Adding RRAS to Windows Standard 2012 Server

July 5, 2013

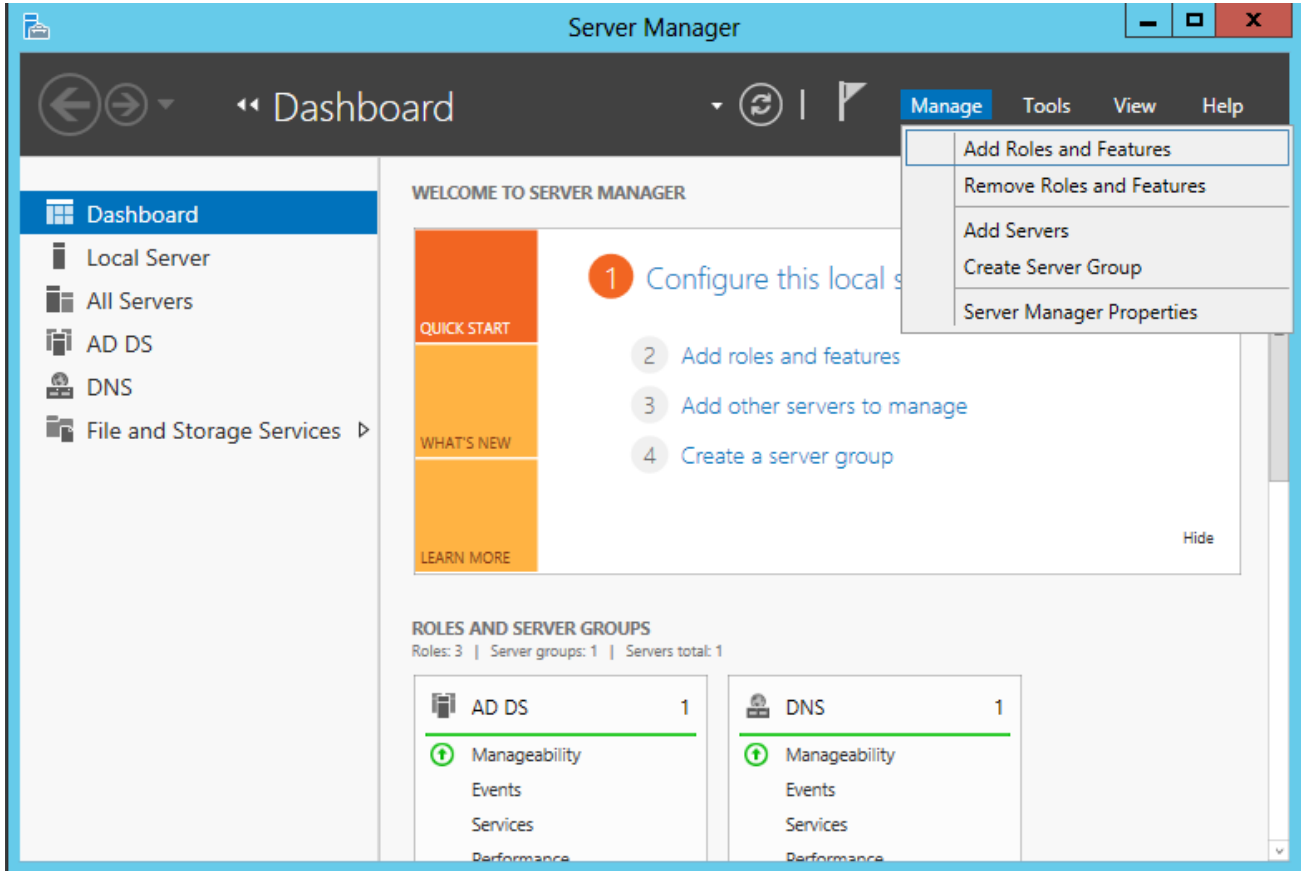
Setting Up RRAS

After setting up Active Directory, our client computers do not have access to the Internet. We need to add the Routing and Remote Access Server role to our machine, so the client computers can access the Wide Area Network beyond our server.

We want two Network Interface Cards on our server, one that connects to the outside world and one that connects to the client machines. Many times we name the cards, exterior and interior.

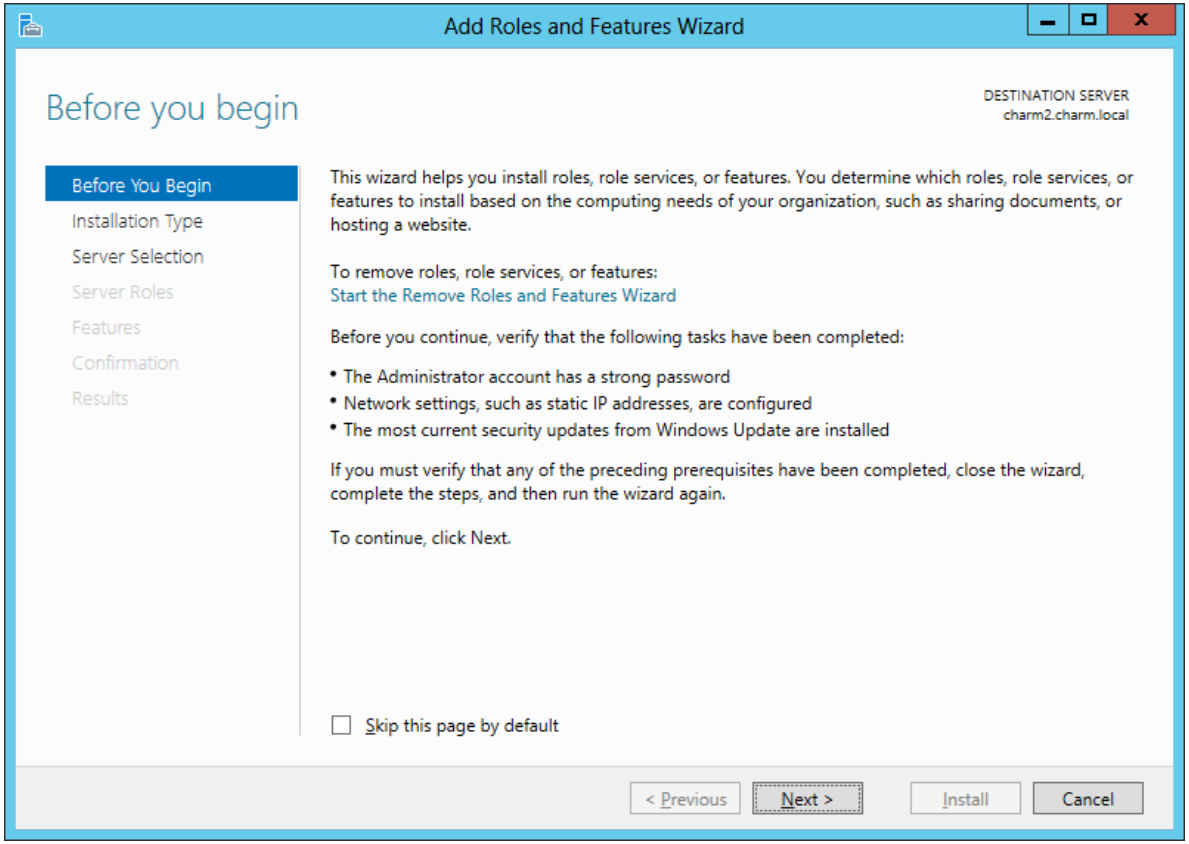
Setup Security Policies

To add a new role such as Routing and Remote Access Services on the Windows 2012 Standard Server, we select the Server Manager button from the Task Bar and select Manage from the Dashboard. From the list we choose Add Roles and Features.



Before You Begin

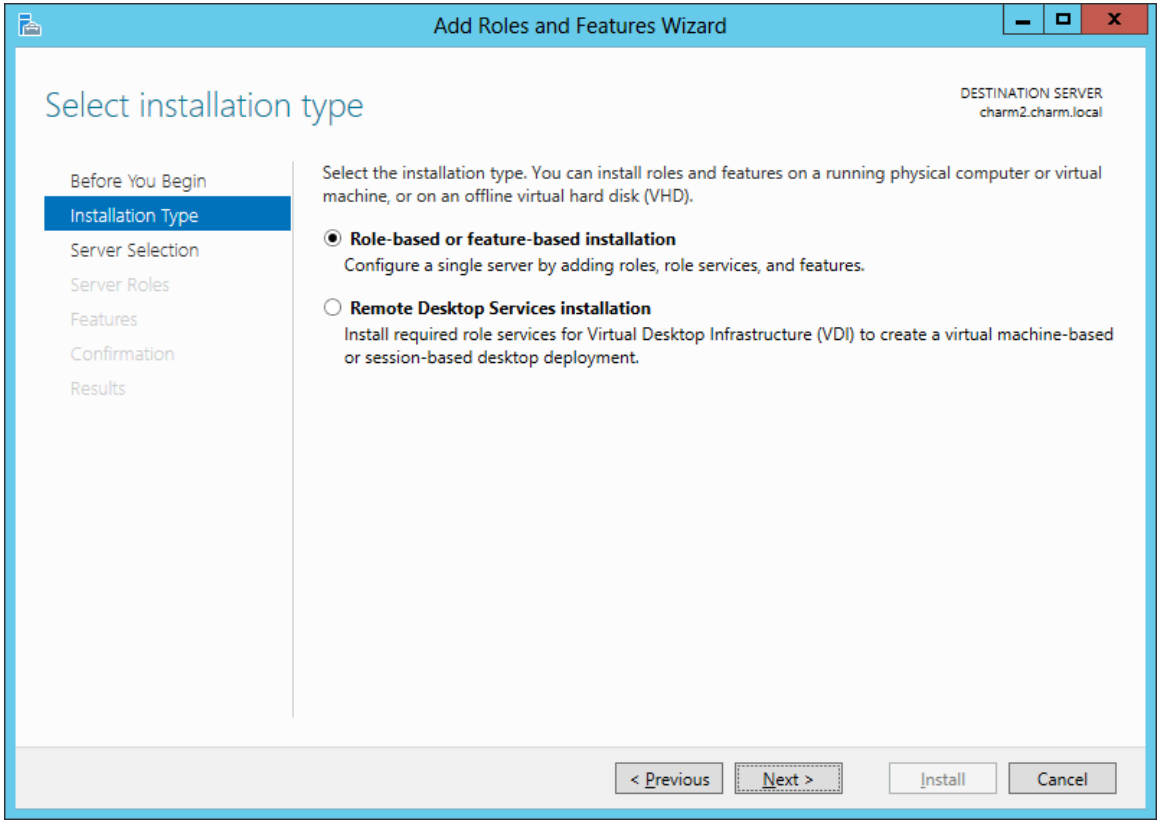
Before we add a role to the Windows 2012 Standard Server, we will want to have a smart password on our administrator account, to configure our network connections with a static IP address and we want to have the most current Service Packs and Windows Updates loaded. If this is done, then we can go ahead and press the Next command button.



