

# Setting Up a Backup Domain Controller

June 27, 2012

# A Backup Domain Controller

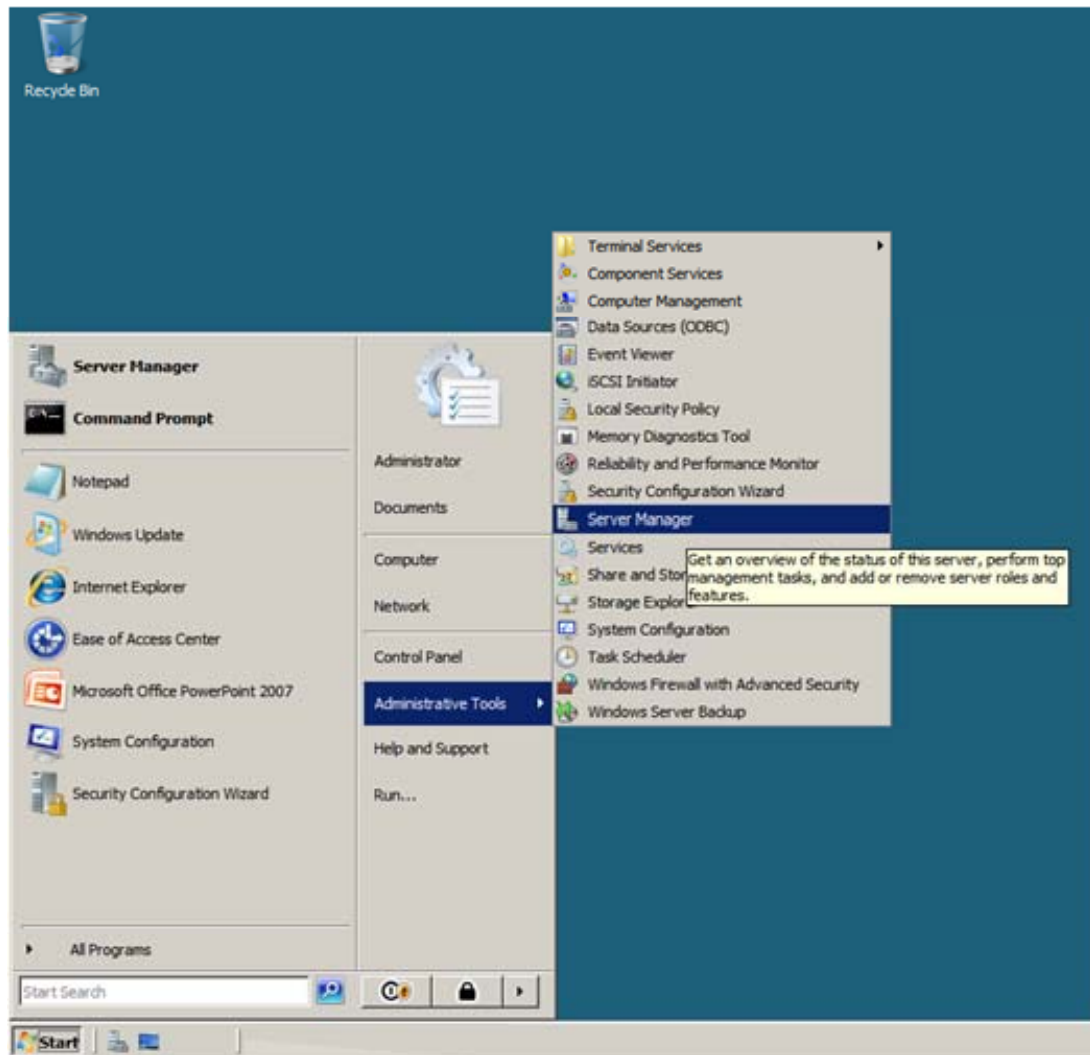
After setting up a primary domain controller, we will want to make an additional domain controller as a backup to the first server in case of failure.

The secondary unit will have the same Active Directory and DNS settings as the original and can take over if the first server's power supply or motherboard fails.



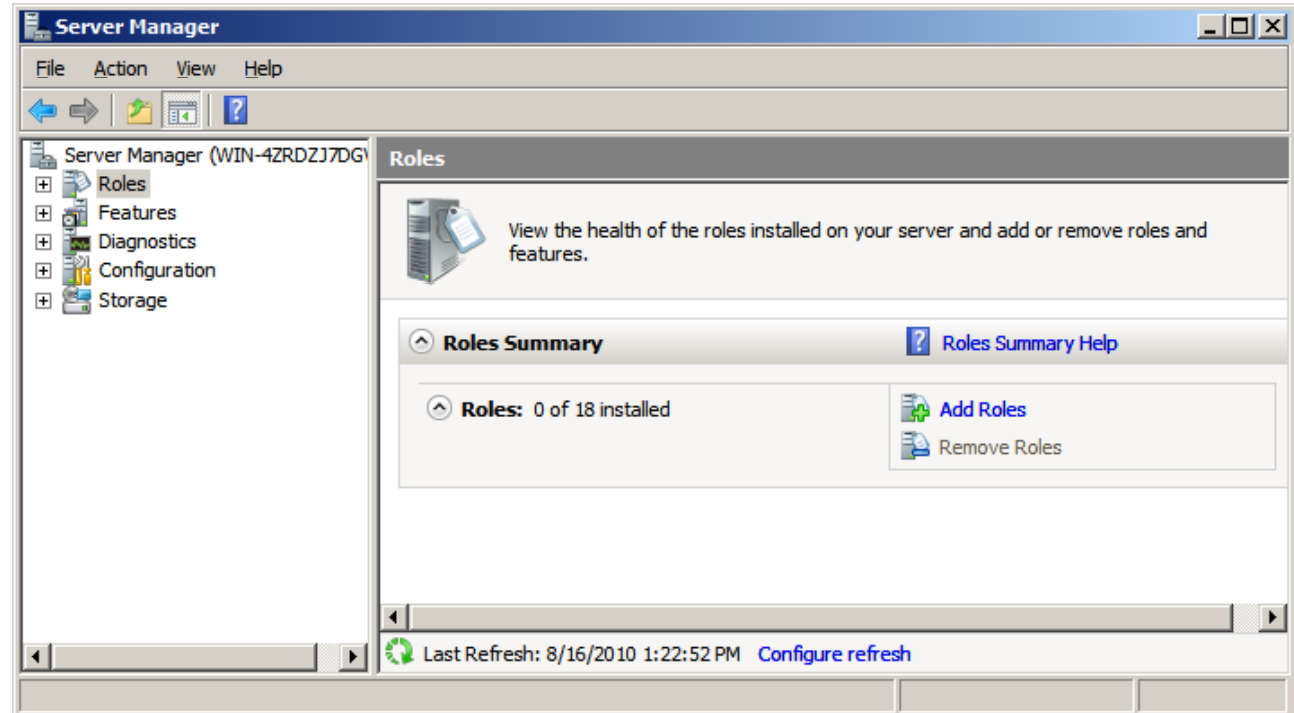
# Server 2008 Desktop

To start the process of making a backup Domain Controller (DC), we load Windows 2008 server to another machine and run Windows Updates to add any Service Packs and security updates. Then we set the Network Interface Card (NIC) IP address on the Domain's network. We set the DNS IP address for the Primary DC. Next, we choose the Start button to open the Start Menu and we choose Administrative Tools and then we pick Server Manager.



