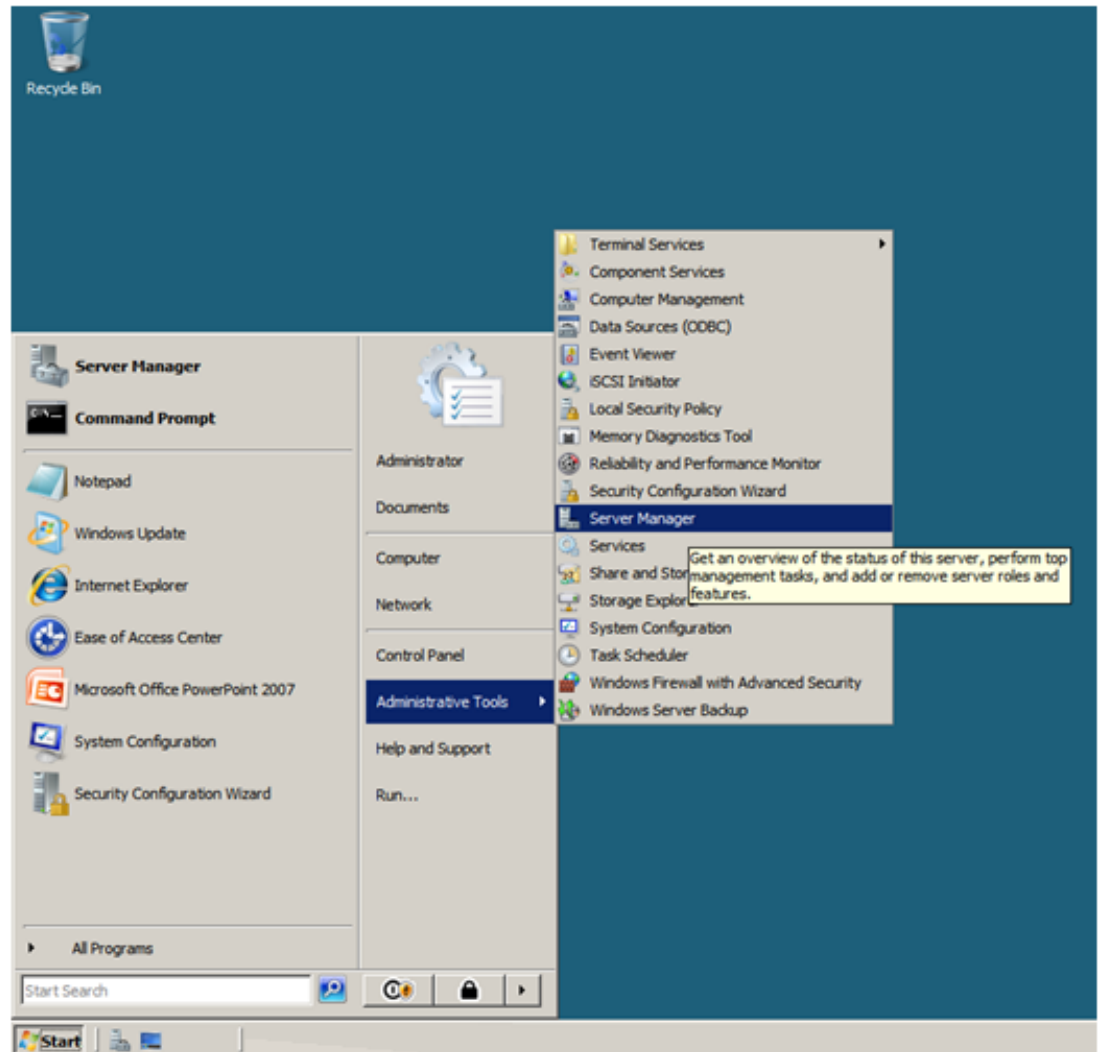


Setup DNS Server on Server 2008

August 16, 2010

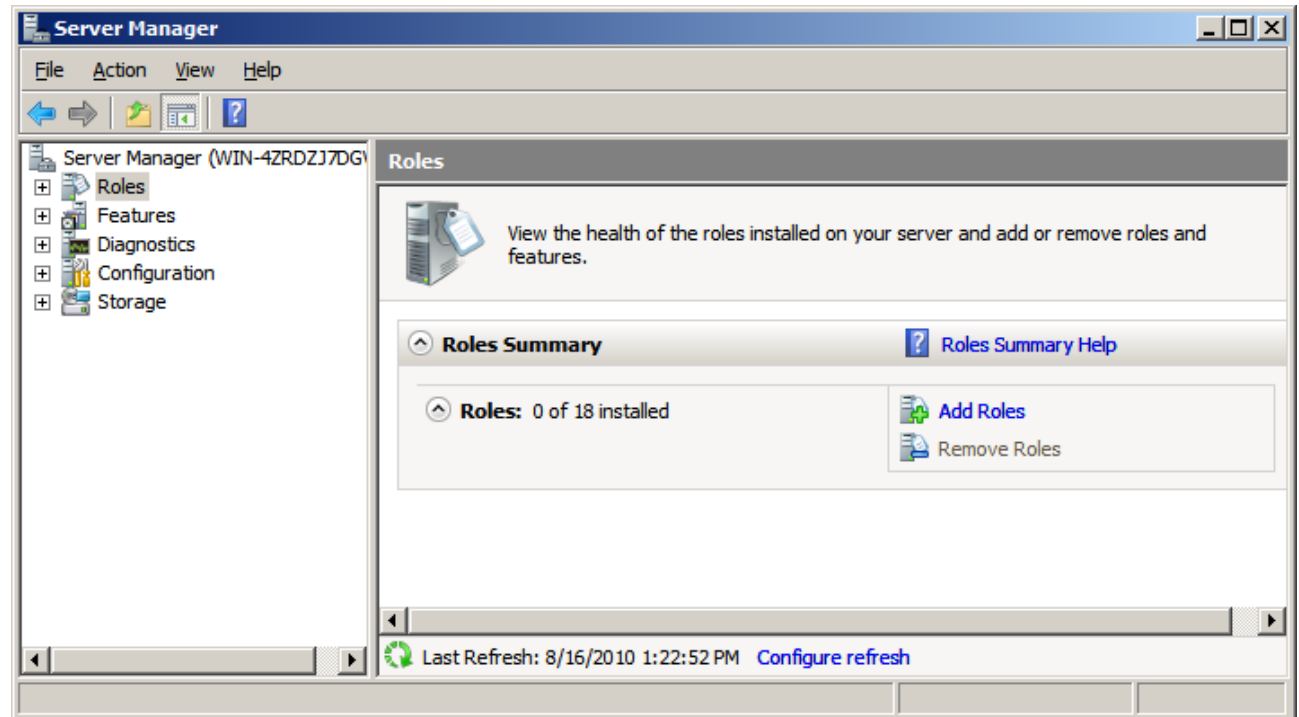
Server 2008 Desktop

To start the process of making a DNS Server, we select the Start button to open the Start Menu. We choose Administrative Tools and then we pick Server Manager.



