



How to Integrate SmartDeploy Enterprise with System Center Configuration Manager

SmartDeploy
Revised: March 2017

Integrating SmartDeploy Enterprise with Microsoft System Center Configuration Manager expands the native functionality of System Center Configuration Manager to add the time-saving benefits of SmartDeploy.

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SmartDeploy and System Center Configuration Manager Integration

Microsoft System Center Configuration Manager is a powerful client, server, and mobile device management suite. This document shows how SmartDeploy Enterprise can be used with System Center Configuration Manager to extend the operating system deployment features of both products.

SmartDeploy Enterprise is a hardware-independent imaging solution that is built upon Microsoft utilities to simplify enterprise image deployment. SmartDeploy uses the Windows imaging format to store images. A highly customized version of Windows Preinstallation Environment (Windows PE) provides for the image deployment environment on the target device. It is this deep integration with standard Microsoft utilities that makes SmartDeploy a unique fit for integration with System Center Configuration Manager.

One of the main benefits of integrating SmartDeploy Enterprise with System Center Configuration Manager is the use of Platform Packs. Platform Packs are the mechanism behind the hardware-independent imaging model in SmartDeploy Enterprise. These packs contain all of the device drivers for a specific make and model of computer. As part of the support contract with SmartDeploy Enterprise, these packages are created and made available for download from SmartDeploy.com, which can save a tremendous amount of time over downloading, importing, organizing, and creating packages within System Center Configuration Manager.

SmartDeploy also offers easy-to-use wizard driven applications to reduce the overall time of deployment, while maintaining an advanced feature set that provides flexibility in the imaging process. When coupled with System Center Configuration Manager, SmartDeploy reduces the efforts of deploying an operating system image, while providing the ability to target specific collections of devices and advanced Wake On local area network (LAN) features that are included with System Center Configuration Manager.

How To Integrate SmartDeploy With SCCM

The following sections walk you through the process of integrating SmartDeploy with System Center Configuration Manager. You are first guided through the process of creating SmartDeploy boot media. This boot media is then imported to the System Center Configuration Manager Console and added to distribution points. Next, you add your reference image to System Center Configuration Manager and create a task sequence to deploy this image to select target devices.

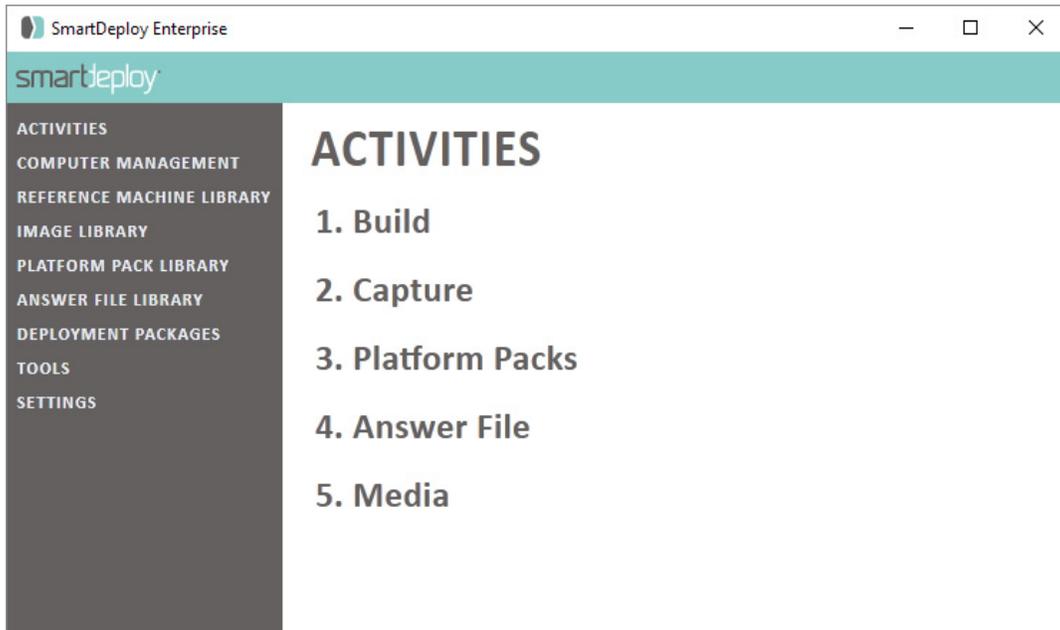
Before You Begin

This document shows you the procedures needed to integrate the SmartDeploy deployment method with System Center Configuration Manager. It is assumed that the reader currently has a configured System Center Configuration Manager site with a pre-boot execution environment (PXE) service point in place, and has captured an image with SmartDeploy using the Capture Wizard. For more information on installing and configuring System Center Configuration Manager, please read the [product documentation](#).

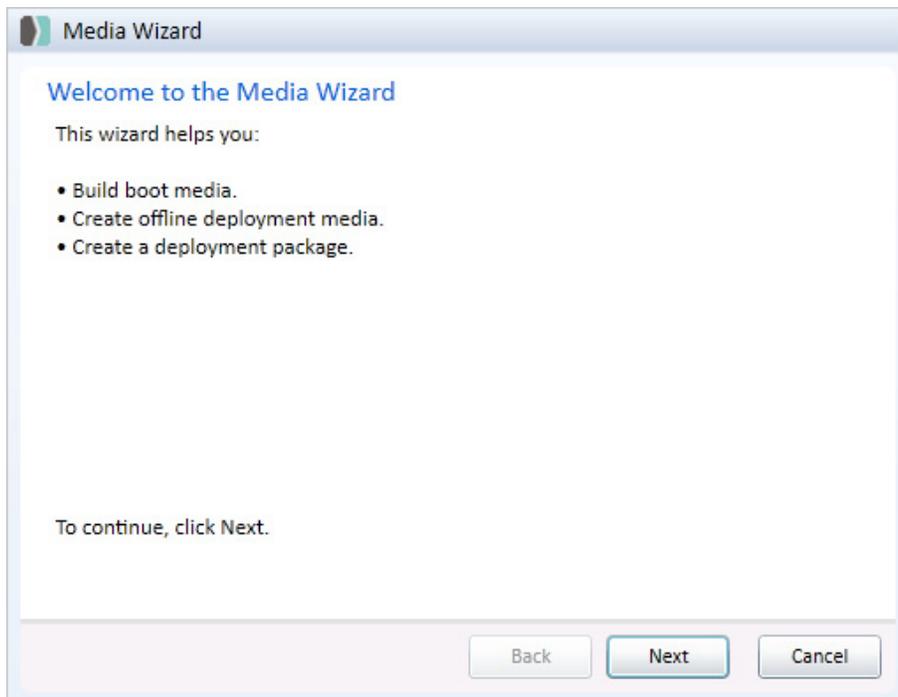
Create SmartPE Boot Media

The first step in integrating SmartDeploy with System Center Configuration Manager is to build boot media with driver support for your environment. This is done via Media Wizard with a default Platform Pack that encompasses all computer models.

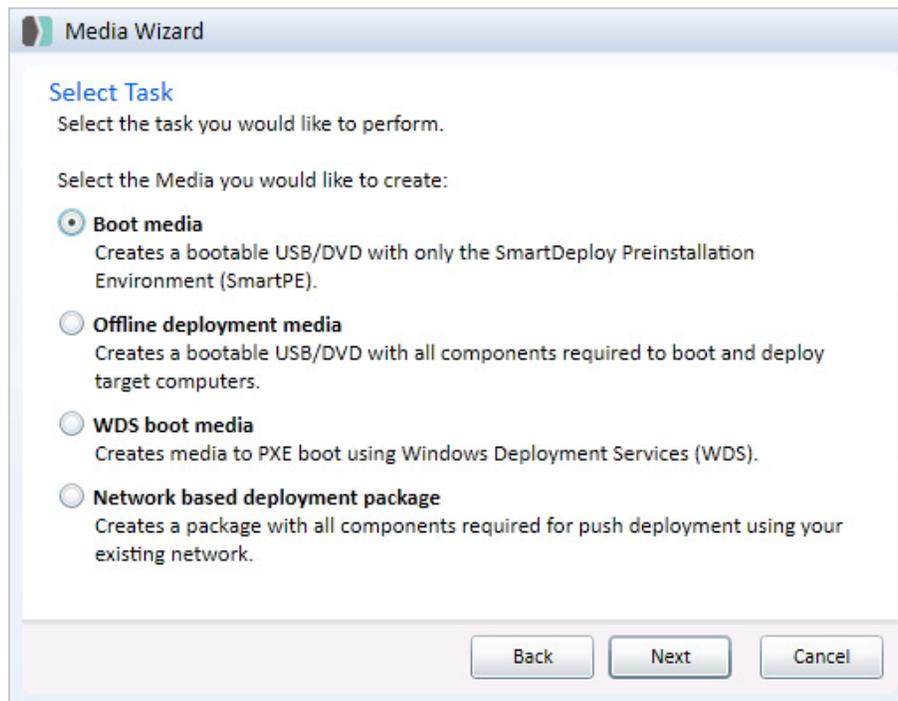
1. From the SmartDeploy Console select **5. Media** from the **Activities** tab to launch the Media Wizard.



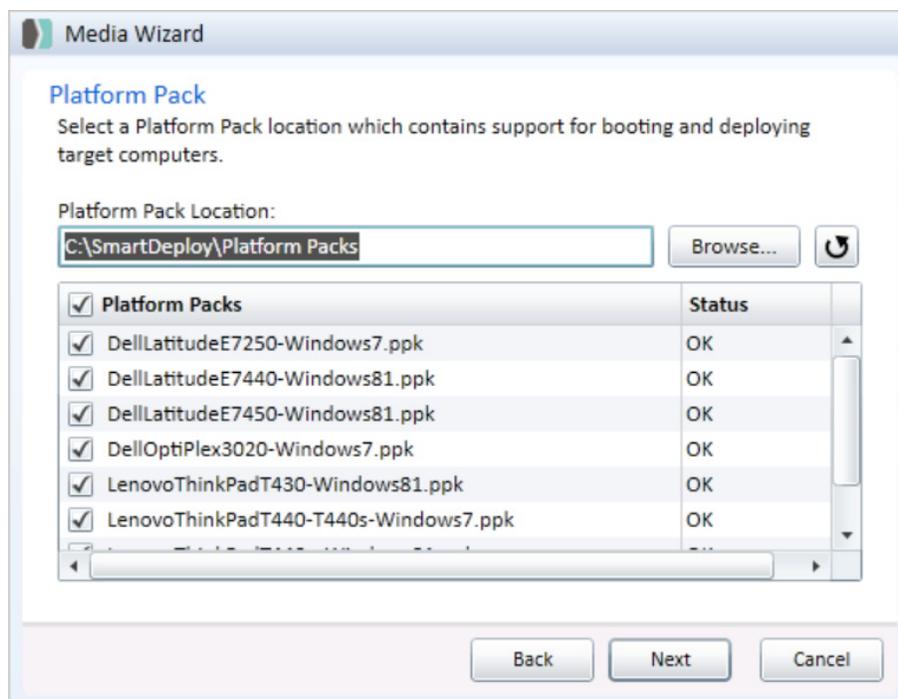
2. On the **Welcome to the Media Wizard** page, click **Next**.



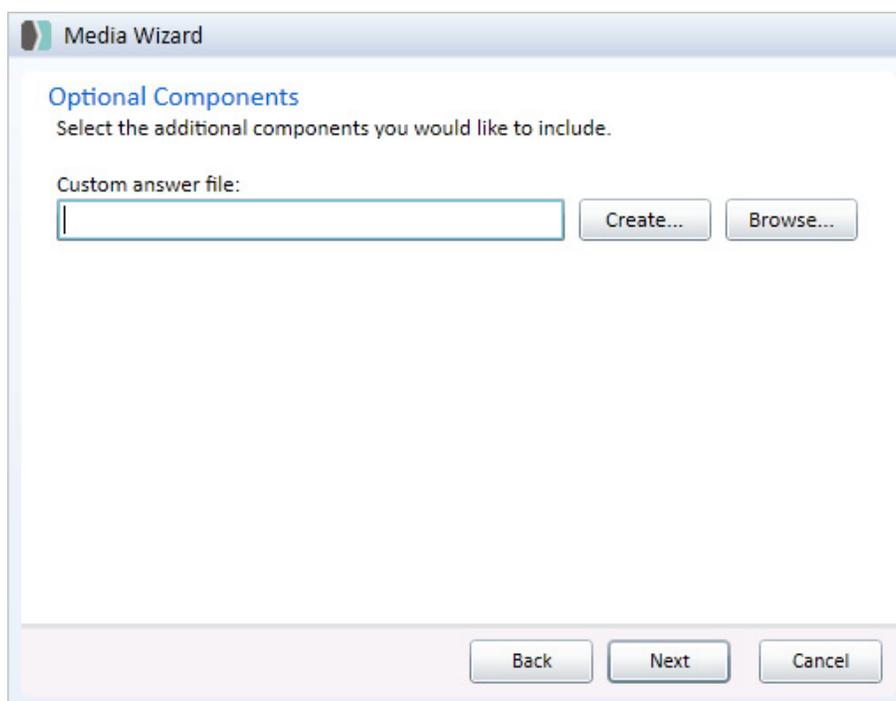
3. On the **Select Task** page, select **WDS boot media**, and then click **Next**. The WDS boot media option means that Media Wizard creates a WIM-only version of the boot environment.



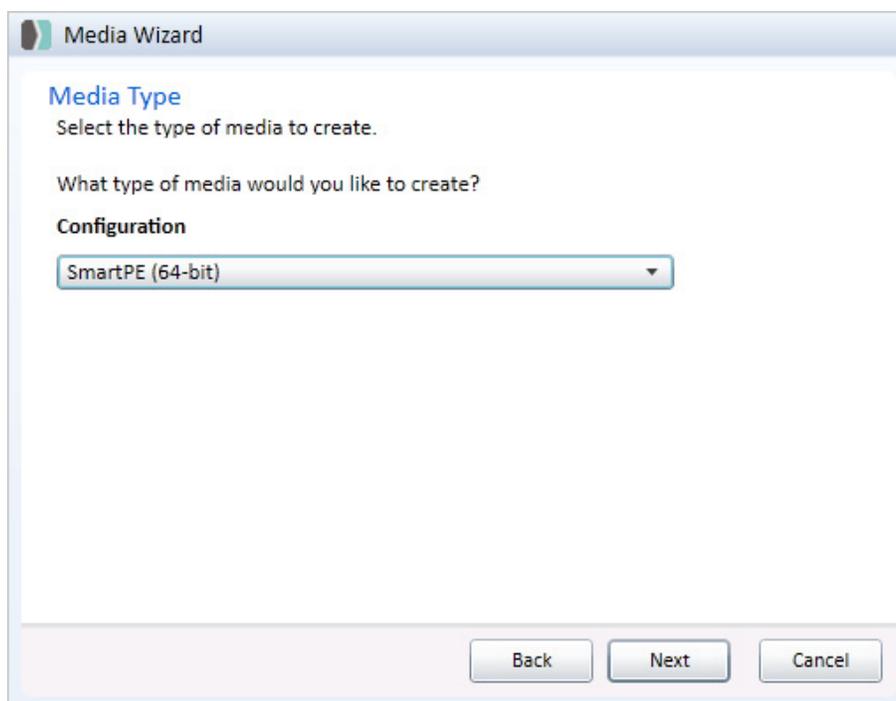
4. On the **Platform Pack** page, click **Browse**. Select the folder that contains Platform Packs for the target computers. Select the Platform Pack file(s) that contains the drivers for the target computers by checking the box. Click **Next**.



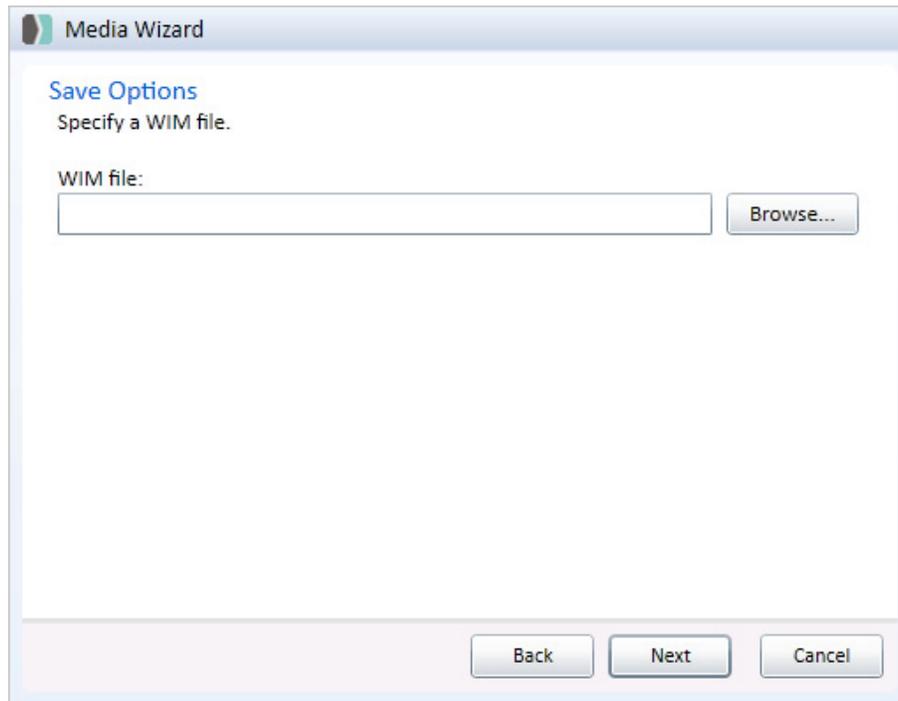
5. On the **Optional Components** page, you can select or create an answer file to customize your deployment, and click **Next**.



