Adding the Pretty Good Frontend Web Service

This guide assume that you have downloaded the source code and compiled the Frontend binaries using Visual Studio 2013. In this guide my ConfigMgr 2012 R2 site server is named CM01, and the domain is VIAMONSTRA (corp.viamonstra.com). I'm also using a service account named CM_WS. That service account has been given permissions to manage computer objects in the domain.

Note: This is the same Frontend sample that is part of the Stealing With Pride – Volume 1 book, available on http://www.deploymentartist.com/Books.aspx (both Kindle and hardcopy versions available).

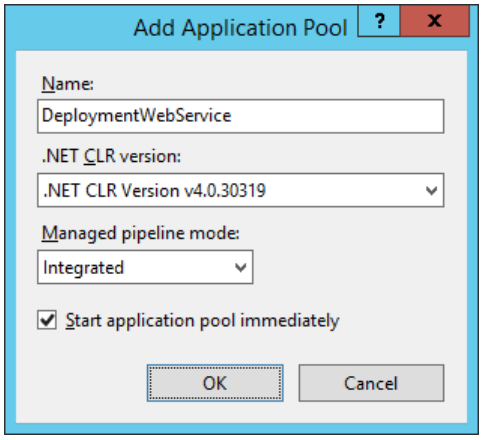
Create an Application Pool for Deployment Web Services

When using a custom web service, it can be useful to have it running in its own application pool. The reasons for having a separate application pool are the following:

- To support running the web service with a different .NET Framework version
- To assign specific permissions to only that web service (Each application pool can be connected to only one security principal.)
- To be able to restart the web service without disrupting any other web applications

In these steps, you create the application pool for deployment web services and configure it to use the service account:

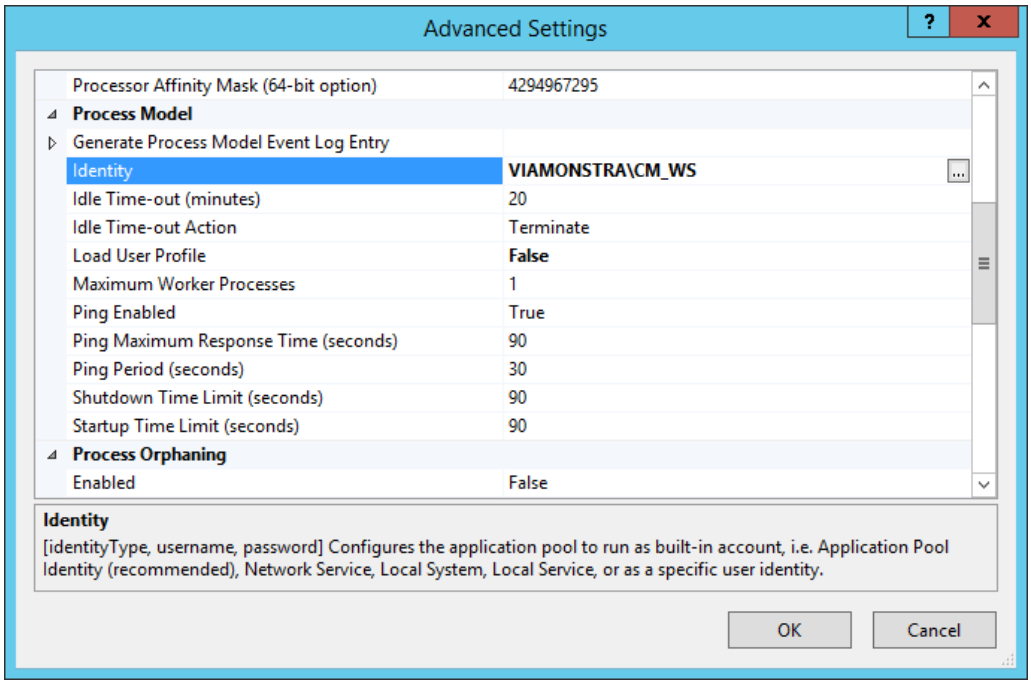
1. On **CM01**, using **Internet Information Services (IIS) Manager**, expand the **CM01** node.
2. Right-click **Application Pools**, select **Add Application Pool**, and configure the new application pool with the following settings:
    a. Name: **DeploymentWebService**
    b. .NET CLR version: **.NET CLR Version v4.0.30319**
    c. Managed pipeline mode: **Integrated**
    d. Select the **Start application pool immediately** check box, and click **OK**.



