



CS2000 – Laboratory 02

**Install and Configure DNS, FTP and Web Server on
Windows Server 2019**



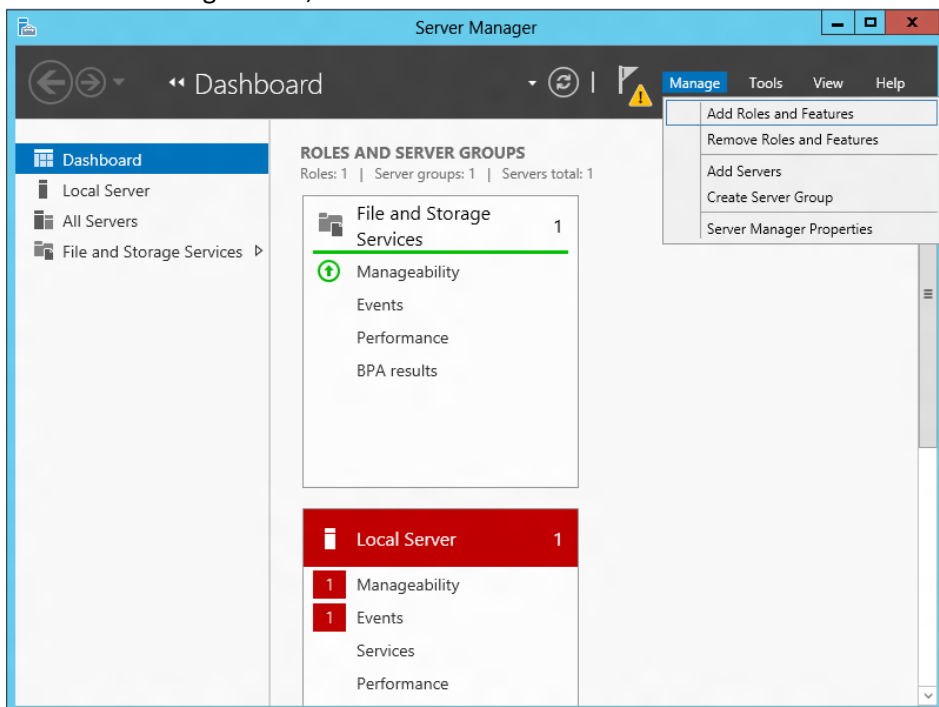
Introduction

Today you will be installing and configuring IIS, FTP and DNS on Windows Server 2019.

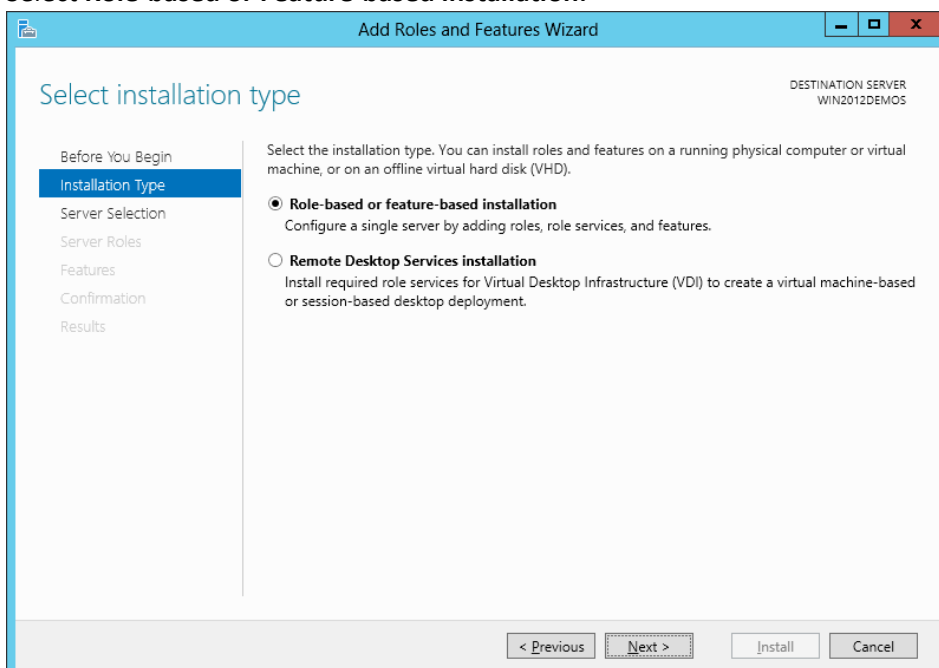
The Web Server (IIS) role in Windows Server 2019 provides a secure, easy-to-manage, modular and extensible platform for reliably hosting websites, services, and applications. With IIS 8 you can share information with users on the Internet, an intranet, or an extranet. IIS 8 is a unified web platform that integrates IIS, ASP.NET, FTP services, PHP, and Windows Communication Foundation (WCF).

