

Install VPN Server

Windows Server 2019 includes a network service called Routing and Remote Access Services (RRAS) that supports remote user or site-to-site connectivity by using virtual private networks (VPN) or dial-up connections.

VPN servers are usually found on or near the network edge so that external clients can connect to the internal network. In this exercise, you will install RRAS on the **PLABSA01** device running Windows Server 2019 which will play the role of the remote VPN server. You will also configure a remote workstation as a VPN client that will dial-in to RRAS.

To better understand this technology, refer to your course material as well or use your preferred search engine to research this topic in detail.

Learning Outcomes

After completing this exercise, you will be able to:

- Install Routing and Remote Access

Your Devices

You will be using the following devices in this lab. Please make sure these are powered on before proceeding.

- **PLABSA01** (Windows Server 2019 Standard - Access Server)



Task 1 - Install Routing and Remote Access on PLABSA01

A server called **PLABSA01** will be designated as the VPN server. You will install Routing and Remote Access Server (RRAS) on the mentioned device as a system

pre-requisite.

To install RRAS, perform the following steps:

Step 1

Ensure that you have powered on the required devices indicated in the **Introduction** section. Connect to the **PLABSA01** device. The **Server Manager** should be open. If not, click the start button, type Server Manager to open it.

In the **Server Manager** click on **Add roles and features**.

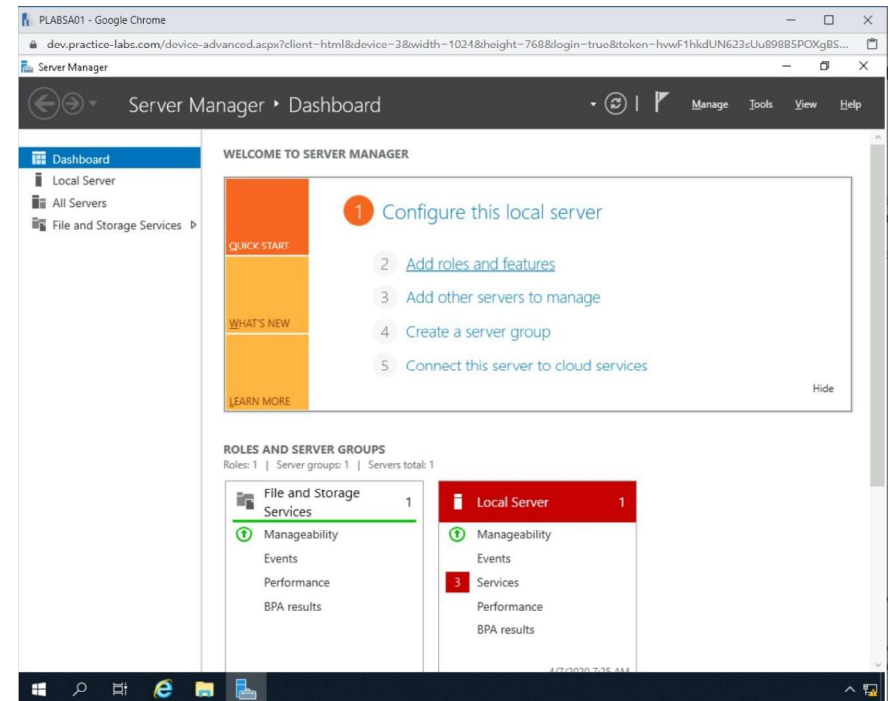


Figure 1.1 Screenshot of the PLABSA01: Add roles and features link is displayed in the Server Manager console.

Step 2

From the **Before you begin** page, click **Next**.

