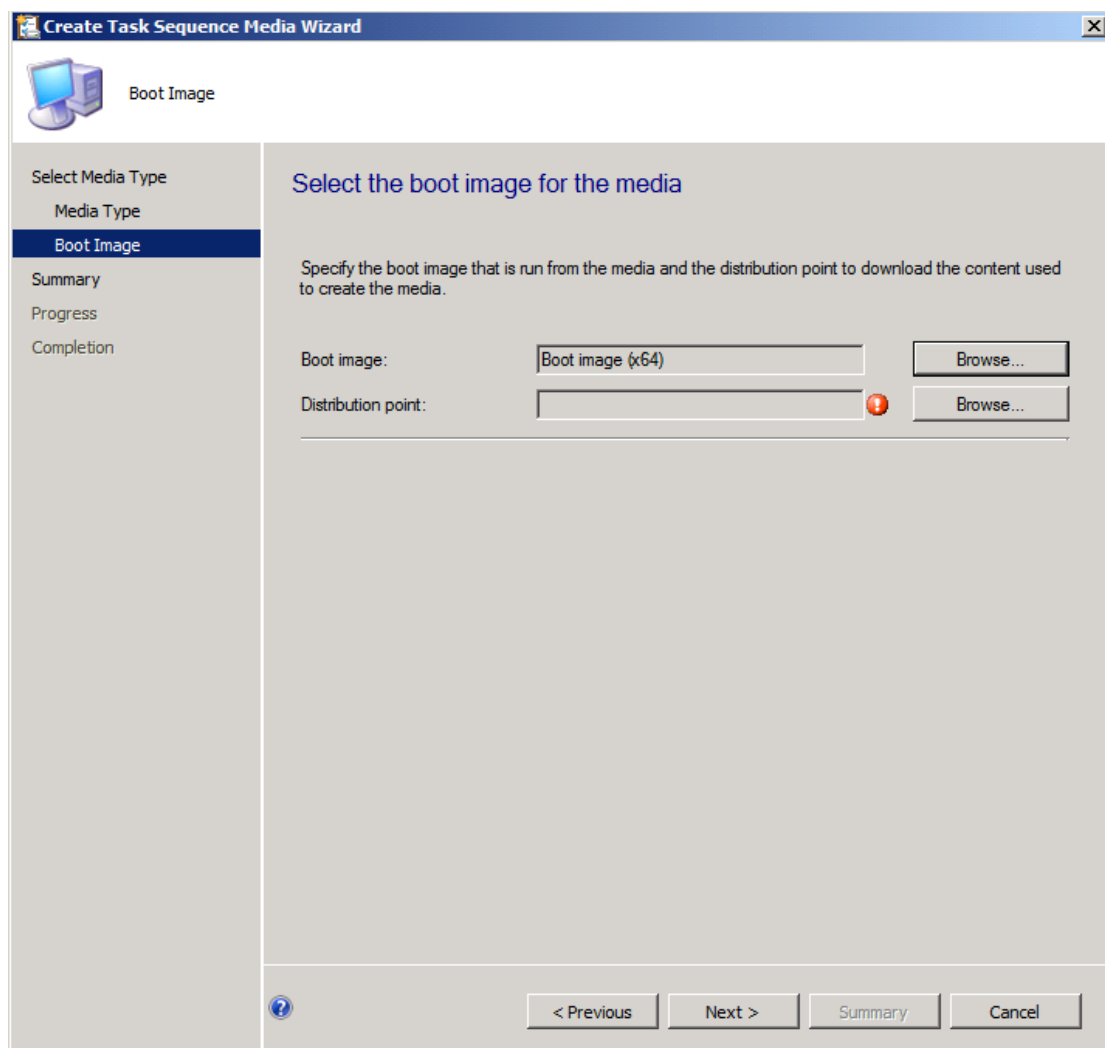
6) And then click **Next** , the **Boot Image** dialog box appears :



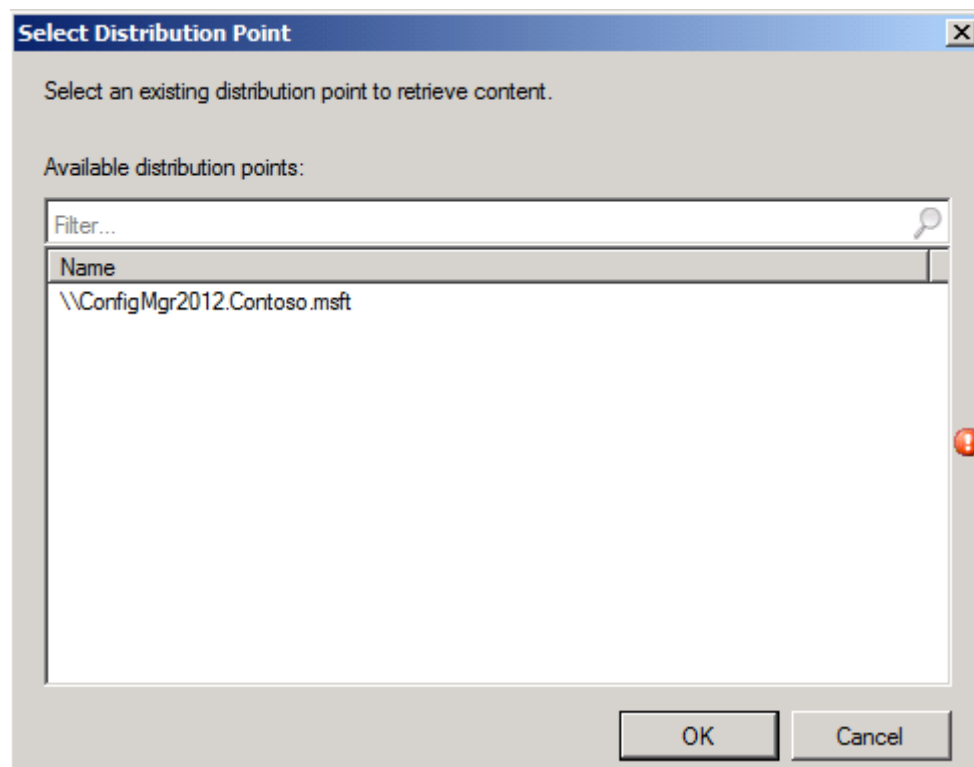
7) After **Boot image** , click **Browse...** , the **Select a Boot Image** dialog box appears :



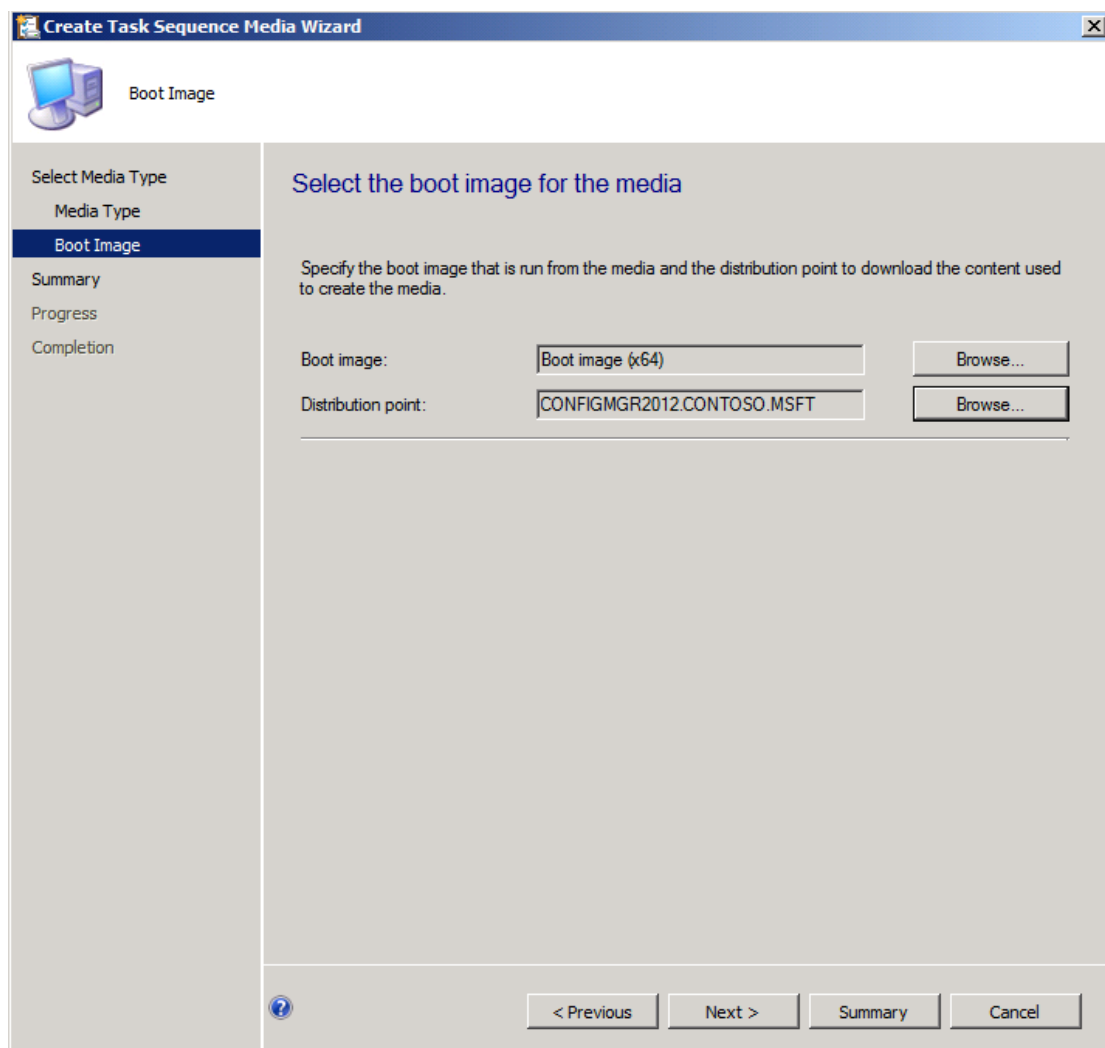
8) Under **Boot images** , click **Boot image (x64)** , and then click **OK** , the **Boot Image** dialog box appears :



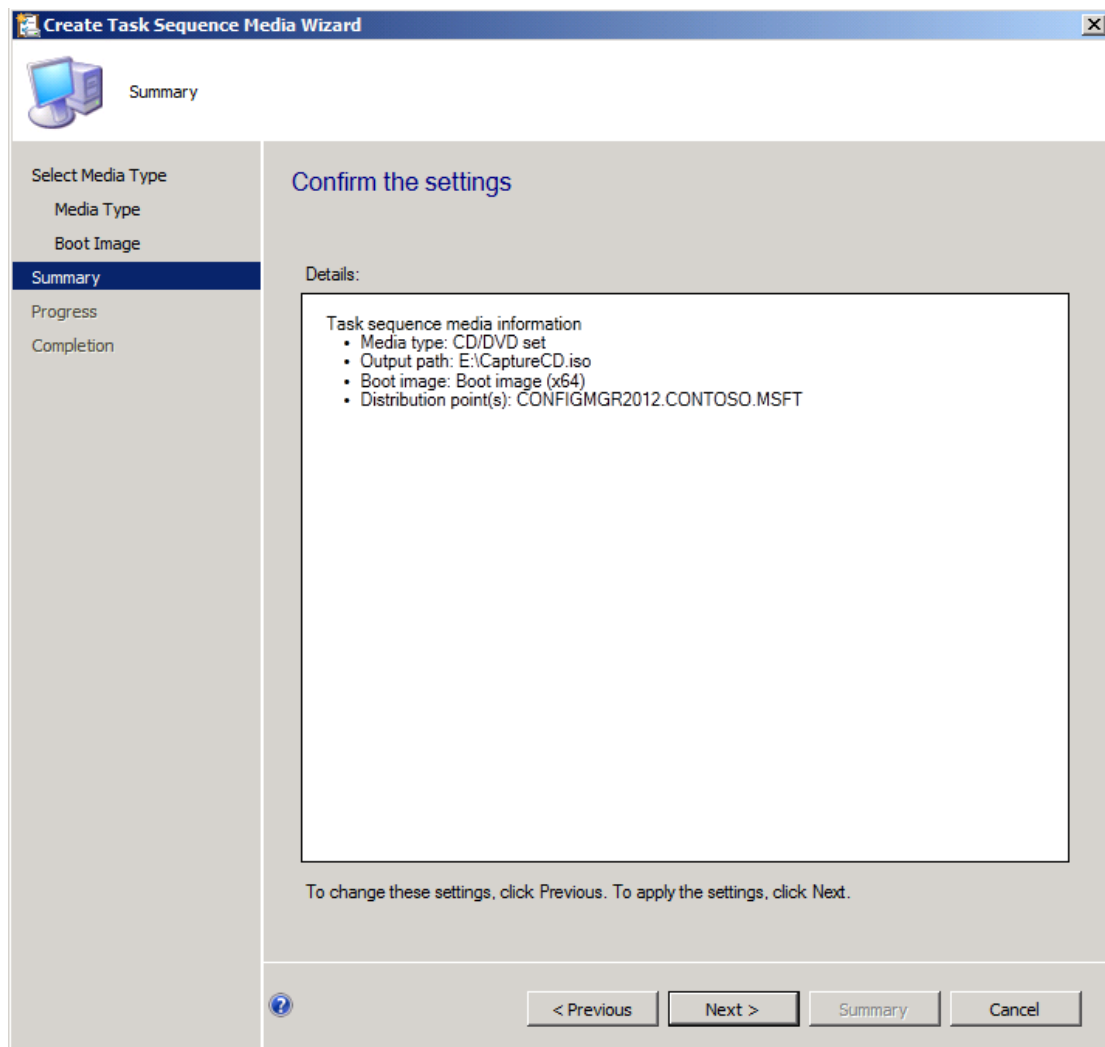
9) After **Distribution point** , click **Browse...** , the **Select Distribution Point** dialog box appears :



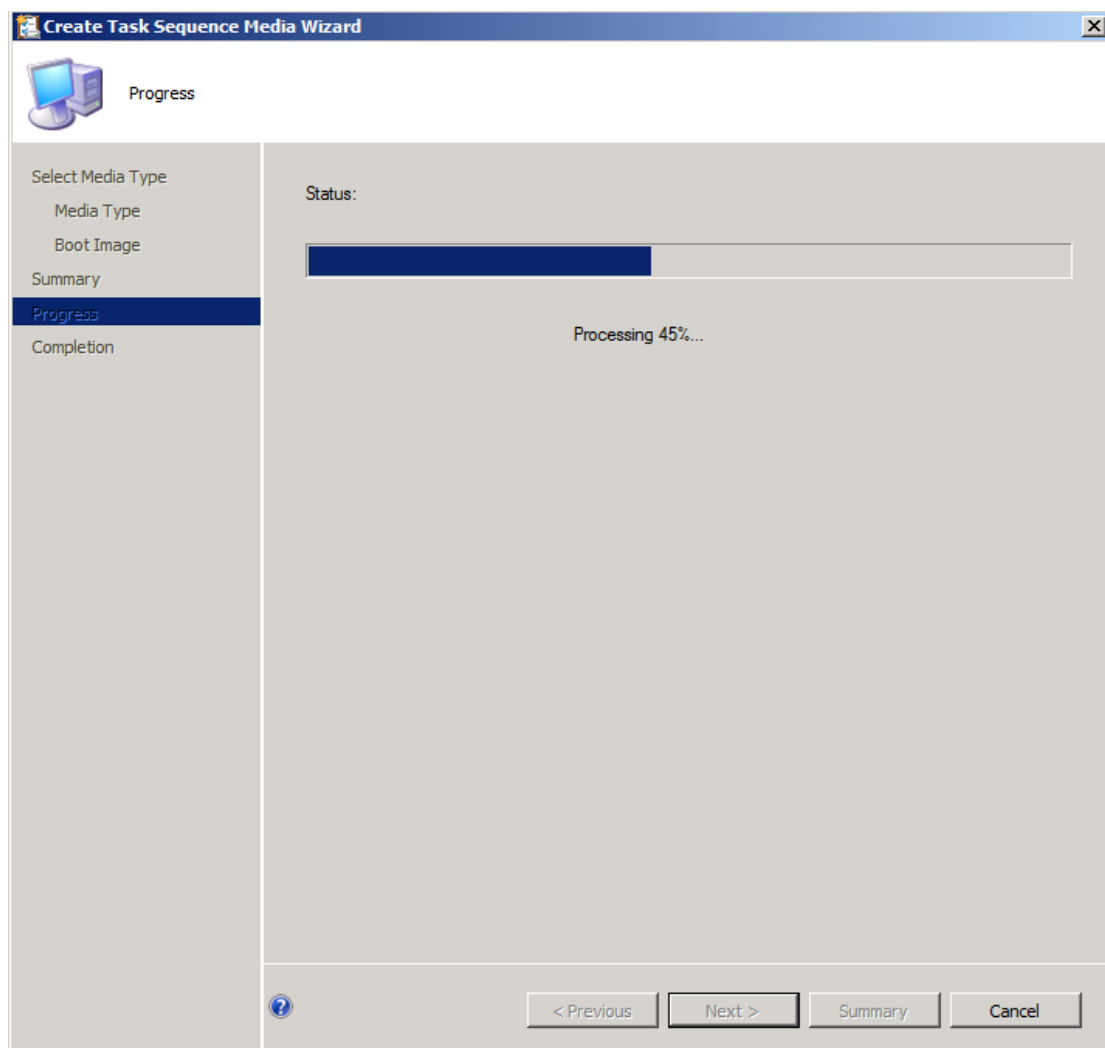
10) Under **Name** , click DP , and then click **OK** , the **Boot Image** dialog box appears :



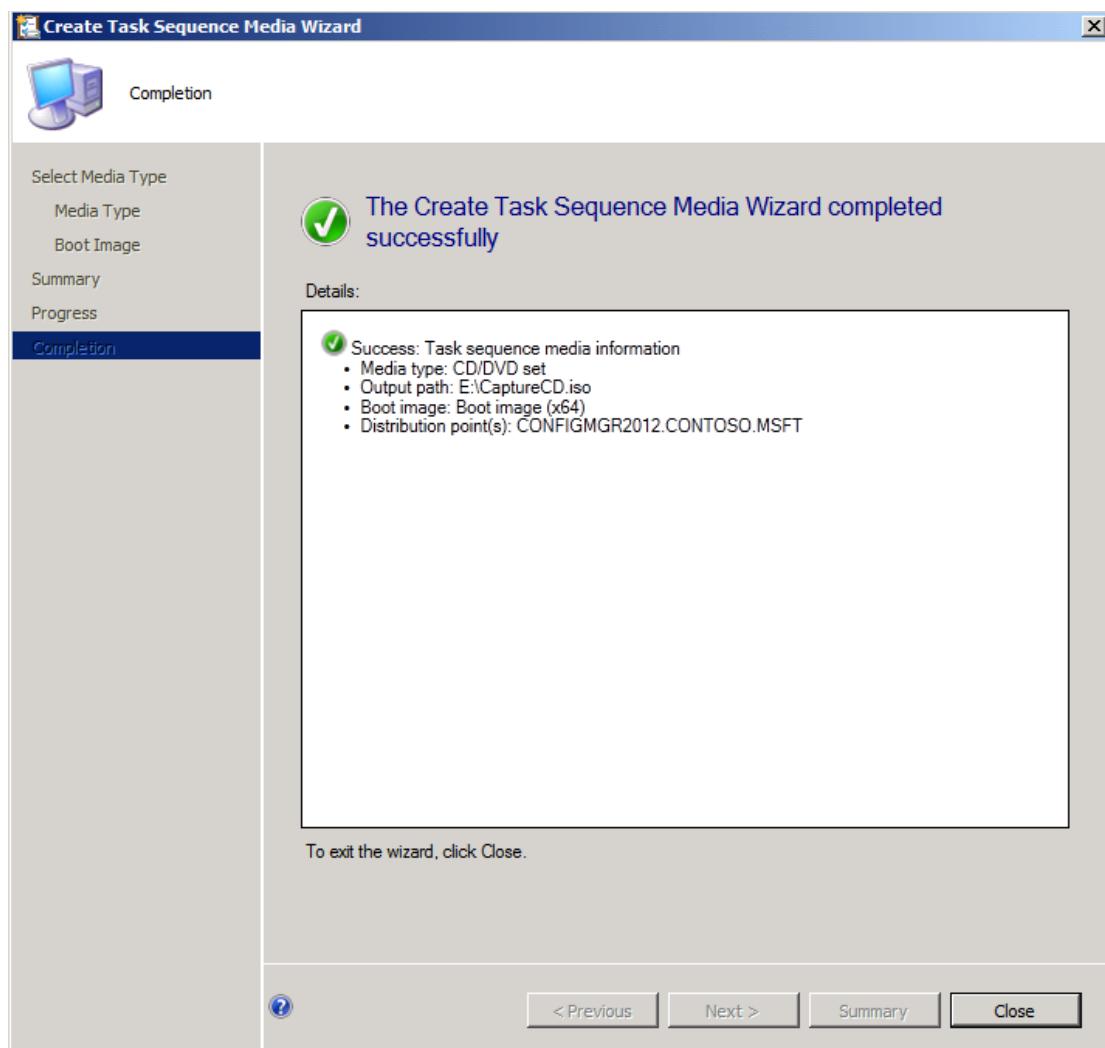
11) Click **Next** , the **Summary** dialog box appears :



12) Click **Next** , the **Progress** dialog box appears :

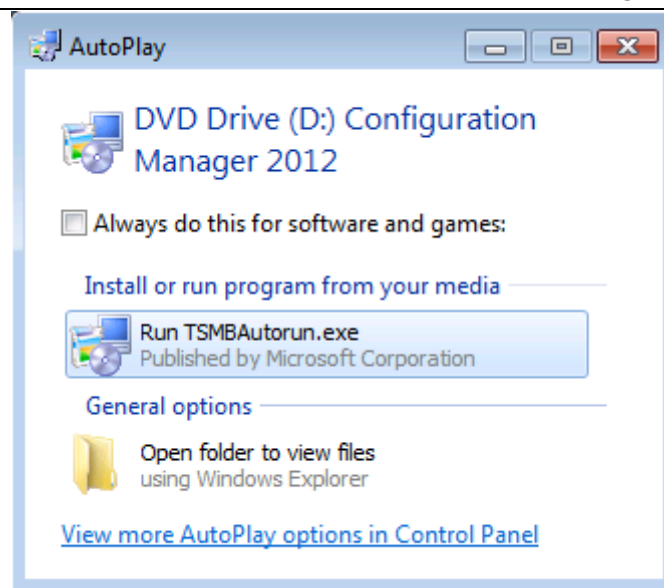


13) Wait some seconds , the **Completion** dialog box appears indicating that the wizard successfully created the capture media :

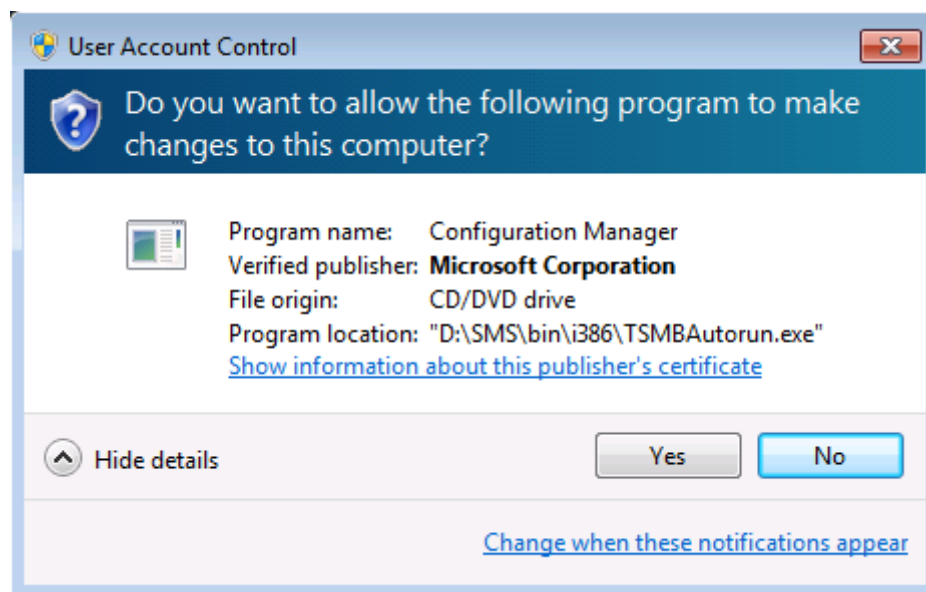


14) Click **Close** . You can find the **CaptureCD.iso** file and you need to burn it to a physical CD .

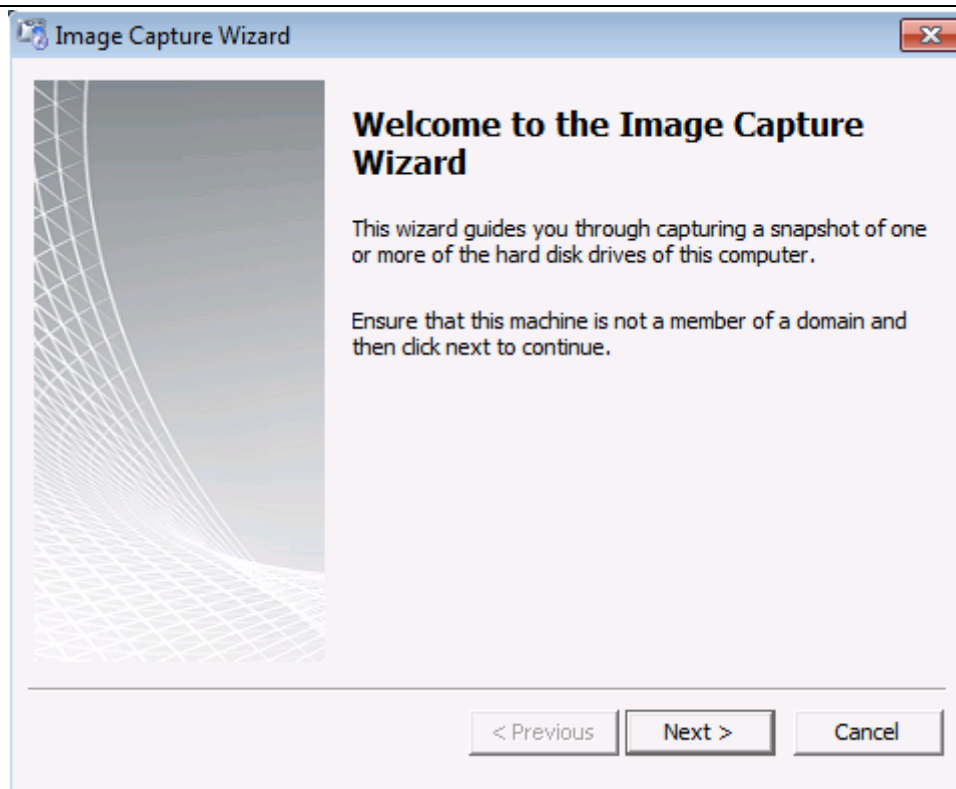
15) You will prepare the Windows 7 client computer to be captured , the reference computer cannot be domain joined , so you will remove the client from the domain for capturing . Remove the **Client** computer from the Contoso.msft domain , and restart the computer and logon as LocalAdmin . Insert CaptureCD image , will display :



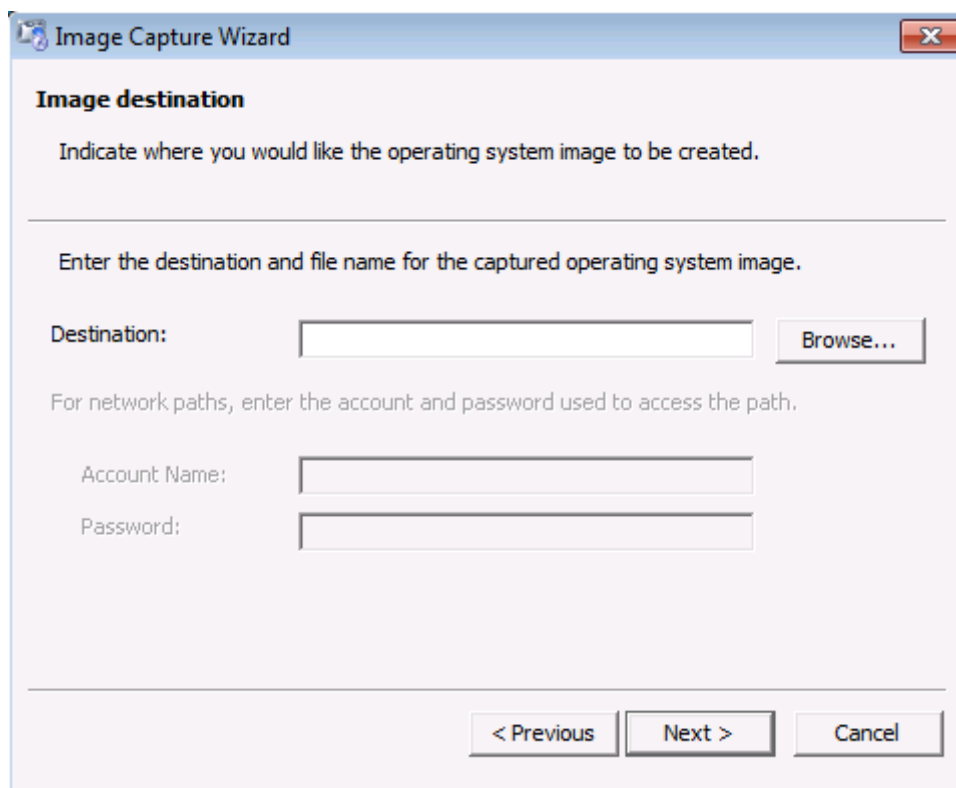
16) Click **Run TSMBAutorun.exe** , a **User Account control** message box appears prompting :



17) Click **Yes** , the **Image Capture Wizard Welcome to the Image Capture Wizard** dialog box appears :

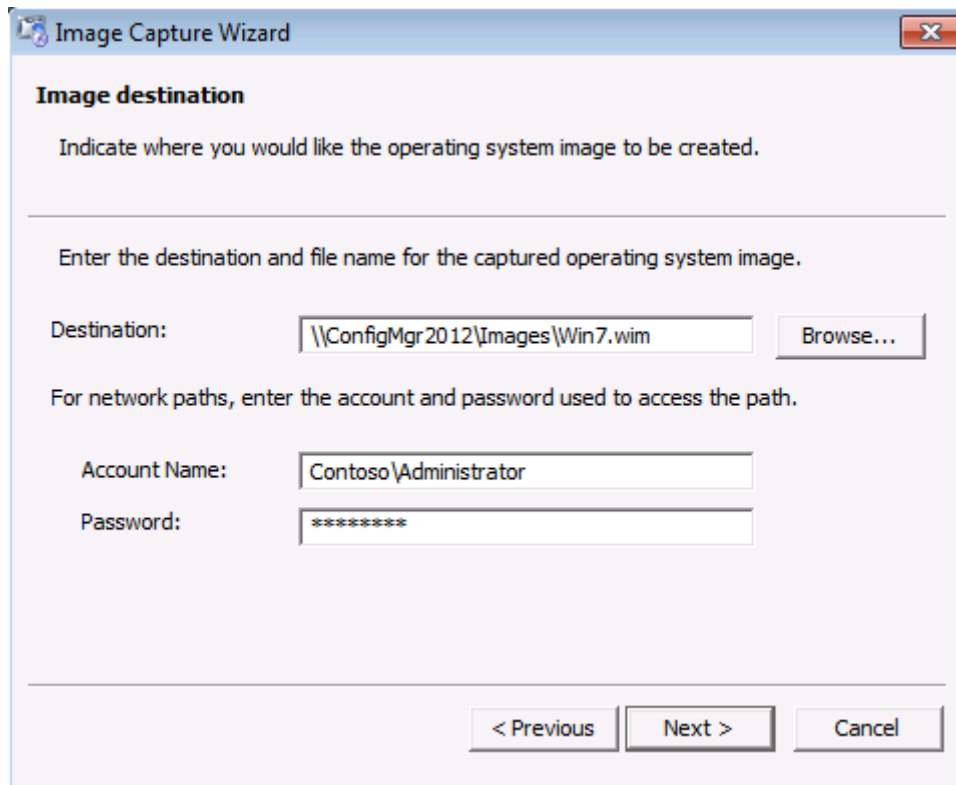


18) Click **Next** , the **Image destination** dialog box appears :



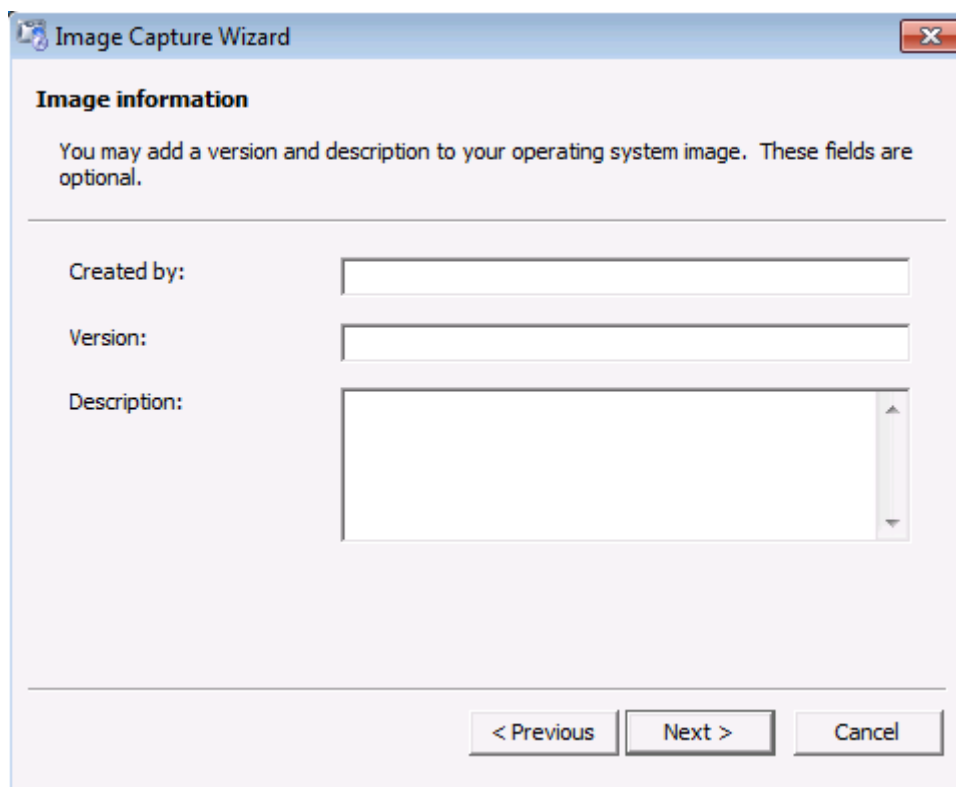
19) In the **Destination** box , type a path and captured image name , in the

Account Name and **Password** box , type Domain\User information :



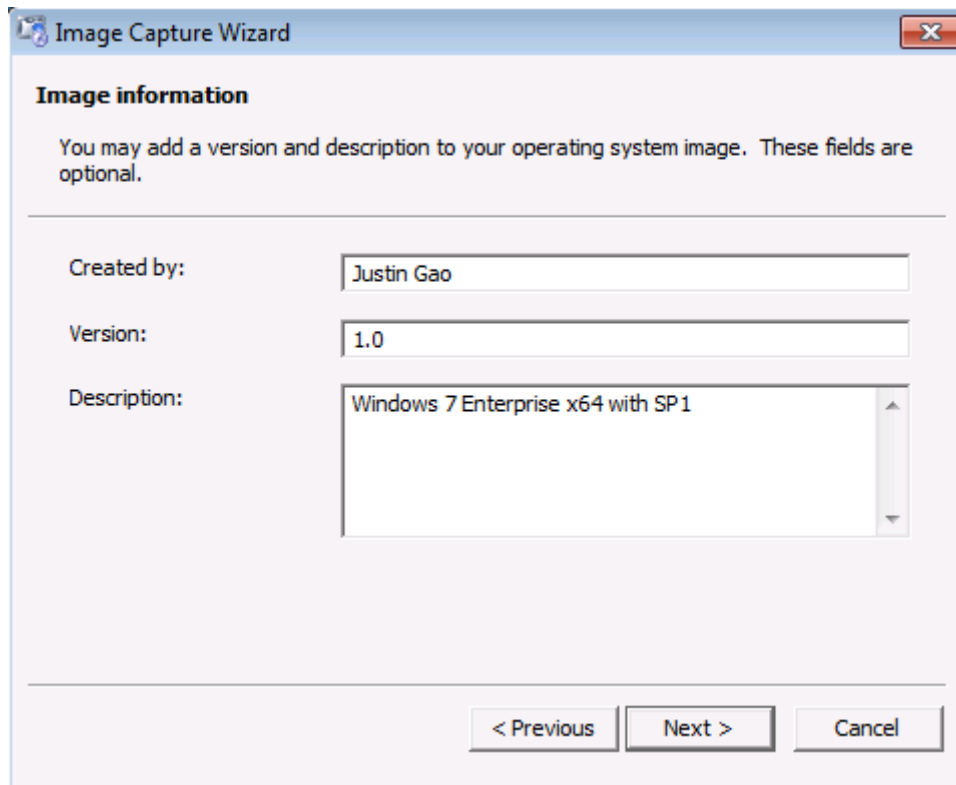
The dialog box is titled "Image Capture Wizard" and has a close button (X) in the top right corner. The main heading is "Image destination". Below the heading is the instruction: "Indicate where you would like the operating system image to be created." A horizontal line separates this from the next section, which says: "Enter the destination and file name for the captured operating system image." There is a text box labeled "Destination:" containing the path "\\ConfigMgr2012\\Images\\Win7.wim". To the right of this text box is a "Browse..." button. Below this, it says: "For network paths, enter the account and password used to access the path." There are two text boxes: "Account Name:" containing "Contoso\\Administrator" and "Password:" containing "*****". At the bottom, there are three buttons: "< Previous", "Next >", and "Cancel".