Task 1 - Installing IIS 8 on Windows Server 2019

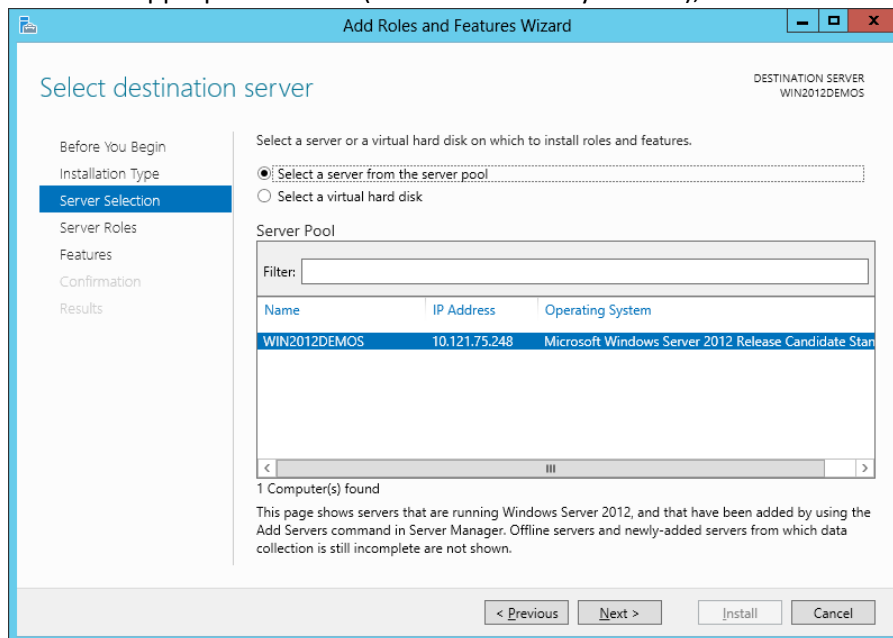
1. Open Server Manager
2. Under the Manage menu, select **Add Roles and Features**:



3. Select **Role-based or Feature-based installation**:

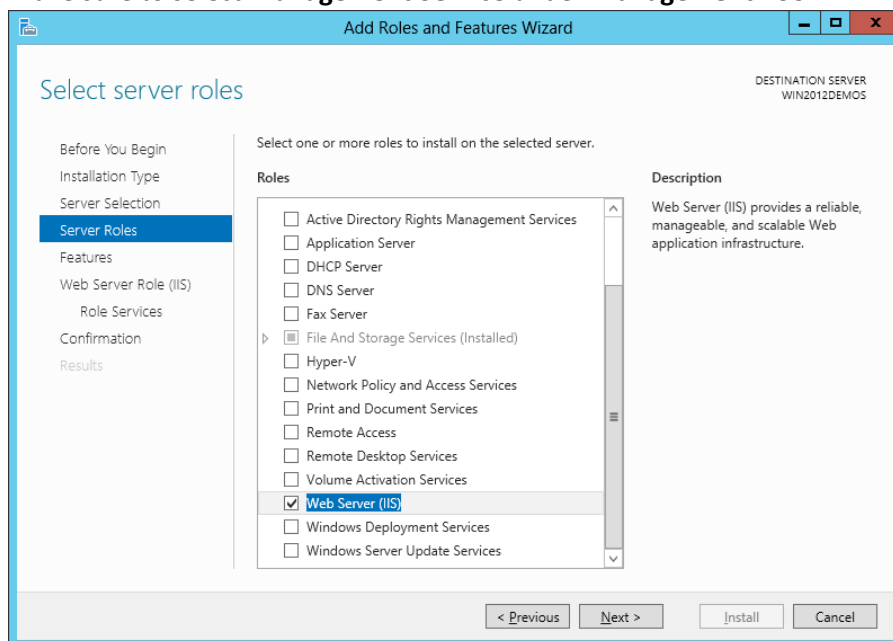


4. Select the appropriate server (local is selected by default), as shown below:

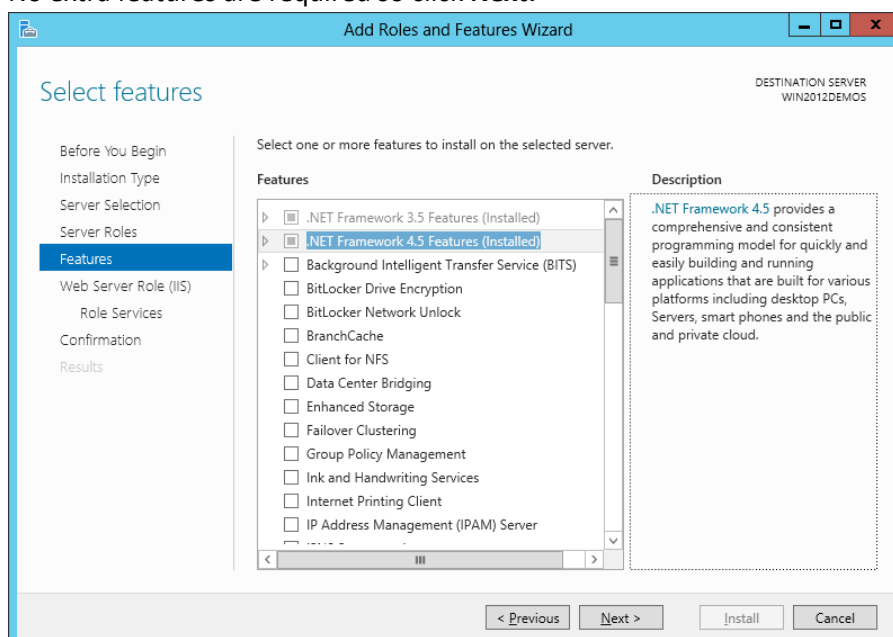


5. Select **Web Server (IIS)**

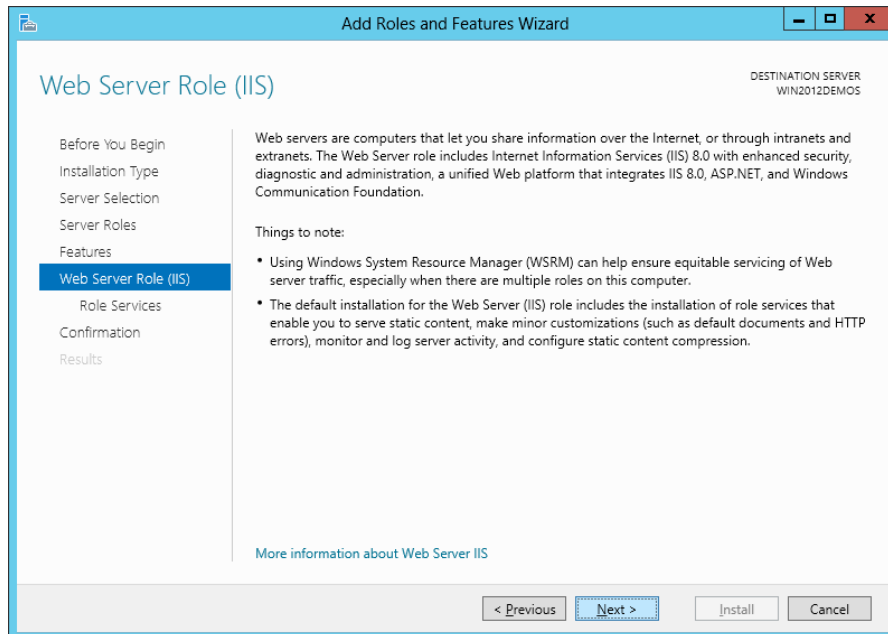
6. Make sure to select **Management Service** under **Management Tool**



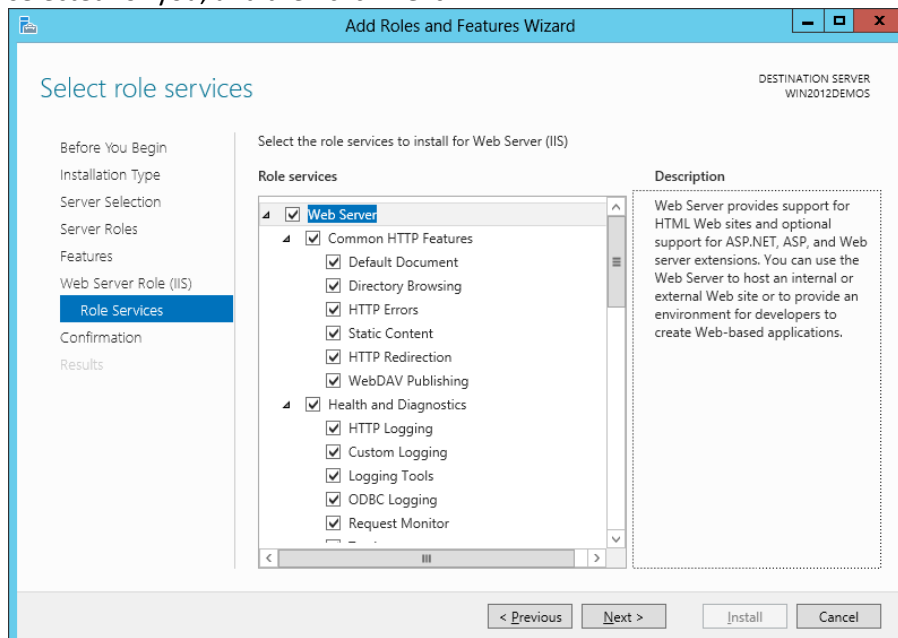
7. No extra features are required so click **Next**:



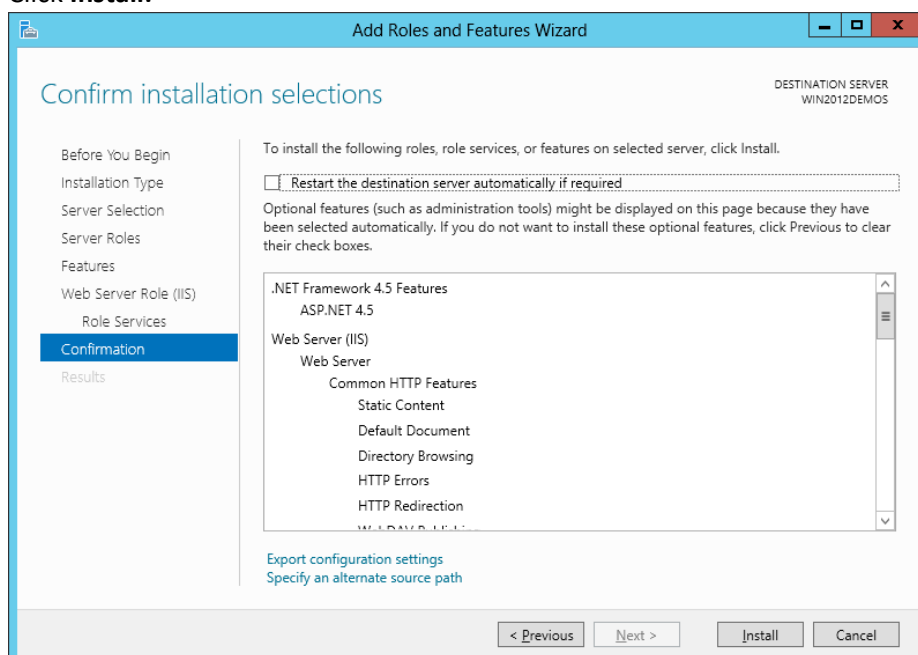
8. Click **Next**:



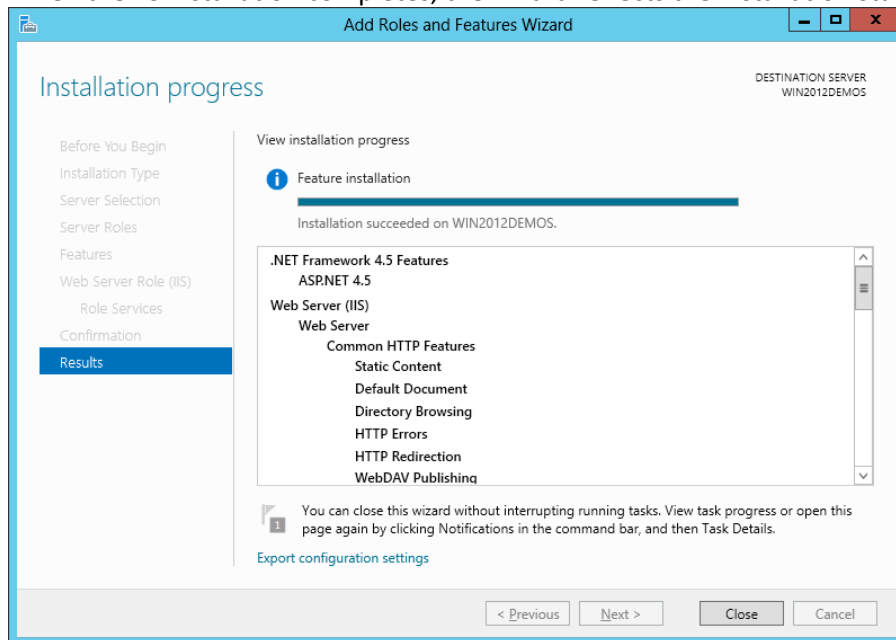
9. Customize your installation of IIS, or accept the default settings that have already been selected for you, and then click **Next**:



10. Click **Install**:



11. When the IIS installation completes, the wizard reflects the installation status:



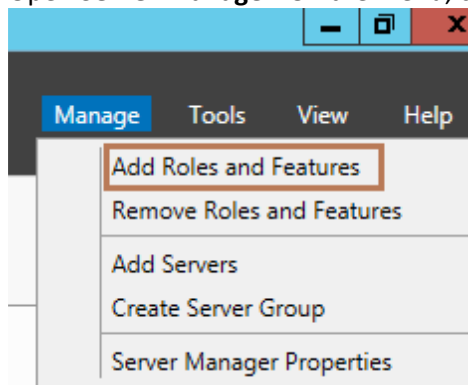
12. Open a web browser on the host machine (Windows 10) and enter the server IP address.

Bonus Question: Where is the main page of the web server on Windows Server 2019 is located?