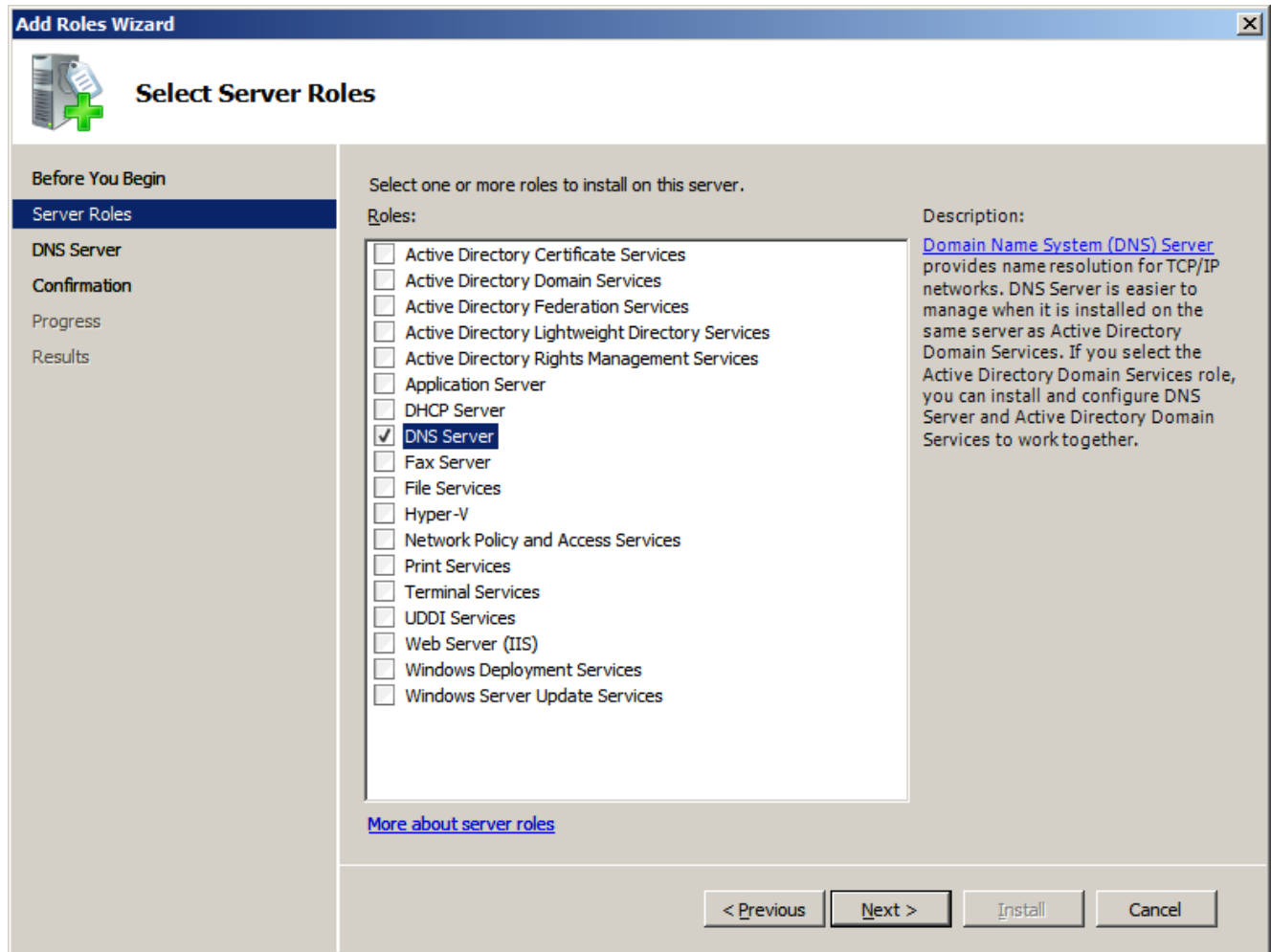
Server Manager

The Server Manager window will open. We highlight Roles in the left pane and select Add Roles in the right pane.



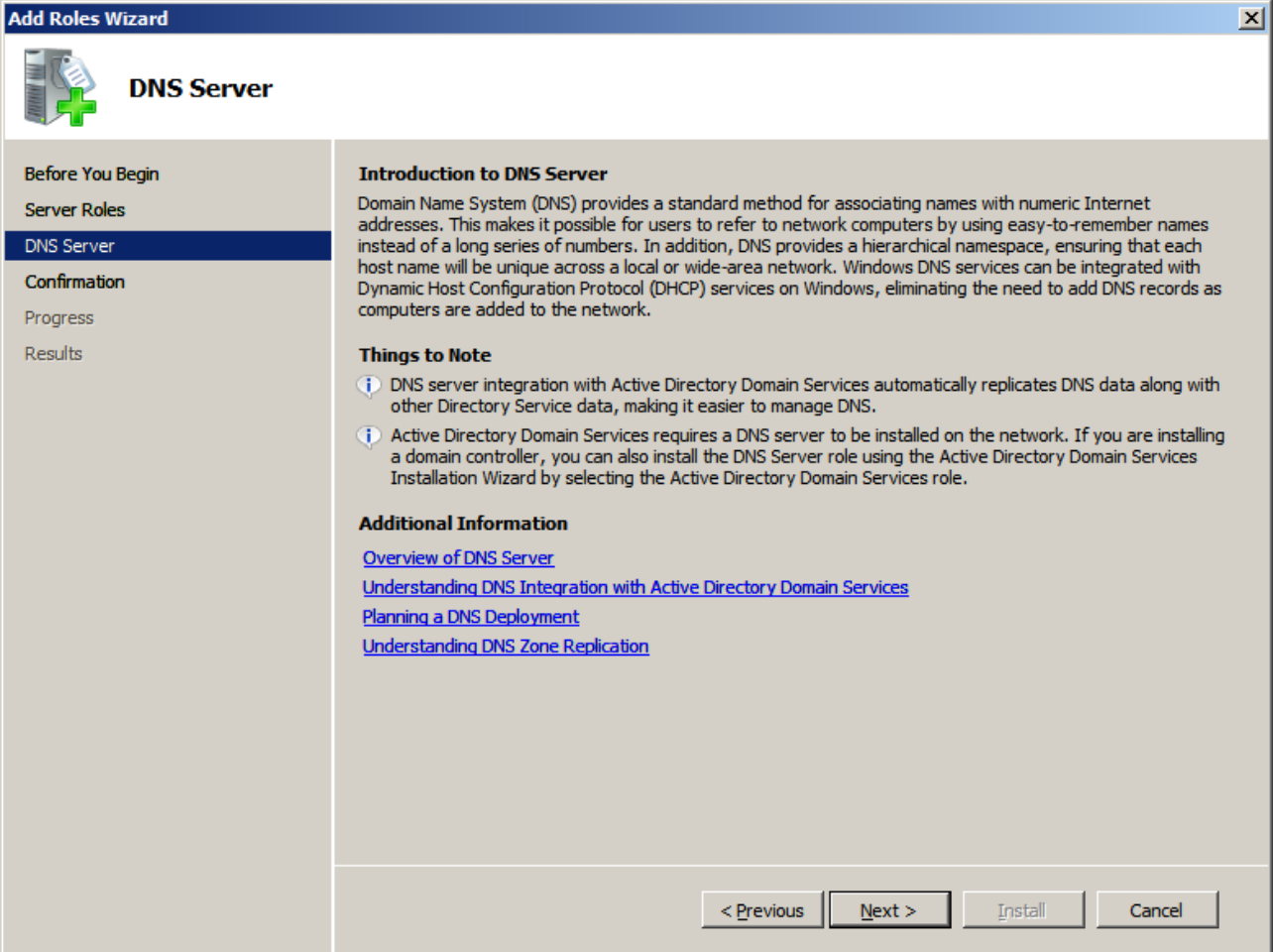
Select Server Roles

The Add Roles Wizard window shows the multitude of functions a 2008 server can provide. We annotate the DNS Server checkbox and press the Next button.



DNS Server

The DNS Server window will explain the DNS deployment and Active Directory.



The screenshot shows the 'Add Roles Wizard' window for the 'DNS Server' role. The window title is 'Add Roles Wizard'. On the left, there is a navigation pane with the following items: 'Before You Begin', 'Server Roles', 'DNS Server' (highlighted), 'Confirmation', 'Progress', and 'Results'. The main content area is titled 'DNS Server' and contains the following text:

Introduction to DNS Server

Domain Name System (DNS) provides a standard method for associating names with numeric Internet addresses. This makes it possible for users to refer to network computers by using easy-to-remember names instead of a long series of numbers. In addition, DNS provides a hierarchical namespace, ensuring that each host name will be unique across a local or wide-area network. Windows DNS services can be integrated with Dynamic Host Configuration Protocol (DHCP) services on Windows, eliminating the need to add DNS records as computers are added to the network.

Things to Note

- DNS server integration with Active Directory Domain Services automatically replicates DNS data along with other Directory Service data, making it easier to manage DNS.
- Active Directory Domain Services requires a DNS server to be installed on the network. If you are installing a domain controller, you can also install the DNS Server role using the Active Directory Domain Services Installation Wizard by selecting the Active Directory Domain Services role.