# Server Manager

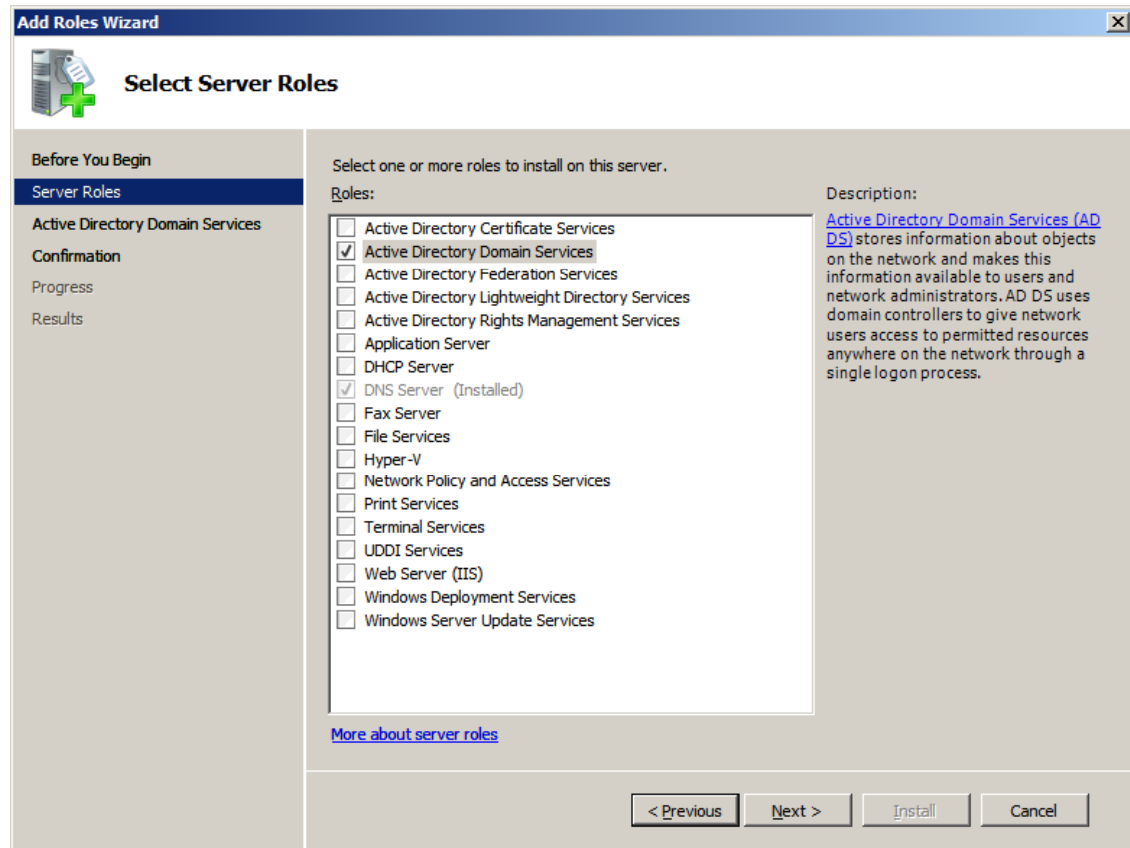
The Server Manager window will open. We highlight Roles in the left pane and select Add Roles in the right pane.



# Select Server Role

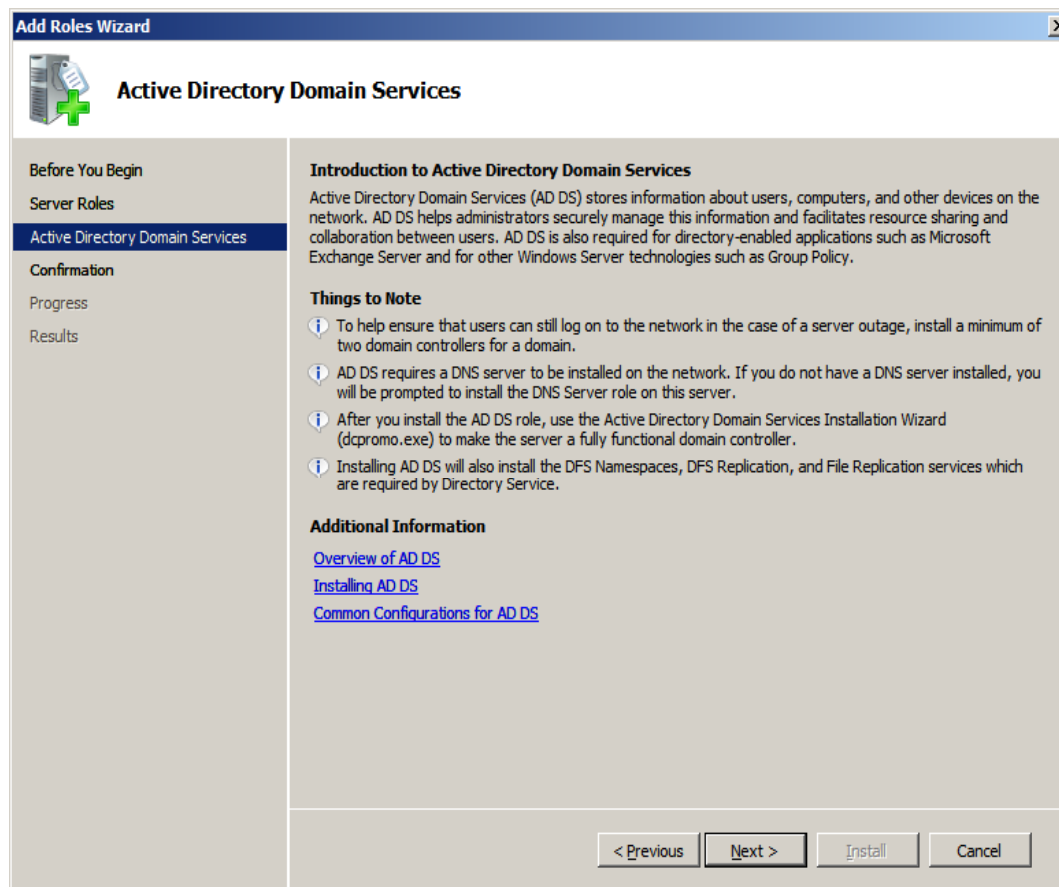
The Add Roles Wizard window displays a multitude of functions a 2008 server can provide, but first we only want to add those to make this machine a backup DC.

We annotate the Active Directory Domain Services checkbox and we press the Next button.



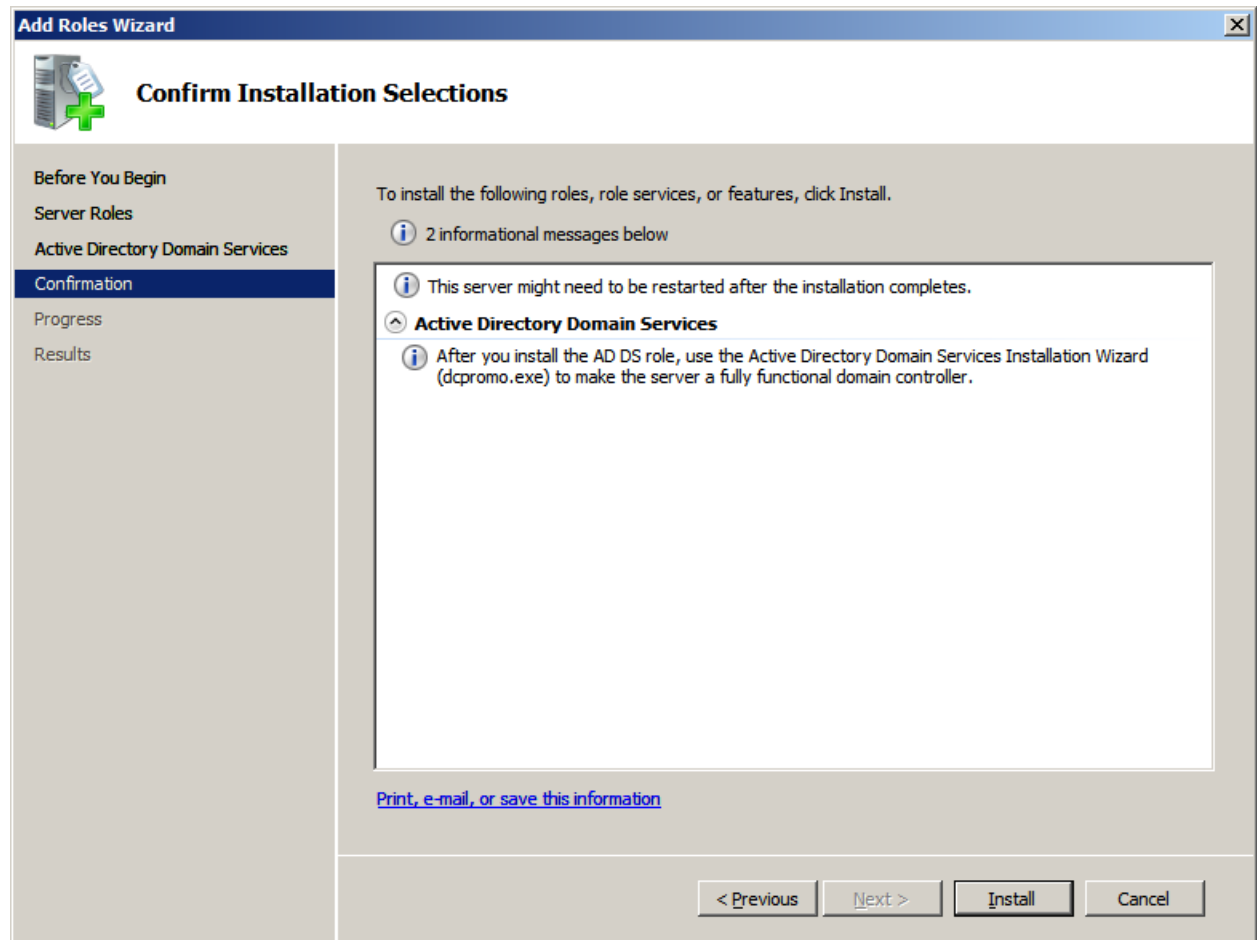
# Active Directory Domain Services

The Active Directory Domain Services window will explain the DNS deployment and Active Directory. We press the Next button to continue.