Creating the DeploymentWebService application pool.

3. Select the **Application Pools** node, right-click the new **DeploymentWebService** application pool, and select **Advanced Settings**.

4. Click on the **Identity** line and then click the browse "…" button.
5. Select **Custom account** and click **Set**. Use the following settings for the **Set Credentials** dialog box:
    a. Username: **VIAMONSTRA\CM_WS**
    b. Password and confirm password: **P@ssw0rd**
    c. Click **OK** twice.



Identity configured for the application pool.

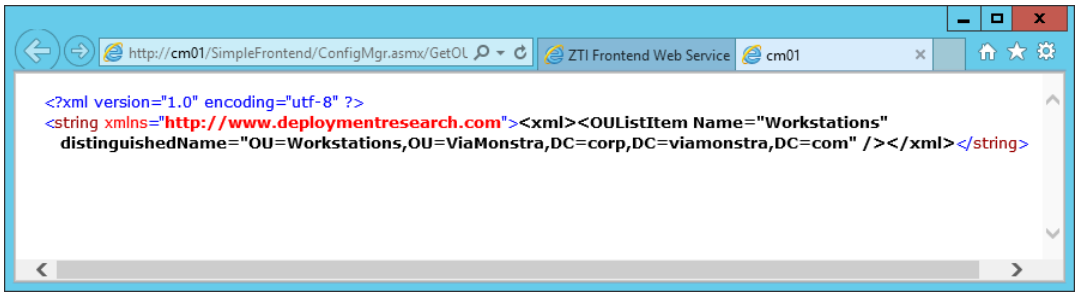
Install the Web Service

In these steps, we assume you created the DeploymentWebService application pool earlier in this chapter.

1. On **CM01**, using **Internet Information Services (IIS) Manager**, expand **Sites**.
2. Right-click **Default Web Site**, and select **Add Application**. Use the following settings for the application, and then click **OK**:
    a. Alias: **SimpleFrontend**
    b. Application pool: **DeploymentWebService**
    c. Physical Path: **D:\ViaMonstraWebServices\SimpleFrontend**
3. In the **Default Web Site** node, select the **SimpleFrontend** web application, and in the right pane, double-click **Authentication**. Use the following settings for the **Authentication** dialog box:
    d. Anonymous Authentication: **Disabled**
    e. ASP .NET Impersonation: **Disabled**
    f. Forms Authentication: **Disabled**
    g. Windows Authentication: **Enabled**