Installation Type

Then we opt for the installation type which is either Role based or Remote Desktop Services Installation. For a stand alone server, we will choose the Role based option.

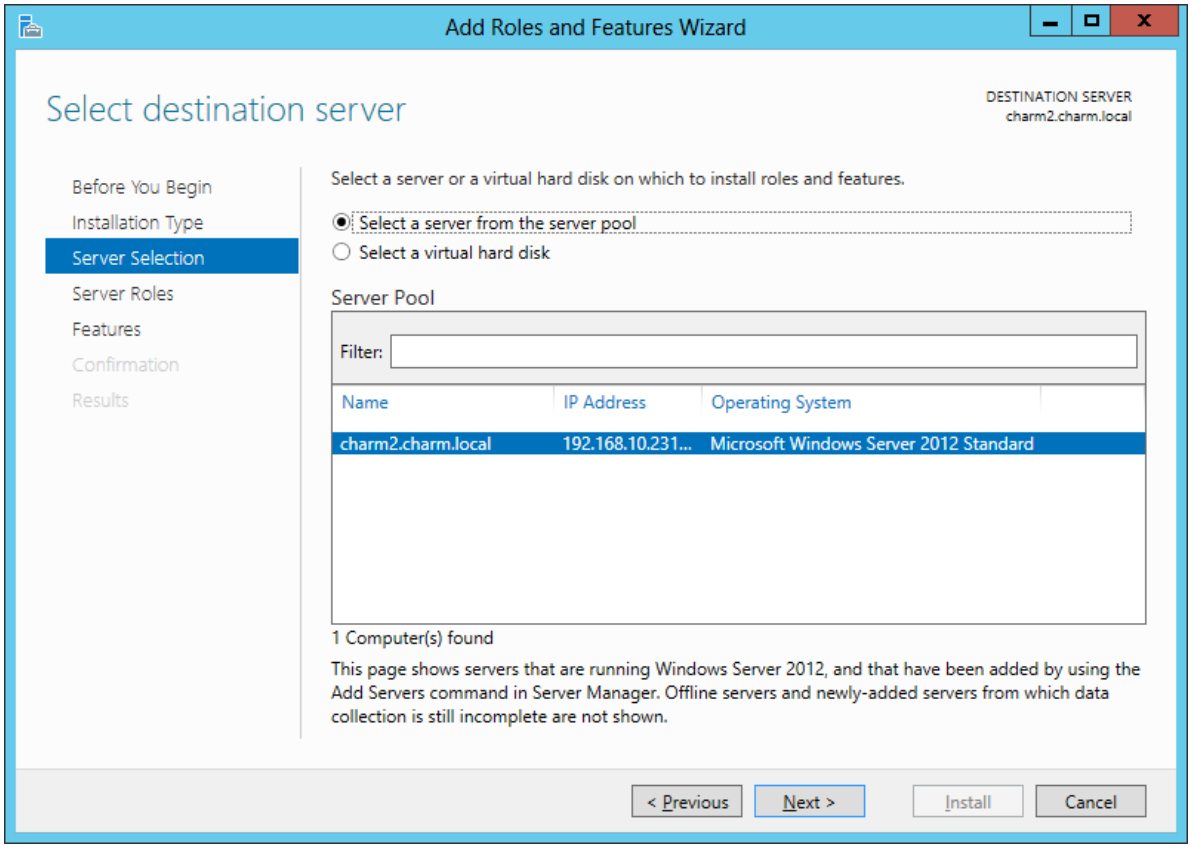
Press the Next button to continue.



Select Destination Server

Now we will select a server from the server pool. This can be a physical or virtual server. We opt to choose a server from the server pool and we highlight our server name from the list.

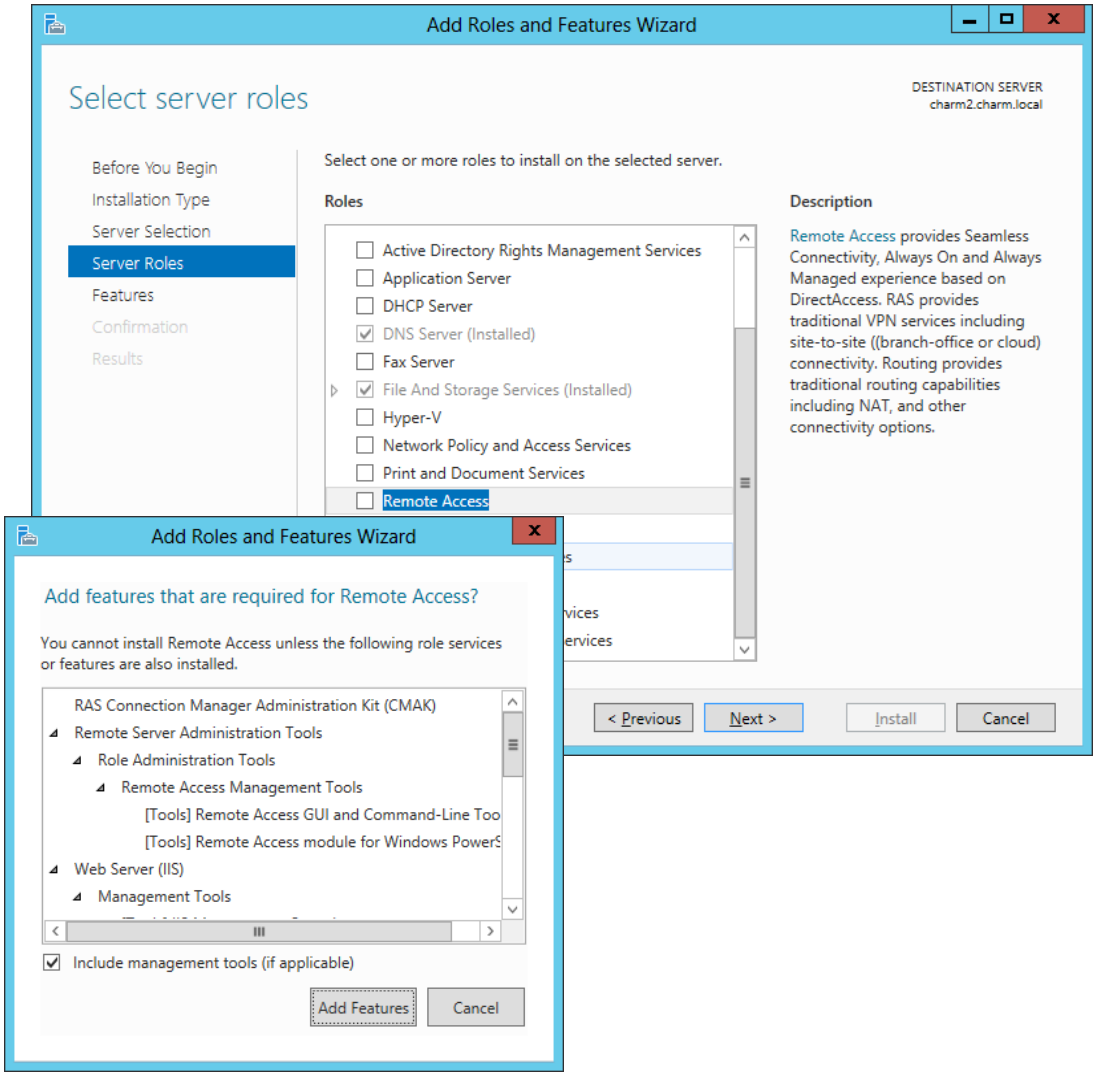
Press the Next button to advance.