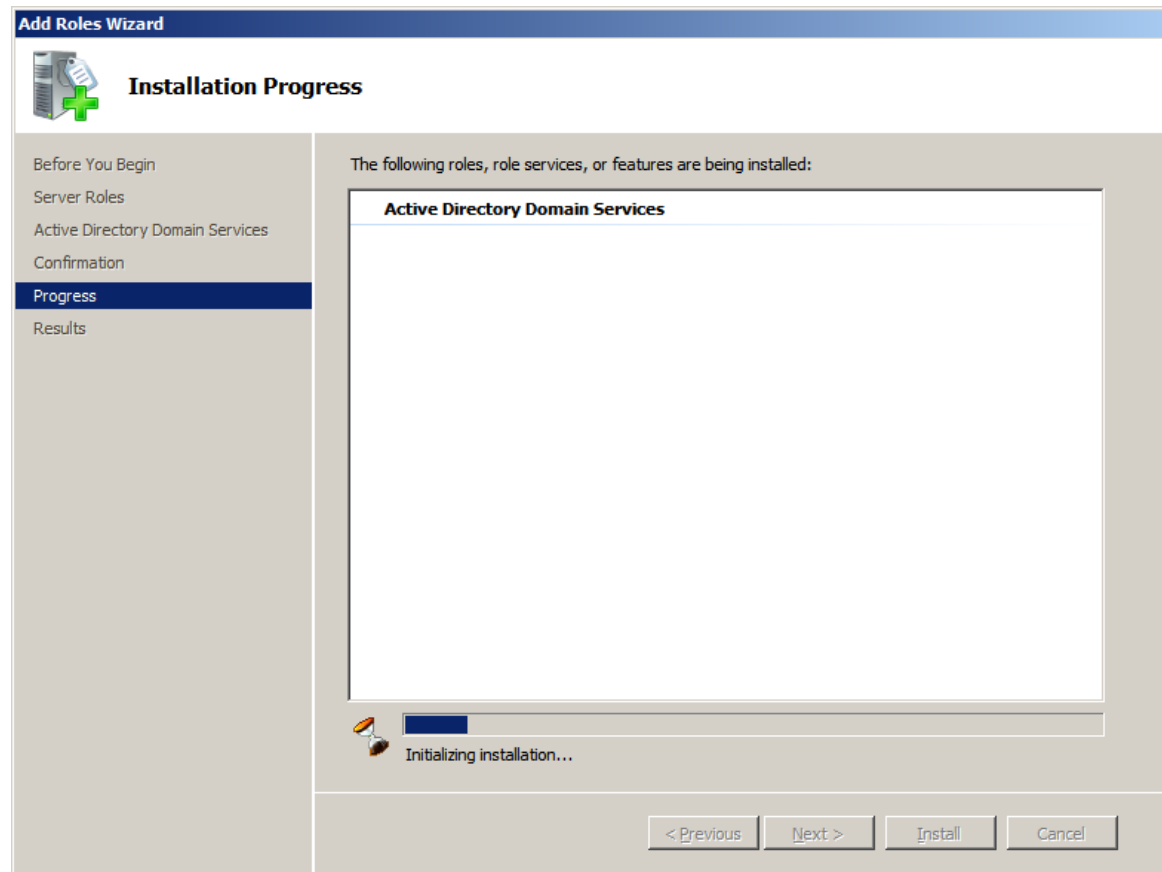
# Confirm Installation Selections

We confirm that we want to set the machine up as a Active Directory Domain Services, so we pick the Install button to proceed.



# Installation

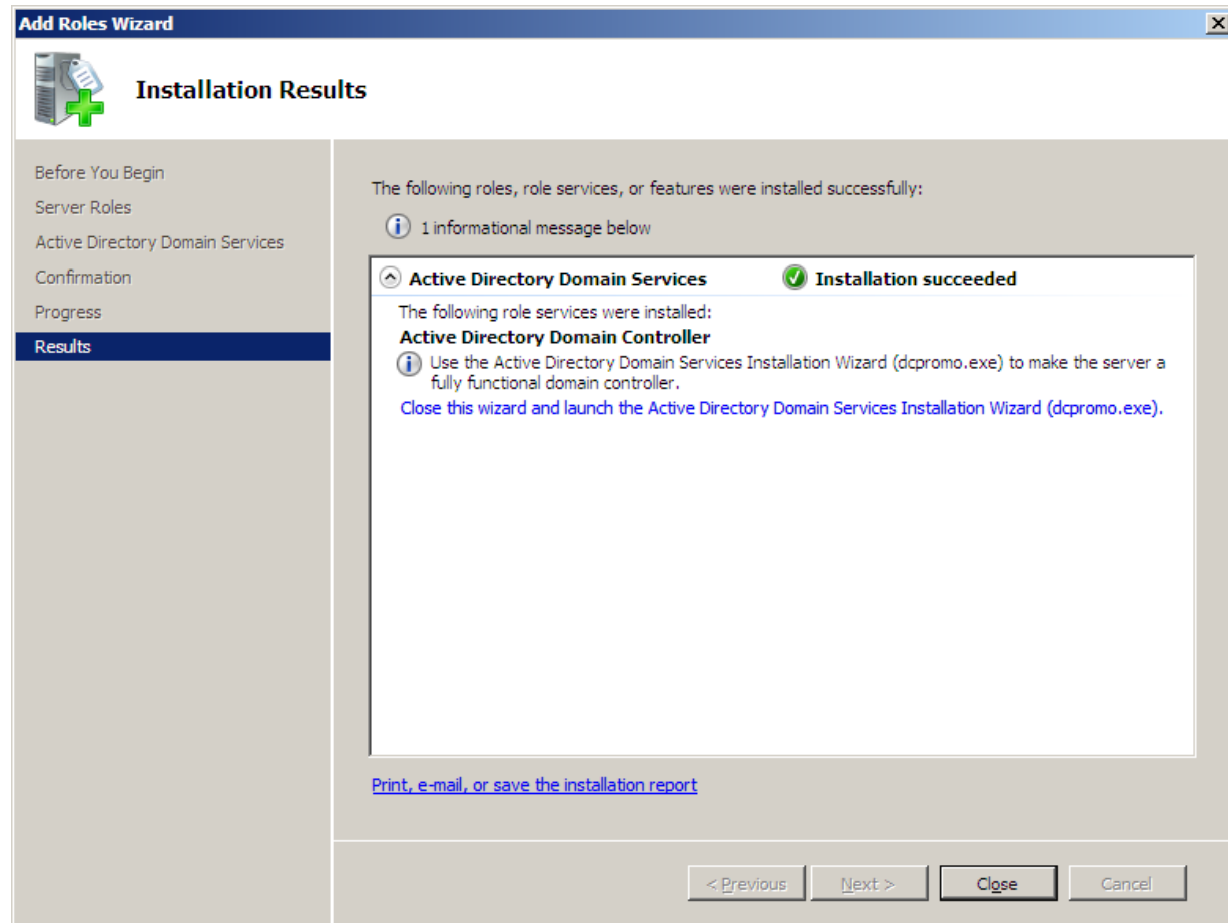
We can watch the server advance through the installation.





# Installation Results

At the Installation Results window, we can double click on the blue hyperlinked statement to launch dcpromo.exe.