20) Click **Next** , the **Image information** dialog box appears :



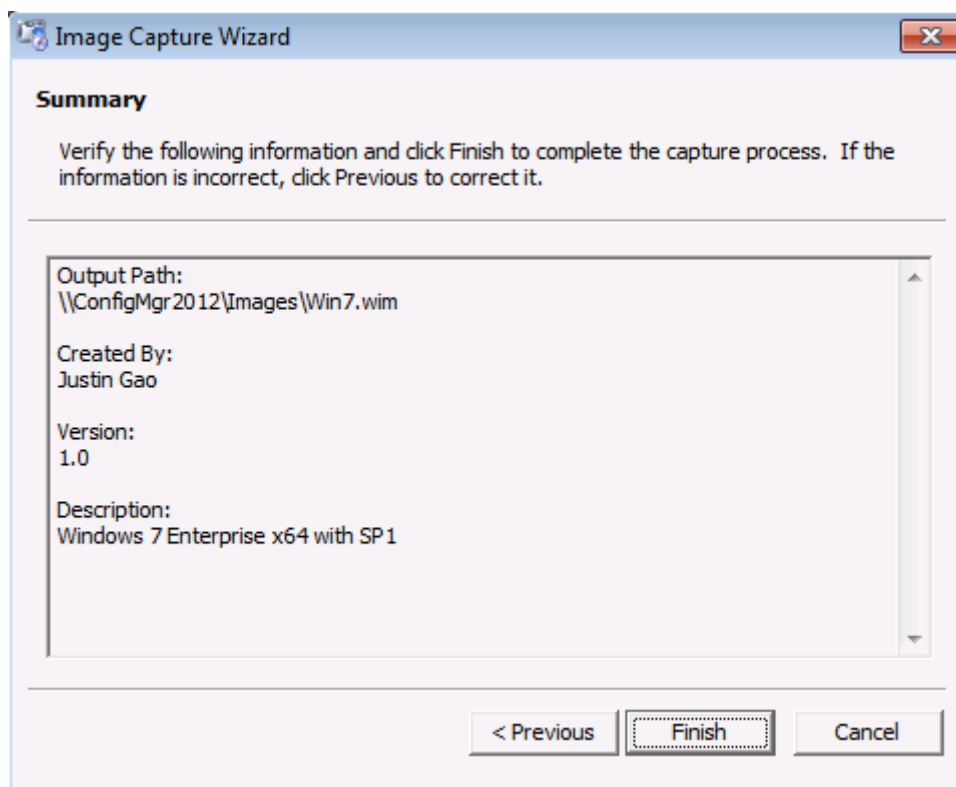
The dialog box is titled "Image Capture Wizard" and has a close button (X) in the top right corner. The main heading is "Image information". Below the heading is the instruction: "You may add a version and description to your operating system image. These fields are optional." A horizontal line separates this from the input fields. There are three text boxes: "Created by:" (empty), "Version:" (empty), and "Description:" (a large text area with a vertical scrollbar). At the bottom, there are three buttons: "< Previous", "Next >", and "Cancel".

21) Type related information :



The 'Image Capture Wizard' dialog box is shown with the 'Image information' tab selected. It contains three input fields: 'Created by:' with the text 'Justin Gao', 'Version:' with the text '1.0', and 'Description:' with the text 'Windows 7 Enterprise x64 with SP1'. At the bottom, there are three buttons: '< Previous', 'Next >', and 'Cancel'.

22) Click **Next** , the **Summary** dialog box appears :

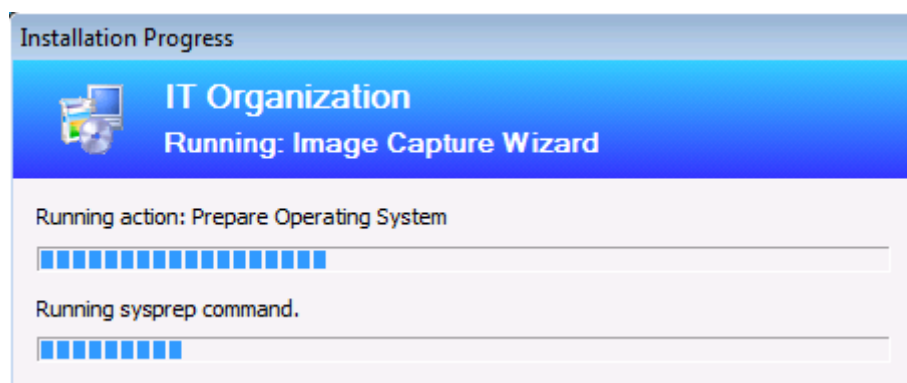


The 'Image Capture Wizard' dialog box is shown with the 'Summary' tab selected. It displays a summary of the information entered in the previous step: 'Output Path: \\ConfigMgr2012\\Images\\Win7.wim', 'Created By: Justin Gao', 'Version: 1.0', and 'Description: Windows 7 Enterprise x64 with SP1'. At the bottom, there are three buttons: '< Previous', 'Finish', and 'Cancel'.

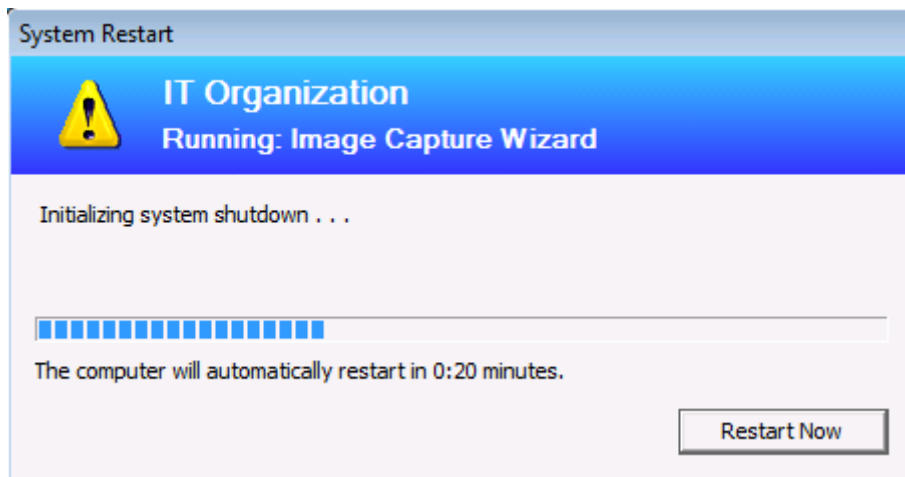
23) Click **Finish** , the image capture preparation process begins . When ready , an **Installation Progress** message box appears displaying the progress of the image preparation process :



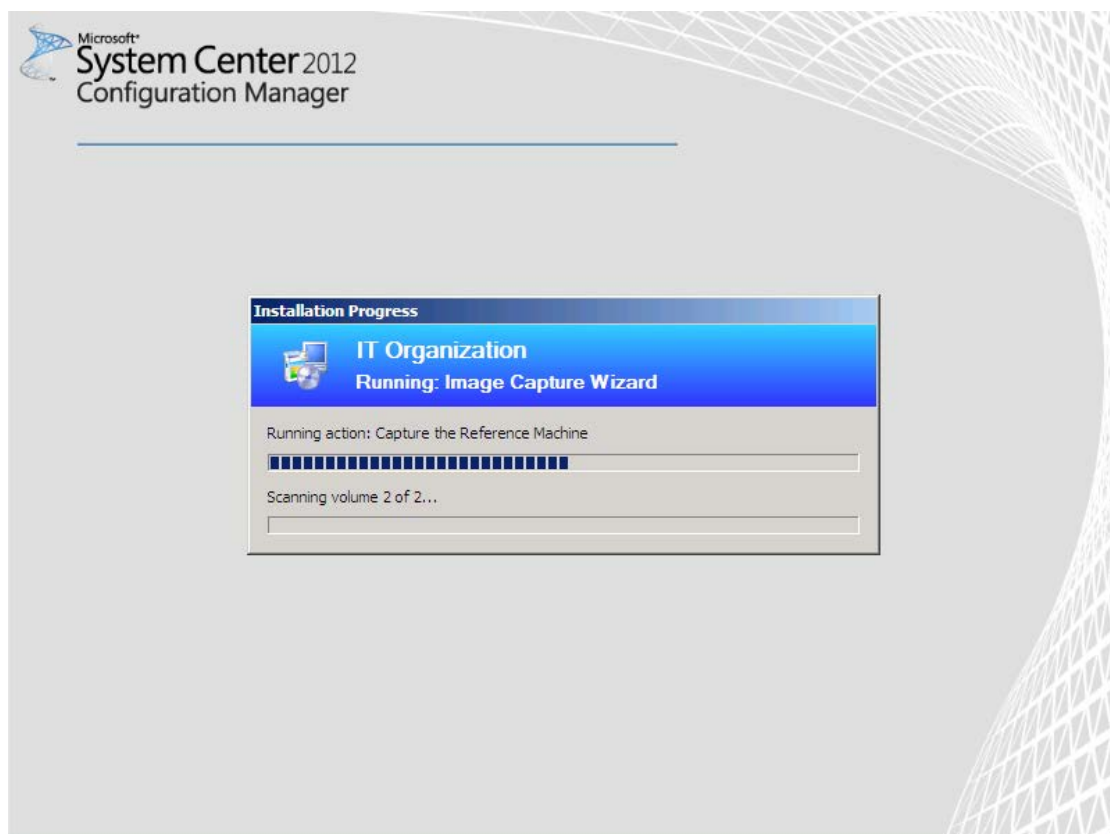
24) Part of the capture process involves running sysprep on the computer to depersonalize the system for imaging :

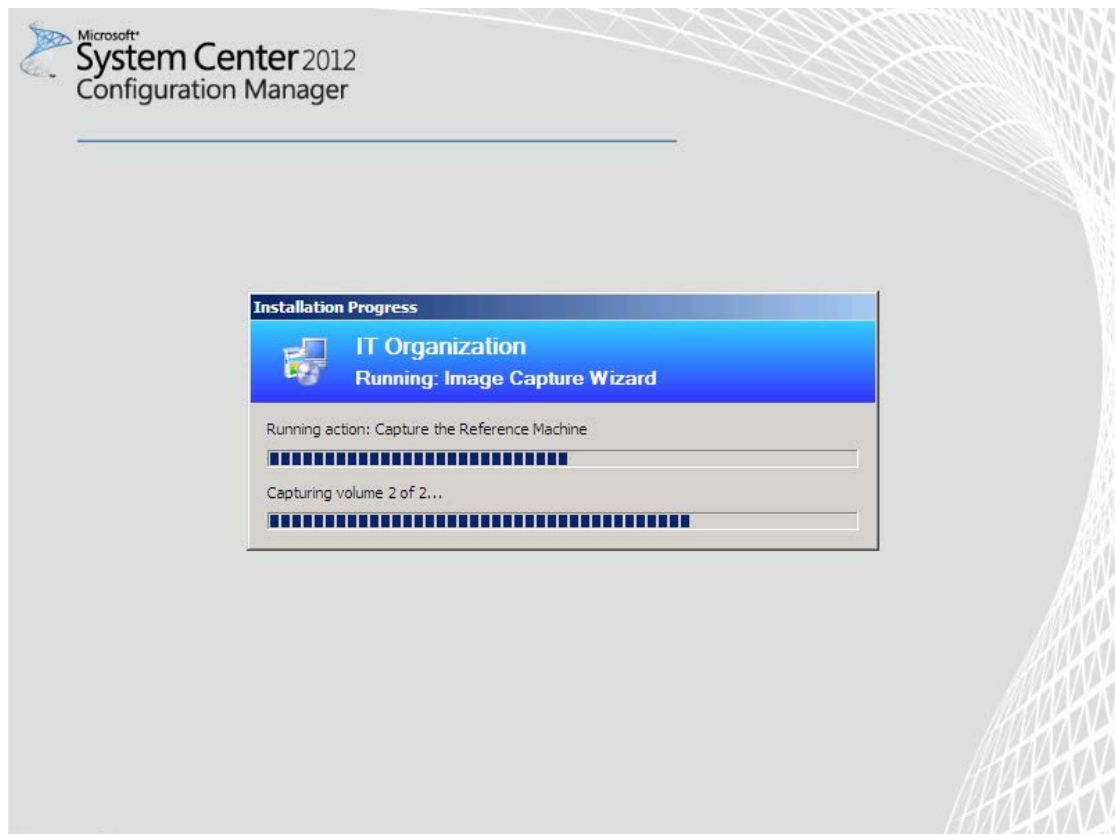


25) After sysprep has completed , the computer will restart automatically and boot using the boot image that was configured for the capture media :

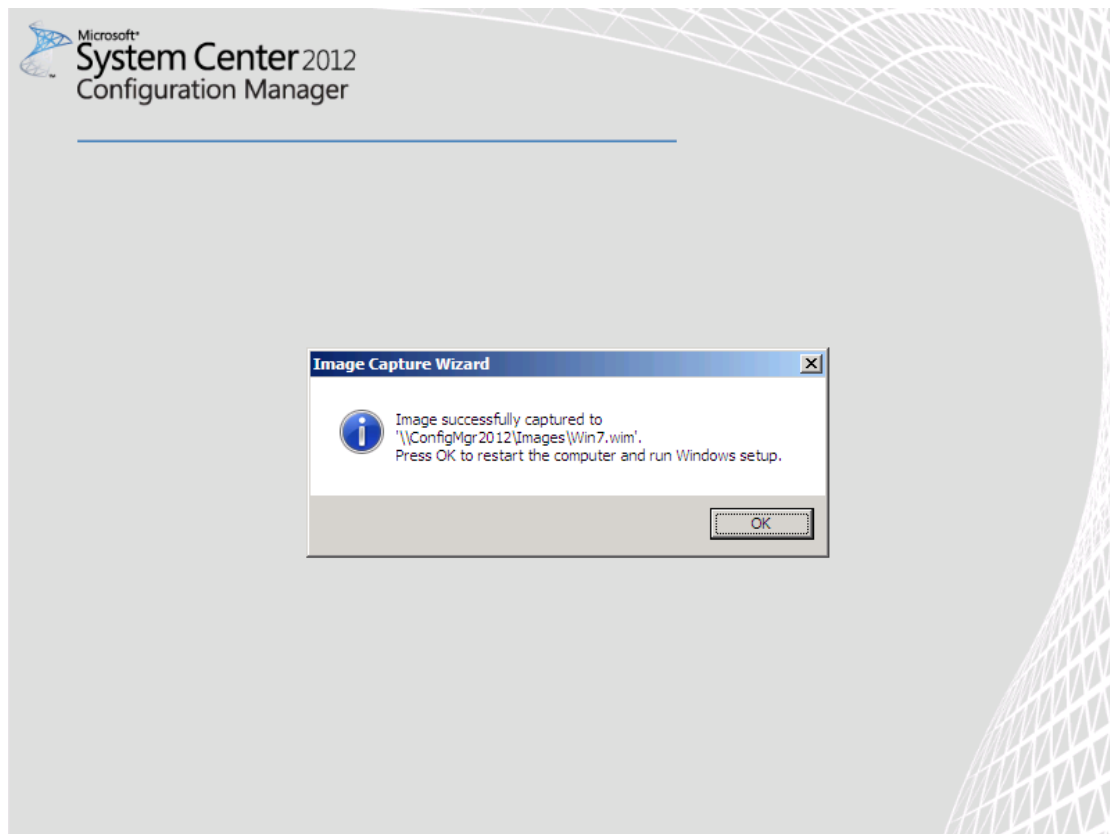


26) After the computer restart , an **Installation Progress** message box appears again as part of the capture process . Notice that the **Installation Progress** message box indicates that it is currently running the **Image Capture Wizard** :

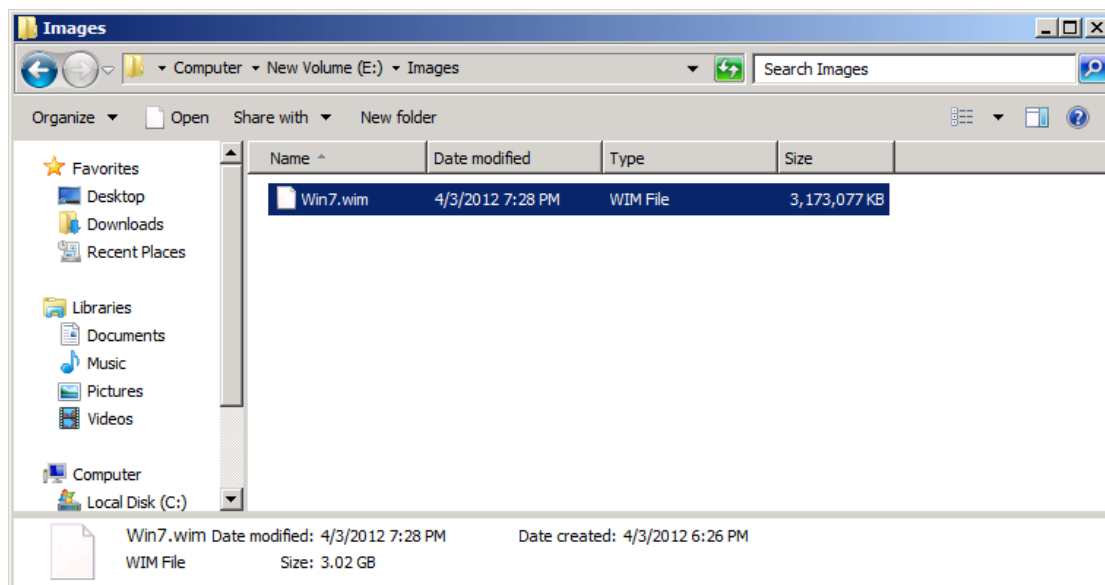




27) This process may take over an hour to complete , depending on the hardware used in your own environment . When completed , a **Image Capture Wizard** will displaying :

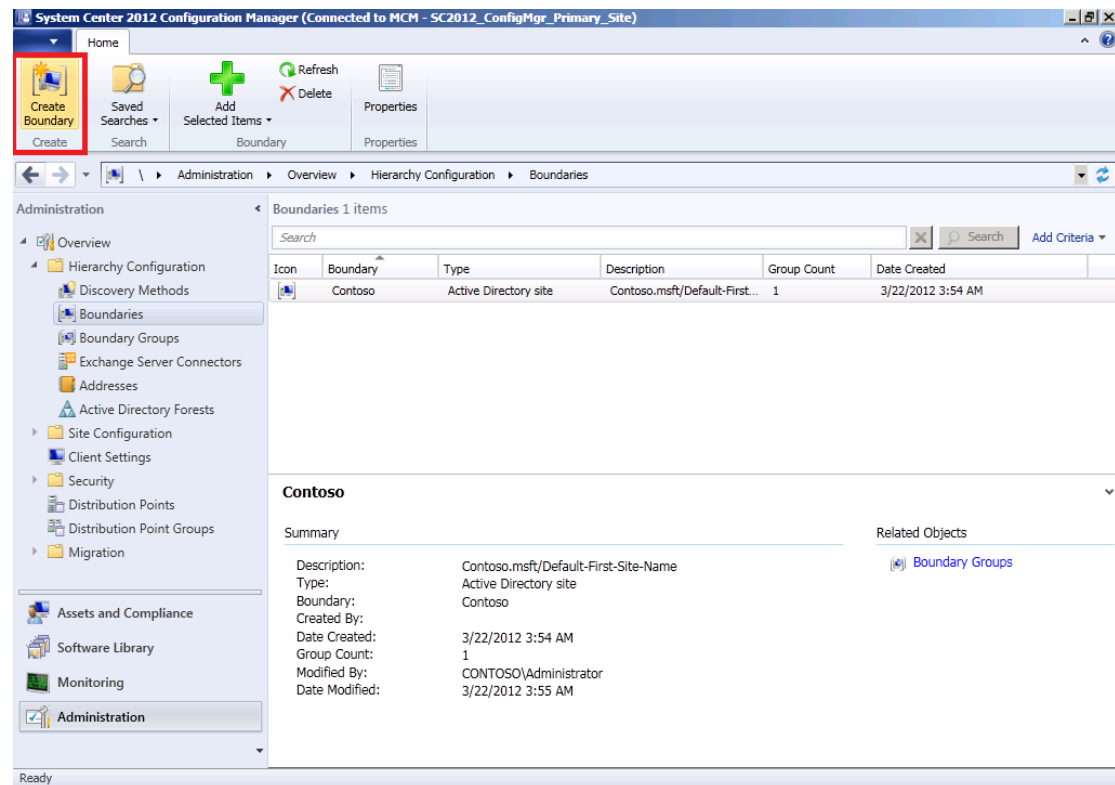


28) Click **OK** and shutdown this computer . You can see this captured image in **Images** folder on **ConfigMgr2012** server :

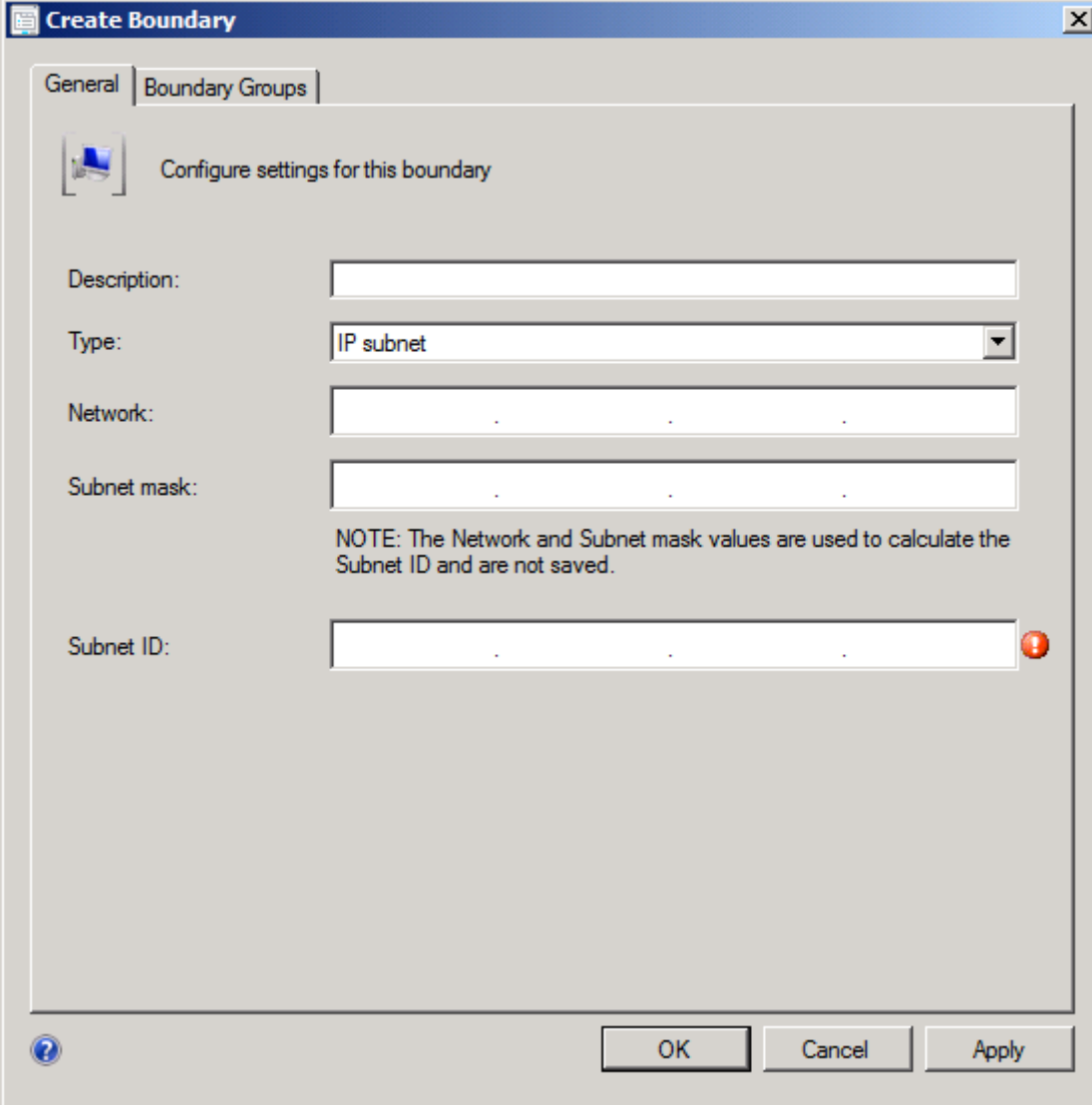


6. Preparing the Site to Support Operating System Deployment :

1) Click the **Administration** workspace , expand **Hierarchy Configuration** , and then click **Boundaries** , on the Ribbon , click **Create Boundary** :



2) The **Create Boundary** dialog box appears :



The image shows a 'Create Boundary' dialog box with two tabs: 'General' and 'Boundary Groups'. The 'General' tab is active. It contains a section titled 'Configure settings for this boundary' with a computer icon. Below this are several input fields: 'Description' (text box), 'Type' (dropdown menu showing 'IP subnet'), 'Network' (text box with dots), 'Subnet mask' (text box with dots), and 'Subnet ID' (text box with dots and a red warning icon). A note states: 'NOTE: The Network and Subnet mask values are used to calculate the Subnet ID and are not saved.' At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

Create Boundary

General | Boundary Groups

Configure settings for this boundary

Description:

Type:

Network:

Subnet mask:

NOTE: The Network and Subnet mask values are used to calculate the Subnet ID and are not saved.

Subnet ID:

OK Cancel Apply

3) Type related information :

Create Boundary

General | Boundary Groups

Configure settings for this boundary

Description: Range for DHCP clients

Type: IP address range

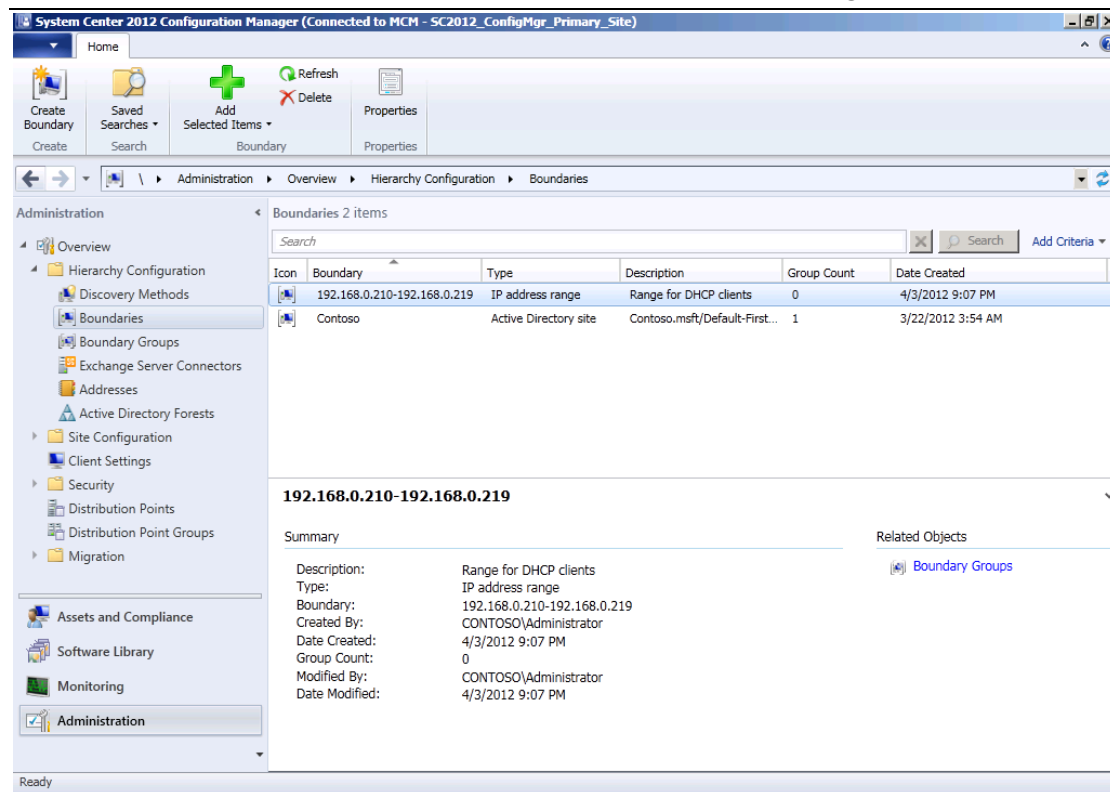
Starting IP address: 192 . 168 . 0 . 210

Ending IP address: 192 . 168 . 0 . 219

OK Cancel Apply

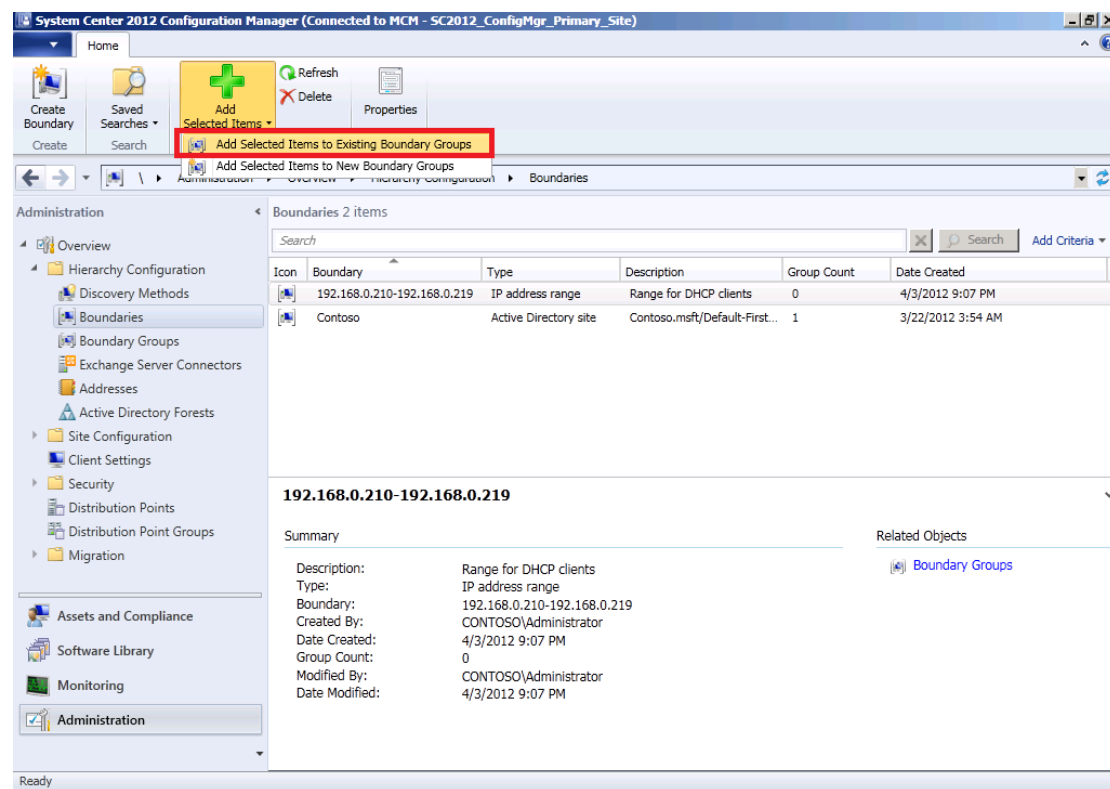
4) Click **OK** , there are now two boundaries in the site :

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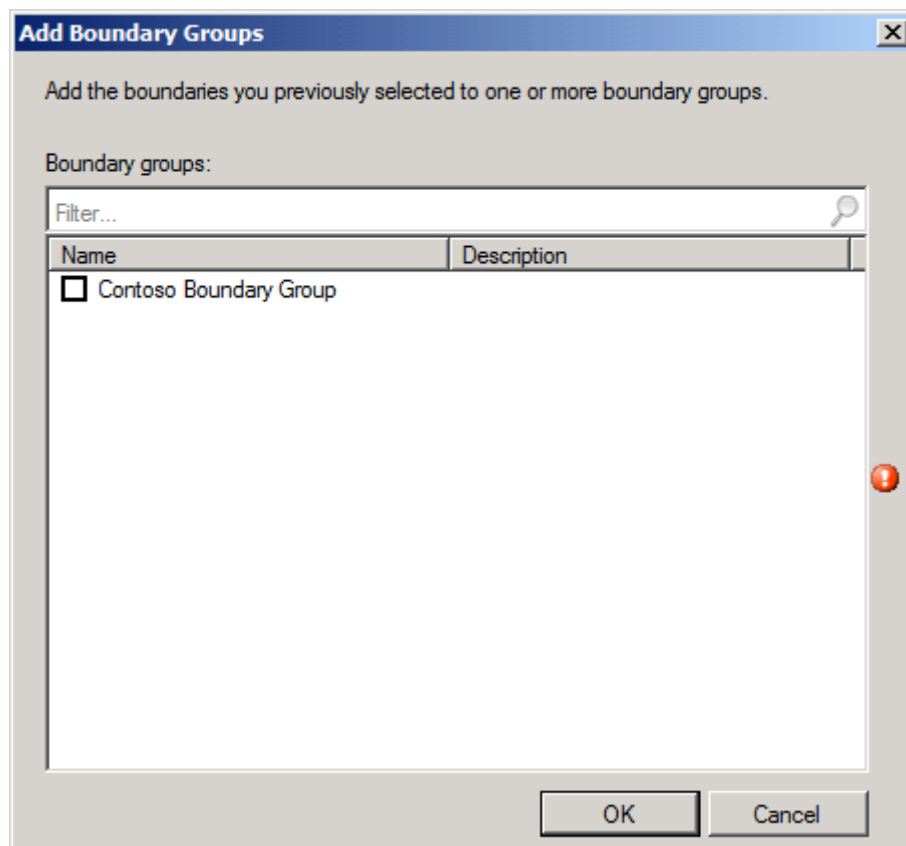
5) Click new created boundary , and then on the Ribbon , click **Add Selected**

Items , and then click **Add Selected Items to Existing Boundary Groups** :



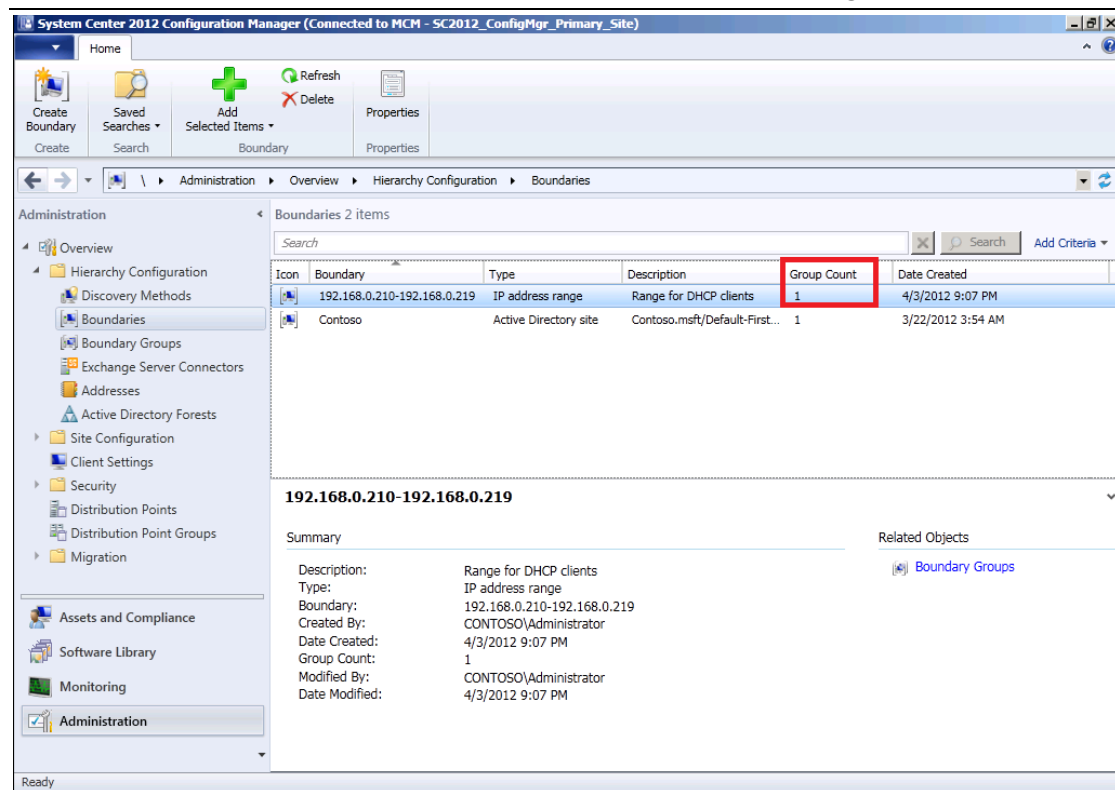
Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

- 6) The **Add Boundary Groups** dialog box appears :



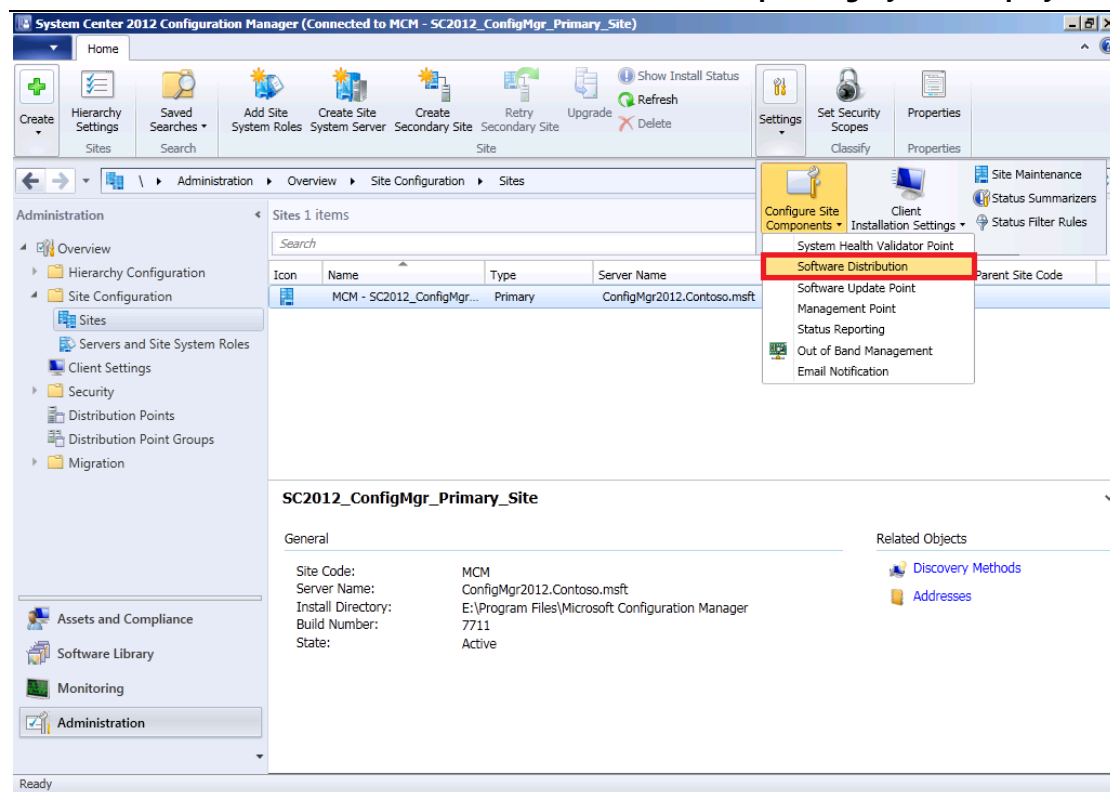
- 7) Click to select **Contoso Boundary Group** , and then click **OK** , the list of boundaries appears in the results pane . Notice that new boundary created is now a member of one group :