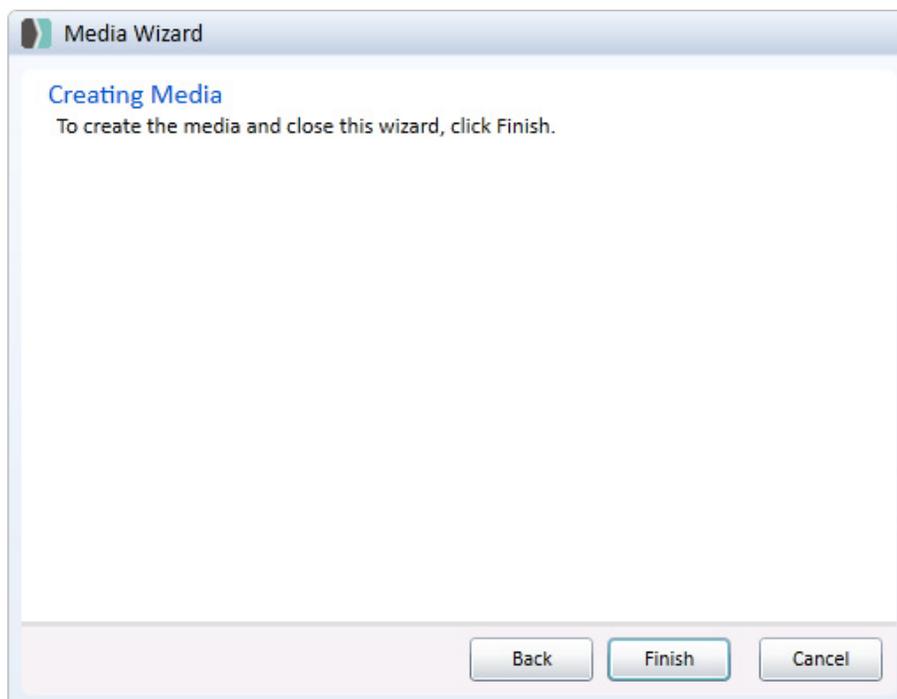
6. On the **Media Type** page, select the media type you would like to use. For this example, make sure that SmartPE (64-bit) is selected to create a SmartPE boot environment to deploy 64-bit operating systems, and then click **Next**.



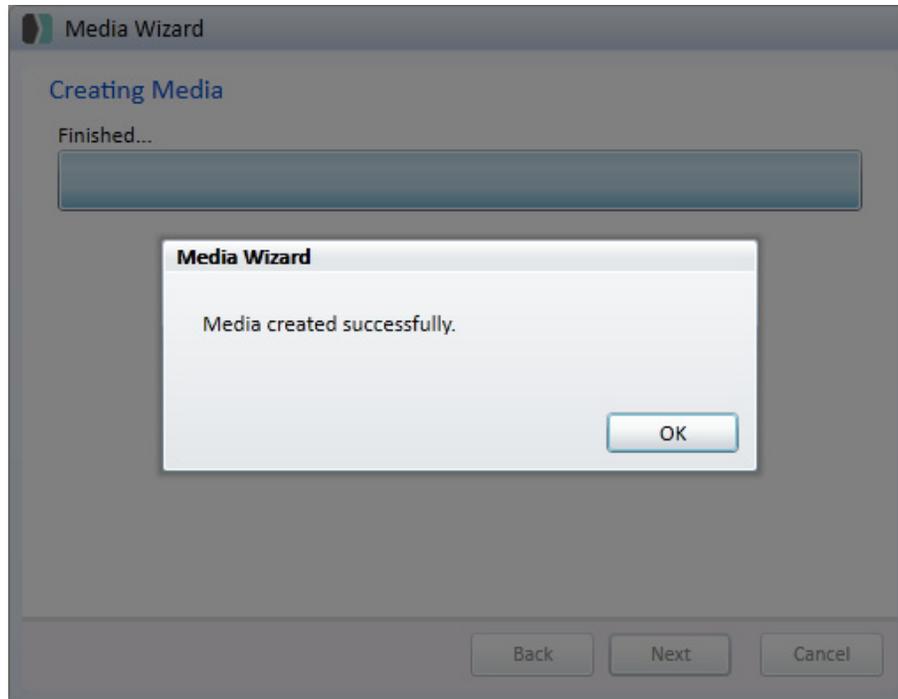
7. On the **Save Options** page, type the path and name of the WIM file. For this example, type **C:\SmartDeploy\Media\SmartDeploy.wim**, and then click **Next**.



8. To create the media and close the wizard, click **Finish**.



9. Wait while the custom SmartPE WIM file is created.
10. Click **OK**. Boot media is created in the specified folder. In this example it should be in **C:\SmartDeploy\Media** with the name **SmartDeploy.wim**.

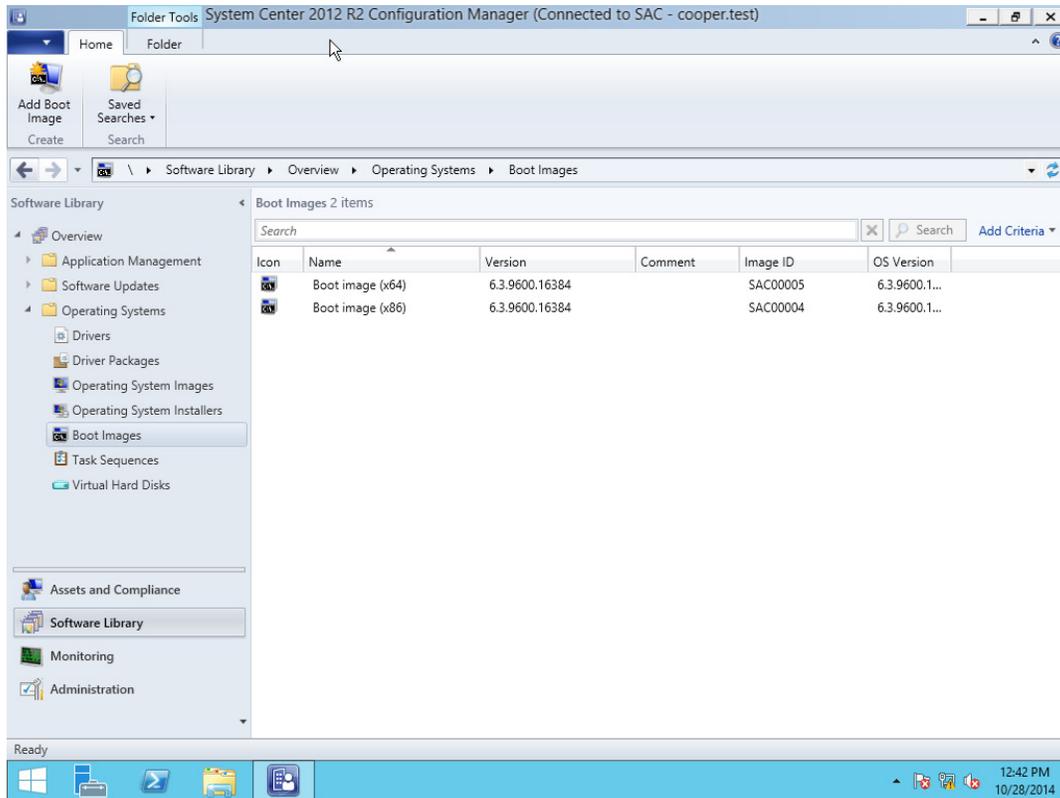


Import SmartPE to System Center Configuration Manager

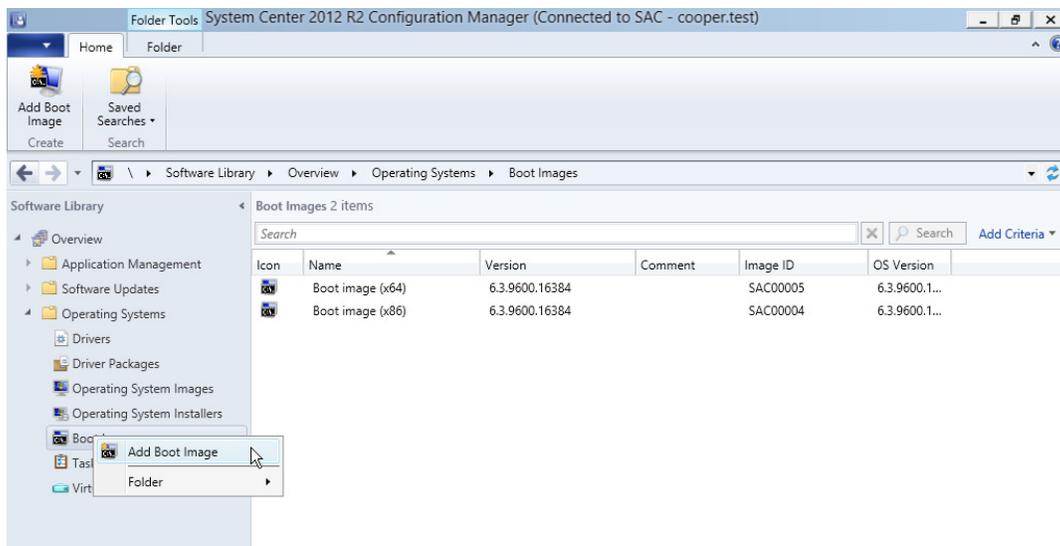
1. If you are using Windows 7 SP1 or Server 2008 R2: Open Configuration Manager Console from Start > All Programs > Microsoft System Center > Configuration Manager 2012 > Configuration Manager Console.

If you are using Windows 8.1/10 or Server 2012/R2: Open Configuration Manager Console from Start > All Apps.

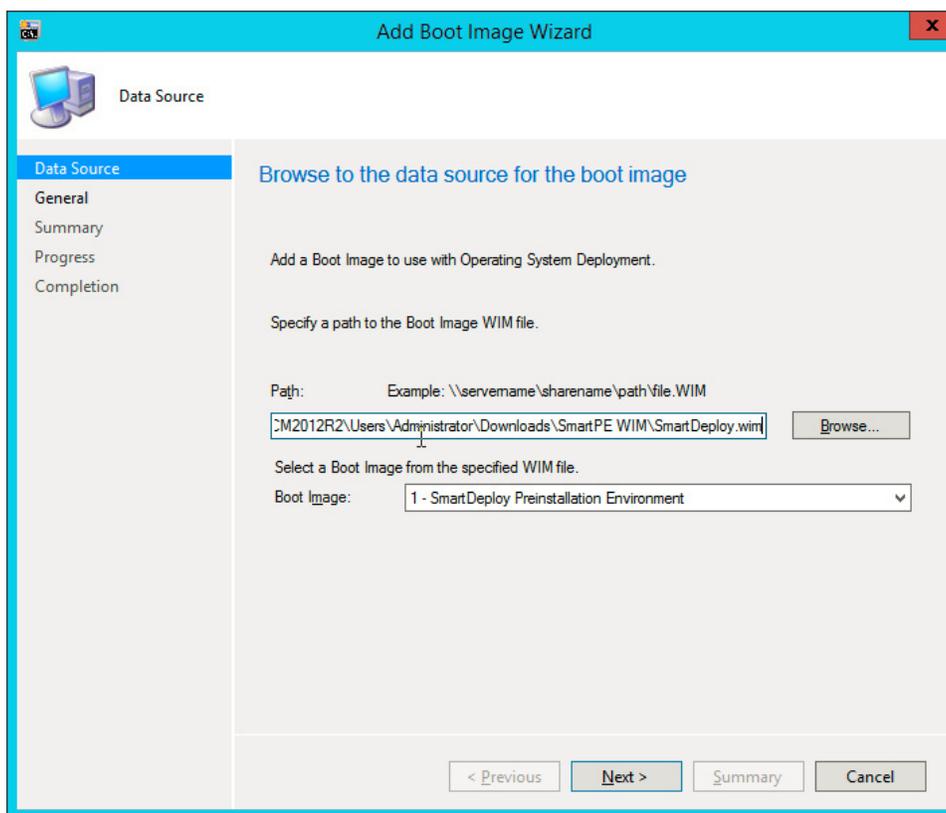
2. From the **Configuration Manager Console**, click **Software Library**.



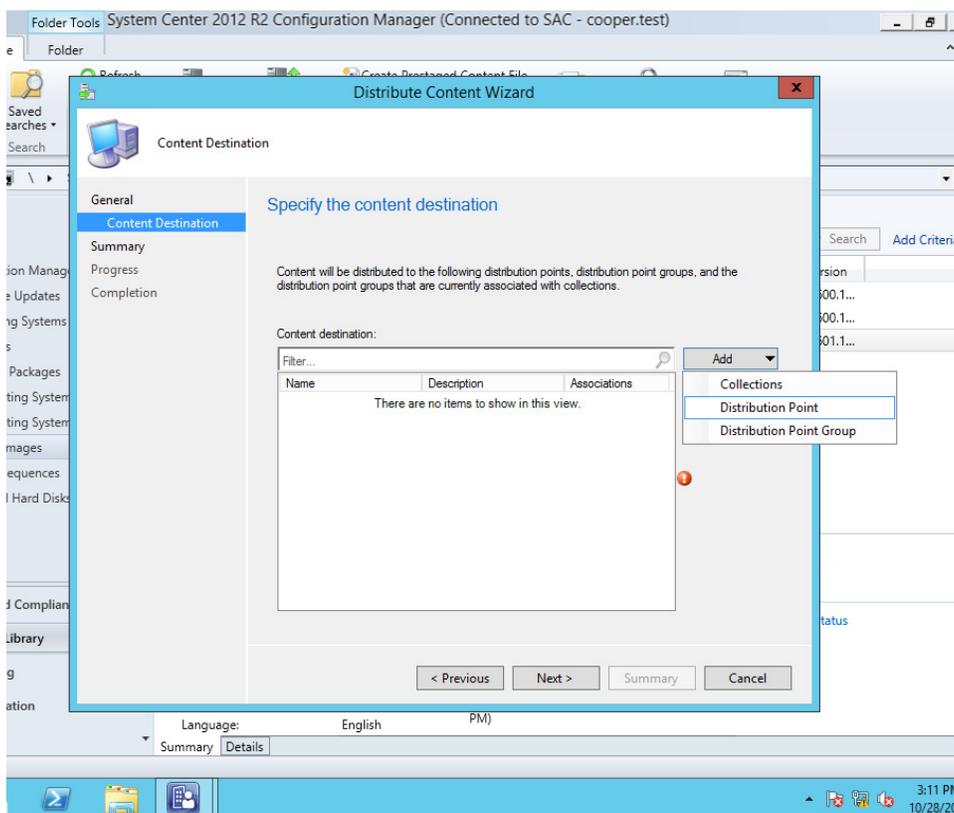
3. Expand **Operating Systems**, right click **Boot Images**, select **Add Boot Image**.



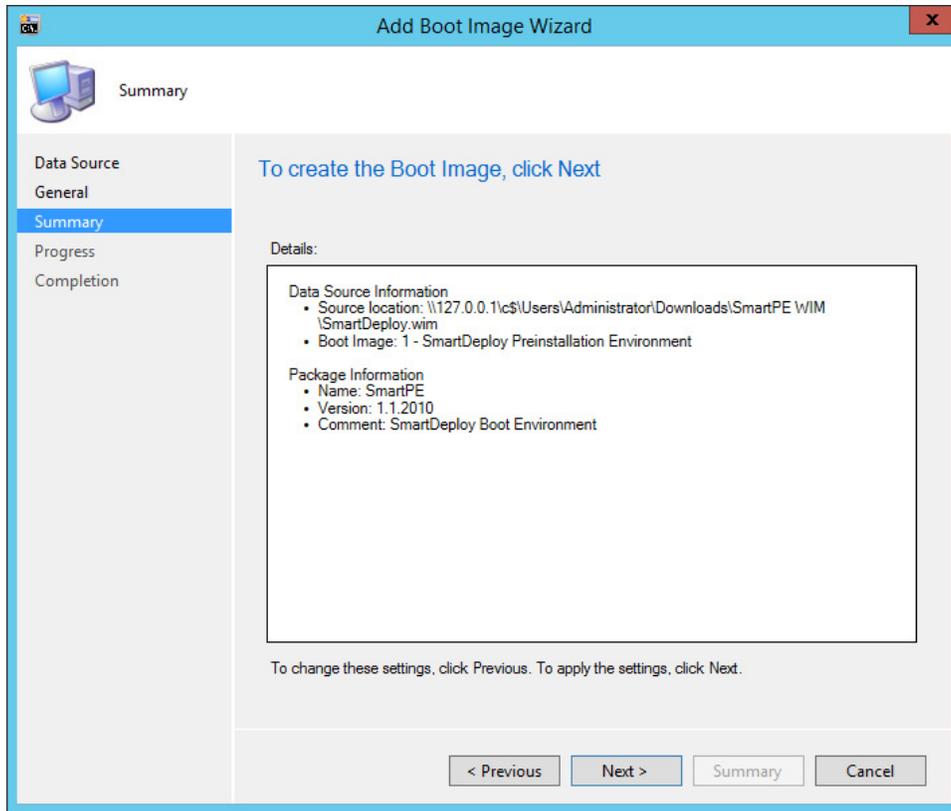
4. The **Add Boot Image Package Wizard** opens. On the **Data Source** page, type the path to the boot media, **SmartDeploy.wim**, that was created in the previous section. Leave the **Boot Image** dropdown as the default setting: 1-SmartDeploy Preinstallation Environment. Click **Next**.



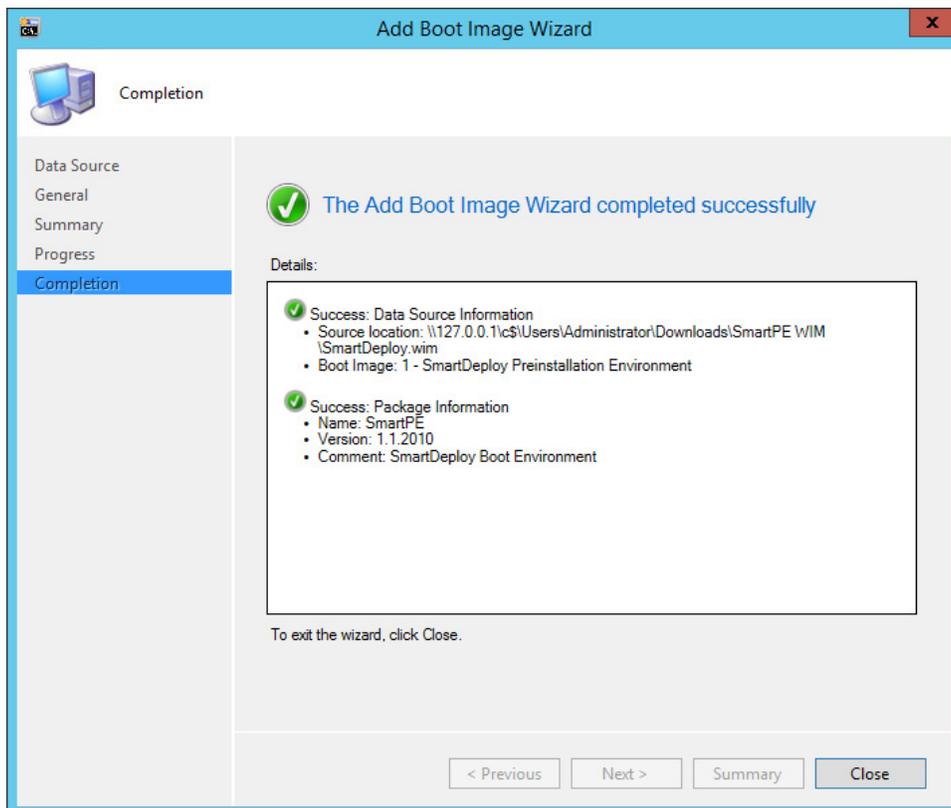
5. Provide details about the boot image for identification purposes. Click **Next**.