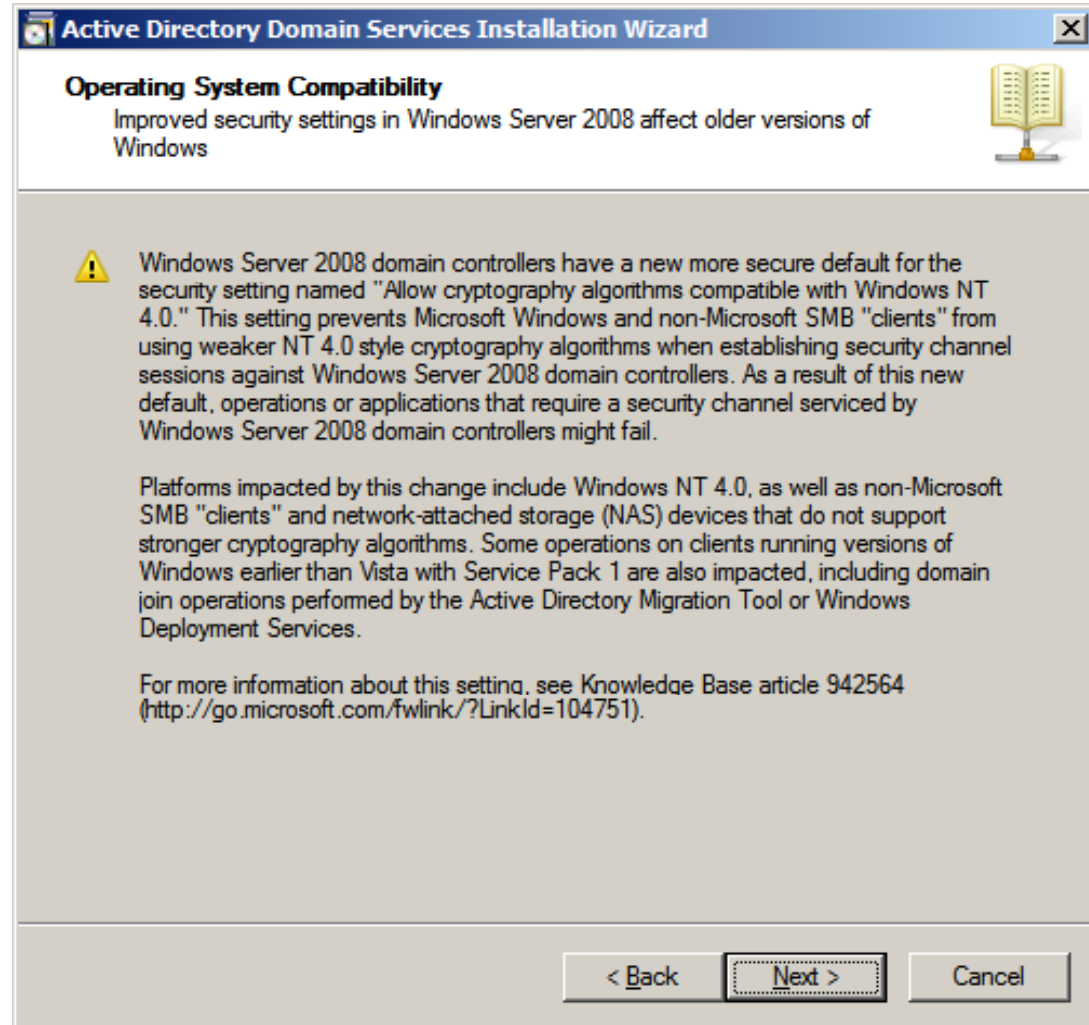
# Active Directory Domain Services Installation Wizard

We begin the Active Directory Domain Services Installation Wizard and we press the Next button to advance.



# Operating System Compatibility

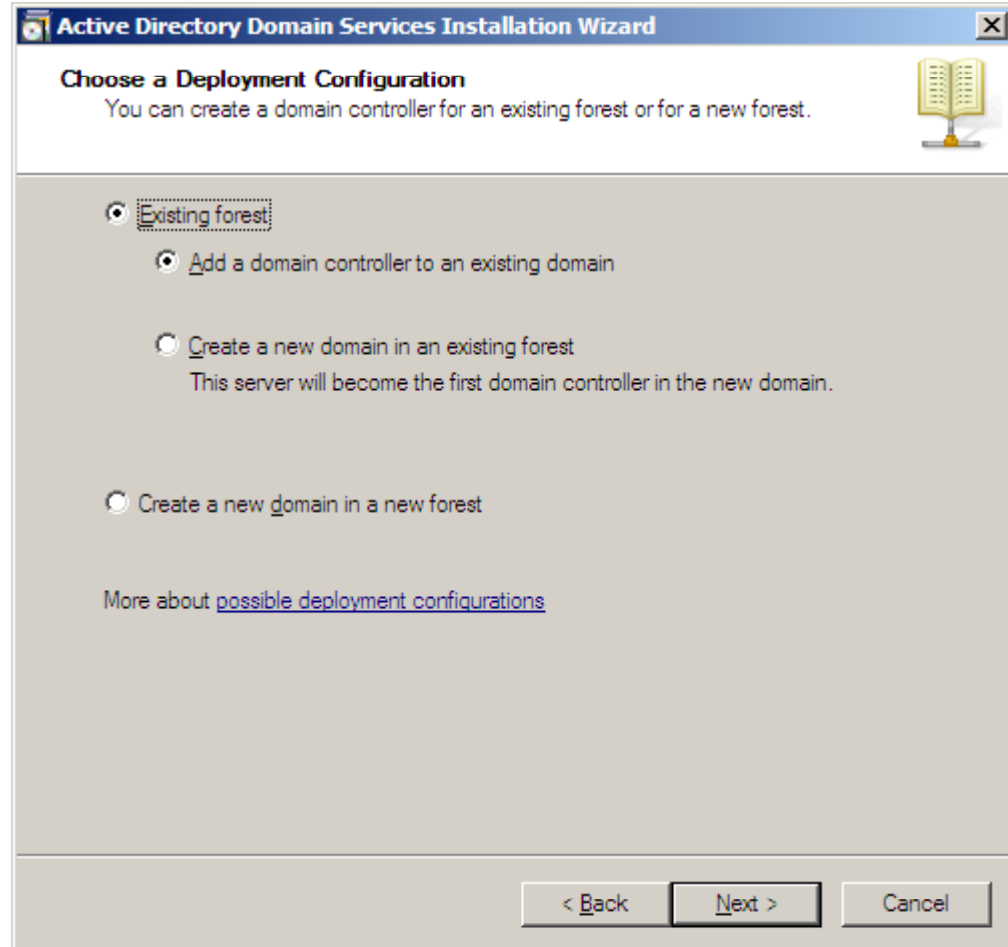
The next section of the Active Directory setup is to respond to prompts concerning compatibility issues. We press the Next button to advance.



# Deployment Configuration

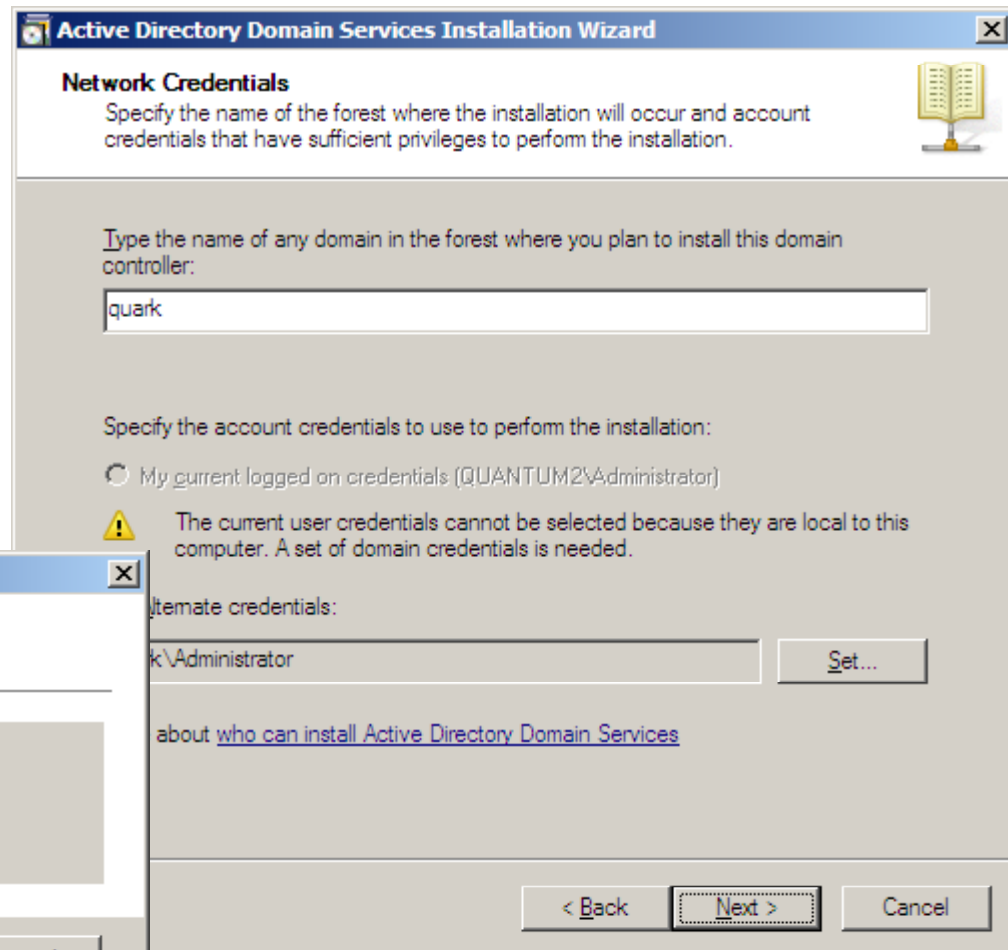
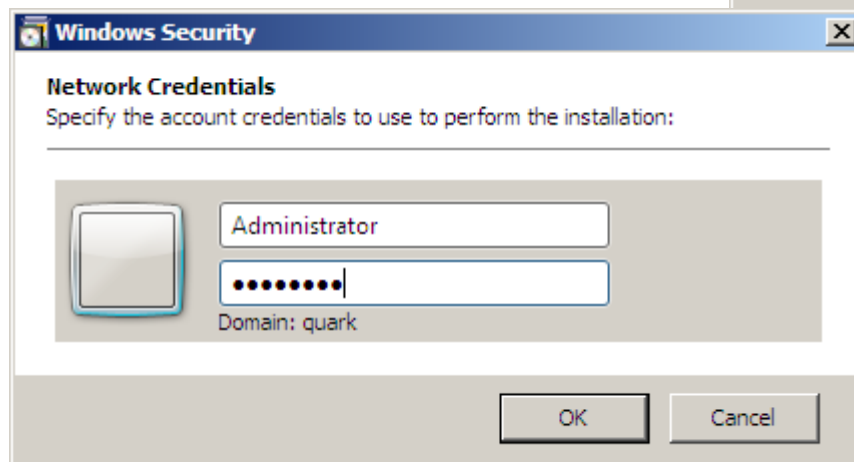
We will select the Existing forest option and we will want to create a domain controller in an existing domain.

