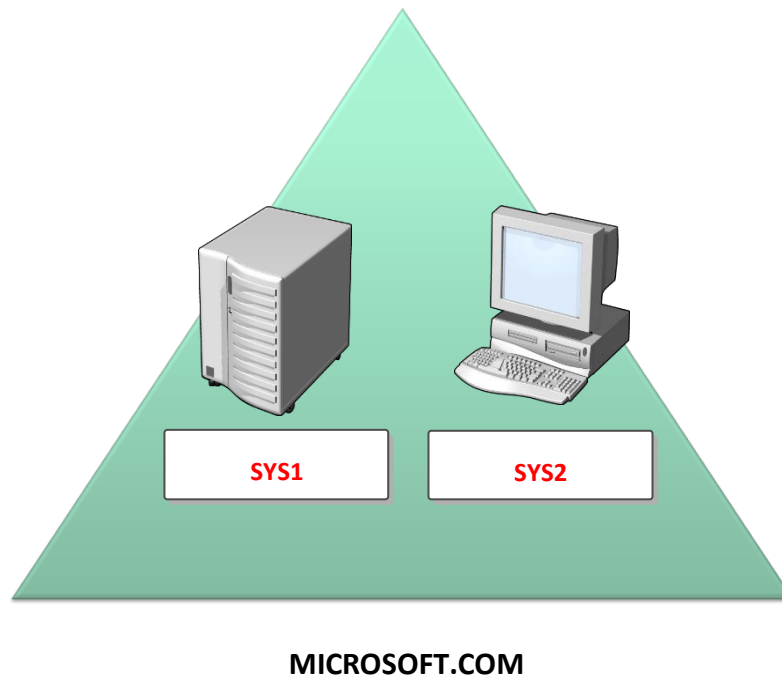


WINDOWS DEPLOYMENT SERVICES (WDS)

Prerequisites:

Before working on this lab, you must have

1. A computer running windows 2012 server Domain Controller, DHCP with Scope, DNS with Services records.
2. A computer with or without any Operating system.



SYS1

Domain Controller / WDS Server

IP Address	10.0.0.1
Subnet Mask	255.0.0.0
Preferred DNS	10.0.0.1

SYS2

WDS Client

IP Address	-----
Subnet Mask	-----
Preferred DNS	-----

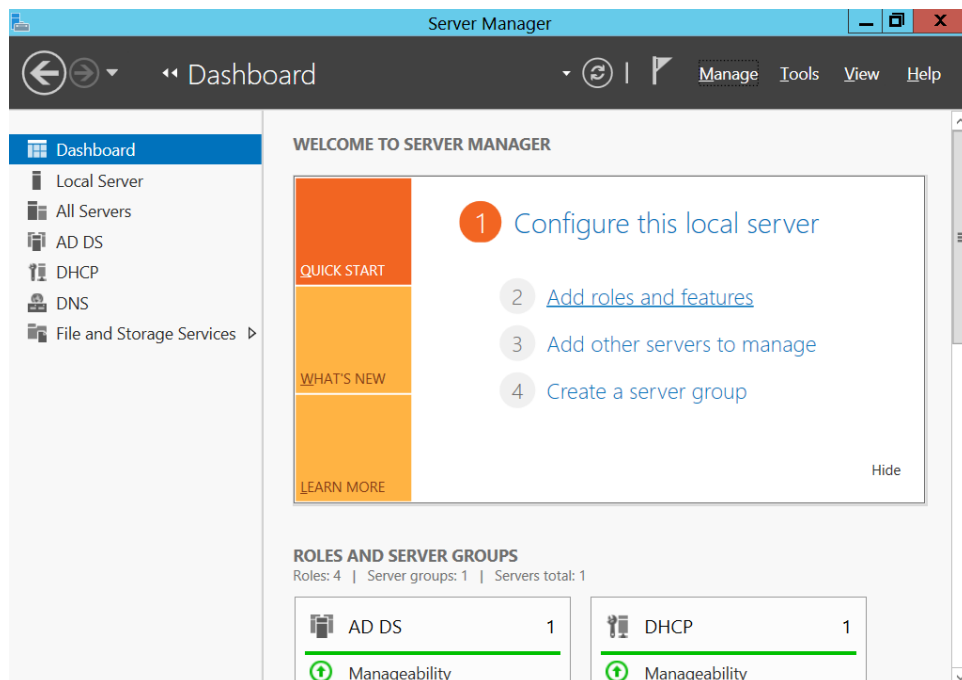
Lab – 1: Installing Windows Deployment Services

SYS1 – CONFIGURATION

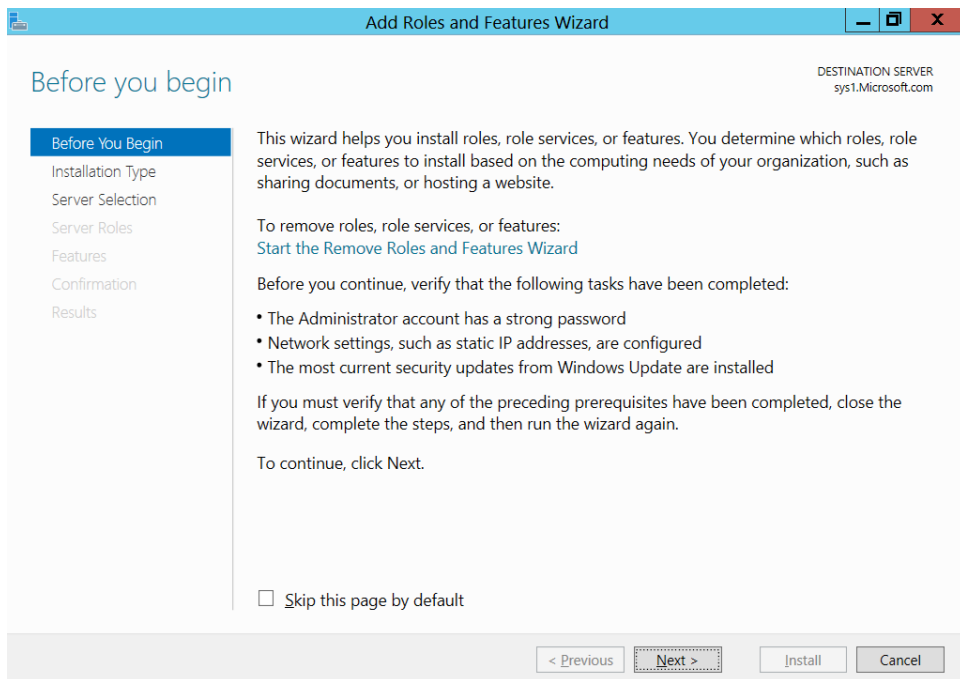
1. Go to Start, click Server Manager



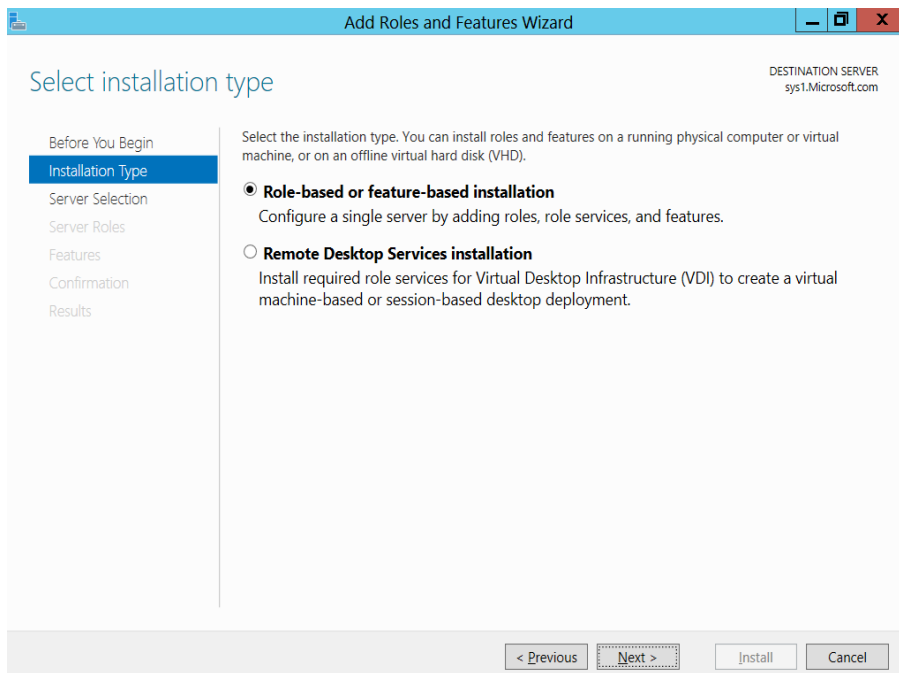
2. In the Server Manager Console, Select **Add roles and features**