Select Server Role

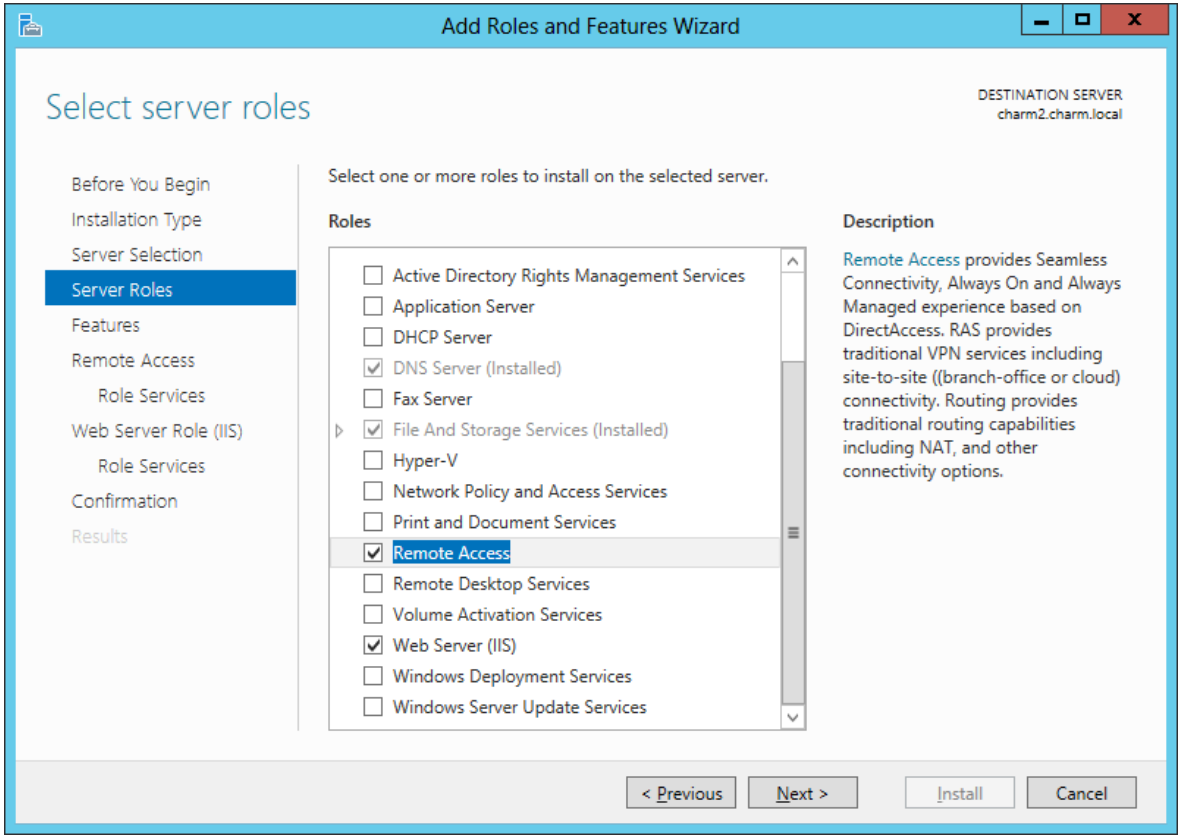
The Add Roles and Features Wizard window shows the multitude of functions a 2012 server can provide. We annotate the Routing and Remote Access Services checkbox and press the Next button.

A smaller dialogue box will appear and we then press the Add Features button on that pop up window.



Confirm Installation Selections

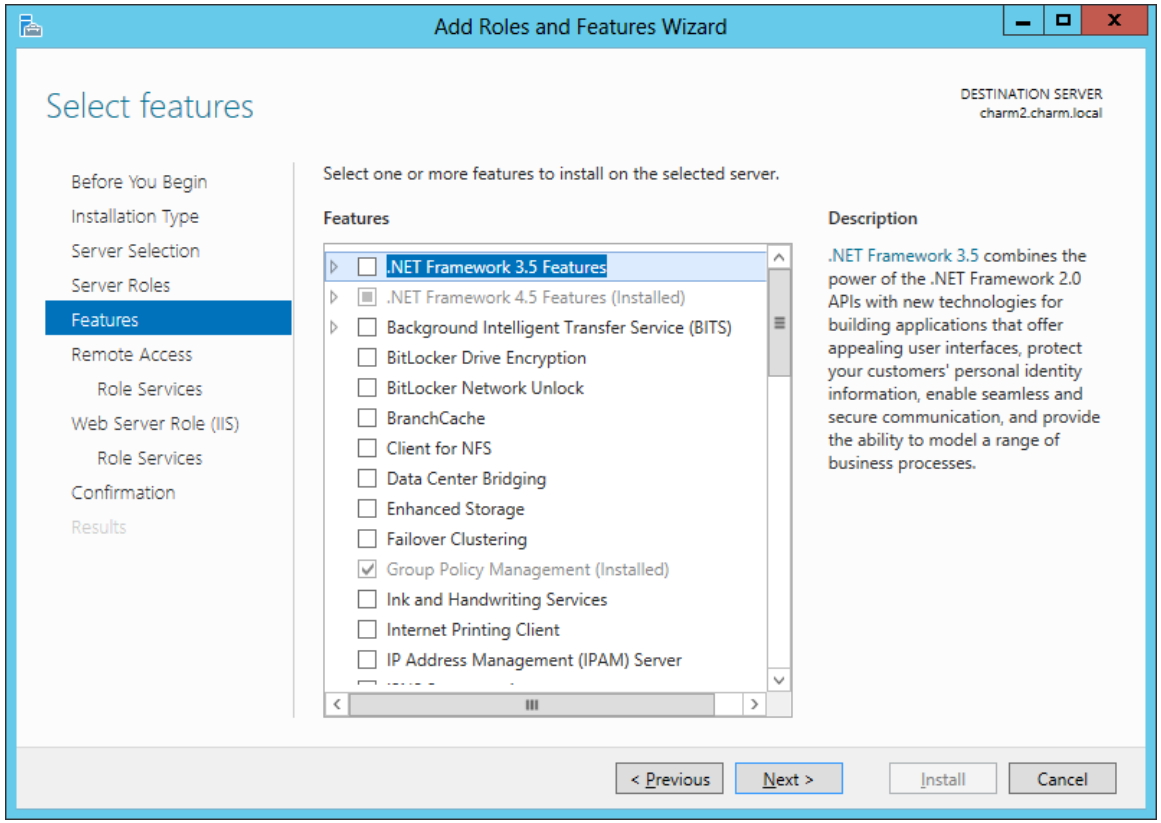
The Routing and Remote Access Services role is now checked on the roles list and we push the Next button to continue.



Features Window

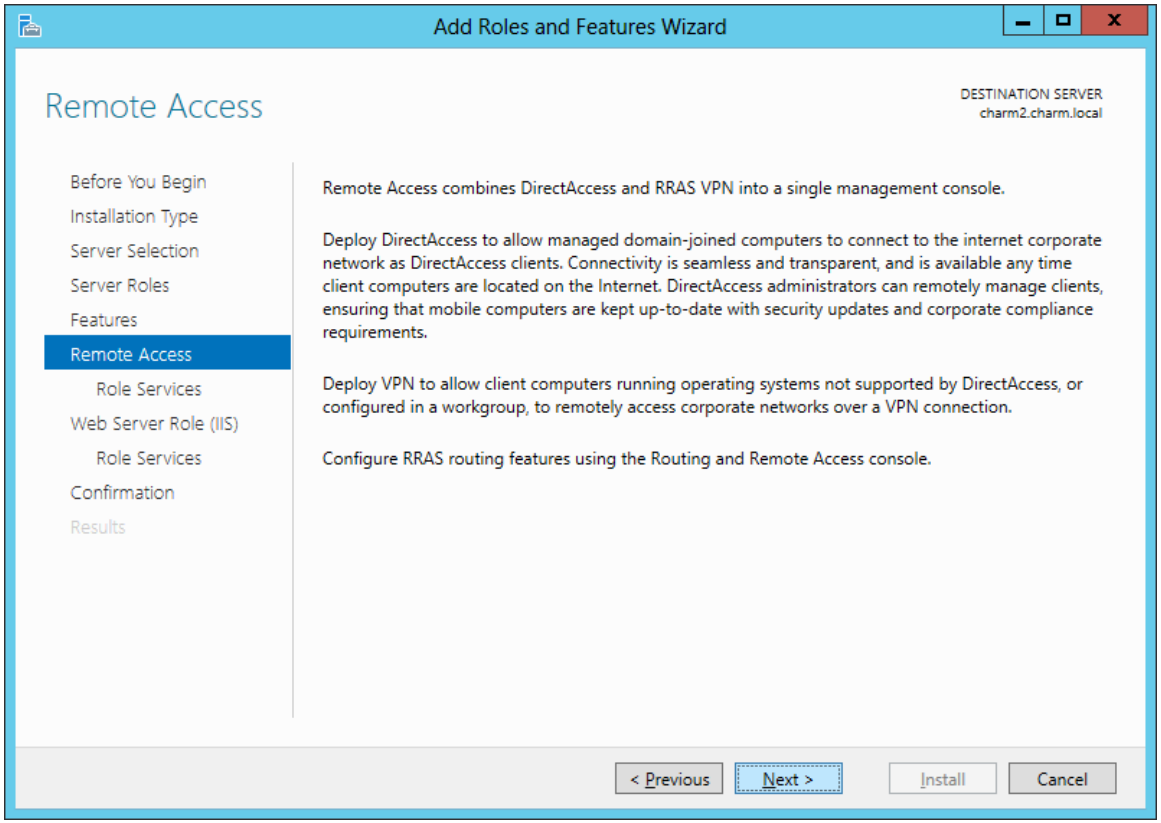
Next, the Features window comes up and we will not add any features at this time.

Press the Next button to go on.