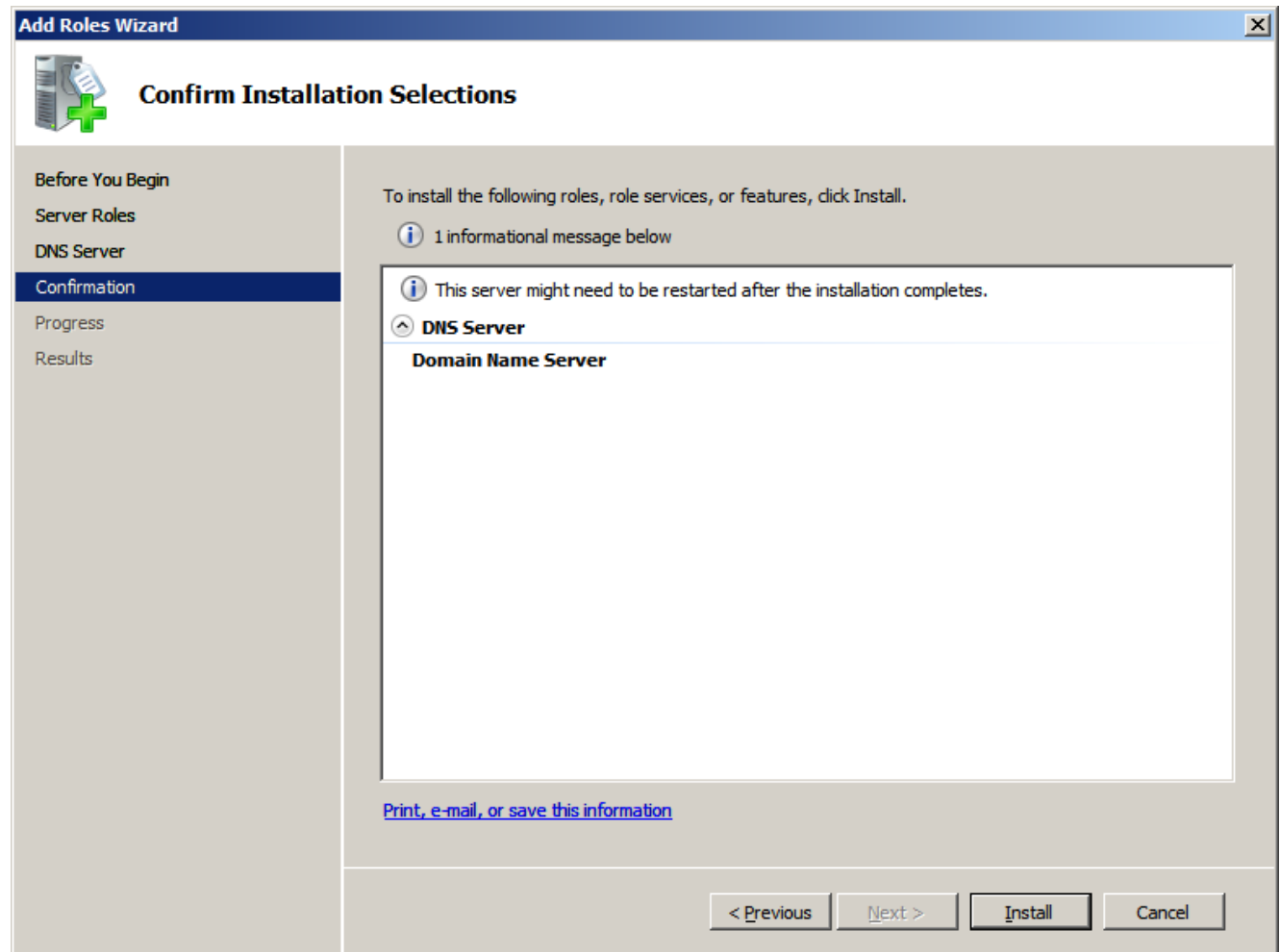
Additional Information

- [Overview of DNS Server](#)
- [Understanding DNS Integration with Active Directory Domain Services](#)
- [Planning a DNS Deployment](#)
- [Understanding DNS Zone Replication](#)

At the bottom of the window, there are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

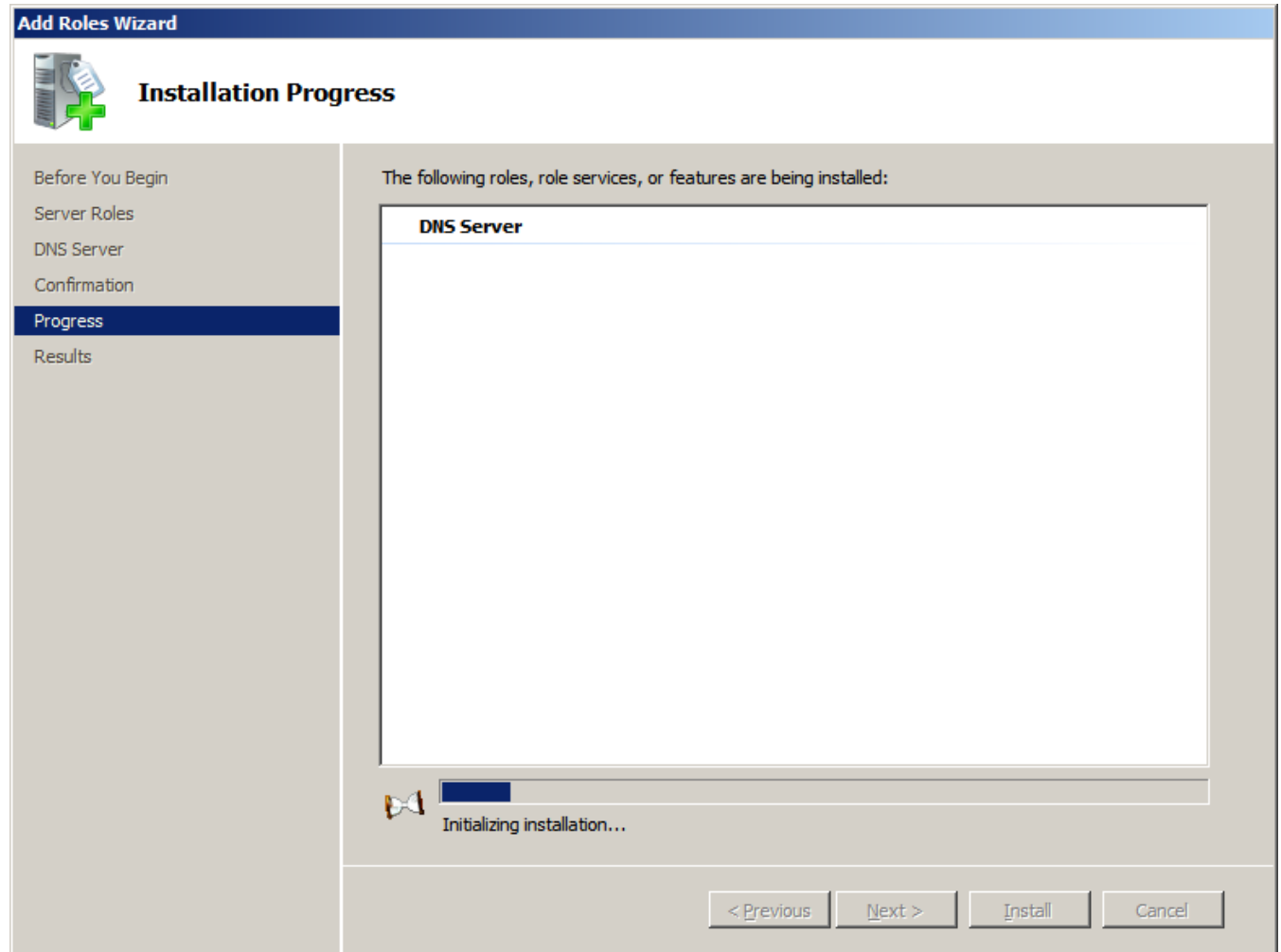
Confirm Installation Selections

We confirm that we want to set the machine up as a DNS server, so we pick the Install button to proceed.



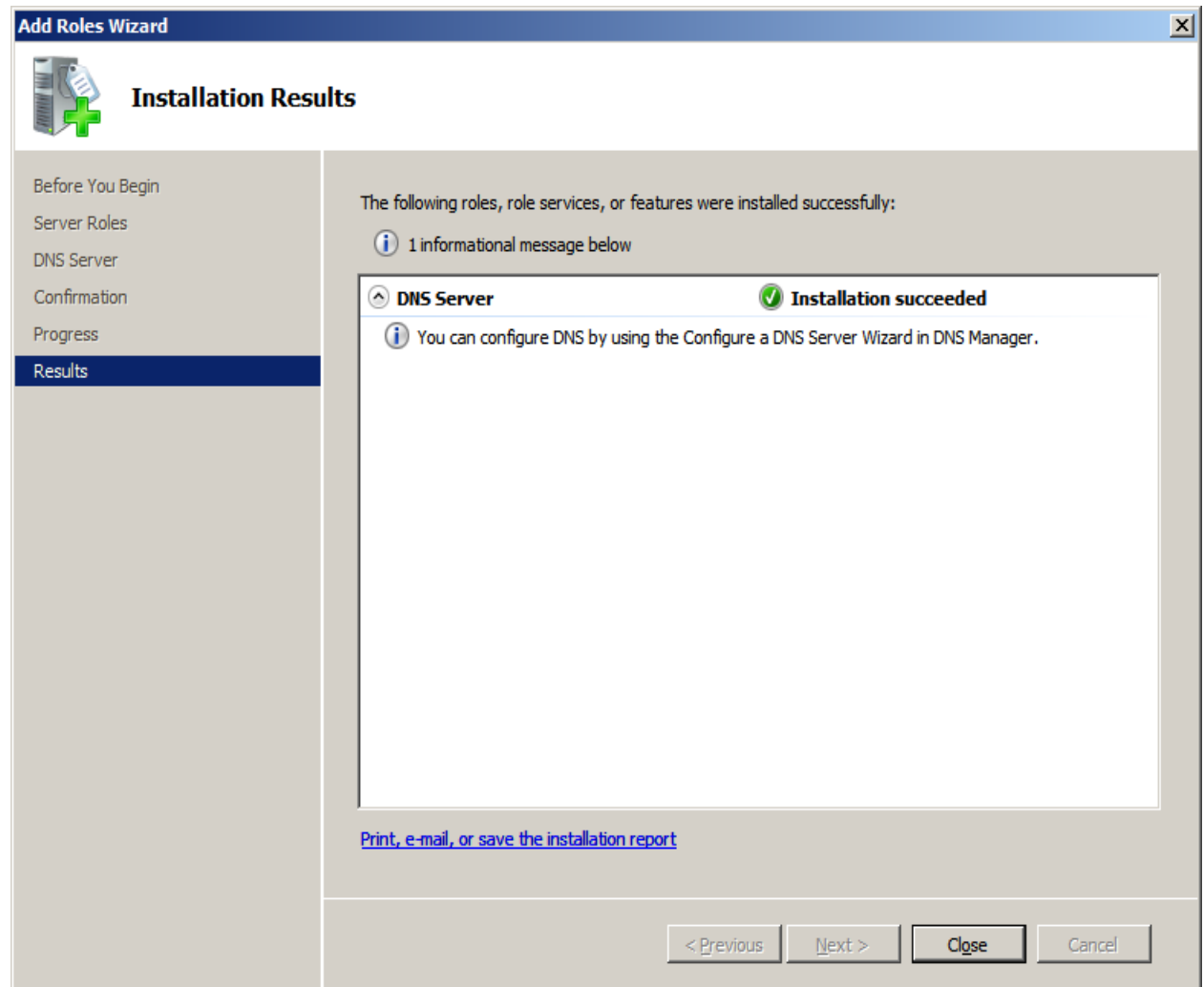
Installation

We can watch the computer progress through the installation.