We press the Next button to go on.



# Network Credentials

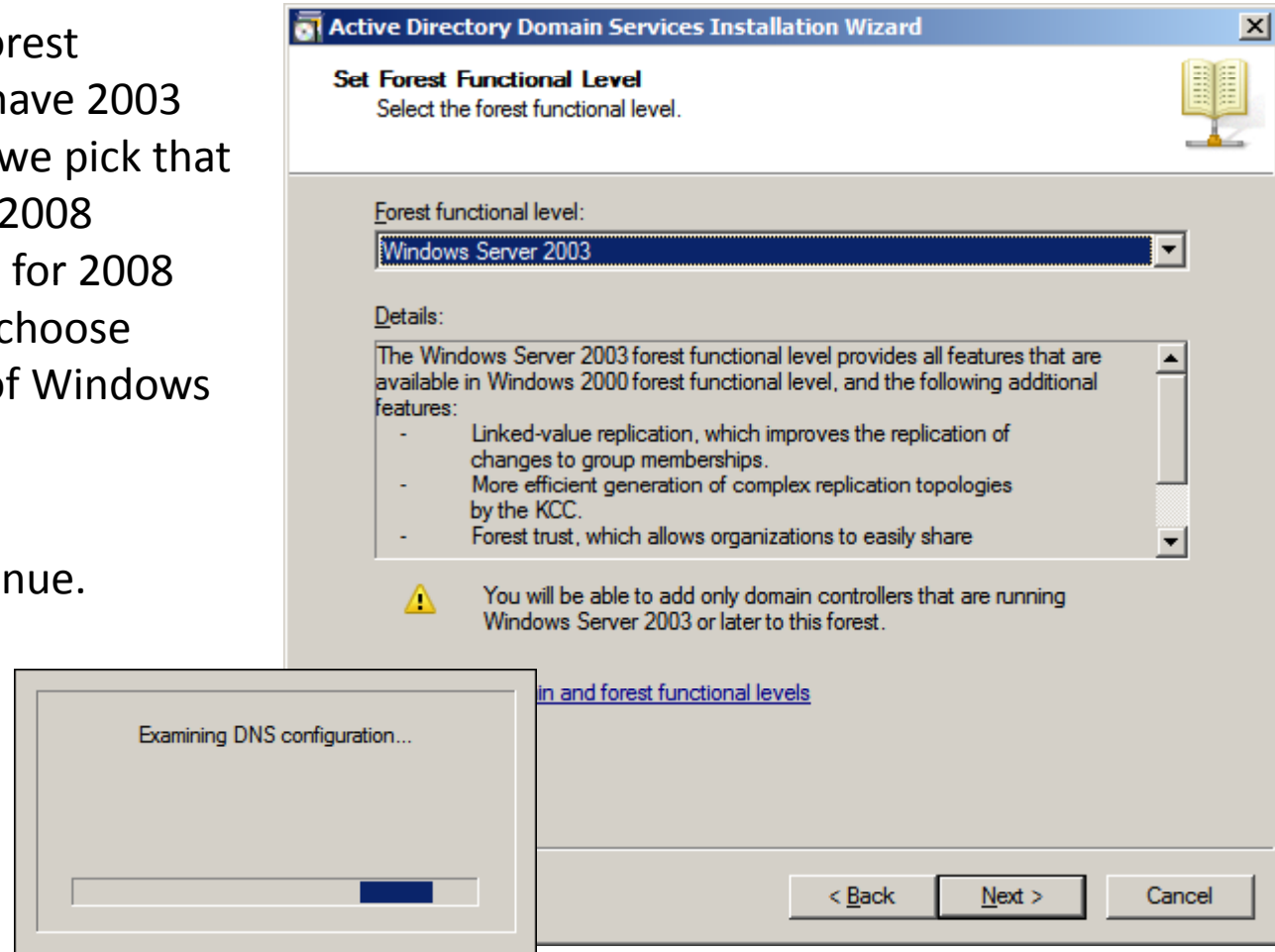
At this dialog box, we type in the name of the domain and then we press the Set button and type in the Primary DC's administrator for the username and the password.



# Set Forest Functional Level

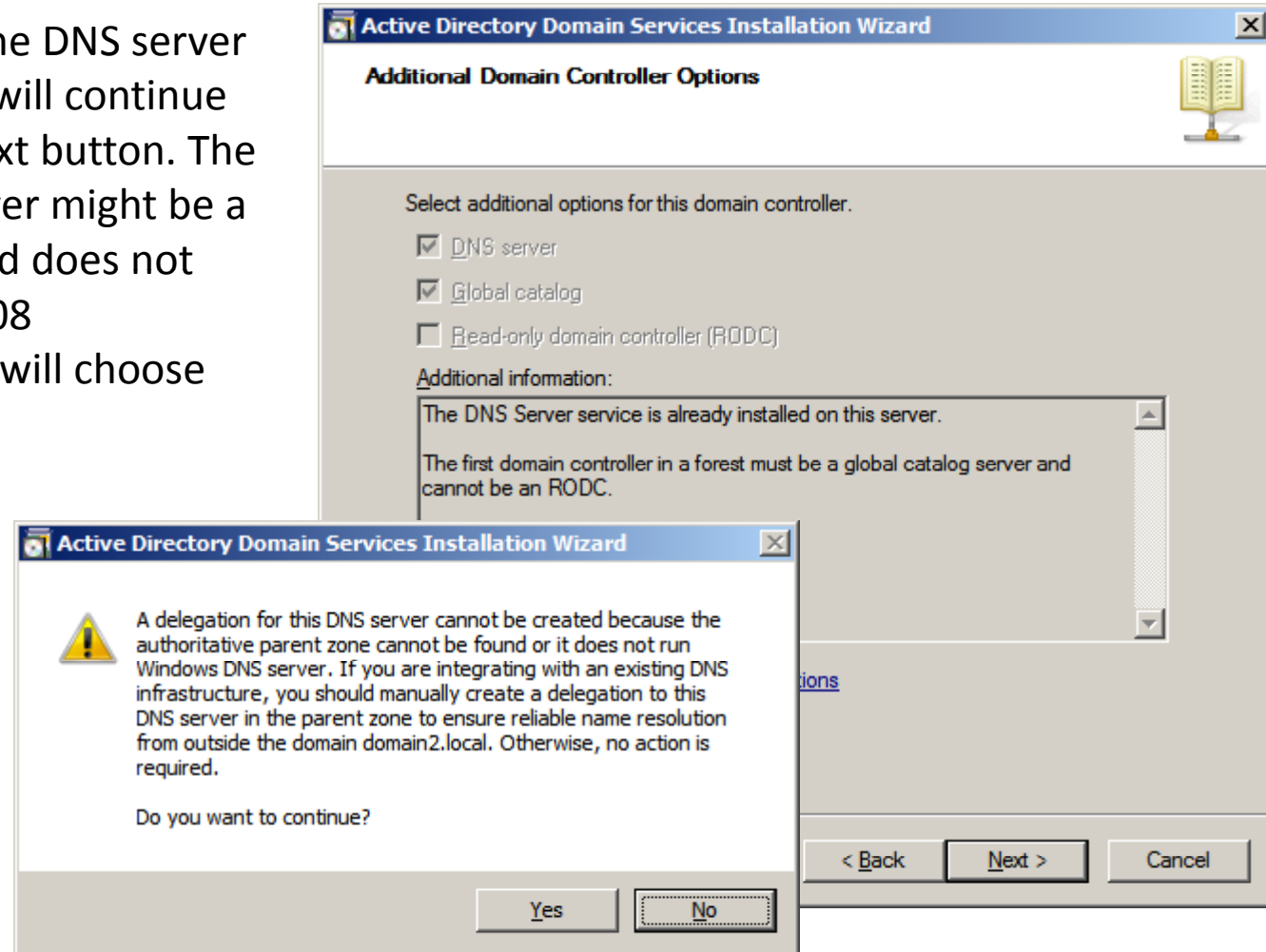
We can choose the forest functional level. We have 2003 and 2008 servers, so we pick that stage. If we only had 2008 servers, we could opt for 2008 servers only. We can choose even earlier version of Windows server.