3. In Before you begin page, click **Next**.



4. Select **Role-based or feature-based installation**, click **Next**.

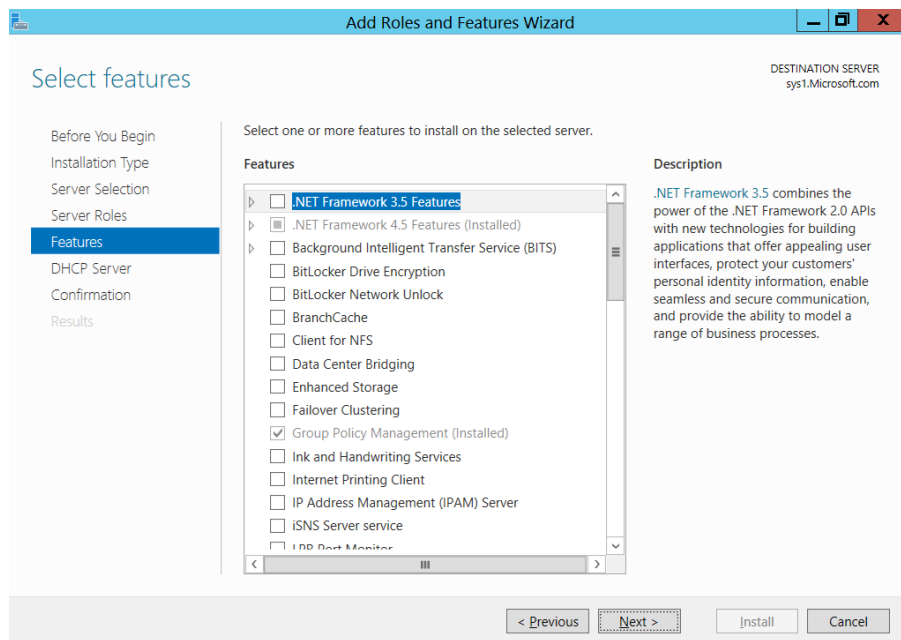
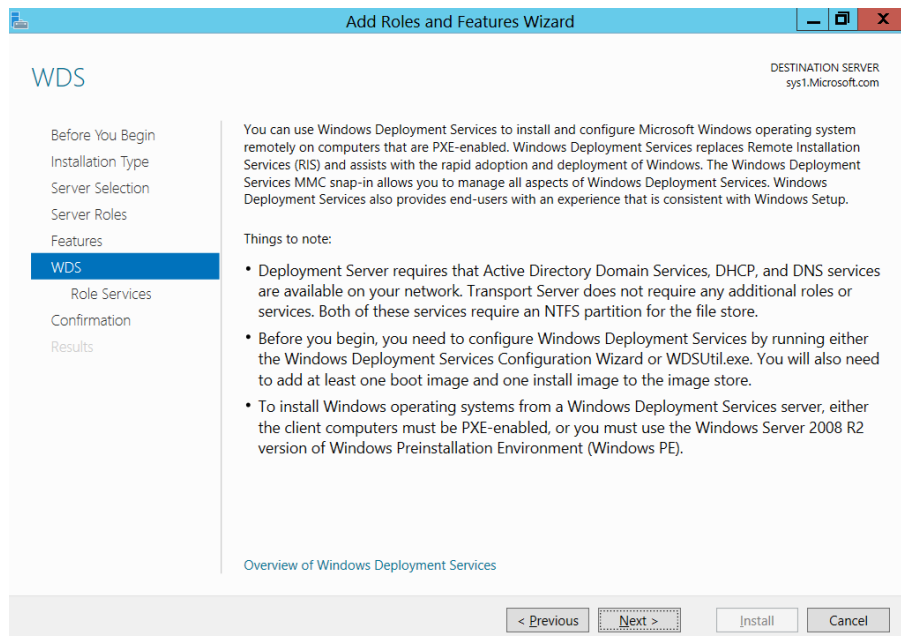


5. Select a server (**sys1.Microsoft.com**) from the server pool and click **Next**.

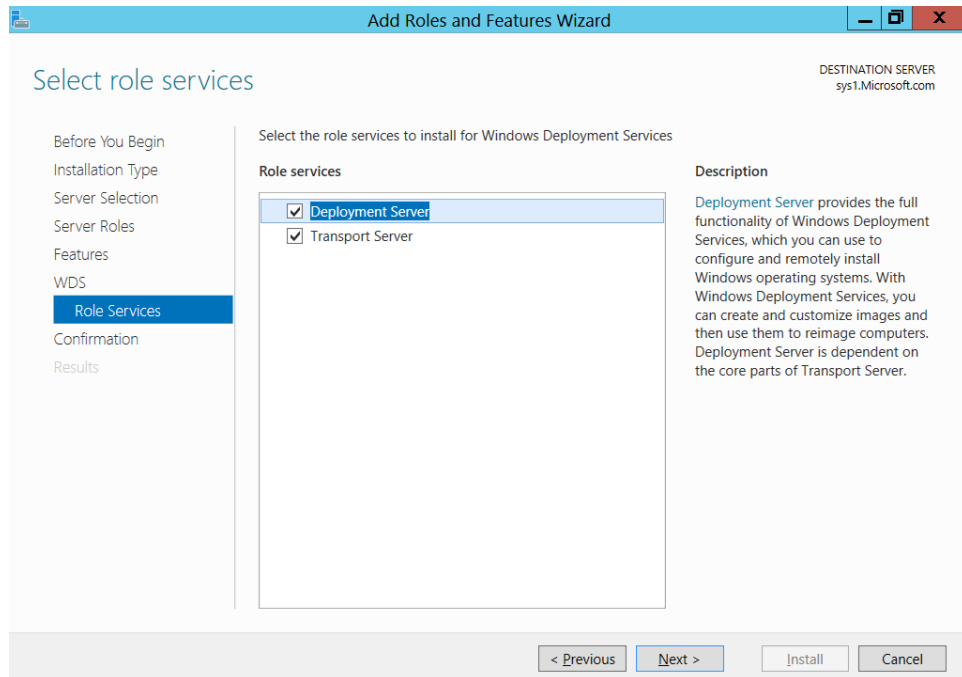
The screenshot shows the 'Add Roles and Features Wizard' window. The title bar says 'Add Roles and Features Wizard'. The main heading is 'Select destination server'. In the top right corner, it says 'DESTINATION SERVER sys1.Microsoft.com'. On the left, there is a navigation pane with the following items: 'Before You Begin', 'Installation Type', 'Server Selection' (which is highlighted), 'Server Roles', 'Features', 'Confirmation', and 'Results'. The main area contains the following text: 'Select a server or a virtual hard disk on which to install roles and features.' Below this are two radio buttons: 'Select a server from the server pool' (which is selected) and 'Select a virtual hard disk'. Below the radio buttons is a section titled 'Server Pool'. It contains a 'Filter:' text box. Below the filter is a table with the following columns: 'Name', 'IP Address', and 'Operating System'. The table has one row: 'sys1.Microsoft.com', '10.0.0.1', and 'Microsoft Windows Server 2012 Standard Evaluation'. Below the table, it says '1 Computer(s) found'. Below that, it says 'This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.' At the bottom, there are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