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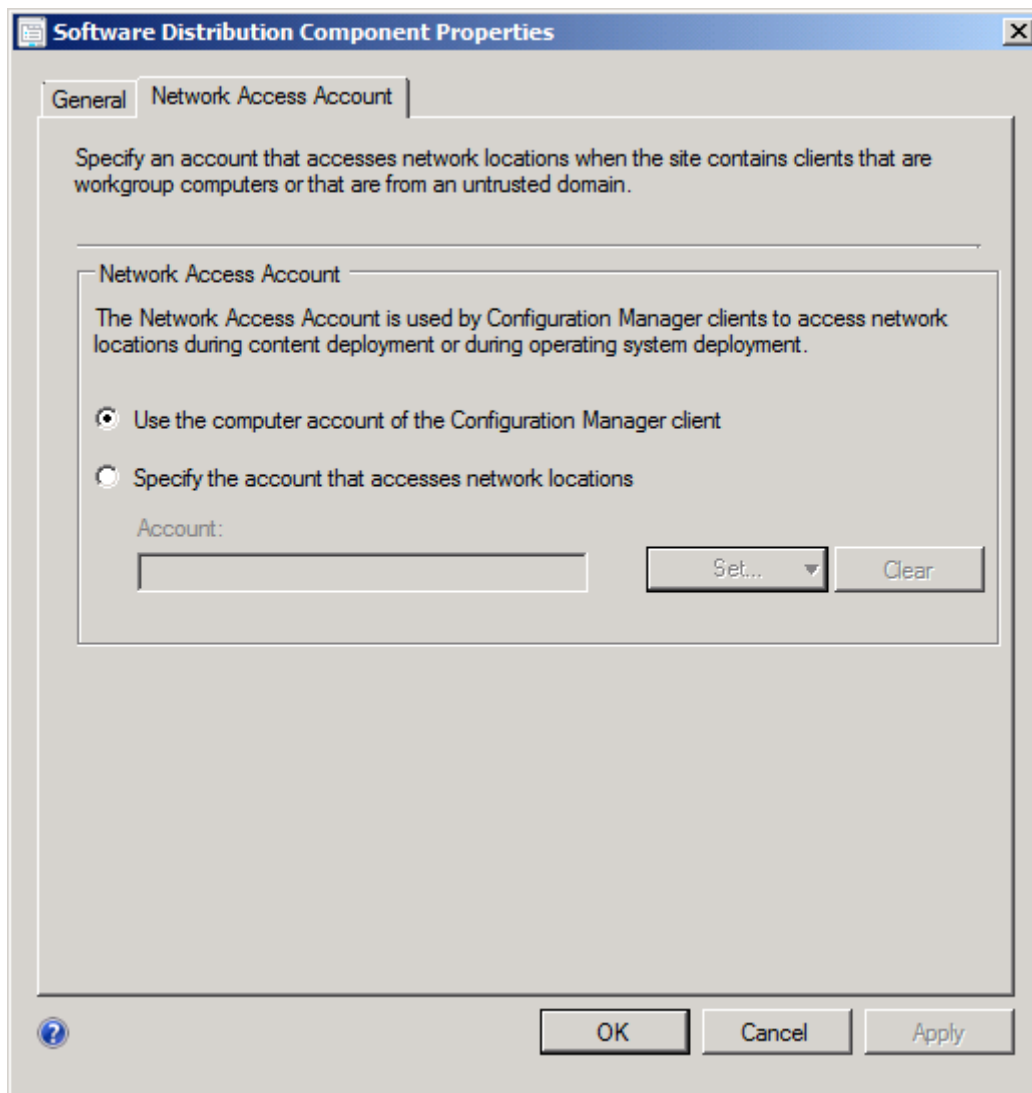


8) Expand **Site Configuration** , and then click **Sites** , on the Ribbon , click **Settings** , click **Configure Site Components** , and then click **Software Distribution** :

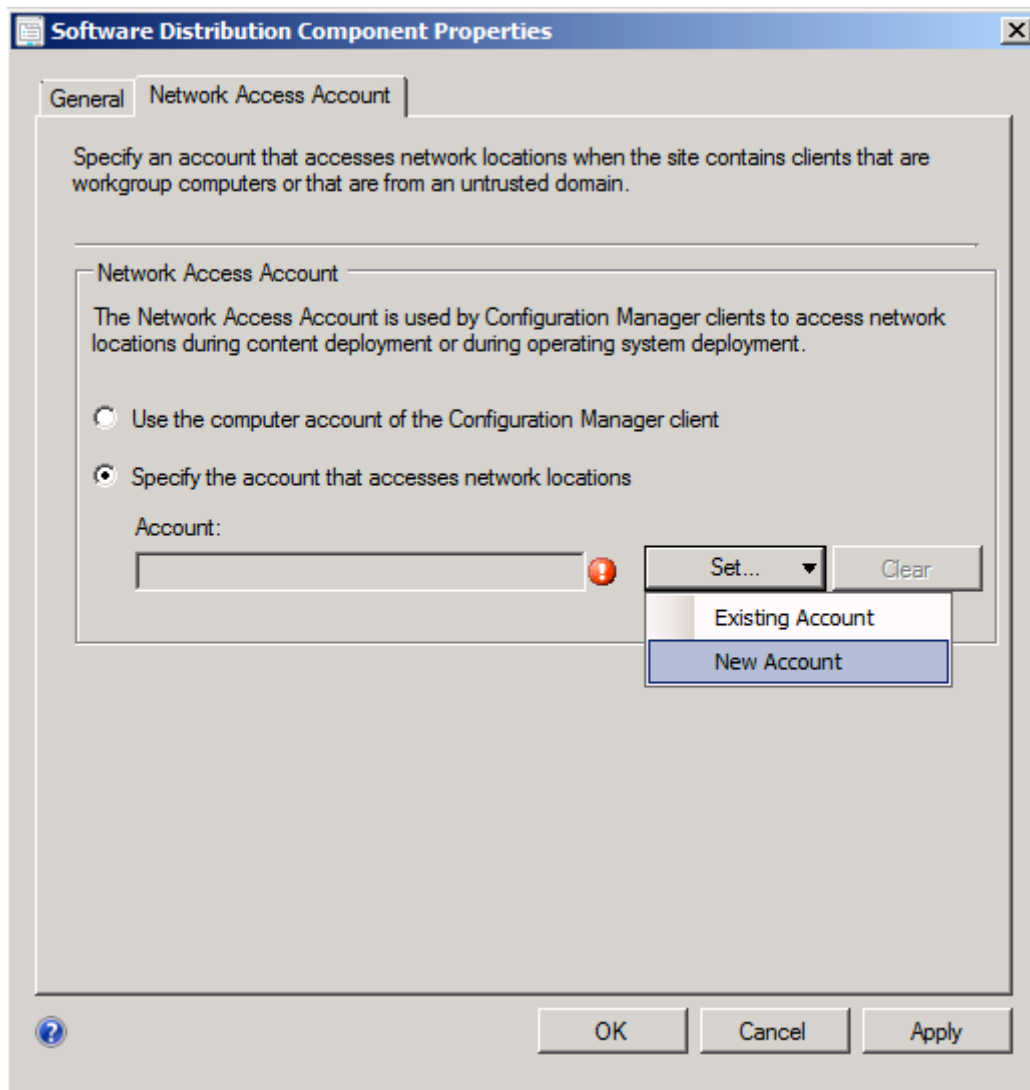
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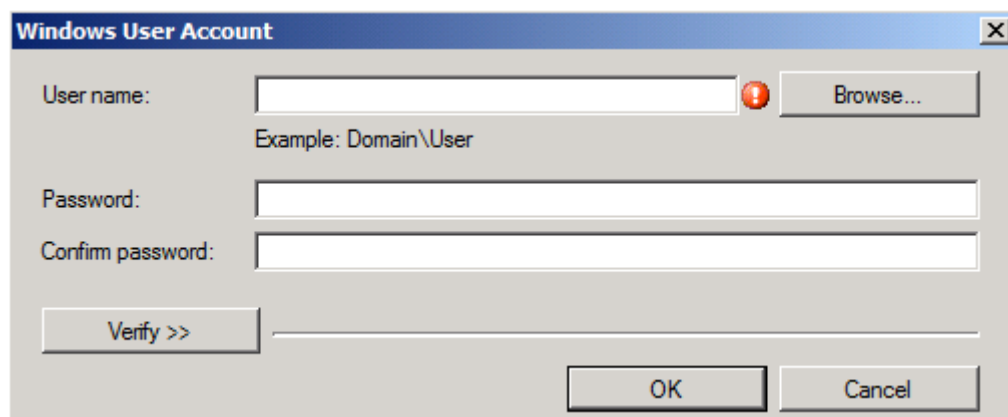
9) The **Software Distribution Component Properties** dialog box appears ,
click the **Network Access Account** tab :



10) Click **Specify the account that accesses network locations** , and then click **Set...** ,then click **New Account** :

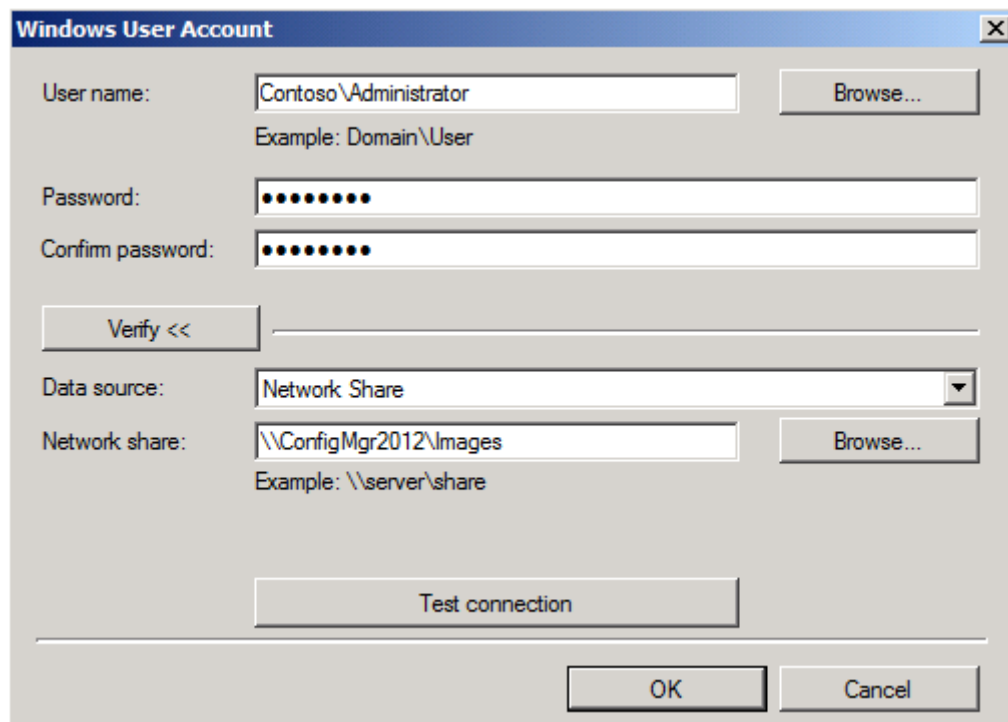


11) The **Windows User Account** dialog box appears :

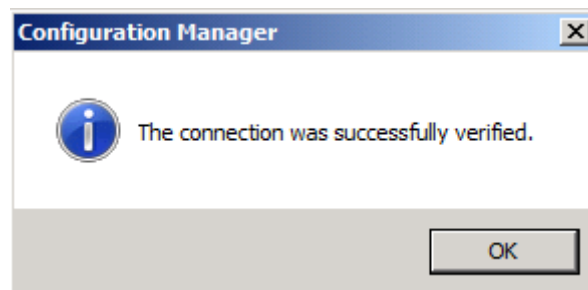


12) Type a user account and password and then click Verify , in the **Network**

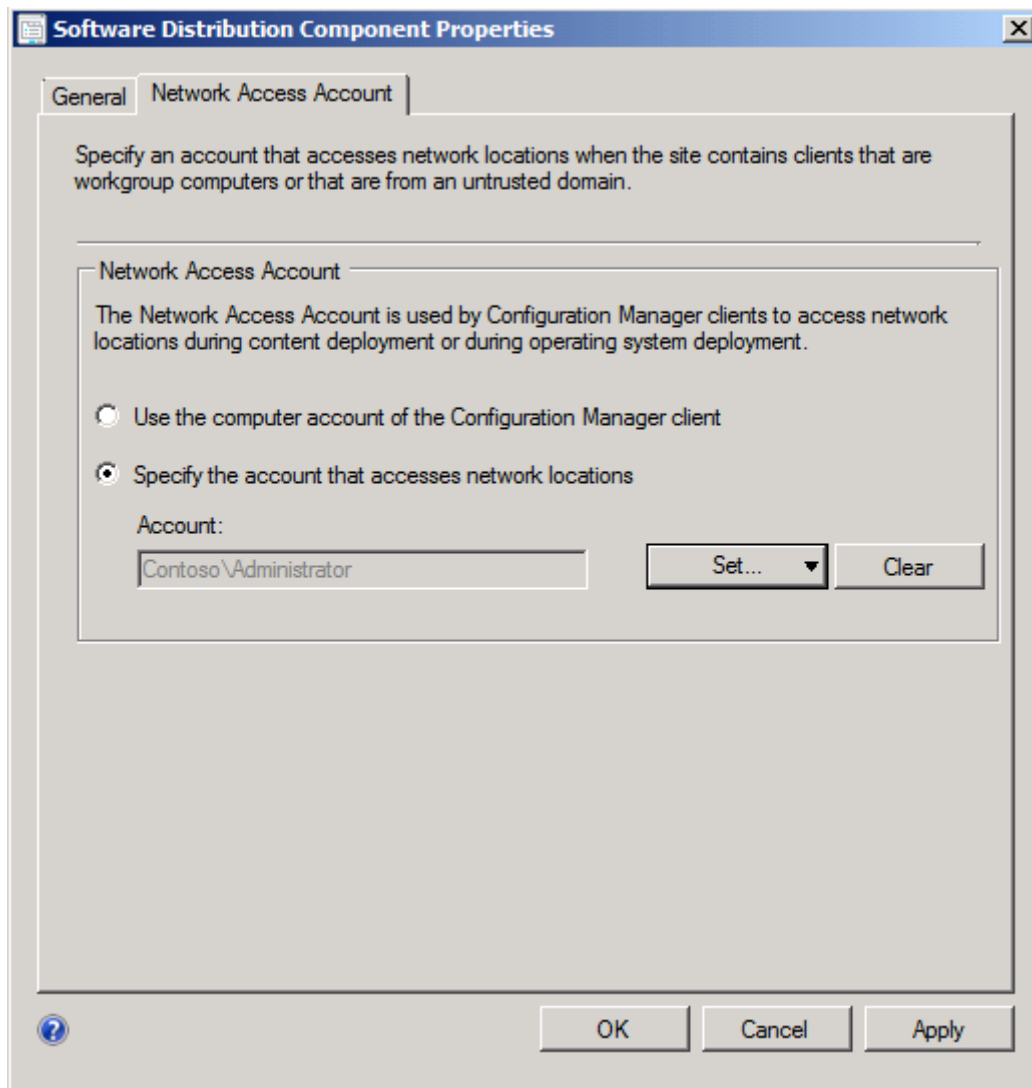
share box , type **\\ ConfigMgr2012\Images** :



13) And then click **Test connection** , a **Configuration Manager** message box appears :

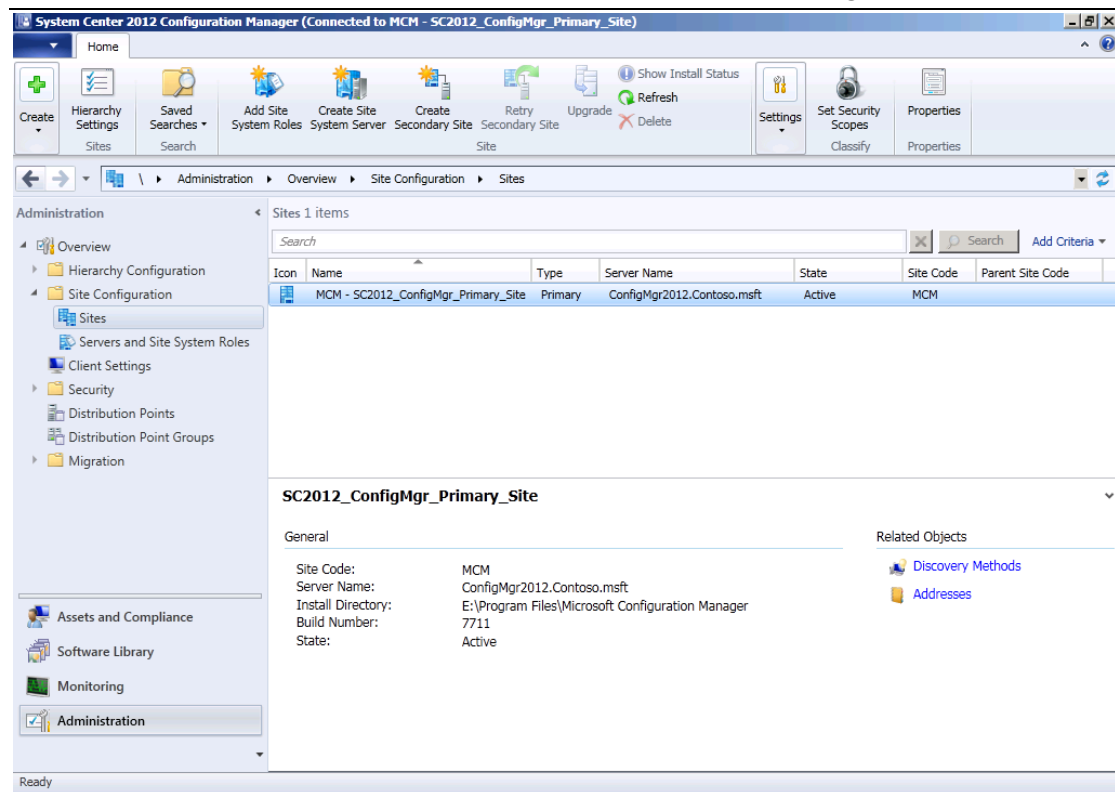


14) Click **OK** twice , the **Software Distribution Component Properties** dialog box appears , notice that there is now a network access account specified :

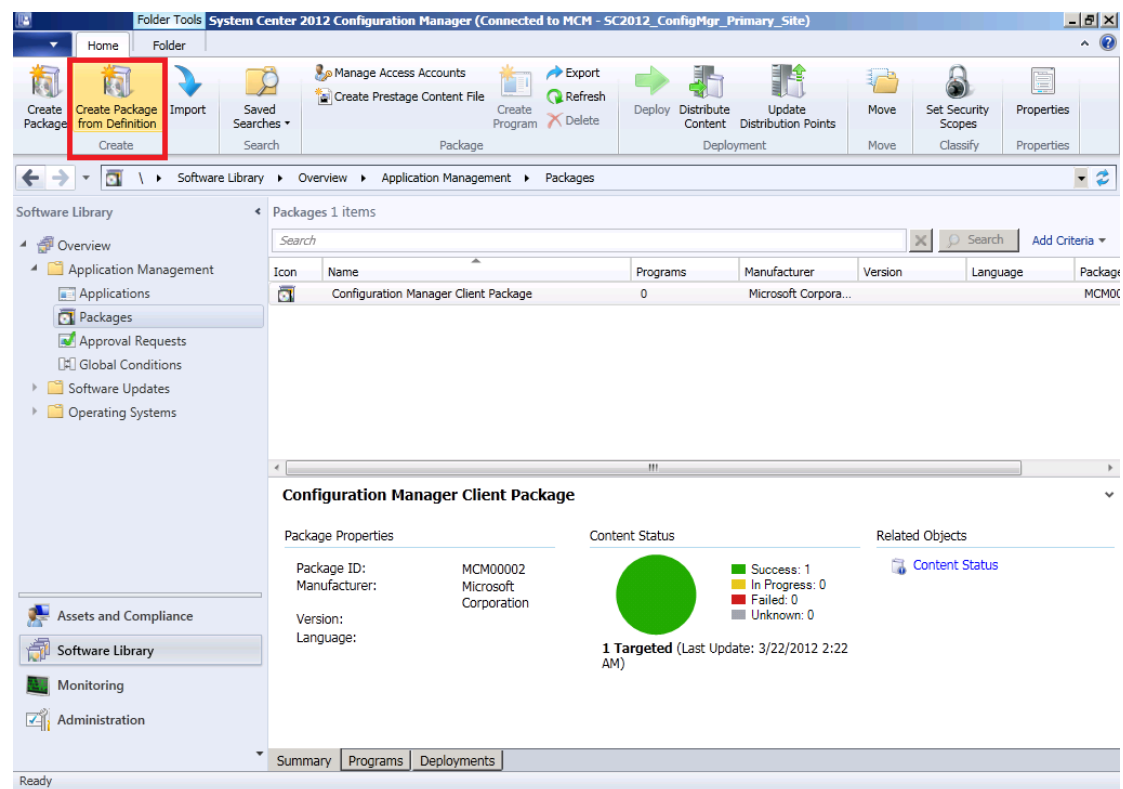


15) Click **OK** , the list of sites appears in the results pane :

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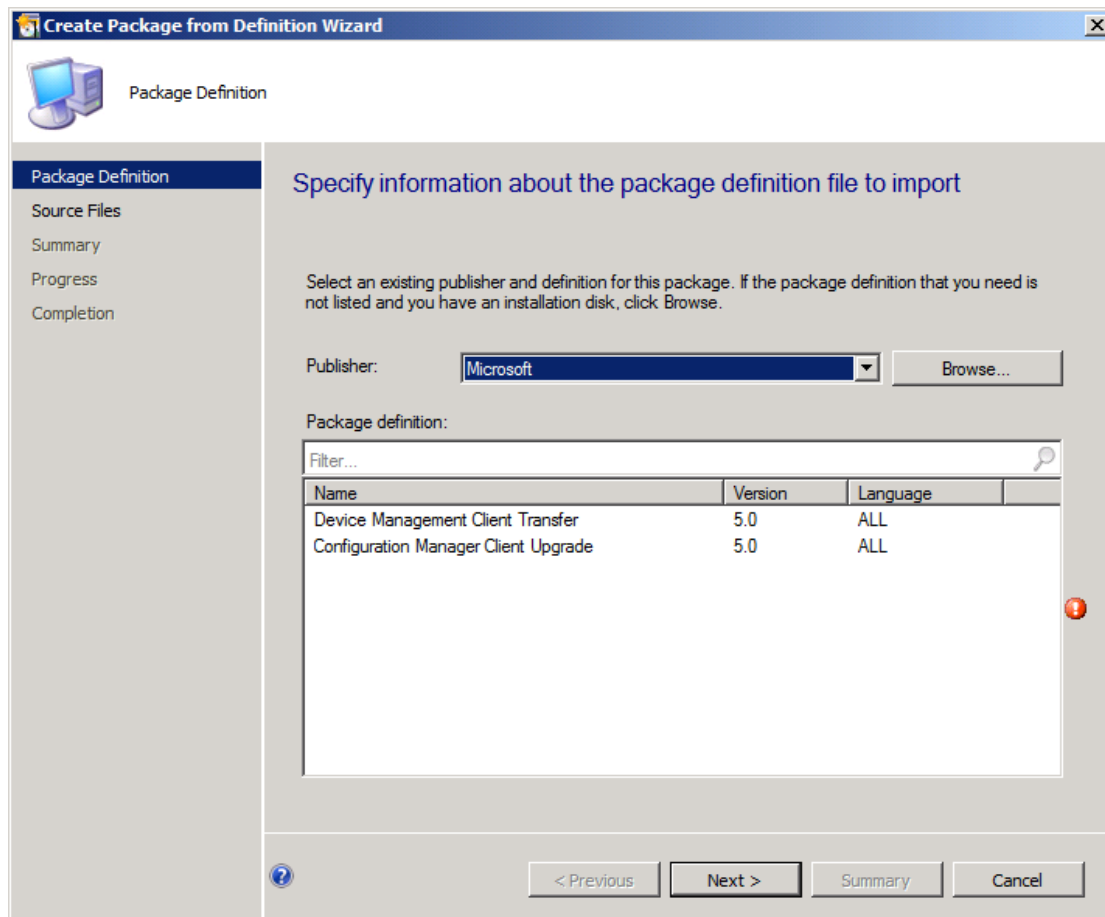
16) Click the **Software Library** workspace , expand **Application Management** , and then click **Packages** , on the Ribbon , click **Create Package from Definition** :



Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

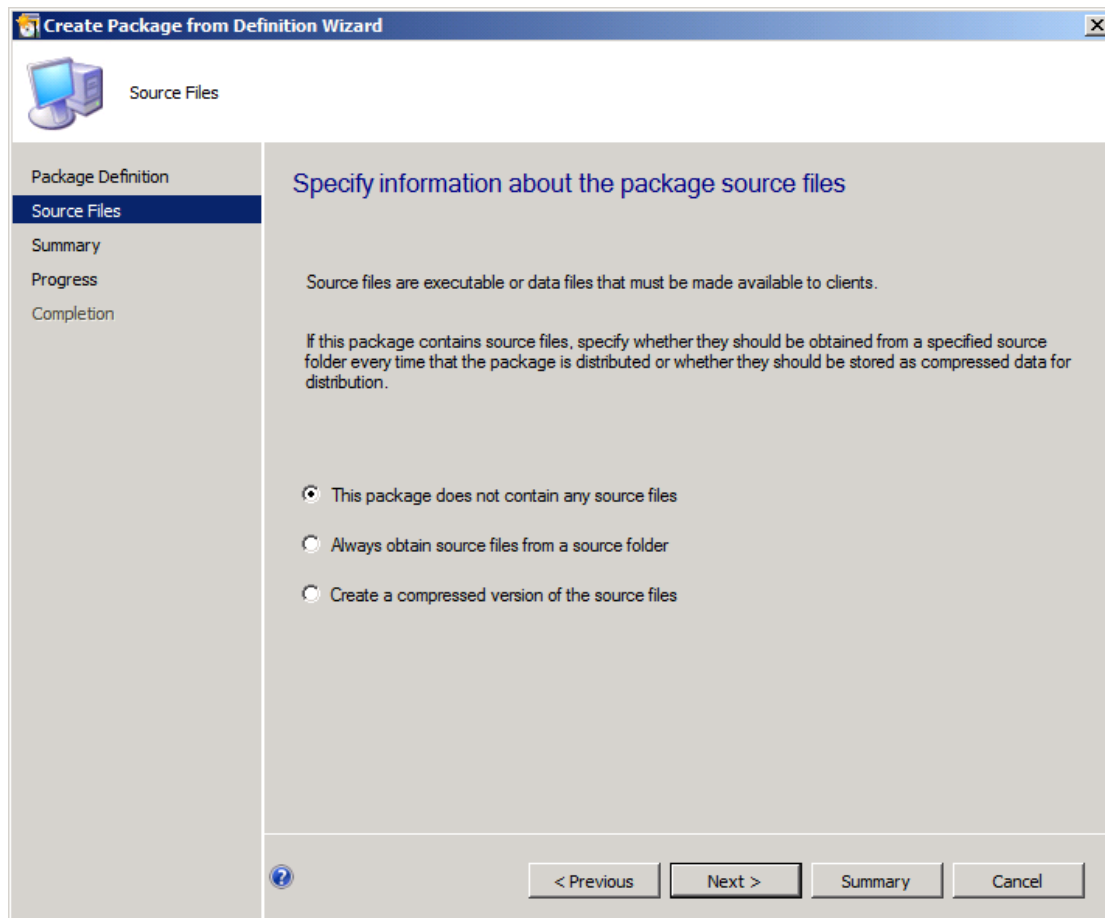
17) The **Create Package from Definition Wizard Package Definition** dialog

box appears :



18) Under **Package definition** , click **Configuration Manager Client Upgrade** ,

and then click **Next** , the **Source Files** dialog box appears :



19) Click **Always obtain source files from a source folder** , and then click **Next** , the **Source Folder** dialog box appears :

The screenshot shows the 'Create Package from Definition Wizard' dialog box, specifically the 'Source Folder' step. The left sidebar contains a list of steps: Package Definition, Source Files, Source Folder (highlighted), Summary, Progress, and Completion. The main area is titled 'Specify the package source folder' and includes a note: 'Make sure that this folder is accessible to the Configuration Manager Service Account for as long as the package exists.' Below this, there is a 'Package name' field with the text 'Configuration Manager Client Upgrade'. The 'Package source folder' section has two radio buttons: 'Network path (UNC name)' (selected) and 'Local folder on site server'. An example path is provided: '\\servername\sharename\path'. There is an empty text box for the path and a 'Browse...' button. At the bottom, there are buttons for '< Previous', 'Next >', 'Summary', and 'Cancel'.

20) In the Package **source folder** box , type
\\ConfigMgr2012\sms_mcm\client :

The screenshot shows the 'Create Package from Definition Wizard' dialog box, specifically the 'Source Folder' step. The left sidebar contains a list of steps: Package Definition, Source Files, Source Folder (highlighted), Summary, Progress, and Completion. The main area is titled 'Specify the package source folder' and includes a note: 'Make sure that this folder is accessible to the Configuration Manager Service Account for as long as the package exists.' Below this, there are two input fields: 'Package name:' with the text 'Configuration Manager Client Upgrade', and 'Package source folder:' with radio buttons for 'Network path (UNC name)' (selected) and 'Local folder on site server'. An example path is shown: '\\servername\sharename\path'. Below the example, there is a text box containing '\\ConfigMgr2012\sms_mcm\client' and a 'Browse...' button. At the bottom, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'.

Create Package from Definition Wizard

Source Folder

Package Definition
Source Files
Source Folder
Summary
Progress
Completion

Specify the package source folder

Make sure that this folder is accessible to the Configuration Manager Service Account for as long as the package exists.

Package name: Configuration Manager Client Upgrade

Package source folder:

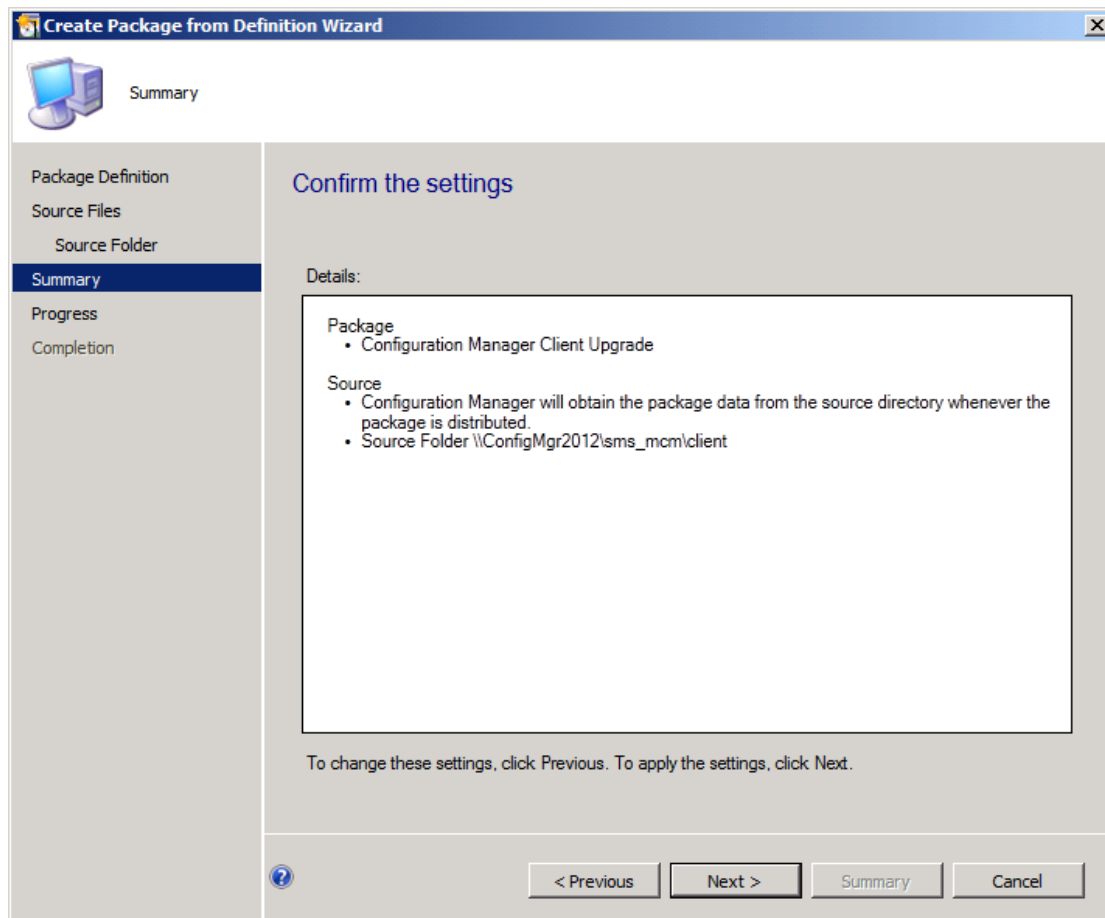
☒ Network path (UNC name)
☐ Local folder on site server

Example: \\servername\sharename\path

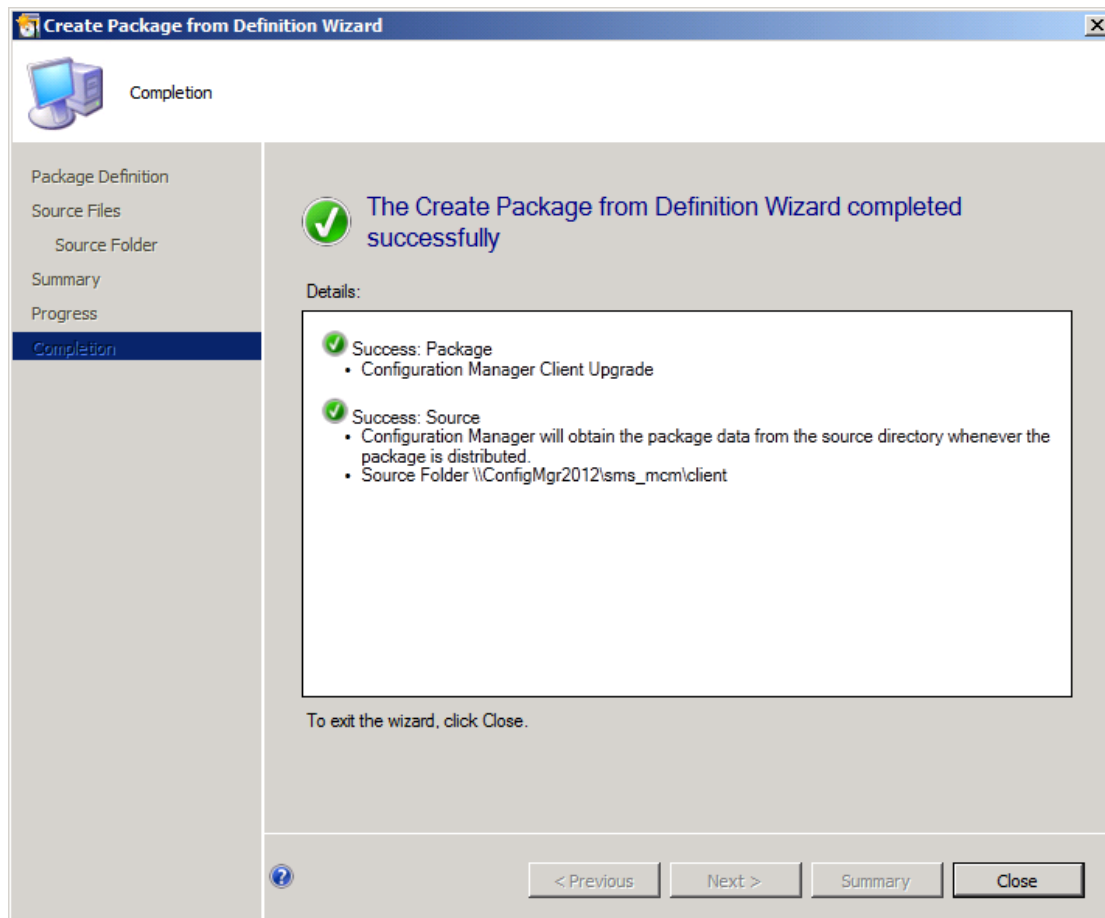
\\ConfigMgr2012\sms_mcm\client Browse...