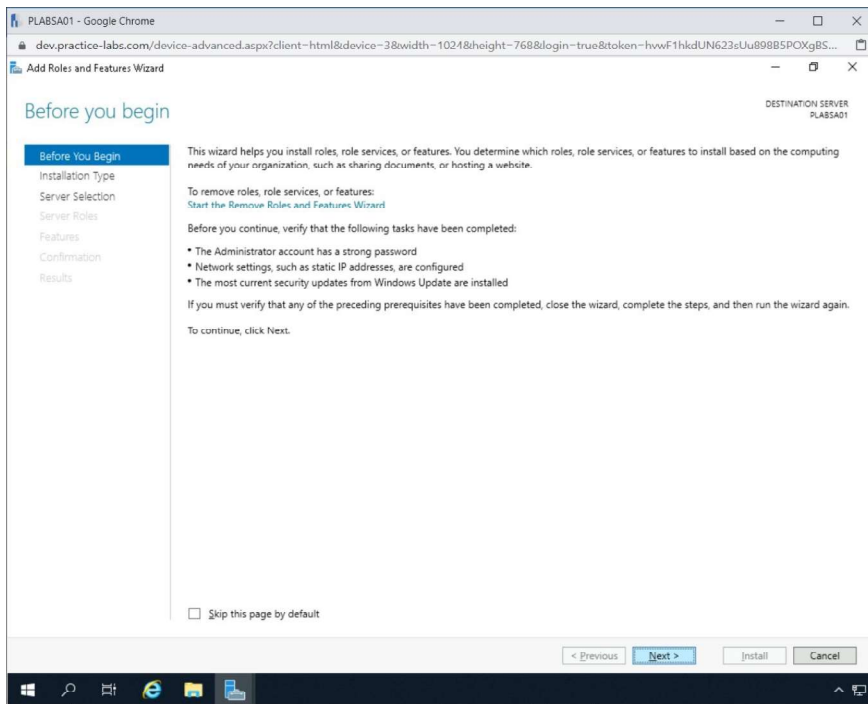


Figure 1.2 Screenshot of the PLABSA01: Before you begin page on the Add Roles and Features Wizard is displayed showing the Next button available.

Step 3

From the **Select installation type** page, click **Next**.

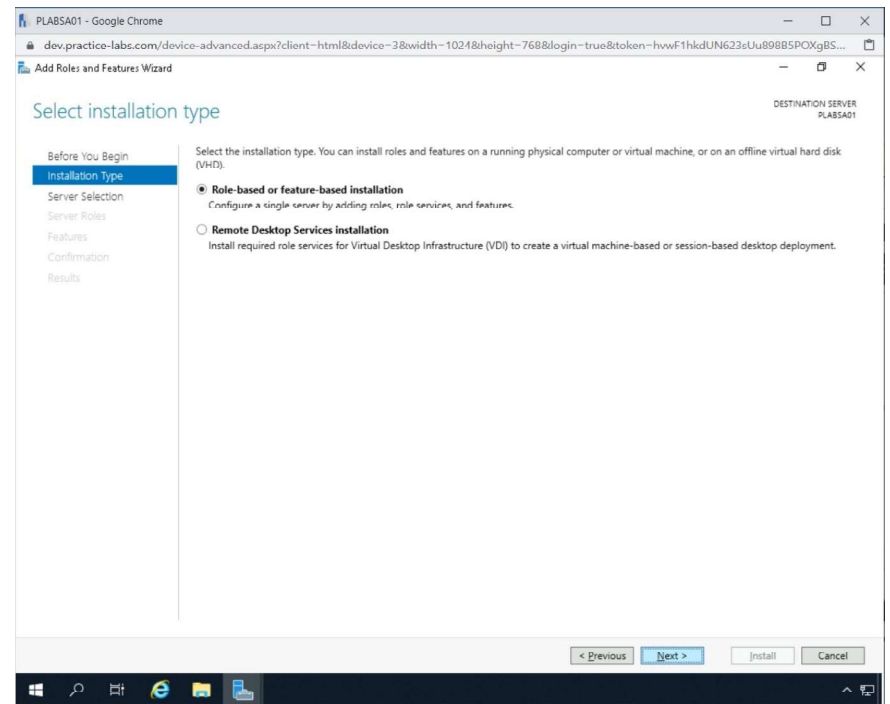


Figure 1.3 Screenshot of the PLABSA01: Select installation type page on the Add Roles and Features Wizard is displayed showing default settings and the Next button available.

Step 4

From the **Select destination server** page, click **Next**.