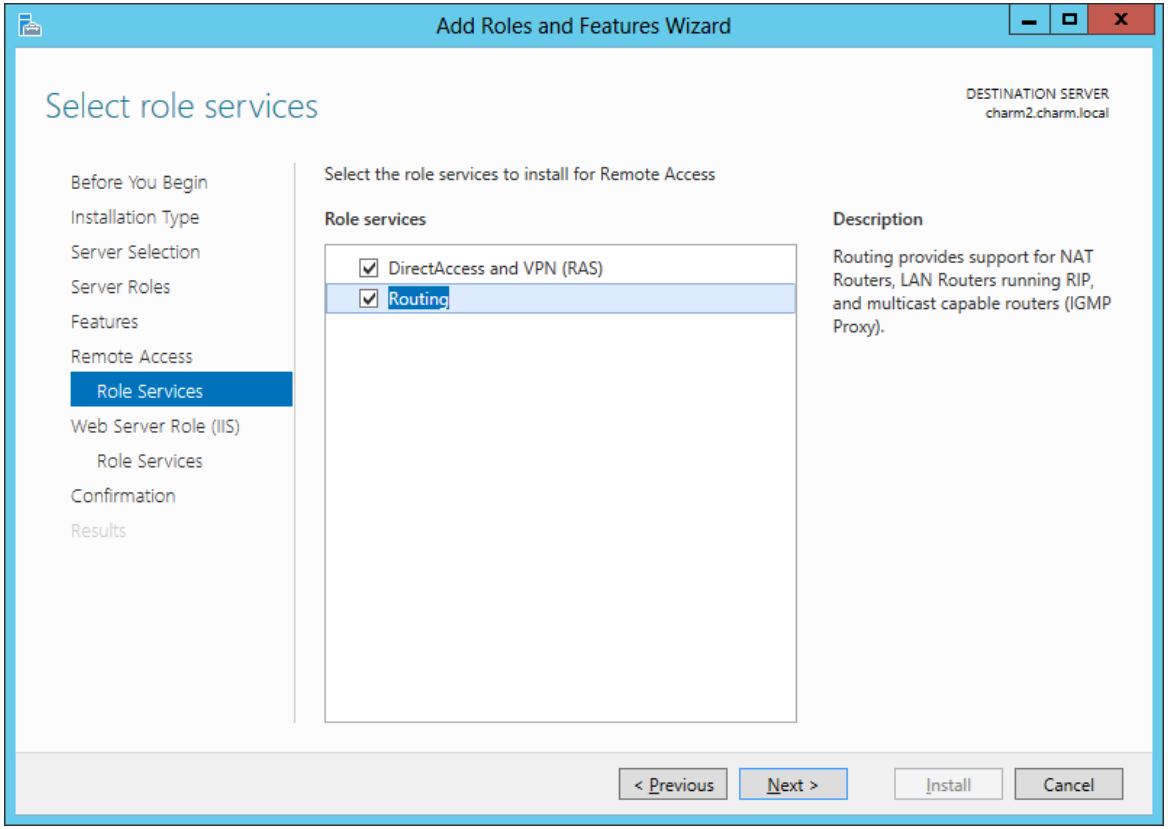
Remote Access

Read the choices for the three remote access options, but for now we will opt for VPN only.



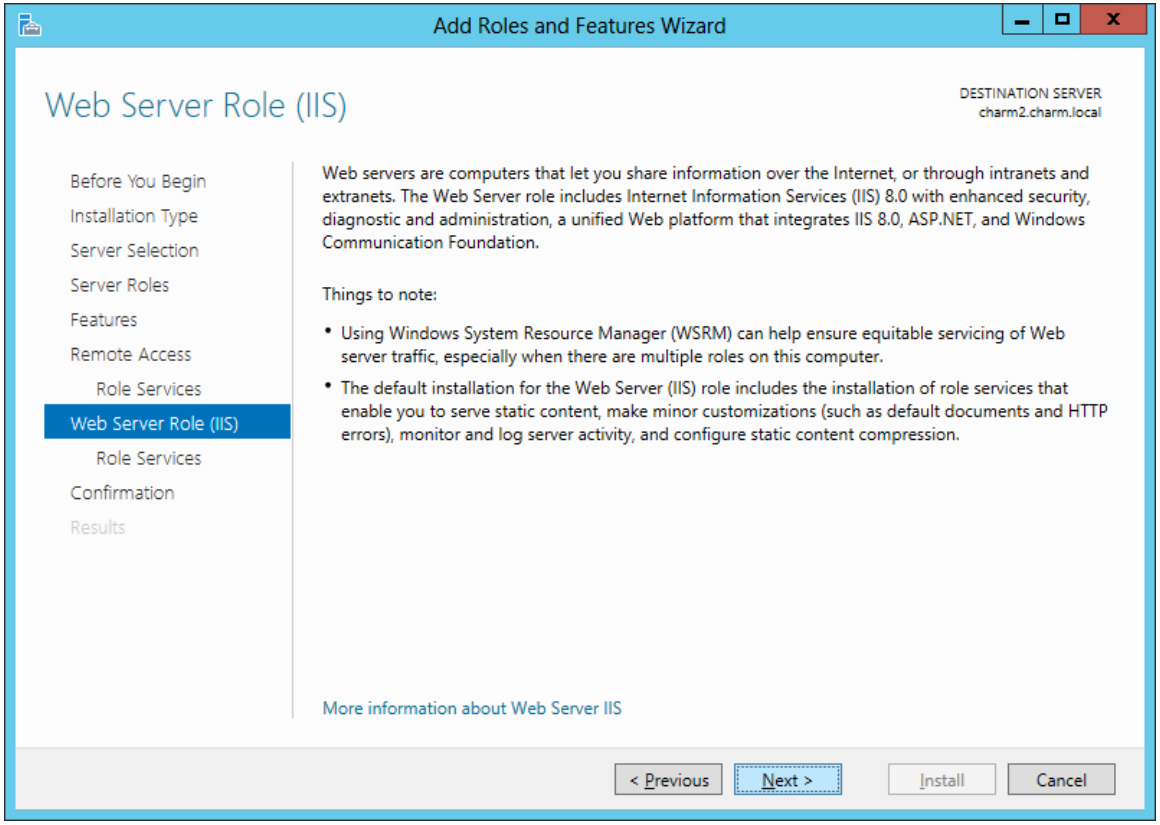
Select Role Services

We check Routing and Remote Access Services as shown in the window. The first checkbox is for external access and the second (importantly) allows for a path from the client to the Internet.



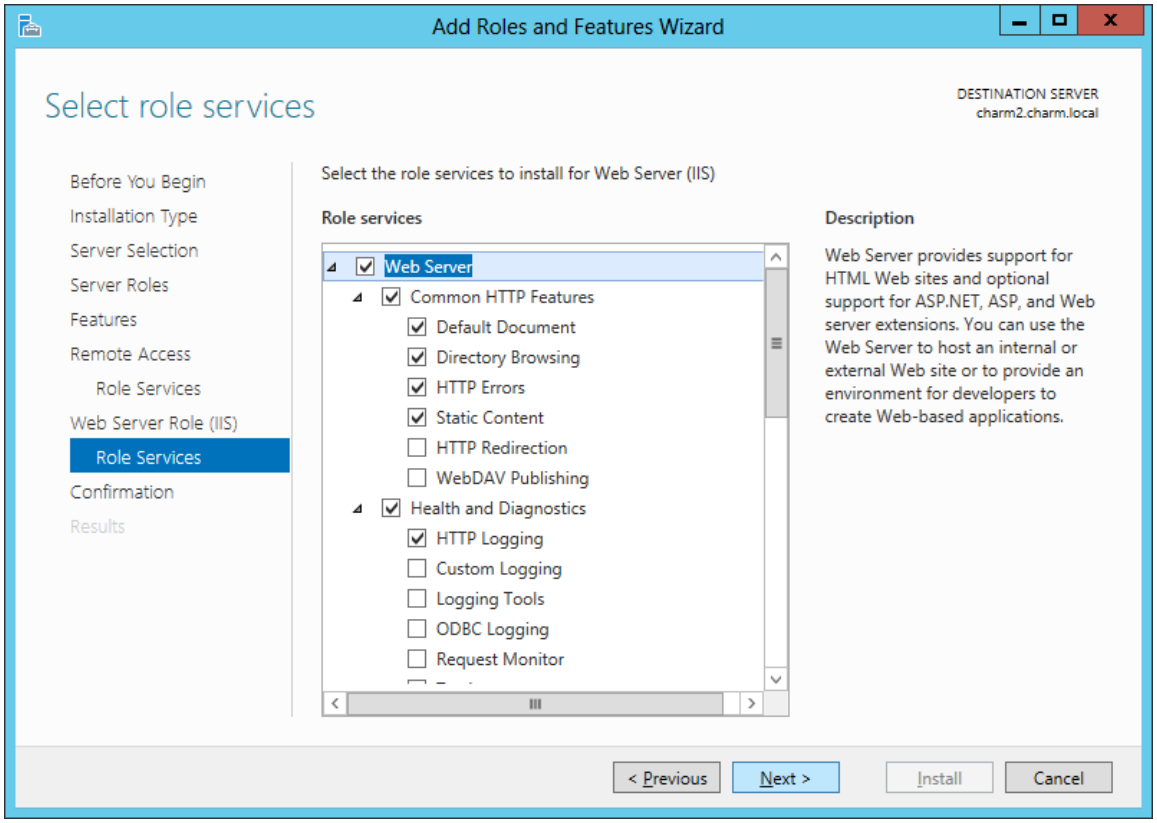
Web Server Role

Some Web Server (IIS) roles need loaded to support RRAS.