6. In select server roles, check the box **Windows Deployment Services**, click **Next**.

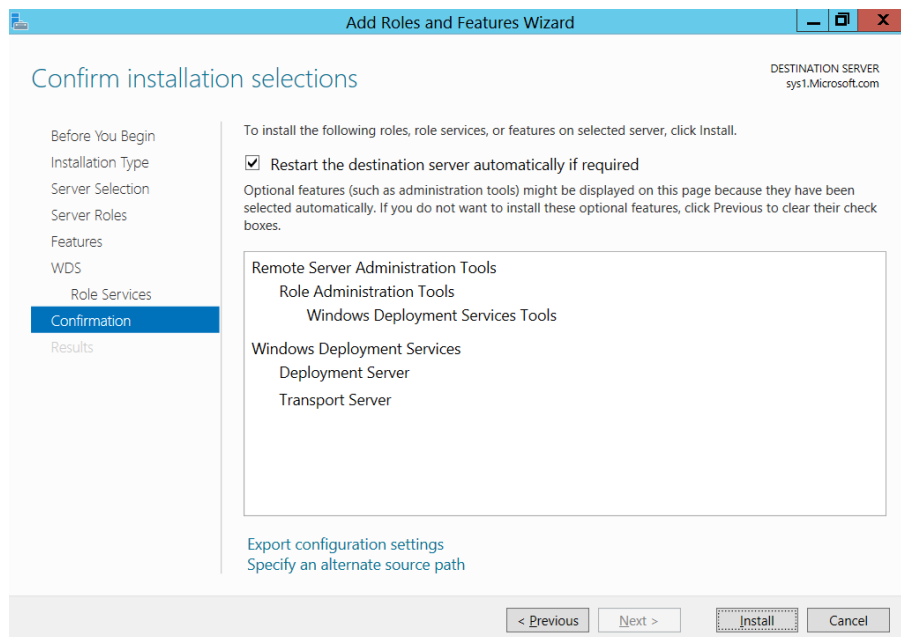
The screenshot shows the 'Add Roles and Features Wizard' window. The title bar says 'Add Roles and Features Wizard'. The main heading is 'Select server roles'. In the top right corner, it says 'DESTINATION SERVER sys1.Microsoft.com'. On the left, there is a navigation pane with the following items: 'Before You Begin', 'Installation Type', 'Server Selection', 'Server Roles' (which is highlighted), 'Features', 'WDS', 'Role Services', 'Confirmation', and 'Results'. The main area contains the following text: 'Select one or more roles to install on the selected server.' Below this is a section titled 'Roles'. It contains a list of roles with checkboxes: 'Active Directory Lightweight Directory Services', 'Active Directory Rights Management Services', 'Application Server', 'DHCP Server (Installed)' (checked), 'DNS Server (Installed)' (checked), 'Fax Server', 'File And Storage Services (Installed)' (checked), 'Hyper-V', 'Network Policy and Access Services', 'Print and Document Services', 'Remote Access', 'Remote Desktop Services', 'Volume Activation Services', 'Web Server (IIS)', 'Windows Deployment Services' (checked), and 'Windows Server Update Services'. To the right of the list is a 'Description' section. It says 'Windows Deployment Services provides a simplified, secure means of rapidly and remotely deploying Windows operating systems to computers over the network.' At the bottom, there are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

7. In select features, click **Next**.8. Click **Next**.

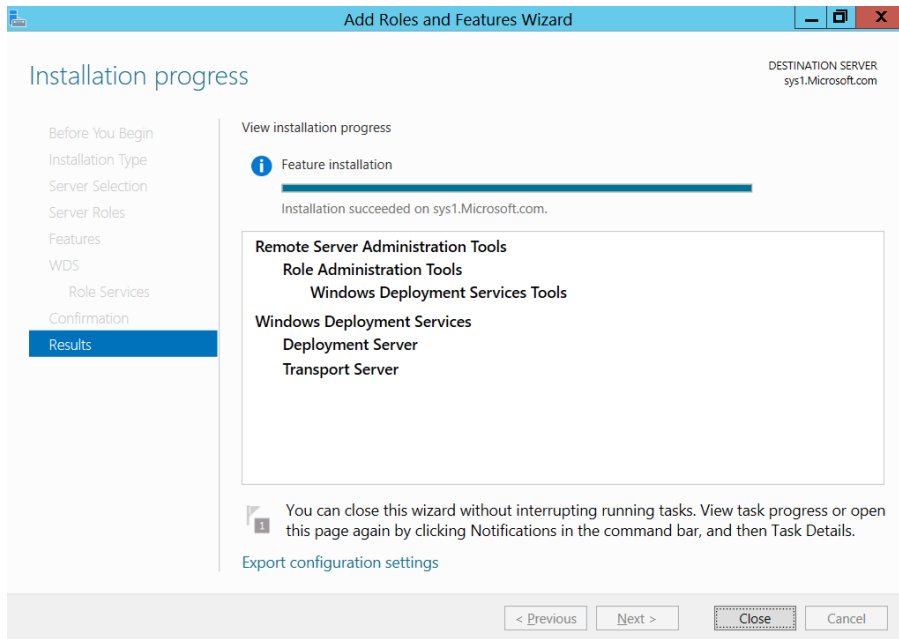
9. In Select role services, Deployment and Transport Server is selected, click **Next**.



10. Check Restart the destination server automatically if required and click **Install**.



11. Click Close to complete the Installation.



Note: SYS1 – CONFIGURATION

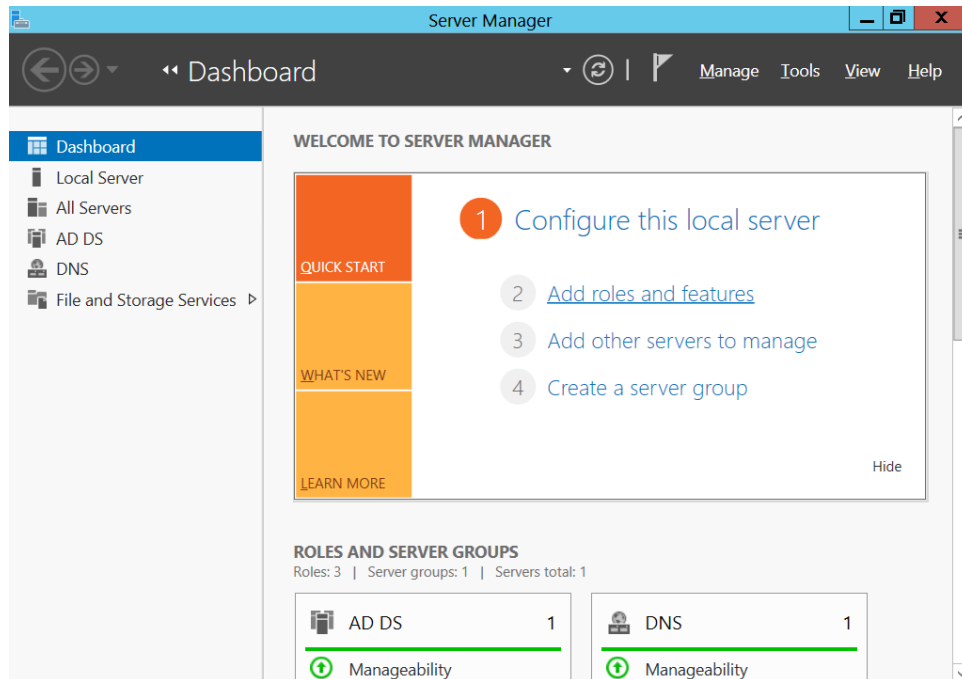
Install the DHCP Service (If not installed) and create a scope in the DHCP.

Give the range (10.0.0.10 – 10.0.0.100), and in the DHCP scope options mention the Domain name (Microsoft.com) and mention the DNS server IP address (10.0.0.1).

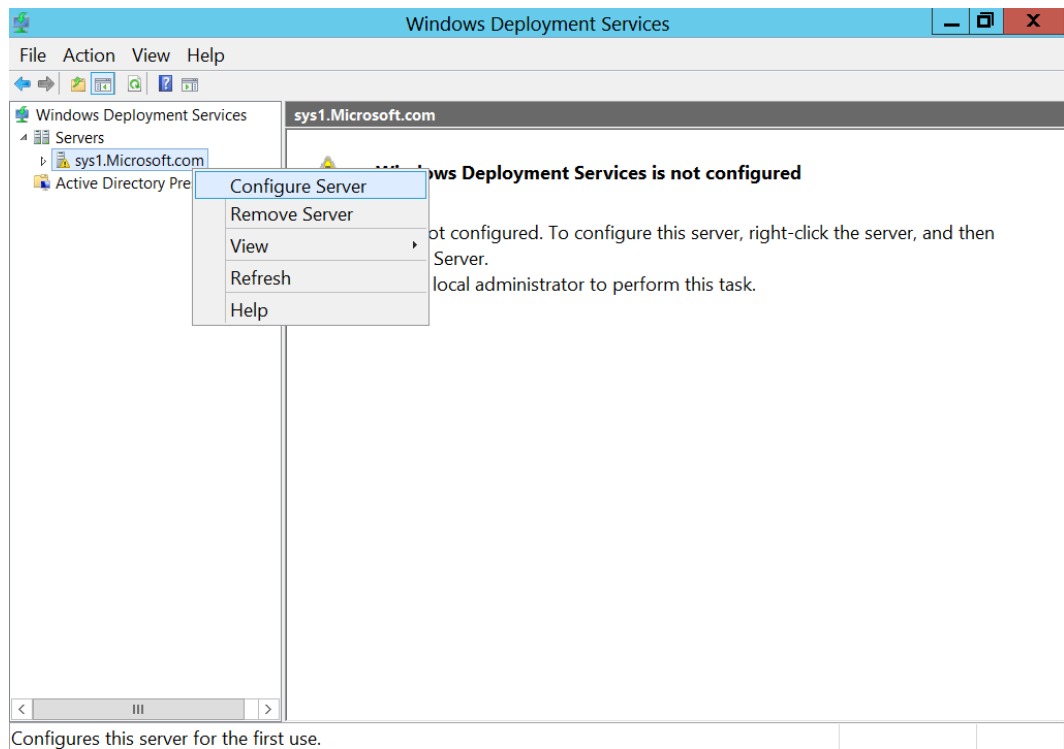
Lab – 2: Configuring Windows Deployment Services