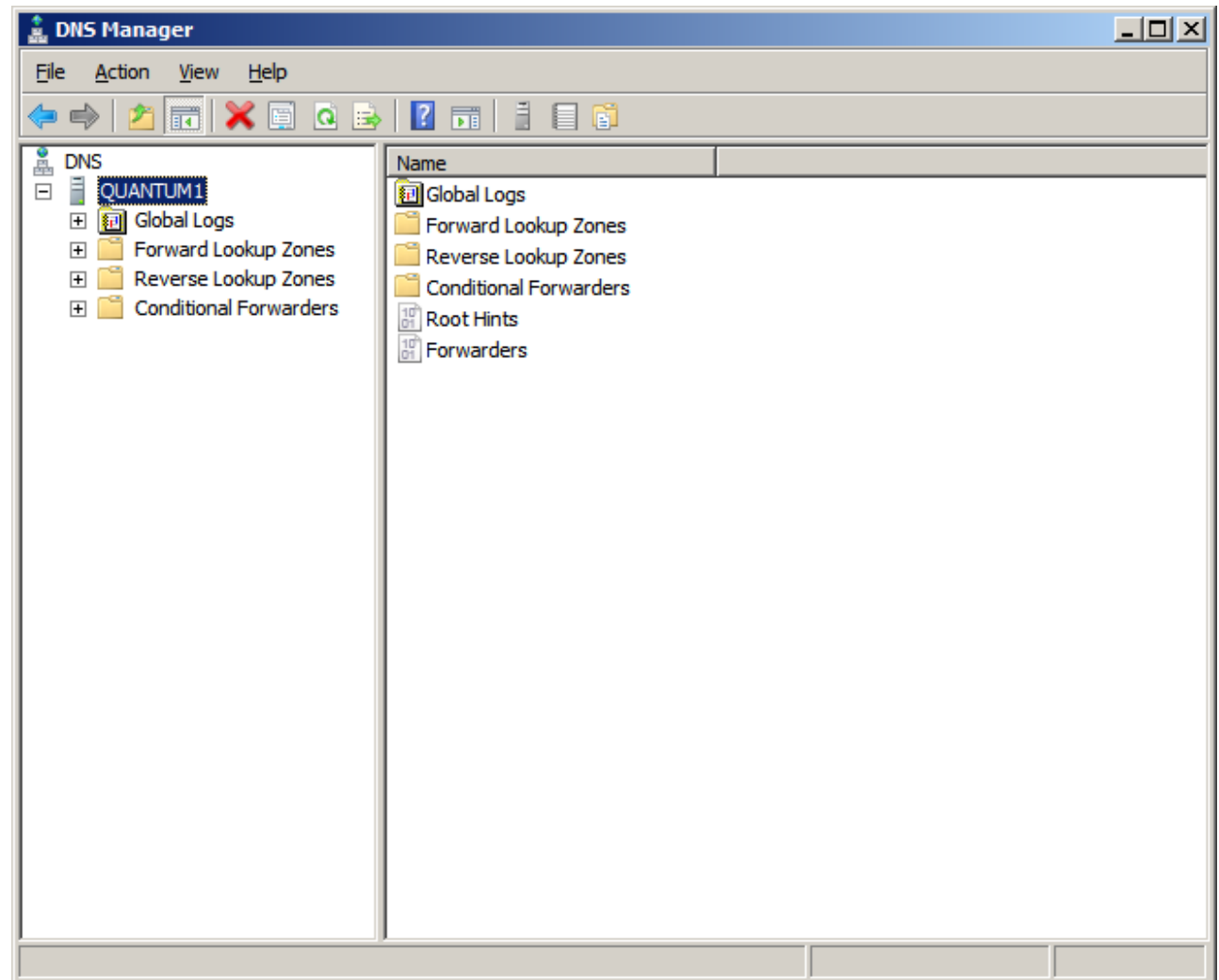
Installation Results

Finally, the server DNS installation is completed.



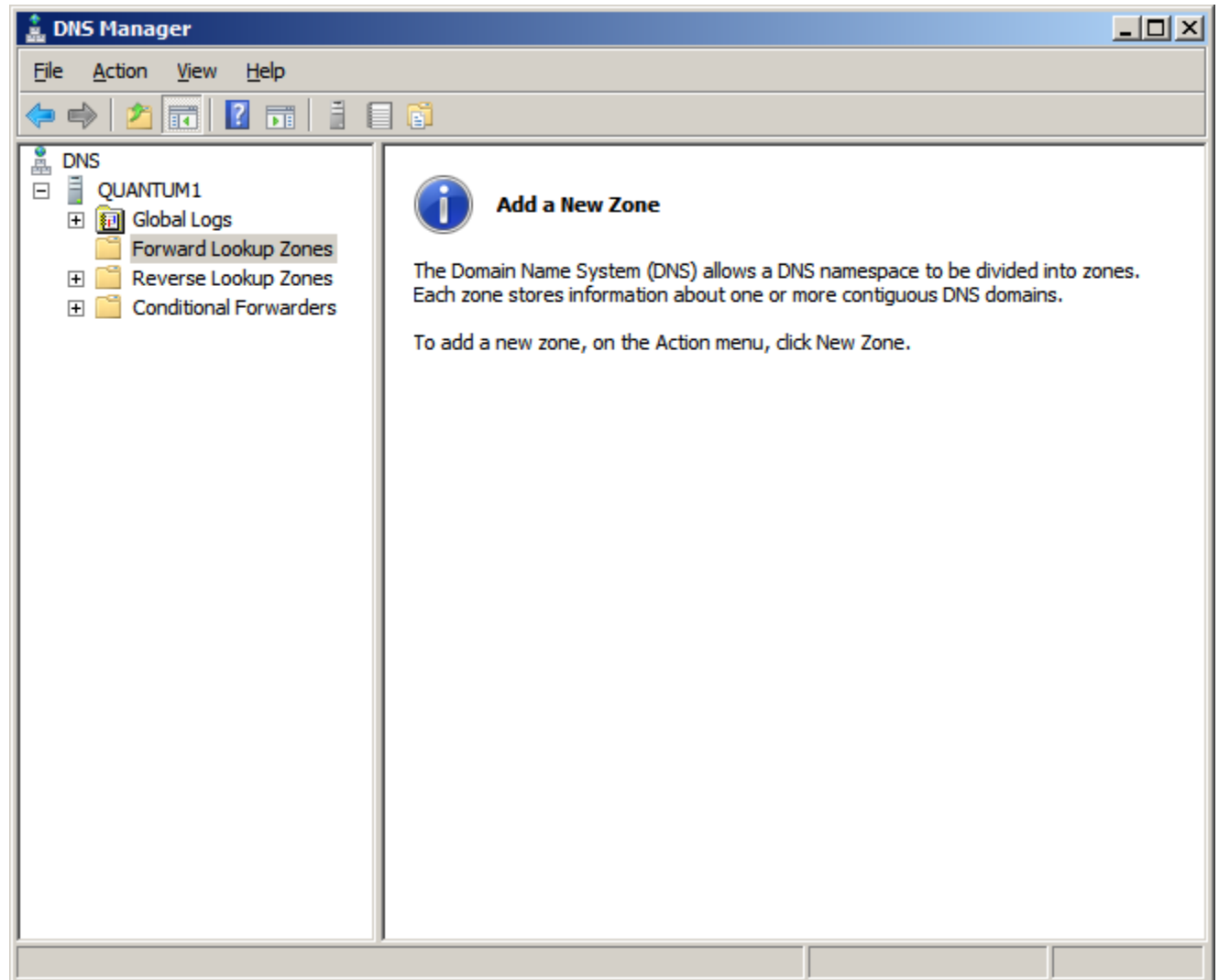
DNS Manager

We can return to Administrative Tools on the Windows 2008 Startup Menu and pick DNS to open the DNS Manager.