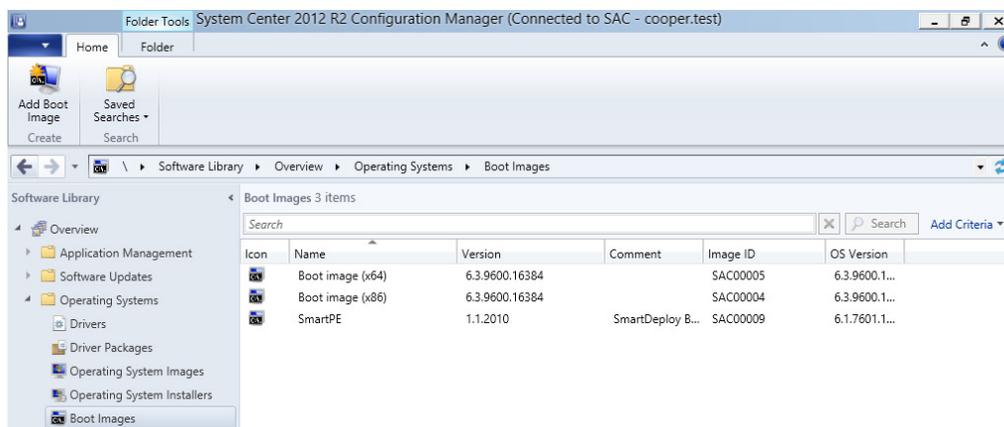
6. Review the information on the **Summary** page, then click **Next**.



7. Wait for the Wizard to complete, then click **Close**.

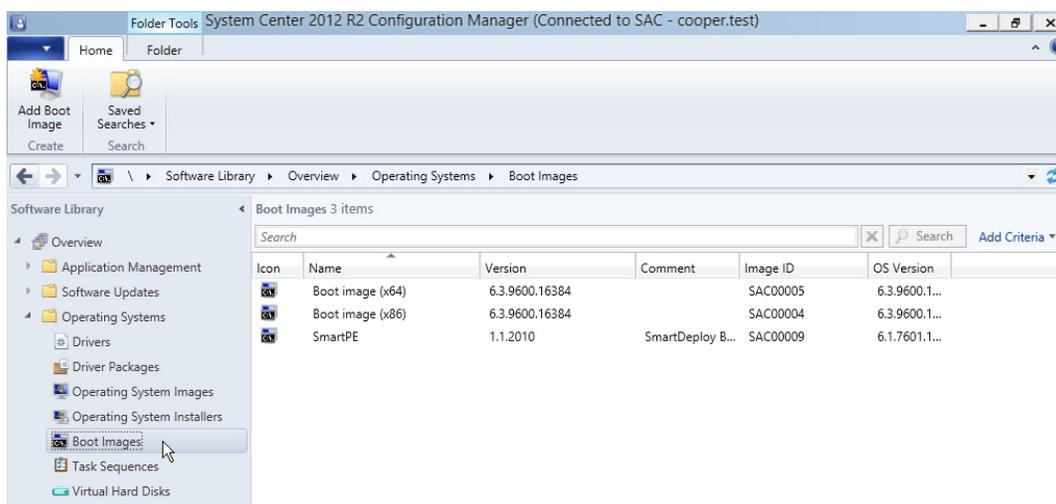


8. The boot image is now added to the Configuration Manager Console.

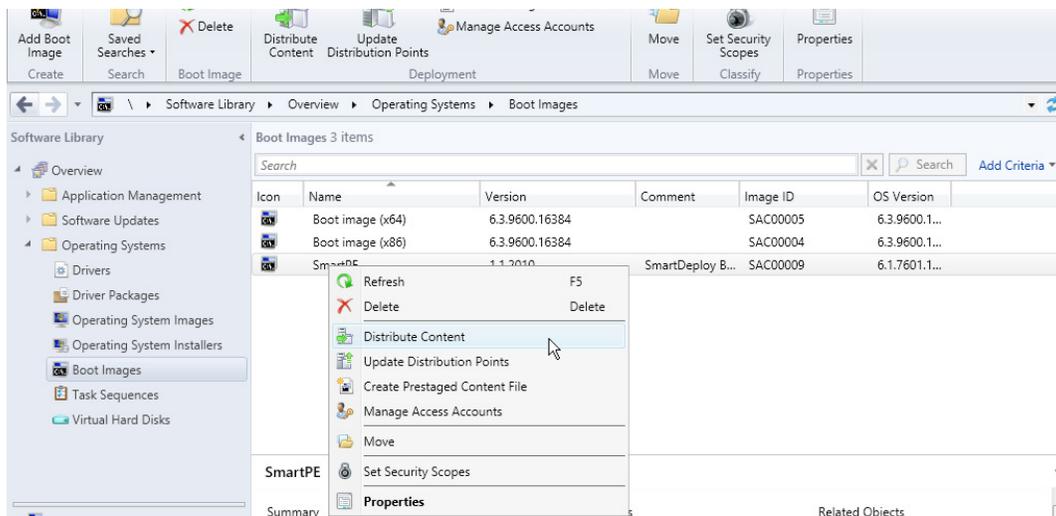


Add Boot Image to Distribution Point

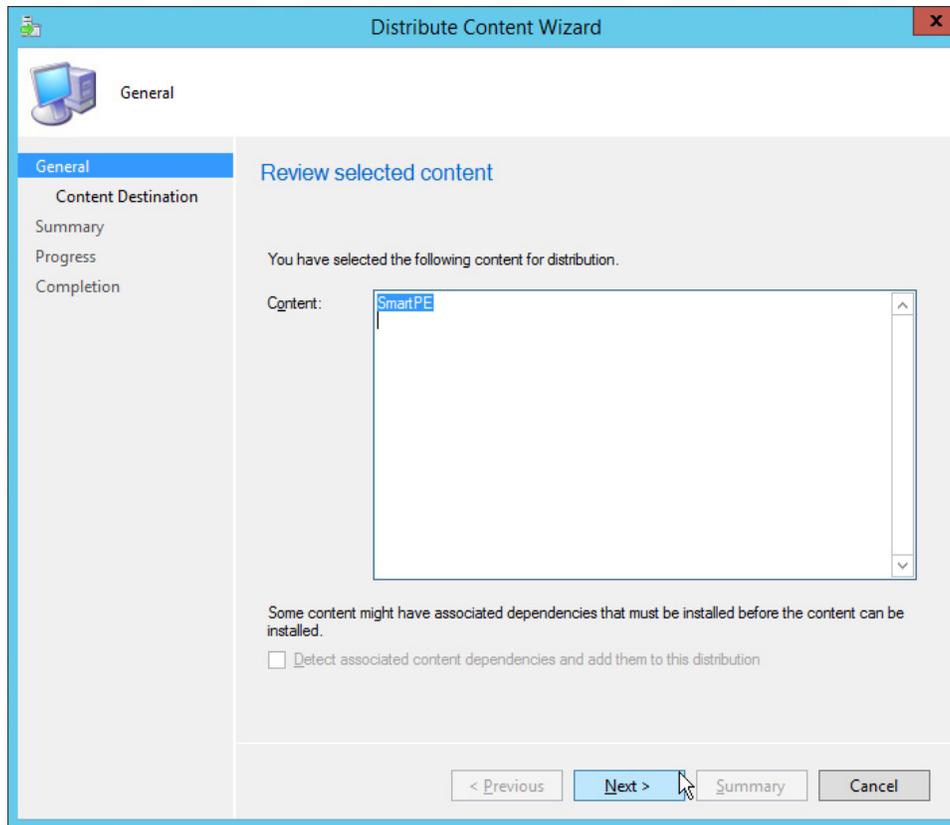
1. From the Software Library, expand **Operating Systems > Boot Images**.



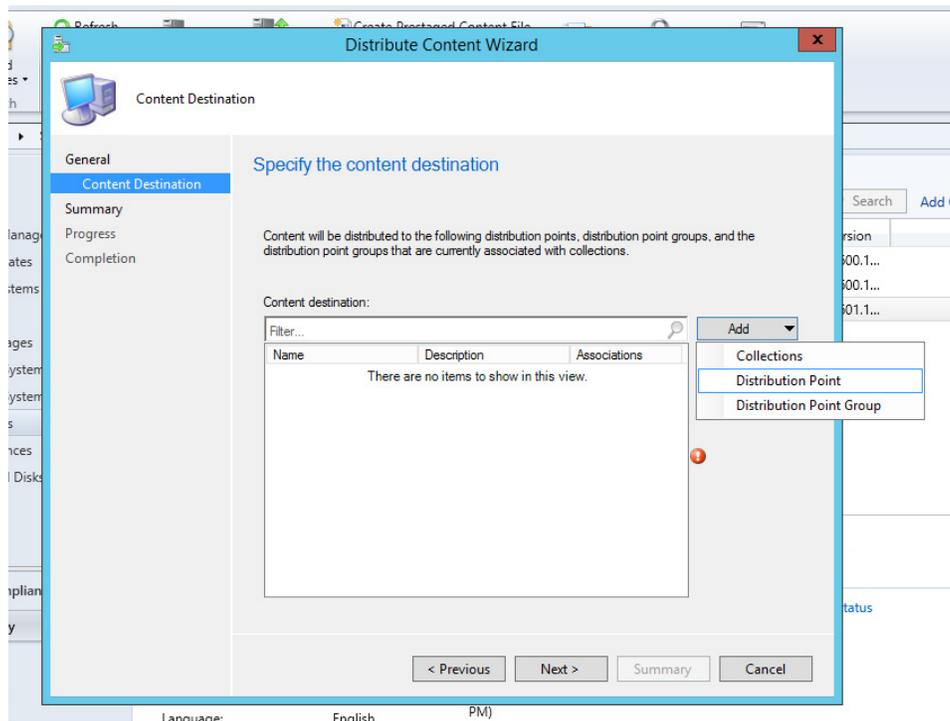
2. Right click on the **SmartDeploy** boot image, select **Distribute Content**.



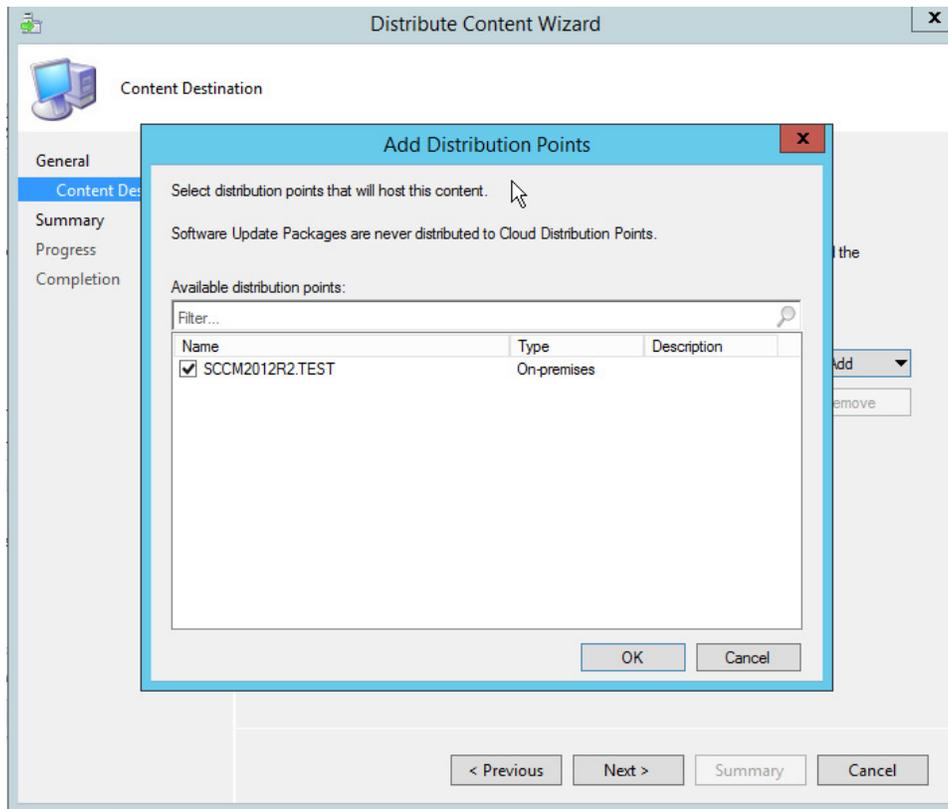
3. The **Distribute Content Wizard** will open, click **Next**.



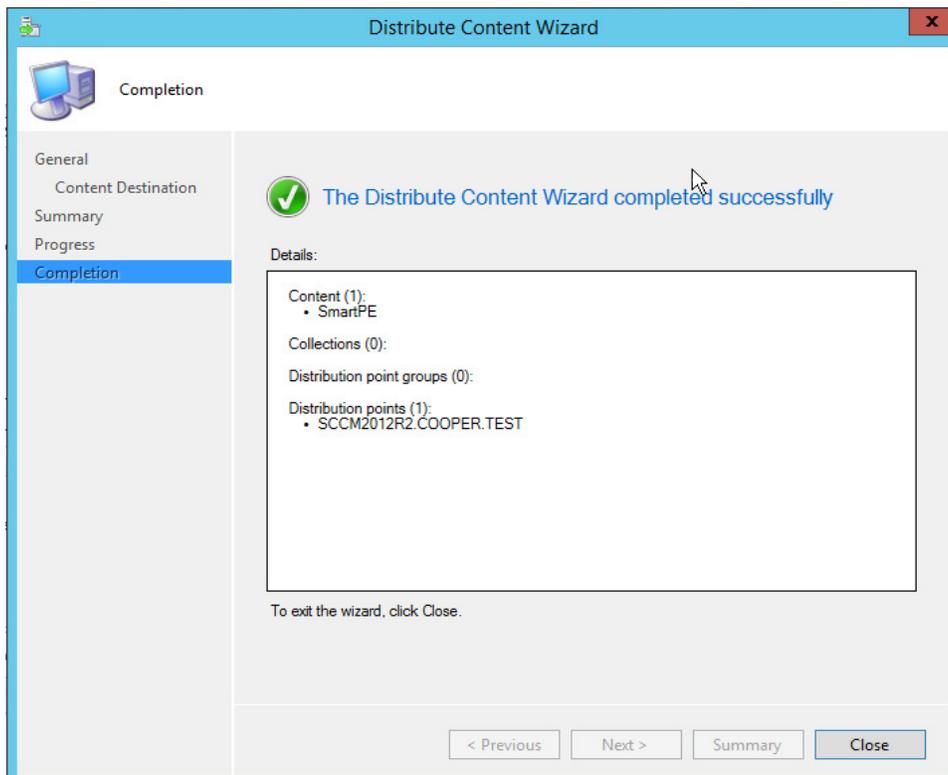
4. On the right side of the window, click **Add**, and select **Distribution Point** or **Distribution Point Group** based on your Configuration Manager settings.



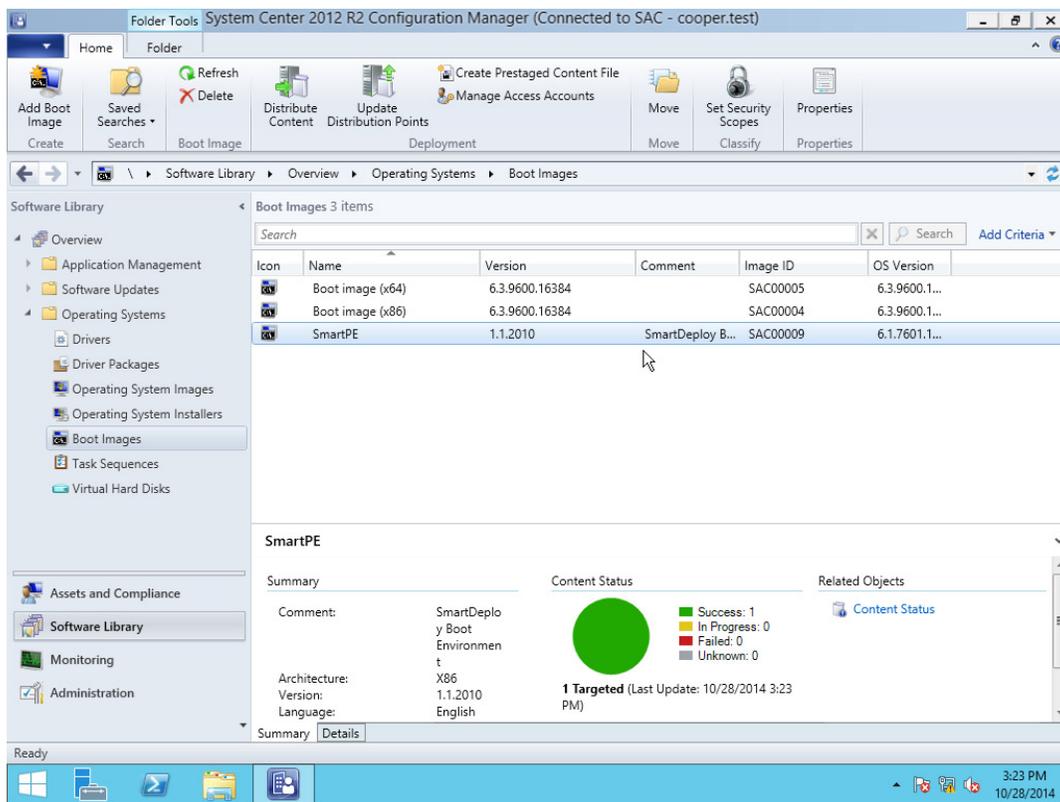
5. Check the box next to the Distribution Point(s) you would like to add the boot image to, click **OK**.