< Previous Next > Summary Cancel

21) Click **Next** , the **Summary** dialog box appears :

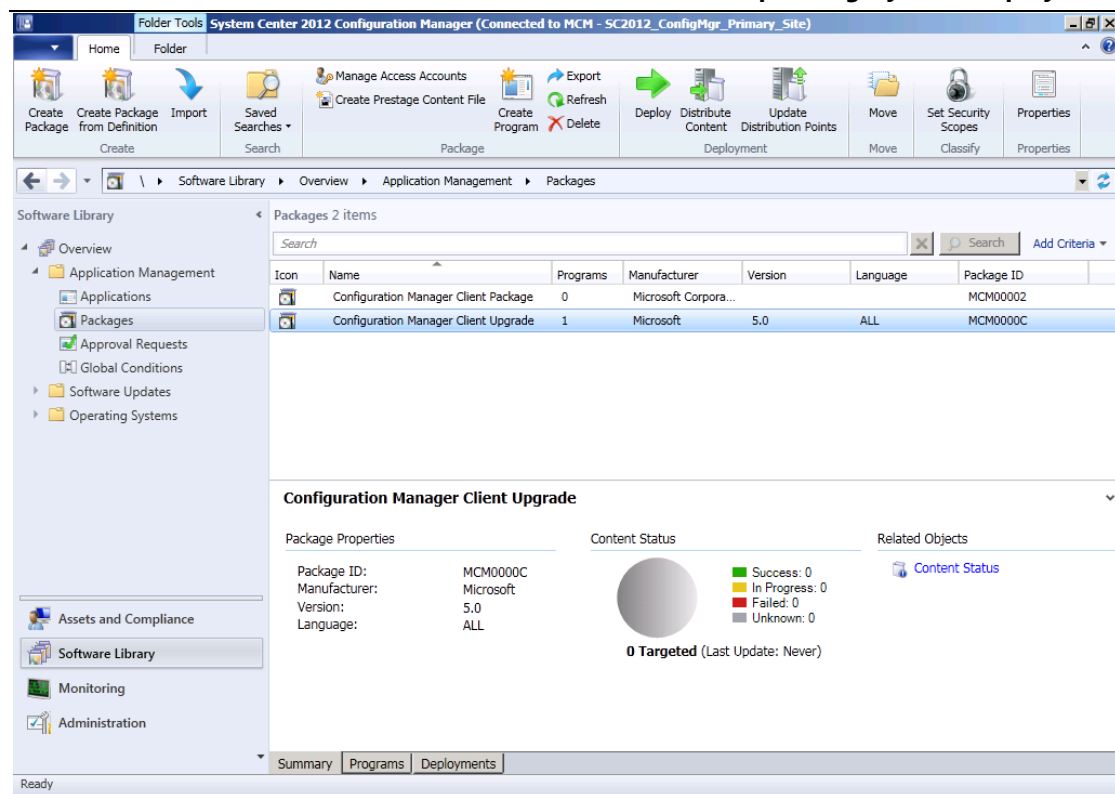


22) Click **Next** , the **Completion** dialog box appears indicating that the wizard successfully created the package :

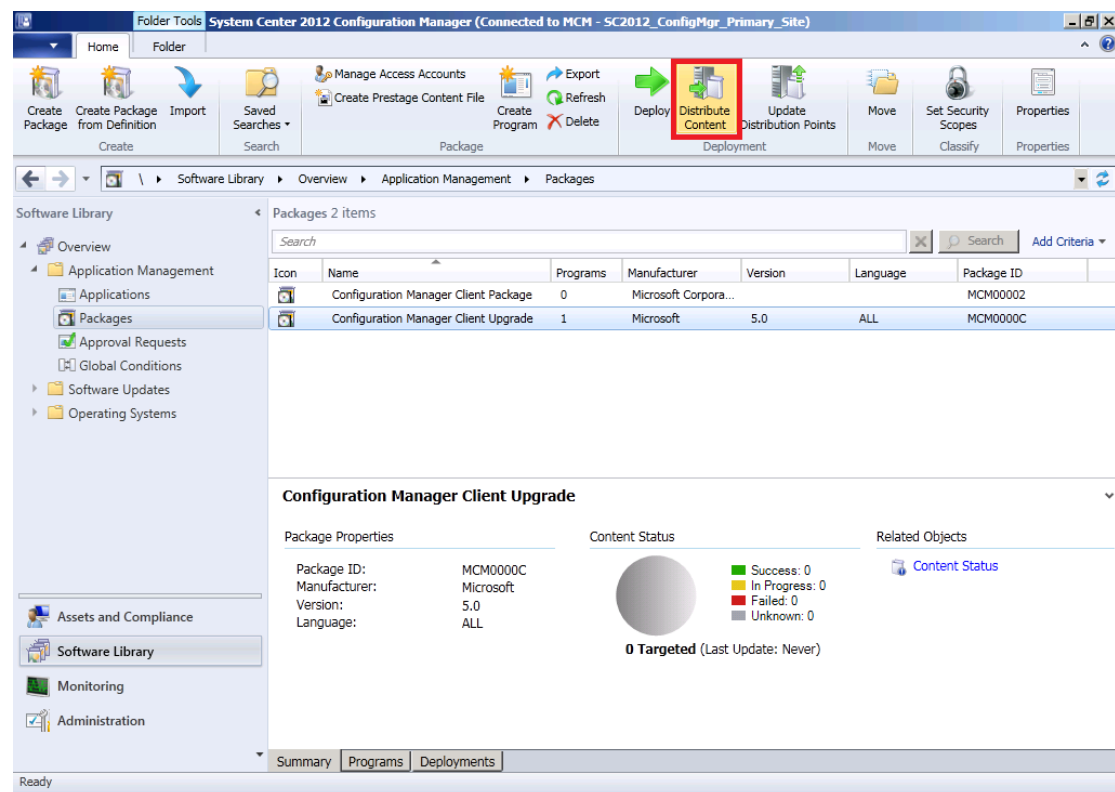


23) Click **Close** . The list of packages appears in the results pane , notice that the **Configuration Manager Client Upgrade** package is listed :

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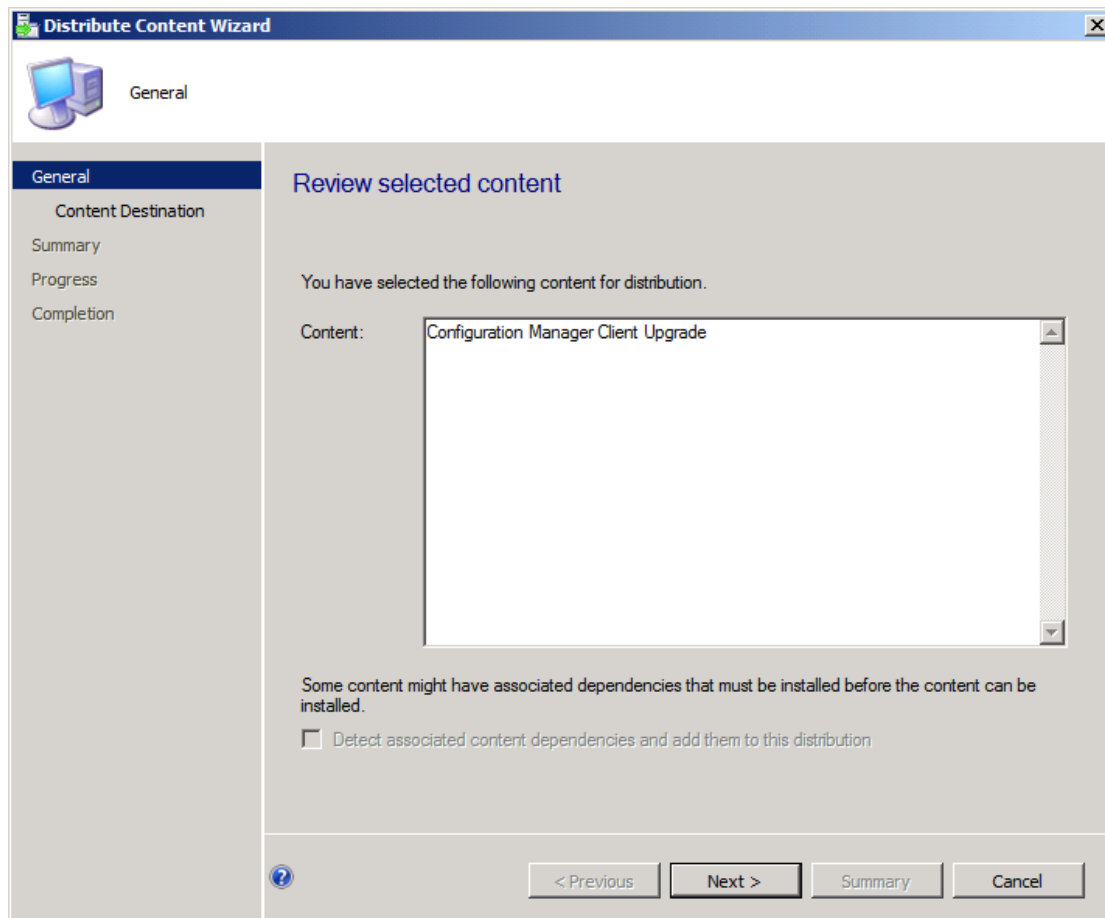


24) On the Ribbon , click **Distribute Content** :

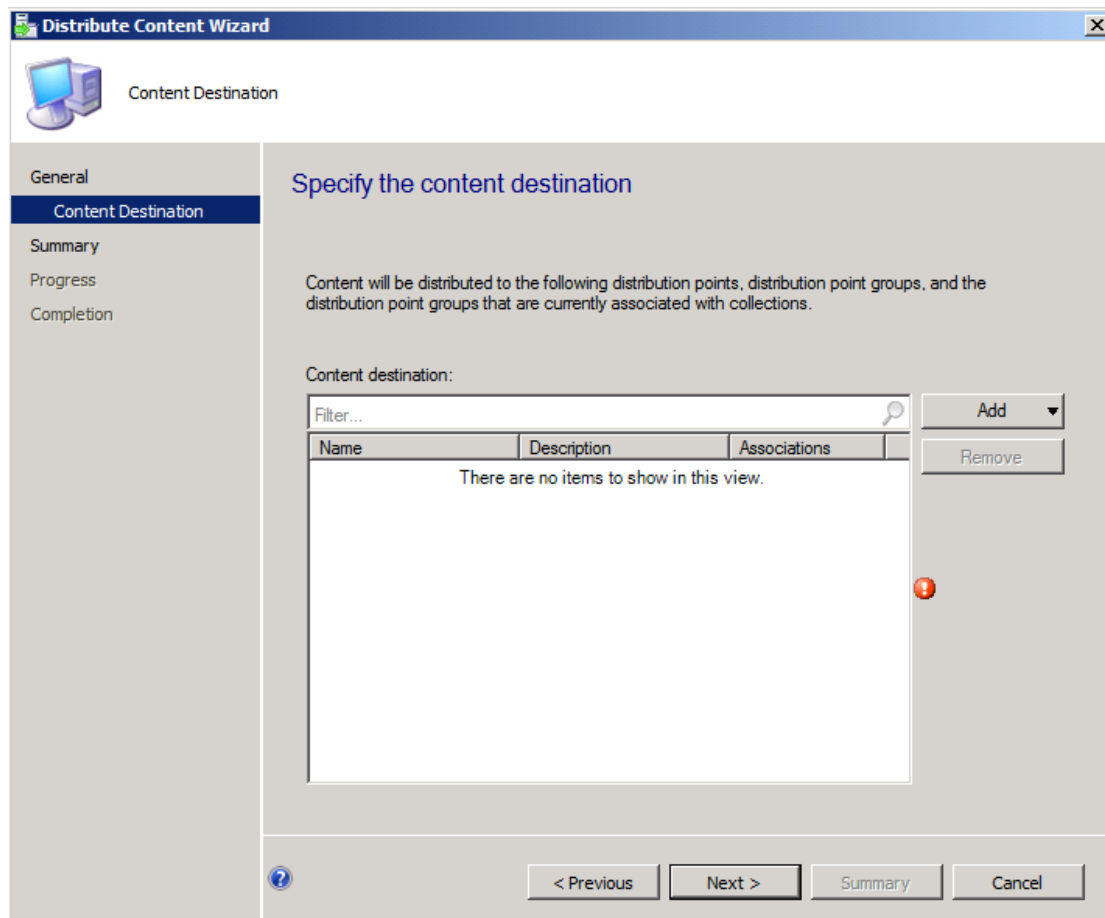


25) The **Distribute Content Wizard General** dialog box appears :

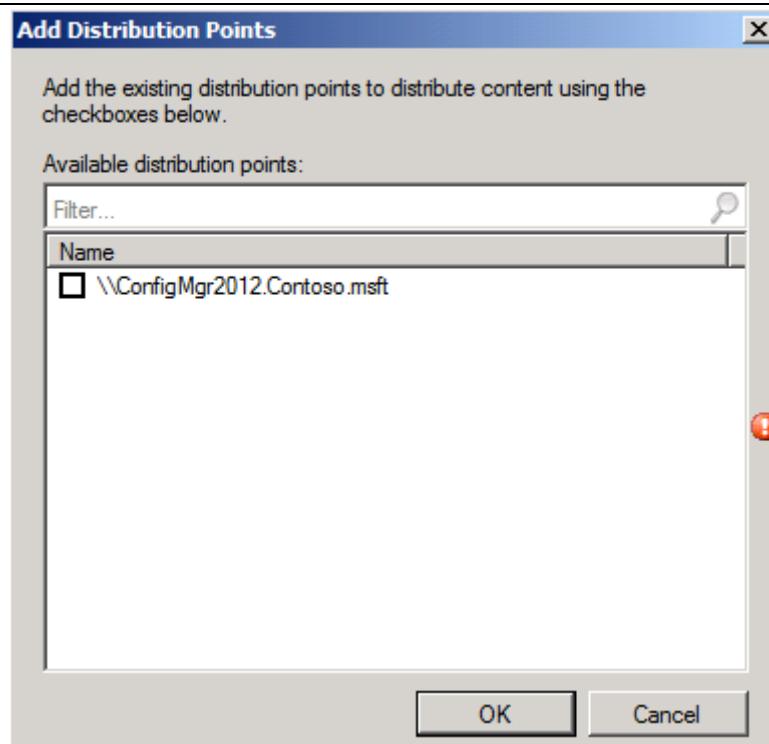
Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao



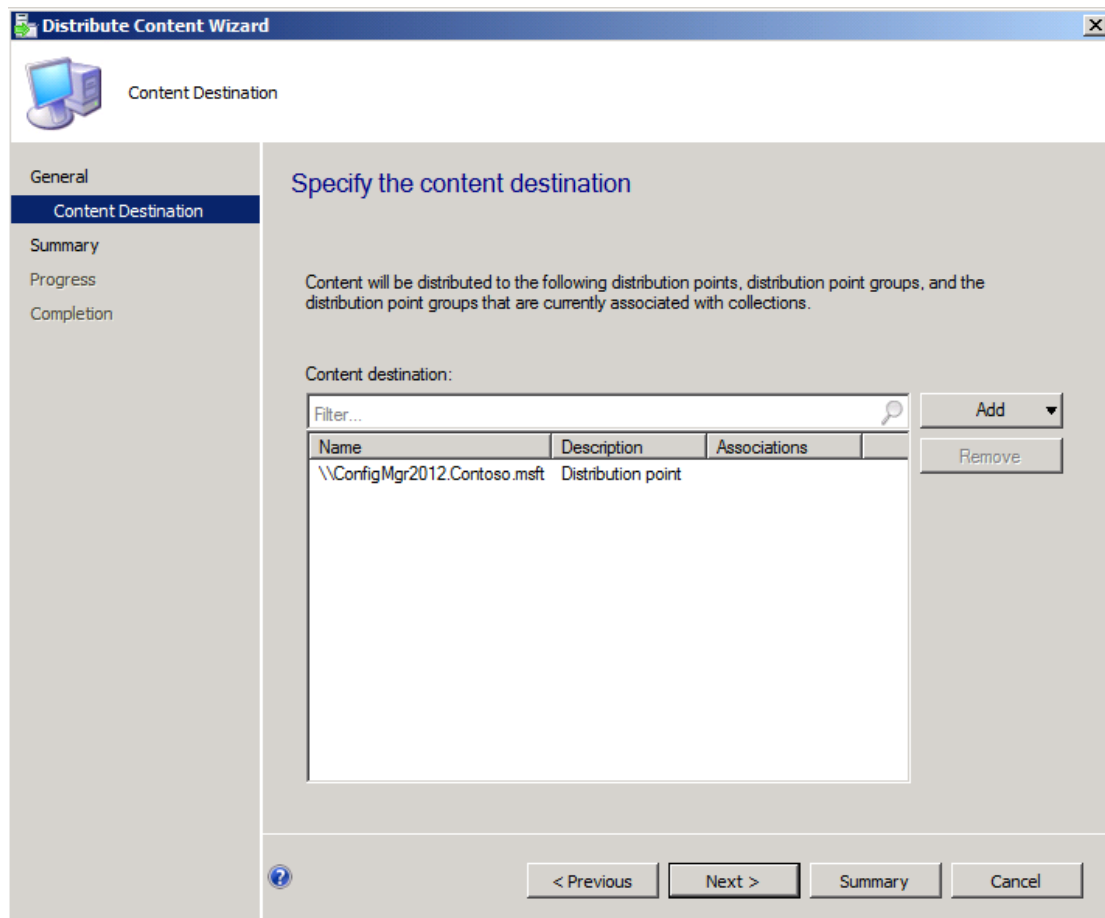
26) Click **Next** , the **Content Destination** dialog box appears :



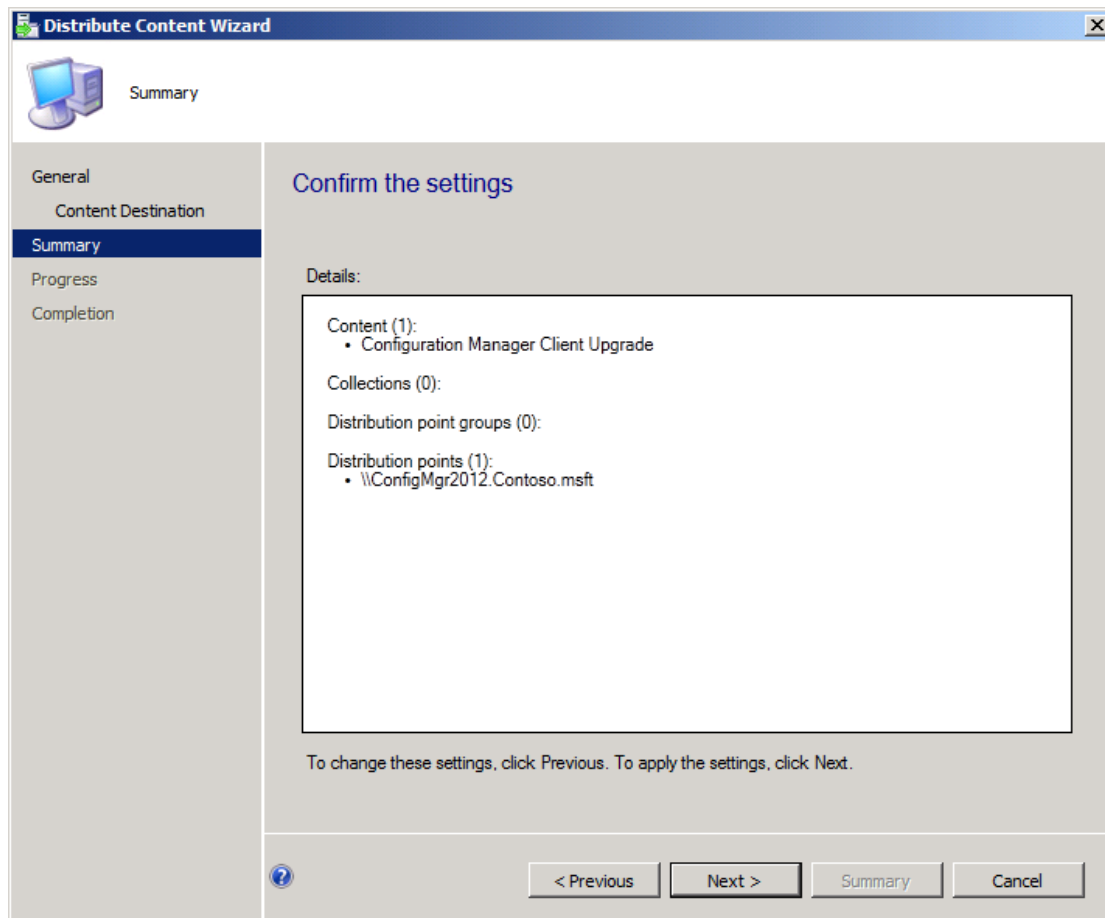
27) Click **Add** and click **Distribution Point** , the **Add Distribution Points** dialog box appears :



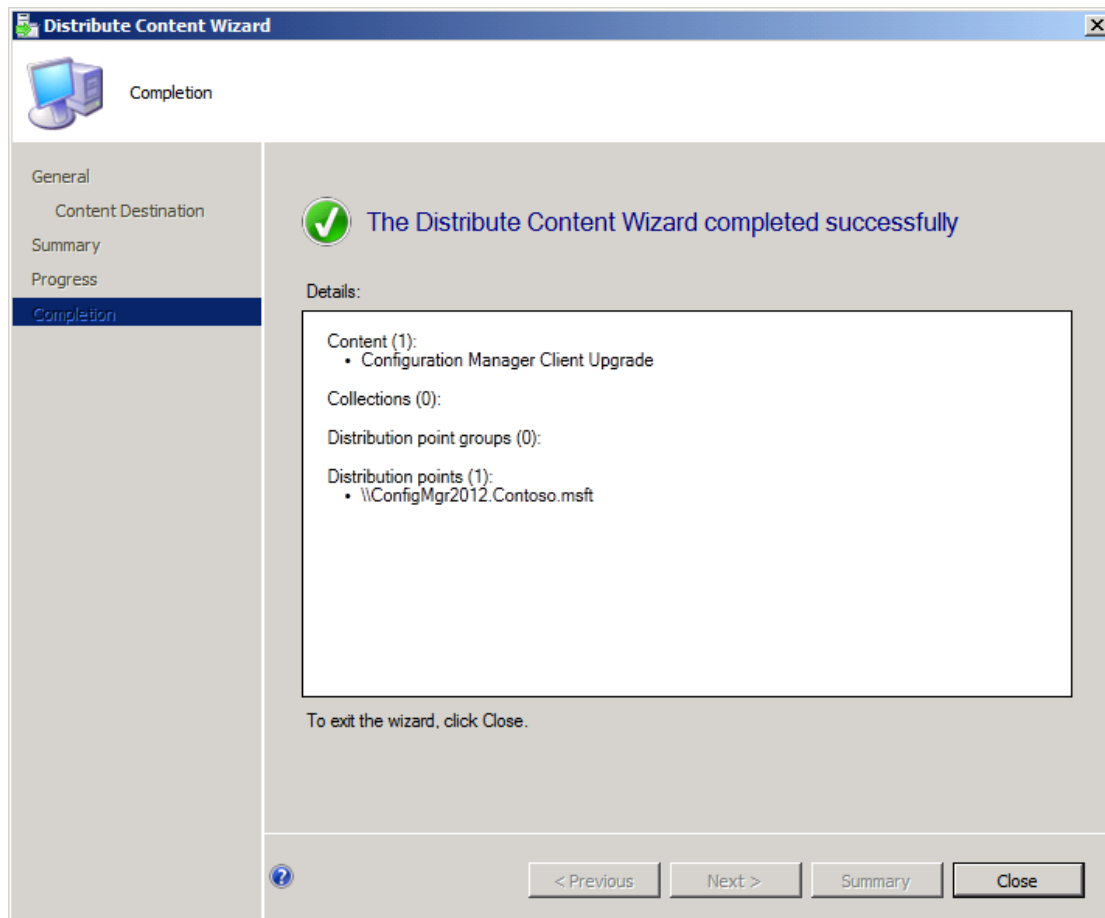
28) Select a DP and click **OK** , will back to **Content Destination** dialog box :



29) Click **Next** , the **Summary** dialog box appears :



30) Click **Next** , the **Completion** dialog box appears indicating that the wizard completed successfully :



31) Click **Close** . The list of packages appear in the results pane , you would normally verify that the distribution of the content to the distribution point was successful :

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The screenshot displays the System Center 2012 Configuration Manager console. The left-hand pane shows the navigation tree with 'Software Library' selected. The main pane shows the 'Packages' view with two items: 'Configuration Manager Client Package' and 'Configuration Manager Client Upgrade'. The 'Configuration Manager Client Upgrade' package is selected, and its details are shown below the list.

Configuration Manager Client Upgrade

Package Properties

Package ID:	MCM0000C
Manufacturer:	Microsoft
Version:	5.0
Language:	ALL

Content Status

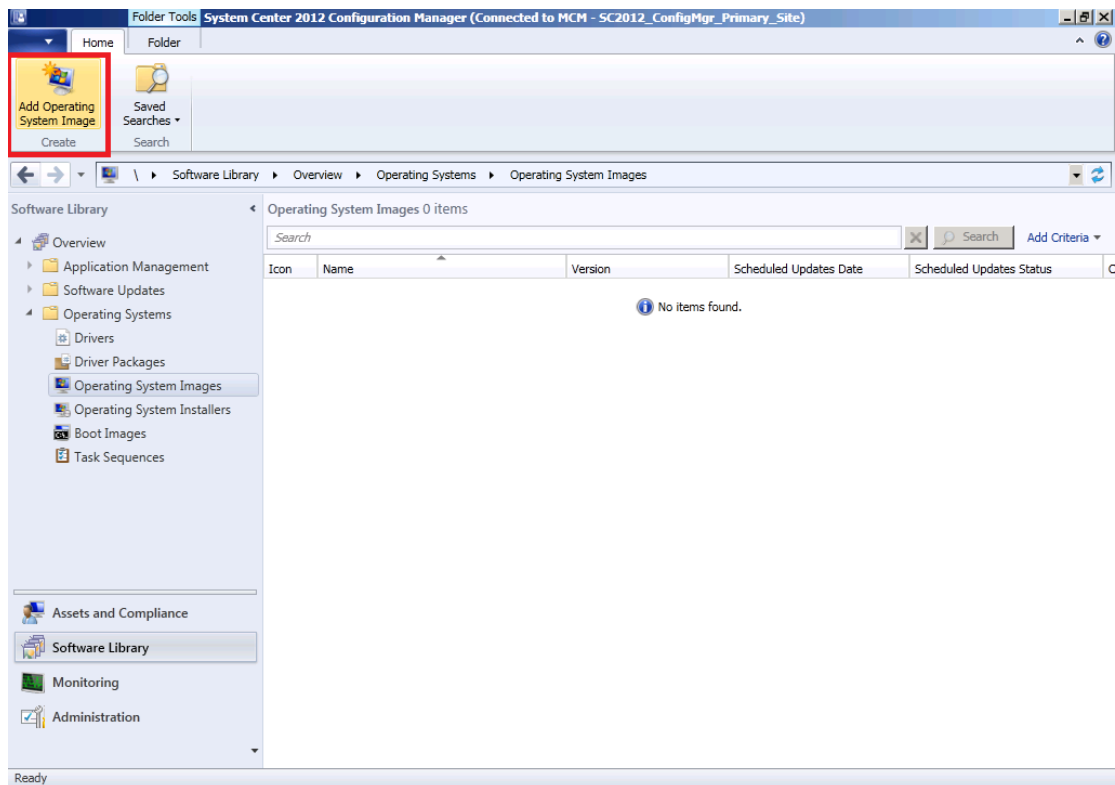
1 Targeted (Last Update: 4/3/2012 9:47 PM)

Related Objects

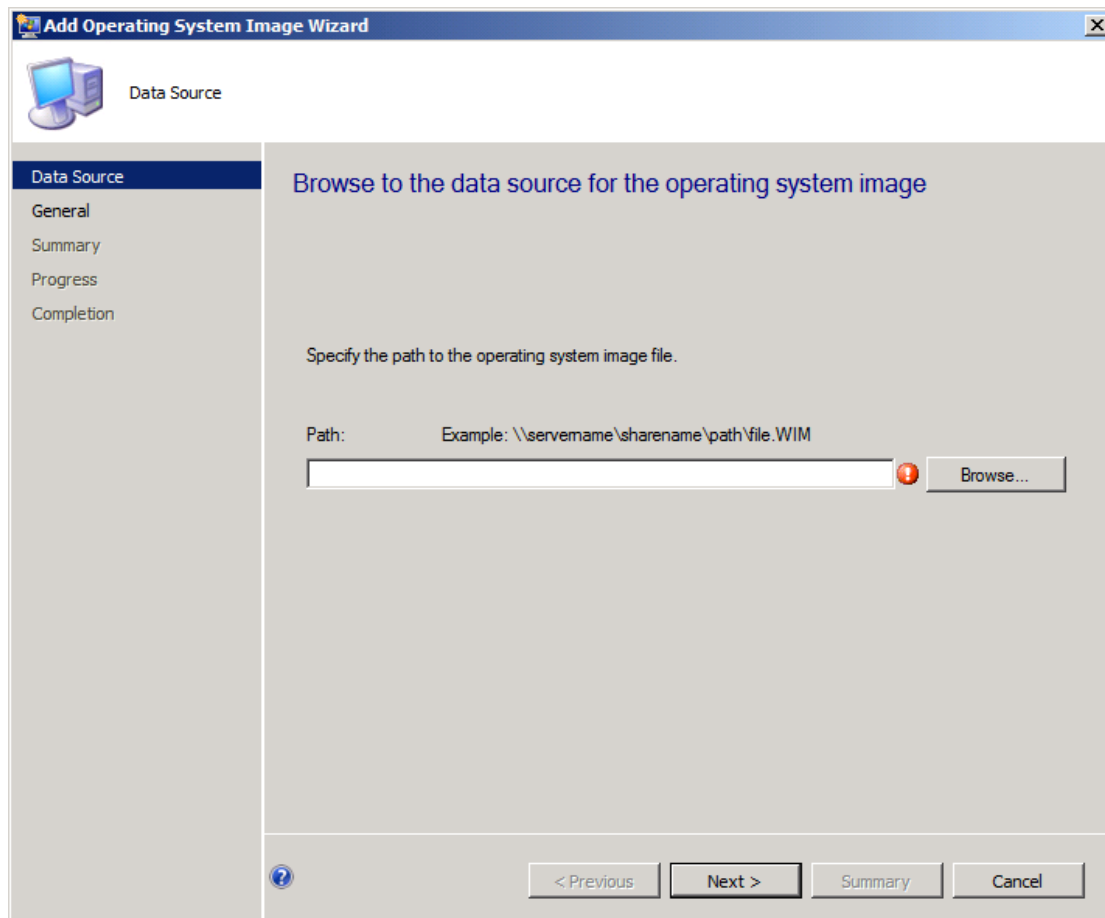
- Content Status

7. Deploying an Operating System Image to a Bare Metal Client :

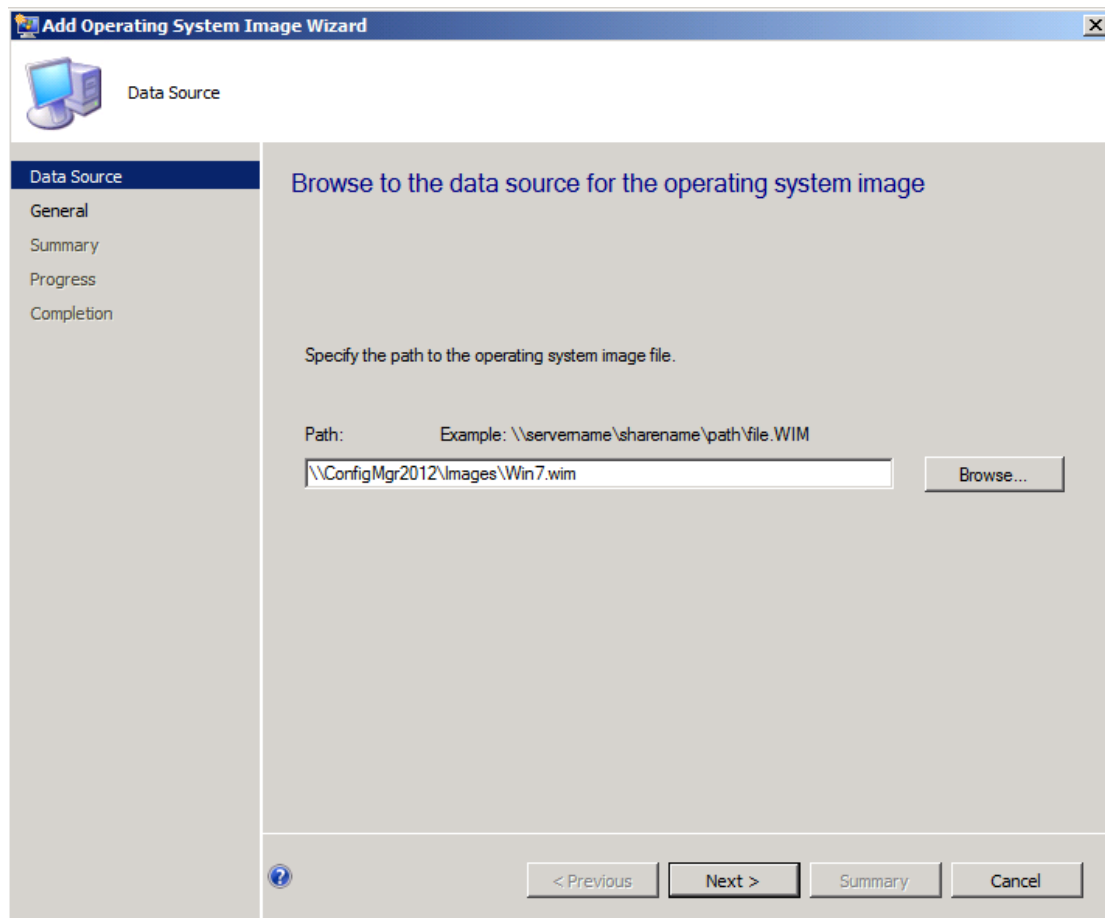
1) Click the **Software Library** workspace , expand **Operating Systems** , and then click **Operating System Images** , on the Ribbon , click **Add Operating System Image** :



2) The **Add Operating System Image Wizard Data Source** dialog box appears :



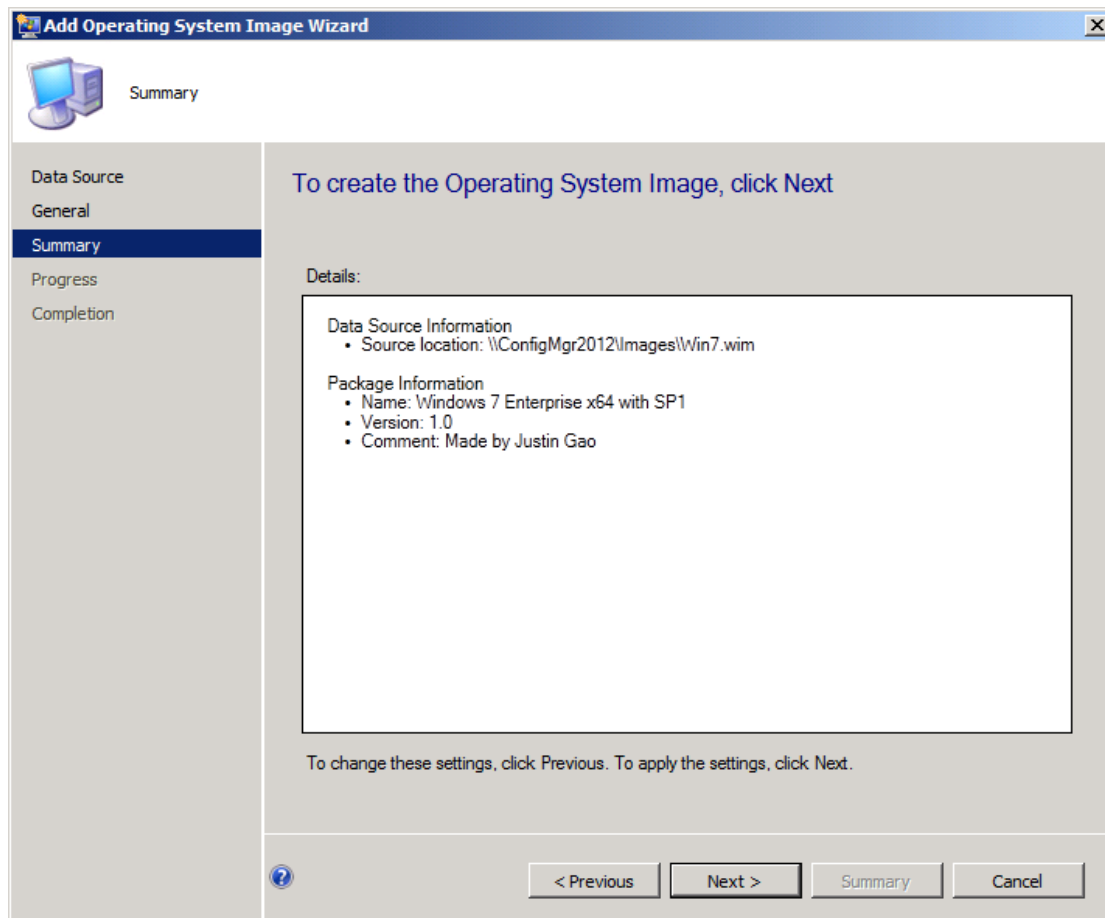
- 3) In the **Path** box , type **\\ConfigMgr2012\Images\Win7.wim** :



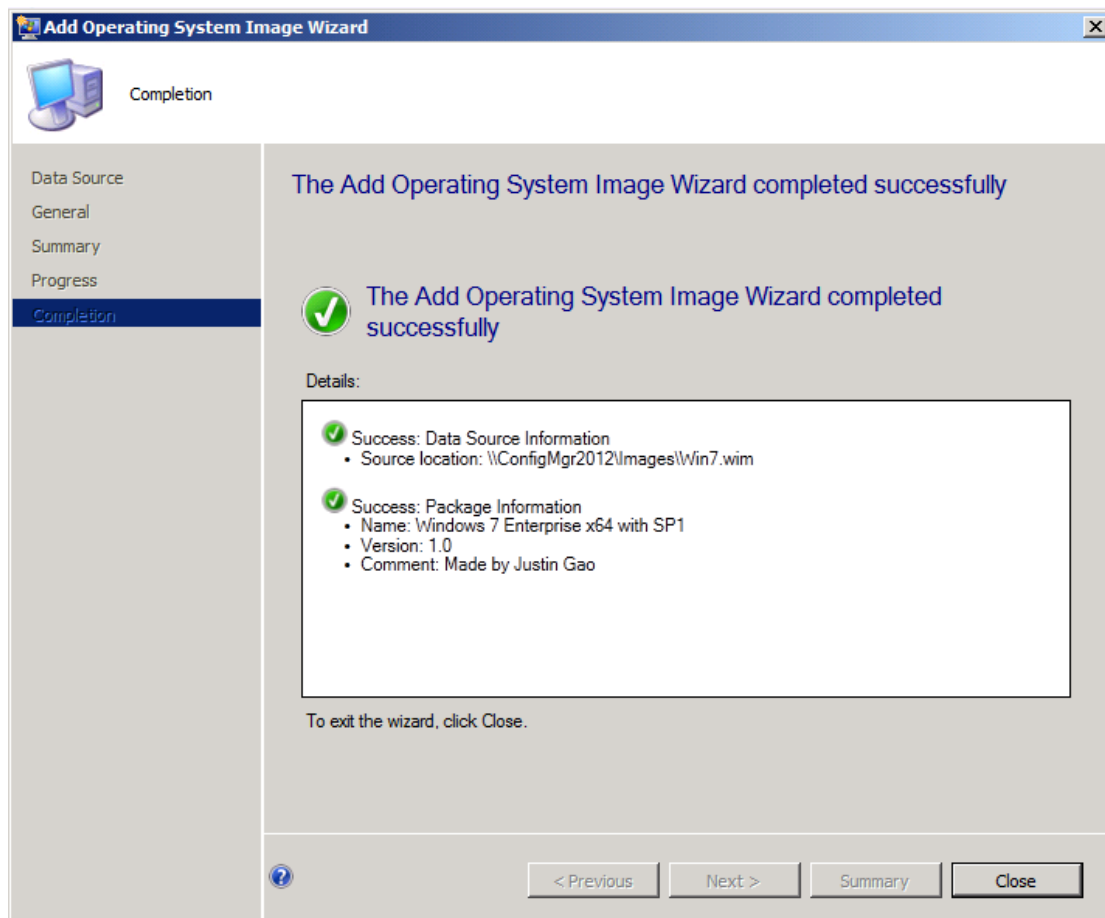
4) Click **Next** , the **General** dialog box appears :

The screenshot shows the 'Add Operating System Image Wizard' dialog box with the 'General' tab selected. The left sidebar contains a tree view with 'General' highlighted, and other options like 'Data Source', 'Summary', 'Progress', and 'Completion'. The main area is titled 'Type general information for the operating system image' and contains a prompt: 'Provide a name, version, and comment for the operating system image.' Below this are three input fields: 'Name' with the text 'Windows 7 Enterprise x64 with SP1', 'Version' with '1.0', and 'Comment' with 'Made by Justin Gao'. At the bottom, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A help icon (?) is located at the bottom left of the main area.