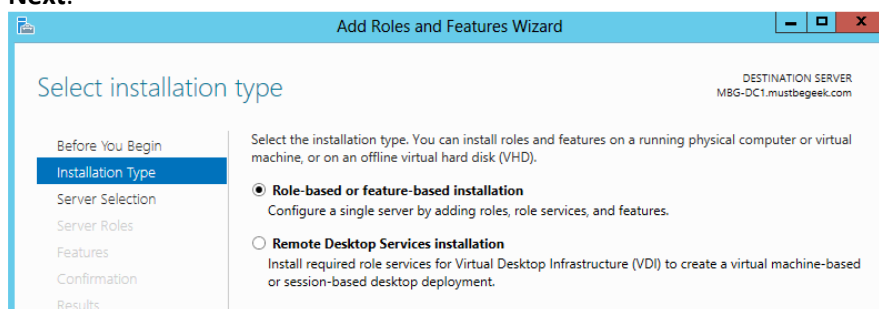
Task 2 – Installing and Configuring FTP Server in Windows Server 2019

Install the FTP server role. In Server 2019, you can install the FTP server role under the IIS server role. So, let's get started.

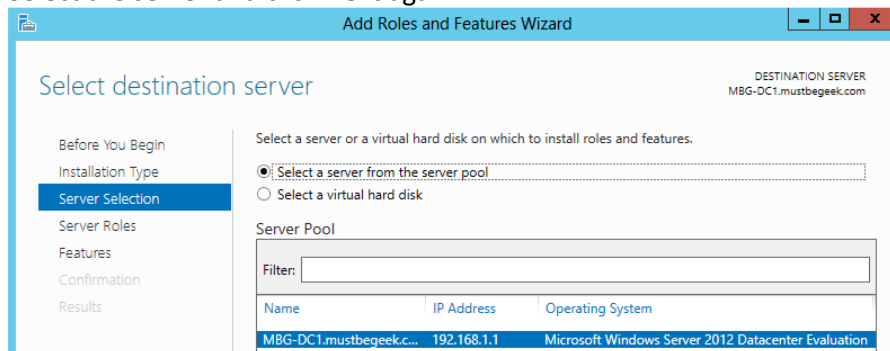
1. Open **Server Manager**. On the menu, click **Manage** and click **Add Roles and Features**.



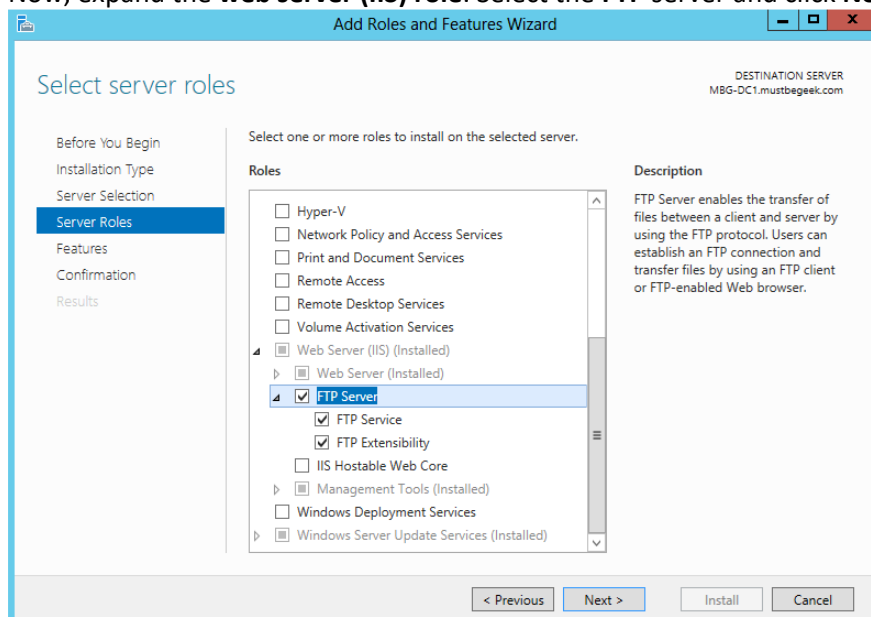
2. Click **Next** on **Before You Begin** window. Click **Role-based or feature based installation** and click **Next**.