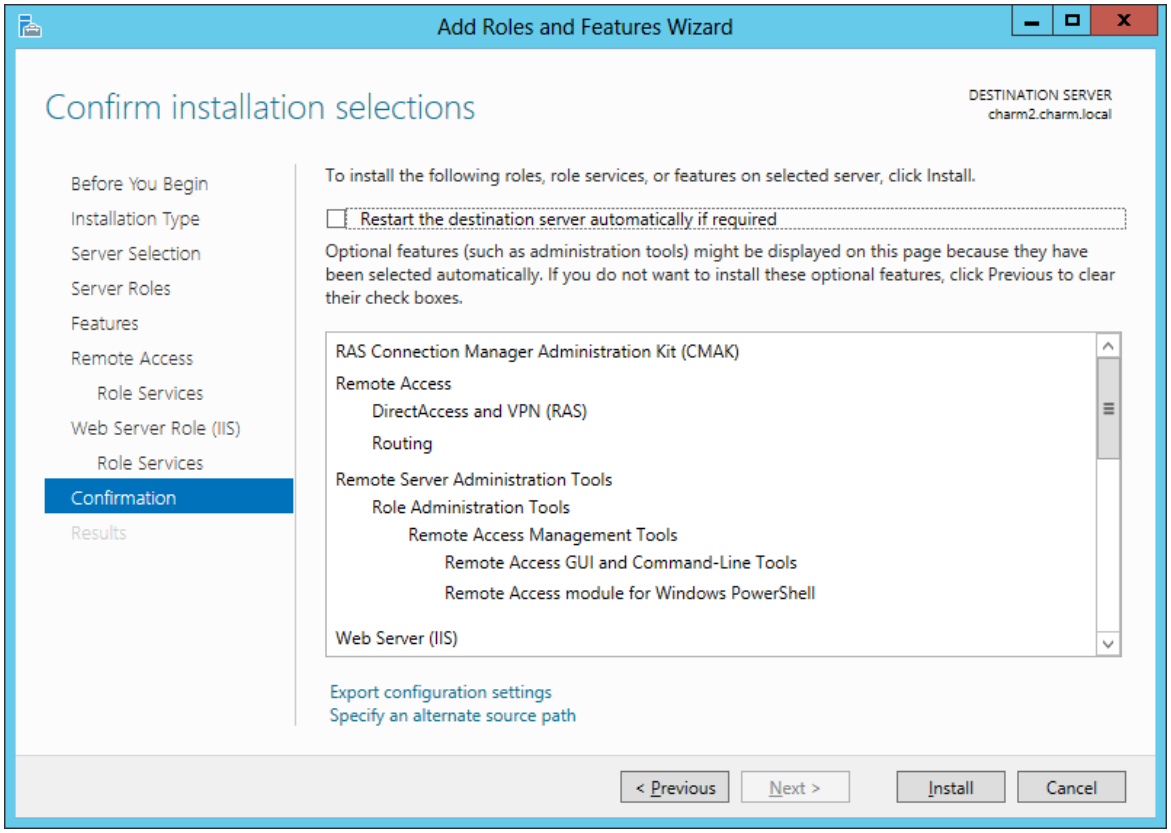
Select Role Services

We will keep the basic web role services and we will press the Next button to continue.



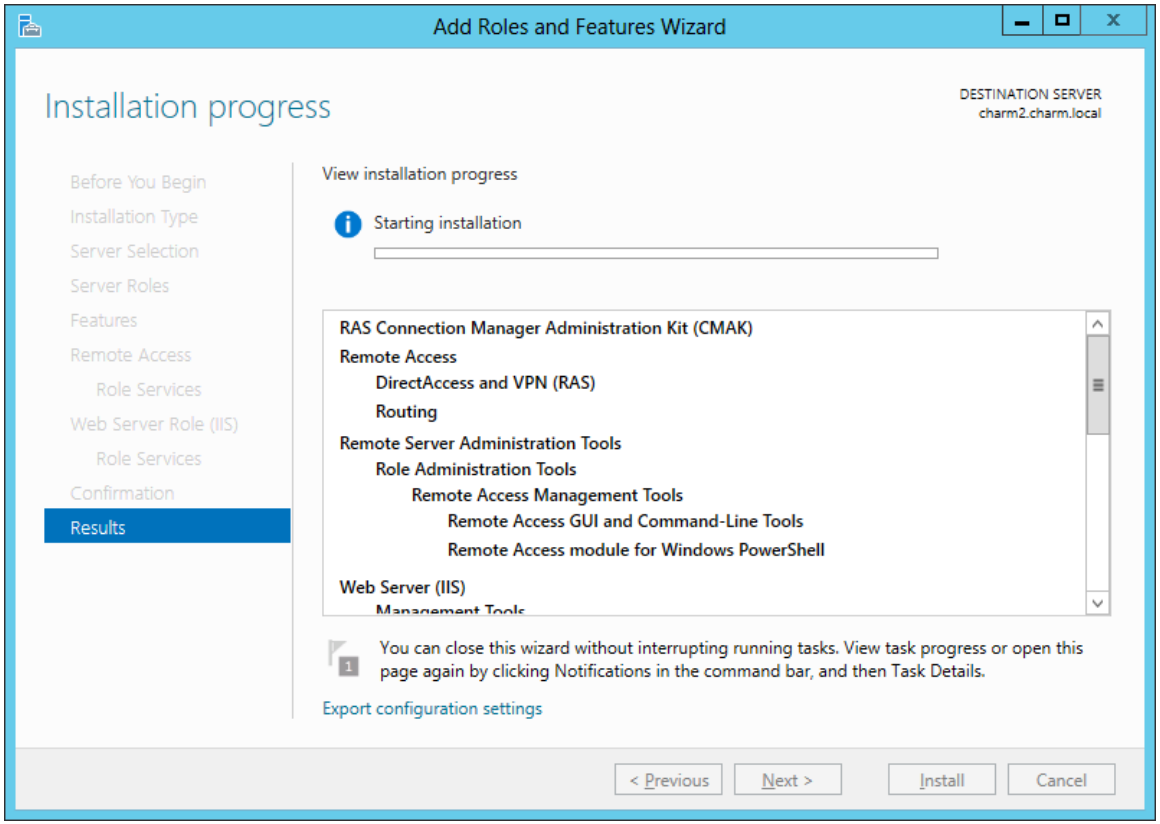
Confirm Installation Selections

We confirm our selection and we double click on the Install button.



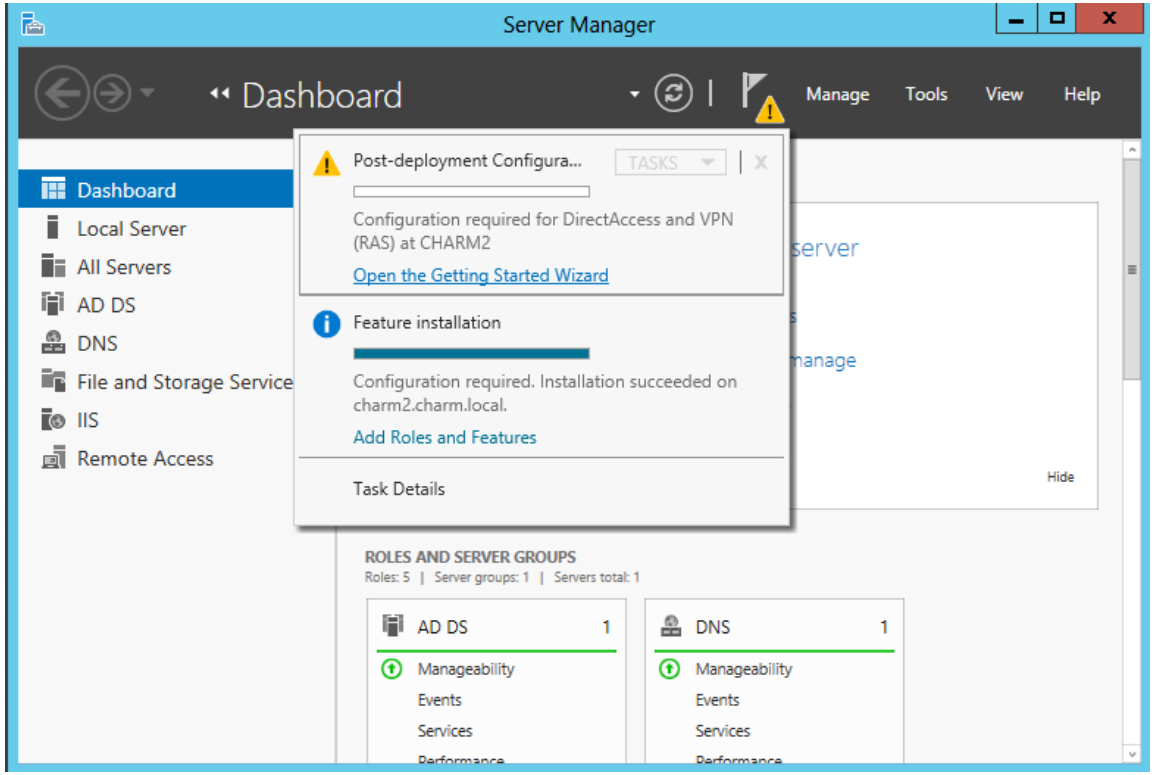
Install RRAS

It may take several minutes to load the RRAS software.