5) Click **Next** , the **Summary** dialog box appears :

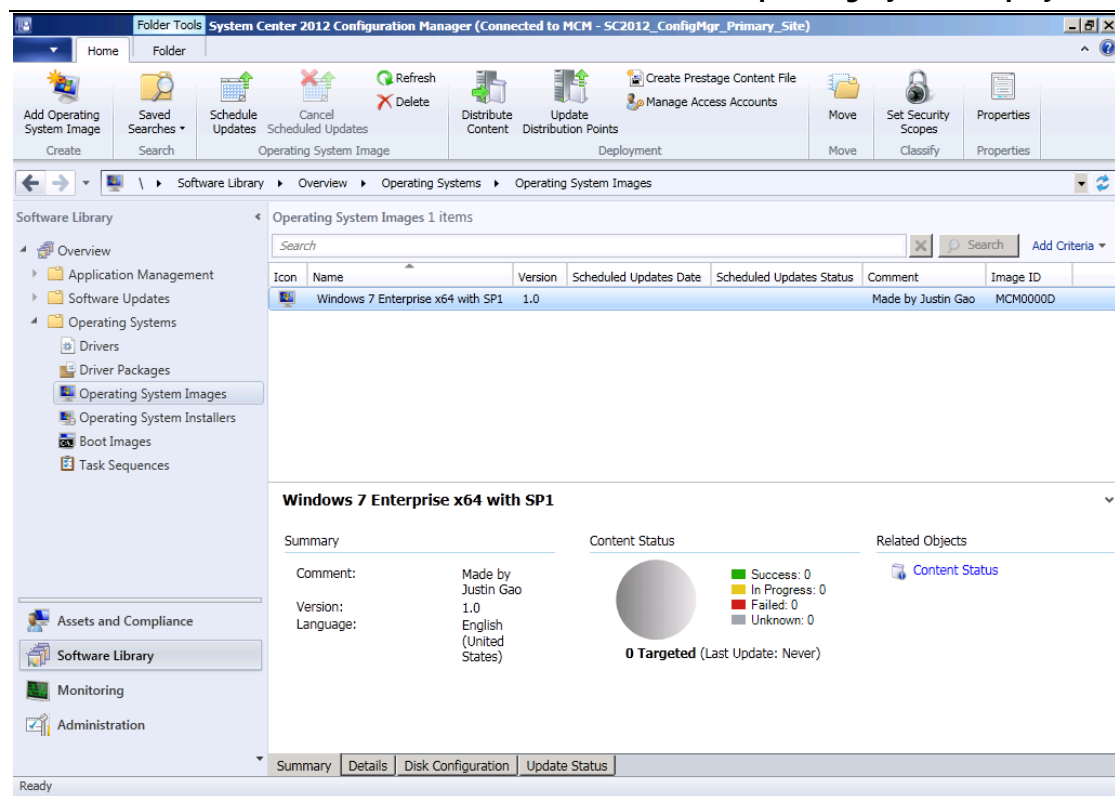


6) Click **Next** , the **Completion** dialog box appears indicating that the wizard successfully created the operating system image :

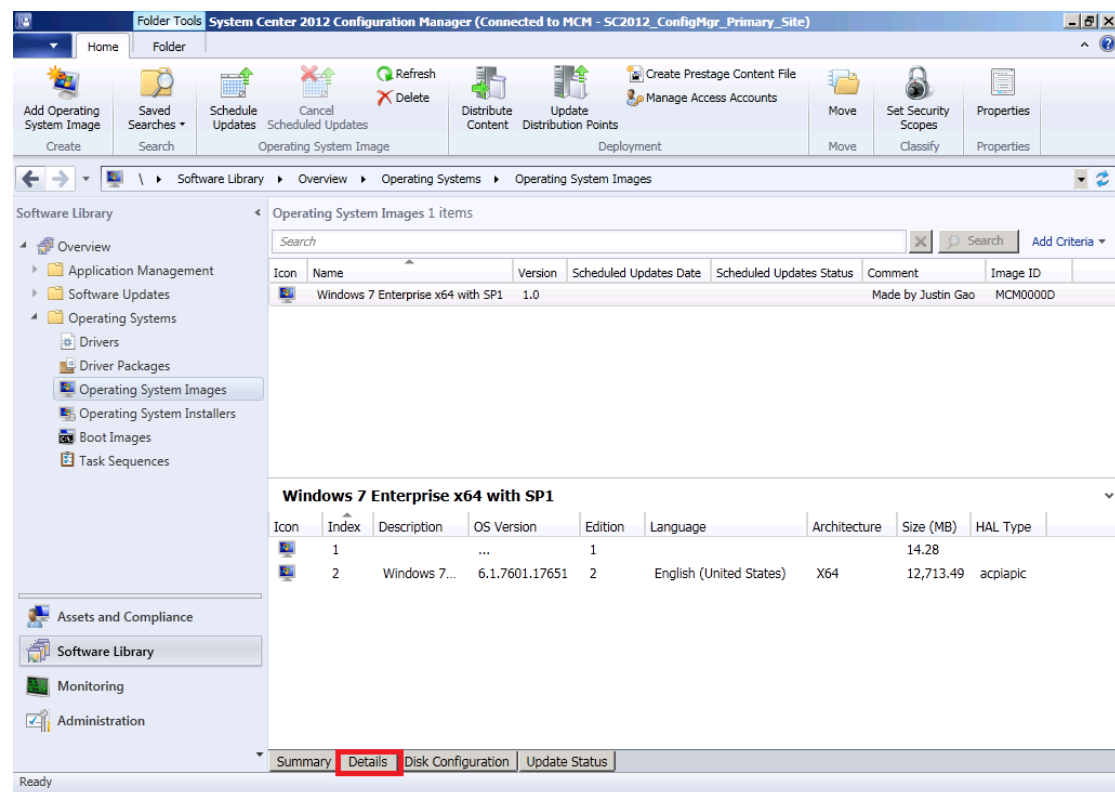


7) Click **Close** , the new operating system image is now displayed :

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8) In the preview pane , click the **Details** tab :

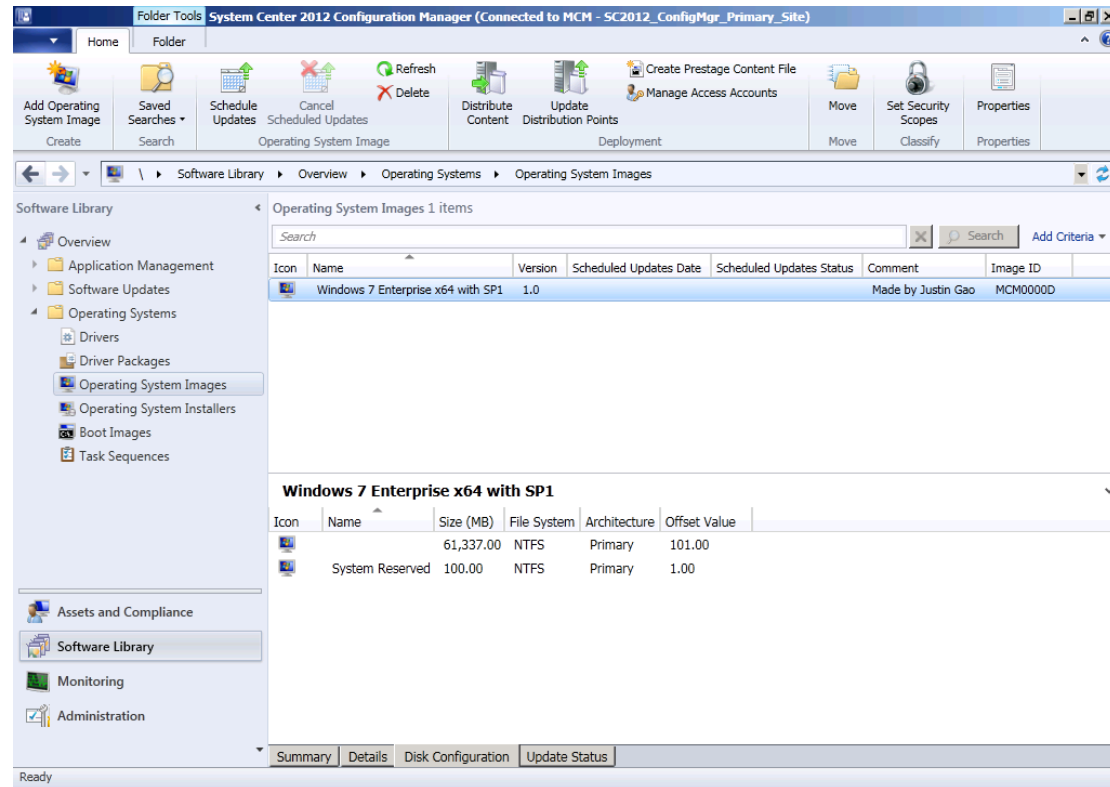


9) The details of Windows 7 x64 Enterprise operating system image appears

Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

in the preview pane . Notice that the reference computer had two partitions , with the primary partition being 13GB in **Size** , though the .wim file was less than 3GB.

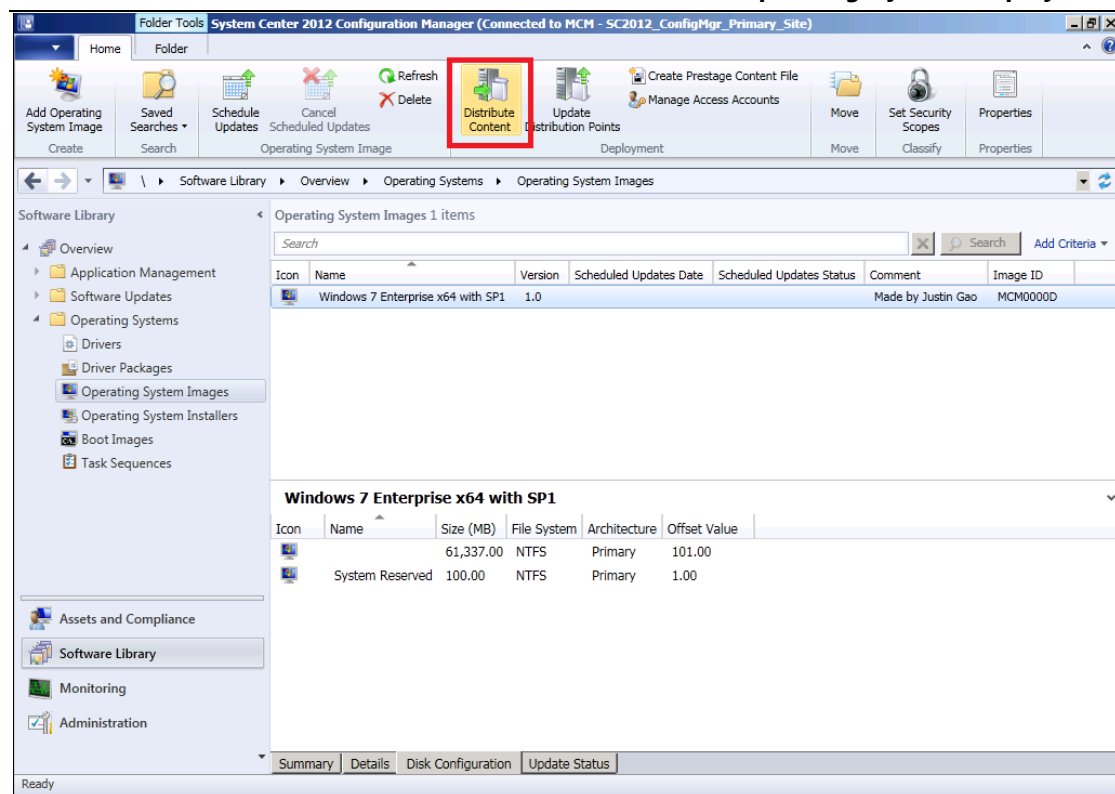
Click the **Disk Configuration** tab :



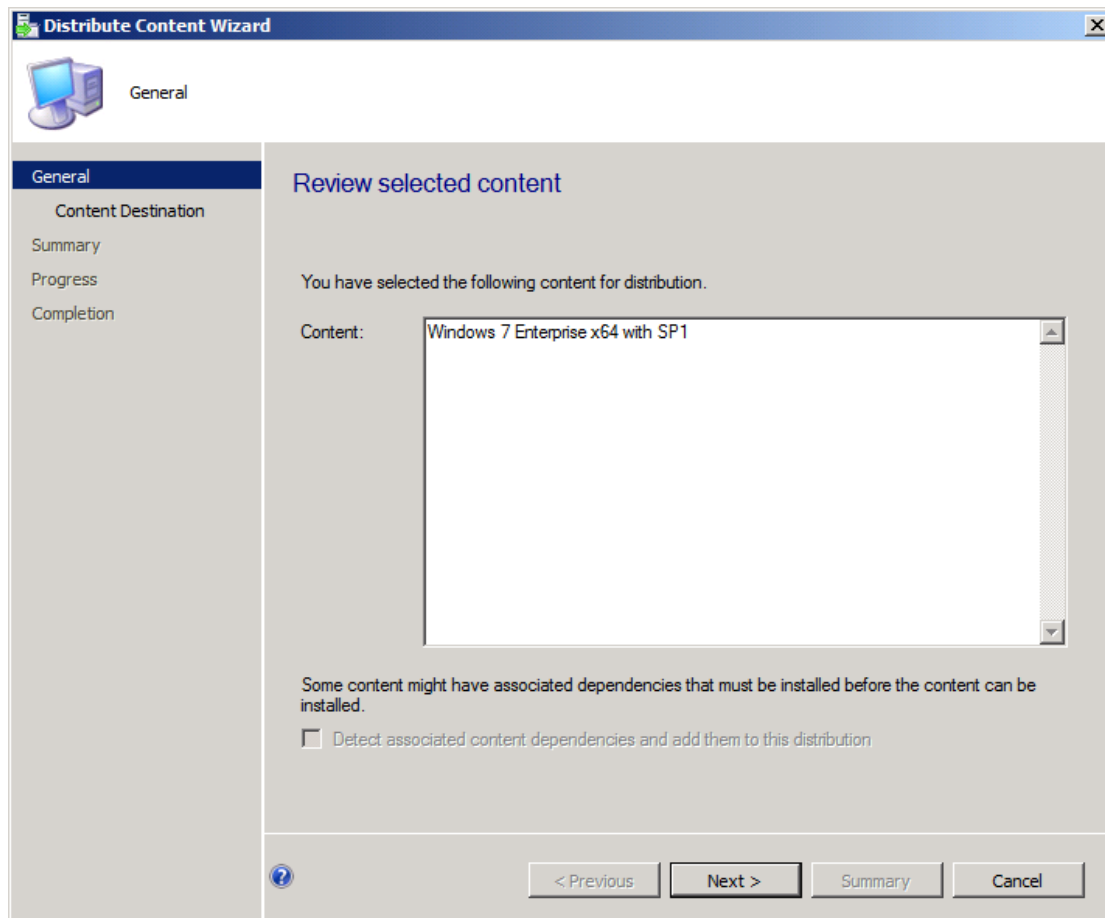
10) The reference computer' s primary partition was almost 100GB in **Size** , the **Details** tab indicated that 13GB was actually used .

11) On the Ribbon , click **Distribute Content** :

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12) The **Distribute Content Wizard General** dialog box appears :



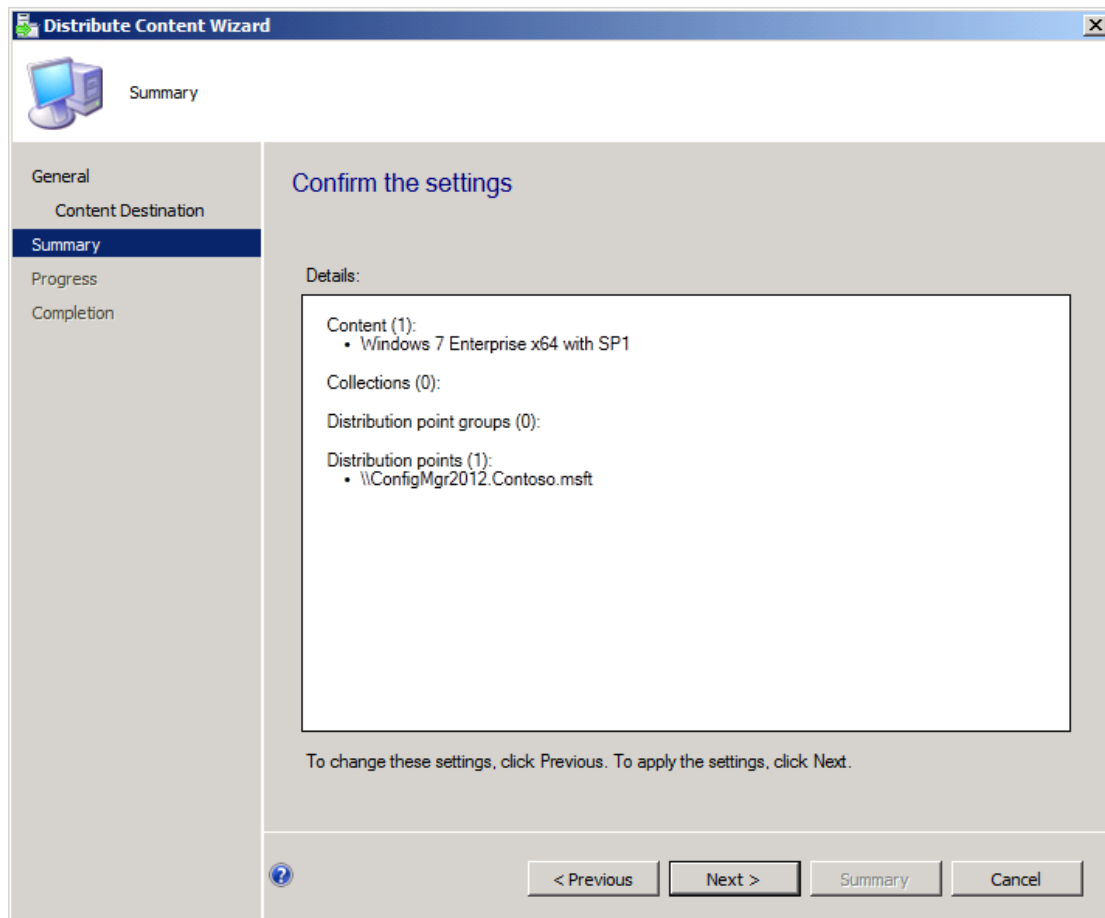
13) Click **Next** , the **Content Destination** dialog box appears , click **Add** to a
DP :

The screenshot shows the 'Distribute Content Wizard' window with the 'Content Destination' step selected in the left-hand navigation pane. The main area is titled 'Specify the content destination' and contains the following elements:

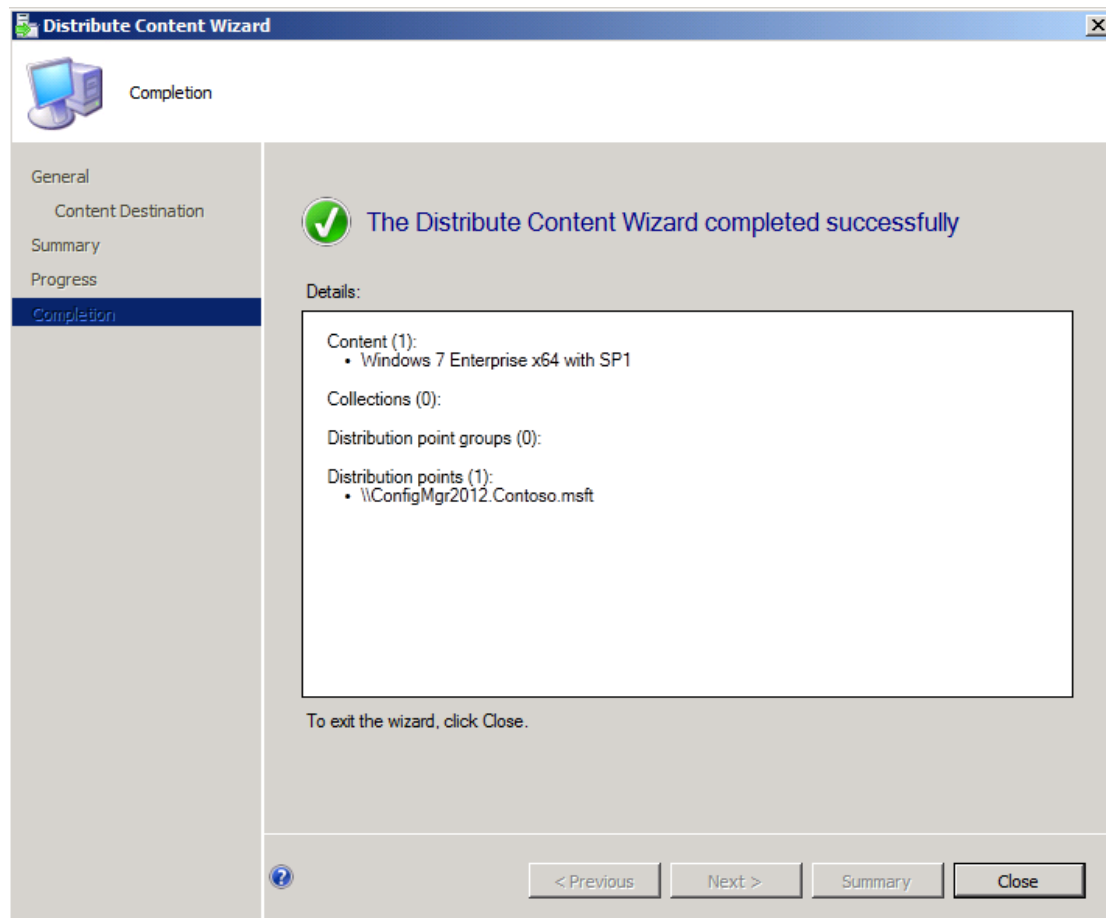
- A descriptive text: 'Content will be distributed to the following distribution points, distribution point groups, and the distribution point groups that are currently associated with collections.'
- A section labeled 'Content destination:' containing a search box with the placeholder 'Filter...' and a magnifying glass icon.
- A table with the following data:

Name	Description	Associations
\\ConfigMgr2012.Contoso.msft	Distribution point	
- Buttons for 'Add' (with a dropdown arrow) and 'Remove' located to the right of the table.
- Navigation buttons at the bottom: '< Previous', 'Next >', 'Summary', and 'Cancel'.

14) Click **Next** , the **Summary** dialog box appears :

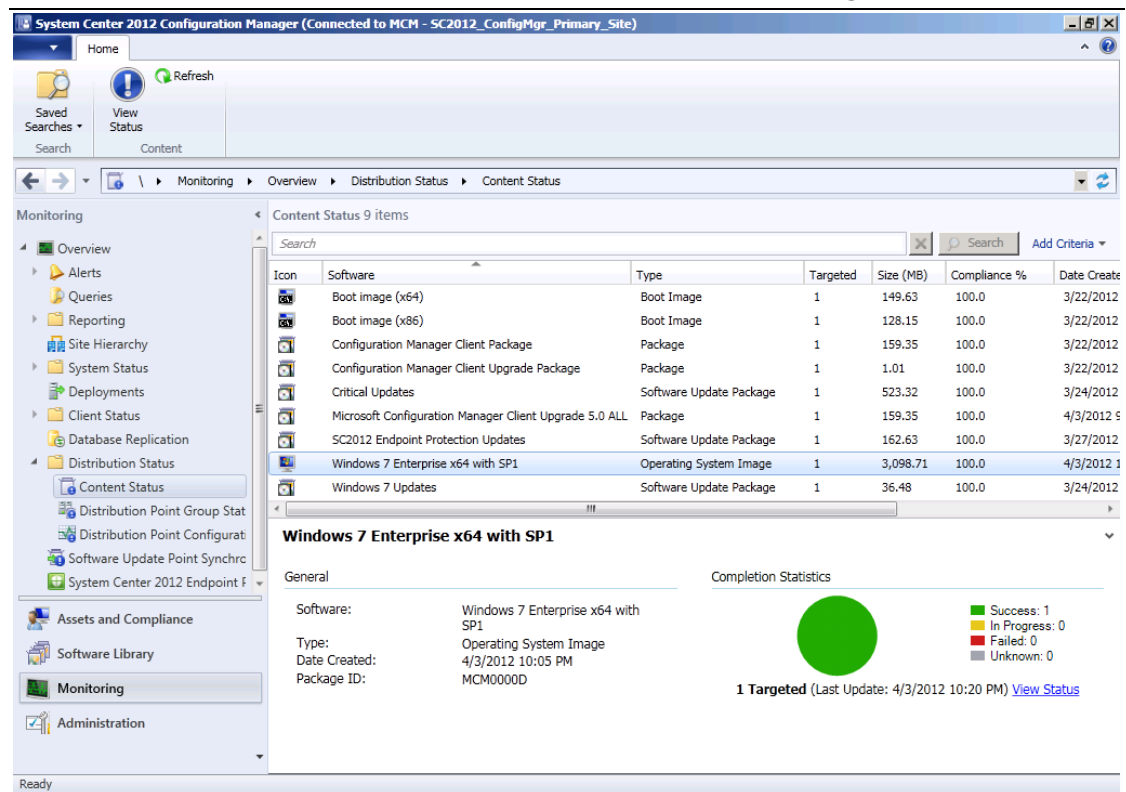


15) Click **Next** , the **Completion** dialog box appears indicating that the wizard completed successfully :

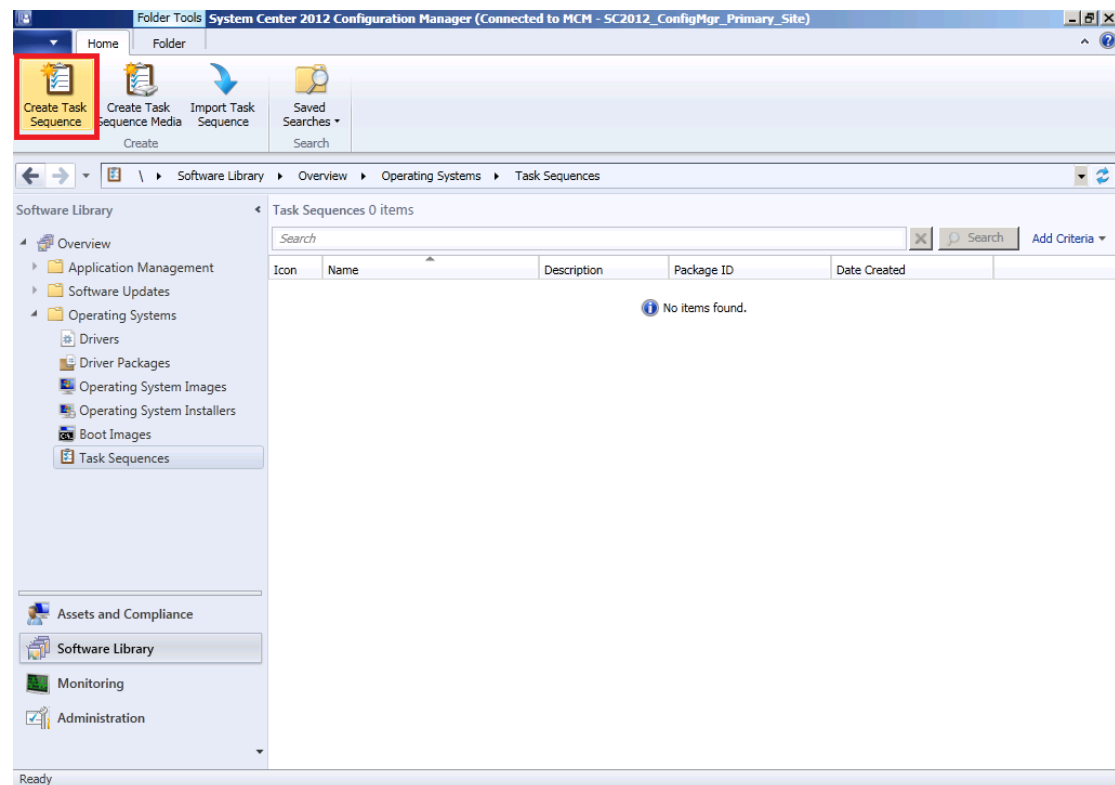


16) Click **Close** , and then click the **Monitoring** workspace , and then in the navigation pane , click **Content Status** , the **Windows 7 Enterprise x64 with SP1** content is currently being distributed to the distribution point :

System Center 2012 Configuration Manager RTM Operating System Deployment

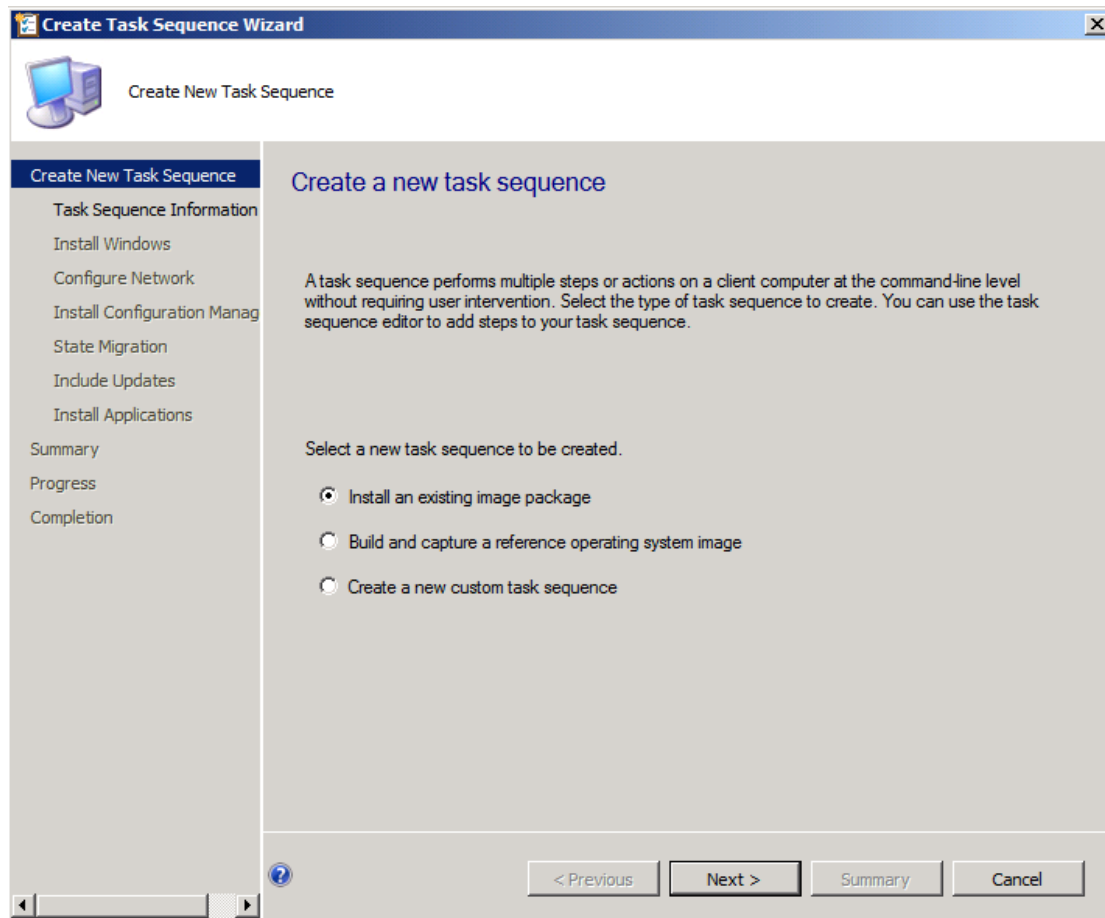


17) Click the **Software Library** workspace , and then in the navigation pane , click **Task Sequences** , on the Ribbon , click **Create Task Sequence** :



Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

18) The **Create Task Sequence Wizard** dialog box appears :



19) Verify that **Install an existing image package** is selected , and then click **Next** , the **Task Sequence Information** dialog box appears :

Task Sequence Information

Create New Task Sequence

Task Sequence Information

Install Windows

Configure Network

Install Configuration Manag

State Migration

Include Updates

Install Applications

Summary

Progress

Completion

Specify task sequence information

Task sequence name: Task Sequence 1

Description:

Boot image: Browse...

< Previous Next > Summary Cancel

20) Type a name in **Task sequence name** box , and click **Browse...** to select a

Boot image :

The screenshot shows the 'Create Task Sequence Wizard' window. The title bar reads 'Create Task Sequence Wizard'. The main window has a left-hand navigation pane with the following items: 'Create New Task Sequence', 'Task Sequence Information' (which is selected and highlighted in blue), 'Install Windows', 'Configure Network', 'Install Configuration Manag', 'State Migration', 'Include Updates', 'Install Applications', 'Summary', 'Progress', and 'Completion'. The main area of the wizard is titled 'Specify task sequence information'. It contains three input fields: 'Task sequence name:' with the value 'Windows 7 Enterprise x64 with SP1', 'Description:' with the value 'Windows 7 Enterprise x64 with SP1', and 'Boot image:' with the value 'Boot image (x64) 6.1.7600.16385 en-US'. To the right of the 'Boot image' field is a 'Browse...' button. At the bottom of the wizard, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A help icon (?) is located to the left of the 'Next >' button.

21) Click **Next** , the **Install Windows** dialog box appears :

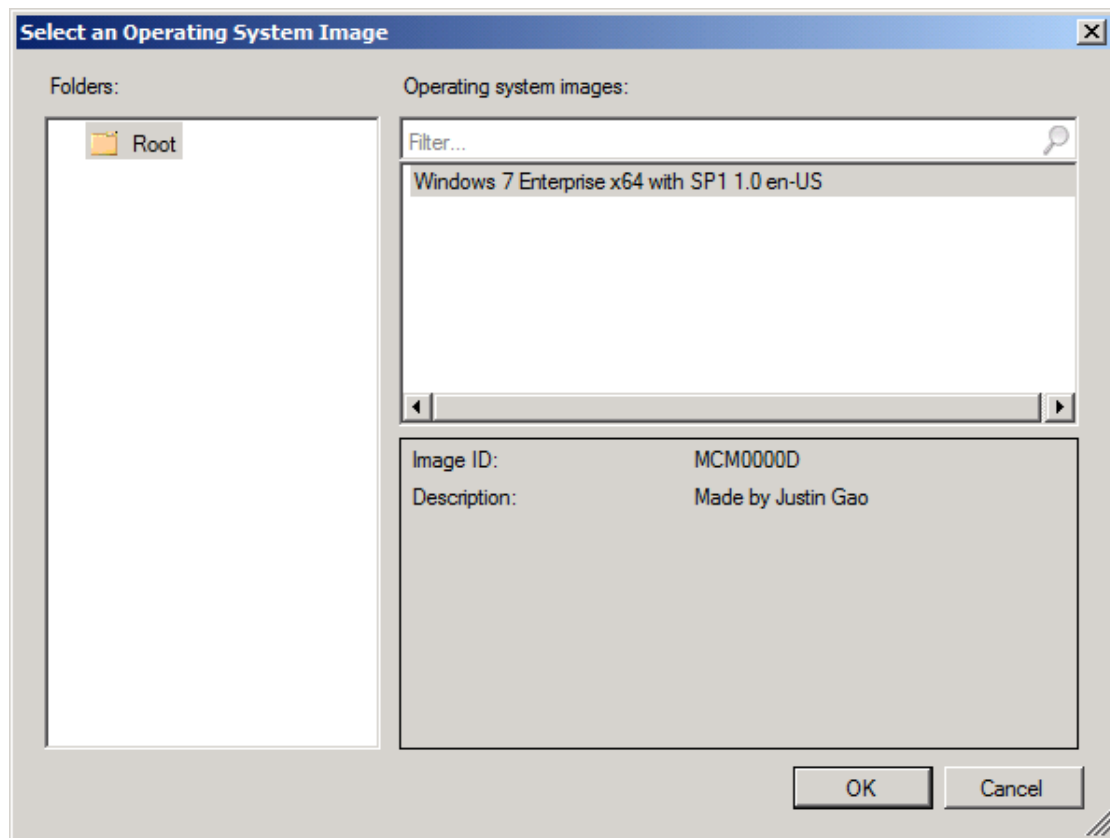
The screenshot shows the 'Create Task Sequence Wizard' window with the 'Install Windows' step selected in the left-hand navigation pane. The main pane is titled 'Install the Windows operating system' and contains the following sections:

- Specify the Windows operating system image and installation information.**
 - Image package:** A text box with a red error icon and a 'Browse...' button.
 - Image:** A dropdown menu with a red error icon.
 - ☒ Partition and format the target computer before installing the operating system.
- Specify the licensing information for the Windows installation.**
 - Product key:** A text box.
 - Server licensing mode:** A dropdown menu showing 'Do not specify'.
 - Maximum server connections:** A spinner box set to '5'.
 - ☒ Disable local administrator account
 - ☐ Always use the same administrator password
 - Password:** A text box.
 - Confirm password:** A text box.

At the bottom, there are navigation buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A status bar at the very bottom shows progress indicators for the wizard steps.

