

Setting Up Active Directory using DCPROMO

June 21, 2011

What is Active Directory?

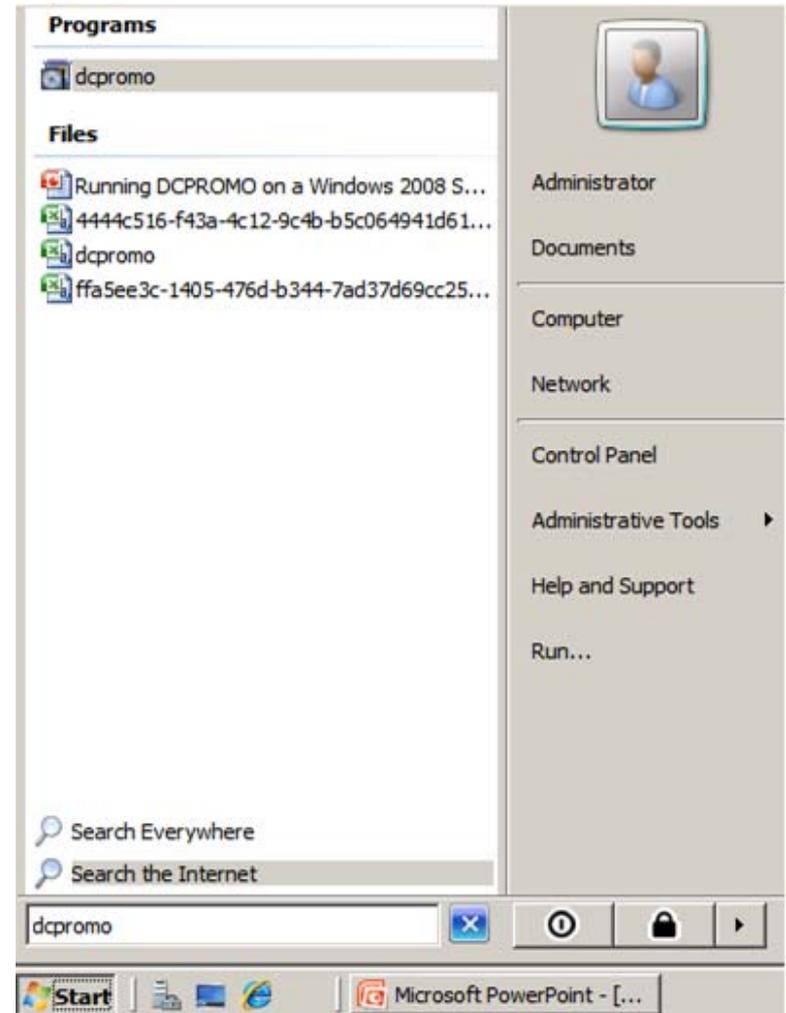
Active Directory is a database that enables all of the advanced functions on a Windows 2008 domain. The first of these machines is called the Domain Controller (DC). We will use the DC to add Organizational Units (OUs), groups, users, and computers to our business server. We will utilize the OUs and groups to control access to folders and files. The DC will authorize the DHCP server and Windows Deployment Server for writing operating systems to client computers using a Remote Installation Server. We will utilize Active Directory to build an Exchange Server and setup Outlook Email accounts.

Active Directory Usage

- Structure for an Organization
- Controls security to access files
- Authorize Remote Installation Servers
- DHCP Authorization
- Exchange Server accounts