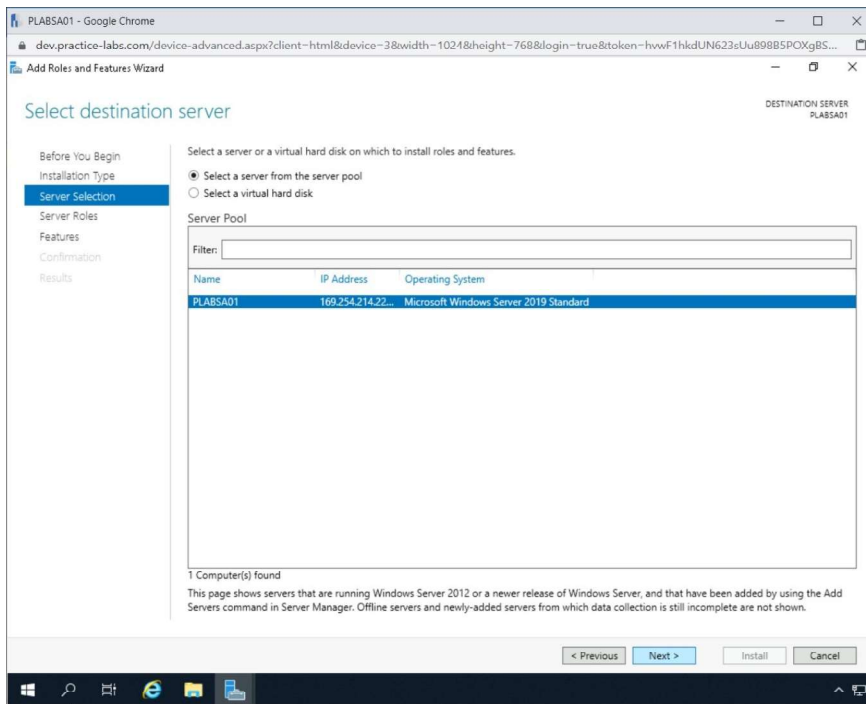


Figure 1.4 Screenshot of the PLABSA01: Select destination server page on the Add Roles and Features Wizard is displayed showing default settings and the Next button available.

Step 5

From **Select server roles** page, select **Remote Access** check box. Then click **Next**.

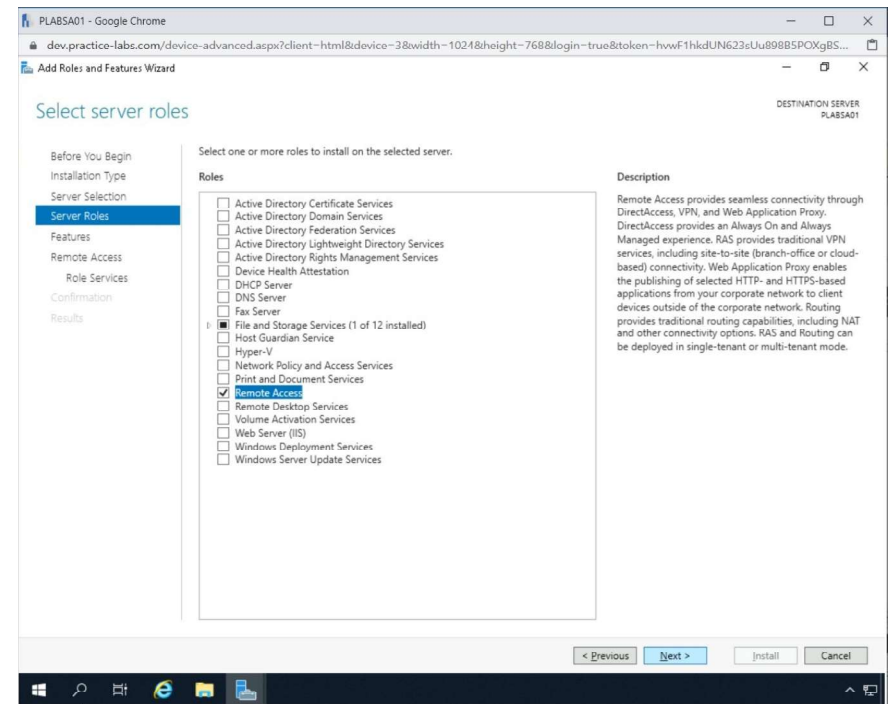


Figure 1.5 Screenshot of the PLABSA01: Select server roles page on the Add Roles and Features Wizard is displayed showing required selections performed.

Step 6

From **Select features** page, click **Next**.