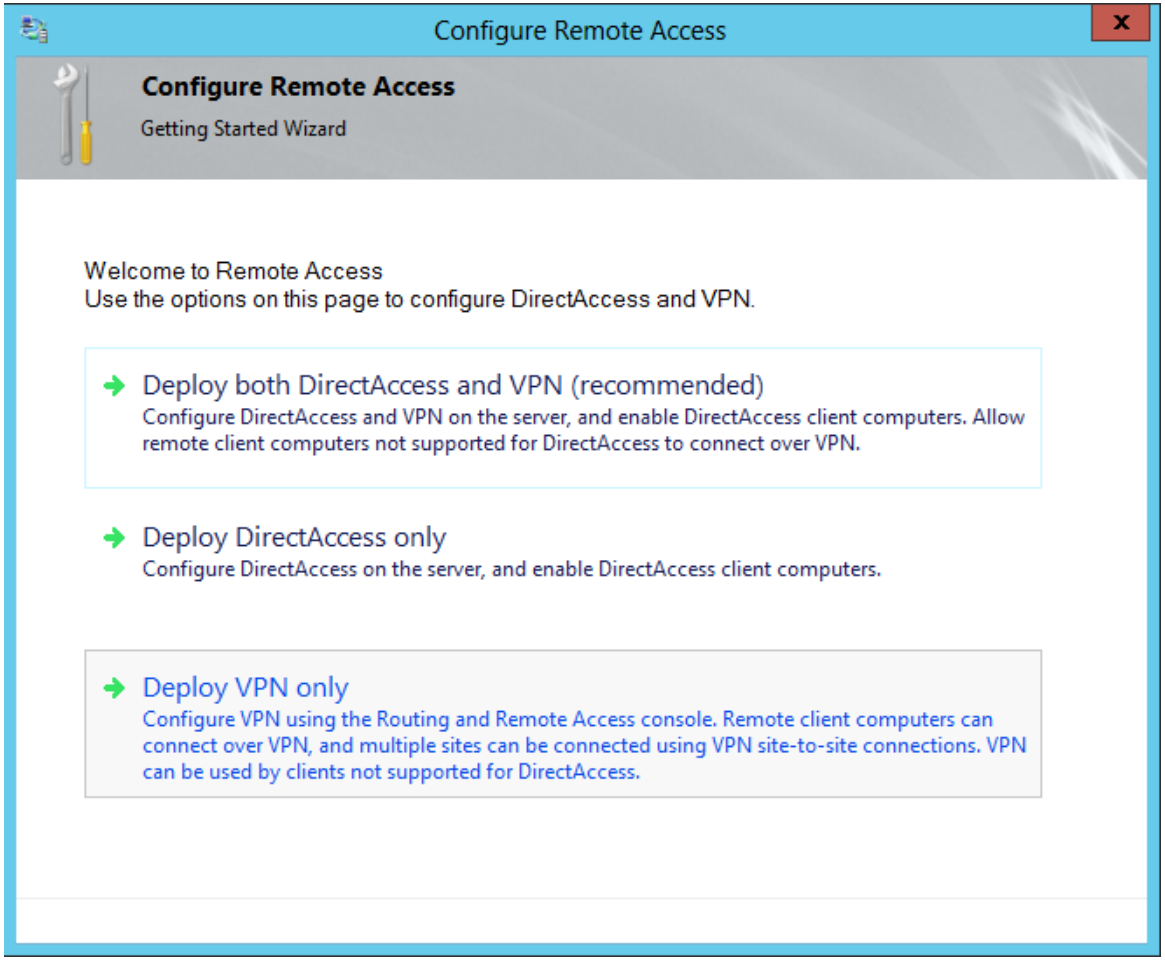
View Server Manager

Routing and Remote Access Services is installed but is not running. Click on the yellow warning icon at the top of the Server Manager Dashboard and click on the “Open the Getting Started Wizard” hyperlink.



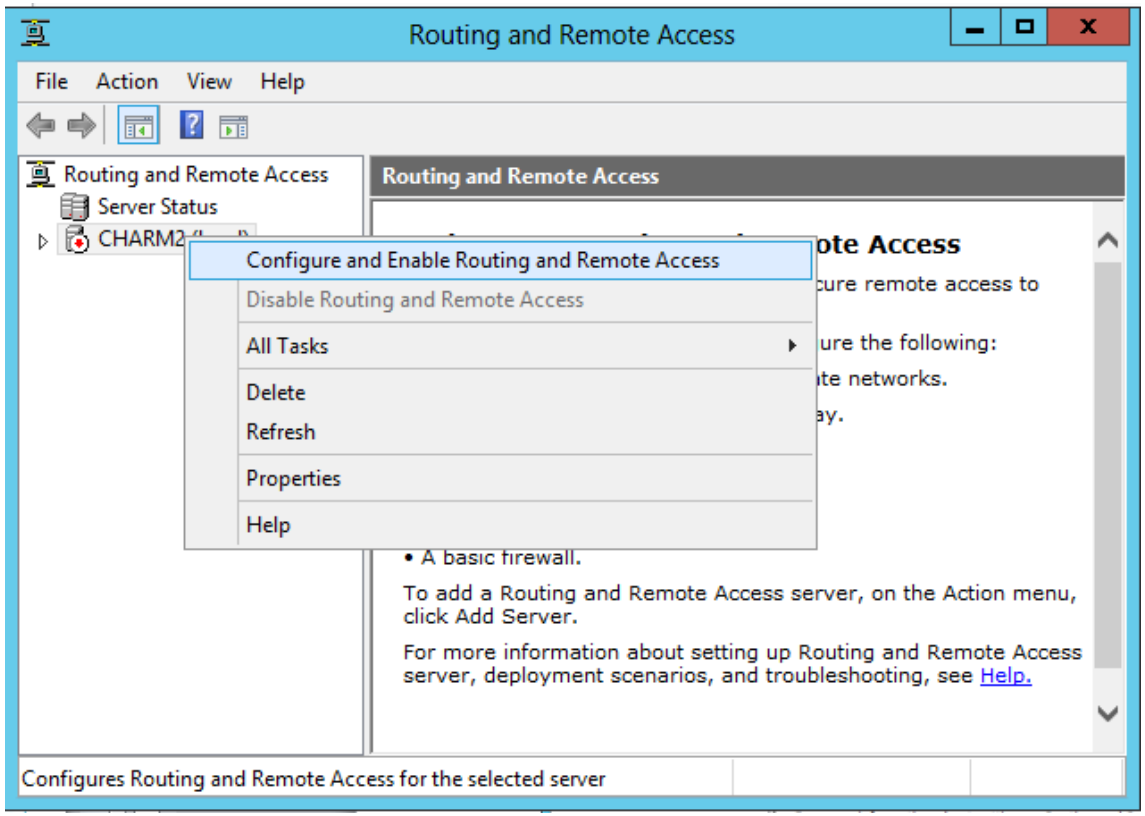
Configure Remote Access

We will select Deploy VPN only option. We will deploy direct access at a later lesson.



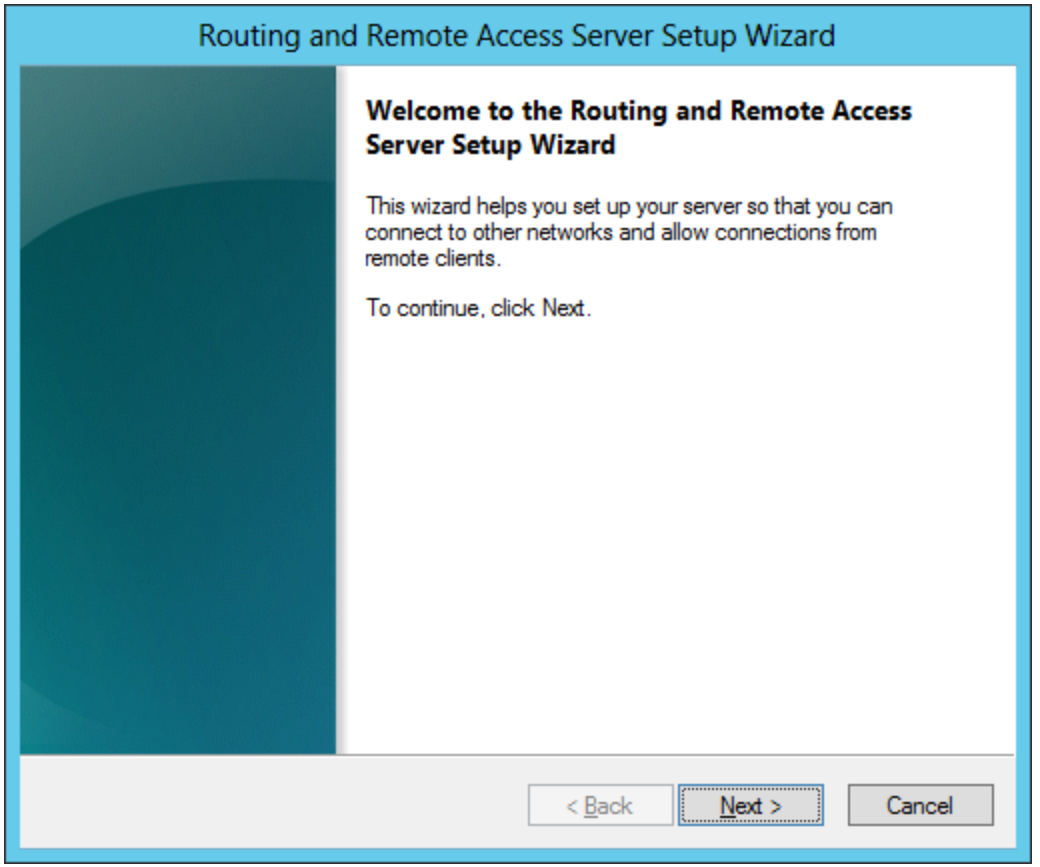
Routing and Remote Access

We open Routing and Remote Access window. Highlight the server name. Then on the popup menu, we select Configure and Enable Routing and Remote Access.