6. Click **Next** until the Wizard finishes. Click **Close**.

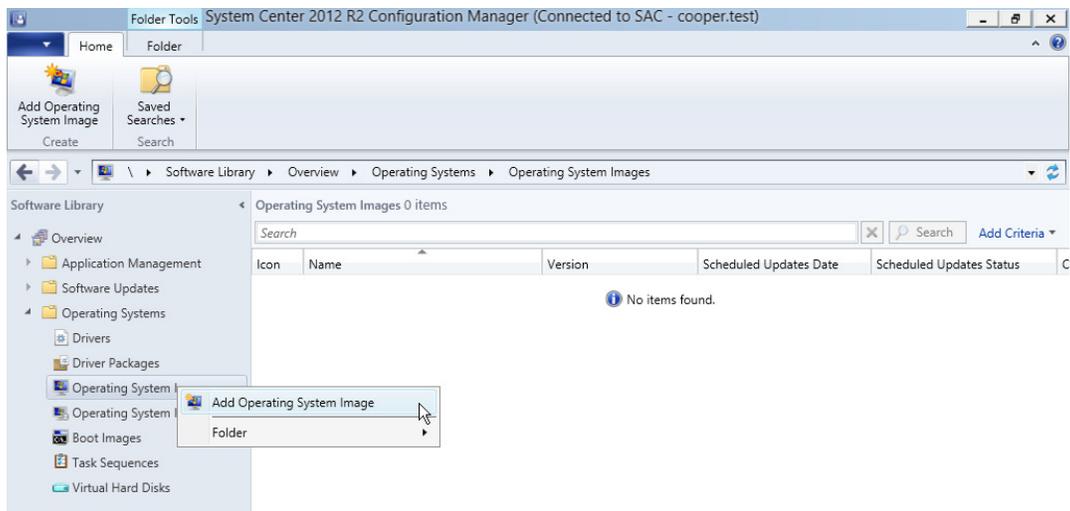


7. Ensure content status in the pane below shows that the content was distributed successfully before deploying.

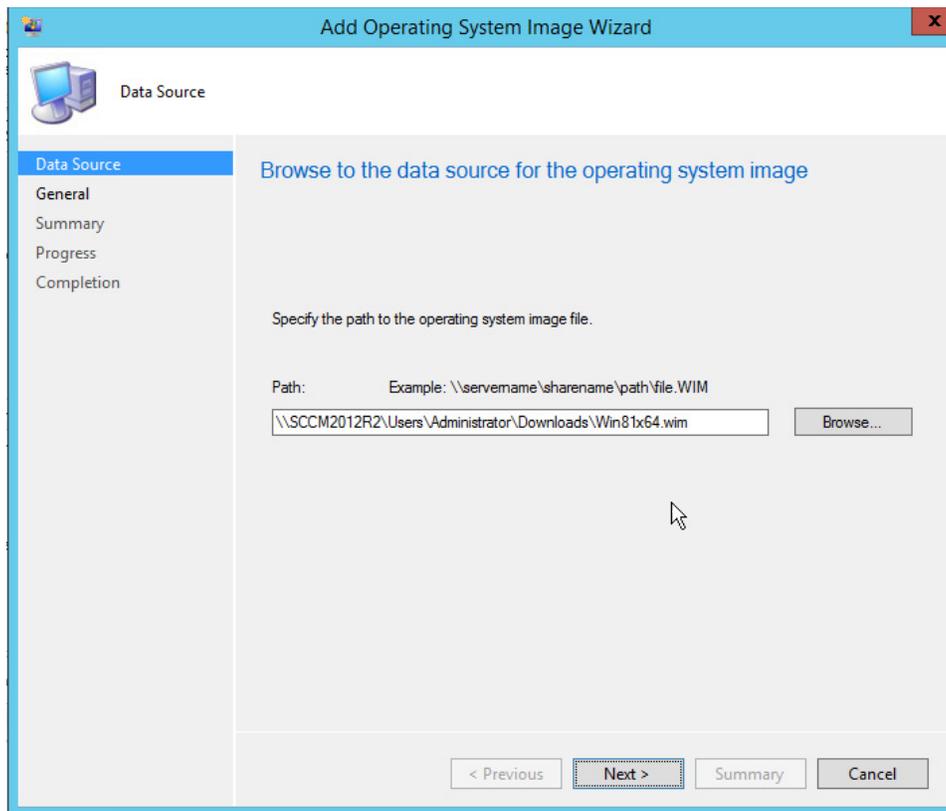


Import Operating System Image to System Center Configuration Manager

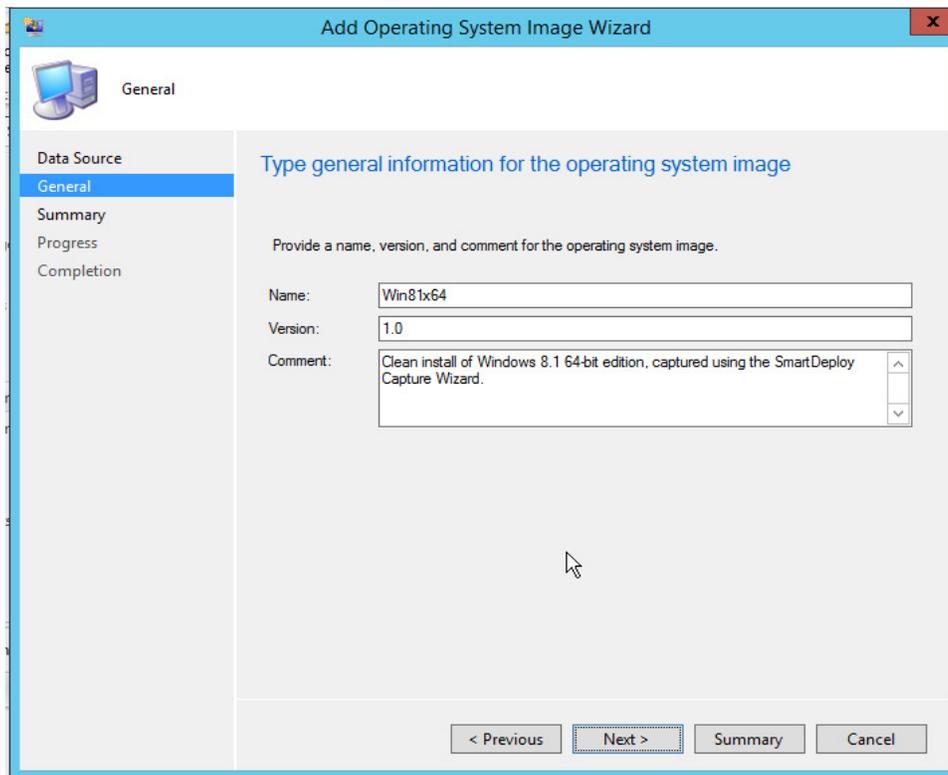
1. From the Software Library, expand **Operating Systems**, then right click **Operating System Images** and select **Add Operating System Image**.



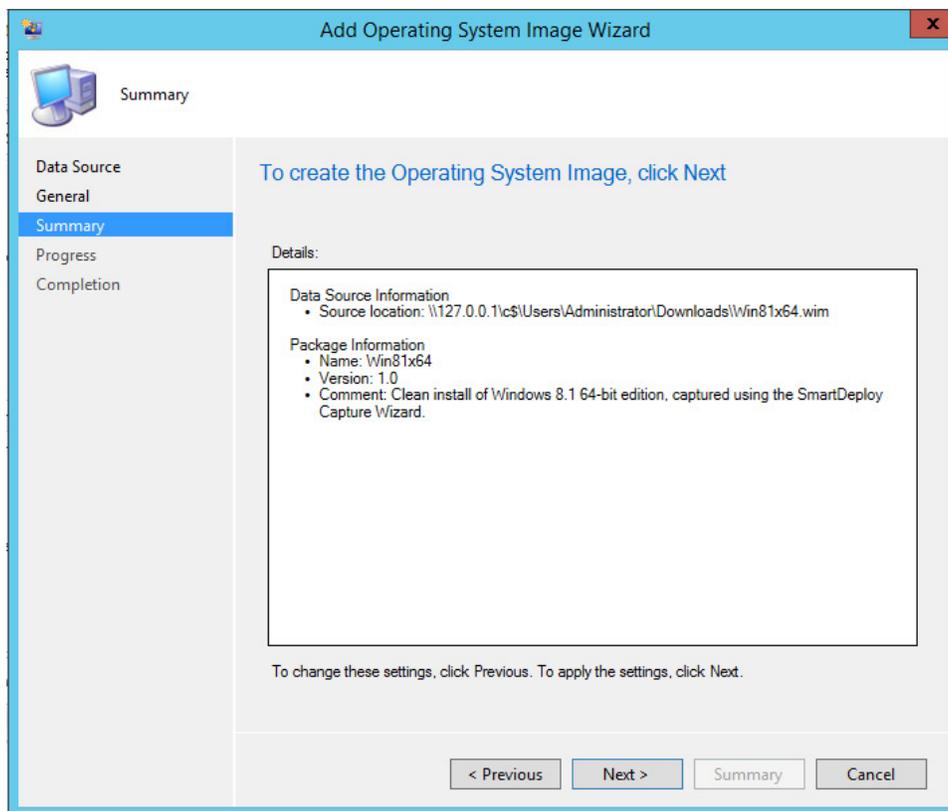
2. Enter the path to the image file that was created using the Capture Wizard, then click **Next**.



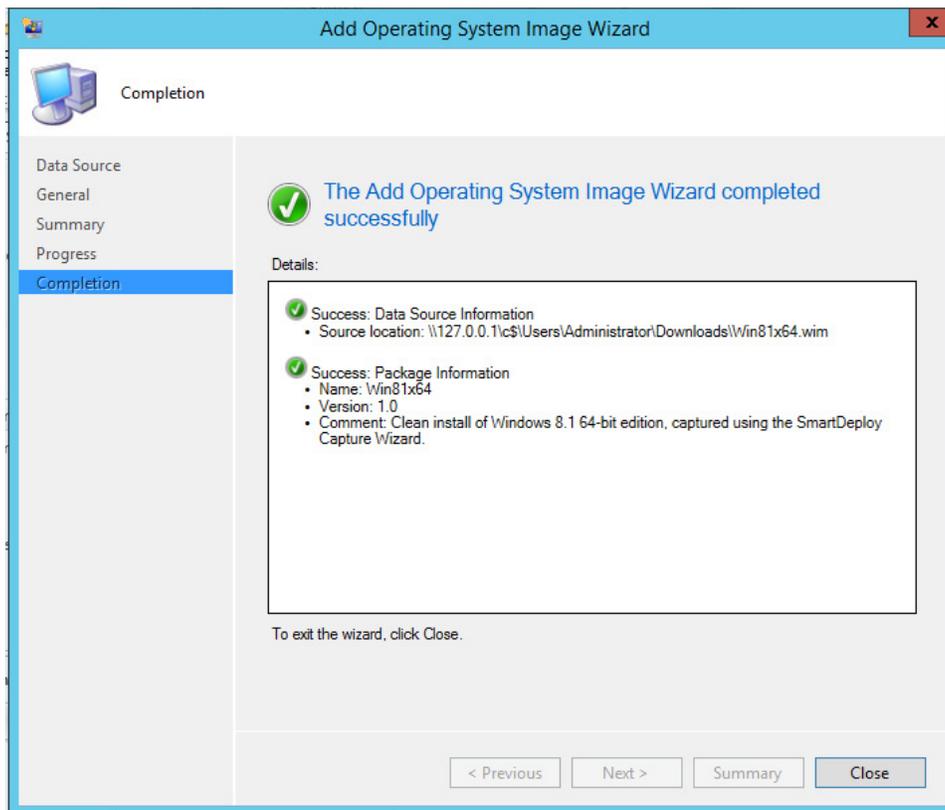
3. Enter any descriptive information for the image and click **Next**.



4. On the **Summary** page, review the information and click **Next**.

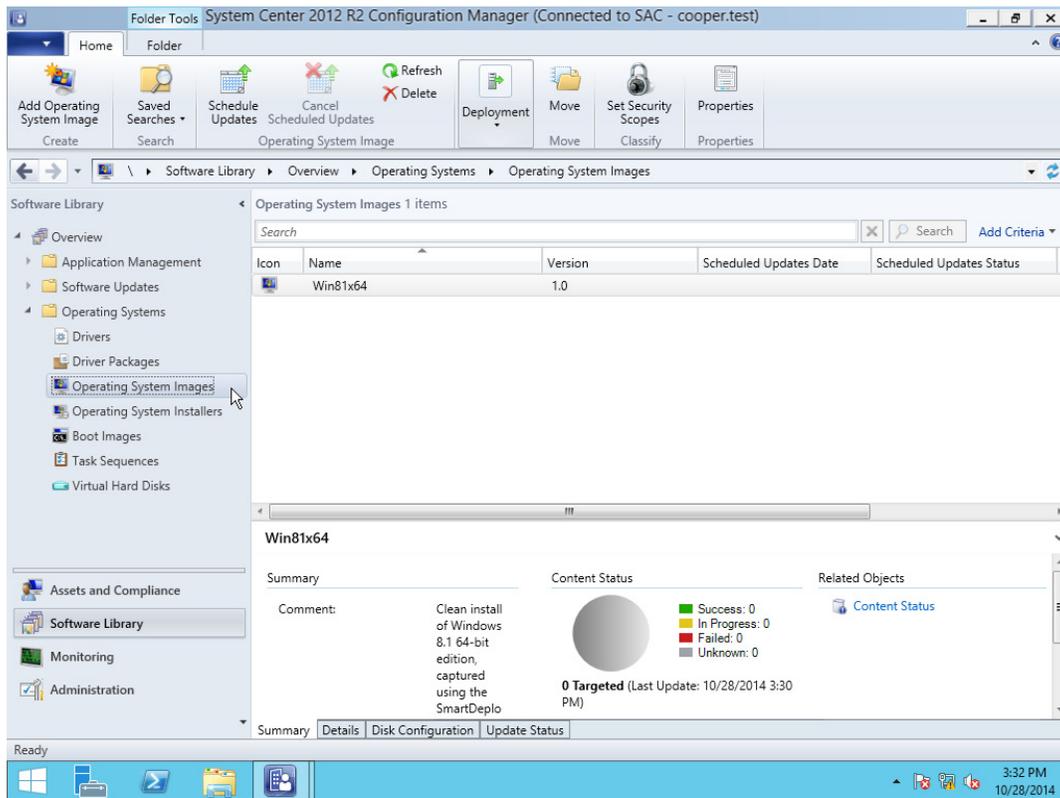


5. Wait for the image to be added. On the **Confirmation** page, ensure the operation was successful and click **Close**.

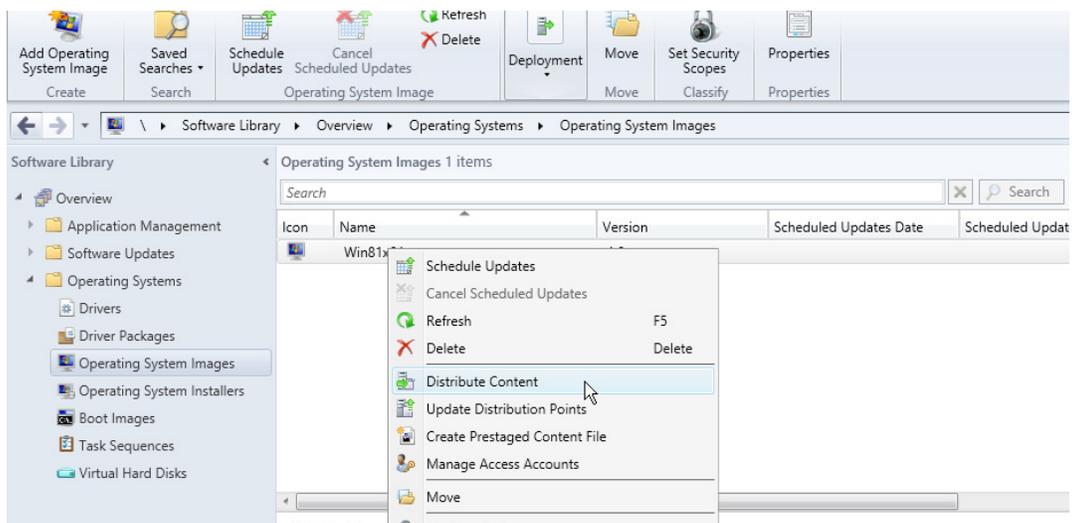


Adding the Operating System Image to Distribution Points

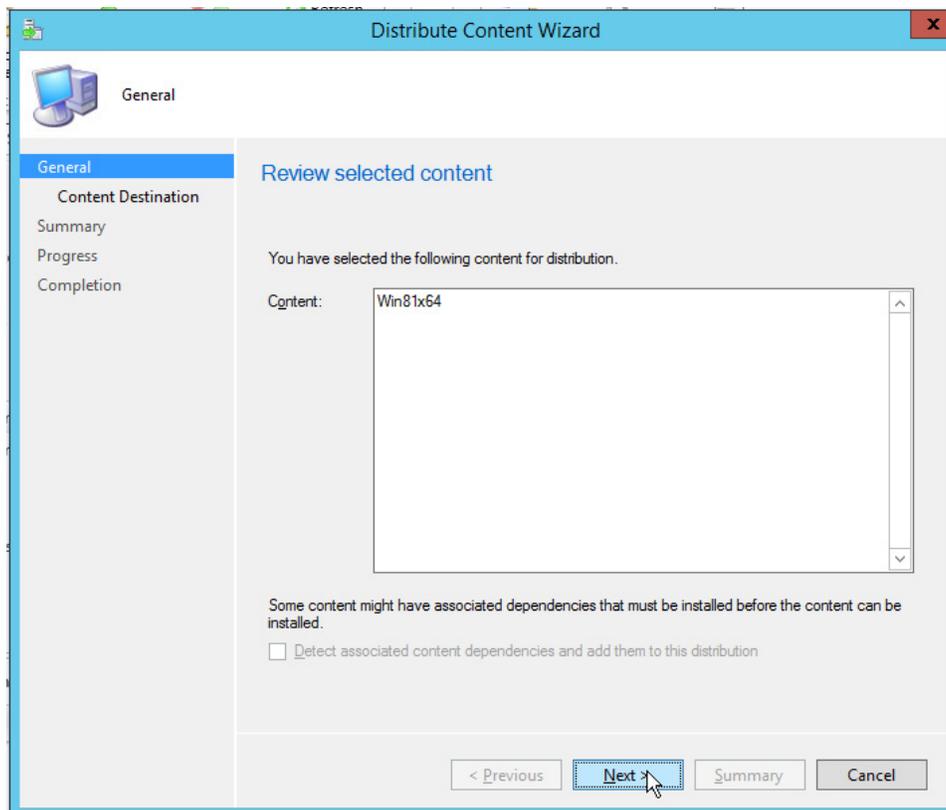
1. From the Software Library, expand **Operating Systems > Operating System Images**.