Forward Lookup Zone

To add a Forward Lookup Zone we select that term in the left pane. Click on the Add a New Zone icon to start that wizard.



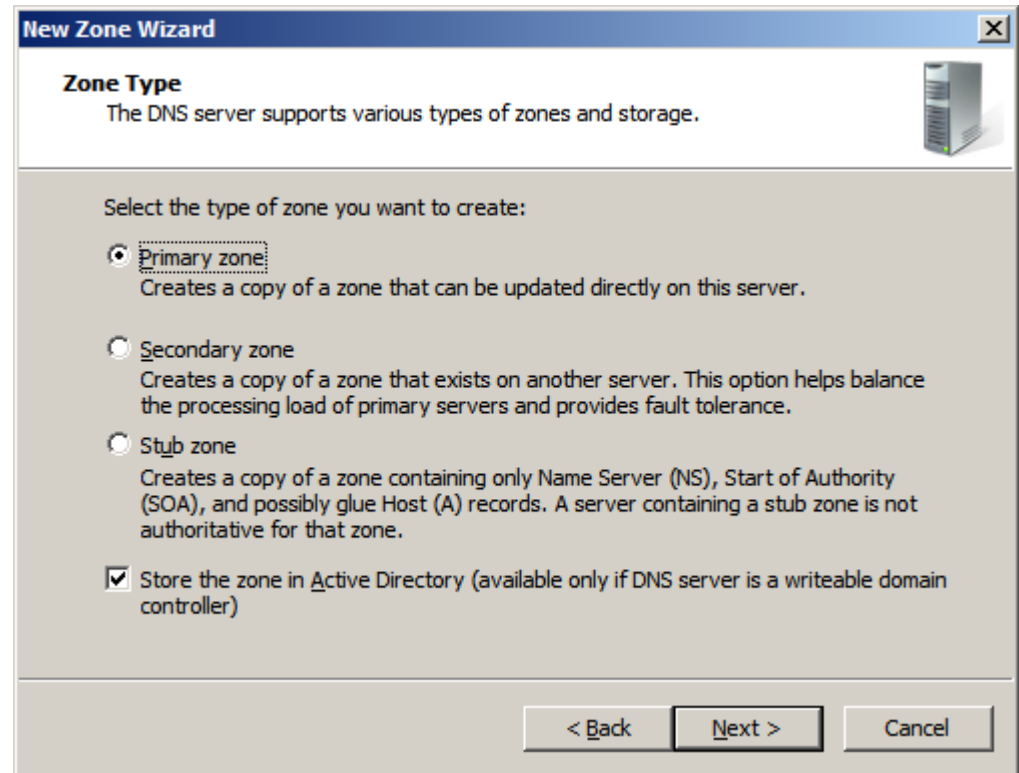
The New Zone Wizard

We enter the New Zone Wizard, and we opt for the Next button to continue.



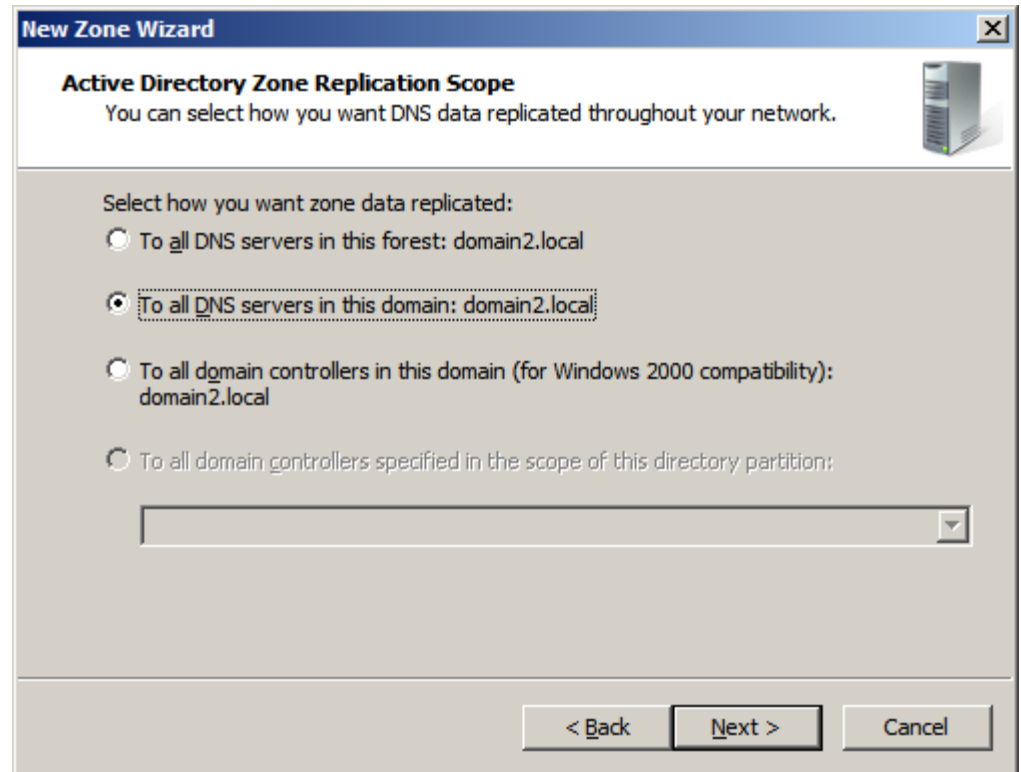
Zone Type

We want to create a primary zone. If we setup another server DNS server, we can create a secondary zone that copies the DNS information from the other machine.



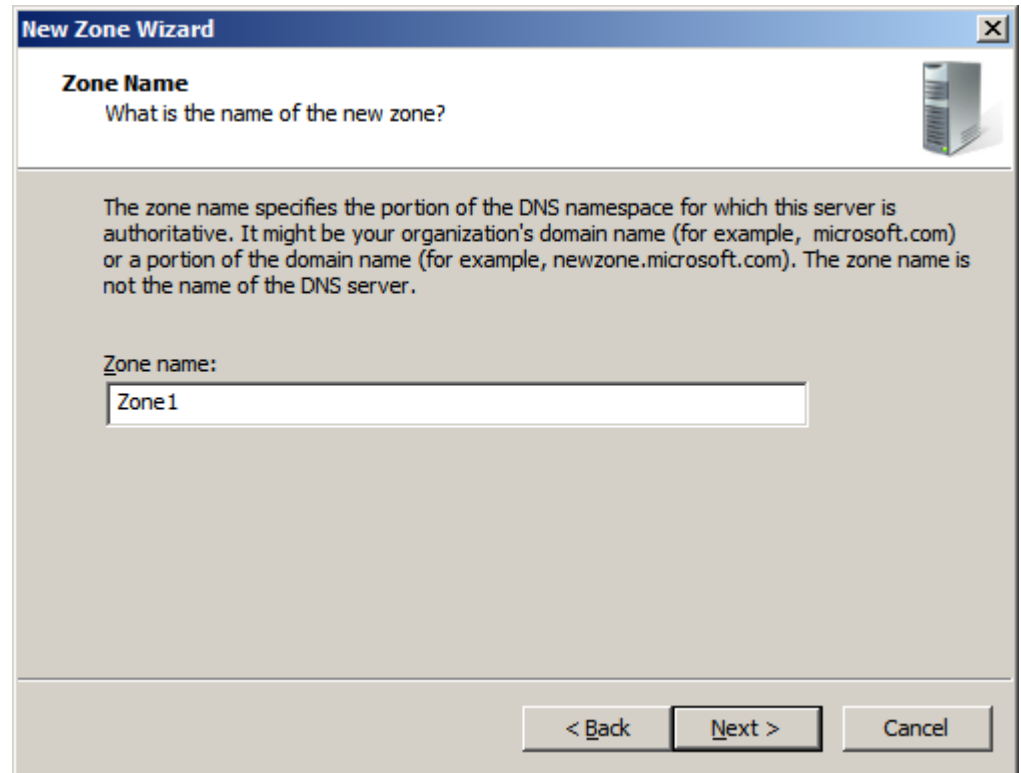
Active Directory Zone Replication

We opt to replicate data to all servers in this domain. Our domain for the project is domain2.local.



Zone Name

We are calling our zone, “Zone1” and we will press the Next button to continue.



The screenshot shows a Windows-style dialog box titled "New Zone Wizard". The main heading is "Zone Name" with the question "What is the name of the new zone?". Below this is a paragraph of explanatory text: "The zone name specifies the portion of the DNS namespace for which this server is authoritative. It might be your organization's domain name (for example, microsoft.com) or a portion of the domain name (for example, newzone.microsoft.com). The zone name is not the name of the DNS server." A text input field labeled "Zone name:" contains the text "Zone1". At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel". A small server icon is visible in the top right corner of the dialog.

New Zone Wizard

Zone Name
What is the name of the new zone?