We pick Next to continue.



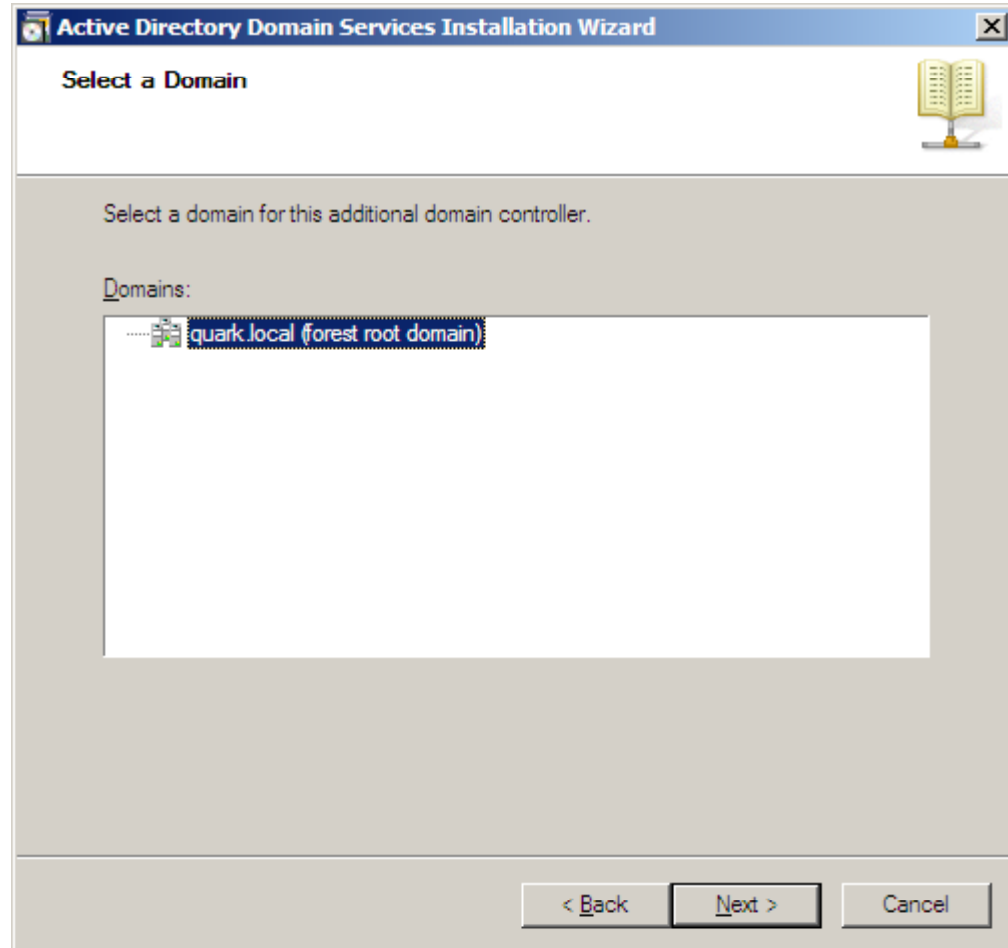
# DNS Server

We already have the DNS server configured, so we will continue by pressing the Next button. The ISP delegation server might be a Linux computer and does not conform to the 2008 infrastructure. We will choose yes to advance.



# Select the Domain

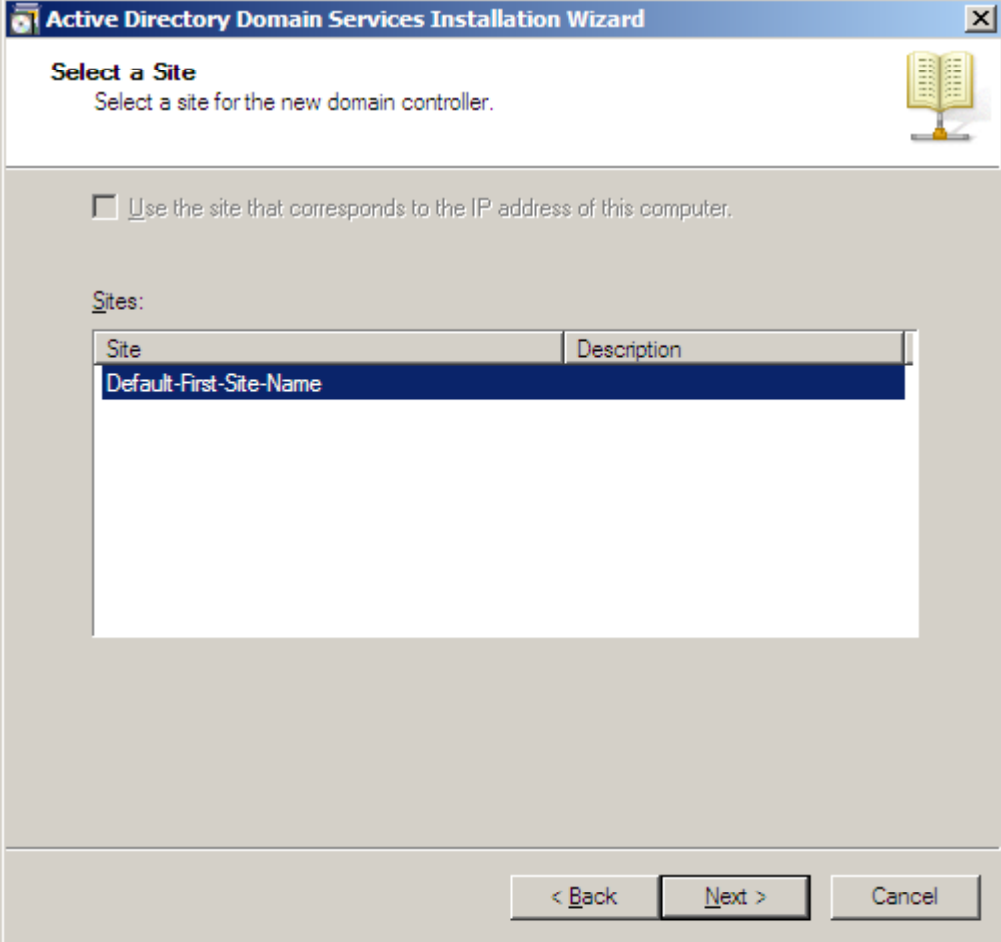
The domain is found and we press the Next button to advance.





# Select a Site

We also continue through this window by pushing the Next button.