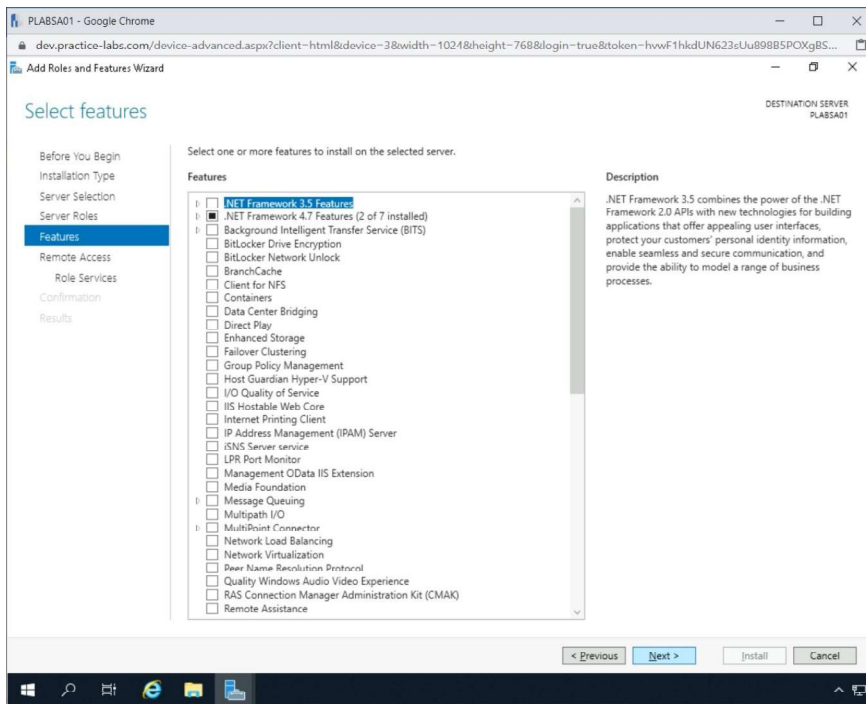


Figure 1.6 Screenshot of the PLABSA01: Select features page on the Add Roles and Features Wizard is displayed showing default settings and the Next button available.

Step 7

In the **Remote Access** introduction page, click **Next**.

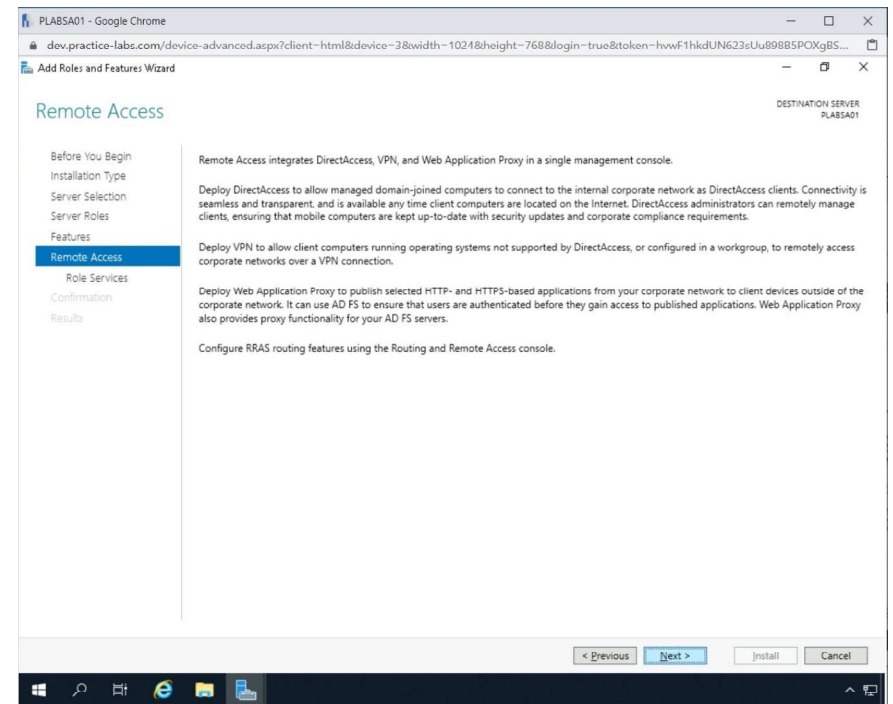


Figure 1.7 Screenshot of the PLABSA01 desktop: Remote Access page on the Add Roles and Features Wizard is displayed introducing the feature and the Next button available.

Step 8

From **Select role services**, select **DirectAccess and VPN (RAS)** checkbox.