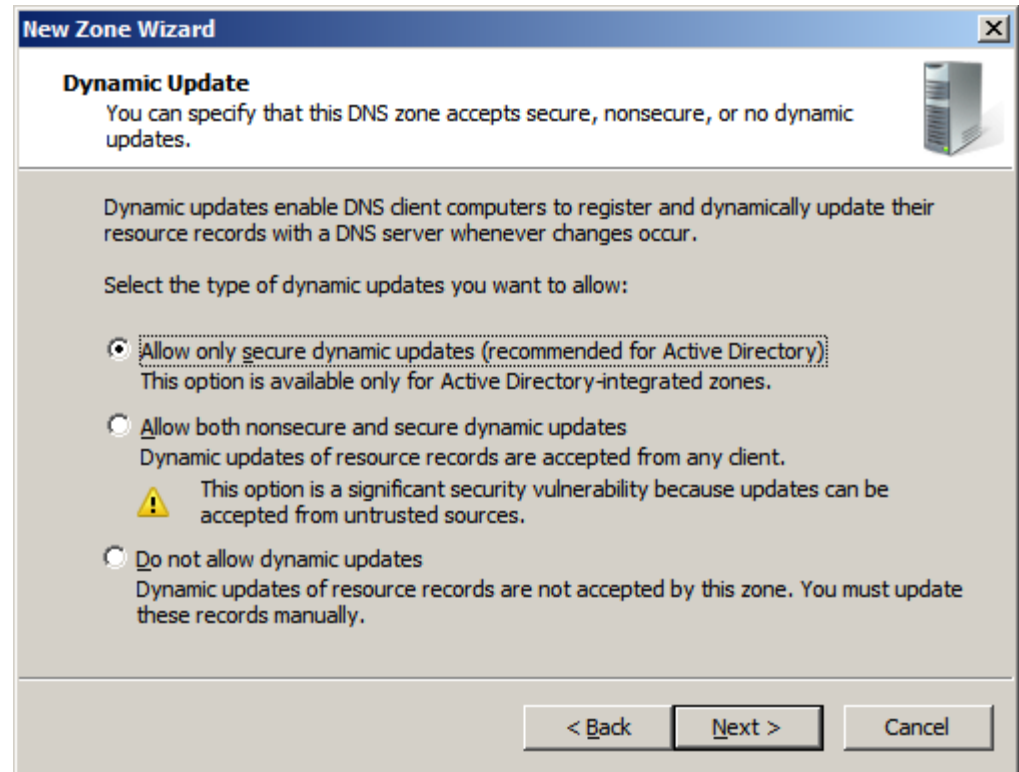
The zone name specifies the portion of the DNS namespace for which this server is authoritative. It might be your organization's domain name (for example, microsoft.com) or a portion of the domain name (for example, newzone.microsoft.com). The zone name is not the name of the DNS server.

Zone name:
Zone1

< Back Next > Cancel

Dynamic Update

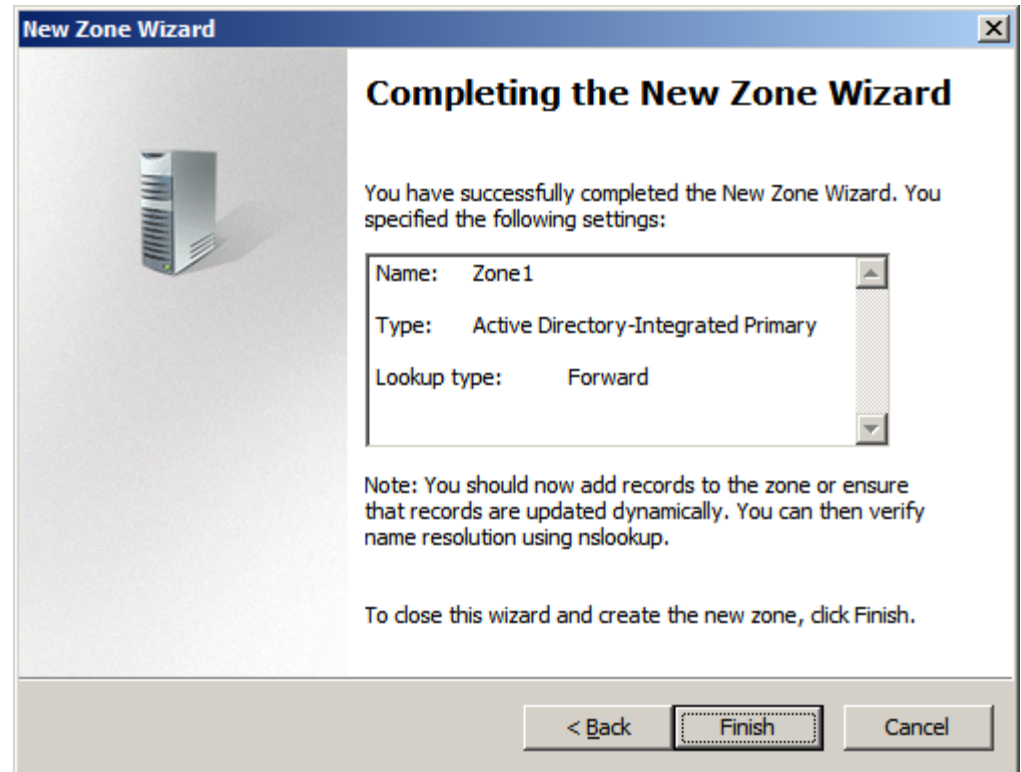
We want to allow only secure dynamic updates. We could opt to allow both non-secure and secure dynamic updates or resource records, but we need to consider the security threat to a server farm when picking this option.



Completing the New Zone Wizard

This window tells the wizard is complete. To continue with our work, such as adding reverse lookup zones and more, we will open the DNS Manager.

After setting up the Forward Lookup Zone, we want to go through the DNS server properties.

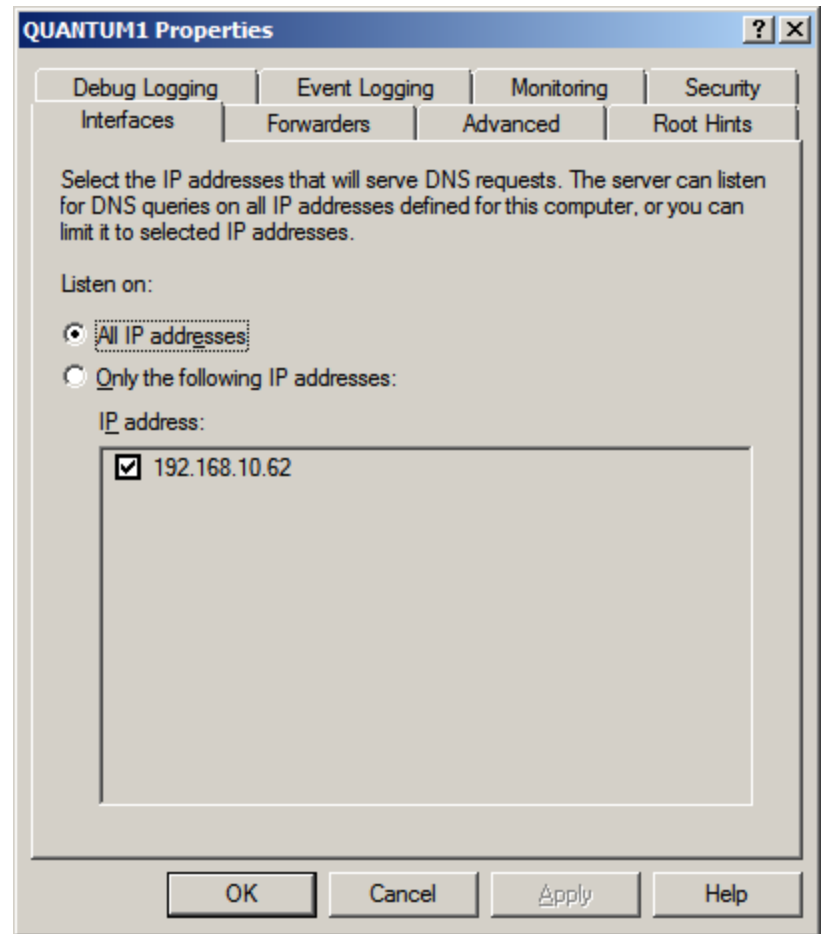


DNS Server Properties

To open the DNS Properties window, to access and make changes to our DNS server, we right click on the DNS Server name and select Properties from the popup menu.

The first inspect the Interface tab where we will see the IP addresses of the external network interface card. The default is to listen to all IP addresses for DNS queries. However, we could decide to limit the listening and choose the second radial button option and select the IP addresses which we want to hear.