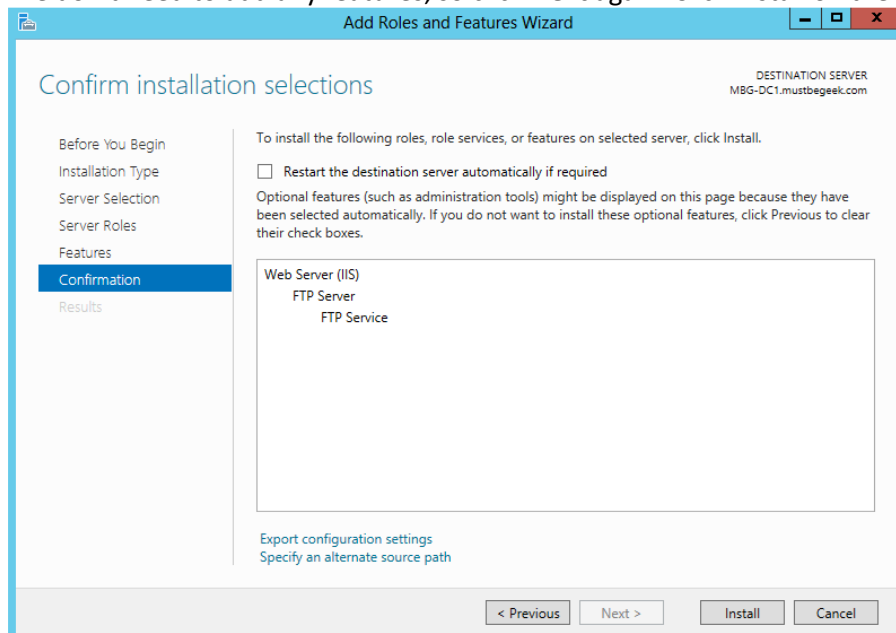
3. Select the server and click **Next** again.



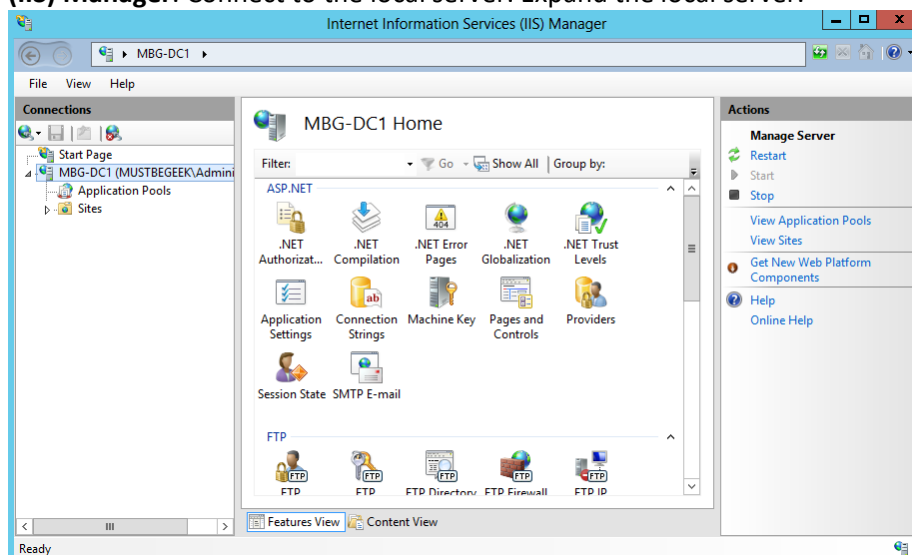
4. Now, expand the **web server (IIS)** role. Select the **FTP server** and click **Next**.



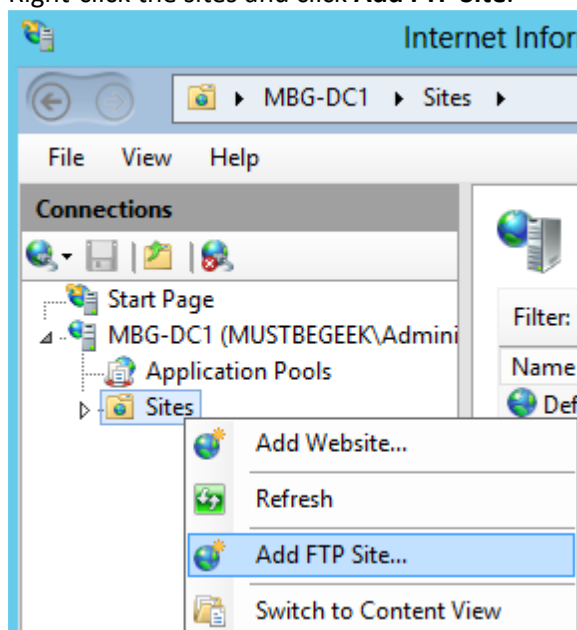
5. We don't need to add any features, so click **Next** again. Click Install on the Confirmation window.