SYS1 – CONFIGURATION

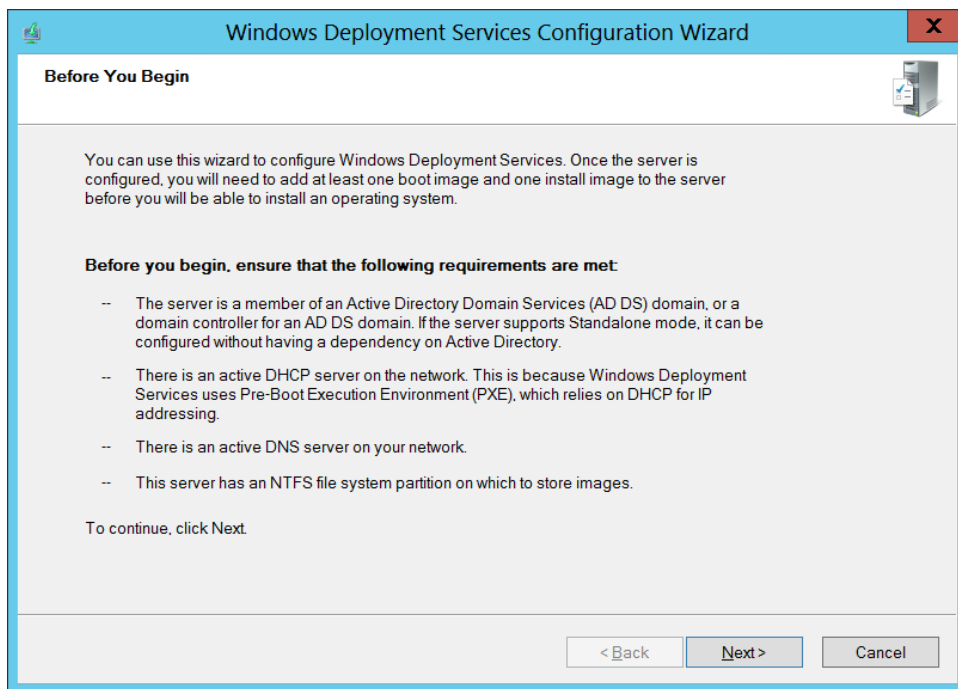
1. Go to Start, select Windows Deployment Services.



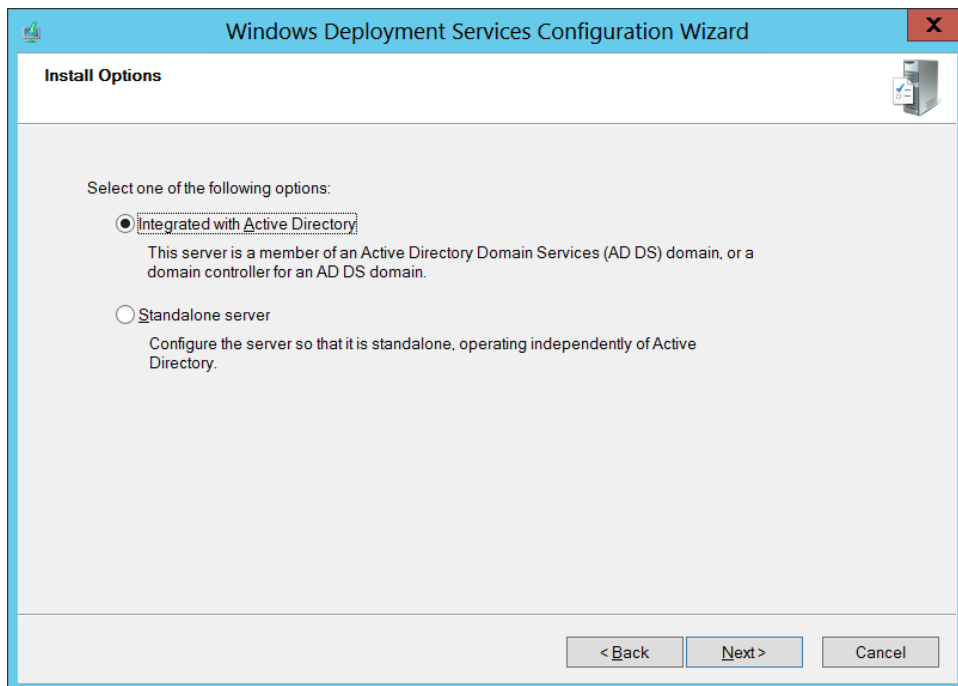
2. Right click **Server Name**, Select **Configure Server**.



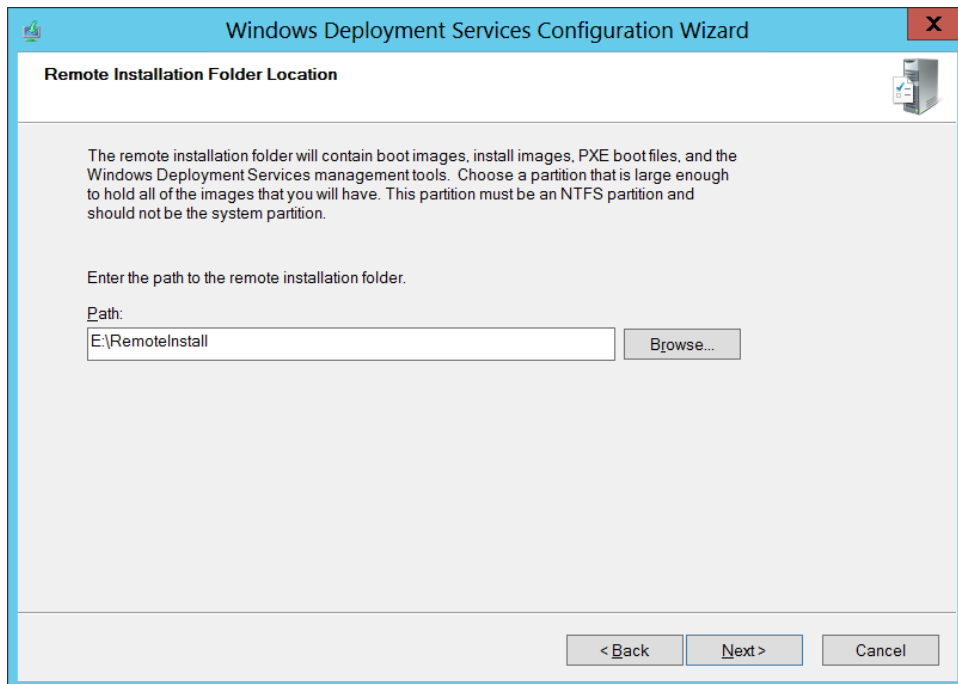
3. In Before You Begin Page, click **Next**.