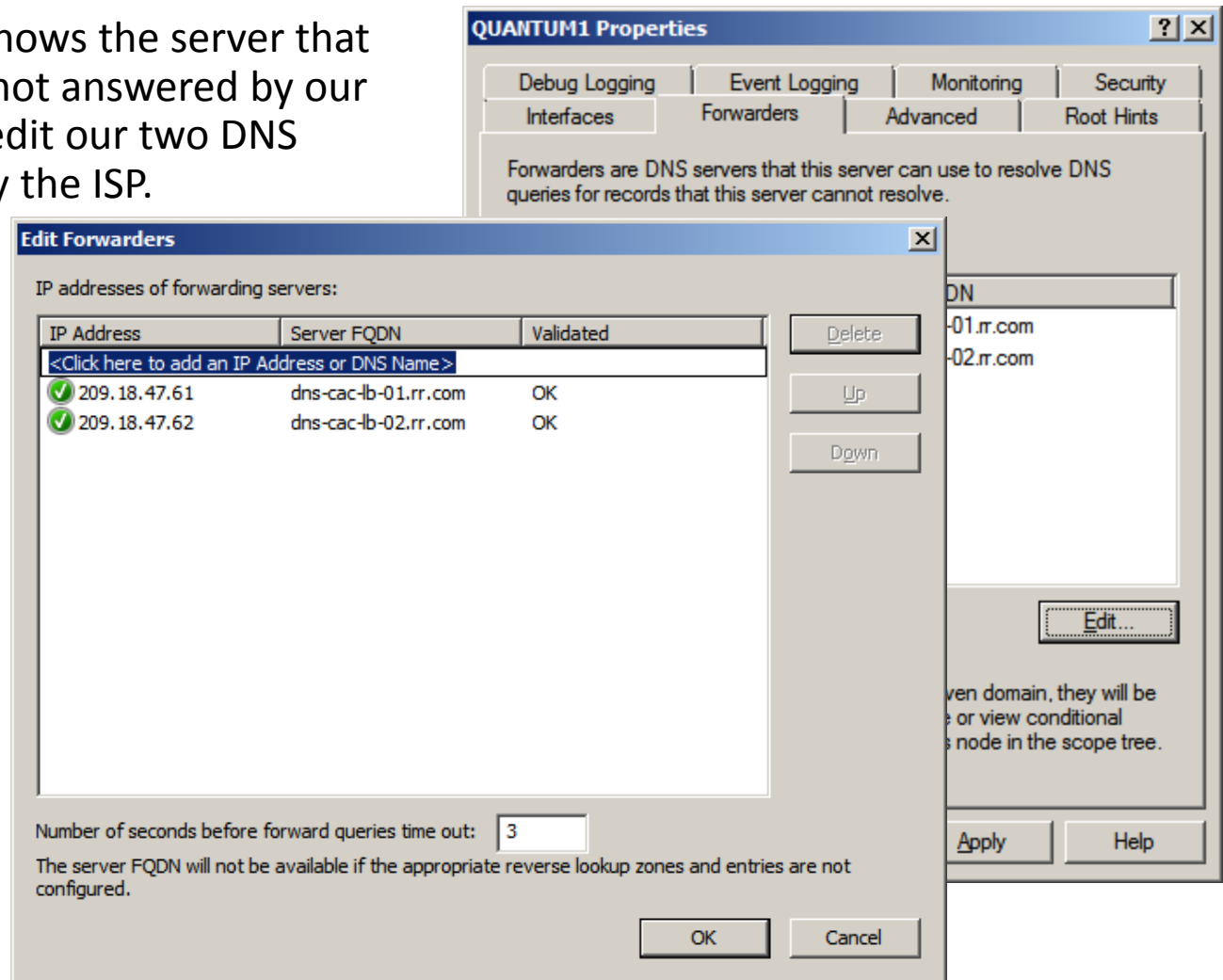
Next, we will visit the Forwarders tab.



The Forwarders Tab

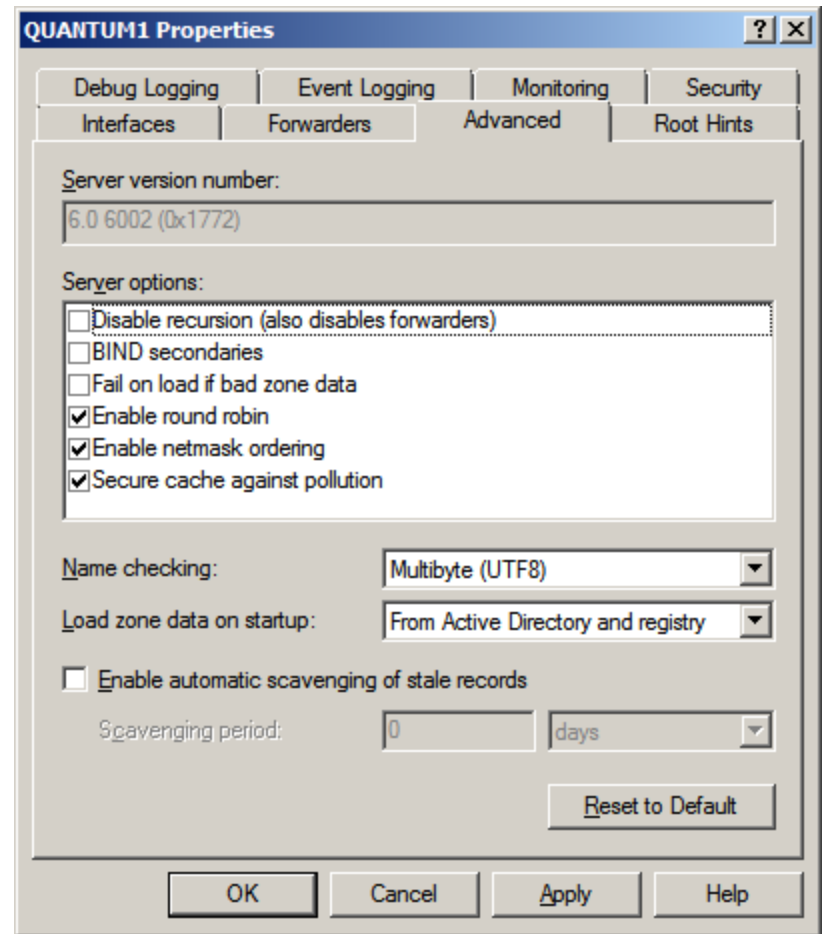
The Forwarders tab shows the server that resolve DNS request not answered by our DNS server. We can edit our two DNS addresses supplied by the ISP.

For home networks that do not have static IP addresses and do not have primary and secondary IP addresses assigned by the ISP, we can use two DNS servers provided by Google.com for public DNS resolution.



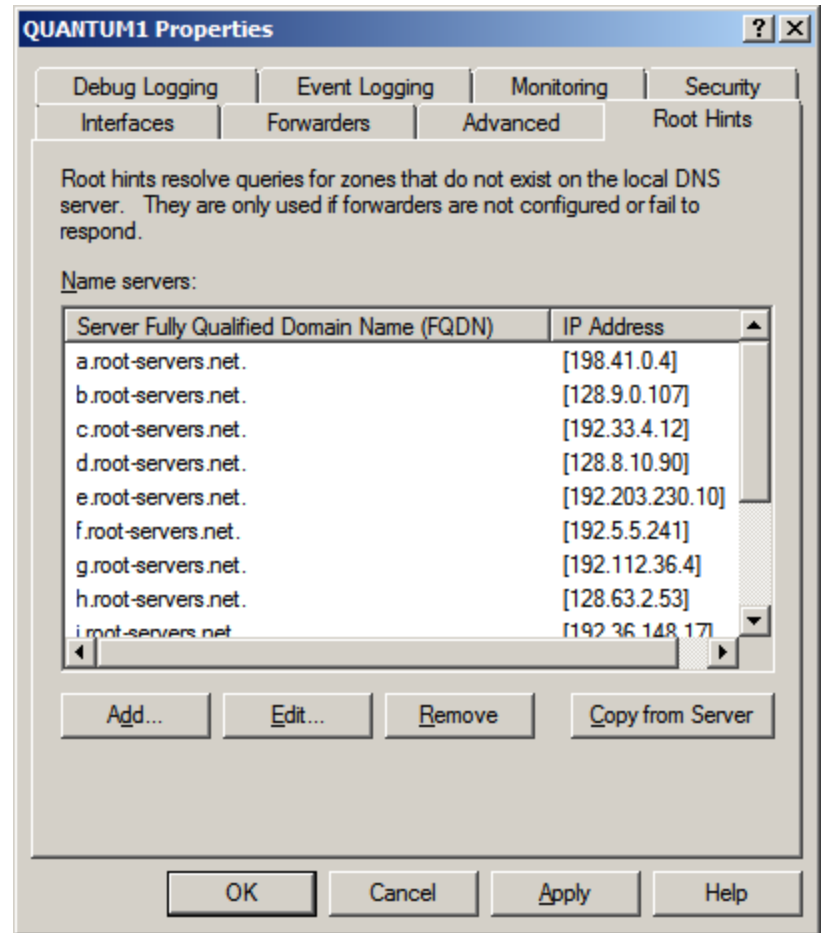
Advanced Tab

The Advanced tab will allow us to view the server options. We will not change any settings at this time.



The Root Hints Tab

Root Hints are IP addresses that are linked to Full Qualified Domain Names (FQDN). We can copy a list from another server by selecting the Copy from Server button. We can add more FQDNs and IP addresses by selecting the Add button.