Test the Web Service

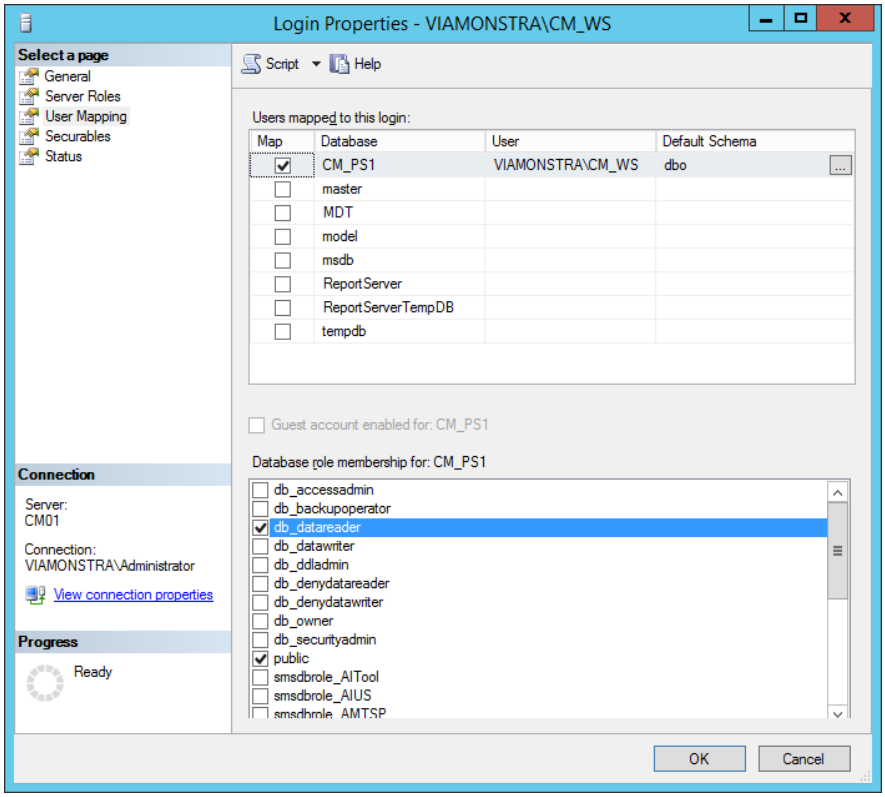
1. On **CM01**, using **Internet Explorer**, navigate to: **http://CM01/SimpleFrontend/ConfigMgr.asmx**.
2. Click the **GetOUList** link, and then click the **Invoke** button.



Listing the Active Directory OUs.

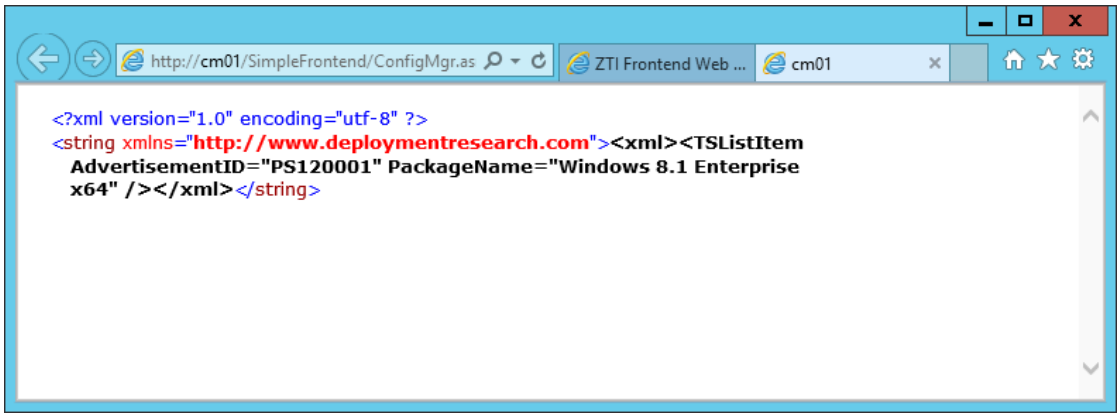
Configuration Steps for the Server Side

1. Using **SQL Management Studio**, in the top **Security** node, create a new security login in SQL for **VIAMONSTRA\CM_WS** and add the account to the following **CM_PS1** database roles:
    a. **db_datareader**
    b. **public** (selected by default)



Configuring SQL permissions for the CM_WS account.

2. Verify that the web service works by starting **Internet Explorer**, navigating to **http://cm01/SimpleFrontend/ConfigMgr.asmx**, and testing the following methods:
    - **GetOUList**
    - **GetTaskSequenceList**
    - **MoveComputerToOU**



Testing the GetTaskSequenceList method.

Create the Boot Image

In this guide I assume you have downloaded and extracted the files to D:\Setup\SimpleFrontend on CM01.