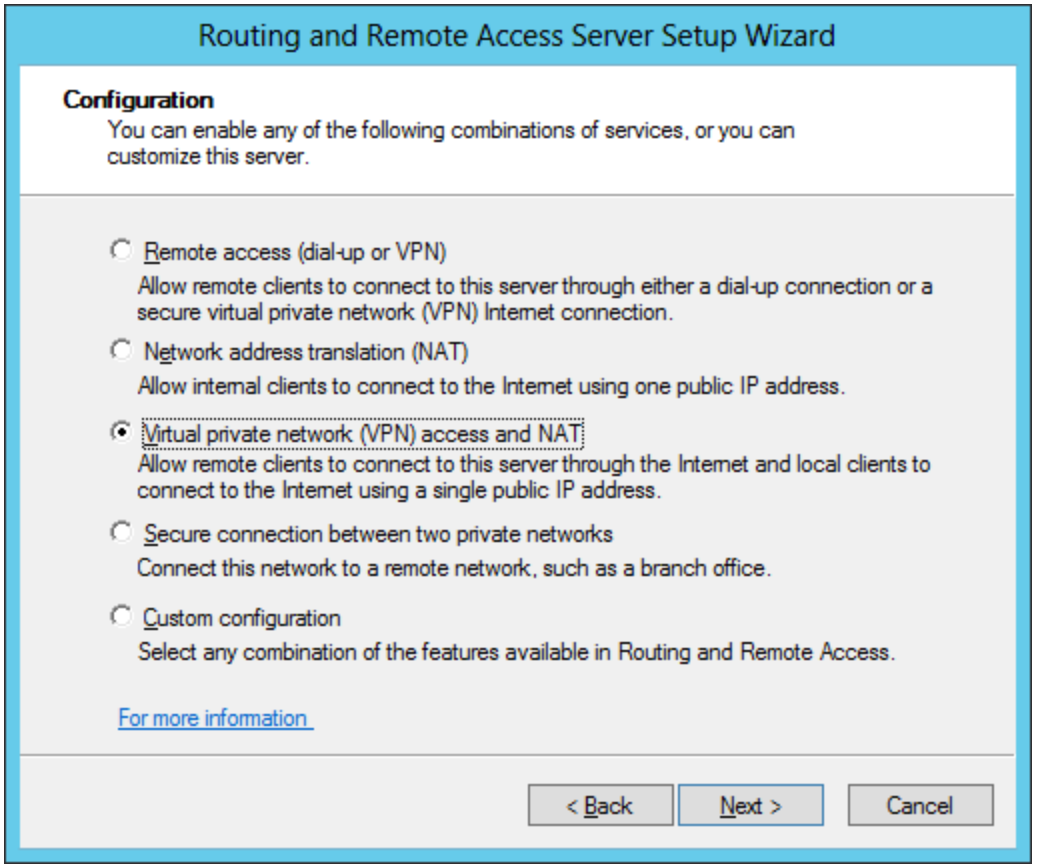
Routing and Remote Access Server Setup Wizard

The Routing and Remote Access Server Setup Wizard will appear and we press the Next button to continue.



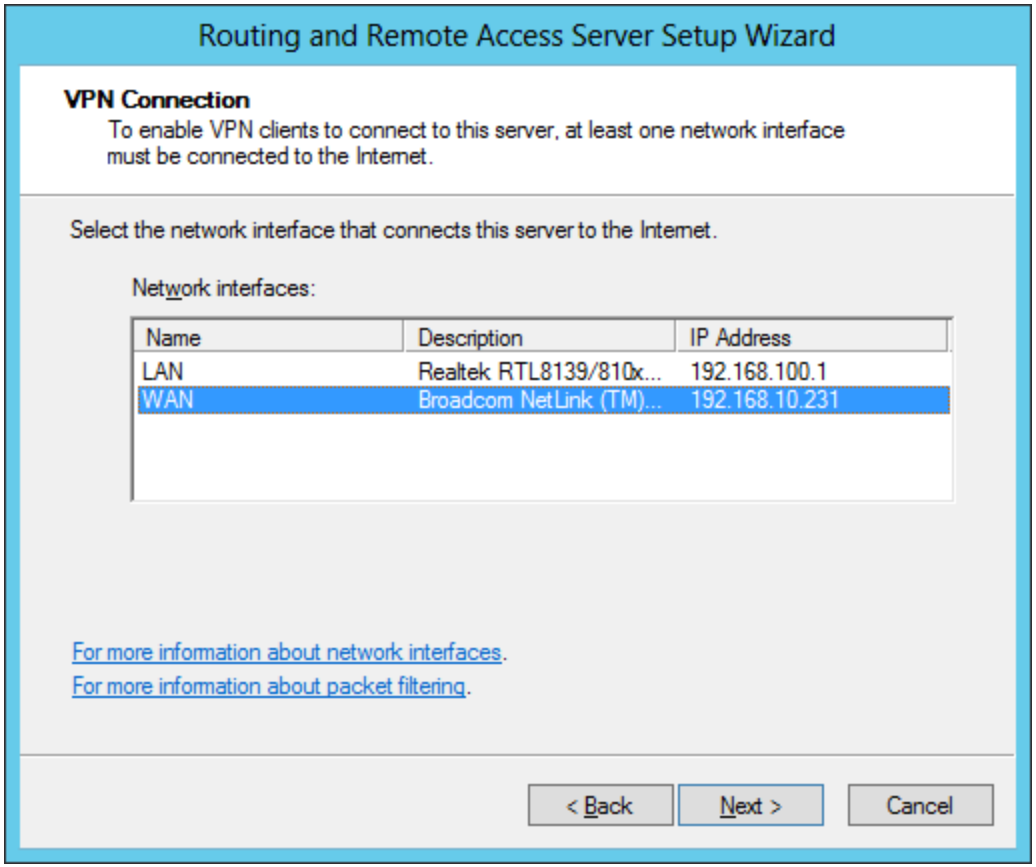
Configuration

This window gives us five unique roles for the RRAS setup. The first is a dial-up or VPN connection to the server. The next is Network Address Translation which opens the Internet to internal clients. The next is VPN and NAT, which is our choose. The fourth option is making a connection to a branch office and the last is custom configuration. After selecting our option, we choose the Next button to carry on.



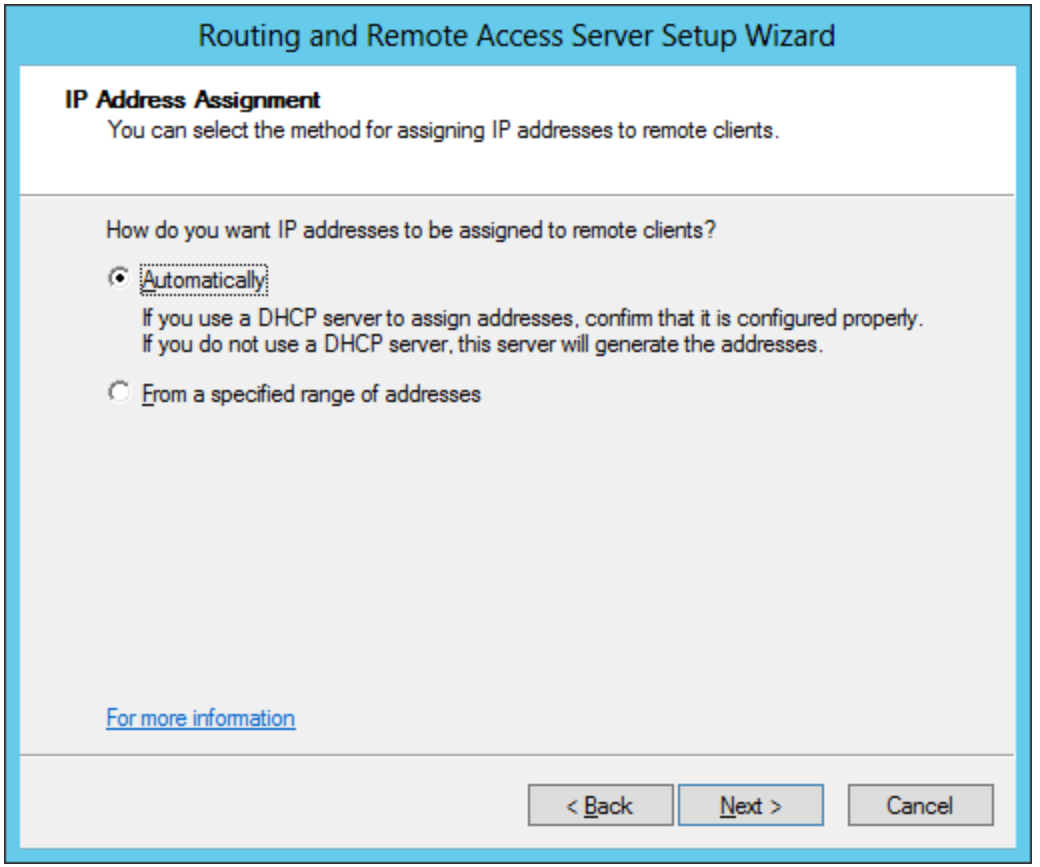
VPN Connection

We show what Local Area Connection connects to the Internet and to the internal network. We highlight the external card (WAN) that attaches to the Internet.