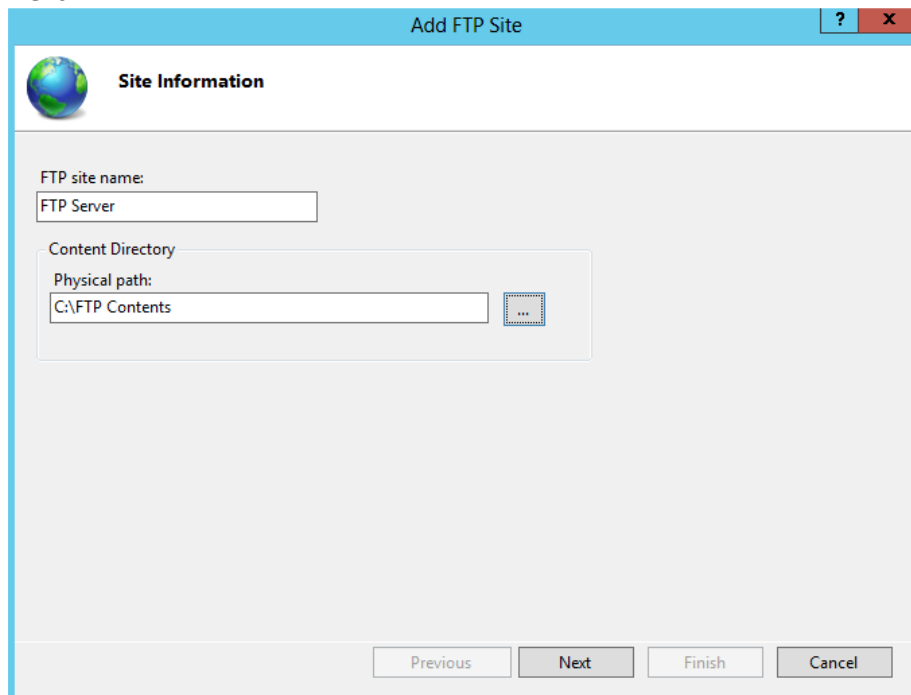
6. After installing the **FTP server** role, open the **Internet Information Services (IIS)** console. You can do this via the start menu or **Server manager**→**Tools**→**Internet Information Services (IIS) Manager**. Connect to the local server. Expand the local server.



7. Right-click the sites and click **Add FTP Site**.

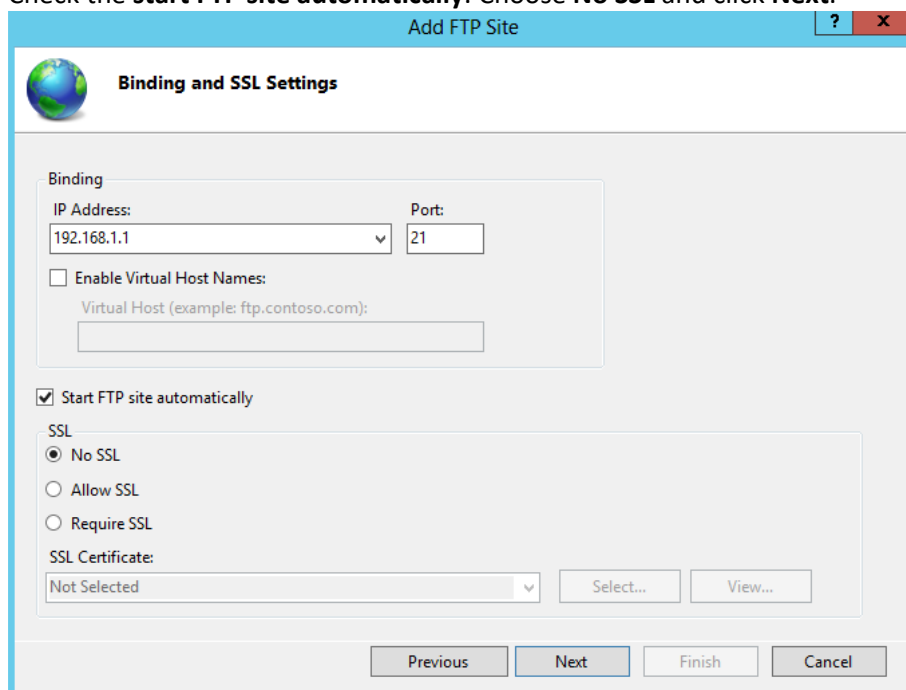


8. Now type the name for the FTP site. Configure the folder where the files will be stored. Create some files in the folder for test purpose. Users will access these files via FTP client. Now click **Next**.



The screenshot shows the 'Add FTP Site' wizard, Site Information page. The title bar says 'Add FTP Site'. The page has a globe icon and the title 'Site Information'. There are two input fields: 'FTP site name:' with the text 'FTP Server' and 'Content Directory' with the text 'C:\FTP Contents'. At the bottom, there are four buttons: 'Previous', 'Next', 'Finish', and 'Cancel'.