22) After **Image package** , click **Browse...** , the **Select an Operating System**

Image dialog box appears :



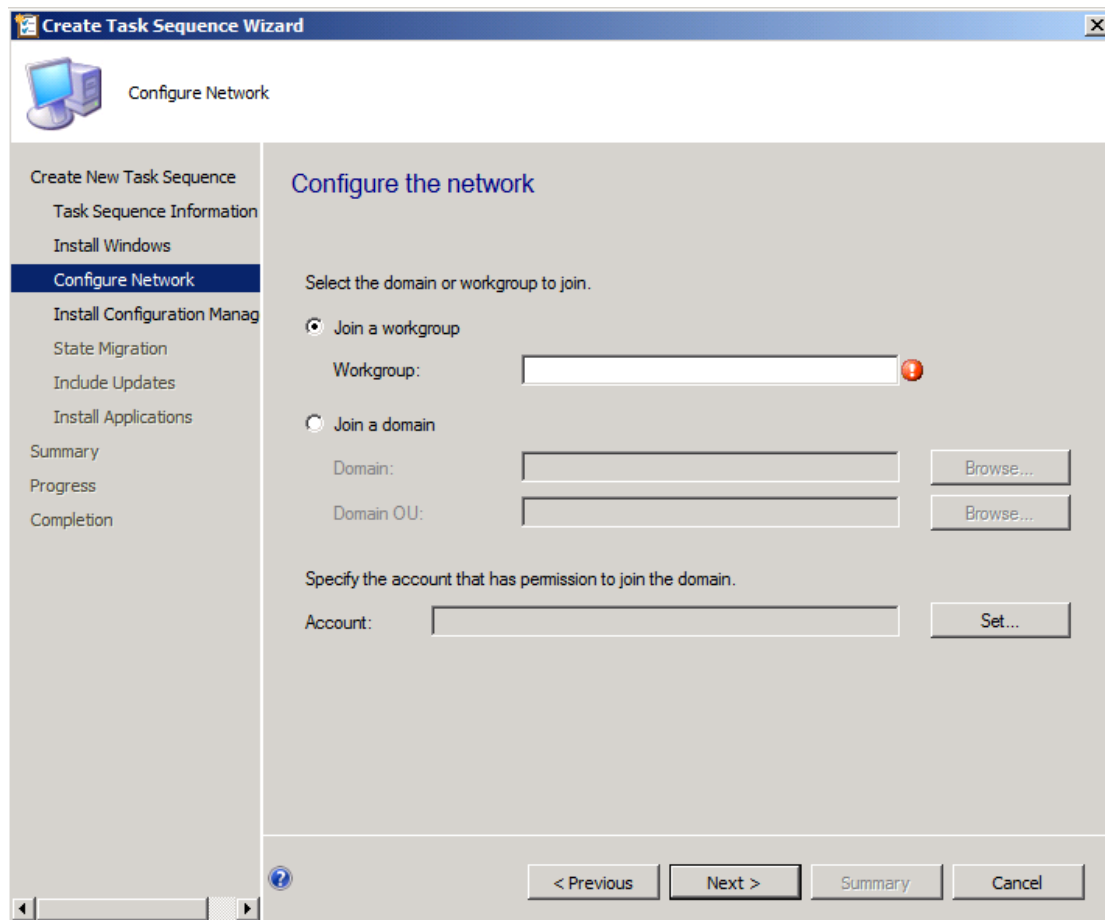
23) Select image and click **OK** , in the **Image** box , click **2-2** :

The screenshot shows the 'Create Task Sequence Wizard' window with the 'Install Windows' step selected in the left-hand navigation pane. The main area is titled 'Install the Windows operating system' and contains the following fields and options:

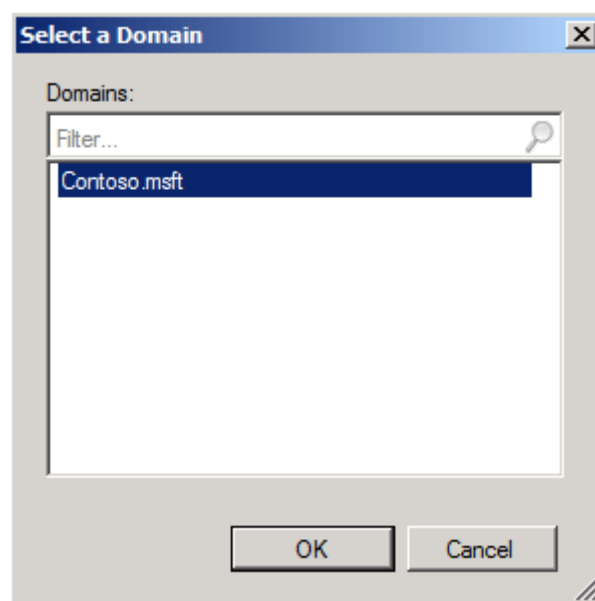
- Image package:** A text box containing 'Windows 7 Enterprise x64 with SP1 1.0 en-US' and a 'Browse...' button.
- Image:** A dropdown menu showing '2 - 2'.
- Partition and format:** A checked checkbox labeled 'Partition and format the target computer before installing the operating system.'
- Licensing information:**
 - Product key:** An empty text box.
 - Server licensing mode:** A dropdown menu showing 'Do not specify'.
 - Maximum server connections:** A spinner box set to '5'.
- Administrator account options:**
 - ☒ Disable local administrator account
 - ☐ Always use the same administrator password
- Password fields:** Two empty text boxes labeled 'Password:' and 'Confirm password:'.

At the bottom, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A help icon (?) is located to the left of the 'Next >' button.

24) Click **Next** , the **Configure Network** dialog box appears :

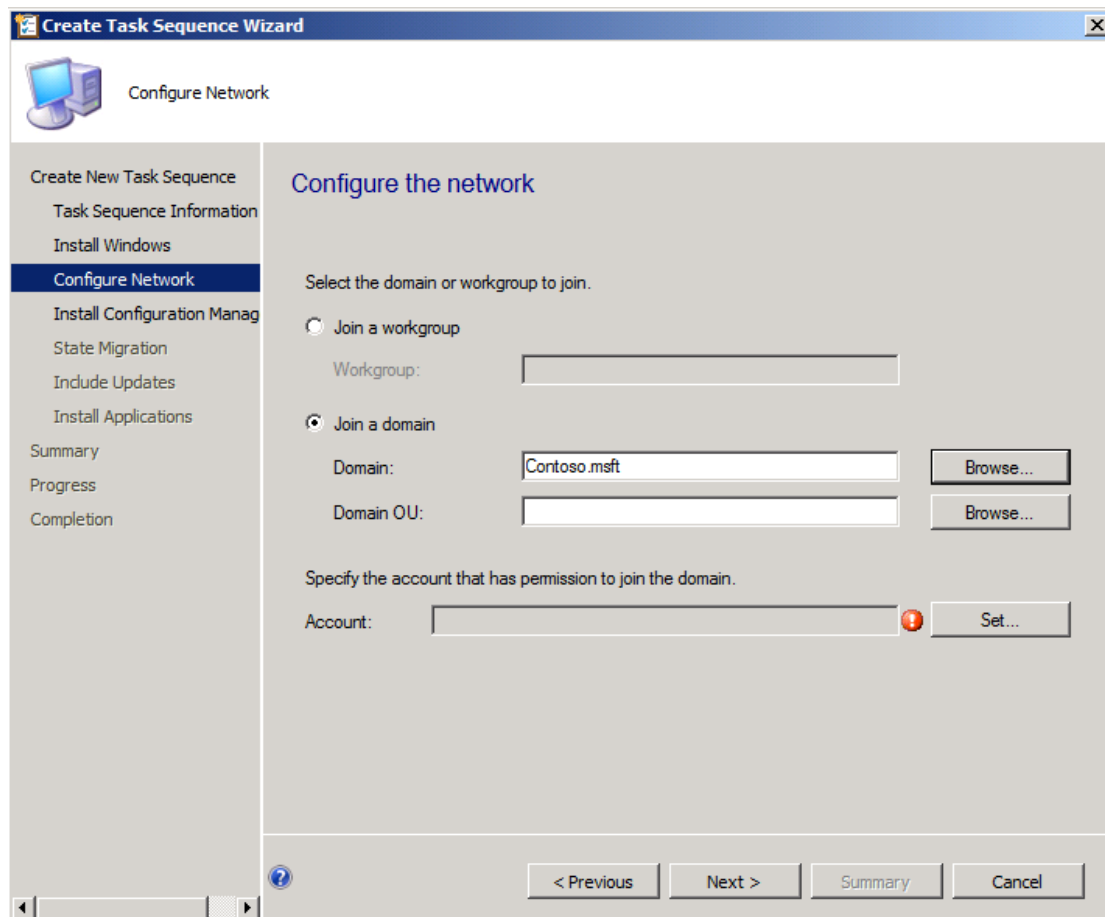


25) Click **Join a domain** , and then after **Domain** , click **Browse...** , the **Select a Domain** dialog box appears :



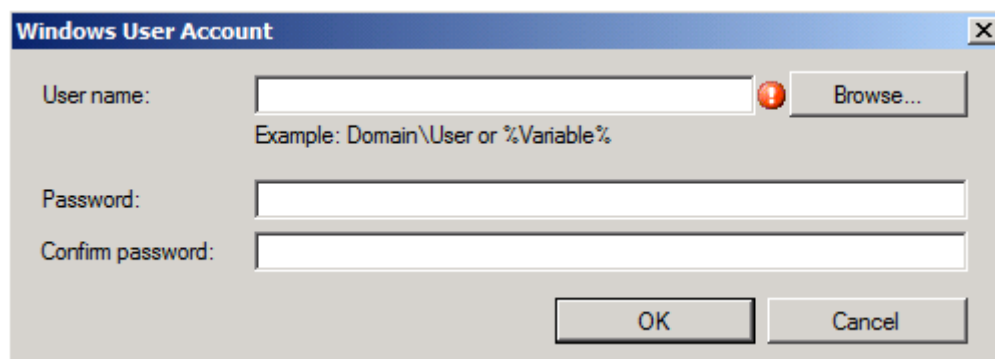
26) Click **Contoso.msft** and then click **OK** , will back to **Configure Network**

dialog box :



27) After **Account** , click **Set...** , the **Windows User Account** dialog box

appears :



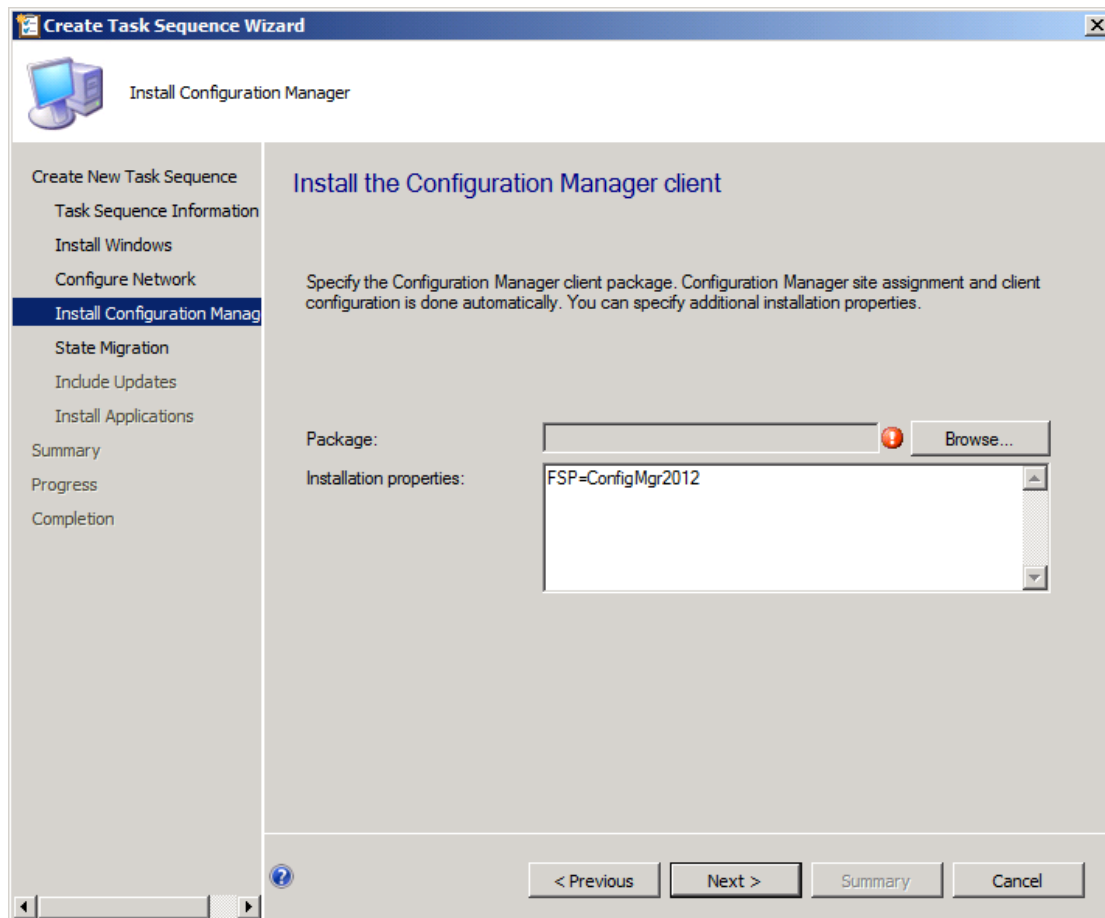
28) Type a user account information and then click **OK** :

The screenshot shows the 'Create Task Sequence Wizard' window with the 'Configure Network' step selected in the left-hand navigation pane. The main area is titled 'Configure the network' and contains the following options and fields:

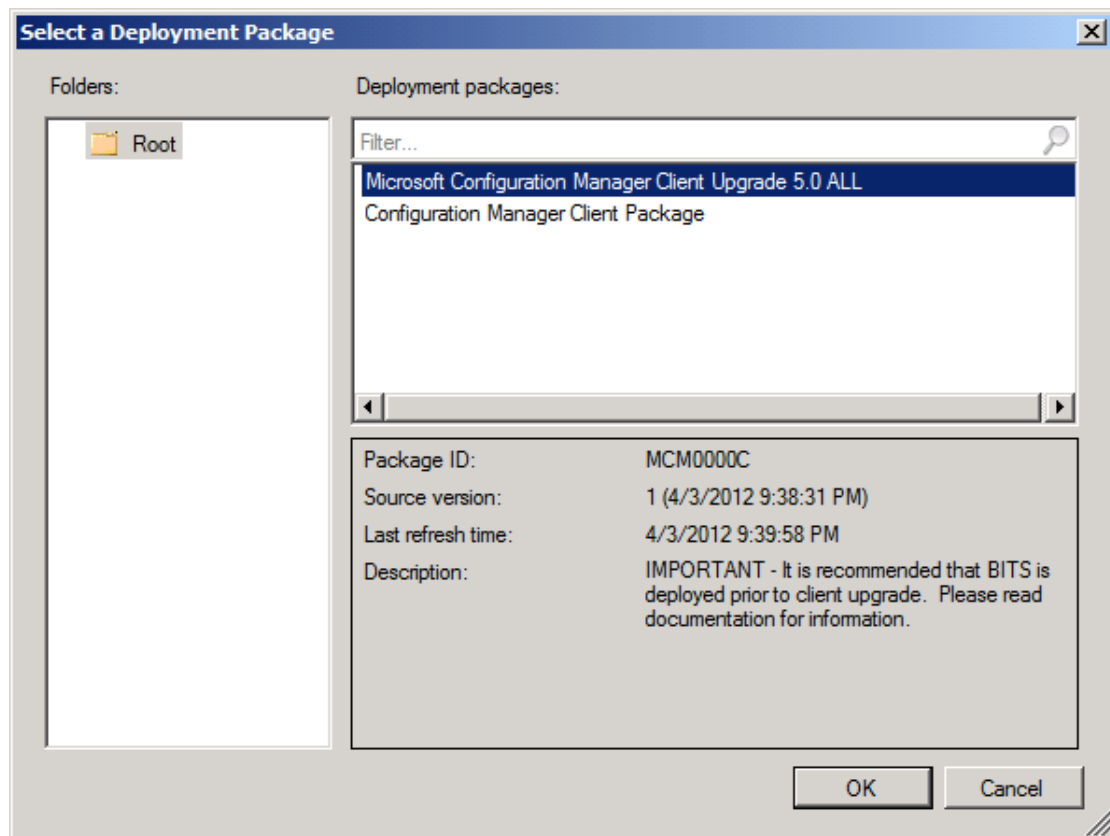
- Select the domain or workgroup to join.**
 - ☐ Join a workgroup
 - Workgroup: [Empty text box]
 - ☒ Join a domain
 - Domain: [Contoso.msft] [Browse...]
 - Domain OU: [Empty text box] [Browse...]
- Specify the account that has permission to join the domain.**
 - Account: [CONTOSO\Administrator] [Set...]

At the bottom of the window, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A help icon (?) is also present near the bottom left.

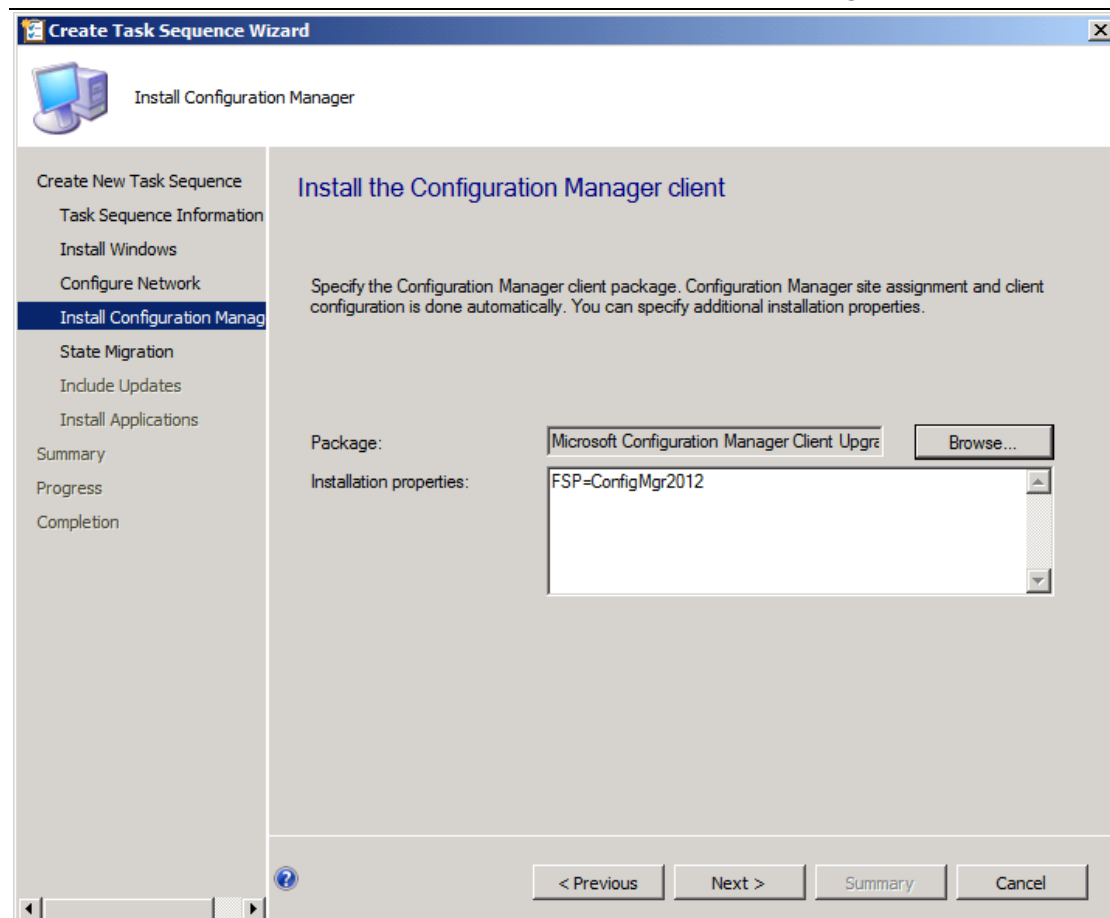
29) Click **Next** , the **Install Configuration Manager** dialog box appears :



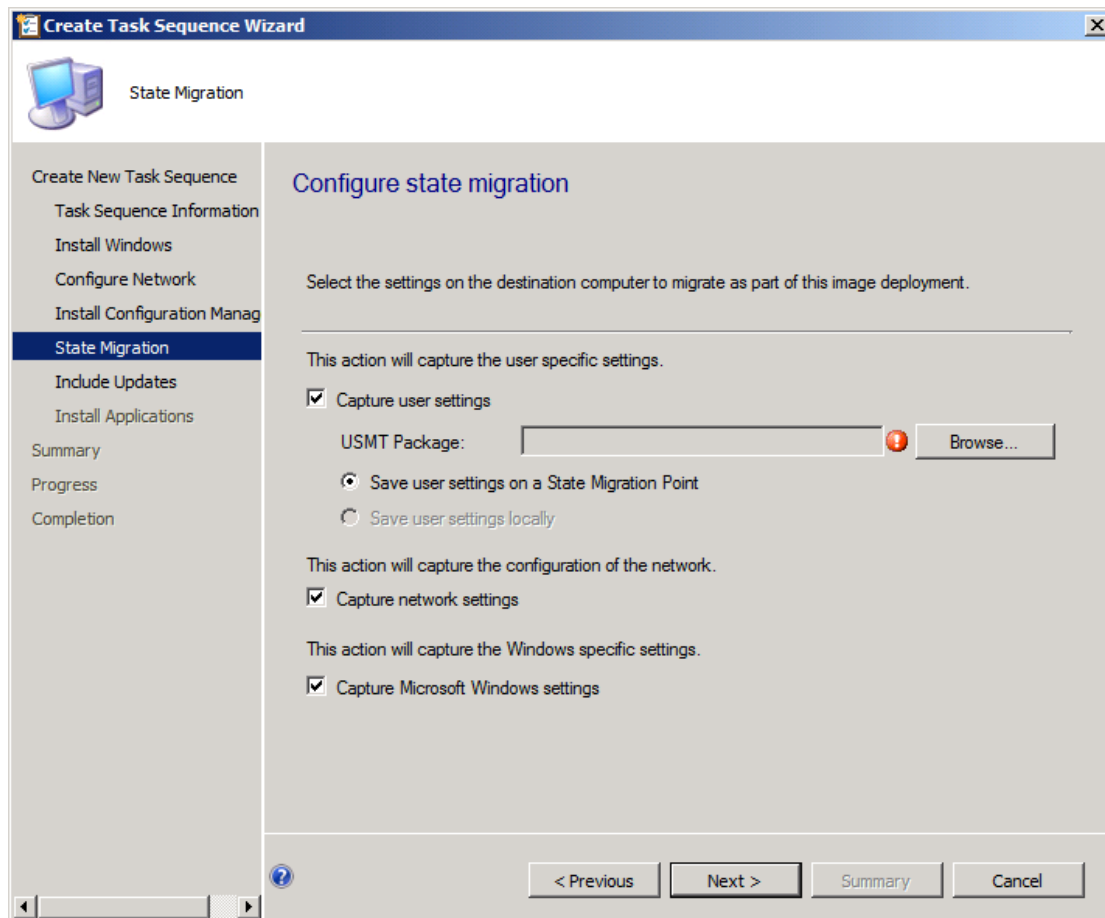
30) After **Package** , click **Browse...** , the **Select a Deployment Package** dialog box appears :



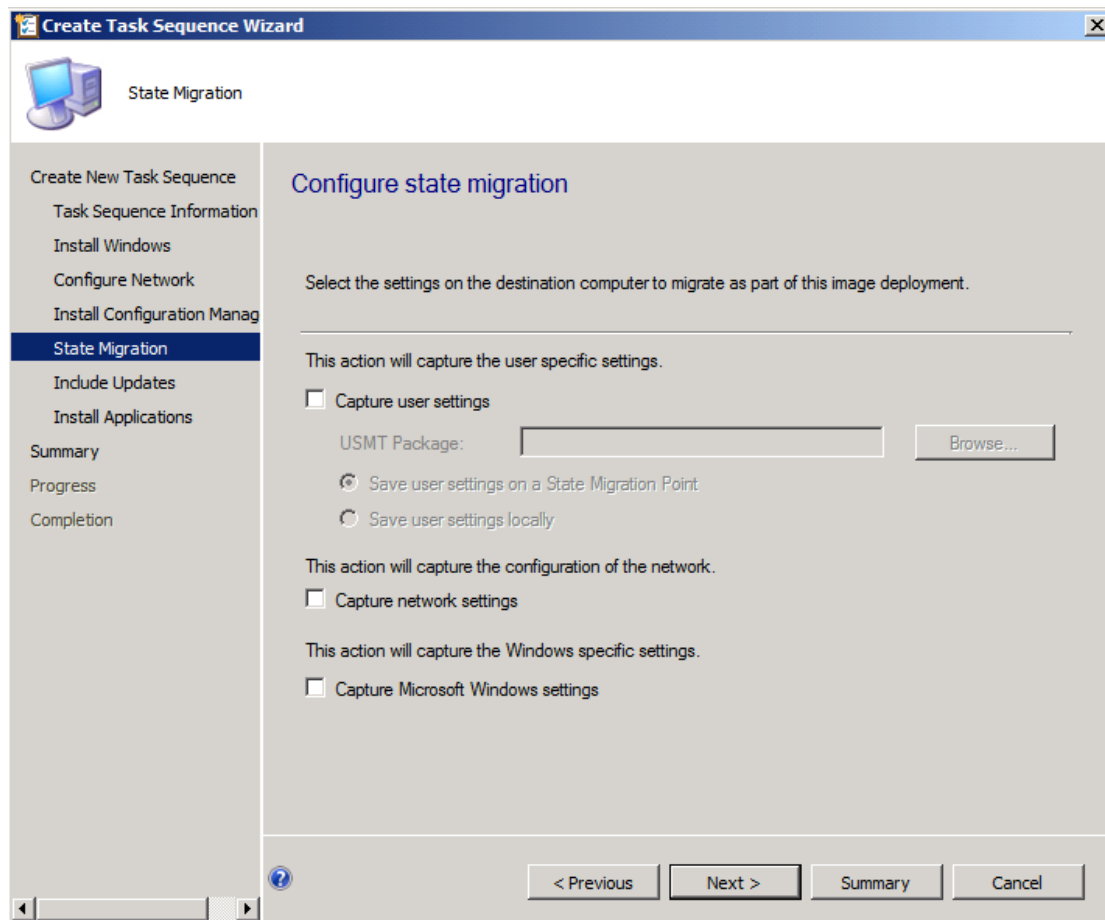
31) Select **Microsoft Configuration Manager Client Upgrade 5.0 ALL** and then click **OK** :



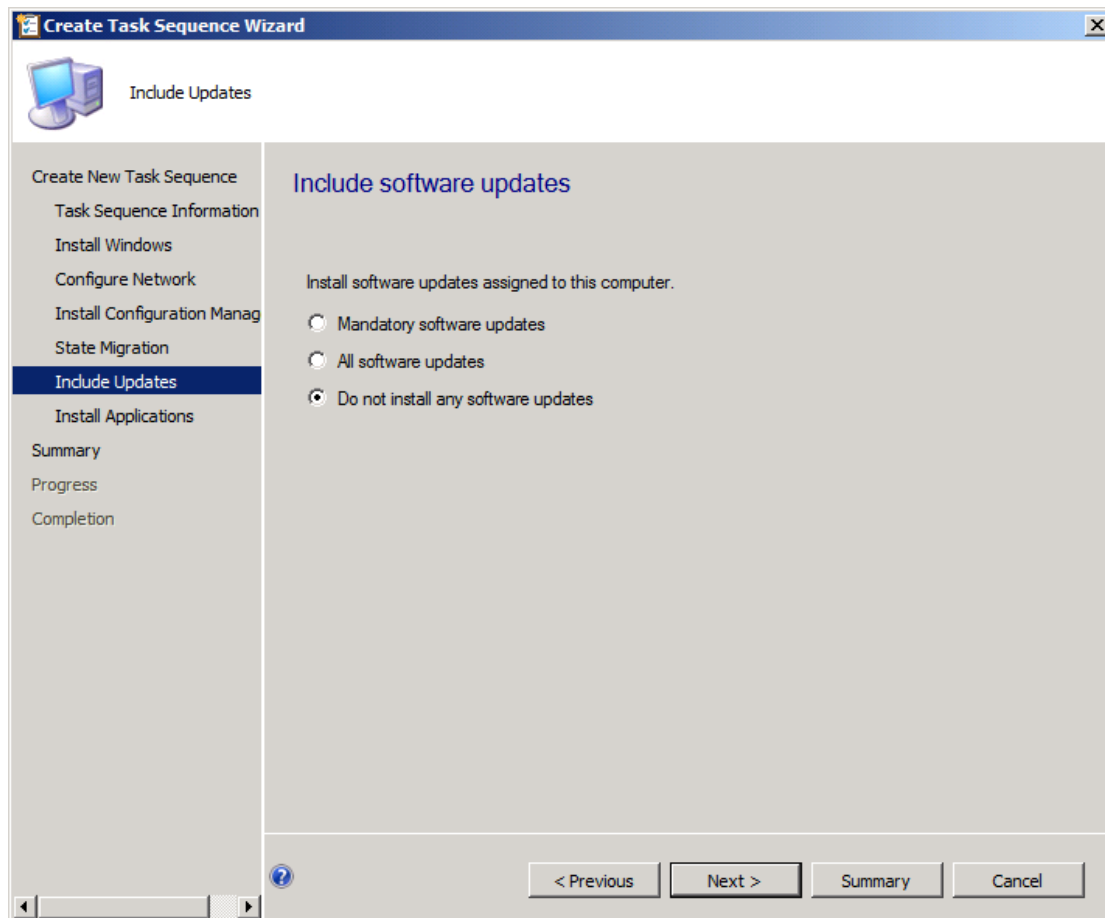
32) Click **Next** , the **State Migration** dialog box appears :



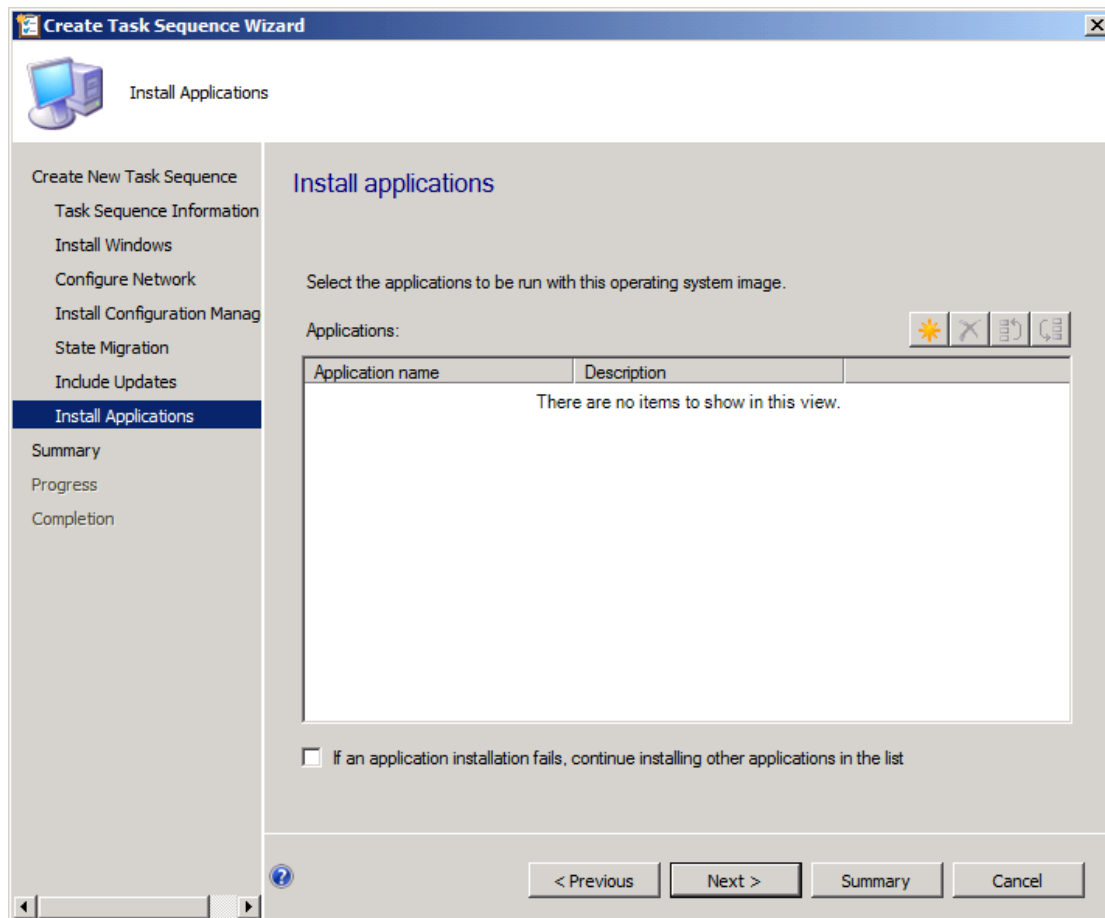
33) Click to clear **Capture user settings** , **Capture network settings** and **Capture Microsoft Windows settings** :



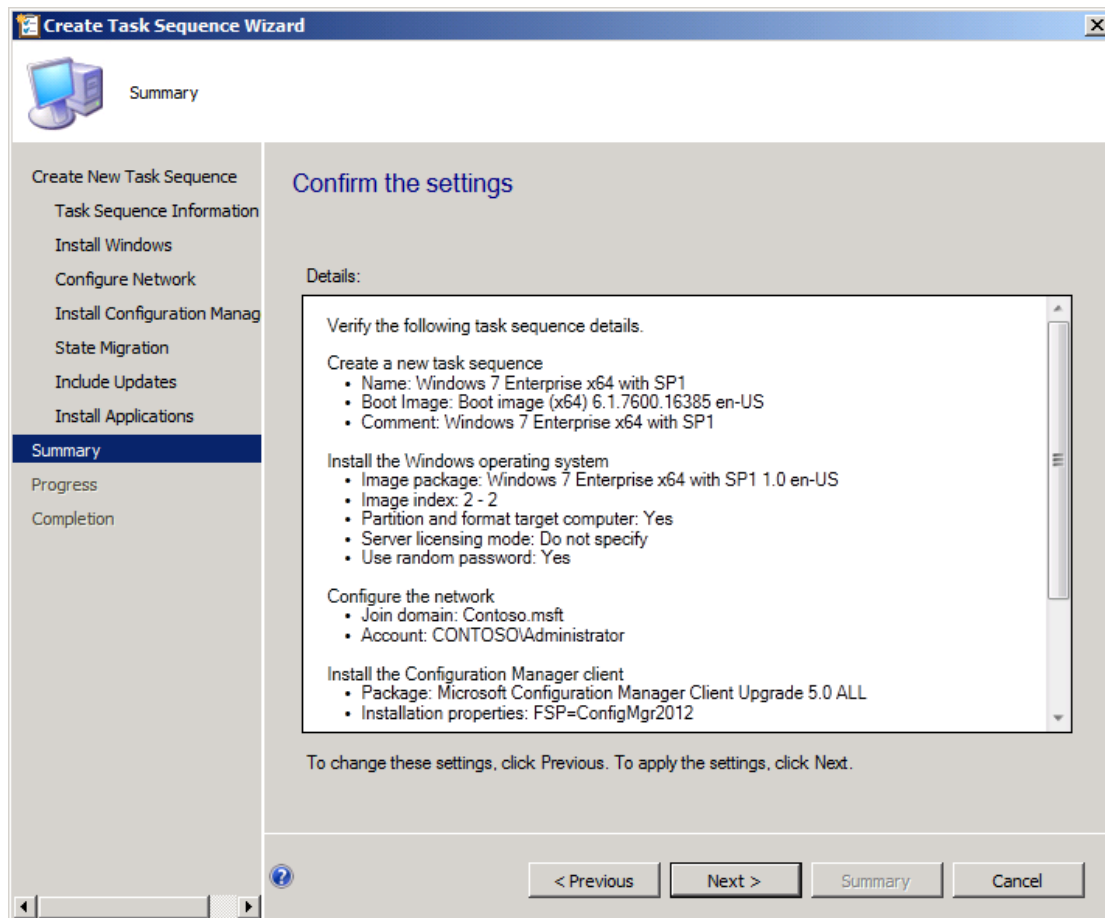
34) Click **Next** , the **Include Updates** dialog box appears :



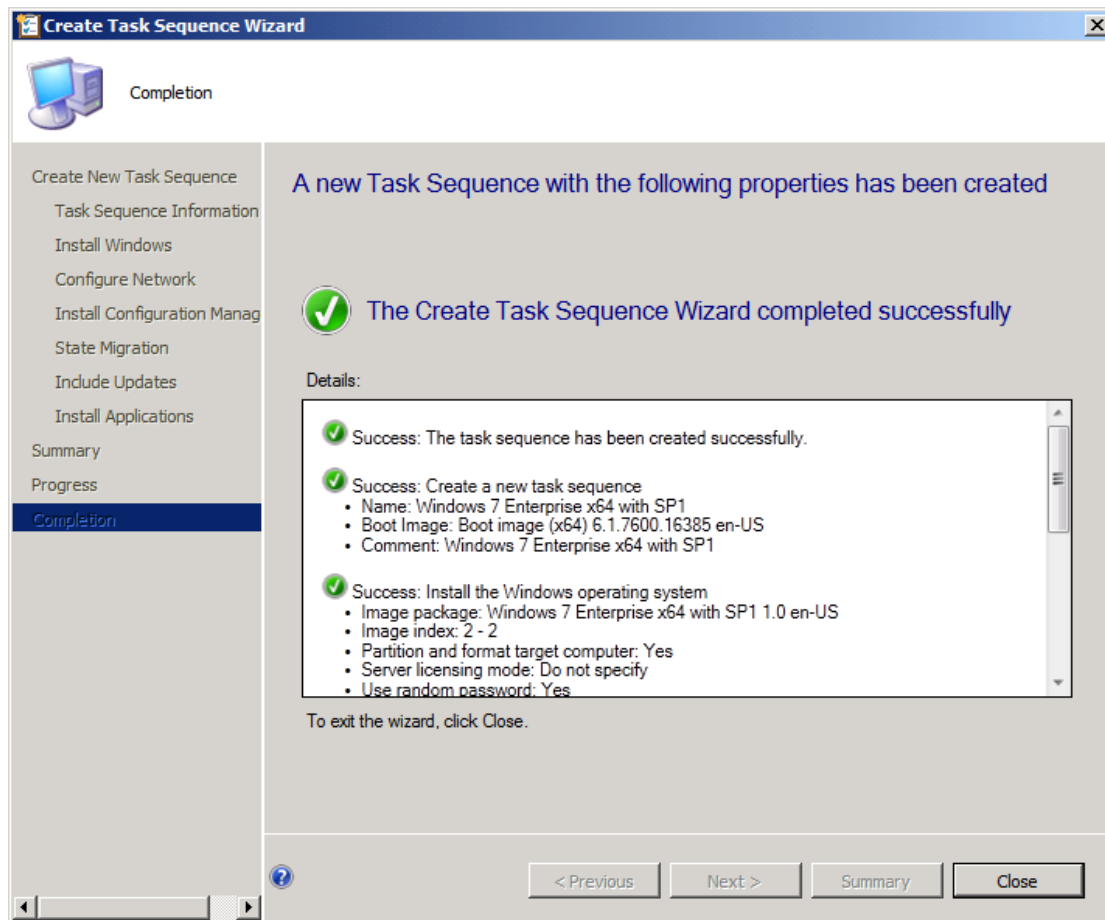
35) Click **Next** to not deploy any software updates , the **Install Applications** dialog box appears :