4. In Install Options, in Domain Model select **Integrated with Active Directory**, click **Next**.

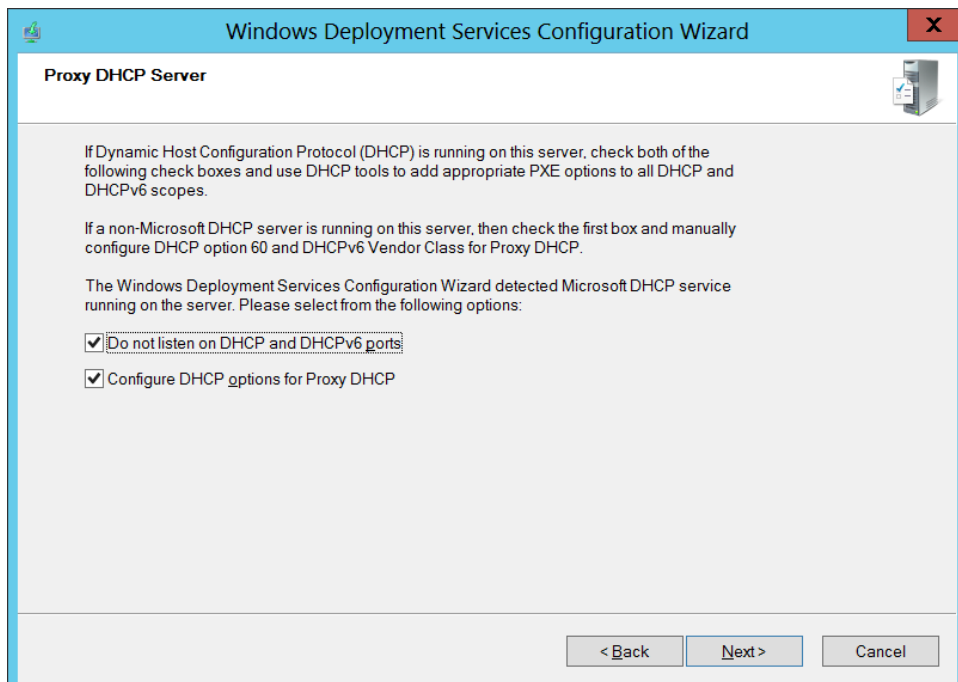


5. Browse and select any empty drive to store **Image Folder** (or) change the Drive letter click **Next**.

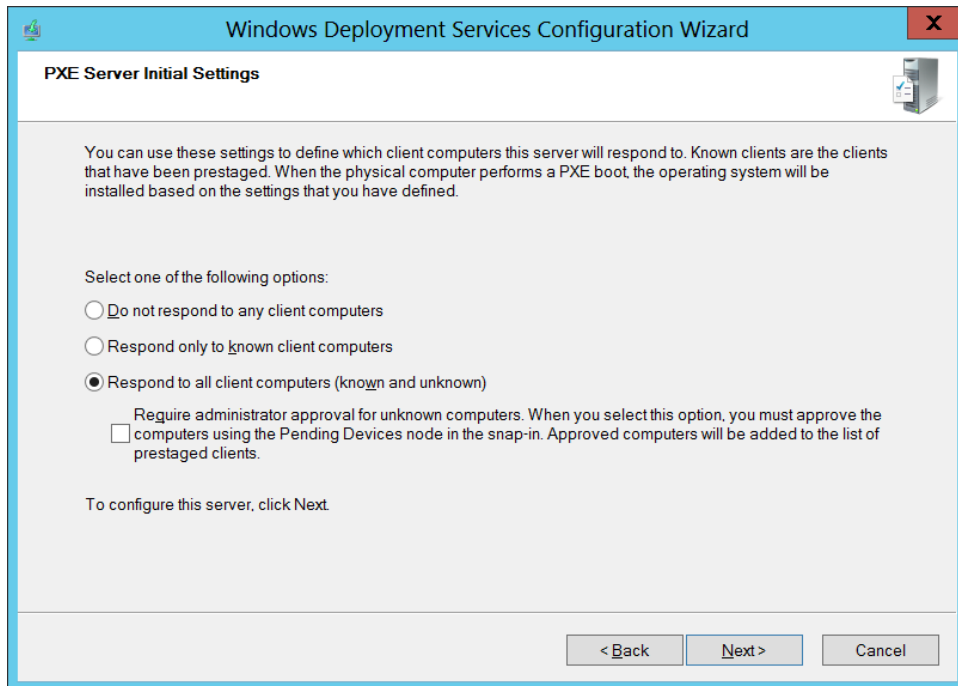


Note: If the WDS server is a DHCP server also then one more wizard will be displayed indicating that the WDS service should not listen on port 67.

So, we have to check the boxes, **Do not listen on port 67** and **Configure DHCP option tag 60 in all DHCP scope options to PXE Client**.



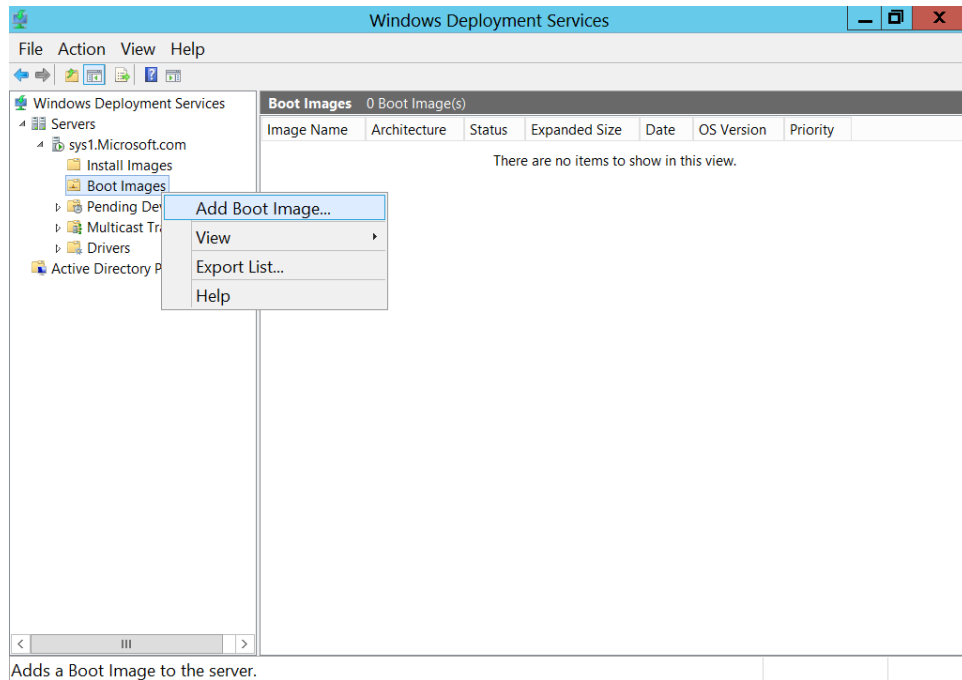
6. Select **Respond to all Known and Unknown Client Computers**, and click **Next**.



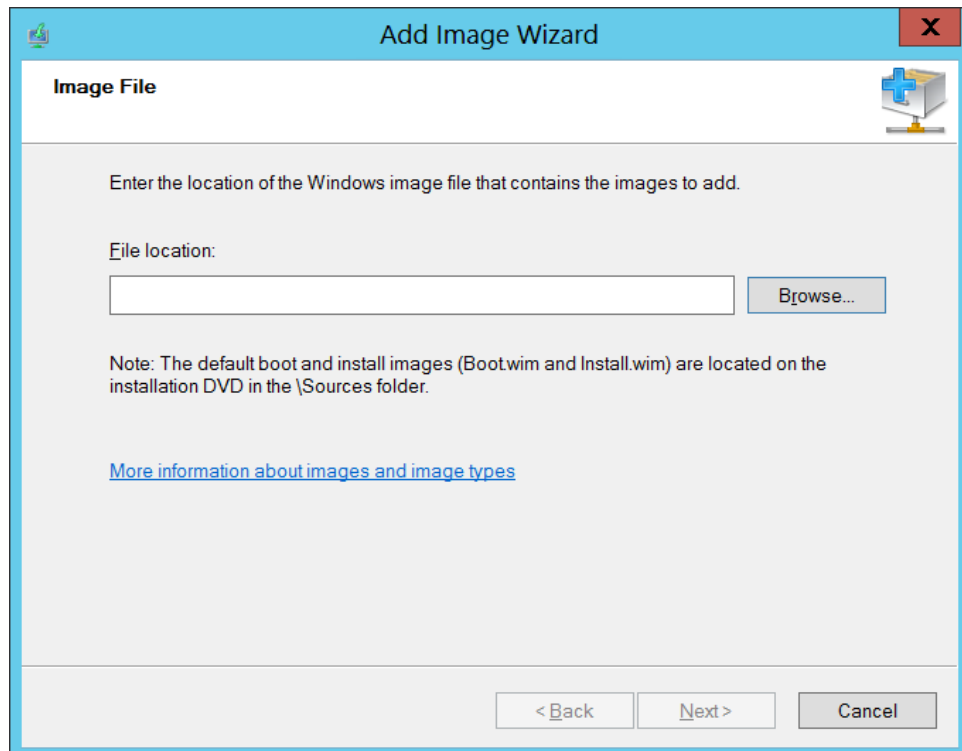
7. Wizard will Configure the **WDS Server**
8. Uncheck the box **Add Images** to Windows Deployment Server now, and click **Finish**.
9. **WDS** Server Service Configured Successfully and started.