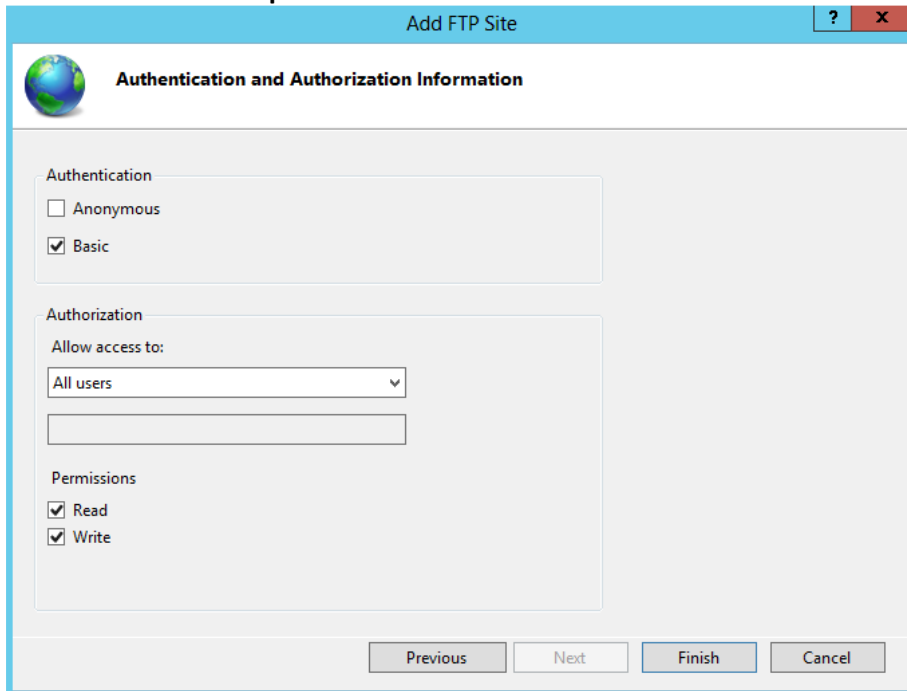
9. Configure the IP address of this server. The IP address must match the address configured in the network adapter of this server. This IP address will be used by clients to access the FTP server. Check the **start FTP site automatically**. Choose **No SSL** and click **Next**.



The screenshot shows the 'Add FTP Site' wizard, Binding and SSL Settings page. The title bar says 'Add FTP Site'. The page has a globe icon and the title 'Binding and SSL Settings'. There are two sections: 'Binding' and 'SSL'. The 'Binding' section has an 'IP Address:' dropdown with '192.168.1.1' and a 'Port:' input field with '21'. There is a checkbox for 'Enable Virtual Host Names:' which is unchecked. The 'SSL' section has a checkbox for 'Start FTP site automatically' which is checked. There are three radio buttons for 'SSL': 'No SSL' (selected), 'Allow SSL', and 'Require SSL'. There is an 'SSL Certificate:' dropdown with 'Not Selected' and two buttons: 'Select...' and 'View...'. At the bottom, there are four buttons: 'Previous', 'Next', 'Finish', and 'Cancel'.

10. Choose **Basic** for authentication. Basic authentication doesn't use encryption mechanism, so username/password are sent in clear text. By default, basic authentication matches username/password from Active Directory database or you can create user accounts in IIS. Under **authorization**, select **all users** to allow FTP access to all users of the domain. Check both

read and write under permissions.



Add FTP Site

Authentication and Authorization Information

Authentication

☐ Anonymous

☒ Basic

Authorization

Allow access to:

All users

Permissions

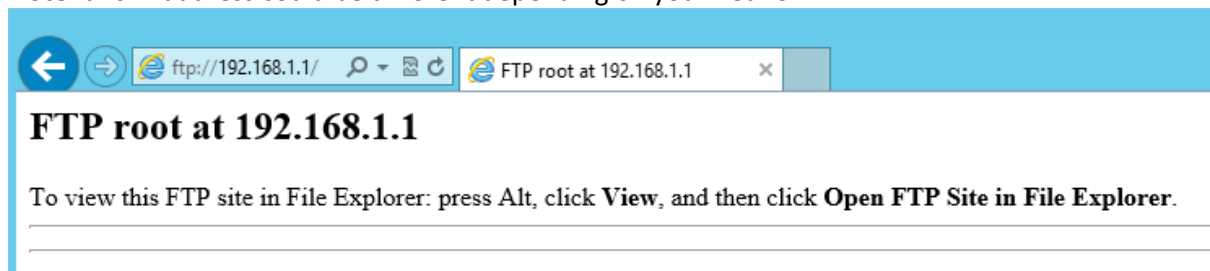
☒ Read

☒ Write

Previous Next Finish Cancel

11. Now browse FTP server from the client machine. Type the IP address on the browser as **ftp://192.168.1.1/** or try accessing it with Filezilla. It will ask you for username and password. Enter the Admin credentials.

Note: this IP address could be different depending on your network.



12. We will come back to this lab after Active Directory lab for user permission configurations. If you are not able to connect to the server from the host machine turn off the firewall and try it again:

Server Manager→ **Tools**→**Windows** firewall with Advanced Security

Click on Windows Firewall Properties turn off the firewall on all the sections.

Task 3 – Installing and Configuring DNS Server

Launch VMware Workstation

1. Follow the same procedure as the previous tasks to add roles and features for the DNS Server.
2. Test the DNS server with the following command:
3. Nslookup 127.0.0.1 <server IP address>

The output should be similar to:

Server: Unknown

Address: 192.168.95.134

Name: localhost

Address: 127.0.0.1