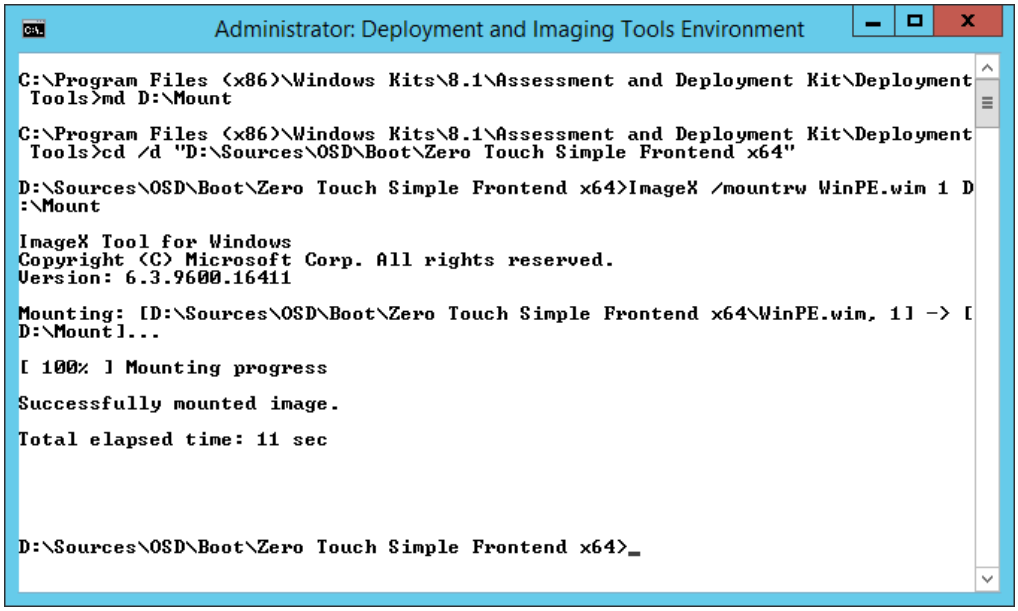
1. On **CM01**, using **Notepad**, review the **D:\Setup\SimpleFrontend\WinPE\Deploy\Scripts\Customsettings.ini** file.
2. Using the **ConfigMgr console**, in the **Software Library** workspace, expand **Operating Systems**, right-click **Boot Images**, select **Create Boot Image using MDT**, and create a new boot image package using the following settings:
    - Package source folder to be created (UNC Path): **\\CM01\Sources\OSD\Boot\Zero Touch Simple Frontend x64**

Note: This folder does not exist (yet). You have to type in the name.

    - Name: **Zero Touch Simple Frontend x64**
    - Platform: **x64**
    - Scratch Space: **<default>**
    - Optional Components: **<default>**
    - Select the **Enable command support (F8)** check box.

3. After the boot image is finished, in an elevated **Deployment and Imaging Tools** command prompt (run as Administrator), mount the boot image using the following commands (pressing **Enter** after each line):

```
md D:\Mount
cd /d "D:\Sources\OSD\Boot\Zero Touch Simple Frontend x64"
ImageX /mountrw WinPE.wim 1 D:\Mount
```