36) Click **Next** to not install any applications through the task sequence deployment process , the **Summary** dialog box appears :

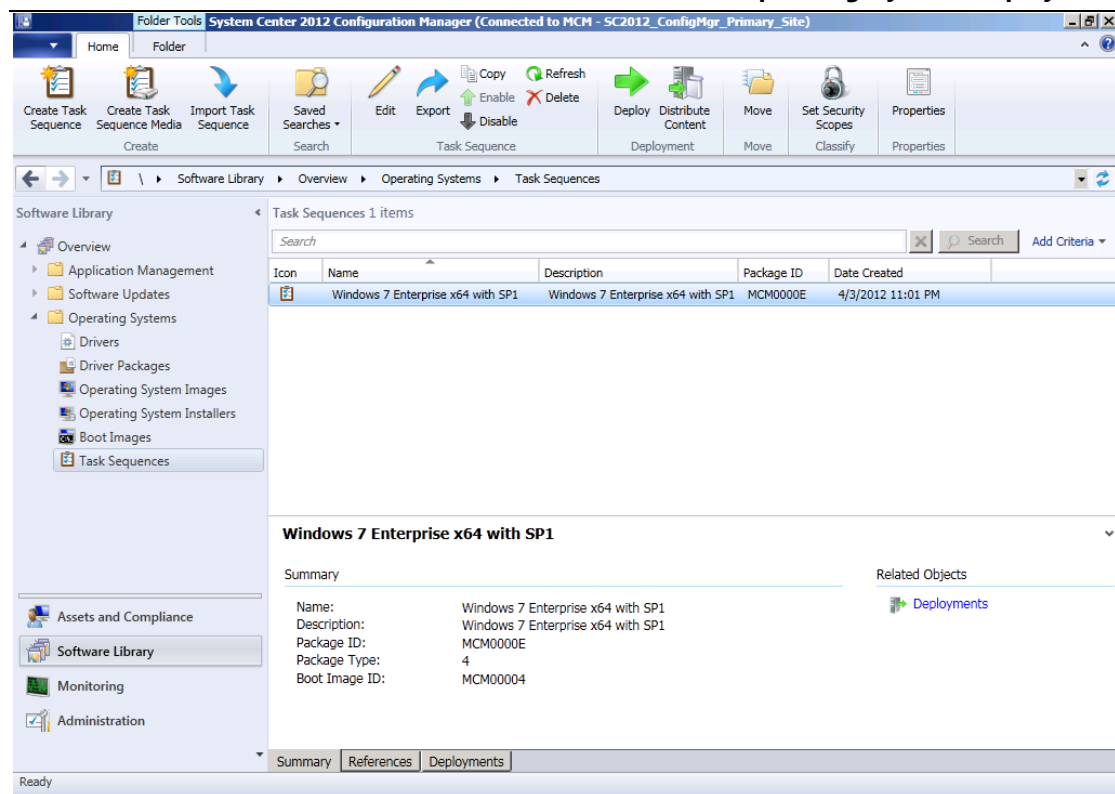


37) Click **Next** , the **Completion** dialog box appears indicating that the wizard successfully created the task sequence :

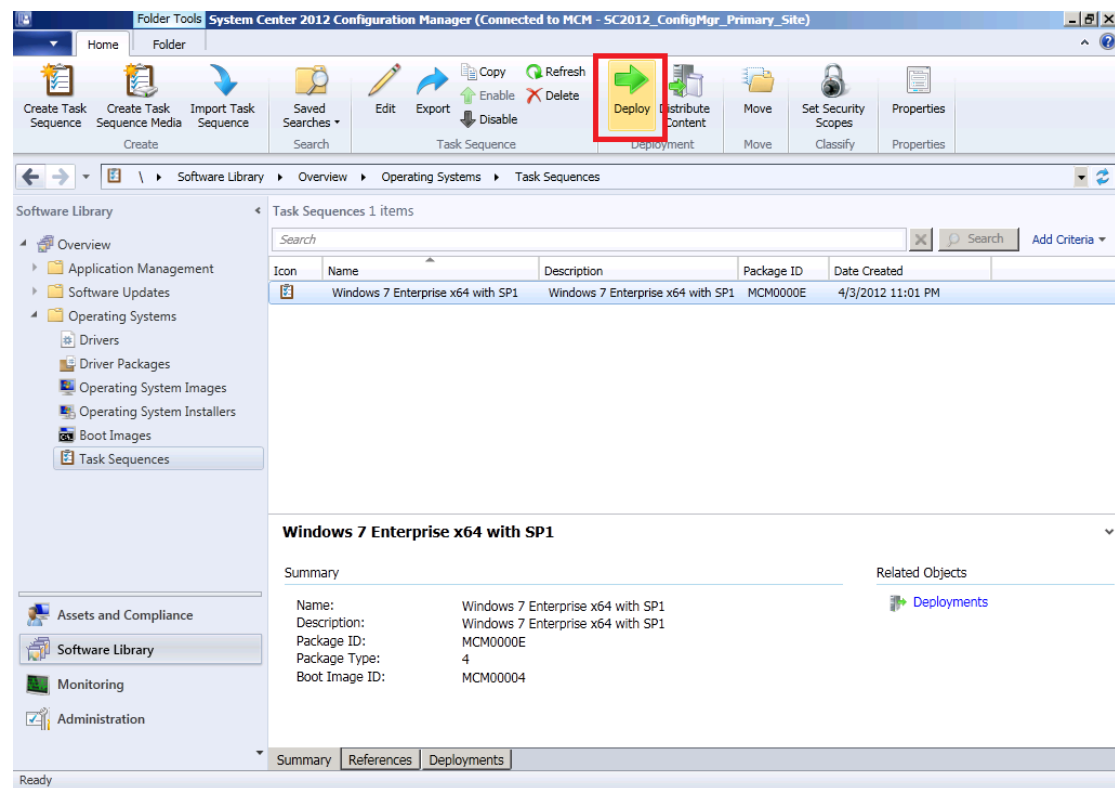


38) Click **Close** , the list of task sequences appears in the results pane . Notice that your new task sequence is displayed :

System Center 2012 Configuration Manager RTM Operating System Deployment



39) On the Ribbon , click **Deploy** :



40) The **Deploy Software Wizard General** dialog box appears :

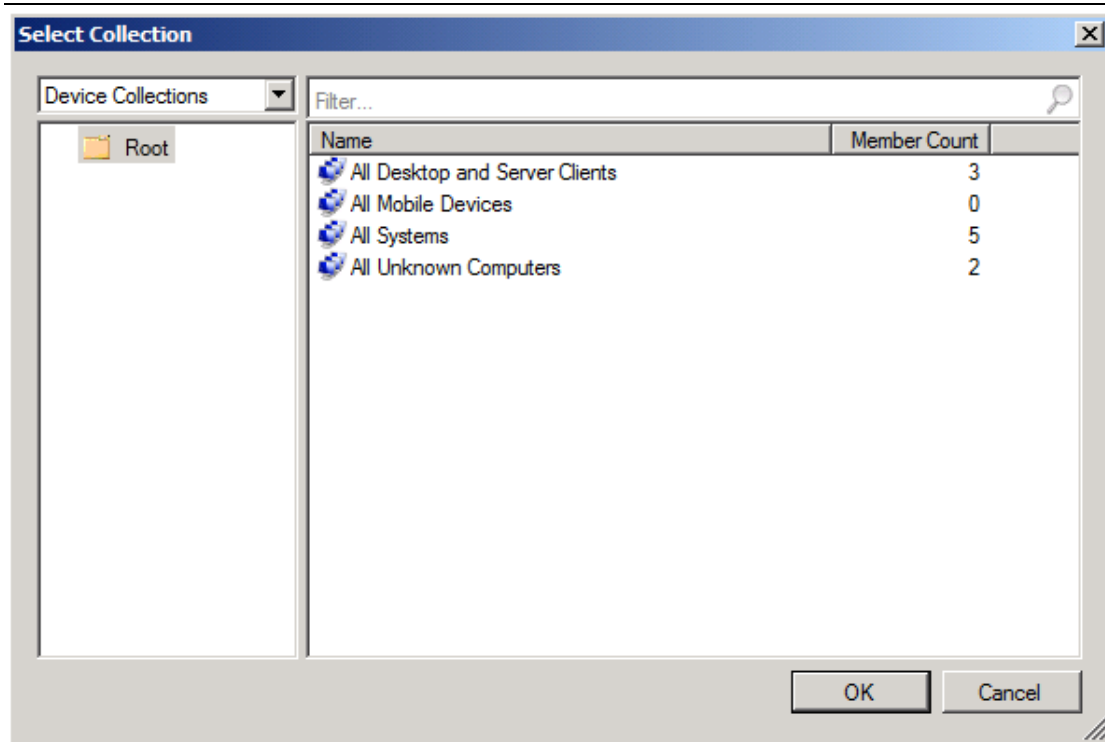
Justin Gao 高扬
yanga@microsoft.com
http://blogs.technet.com/b/justin_gao

The screenshot shows the 'Deploy Software Wizard' window with the 'General' tab selected. The left sidebar contains a tree view with the following items: General (selected), Deployment Settings, Scheduling, User Experience, Alerts, Distribution Points, Summary, Progress, and Completion. The main area is titled 'Specify general information for this deployment'. It contains the following fields and controls:

- Task sequence:** A text box containing 'Windows 7 Enterprise x64 with SP1' and a 'Browse...' button.
- Collection:** An empty text box with a red exclamation mark icon and a 'Browse...' button.
- ☐ Use default distribution point groups associated to this collection
- ☐ Automatically distribute content for dependencies
- Comments (optional):** A large text area for entering comments.

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

41) After **Collection** , click **Browse...** , the **Select Collection** dialog box appears displaying the available device collections :



42) Under **Name** , click **All Unknown Computers** , and then click **OK** , the **General** dialog box appears :

The screenshot shows the 'Deploy Software Wizard' window with the 'General' tab selected. The left sidebar contains a tree view with the following items: General (selected), Deployment Settings, Scheduling, User Experience, Alerts, Distribution Points, Summary, Progress, and Completion. The main area is titled 'Specify general information for this deployment'. It contains two text boxes: 'Task sequence:' with the value 'Windows 7 Enterprise x64 with SP1' and 'Collection:' with the value 'All Unknown Computers'. Each text box has a 'Browse...' button to its right. Below these are two unchecked checkboxes: 'Use default distribution point groups associated to this collection' and 'Automatically distribute content for dependencies'. At the bottom of the main area is a 'Comments (optional):' label above a large text area. The bottom of the window features a navigation bar with four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A help icon (?) is located to the left of the 'Next >' button.

43) Click **Next** , the **Deployment Settings** dialog box appears :

Deploy Software Wizard

Deployment Settings

General
Deployment Settings
Scheduling
User Experience
Alerts
Distribution Points
Summary
Progress
Completion

Specify settings to control how this software is deployed

Action: Install

Purpose: Available

☐ Require administrator approval if users request this application

☐ Make available to boot media and PXE

< Previous Next > Summary Cancel

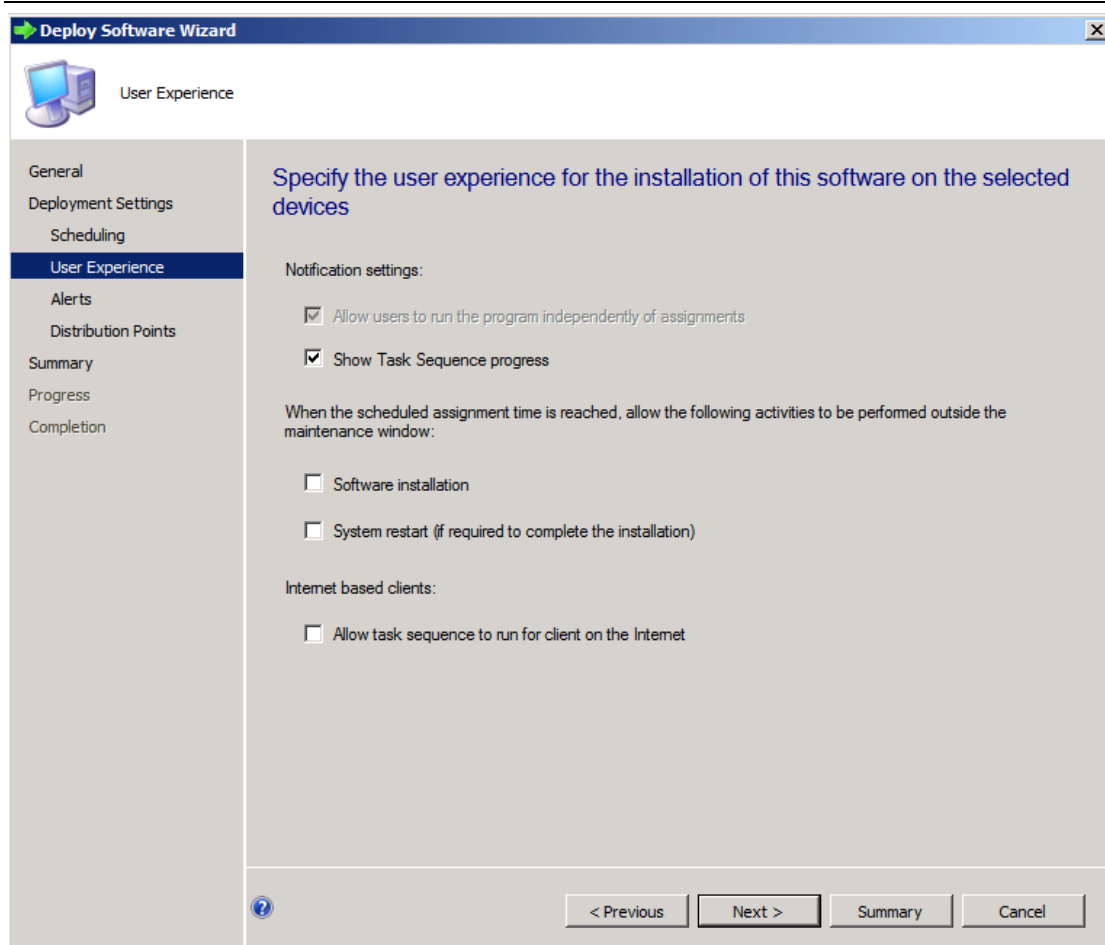
44) In the **Purpose** box , select **Available** , and then click to select **Make available to boot media and PXE** :

The screenshot shows the 'Deploy Software Wizard' window with the 'Deployment Settings' tab selected. The left sidebar contains a list of steps: General, Deployment Settings (highlighted), Scheduling, User Experience, Alerts, Distribution Points, Summary, Progress, and Completion. The main area is titled 'Specify settings to control how this software is deployed'. It contains two dropdown menus: 'Action' set to 'Install' and 'Purpose' set to 'Available'. Below these are two checkboxes: 'Require administrator approval if users request this application' (unchecked) and 'Make available to boot media and PXE' (checked). At the bottom right are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'. A help icon (?) is located at the bottom left of the main area.

45) Click **Next** , the **Scheduling** dialog box appears :

The screenshot shows the 'Deploy Software Wizard' window with the 'Scheduling' tab selected. The left-hand navigation pane lists the following steps: General, Deployment Settings, Scheduling (highlighted), User Experience, Alerts, Distribution Points, Summary, Progress, and Completion. The main area is titled 'Specify the schedule for this deployment'. It contains a descriptive paragraph: 'This program will be available as soon as it has been distributed to the content servers unless it is scheduled for a later time below. For required applications, specify the assignment schedule.' Below this are two checkboxes: 'Schedule when this deployment will become available:' and 'Schedule when this deployment will expire:'. Both are currently unchecked. Each checkbox has a date and time selector (set to 4/ 4/2012 and 10:25 AM) and a 'UTC' checkbox. Below these is the 'Assignment schedule:' section, which includes 'New...', 'Edit...', and 'Delete' buttons. A large empty box below contains the text 'There are no items to show in this view.' At the bottom of the main area is a 'Rerun behavior:' dropdown menu set to 'Always rerun program'. The bottom of the window features a help icon, a '< Previous' button, a 'Next >' button, a 'Summary' button, and a 'Cancel' button.

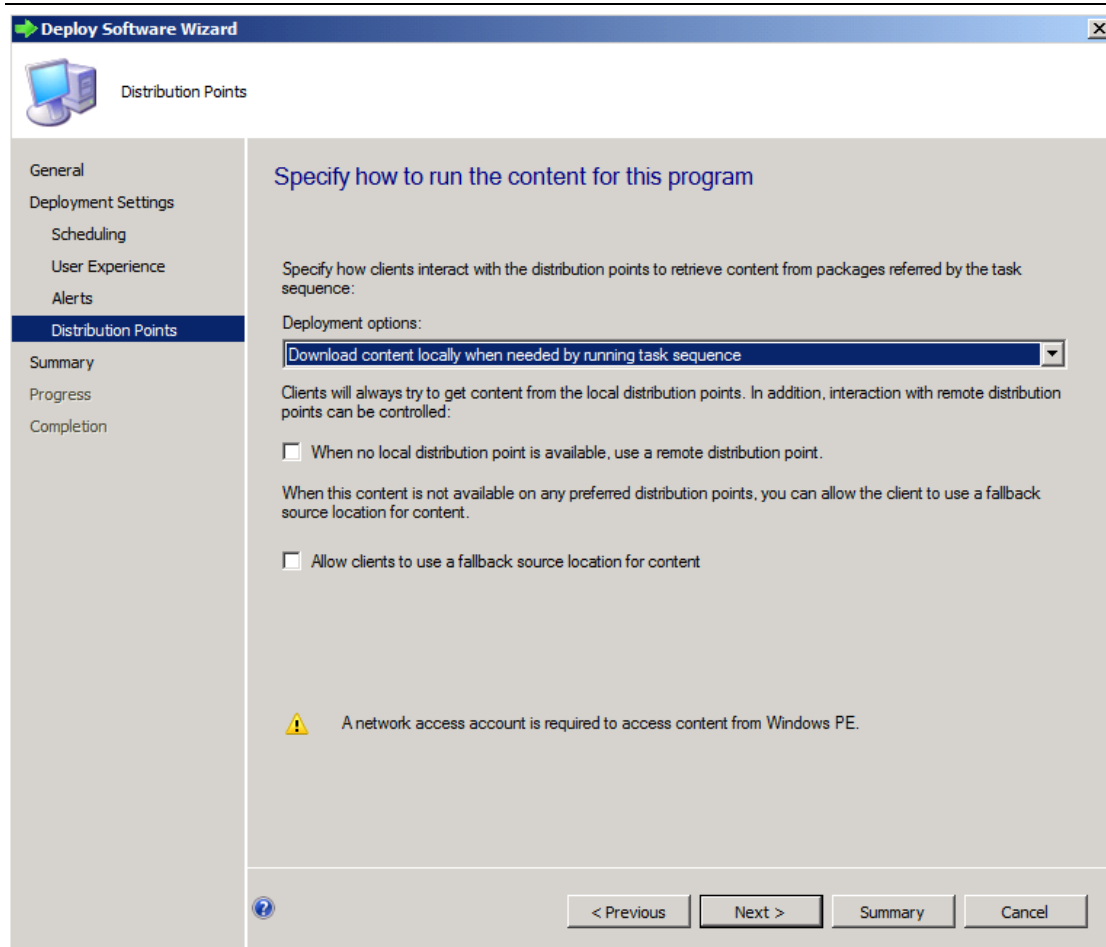
46) Click **Next** , the **User Experience** dialog box appears :



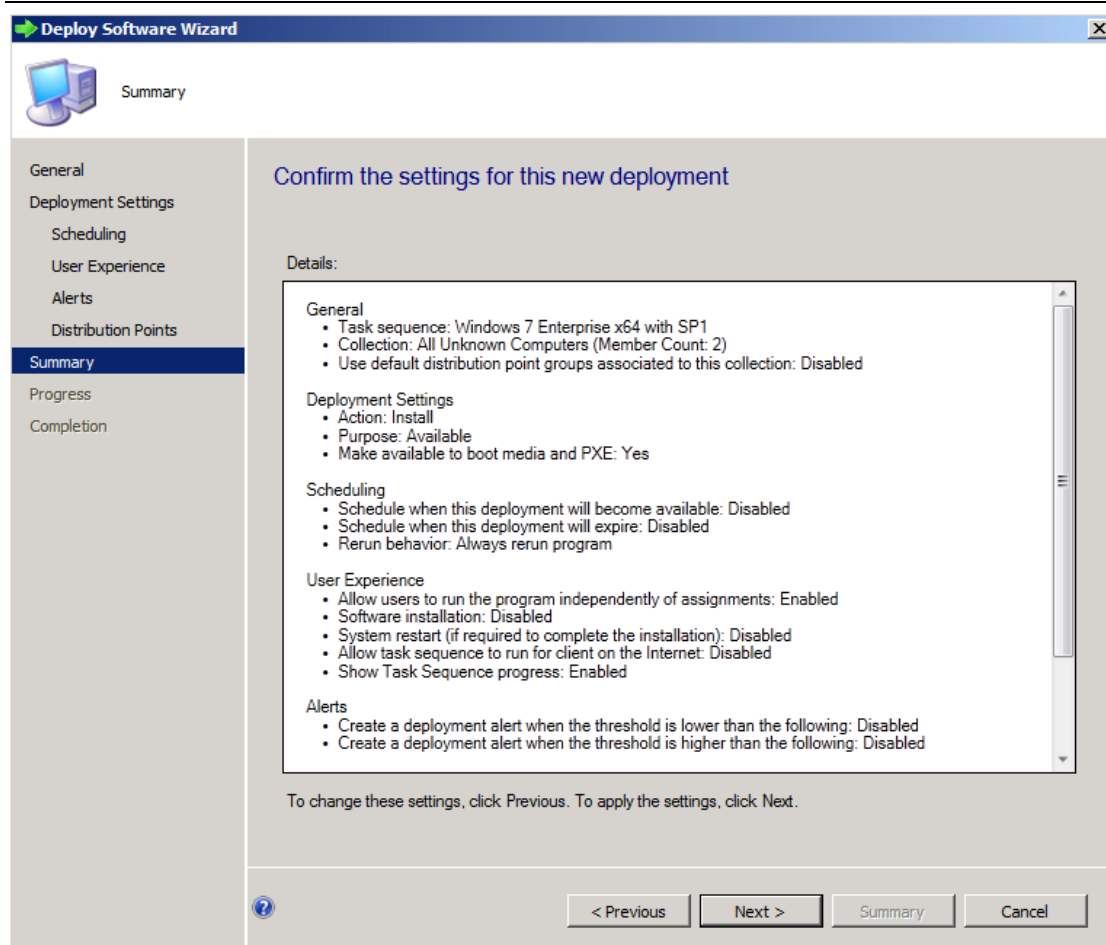
47) Click **Next** to accept the default configuration , the **Alerts** dialog box appears :

The screenshot shows the 'Deploy Software Wizard' window with the 'Alerts' tab selected. The left sidebar contains a list of steps: General, Deployment Settings, Scheduling, User Experience, Alerts (highlighted), Distribution Points, Summary, Progress, and Completion. The main area is titled 'Specify Configuration Manager and Operations Manager alert options'. It contains a text box stating 'Configuration Manager generates alerts when this task sequence is deployed.' Below this are two sections for setting thresholds. The first section, 'Threshold for successful deployment', has a checkbox 'Create a deployment alert when the threshold is lower than the following:' which is unchecked. Below the checkbox are input fields for 'Percent success' (set to 1) and 'After' (set to 4/11/2012 10:25 AM). The second section, 'Threshold for failed deployment', has a checkbox 'Create a deployment alert when the threshold is higher than the following:' which is also unchecked. Below this checkbox is an input field for 'Percent failure' (set to 0). At the bottom of the window are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'.

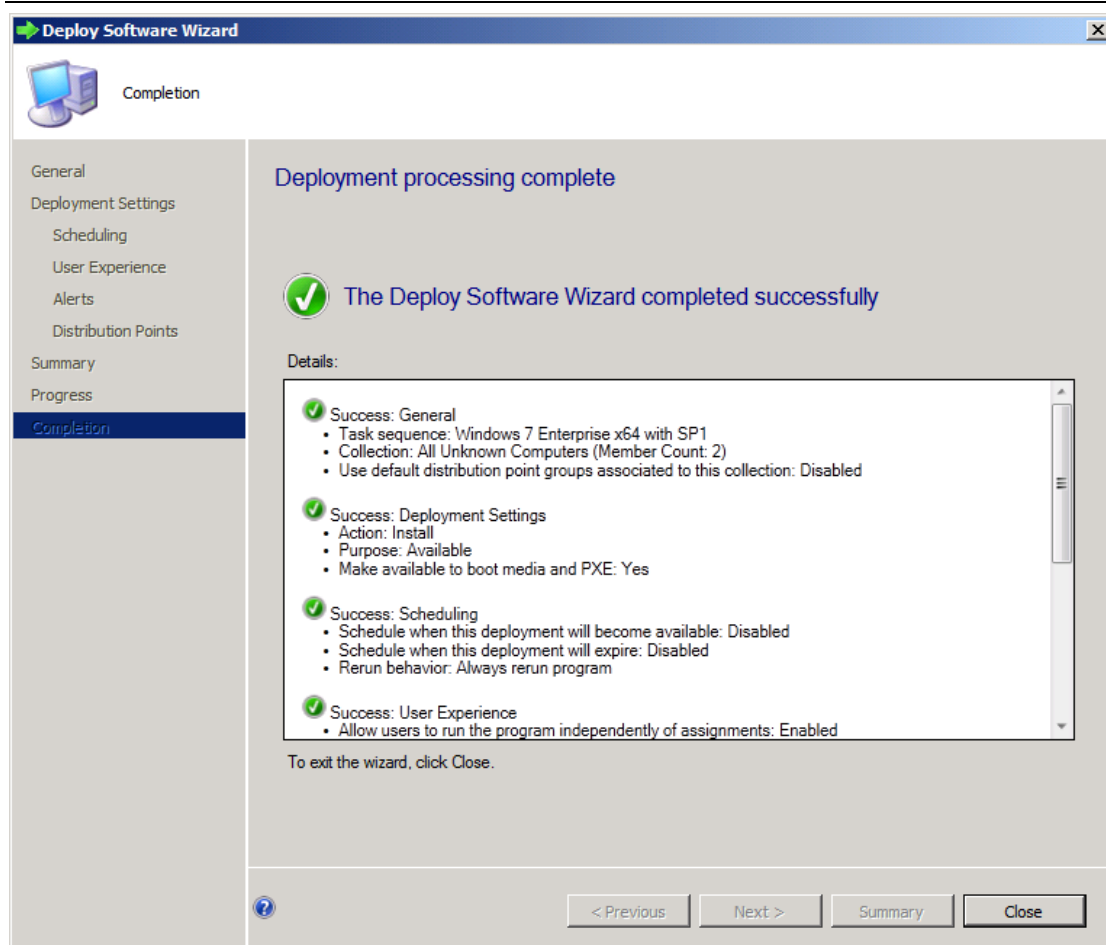
48) Click **Next** to accept the default configuration of no alerts , the **Distribution Points** dialog box appears :



49) Click **Next** to accept the default configuration , the **Summary** dialog box appears :

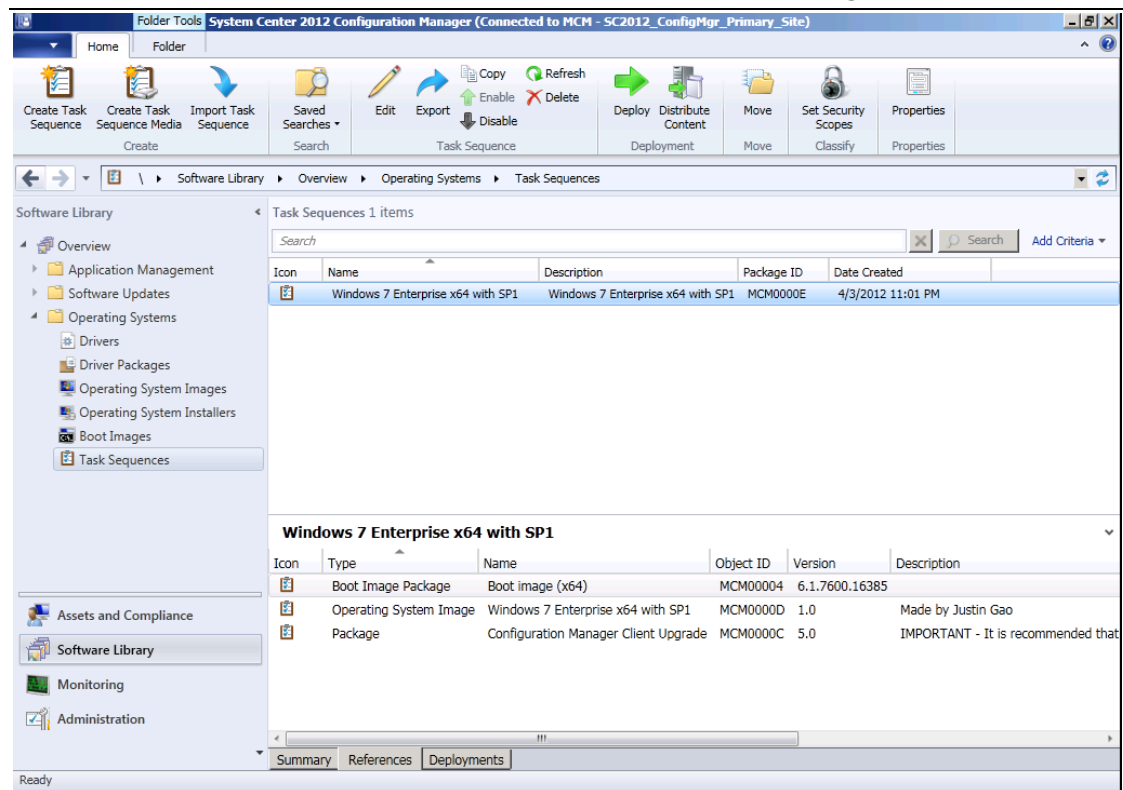


50) Click **Next** , the **Completion** dialog box appears indicating that the wizard successfully deployed the task sequence :



51) Click **Close** , the list of task sequences appear in the results pane . In the preview pane , click the **References** tab :

System Center 2012 Configuration Manager RTM Operating System Deployment



52) The packages that this task sequence requires is displayed in the preview pane .

8. Installing the Operating System Image on a Bare Metal System :

- 1) Boot the **Bare Metal** computer :

```
Hyper-V
PXE Network Boot 03.23.2009
(C) Copyright 2009 Microsoft Corporation, All Rights Reserved.

CLIENT MAC ADDR: 00 15 5D 14 73 46  GUID: 9FEEDE5E-02B9-4C74-9FB6-0456DB507B7B
CLIENT IP: 192.168.0.210  MASK: 255.255.255.0  DHCP IP: 192.168.0.100

Downloaded WDSNBP...

Press F12 for network service boot
-
```

- 2) Click **F12** :

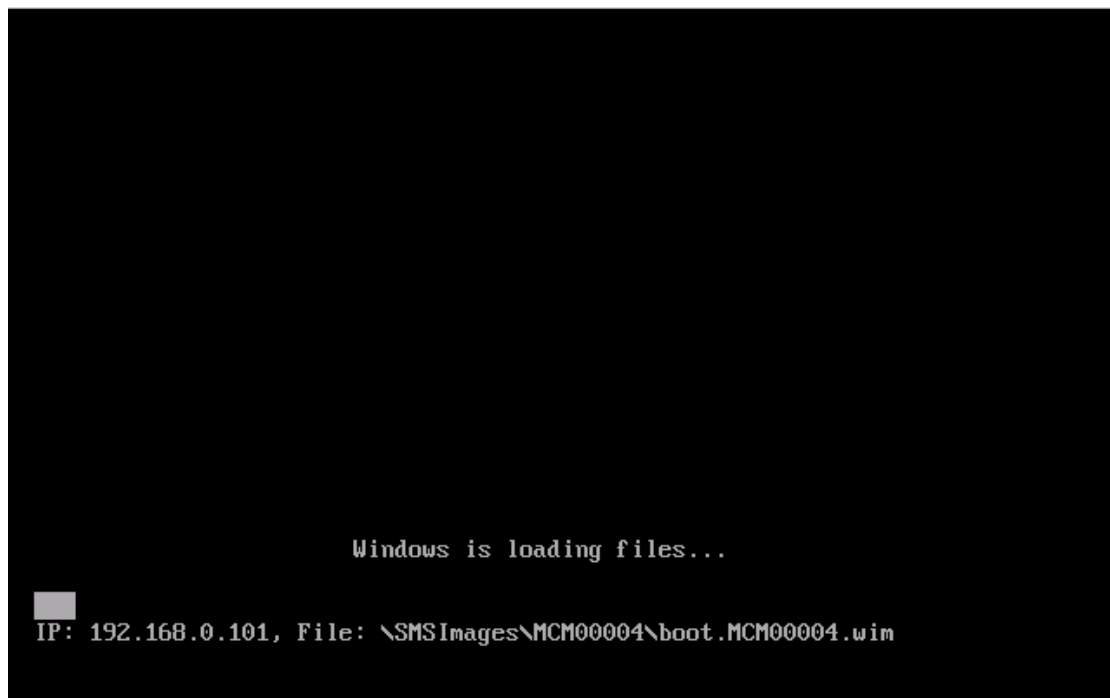
```
Hyper-V
PXE Network Boot 03.23.2009
(C) Copyright 2009 Microsoft Corporation, All Rights Reserved.

CLIENT MAC ADDR: 00 15 5D 14 73 46  GUID: 9FEEDE5E-02B9-4C74-9FB6-0456DB507B7B
CLIENT IP: 192.168.0.210  MASK: 255.255.255.0  DHCP IP: 192.168.0.100

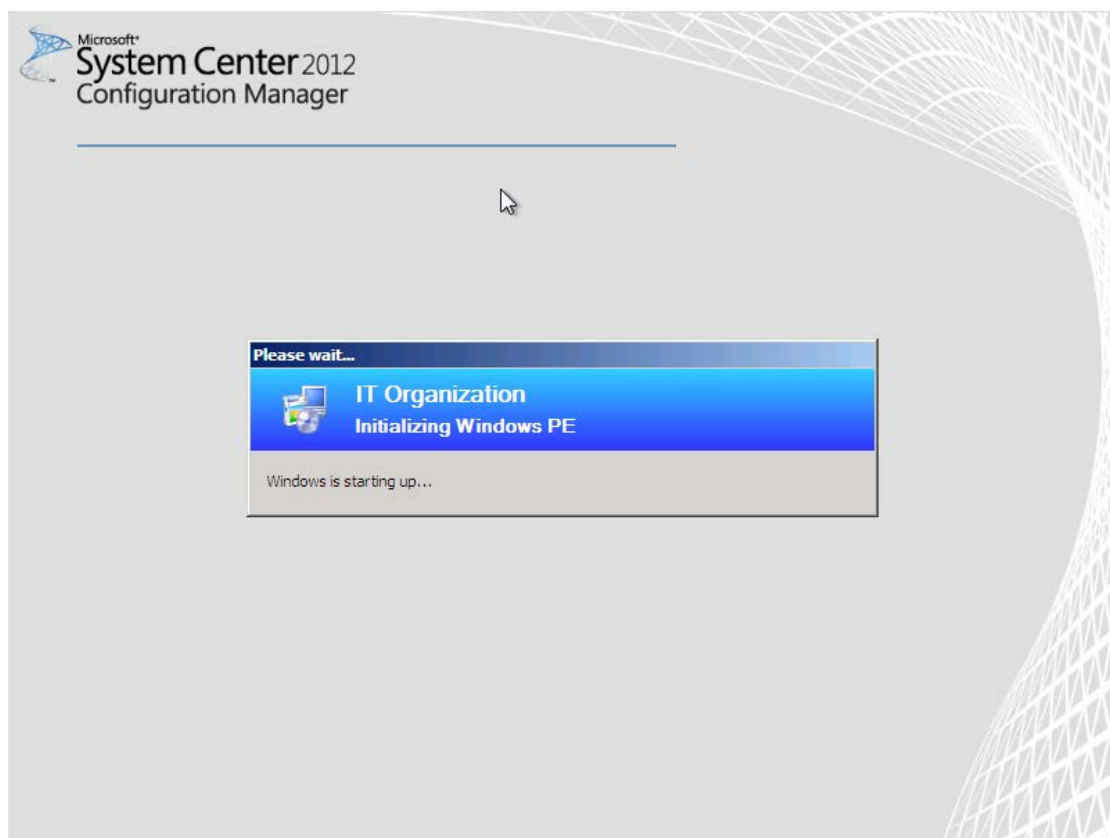
Downloaded WDSNBP...

Press F12 for network service boot
Architecture: x64
Contacting Server: 192.168.0.101.
TFTP Download: boot\x64\pxeboot.n12
-
```

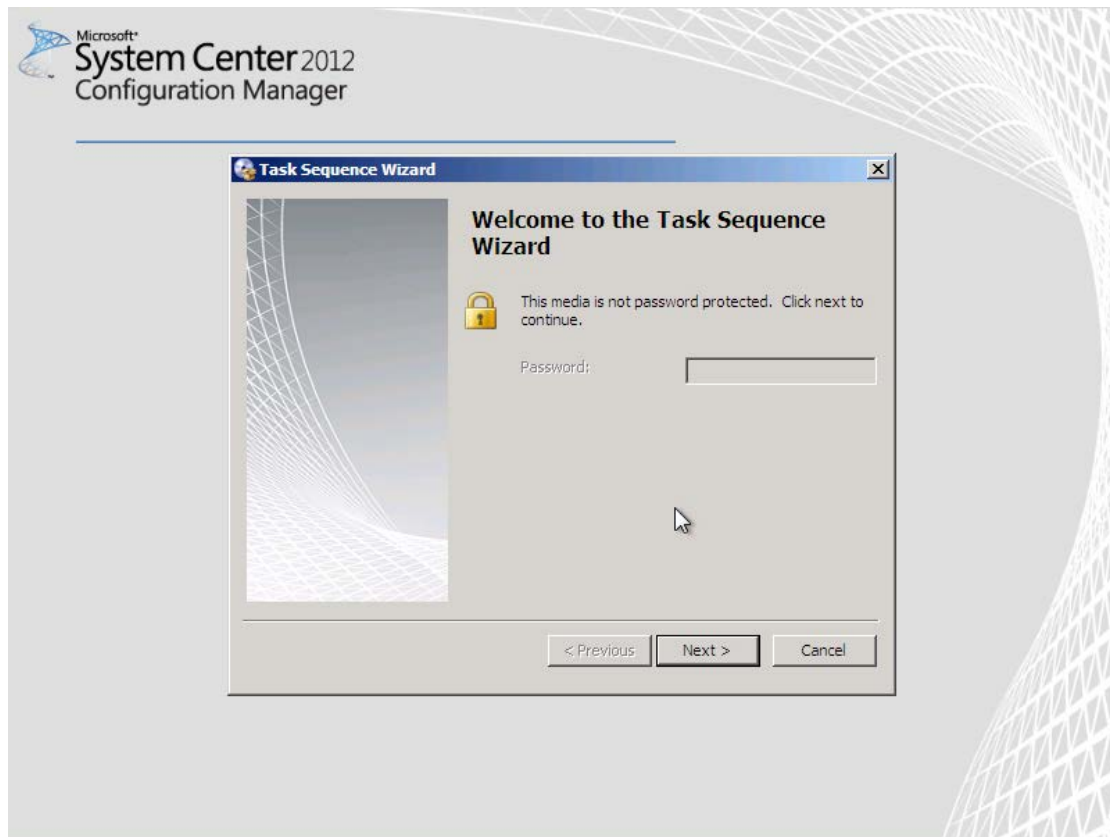
3) Will start to loading boot image :