Lab – 3: Adding Windows 2012 Boot Image to WDS Server

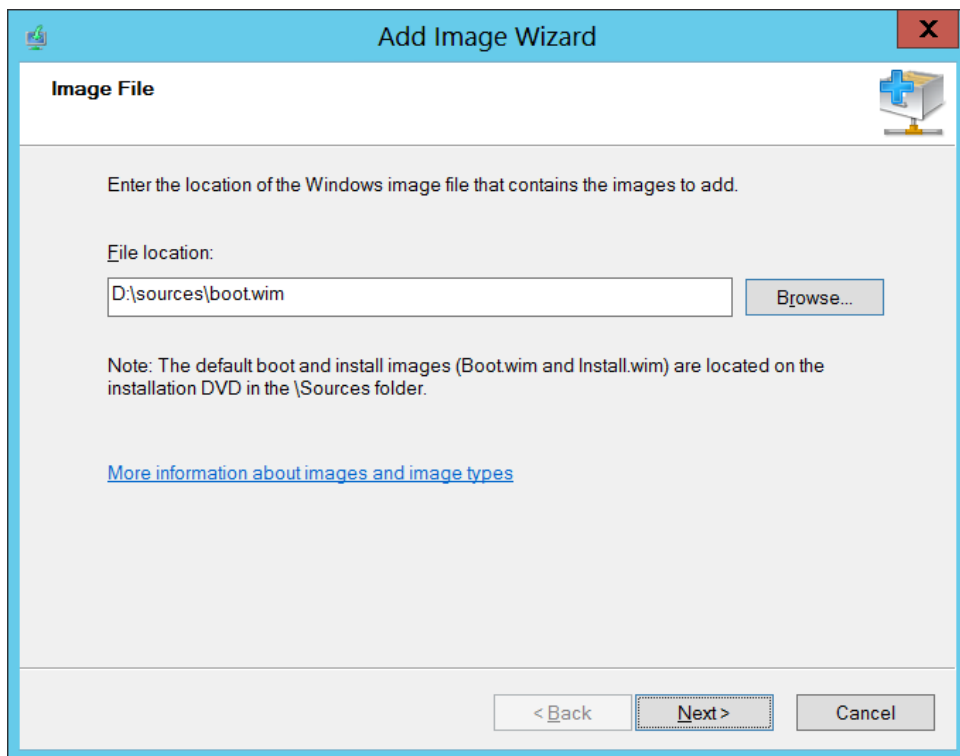
1. Right click Boot Images Select **Add Boot Image**.



2. Browse and Select **boot.wim** file from 2012 OS DVD (Ex: D:\Sources\boot.wim)

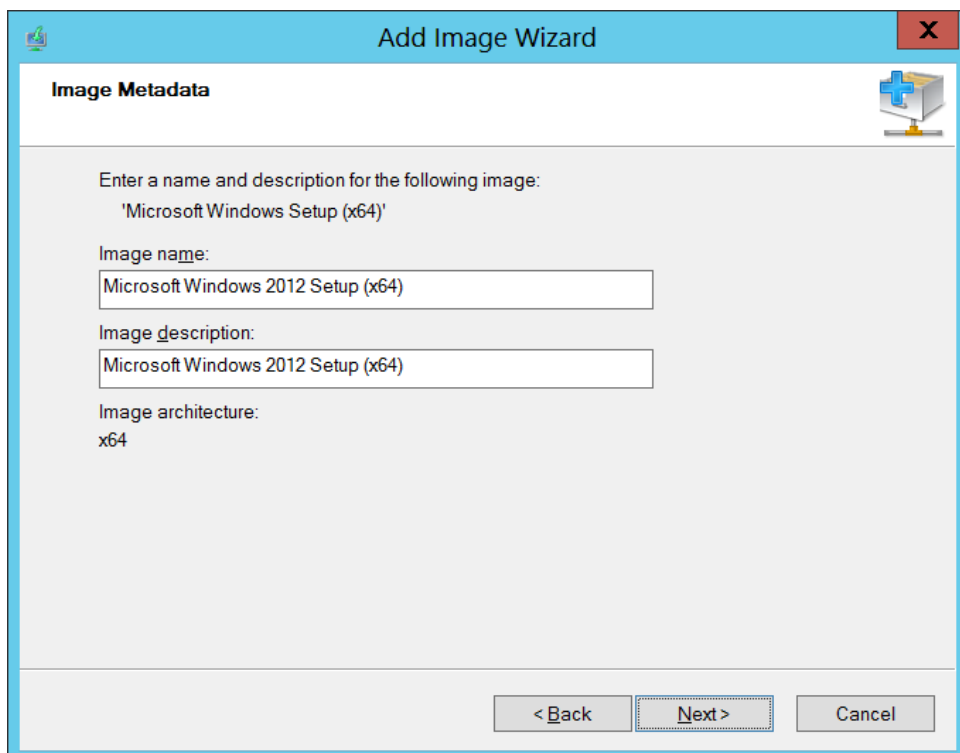


3. Click **Next**.



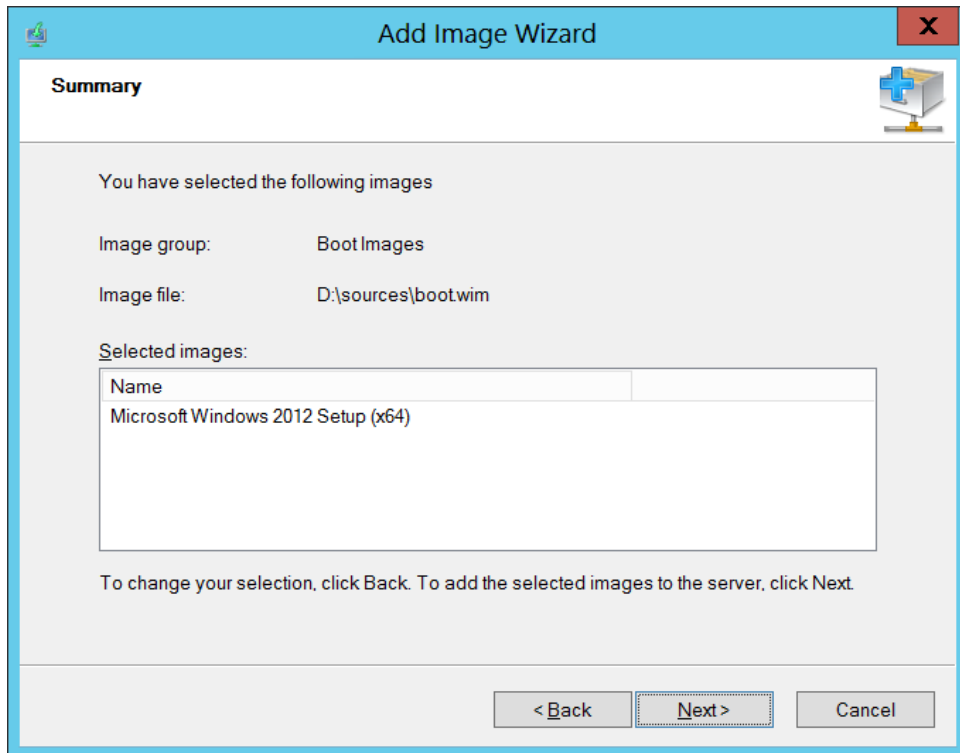
The screenshot shows the 'Add Image Wizard' window with the 'Image File' step selected. The window has a blue title bar with the text 'Add Image Wizard' and a close button (X). The main area is titled 'Image File' and contains the following text: 'Enter the location of the Windows image file that contains the images to add.' Below this is a 'File location:' label followed by a text box containing 'D:\sources\bootwim' and a 'Browse...' button. A note states: 'Note: The default boot and install images (Bootwim and Install.wim) are located on the installation DVD in the \Sources folder.' Below the note is a blue hyperlink: 'More information about images and image types'. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