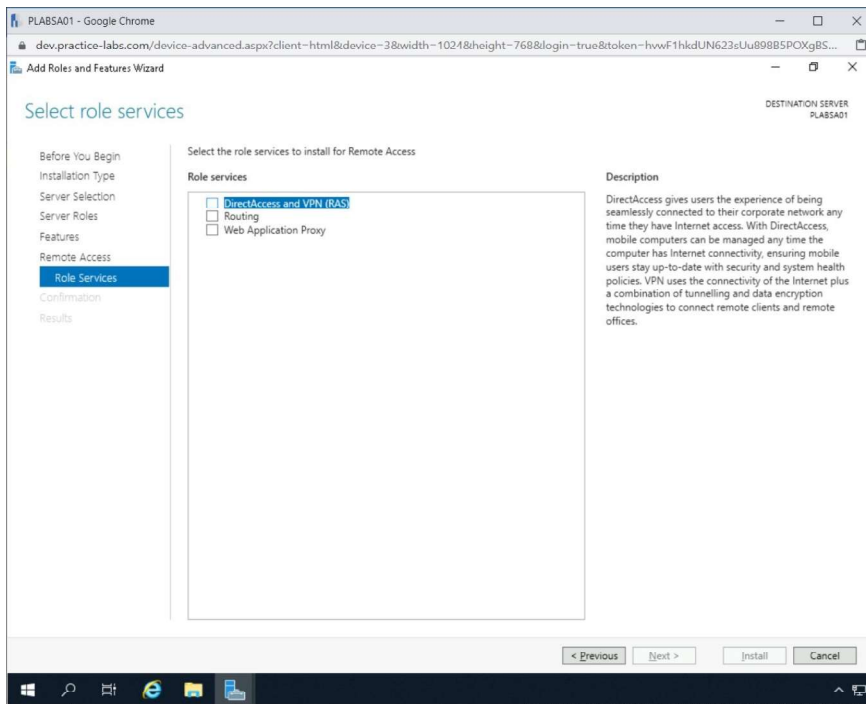


Figure 1.8 Screenshot of the PLABSA01: Select role services page on the Add Roles and Features Wizard is displayed showing the required option to select highlighted.

Step 9

The **Add Roles and Features Wizard** appears, click **Add Features**.

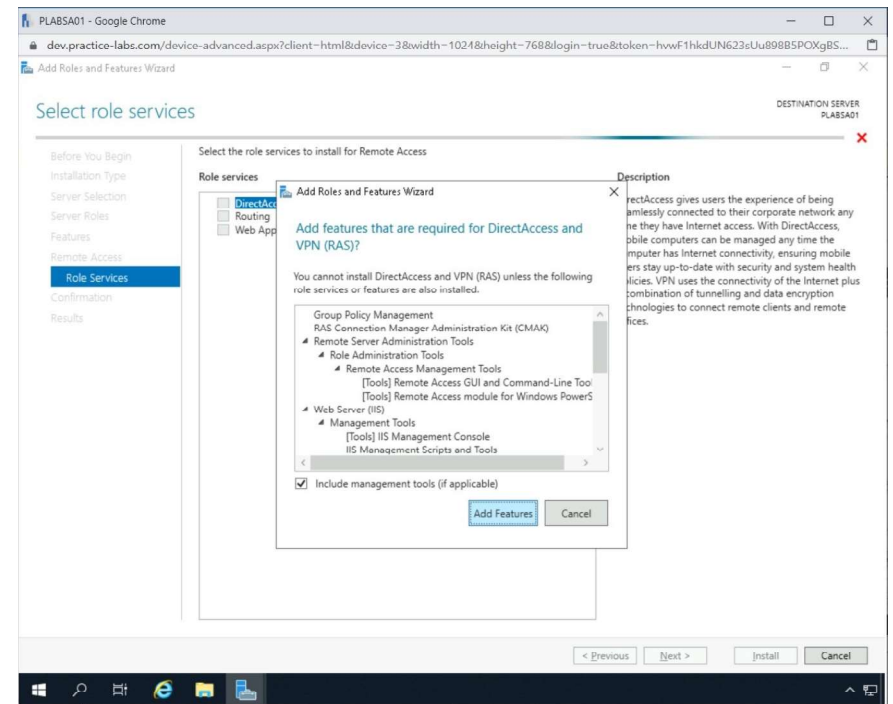


Figure 1.9 Screenshot of the PLABSA01: Add Roles and Features Wizard dialog box is displayed showing default settings and the Add Features button available.

Step 10

Back in **Select role services** page, select **Routing** check box. Click **Next**.