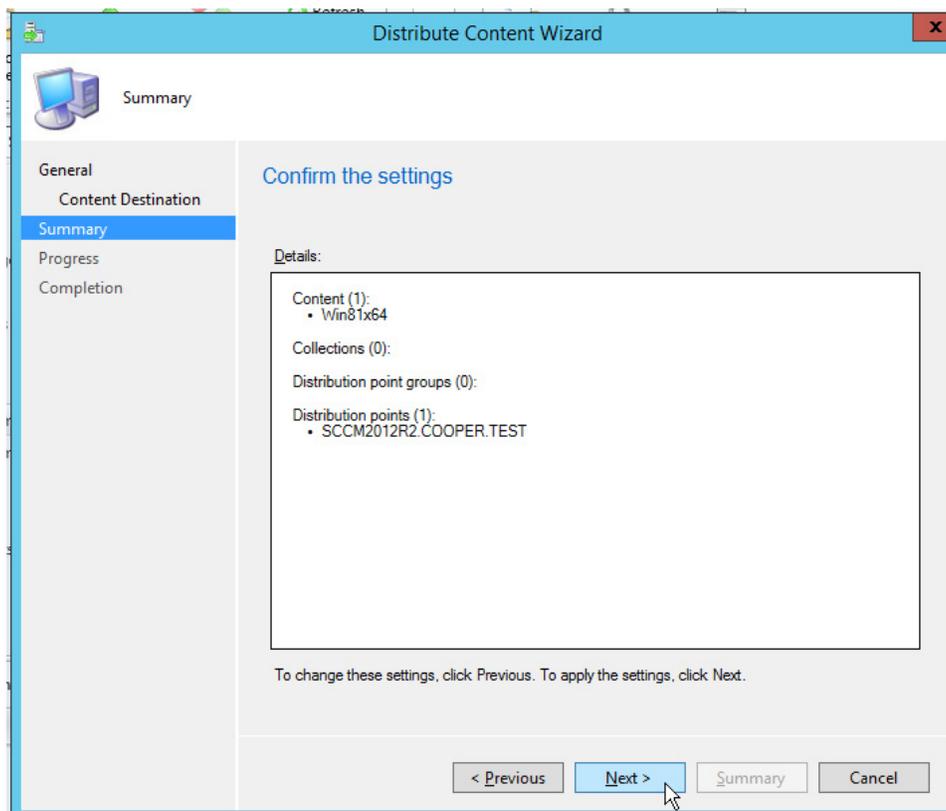
2. Right click on your **Operating System Image**, select **Distribute Content**.



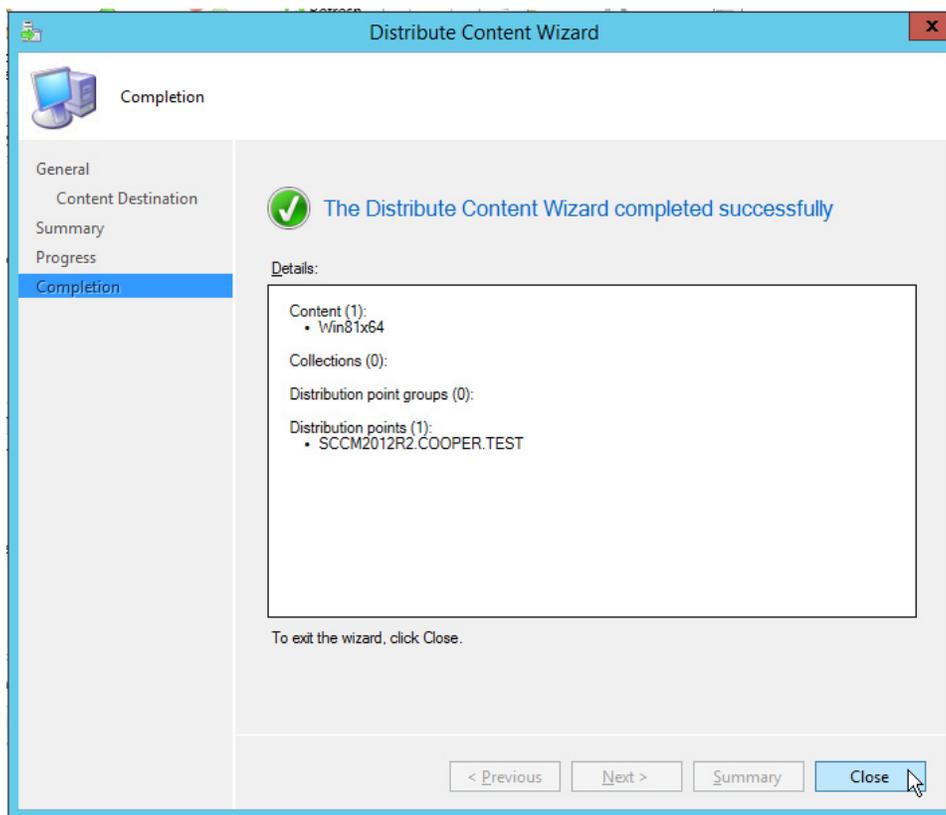
3. On the **Review Selected Content** page of the **Distribute Content Wizard**, click **Next**.



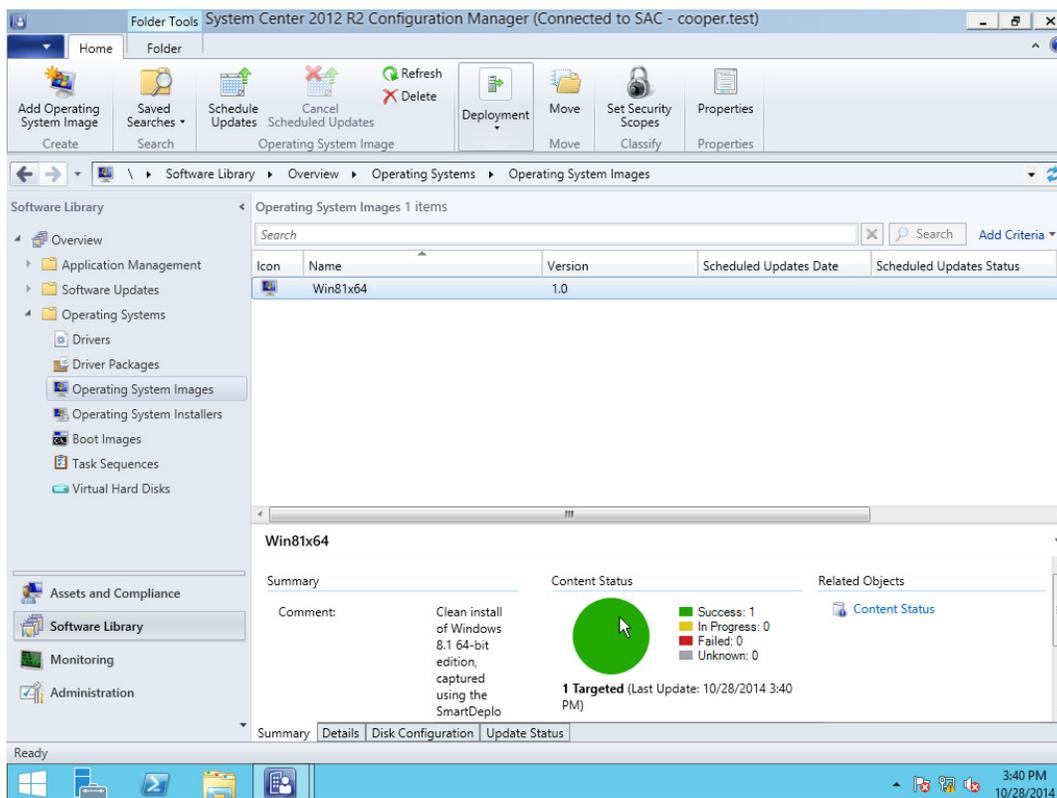
4. On the right side of the window, click **Add**, and select Distribution Point or Distribution Point Group based on your Configuration Manager configuration.



5. Check the box next to the Distribution Point(s) you would like to add the boot image to, click **OK**. Click **Next** until the wizard finishes, then click **Close**.

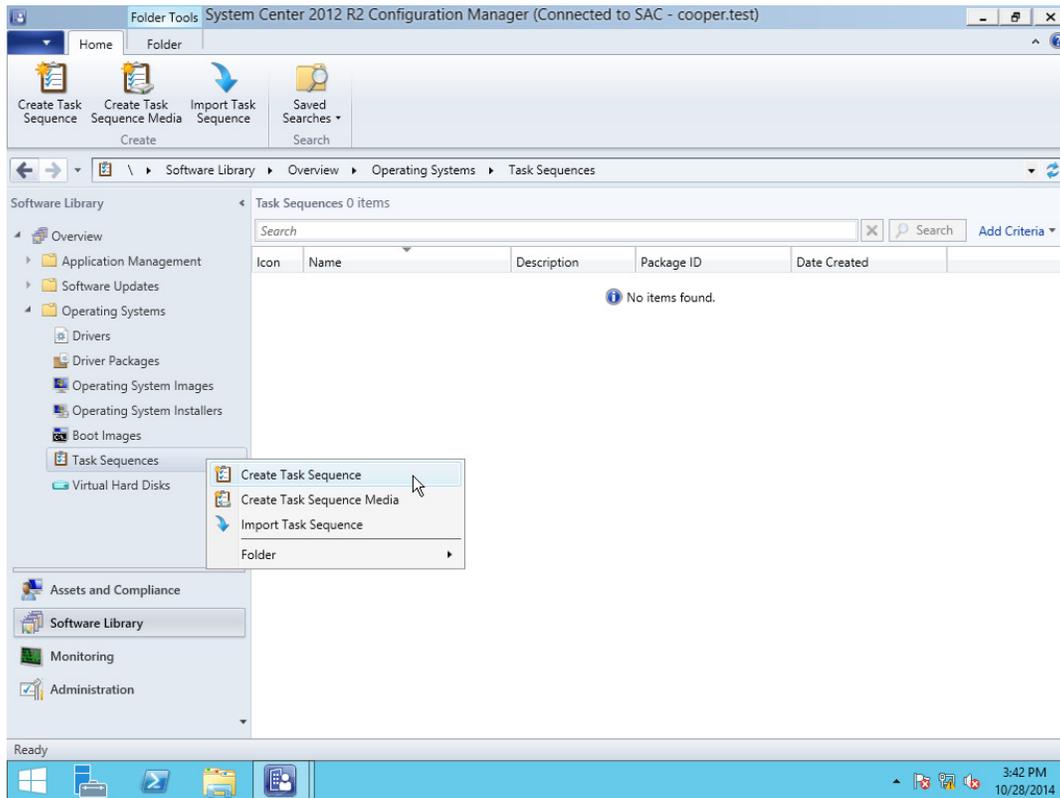


6. Ensure content status in the pane below shows that the content was distributed successfully before deploying.

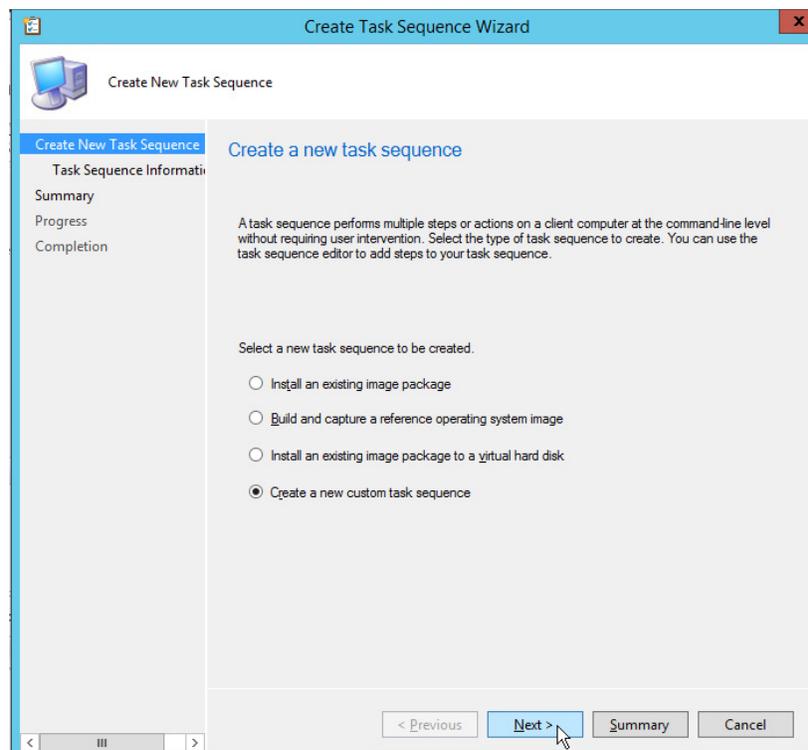


Create a Task Sequence

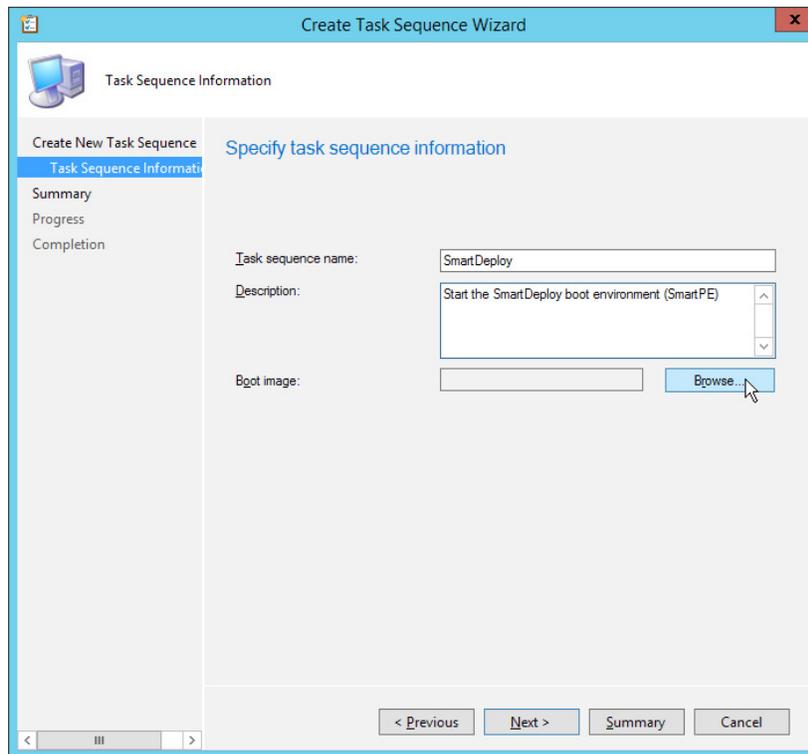
1. From the **Configuration Manager Console**, click **Software Library**.
2. Expand **Operating Systems > right click Task Sequences**, select **Create Task Sequence**.



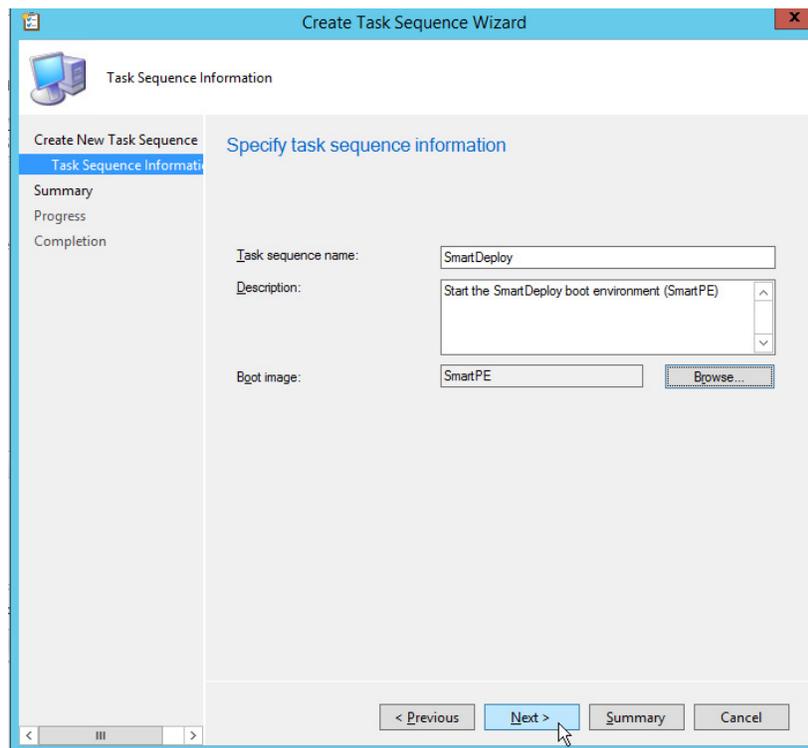
3. Select **Create a new custom task sequence**, and then click **Next**.



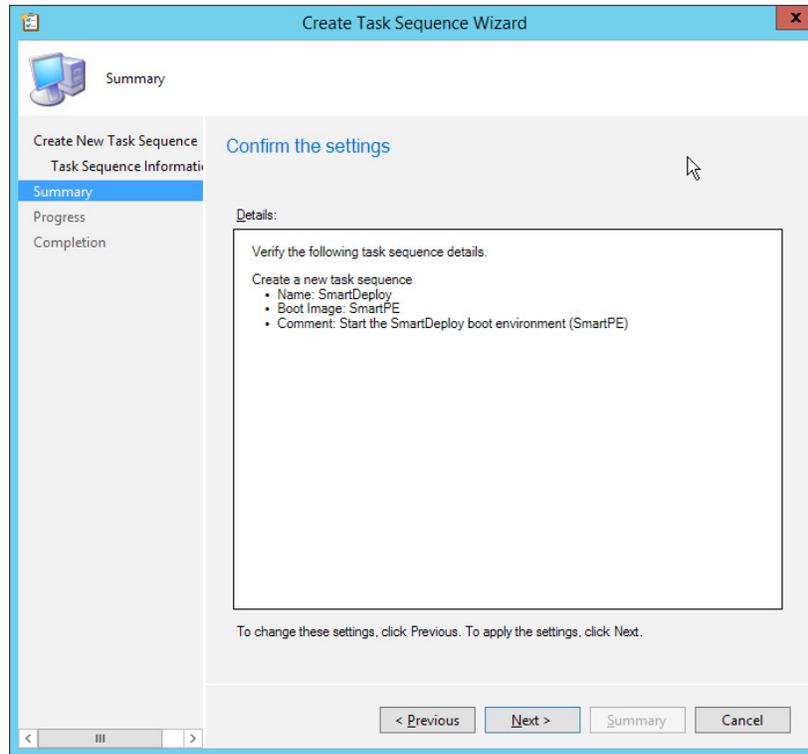
4. Enter a Name and Comment for your task sequence. Next to Boot image, select Browse and then select the SmartPE boot image. Click **OK** to return to the previous screen.