4. Give Name to image Ex: **Windows Server 2012**.

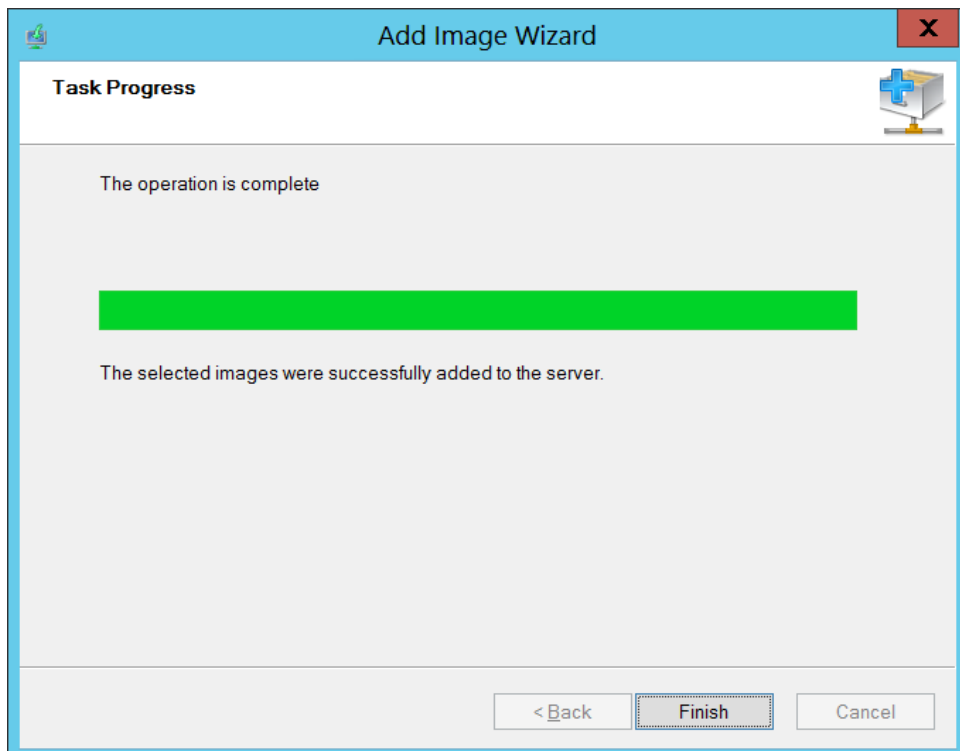


The screenshot shows the 'Add Image Wizard' window with the 'Image Metadata' step selected. The window has a blue title bar with the text 'Add Image Wizard' and a close button (X). The main area is titled 'Image Metadata' and contains the following text: 'Enter a name and description for the following image:' followed by the text 'Microsoft Windows Setup (x64)'. Below this are three labels: 'Image name:', 'Image description:', and 'Image architecture:'. The 'Image name:' and 'Image description:' labels are followed by text boxes containing 'Microsoft Windows 2012 Setup (x64)'. The 'Image architecture:' label is followed by the text 'x64'. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