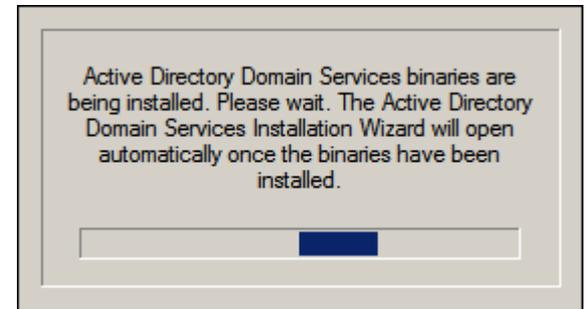
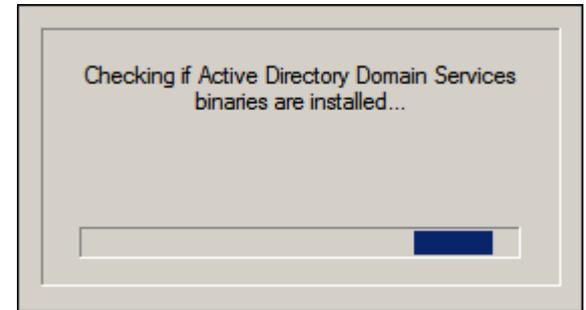
Run DCPROMO

We start to load Active Directory to our server by running DCPROMO application at the Start Menu.



Loading Active Directory Binaries

First, the software checks to see if the Active Directory binaries are already installed. If they are not, they will be loaded.



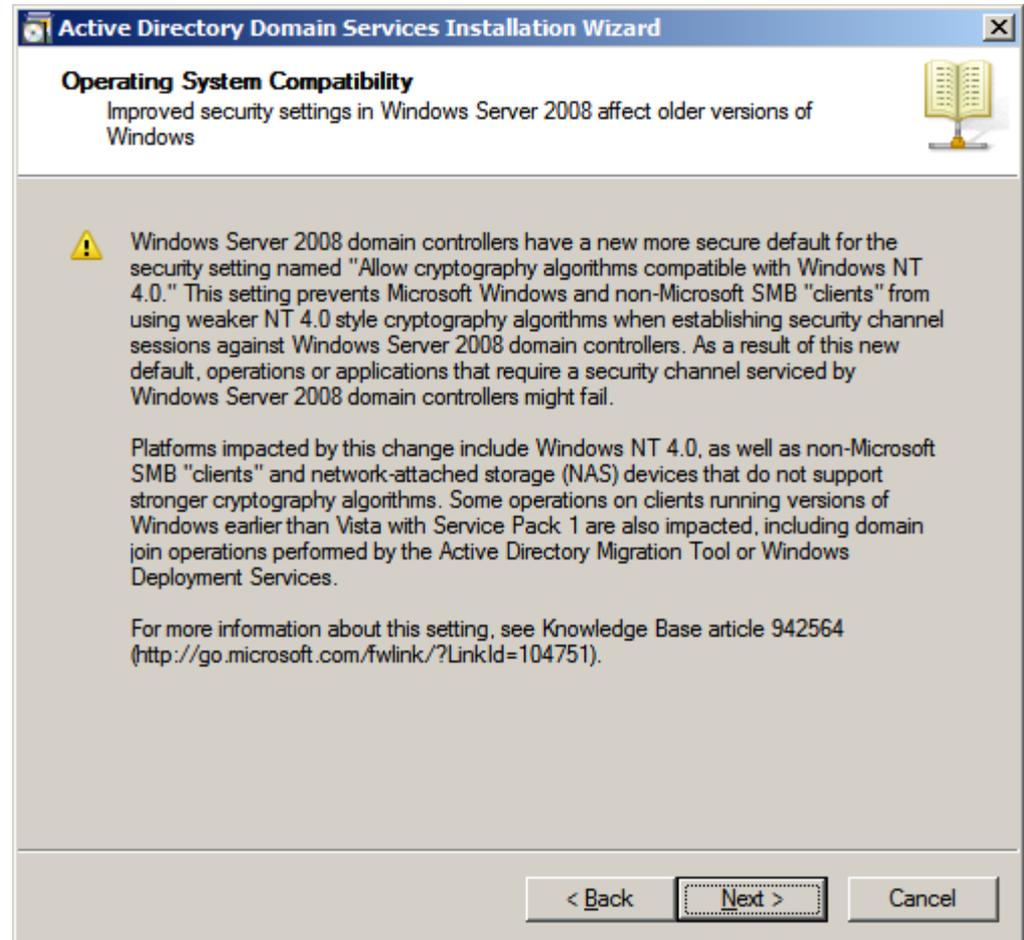
Active Directory Domain Services Installation Wizard

We are welcomed to the Active Directory Domain Services Installation Wizard where we can decide whether to use the advanced mode installation or just a regular setup. We will use a typical setup, so we will select the Next command button to continue.