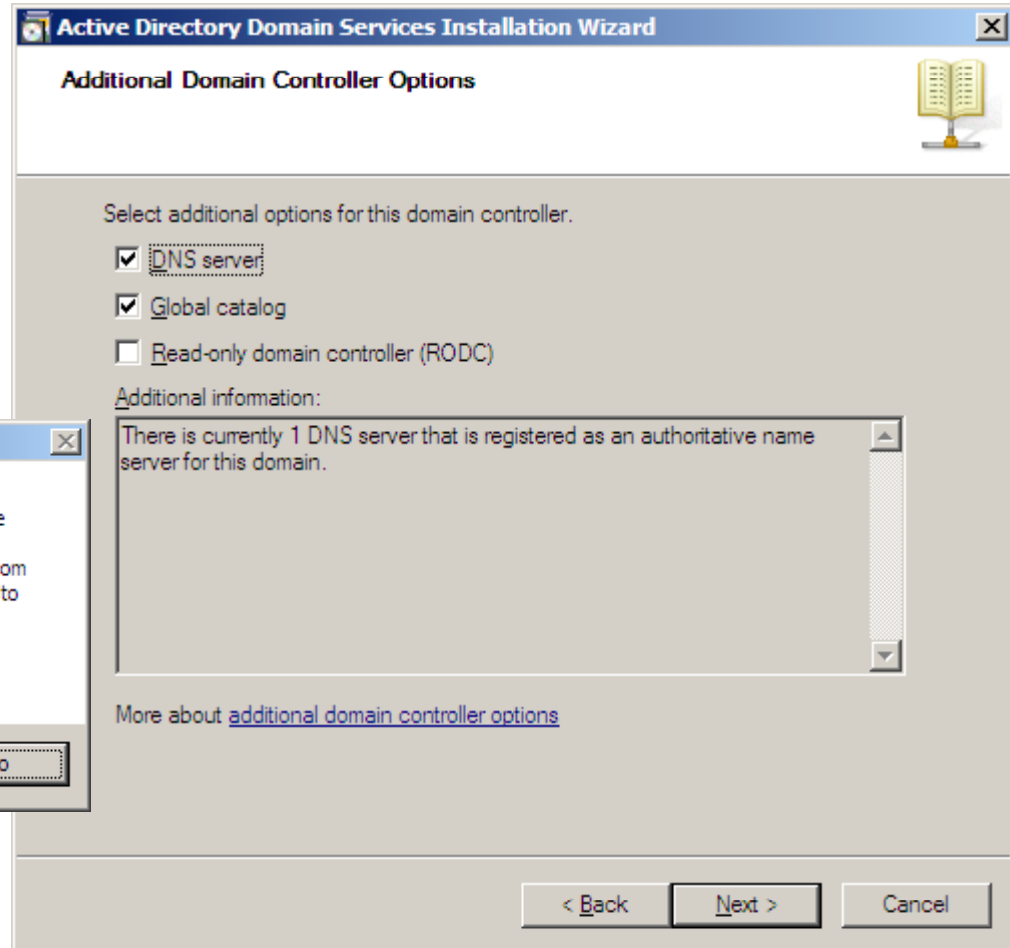
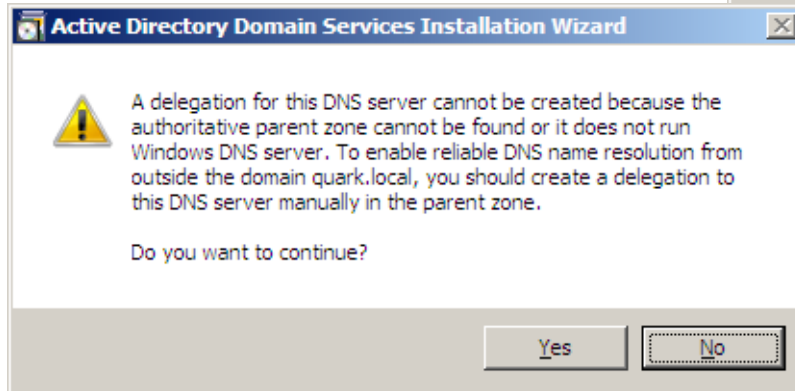
The screenshot shows the 'Active Directory Domain Services Installation Wizard' window. The title bar reads 'Active Directory Domain Services Installation Wizard'. The main heading is 'Select a Site' with the instruction 'Select a site for the new domain controller.' Below this is a checkbox labeled 'Use the site that corresponds to the IP address of this computer.' which is currently unchecked. Under the heading 'Sites:', there is a table with two columns: 'Site' and 'Description'. The table contains one entry: 'Default-First-Site-Name'. At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'.

Site	Description
Default-First-Site-Name	

# Additional DC Options

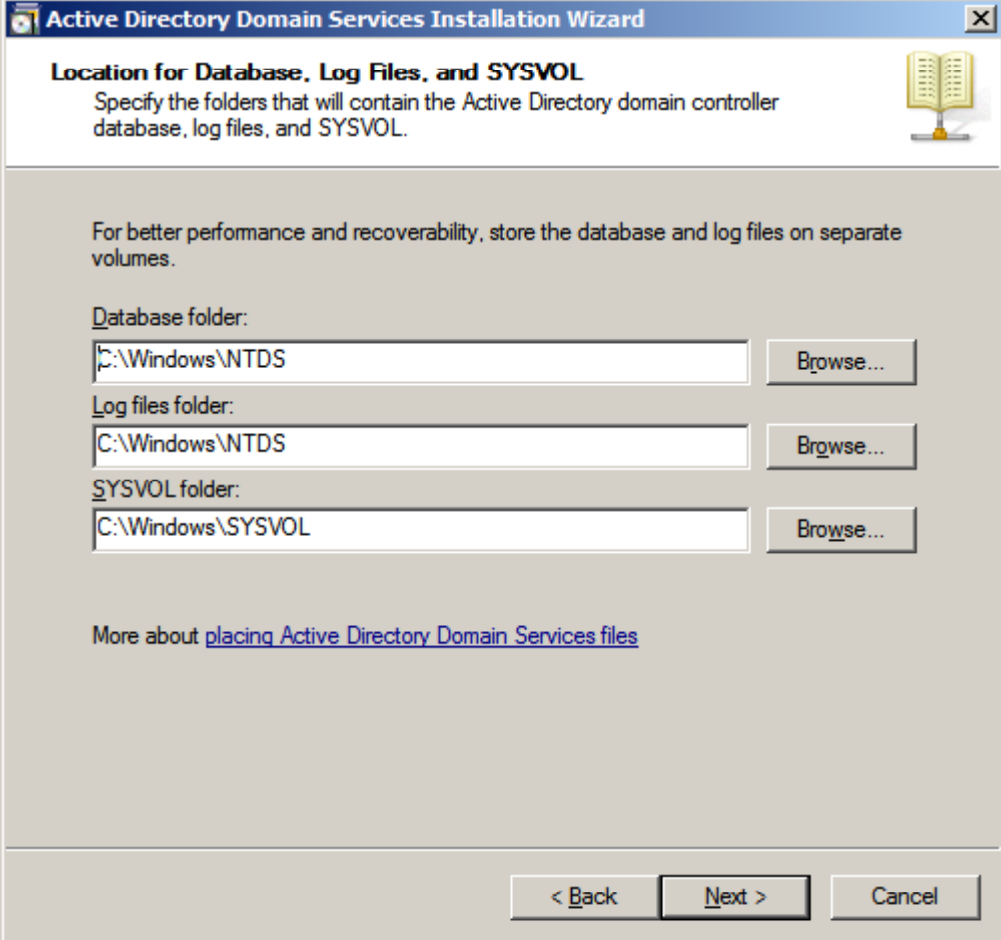
We will want the backup DC to be a DNS server and we also want to have the Global catalog checked.

Answer yes if the delegation window appears.



# Database, Log and SYSVOL Folders

We typically choose the database and log folder defaults. However, we can direct the database and log files to another folder. The next folder location is for the shared system volume. We will maintain the default path and pick the Next button to advance.