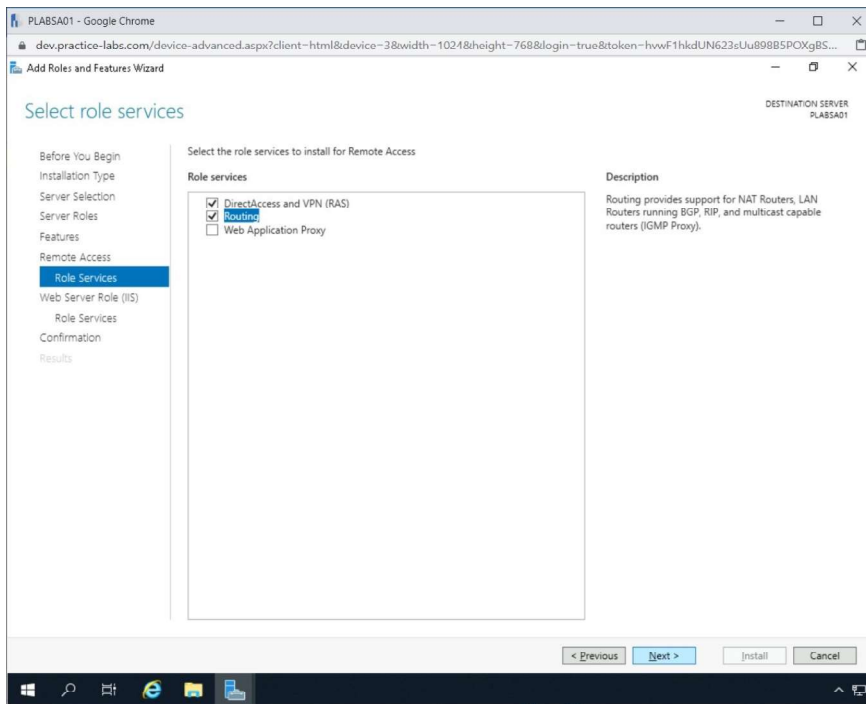


Figure 1.10 Screenshot of the PLABSA01: Select role services page on the Add Roles and Features Wizard is displayed showing the required settings performed and the Next button available.

Step 11

From **Web Server Role (IIS)** page, click **Next**.

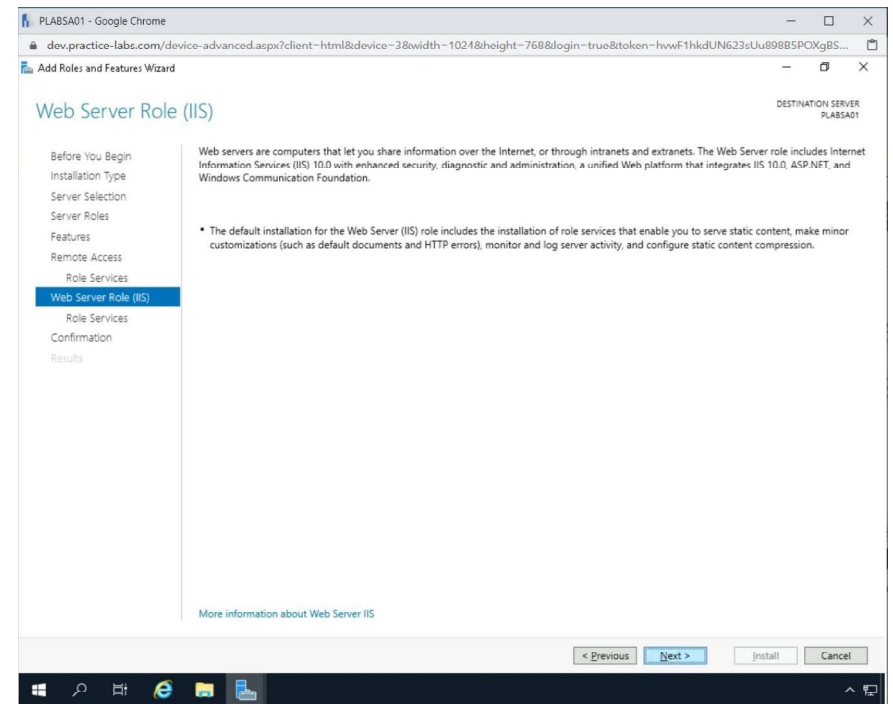


Figure 1.11 Screenshot of the PLABSA01: Web Server Role (IIS) page on the Add Roles and Features Wizard is displayed introducing the feature and the Next button available.

Step 12

From the **Select role services** page, click **Next**.