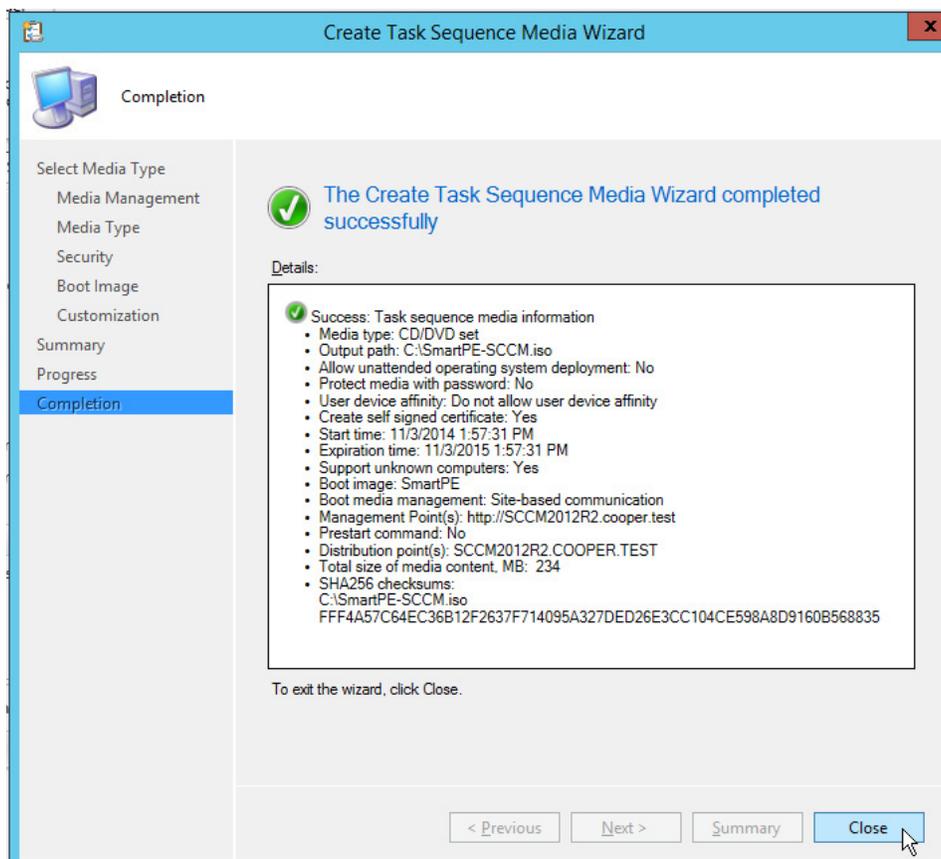
5. Check that all the information is correct, then click **Next**.



6. From the **Summary** page, review the information, and then click **Next**.

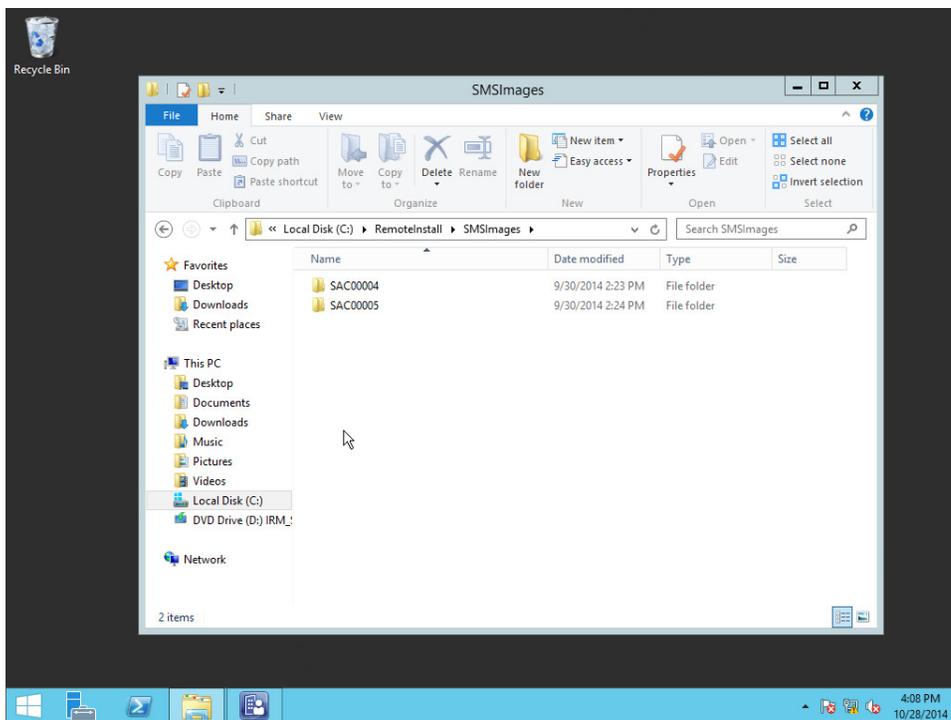


7. Wait for the process to complete, and then click **Close**.

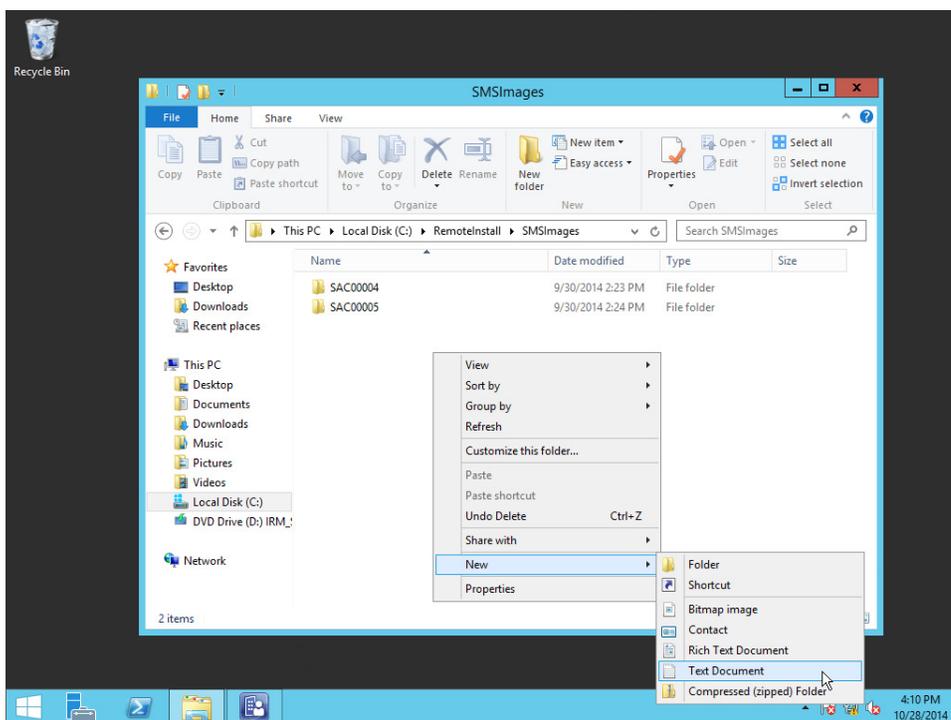


- Now that the task is created, we need to give it a function. To successfully start SmartPE, we need to launch the SDShell, as this has been disabled when the boot image was imported into Configuration Manager.

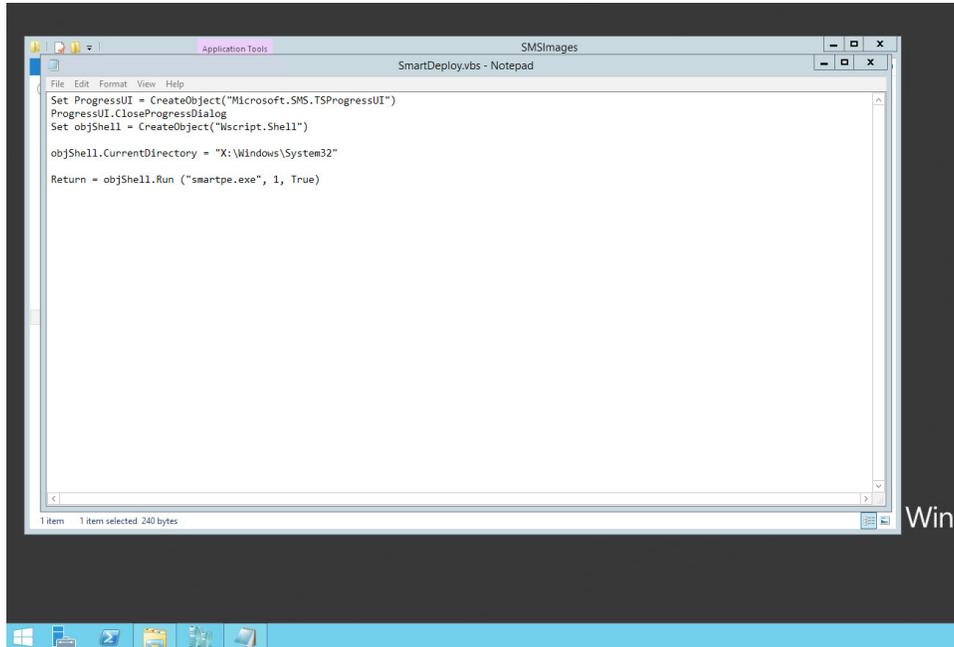
To Launch SDShell, create a new VBScript in your **\RemoteInstall\SMSImages** folder. This location may vary depending on the configuration of your distribution point.



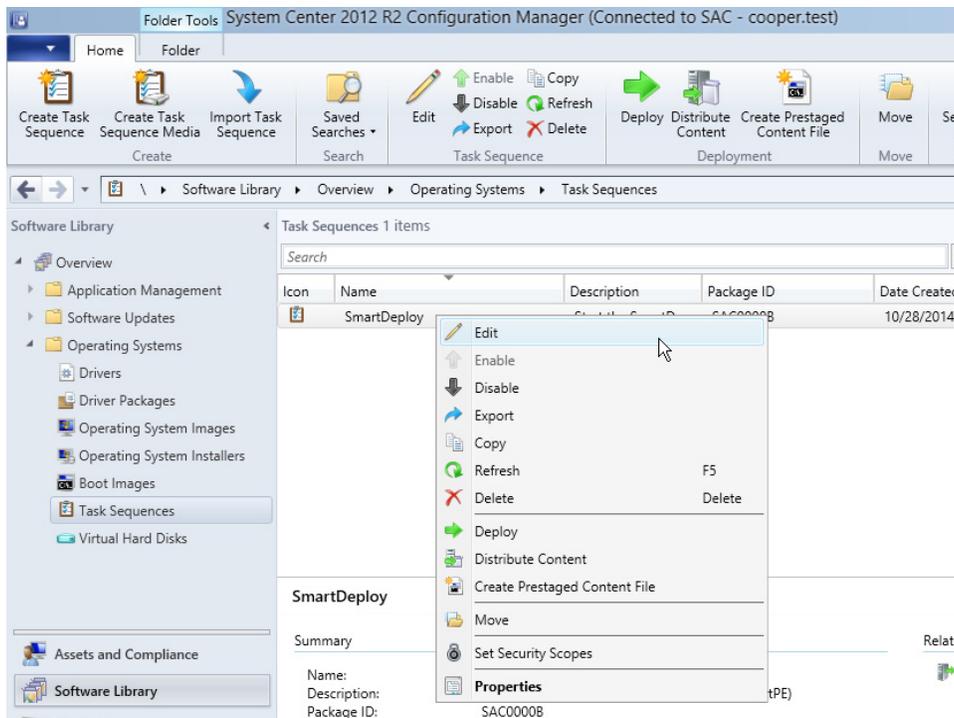
- Browse to the folder, right-click and select **New > Text Document**



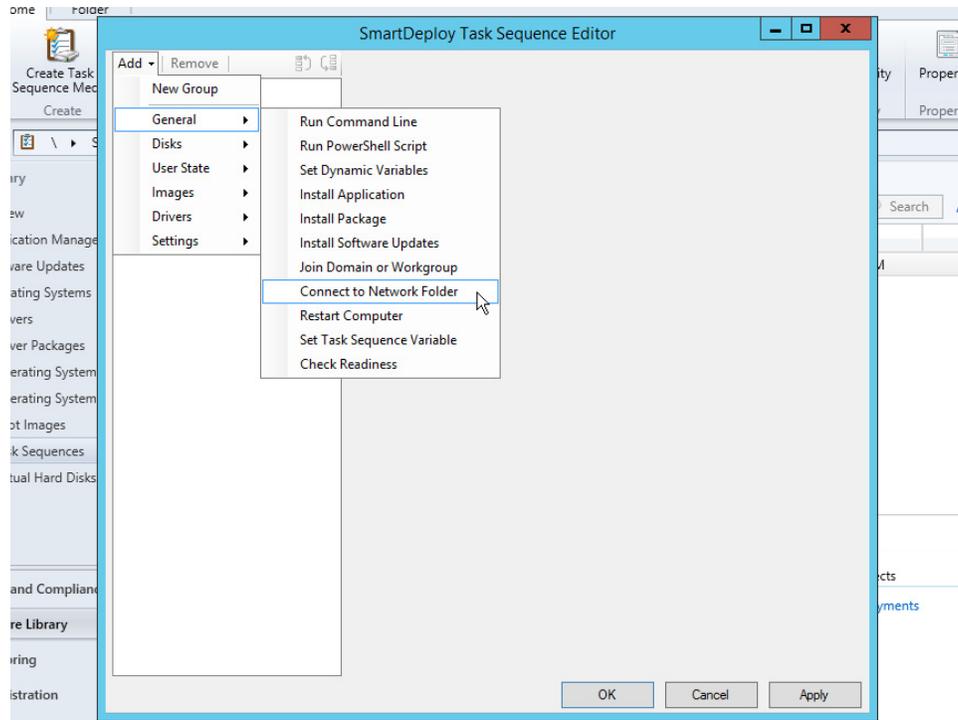
10. Name the new document SmartDeploy.vbs, and click **Yes** to change the extension type.
11. Right-click SmartDeploy.vbs and then click **Edit**.
12. Enter the following code into the editor, and then close the file. Be sure to save your changes.
([click here](#) to download .txt file)



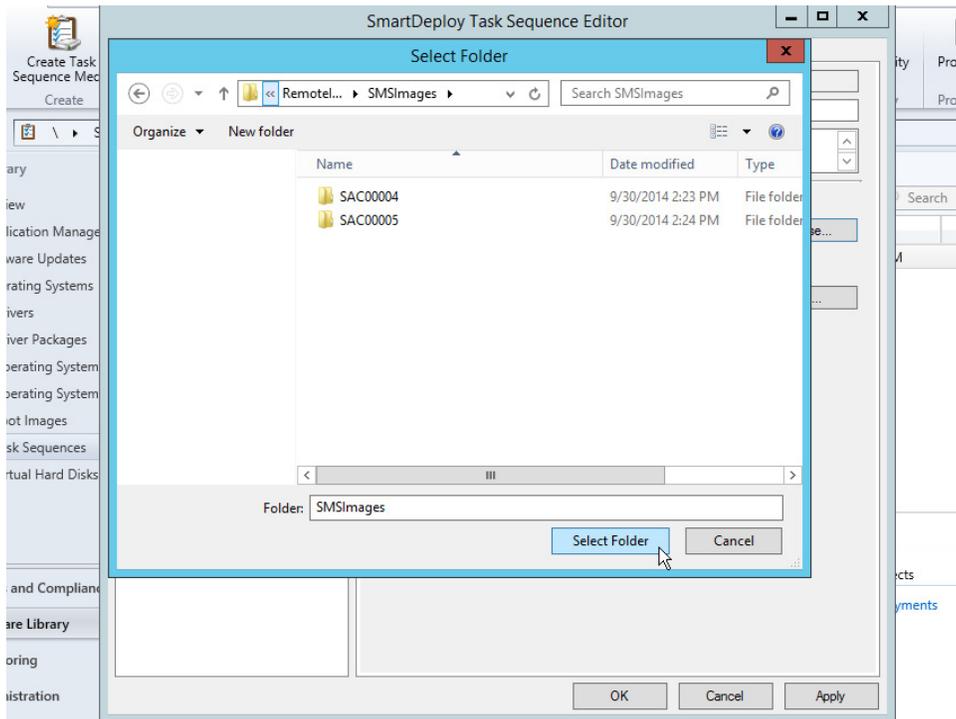
13. Navigate back to the Configuration Manager Console, right-click the previously created task sequence, and click **Edit**.

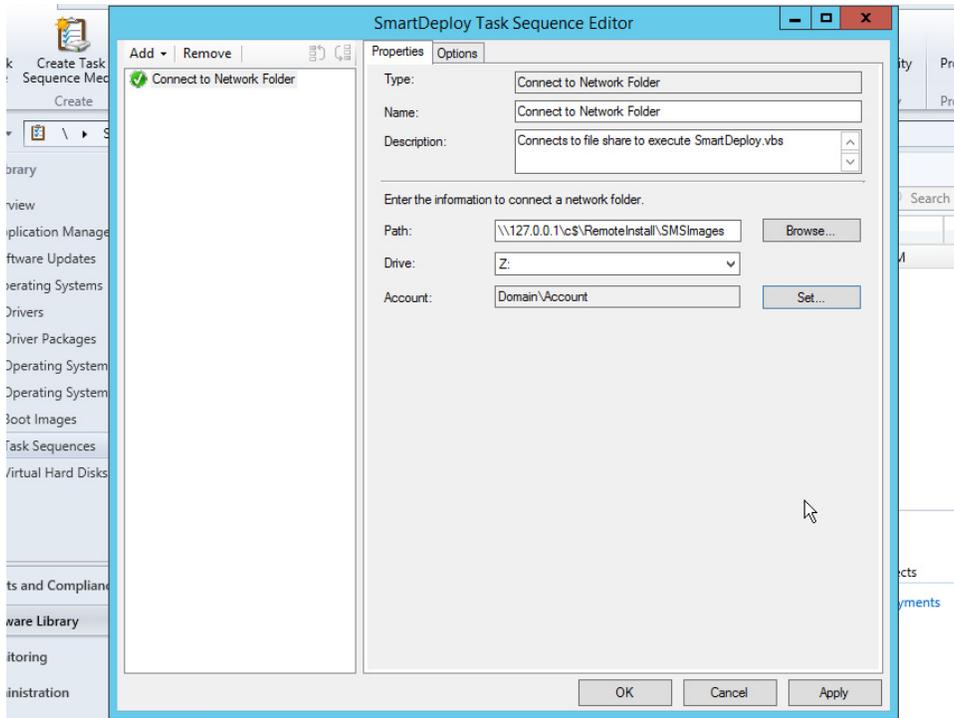


14. From the **Task Sequence Editor** select **Add > General > Connect to Network Folder**.

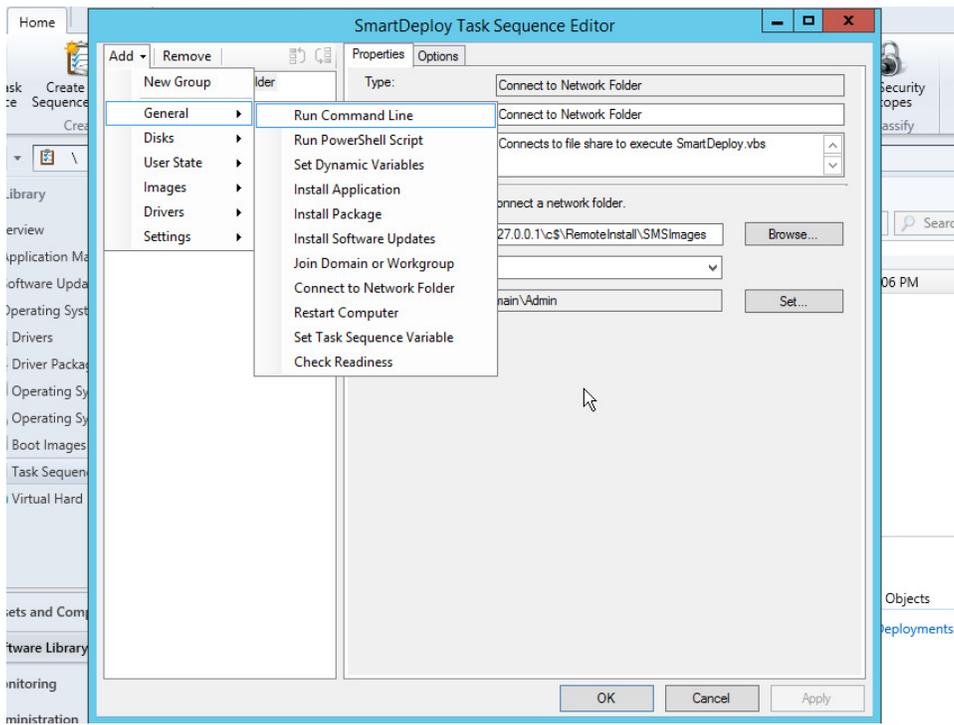


15. If desired, change the Name and Description of the task. For the Path field, enter the path to the Distribution Point that contains your `\RemoteInstall\SMSImages` share. Select a drive letter for this mapped drive, and add account information to connect to the share. This account should have Read/Execute permissions to the share.