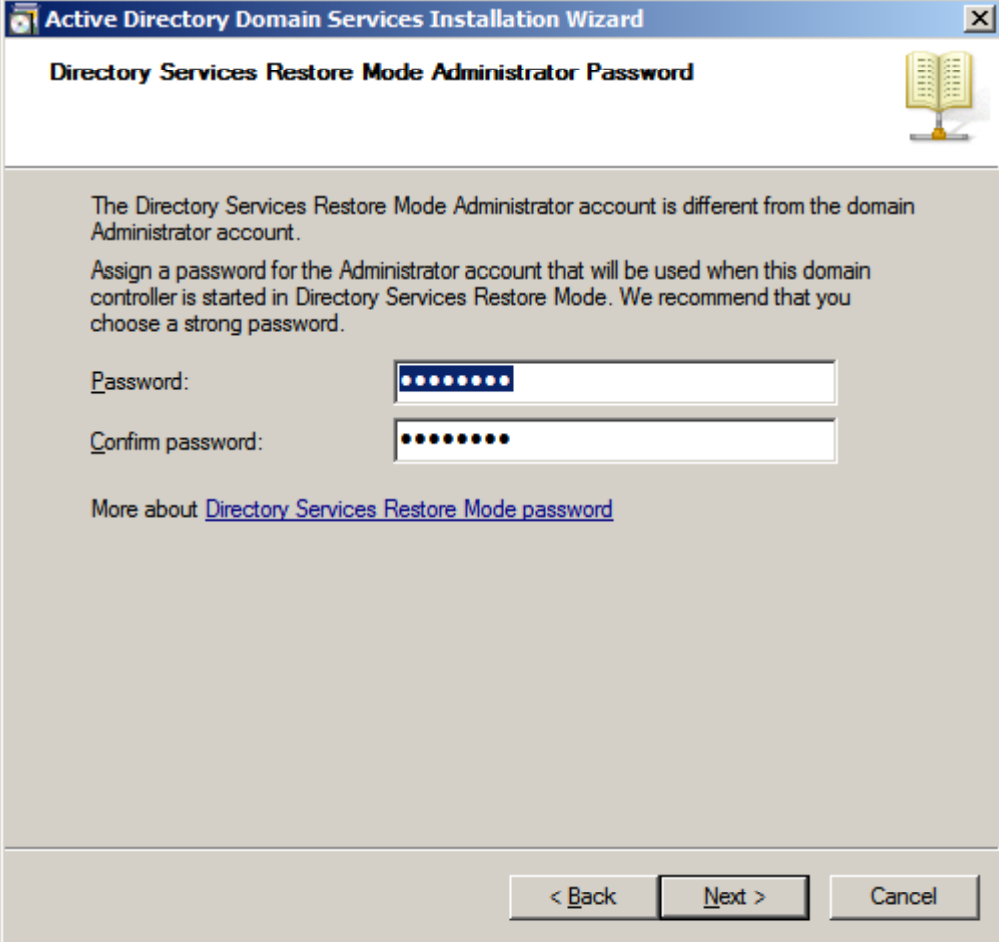


The screenshot shows the 'Active Directory Domain Services Installation Wizard' dialog box. The title bar reads 'Active Directory Domain Services Installation Wizard'. The main heading is 'Location for Database, Log Files, and SYSVOL'. Below the heading, it says 'Specify the folders that will contain the Active Directory domain controller database, log files, and SYSVOL.' There is a small icon of an open book to the right. The main area contains the text: 'For better performance and recoverability, store the database and log files on separate volumes.' Below this, there are three input fields, each with a 'Browse...' button to its right. The first field is labeled 'Database folder:' and contains 'C:\Windows\NTDS'. The second field is labeled 'Log files folder:' and also contains 'C:\Windows\NTDS'. The third field is labeled 'SYSVOL folder:' and contains 'C:\Windows\SYSVOL'. At the bottom of the dialog, there are three buttons: '< Back', 'Next >', and 'Cancel'. A link at the bottom reads 'More about [placing Active Directory Domain Services files](#)'.

# Administrative Password

We type and confirm the administrative password for the backup domain controller. The password should conform to the complexity requirement and minimum character length we will setup in the password policy.

We opt for the Next button to proceed.

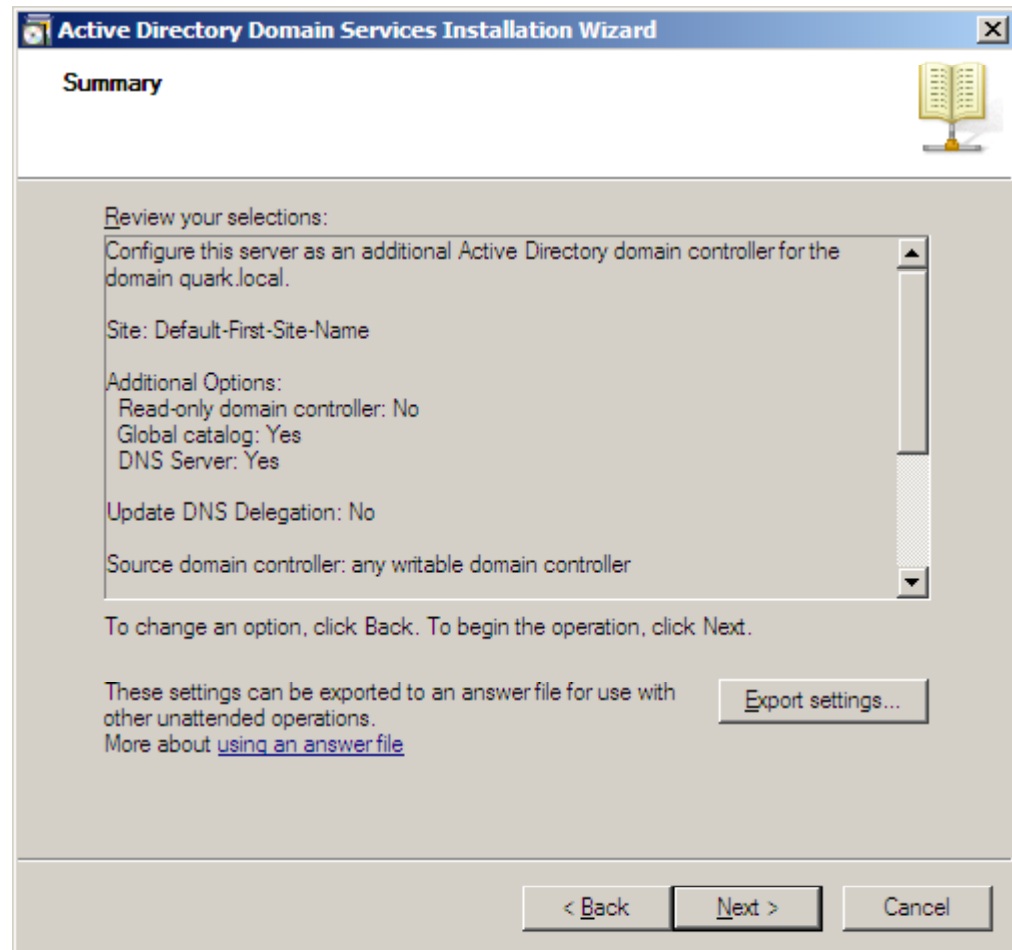


The screenshot shows a Windows dialog box titled "Active Directory Domain Services Installation Wizard". The main heading is "Directory Services Restore Mode Administrator Password". The text inside the dialog reads: "The Directory Services Restore Mode Administrator account is different from the domain Administrator account. Assign a password for the Administrator account that will be used when this domain controller is started in Directory Services Restore Mode. We recommend that you choose a strong password." Below this text are two input fields: "Password:" and "Confirm password:", both containing masked characters (dots). At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

# Summary

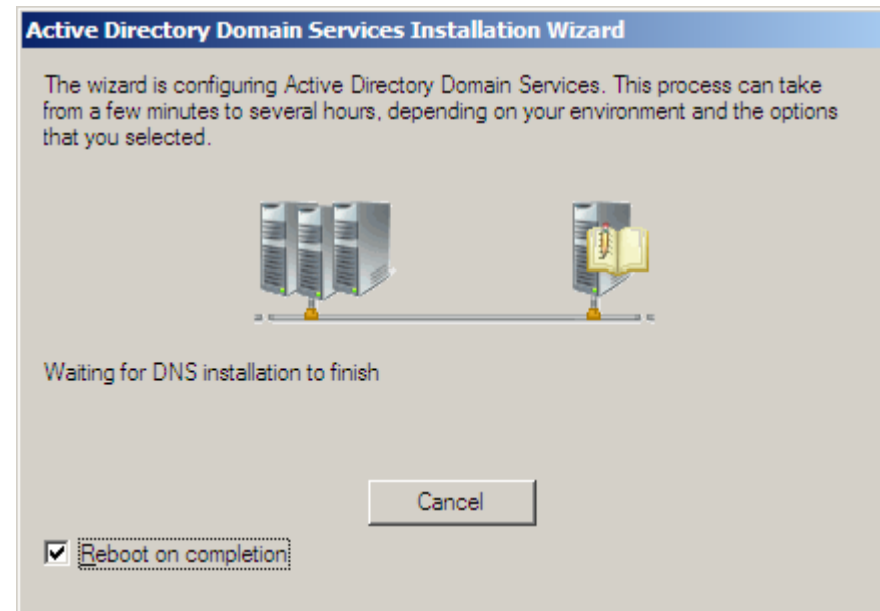
We now see a summary of the choices we made with the Active Directory Installation Wizard. If we need to change anything we can go back to the particular window and make the change and advance back to this point.

However, we agree with the summary and we press Next to continue.



# Loading Active Directory

Active Directory will take some time to load, so be patient. We can annotate the Reboot on completion checkbox and the server will restart on its own.



# Server is Now a Domain Controller

Open the Server Manager window when the server restarts and we see the server is now a backup Domain Controller. All of the users and computers on the primary DC are now also on this machine. We can add other roles such as print server, DHCP and others to mimic the primary DC.