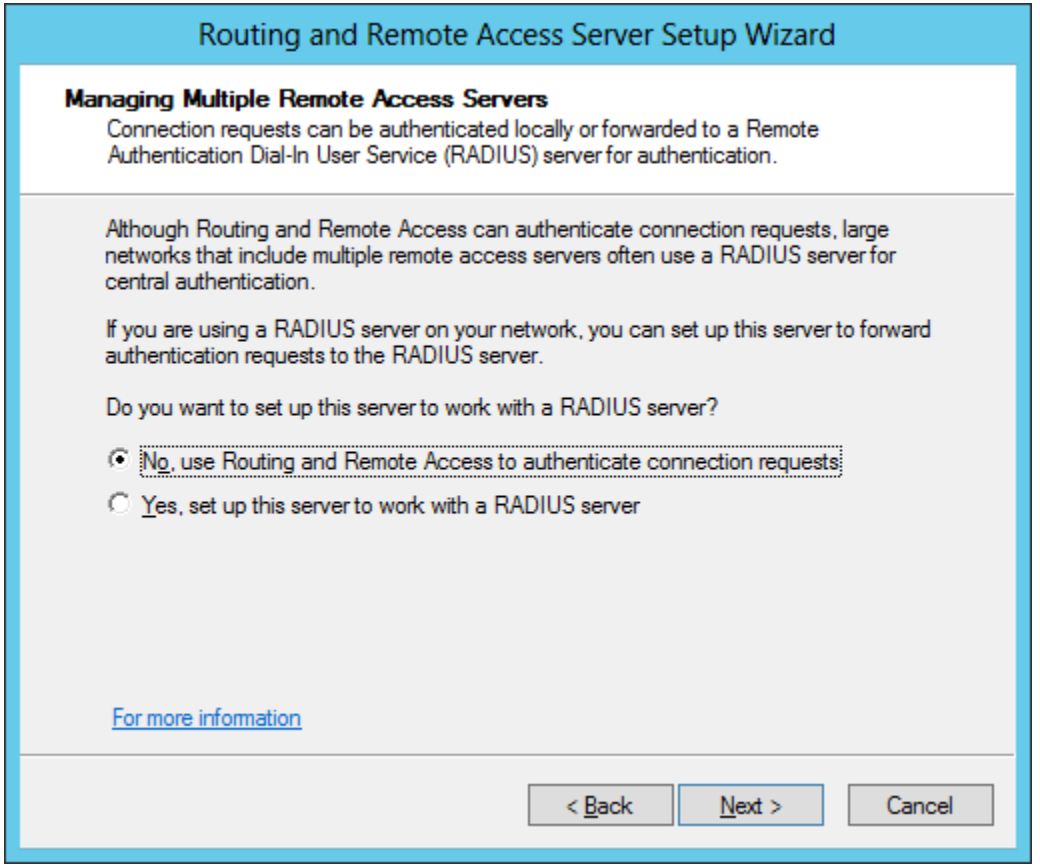
IP Address Assignment

Our internal NIC is on the 192.168.100 network, so the address assignment range will be in this LAN automatically.



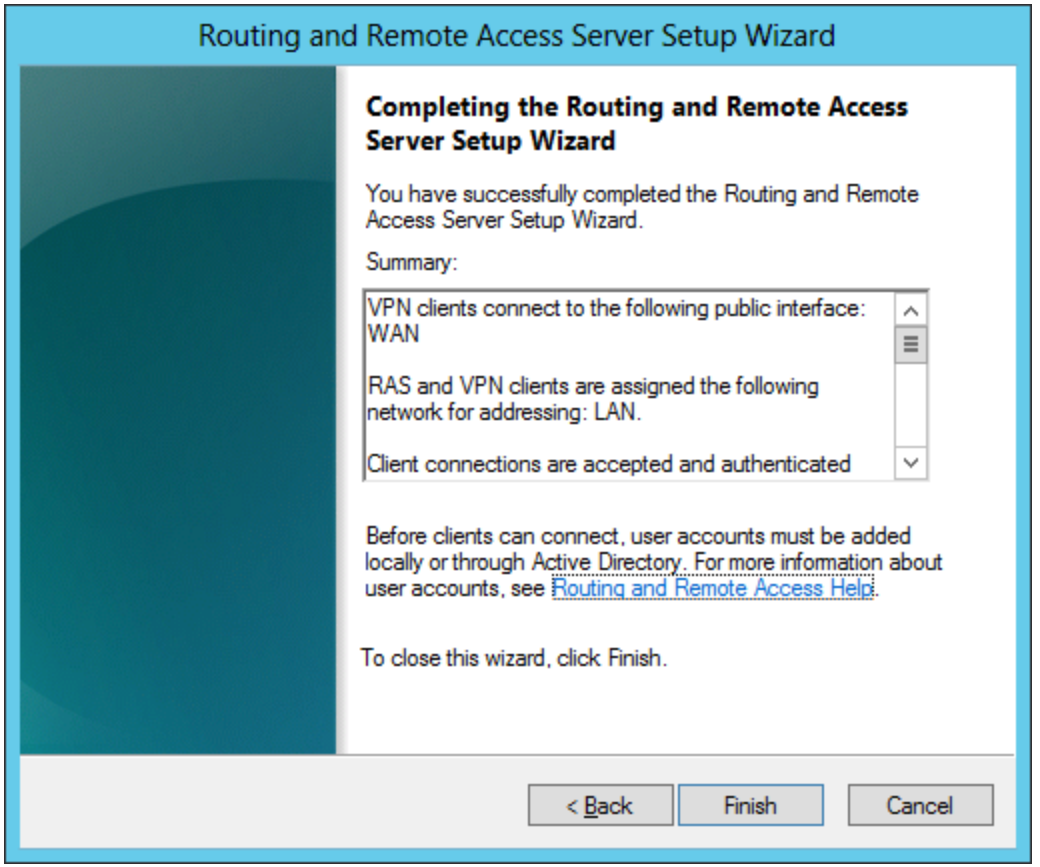
Managing Multiple Remote Access Servers

We do not want to work with a Radius server, which are found in large networks. We decide on the No option and choose the Next button to go forward.



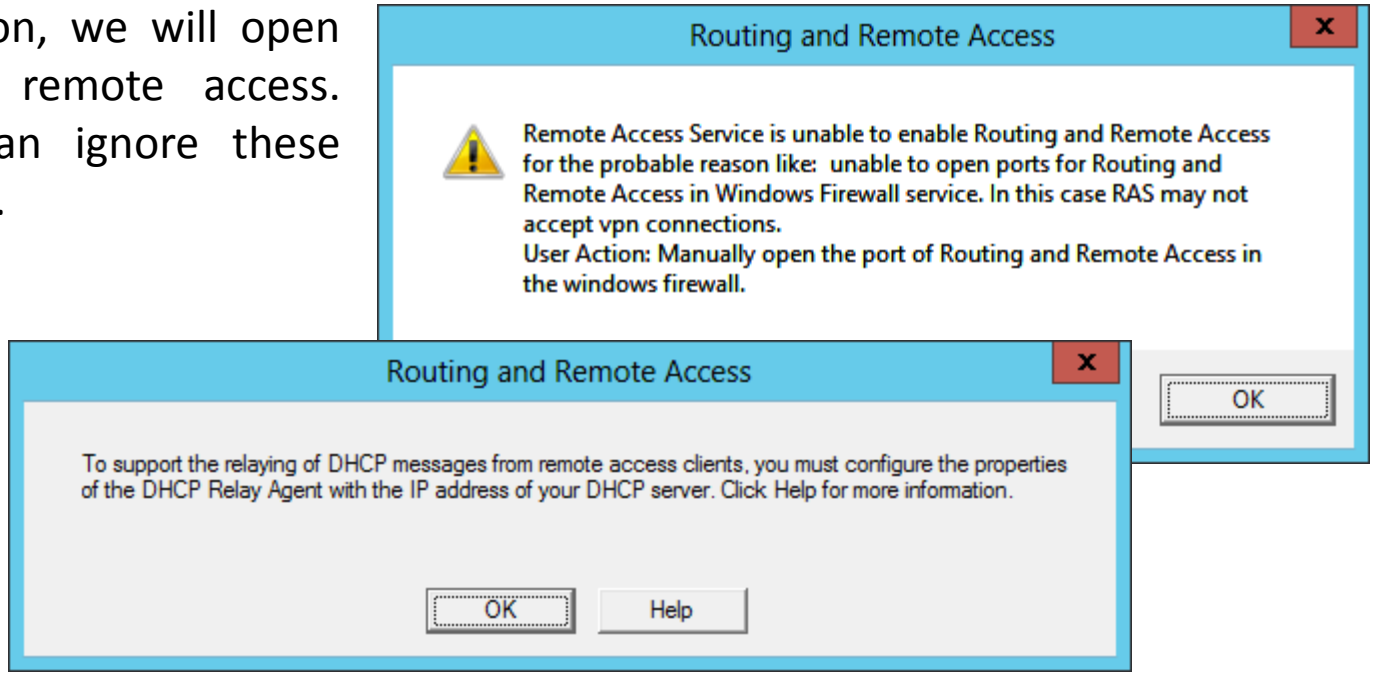
Completing RRAS Setup

The RRAS setup wizard is now complete. We can press the Finish button or go back to correct a setting.



VPN Warning

In our VPN lesson, we will open ports to allow remote access. Therefore we can ignore these warnings for now.



Our Machine is a RRAS Server

Our server is now providing Internet access to the client computers on the 192.168.100 network. We can set up a VPN now if we wish.