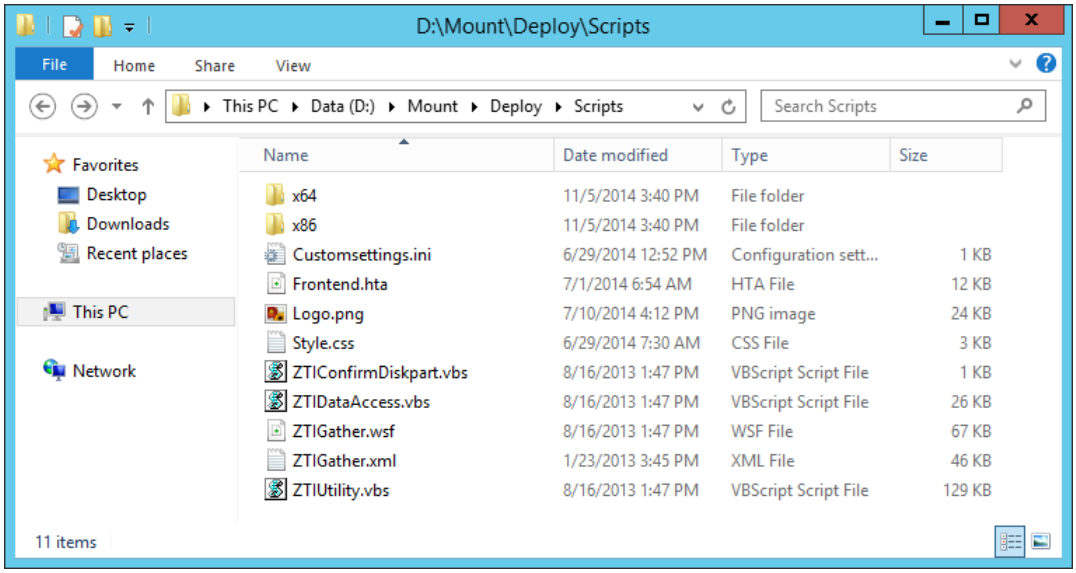


Mounting the boot image.

4. Using **File Explorer**, navigate to **D:\Setup\SimpleFrontend\WinPE** and copy the following folder and file to **D:\Mount** (replace and merge with existing files and folders):
    - **Deploy**
    - **TSConfig.ini**
5. Using **File Explorer**, navigate to **D:\Sources\OSD\MDT\MDT 2013\Scripts** and copy the following files to **D:\Mount\Deploy\Scripts**:
    - **ZTIDataAccess.vbs**
    - **ZTIGather.wsf**
    - **ZTIGather.xml**
    - **ZTIUtility.vbs**

6. Using **File Explorer**, copy the **D:\Sources\OSD\MDT\MDT 2013\Tools\x86\Microsoft.BDD.Utility.dll** file to **D:\Mount\Deploy\Scripts\x86**.

7. Using **File Explorer**, copy the **D:\Sources\OSD\MDT\MDT 2013\Tools\x64\Microsoft.BDD.Utility.dll** file to **D:\Mount\Deploy\Scripts\x64**.



The D:\Mount\Deploy\Scripts folder after copying the files.

8. Close all **File Explorer** windows.

9. In the **Deployment and Imaging Tools** command prompt, unmount the boot image using the following command:

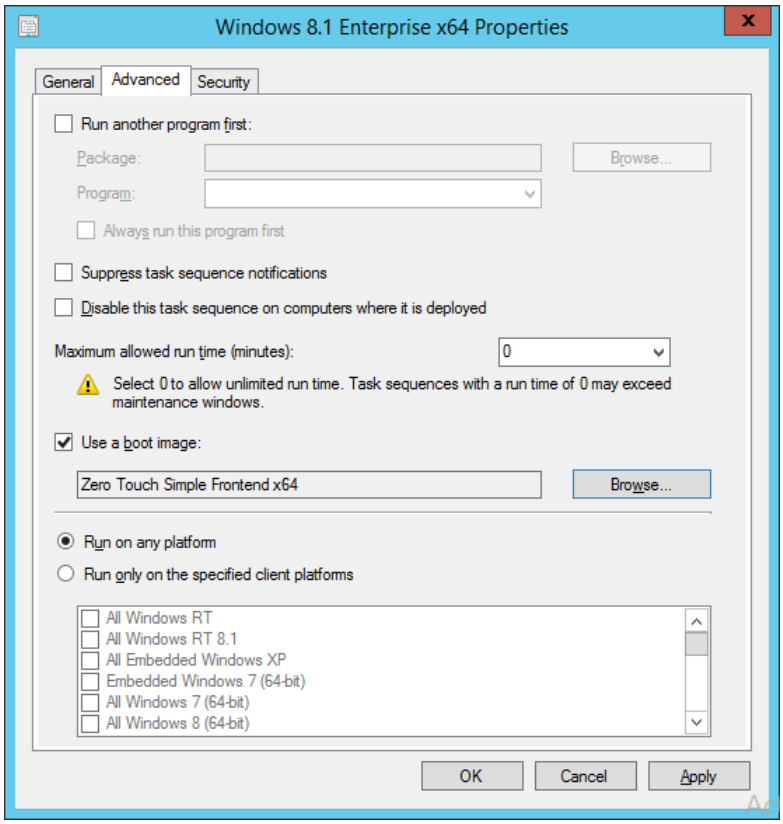
```
ImageX /unmount /commit D:\Mount
```

10. Using the **ConfigMgr console**, select the **Zero Touch Simple Frontend x64** boot image and select **Update Distribution Points** to update the boot image.