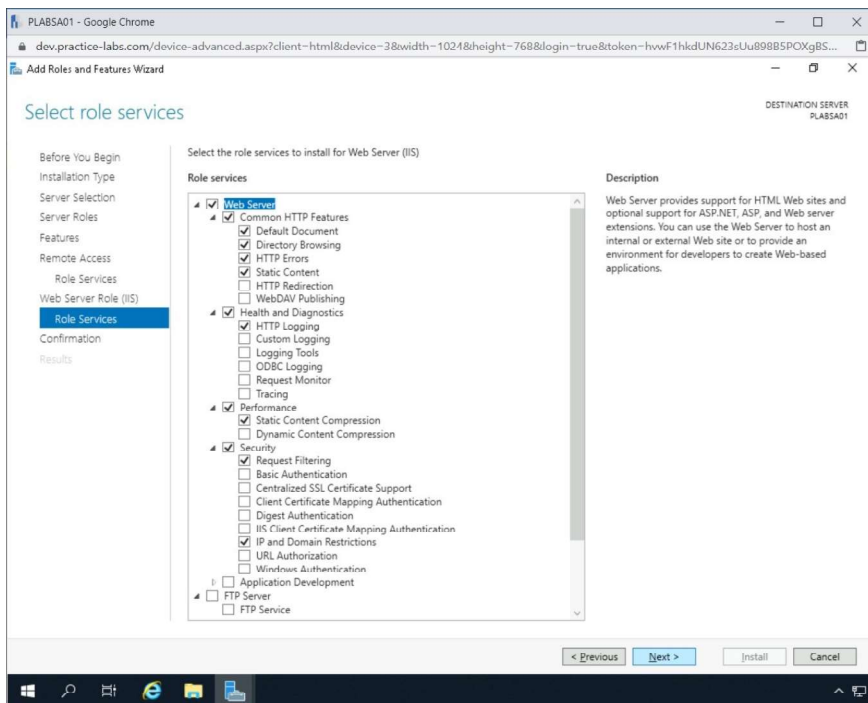


Figure 1.12 Screenshot of the PLABSA01: Select role services page on the Add Roles and Features Wizard is displayed showing default selections and the Next button available.

Step 13

From the Confirm installation selections page, review the roles, role services and features that have been selected in the above steps. Click **Install** to install these roles and features.

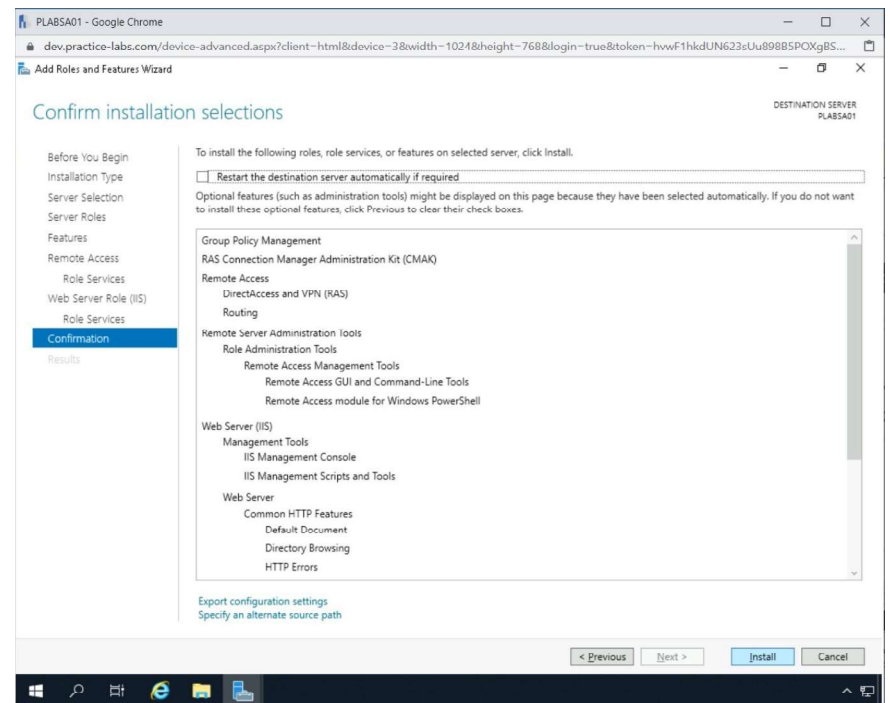


Figure 1.3 Screenshot of the PLABSA01: Confirm installation selections page on the Add Roles, and Features Wizard is displayed listing the installation specifications and the Install button available.

Step 14

Please wait while installation is on-going.