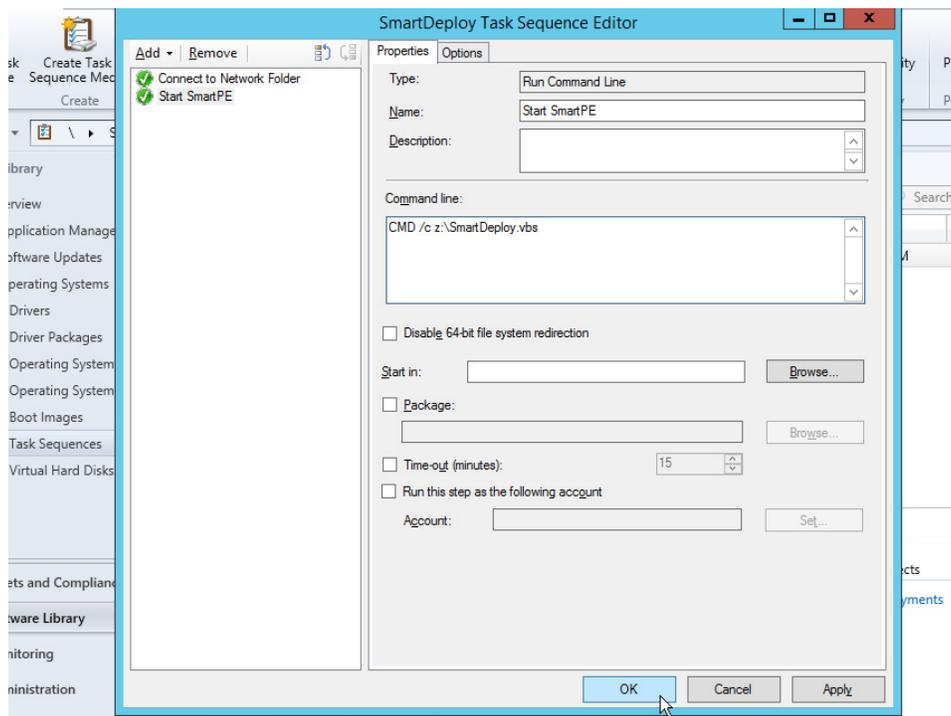




16. From the **Task Sequence Editor** select **Add > General > Run Command Line**.



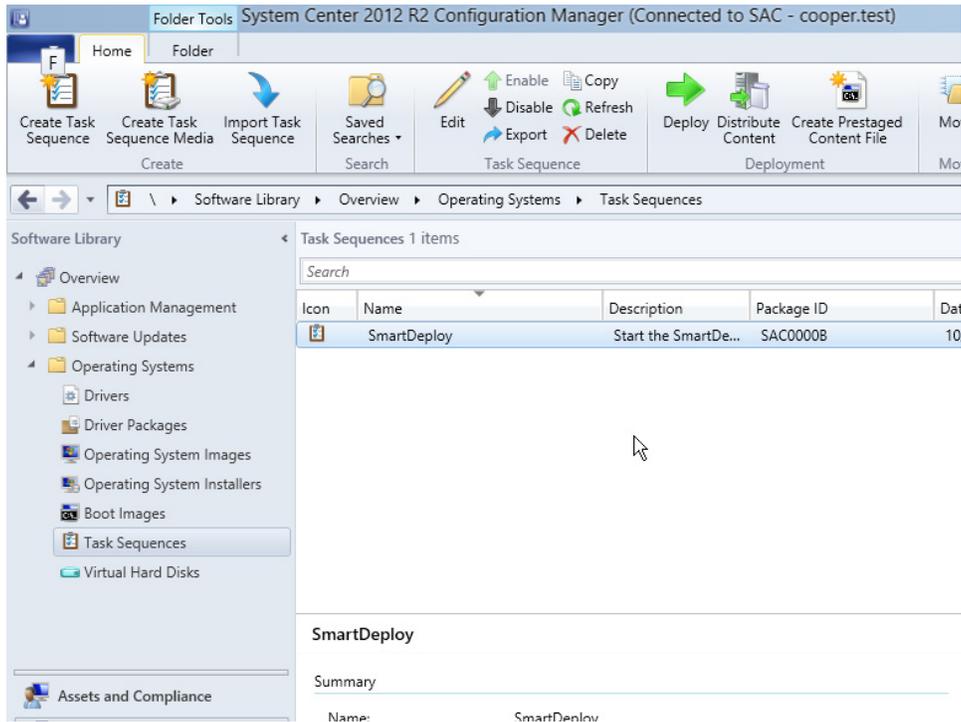
17. If desired, change the Name and Description of the task. Change the Command line field to read `CMD /c z:\SmartDeploy.vbs` (where Z: is the drive that was mapped in previous steps).
18. Click **OK** to save changes and exit.



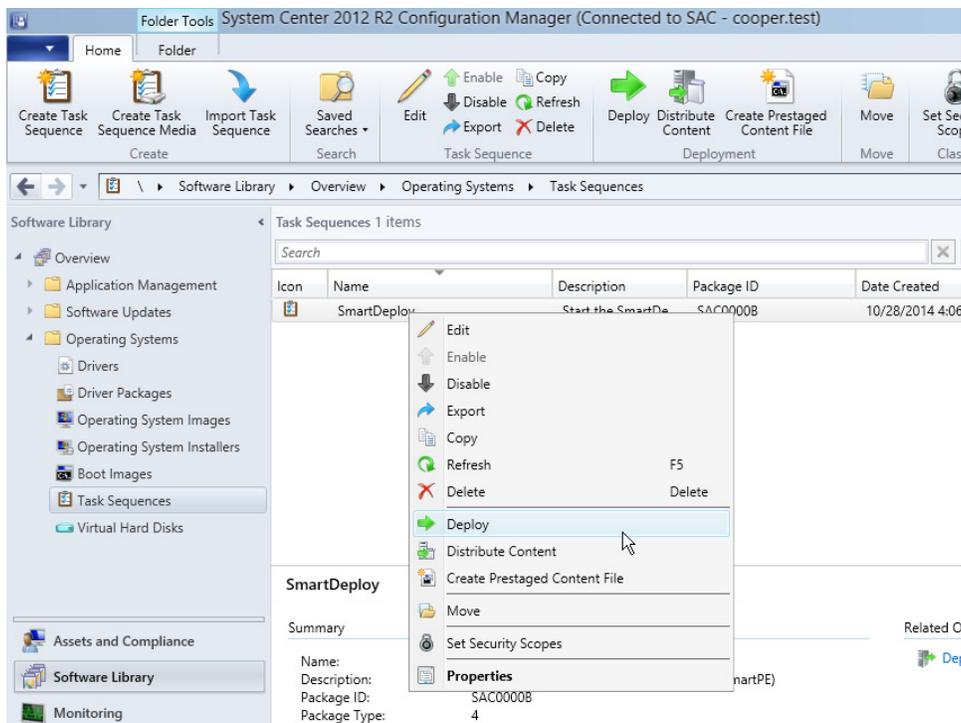
Deploy to Target Collection

This section guides you through the process of deploying the previously created task sequence to a collection of computers. In this example, we use the All Unknown Computers collection, but this can be changed to meet your needs.

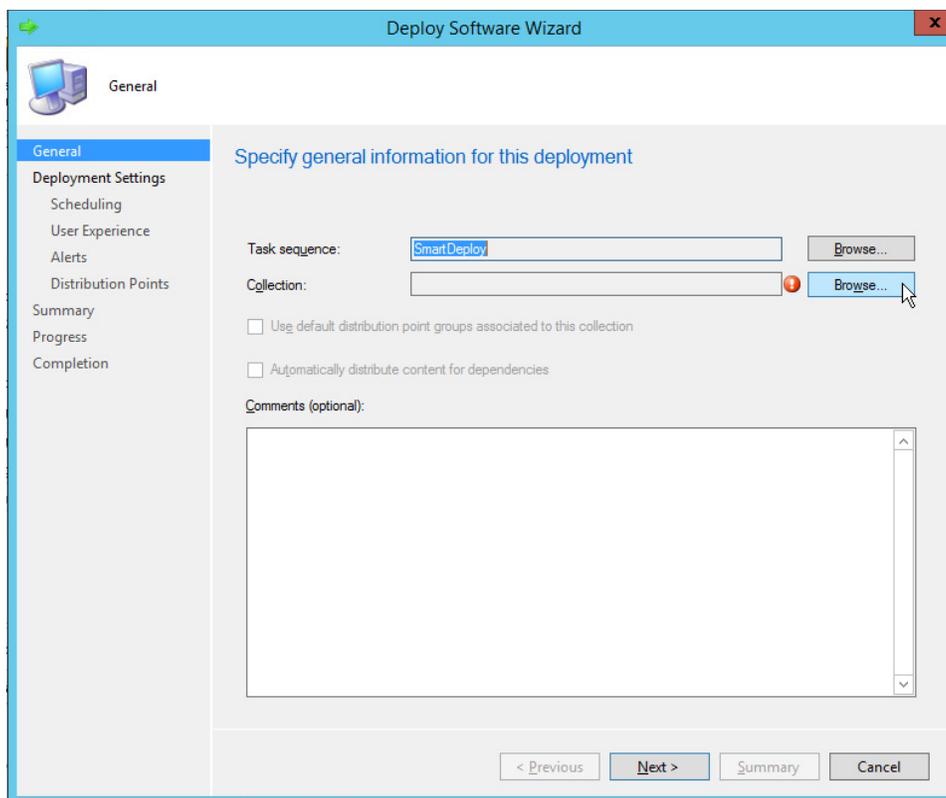
1. From the Configuration Manager Console, navigate to **Software Library > Operating Systems > Task Sequences**.



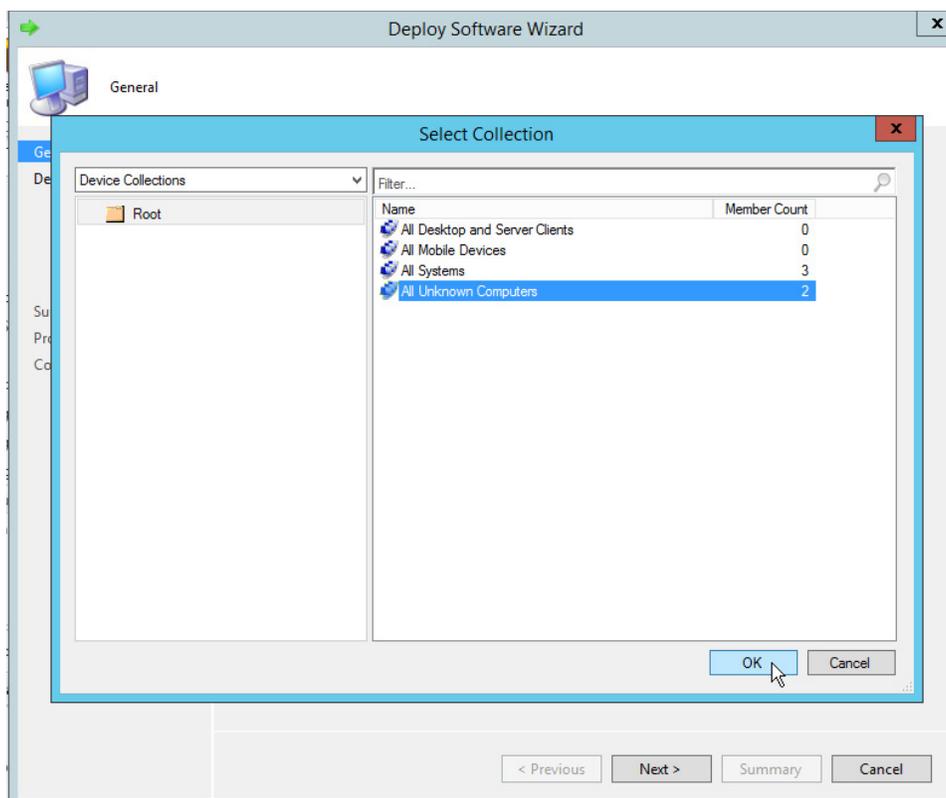
2. In the middle pane, right-click the previously created Task Sequence, then select **Deploy**.



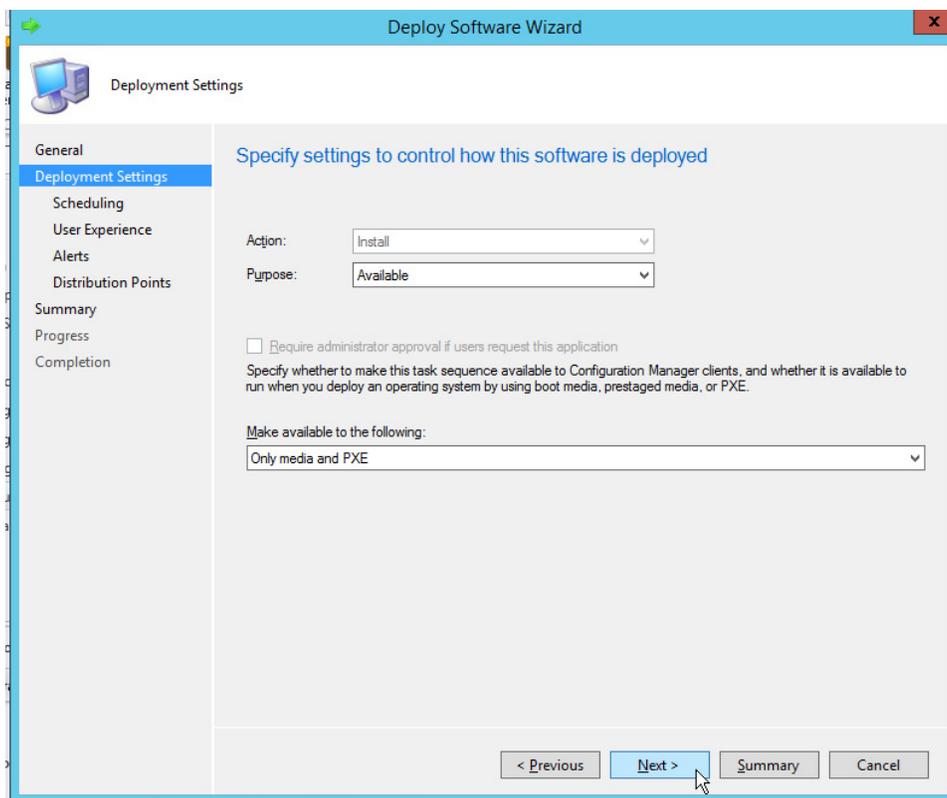
3. On the **General** screen of the Deploy Software Wizard, click the **Browse** button next to the Collection field.



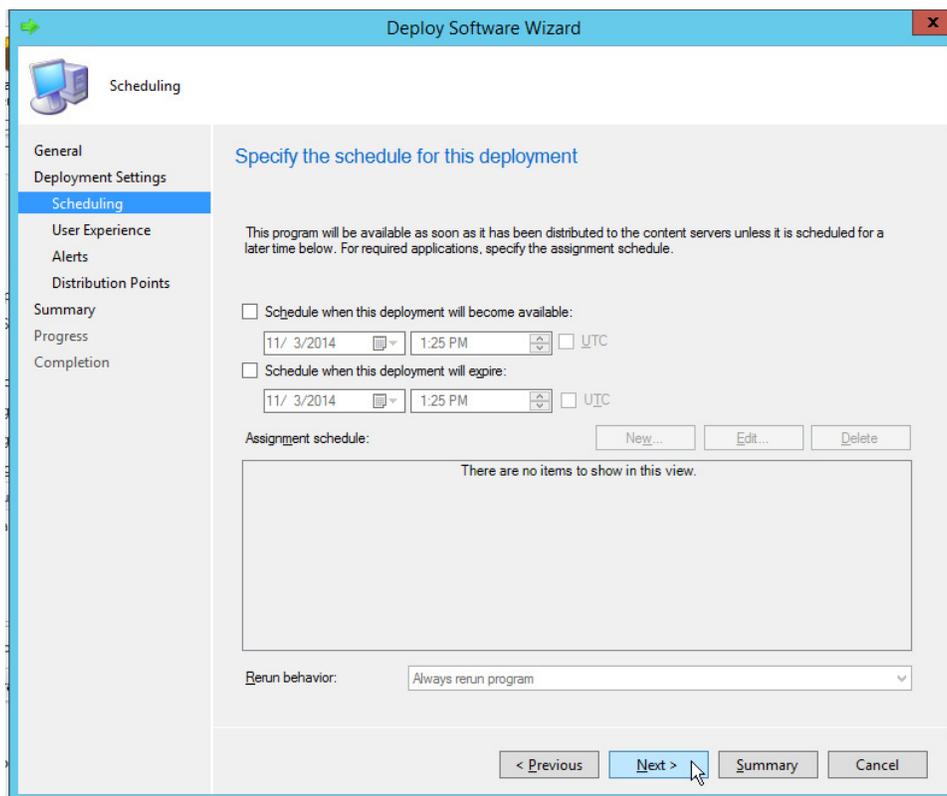
4. In the **Select Collection** window, click All Unknown Computers and click **OK**.