Adding a New Resource Record

After selecting the Add button, the New Resource Record window appears. We type a real URL such as google.com into the textbox and press the Resolve button. A list of IP addresses appears that is associated with the Yahoo domain. Press the OK button and at the Root Hints tab press the Apply button to make the changes.

Enter a server name and one or more IP addresses. Both are required to identify the name server.

Server fully qualified domain name (FQDN):
google.com

Resolve

IP Addresses of this NS record:

IP Address	Validated
<Click here to add an IP Address>	
72.14.204.104	Validating...
72.14.204.147	Validating...
72.14.204.99	Validating...
72.14.204.103	Validating...

Delete

Up

Down

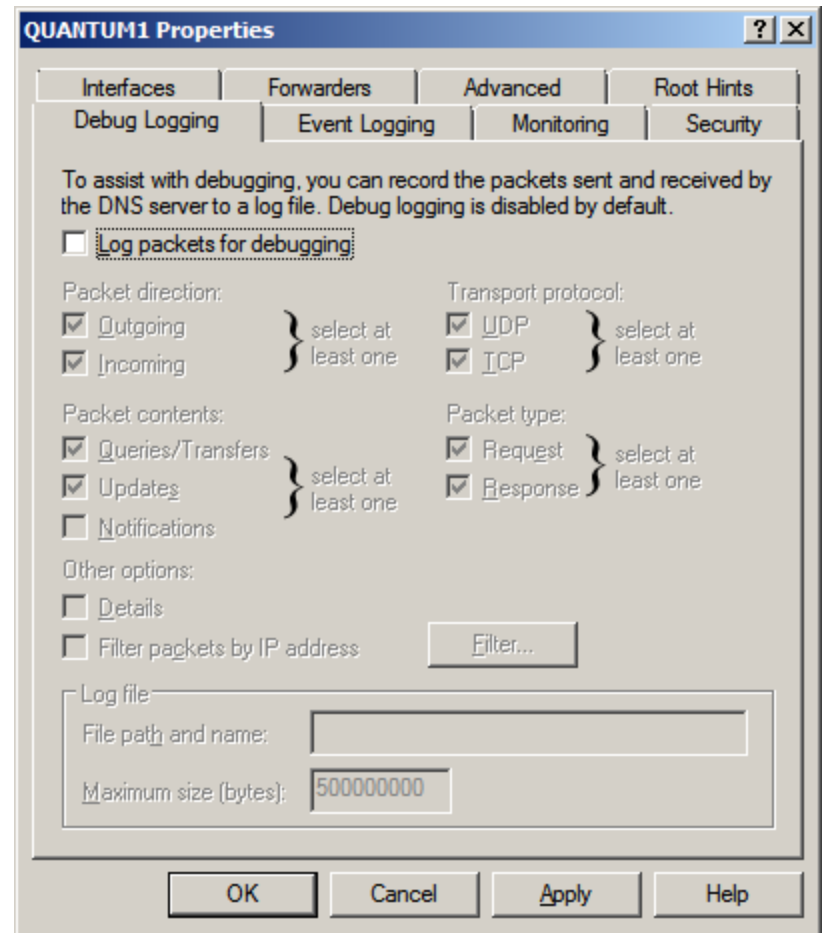
OK

Cancel

The Debug Logging Tab

The Debug Logging tab can record packets sent and received to the log file.

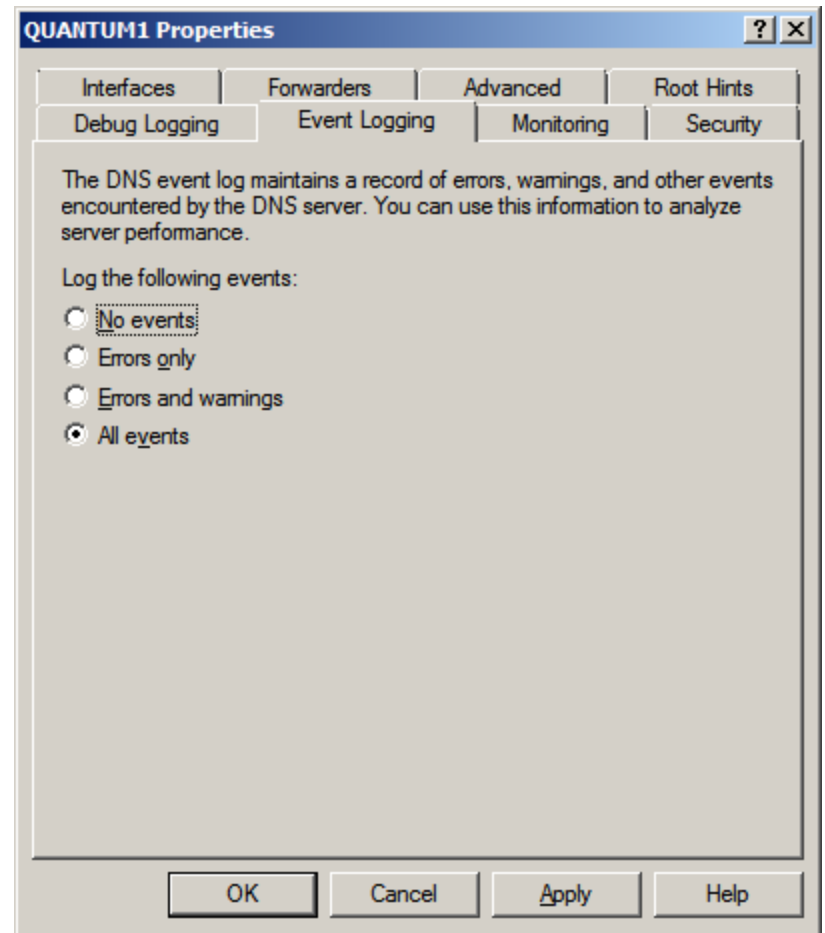
We will keep this setting off by default.



The Event Logging Tab

The Event Logging Tab is presently set for recording all events. However, we can select no events, errors only and errors and warnings.

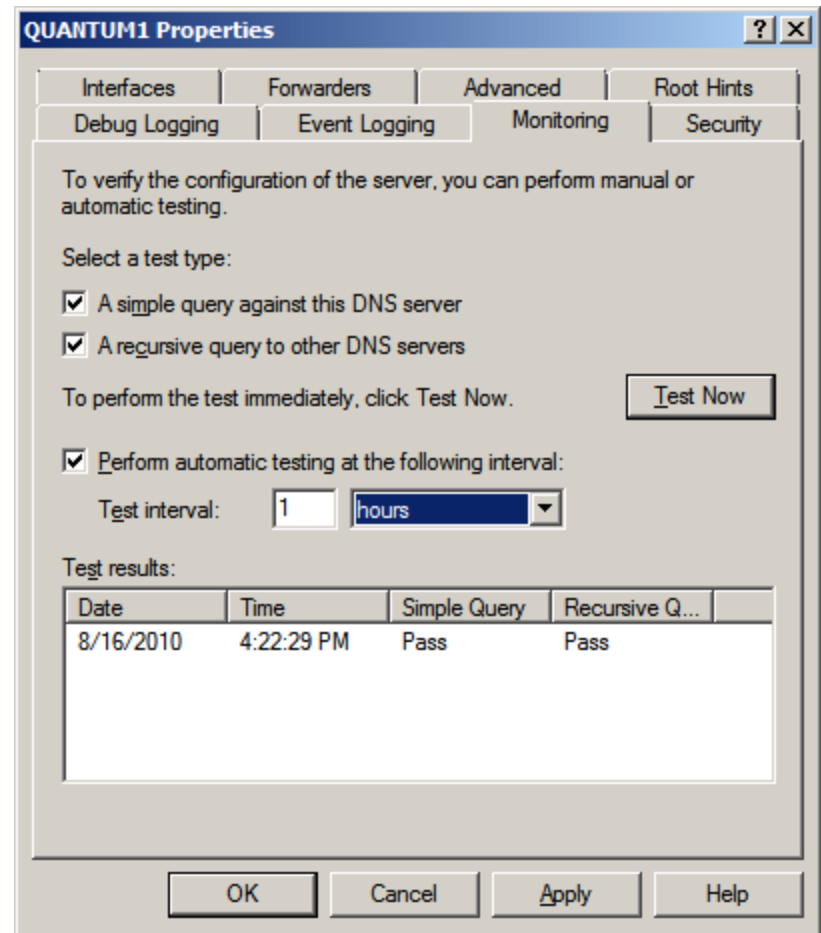
We choose to log all events.



The Monitoring Tab

The Monitoring Tab will tell us if our DNS server is resolving requests.

We check the simple query against the DNS server and a recursive query to other DNS servers checkboxes. We then press the Test Now button and both tests should pass. We can set the interval for the test to whatever seconds, minutes or hours we wish.



Security Tab

The security tab will allow us to set the permissions for access and control of the DNS server. Presently, the administrators can change the DNS Server settings. We press the Apply button and close the DNS Server properties window.