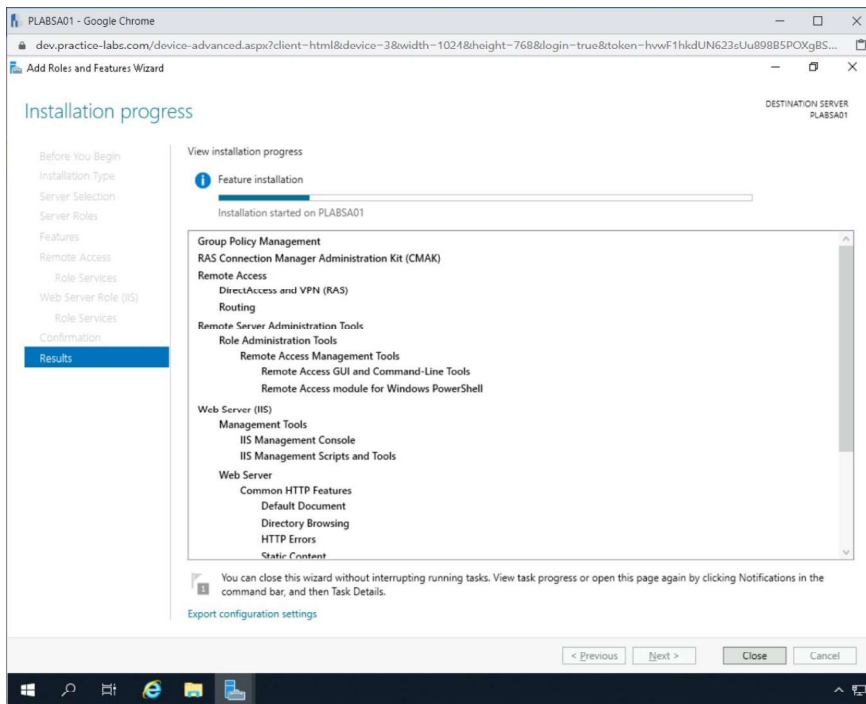


Figure 1.14 Screenshot of the PLABSA01: Installation progress page on the Add Roles and Features Wizard is displayed tracking the feature installation.

Step 15

When the installation is completed, click **Close** and minimize **Server Manager** console.

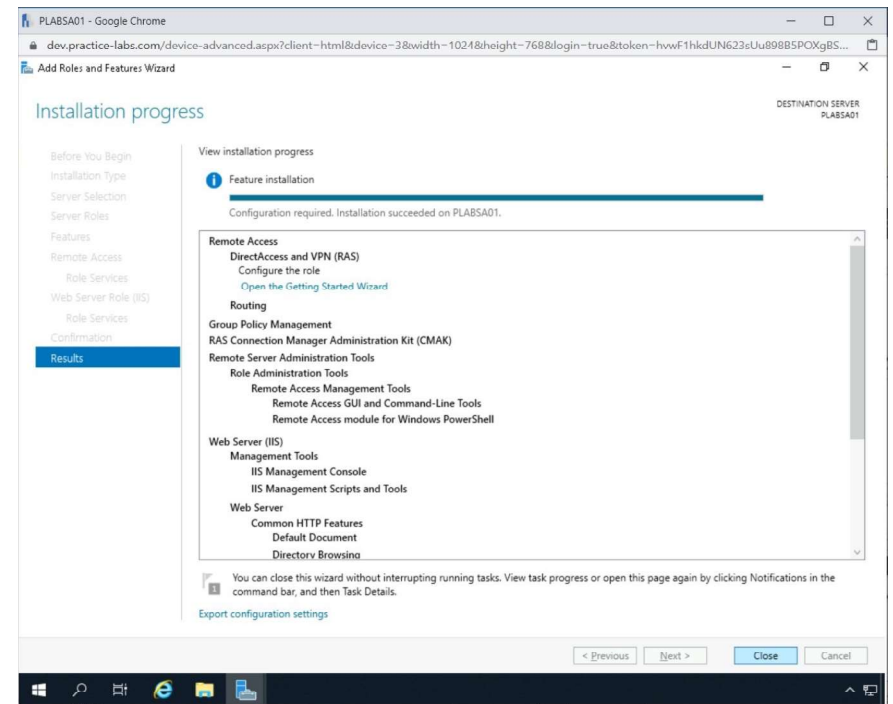


Figure 1.15 Screenshot of the PLABSA01: Installation progress page on the Add Roles and Features Wizard is displayed showing the status of the installation and the Close button available.

Keep all devices powered on in their current state and proceed to the next exercise.