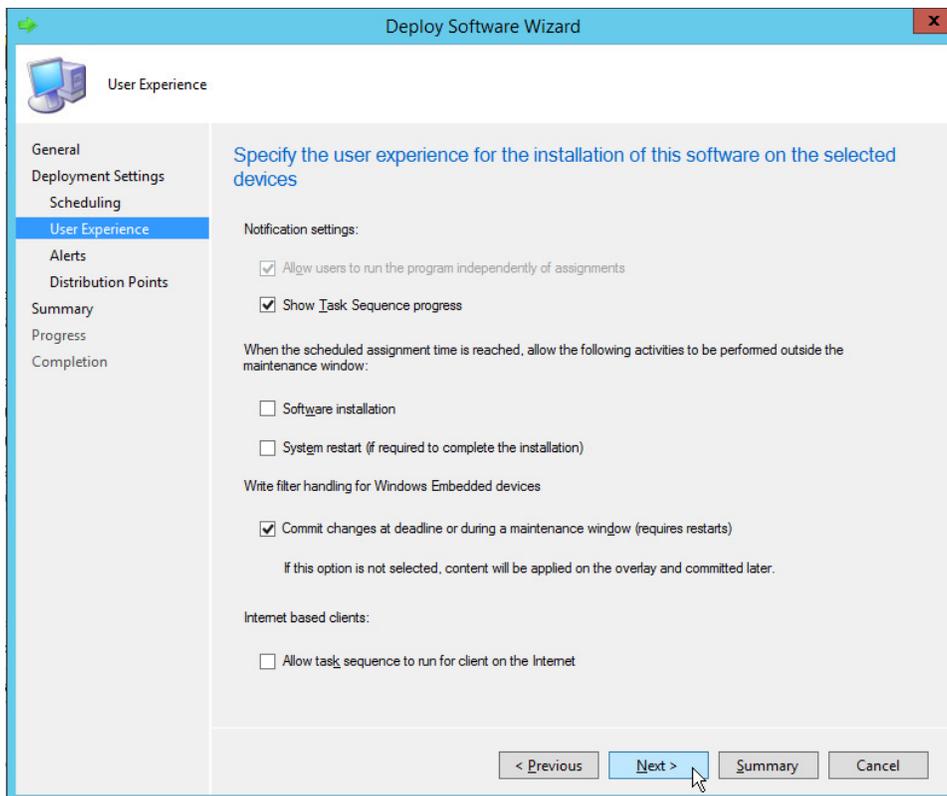
5. On the **Deployment Settings** of the wizard, select **Install** in the Action field. Set purpose to **Available**. Select **Only Media and PXE** in the final field and click **Next**.



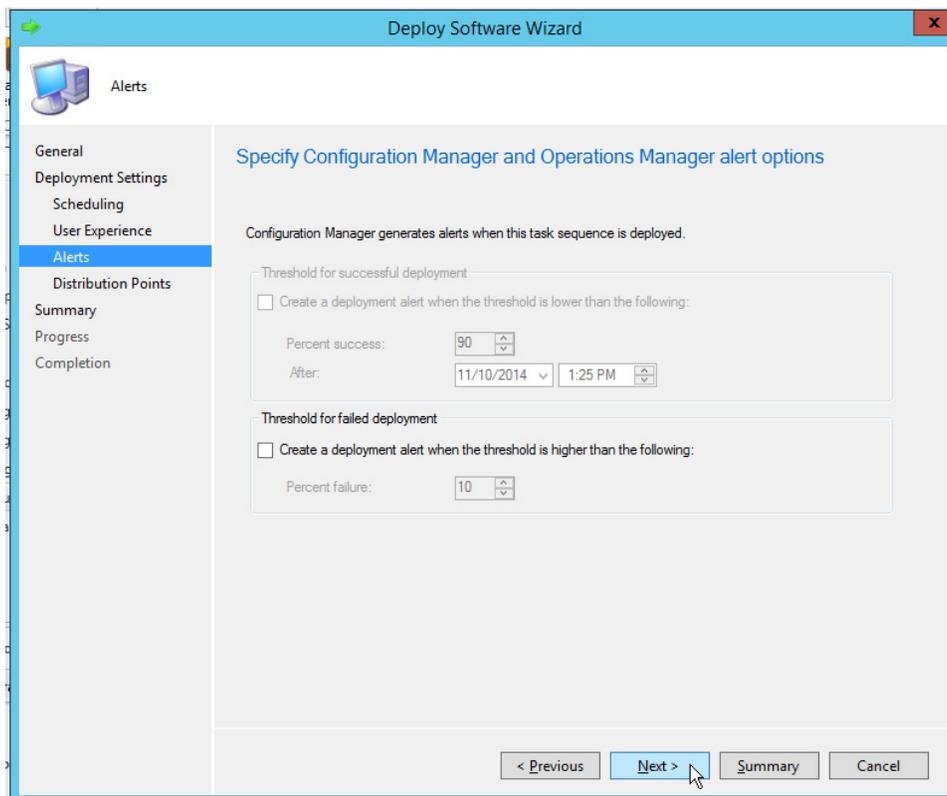
6. On the **Scheduling** page, leave the default setting and click **Next**.



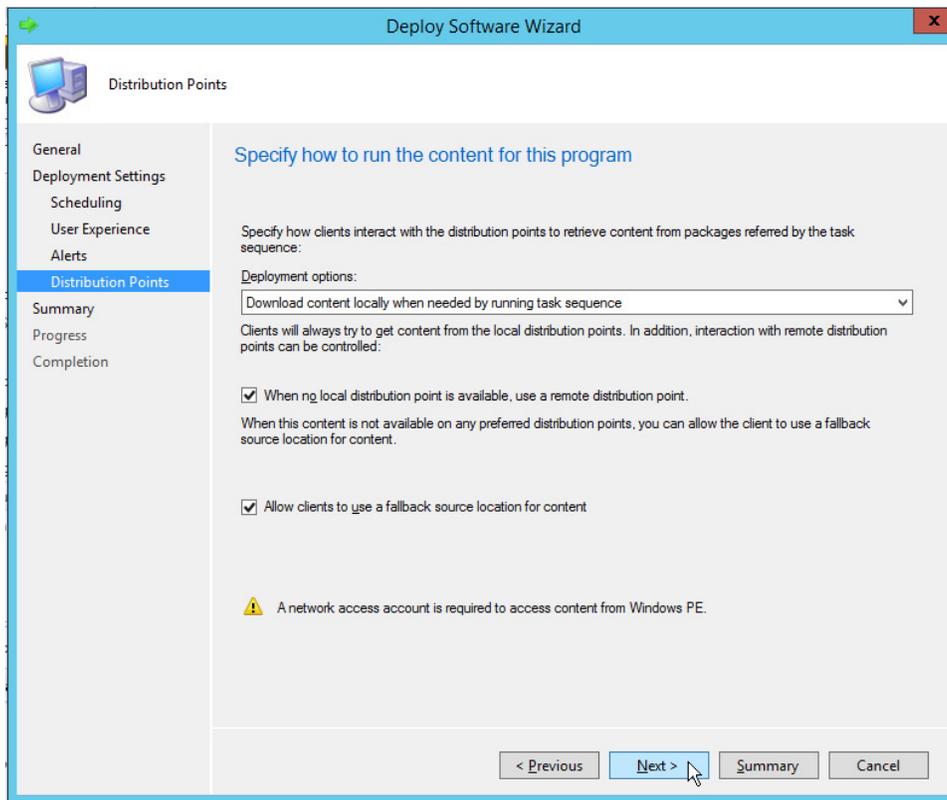
7. On the **User Experience** page, leave the default settings and click **Next**.



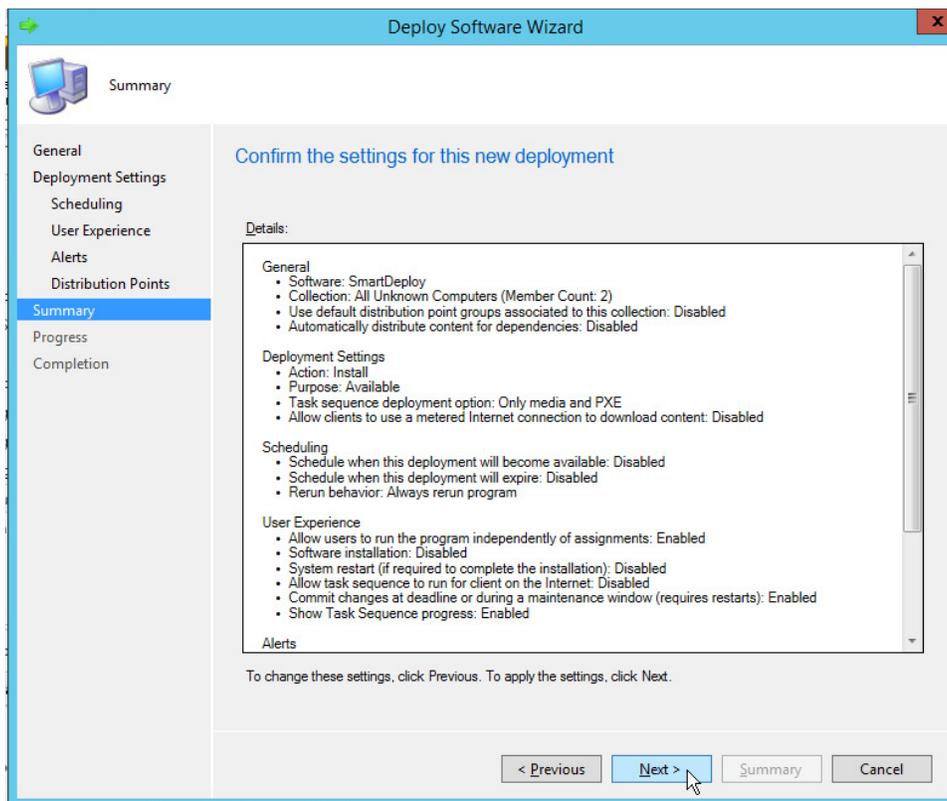
8. On the **Alerts** page, configure alert options as desired and click **Next**.



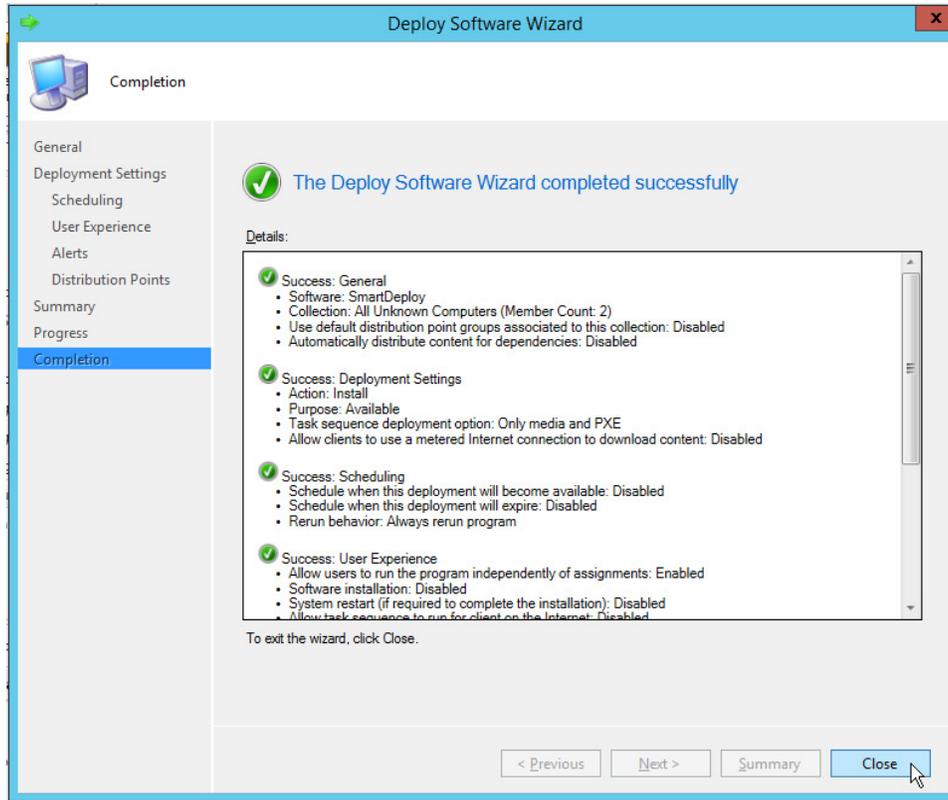
9. On the **Distribution Points** page, check options to specify a remote distribution point and to allow clients to use a fallback content location if needed. Click **Next**.



10. Review settings on the **Confirmation** page, and click **Next**.



11. Once the wizard completes successfully, click **Close**.



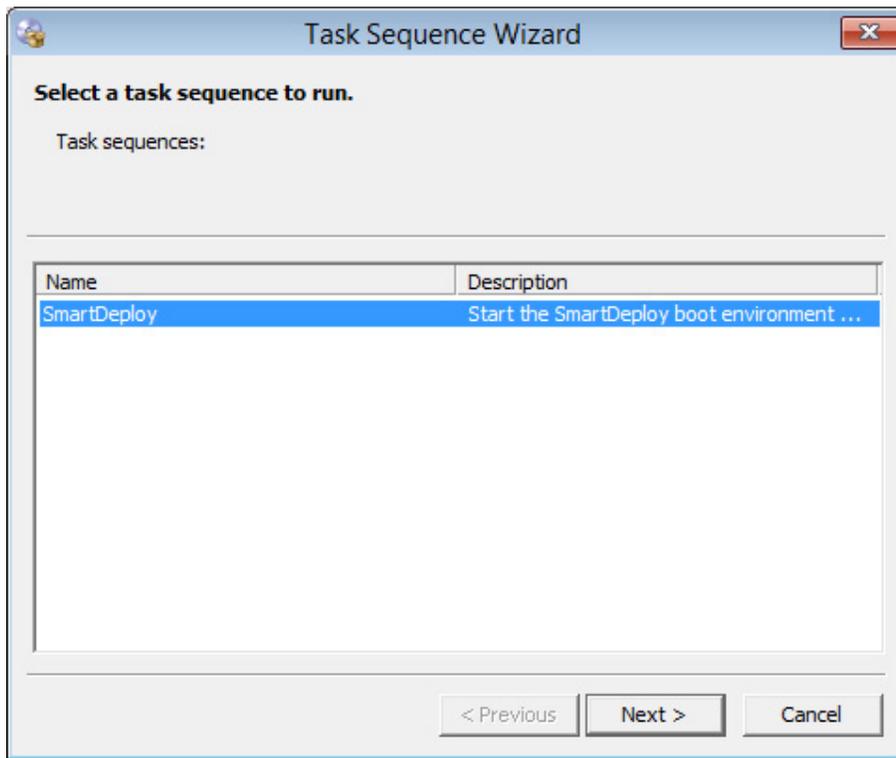
Booting the Target Device

Assuming the target device is part of the collection that the advertisement was assigned to, you can now boot the target device to SmartPE. From here, you can complete your deployment using the SmartDeploy Enterprise hardware-independent imaging model.

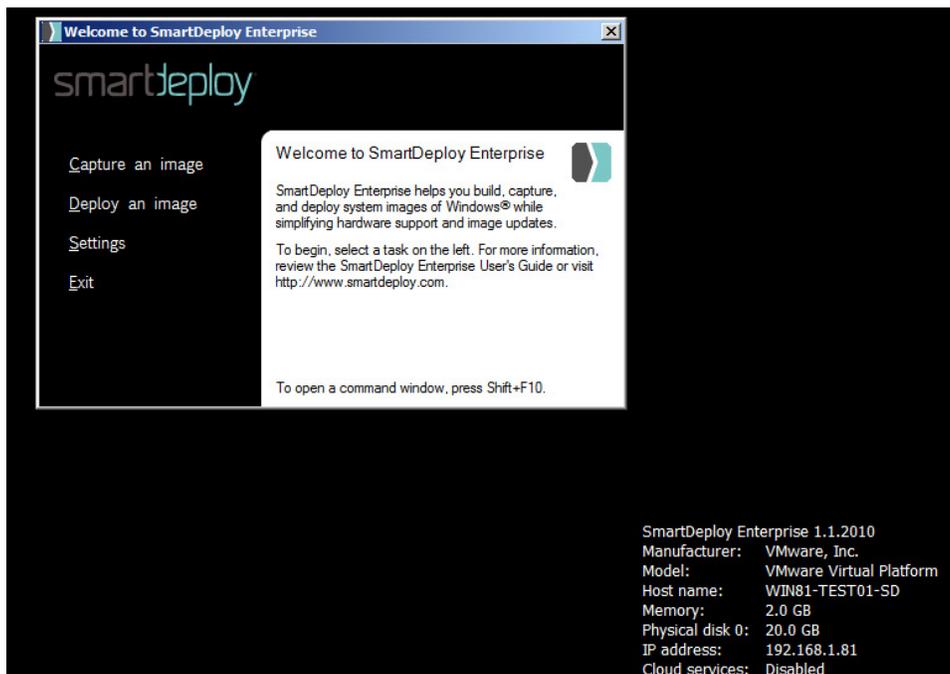
1. Boot your target device from the network.
2. Wait for the PXE boot to complete, and then click **Next** from the Task Sequence Wizard.



3. Select the SmartDeploy task that was created in the previous section, and then click **Next** to execute.



4. Once the task runs, the Welcome to SmartDeploy Enterprise screen opens.



5. From the Welcome to SmartDeploy Enterprise screen, you can deploy your images from the Z: drive and save a SmartDeploy.xml answer file to the Z: drive to automate future deployments. When used with a mandatory task, SmartDeploy.xml can give you a zero-touch deployment.

Summary

This document has illustrated the basic procedure to integrate SmartDeploy Enterprise and System Center Configuration Manager. Once SmartDeploy and SCCM have been integrated, you can take advantage of the time and cost-saving features of SmartDeploy to deploy images from the System Center Configuration Manager console. Using SmartDeploy reduces the overall complexity of operating system deployment within System Center Configuration Manager, while providing the time-saving benefits of SmartDeploy, such as Platform Packs.

More Information

The following links provide further information:

- [SmartDeploy Enterprise User's Guide](#)
- [SmartDeploy Website](#)
- [DeployCentral User Forum](#)
- [System Center Configuration Manager Product Documentation](#)