11. After updating the distribution points, distribute the **Zero Touch Simple Frontend x64** boot image to the **CM01** distribution point.

Configure the task sequence

1. Select **Task Sequences**, right-click the **Windows 8.1 Enterprise x64** task sequence and select **Properties**.
2. In the **Advanced** tab, configure the task sequence to use the **Zero Touch Simple Frontend x64** boot image.

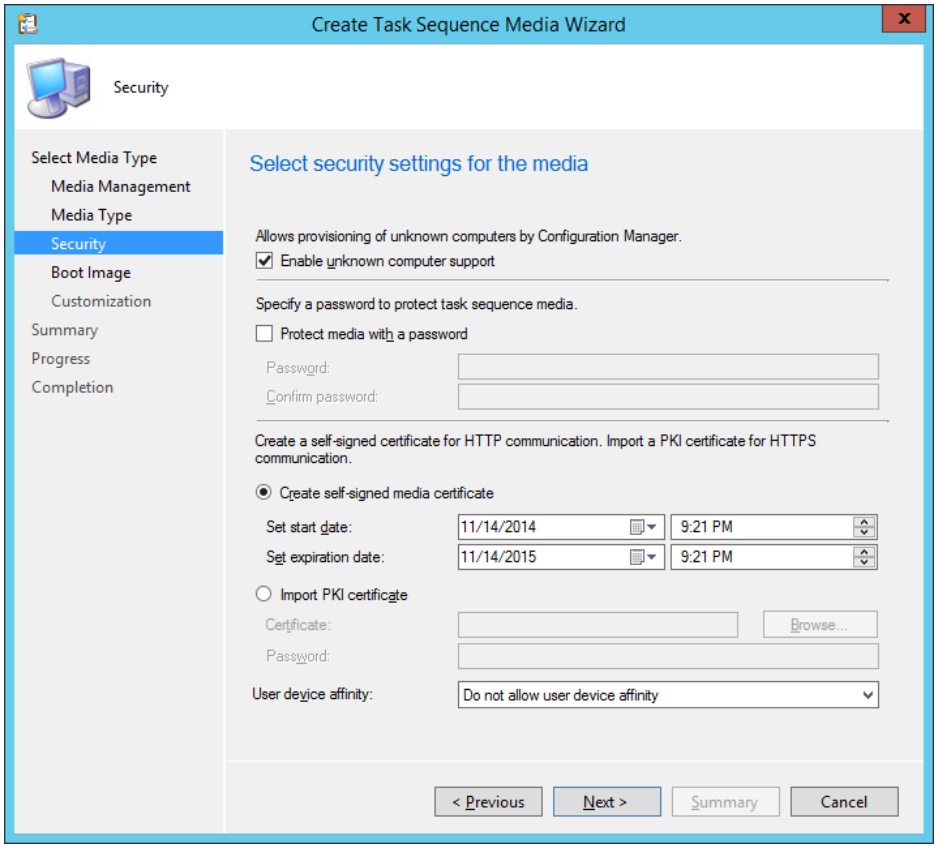


Changing the task sequence boot image.

Create the Boot Image Media

1. Right-click **Task Sequences**, and select **Create Task Sequence Media**.
2. On the **Select the type of media** page, select the **Bootable media option**, and select the **Allow unattended operating system deployment** check box. Then click **Next**.
3. On the **Select how media finds a management point** page, select the **Site-based media** option, and then click **Next**.
4. On the **Specify the media type** page, select the **CD/DVD set** option, and in the **Media File:** text box, type in **D:\Setup\CM2012 ZTI Simple Frontend.iso** and then click **Next**.