5. Click **Next**.

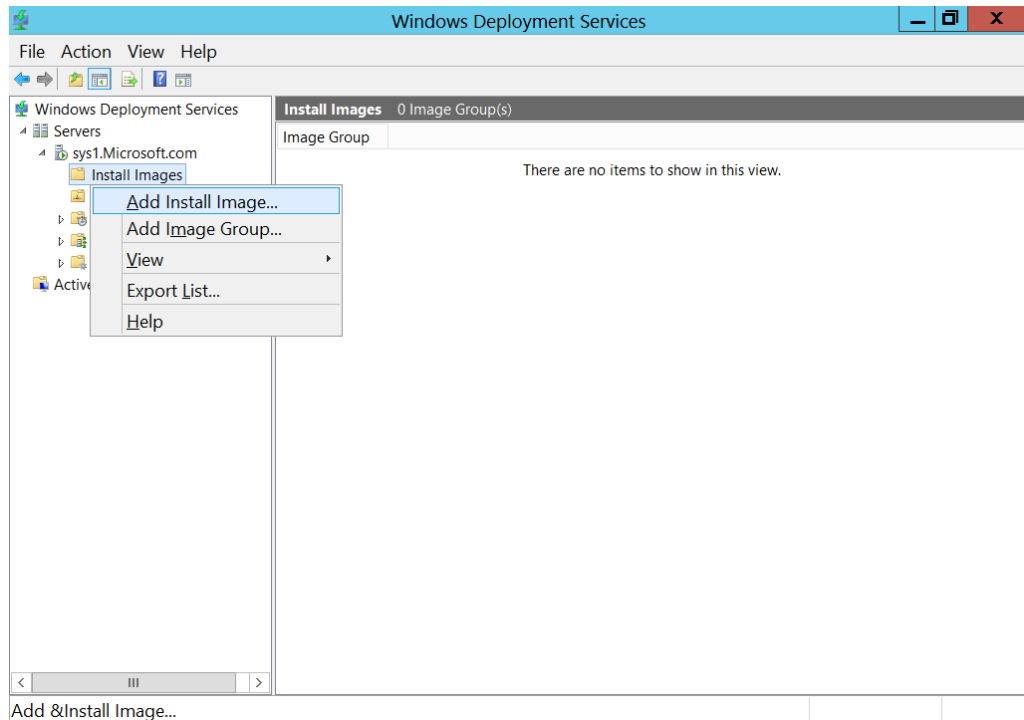


6. Image will be added → click **Finish**.

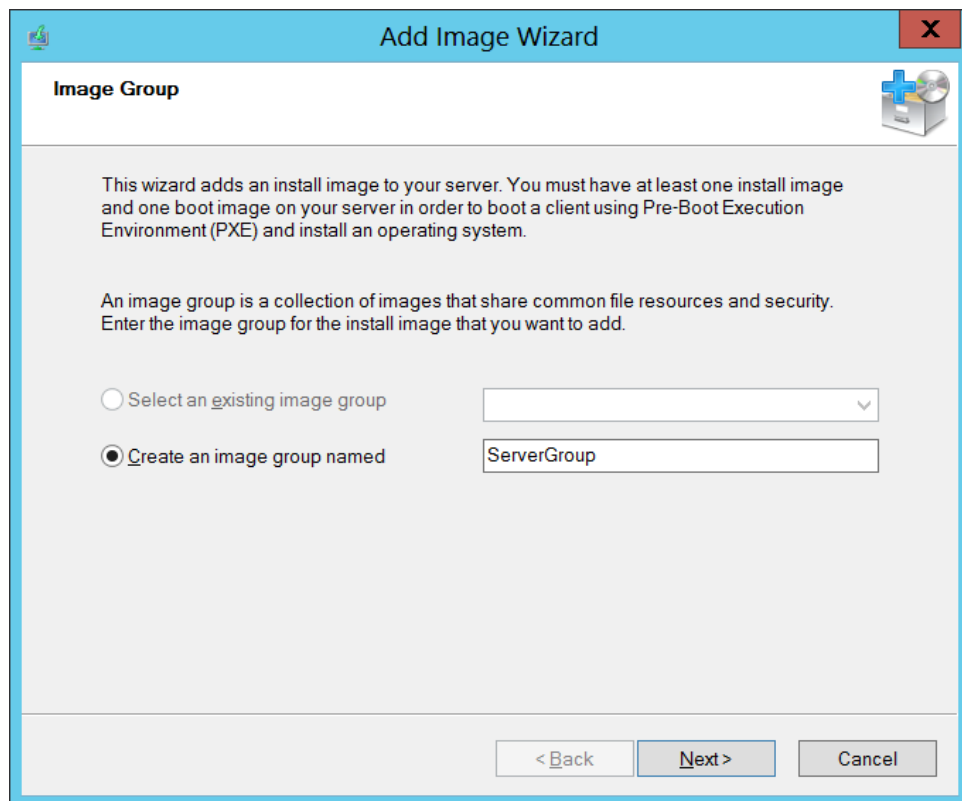


Lab – 4: Adding Windows2012 Install Image to WDS Server

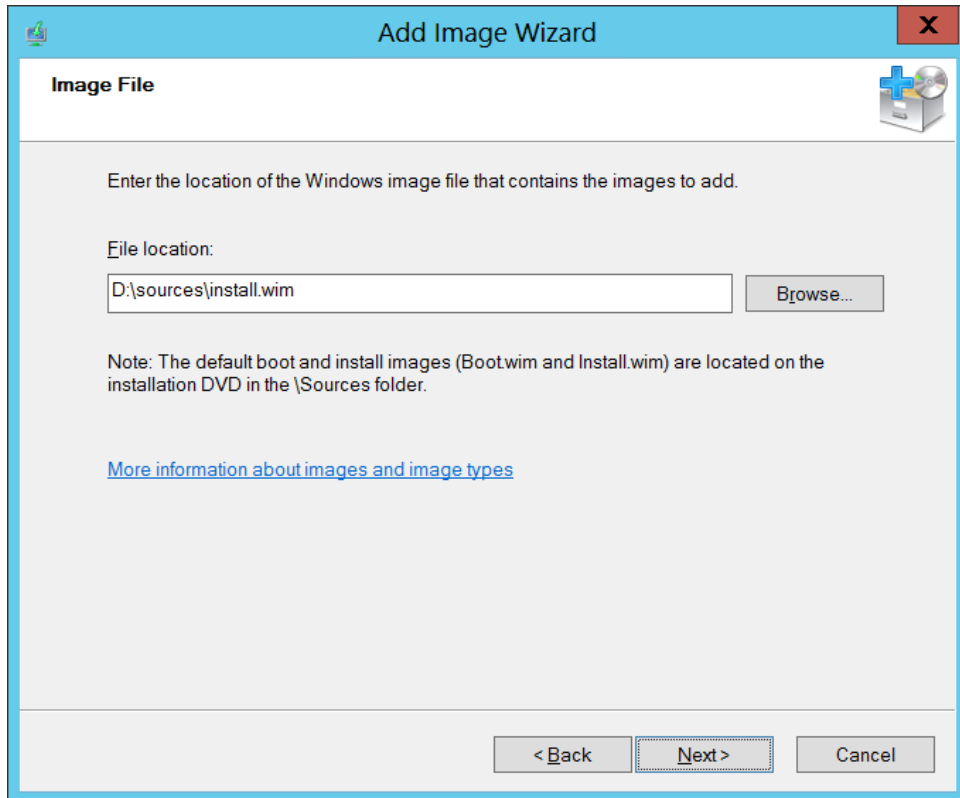
1. Right click Install Images Select **Add Install Image**.



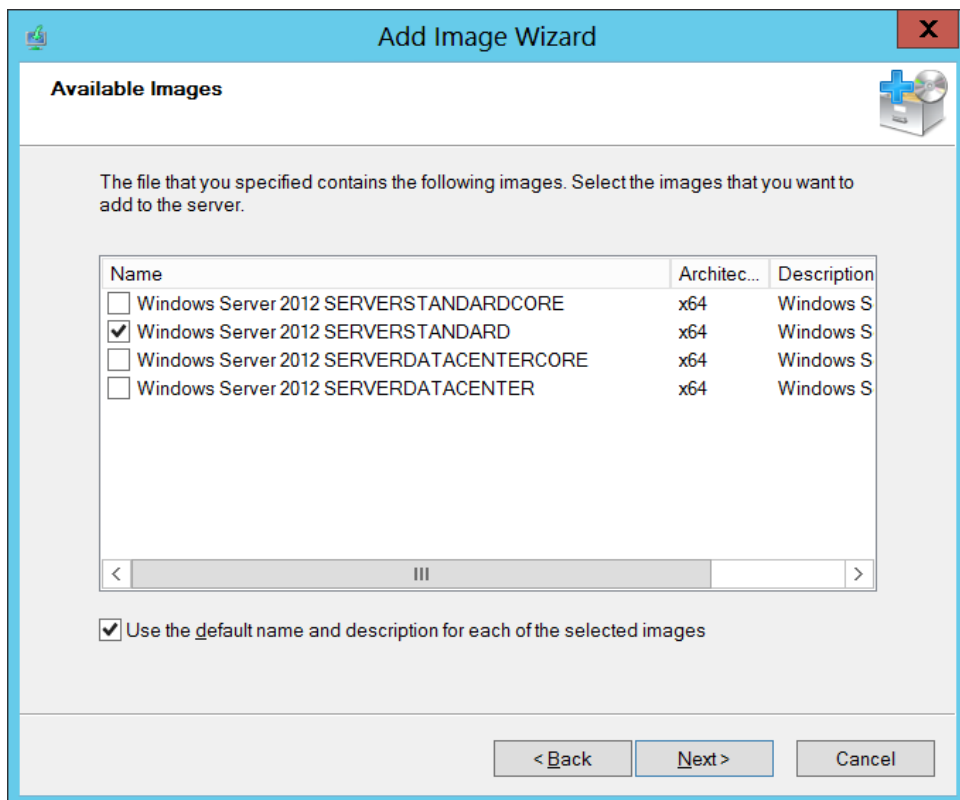
2. Give Name to Image Group Ex: **Server Group** and click **Next**.

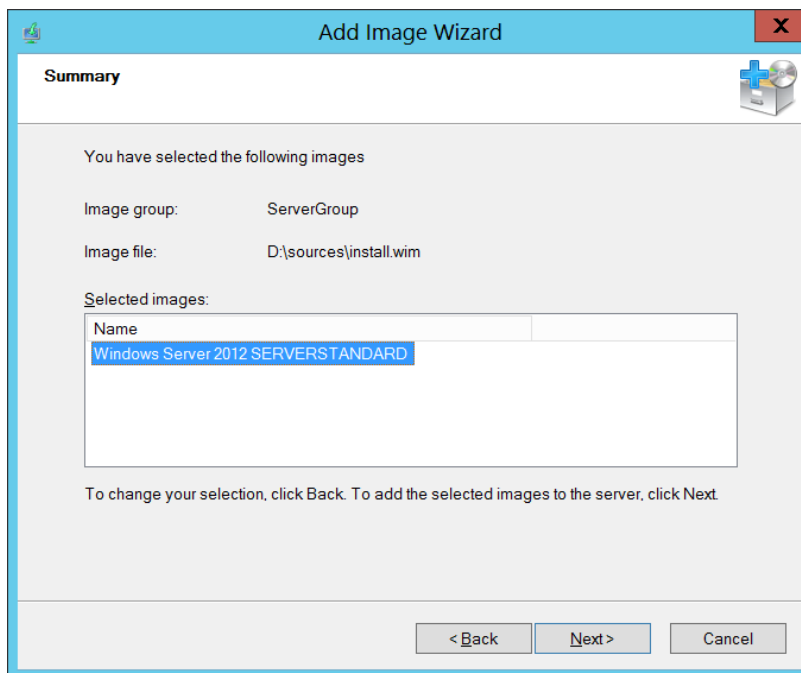
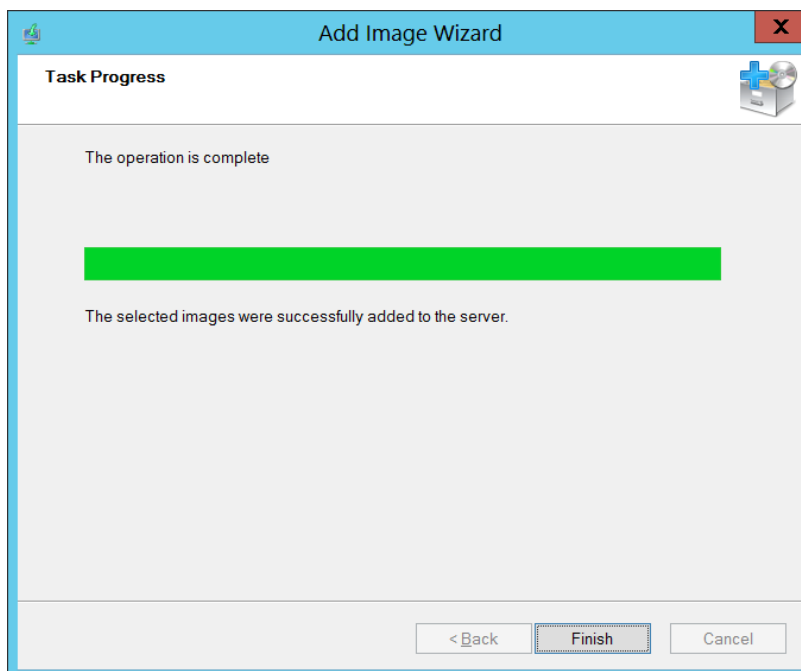


- Browse and select **Install.wim** file from 2012 OS DVD (Ex: **D:\Sources\install.wim**)
→ click **Next**.



- Select **Windows Server 2012 STANTARD** and click **Next**.



5. Click **Next**6. Click **Finish**.**Verification:**

1. Boot the **Client system** with **PXE NIC Card**
2. Press **F12 key** when prompted to start the **Installation**.
3. Then mention the **Administrator** Credential.
4. Select the Operating System which you want to install.
5. Select the Partition to install the O.S and follow the instructions.