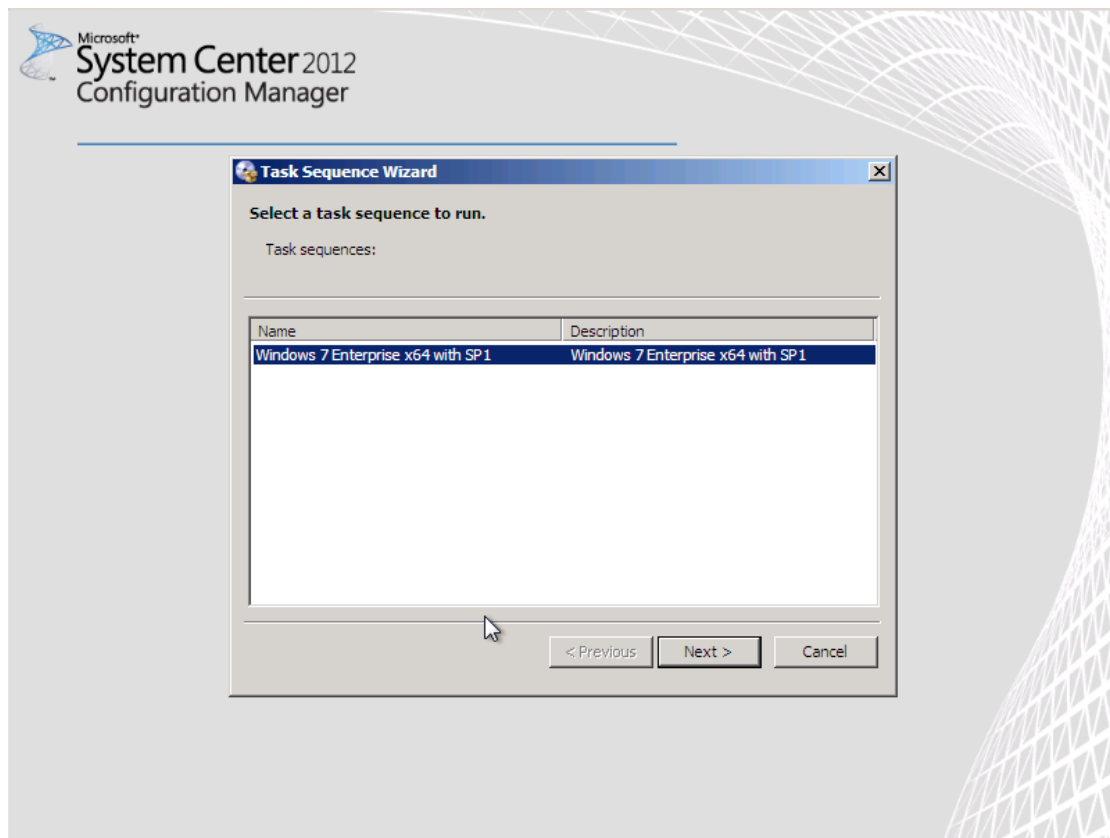
4) Wait some seconds will display **Windows PE** message box :



5) And then the **Task Sequence Wizard** dialog box appears :

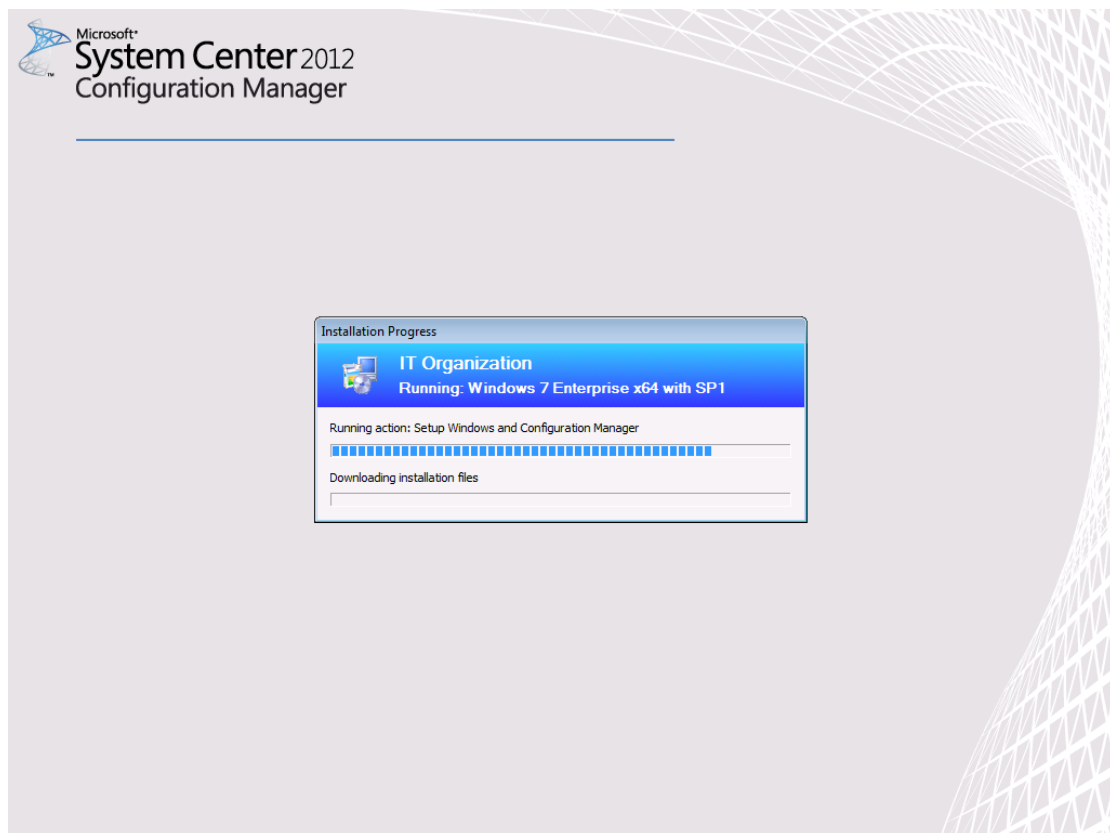
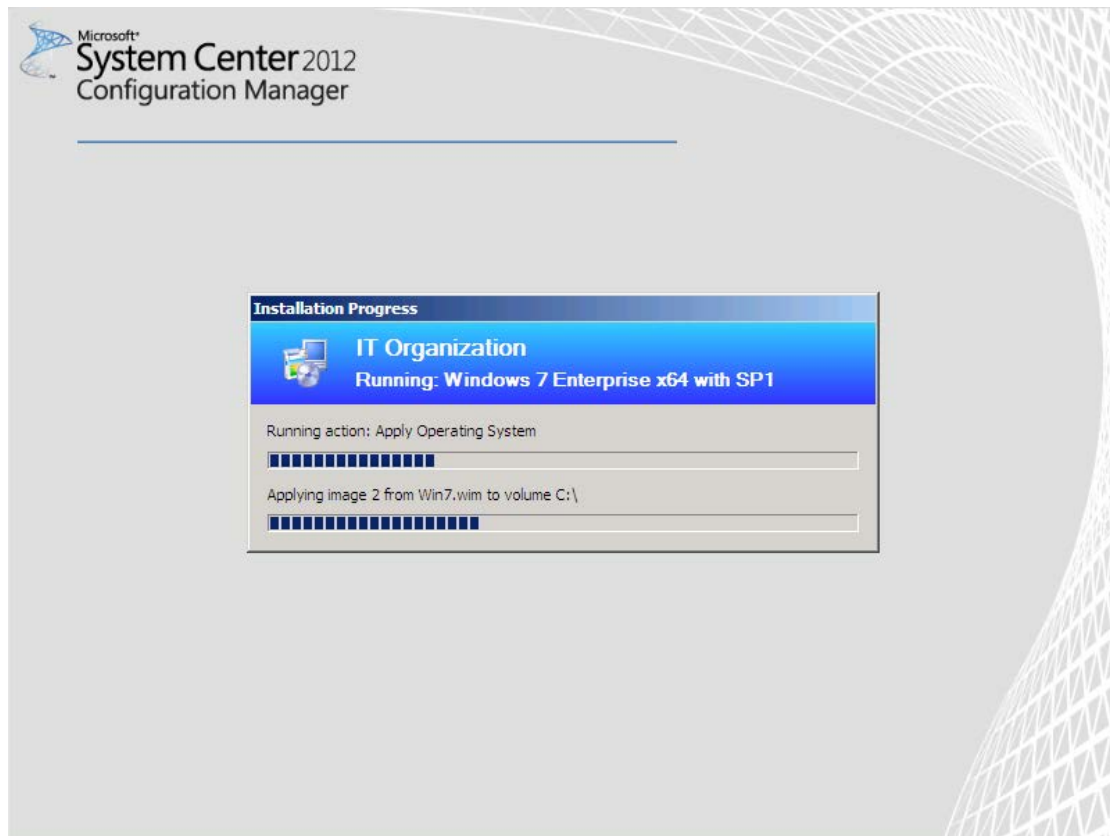


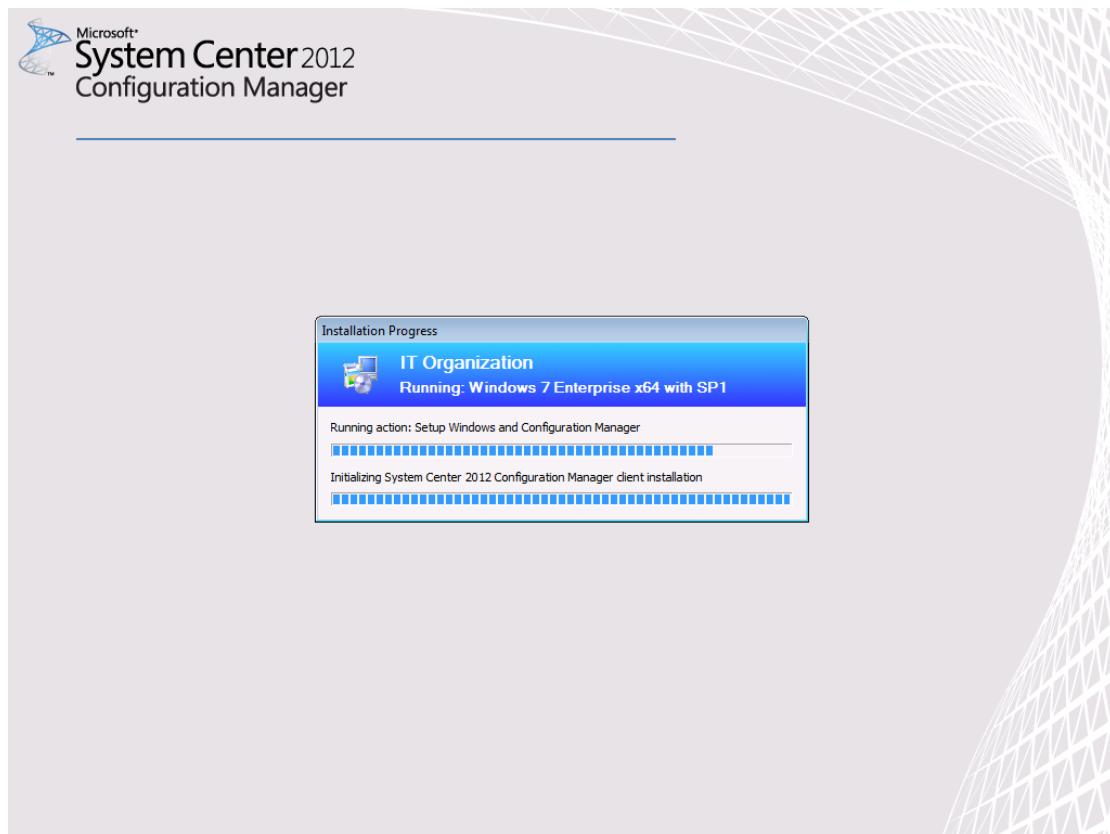
6) Click **Next** , the **Select a task sequence to run** dialog box appears :



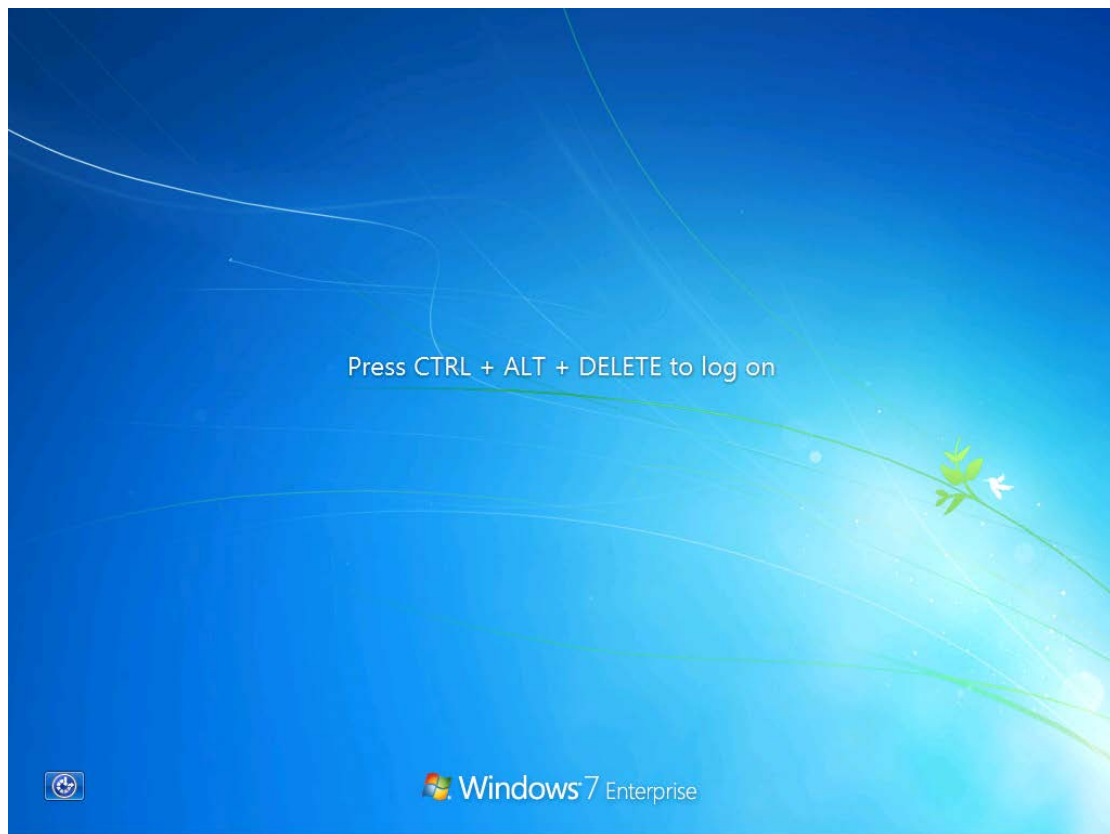
7) You can see created task sequence , and then click **Next** , the **Installation Progress** message box appears , the operating system installing start :



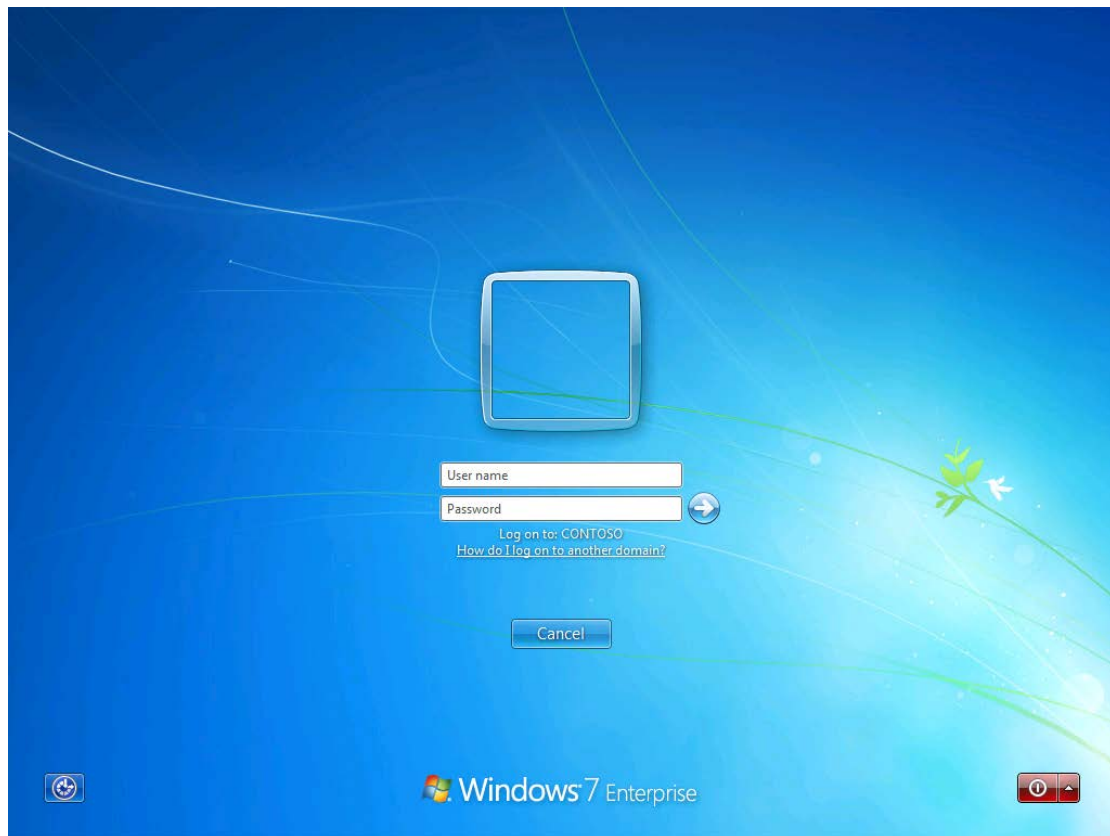




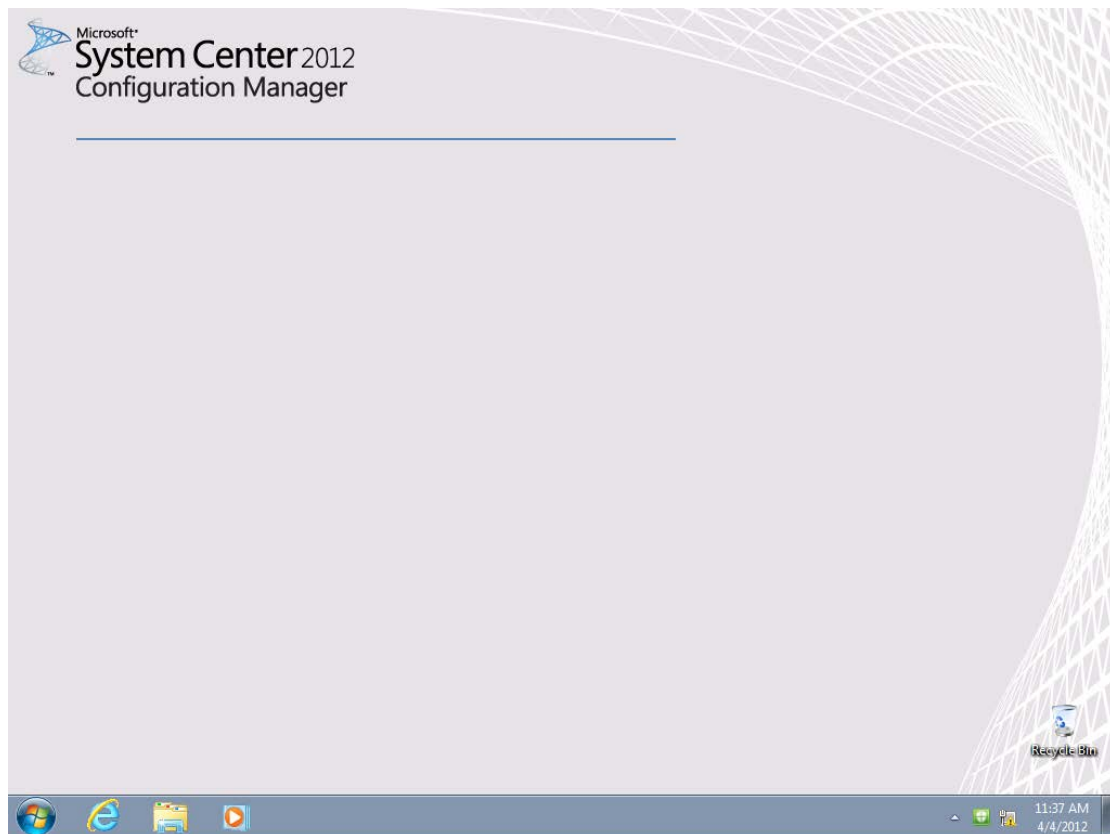
8) Wait about 15-20 minutes , the OS installed , display OS logon screen :



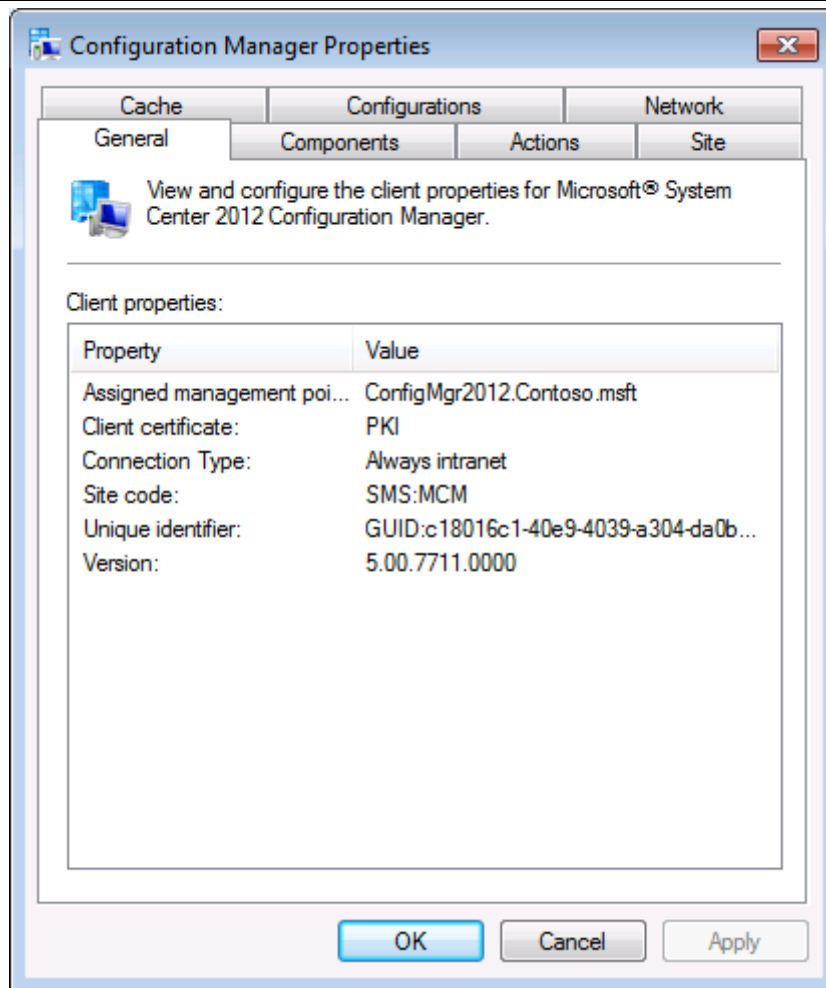
9) Press **Crtl+Alt+Delete** , will displaying :



10) Use domain user **Justin Gao** to logon :

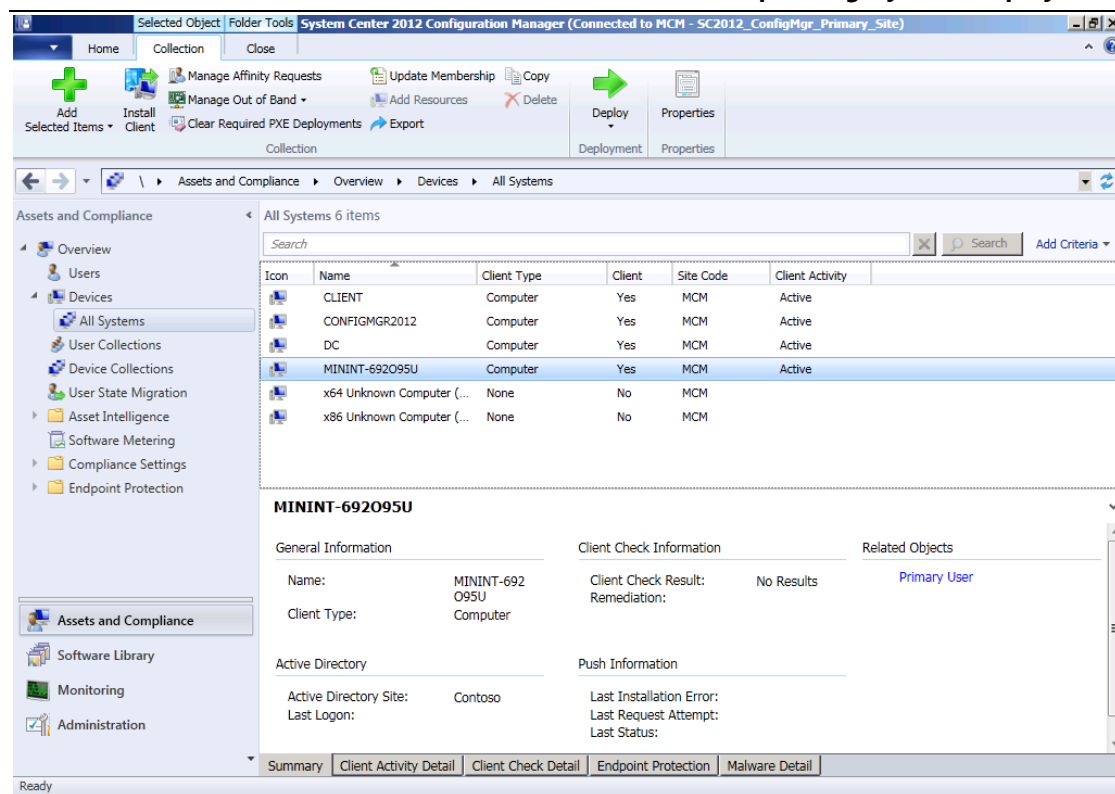


11) Open **Control Panel** , click **System and Security** , click **Configuration Manager** , the **Configuration Manager Properties** dialog box appears :



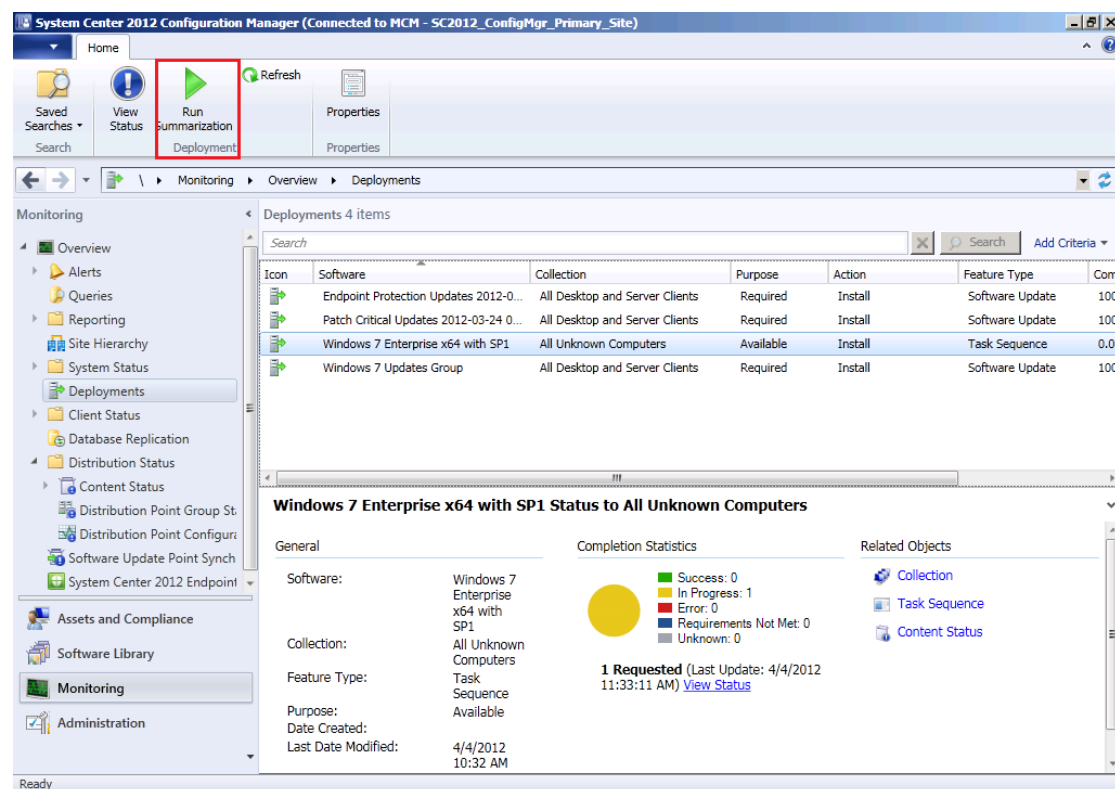
12) Logon to **ConfigMgr2012** server , in the **Configuration Manager Console** , click the **Assets and Compliance** workspace , click **Device Collections** , double-click **All Systems** , you can see just installed client :

System Center 2012 Configuration Manager RTM Operating System Deployment



13) Click the **Monitoring** workspace , click **Deployments** , click **Windows 7**

Enterprise x64 with SP1 , on the Ribbon , click **Run Summarization** :

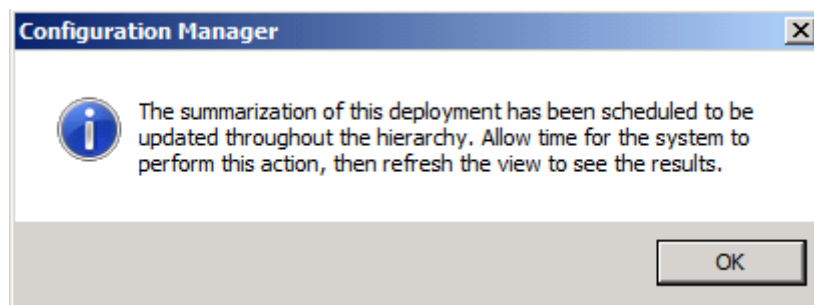


Justin Gao 高扬

yanga@microsoft.com

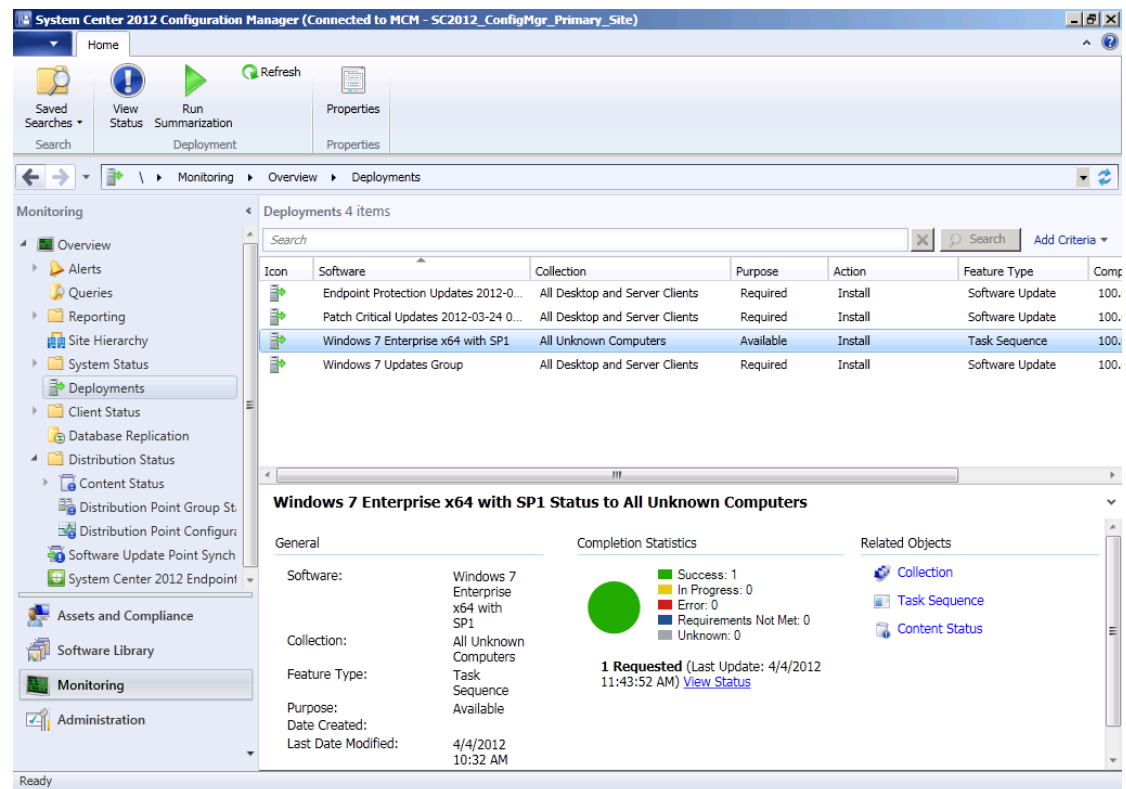
http://blogs.technet.com/b/justin_gao

14) A **Configuration Manager** message box appears :



15) Click **OK** , the **Completion Statistics** from **In Progress** changed to

Success :



16) In the preview pane , click **View Status** , the **Deployment Status** will displaying :

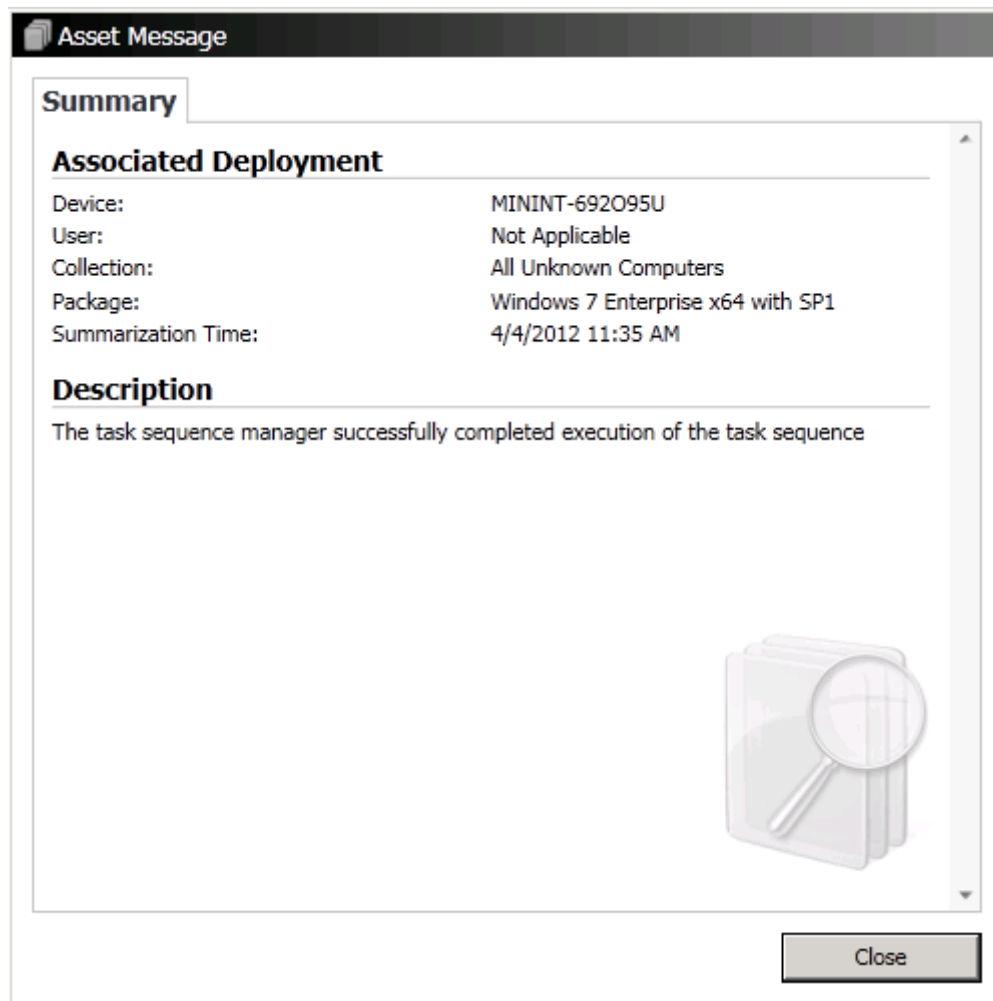
System Center 2012 Configuration Manager RTM Operating System Deployment

The screenshot shows the System Center 2012 Configuration Manager console. The left-hand navigation pane is expanded to 'Monitoring' > 'Deployments' > 'Windows 7 Enterprise x64 v'. The main pane displays the 'Deployment Status' for the task sequence 'Windows 7 Enterprise x64 with SP1' targeting the collection 'All Unknown Computers'. The status is 'Success'. Below this, the 'Asset Details' section shows a table with one row of deployment data.

Deployment ID	Assets	Message ID	Status Type
MCM20004	1	11171	Success

Device	User	Message ID	Status Type	Description
MININT-692O9SU	Not Applicable	11171	Success	The task sequence manager successfully completed execution of the task s...

17) Click **More Details** , the **Asset Message** dialog box appears :



18) Click **Close** .

19) You have now successfully used System Center 2012 Configuration Manager RTM to capture a reference computer running Windows 7 , and then deployed that captured image to a bare metal system.