5. On the **Select security settings for the media** page, configure the following:
    a. Select the **Enable unknown computer support** check box.
    b. Clear the **Protect media with a password** check box.
    c. **Create self-signed media certificate**



The Create Task Sequence Meida Wizard.

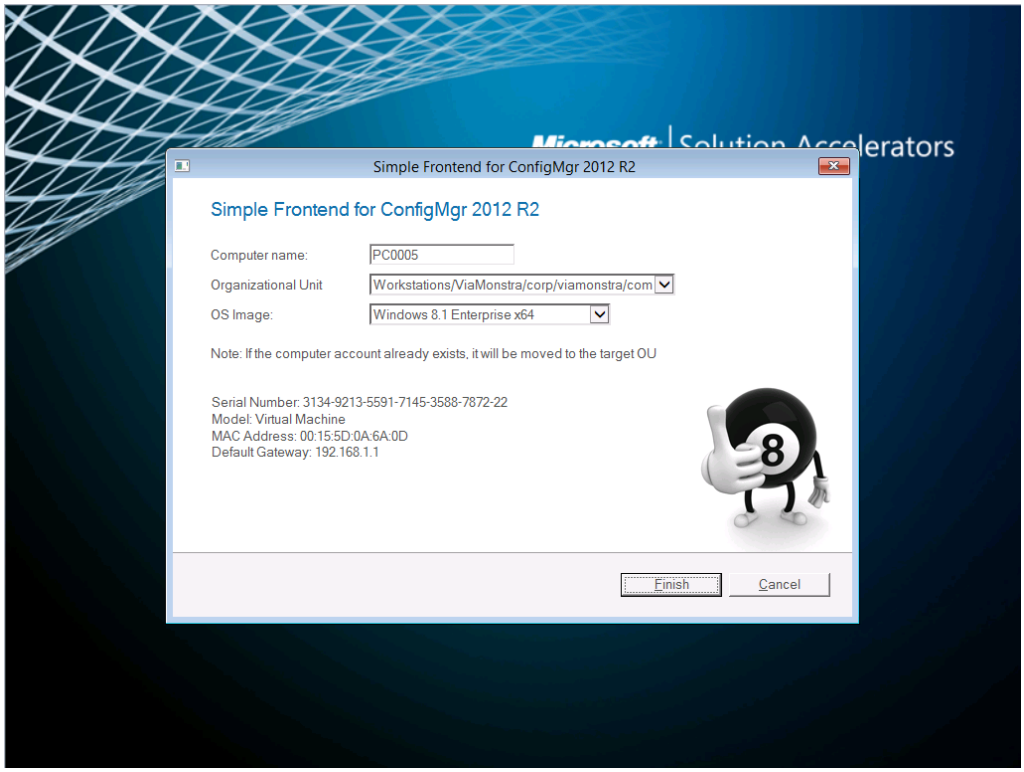
6. On the **Select the boot image for the media** page, configure the following:
    a. Boot image: **Zero Touch Simple Frontend x64**
    b. Distribution Point: **CM01.CORP.VIAMONSTRA.COM**
    c. Management Point: **CM01.corp.viamonstra.com**
7. On the **Customize the task sequence media** page, accept the default settings and click **Next** twice. Once the wizard completes, click **Close**.
8. Using **File Explorer**, copy the **D:\Setup\CM2012 ZTI Simple Frontend.iso** to **C:\ISO** on your host PC.

Deploy Windows 8.1 Using the Custom HTA

1. On the **Host PC**, create a virtual machine with the following settings:
    - Name: **PC0005**
    - Location: **C:\VMs**

- Memory: **2048 MB**
- Network: The virtual network for the New York site
- Hard disk: **60 GB**

2. Configure the **PC0005** virtual machine to use the **C:\ISO\CM2012 ZTI Simple Frontend.iso** file and start the **PC0005** virtual machine.
3. When the wizard starts, configure the following, and then click **Finish** to start the deployment:
    a. Computer name: **PC0005**
    b. Organizational Unit: **Workstations/ViaMonstra/viamonstra/com**
    c. OS Image: **Windows 8.1 Enterprise x64**



Using the Simple Frontend HTA.