Operating System Compatibility

The next section of the Active Directory setup is to respond to prompts concerning compatibility issues. The Windows 2000, 2003 and 2008 servers are not compatible with previous versions of Windows servers. We press the Next button to advance.

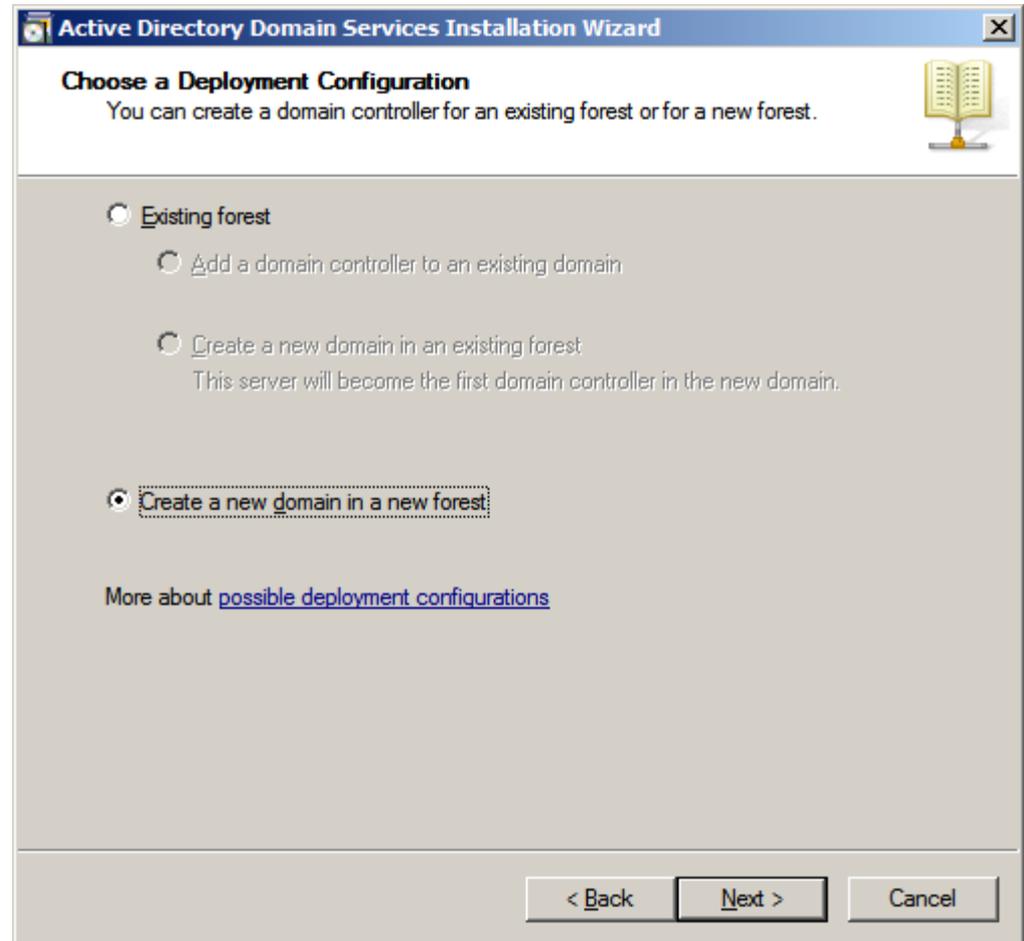


Deployment Configuration

We will select domain controller for a new domain. If this was going to be added to another existing domain, we would opt for joining an existing forest.

The add a domain controller to an existing domain will add another server to a tree. The new domain in a existing forest option will begin a new tree.

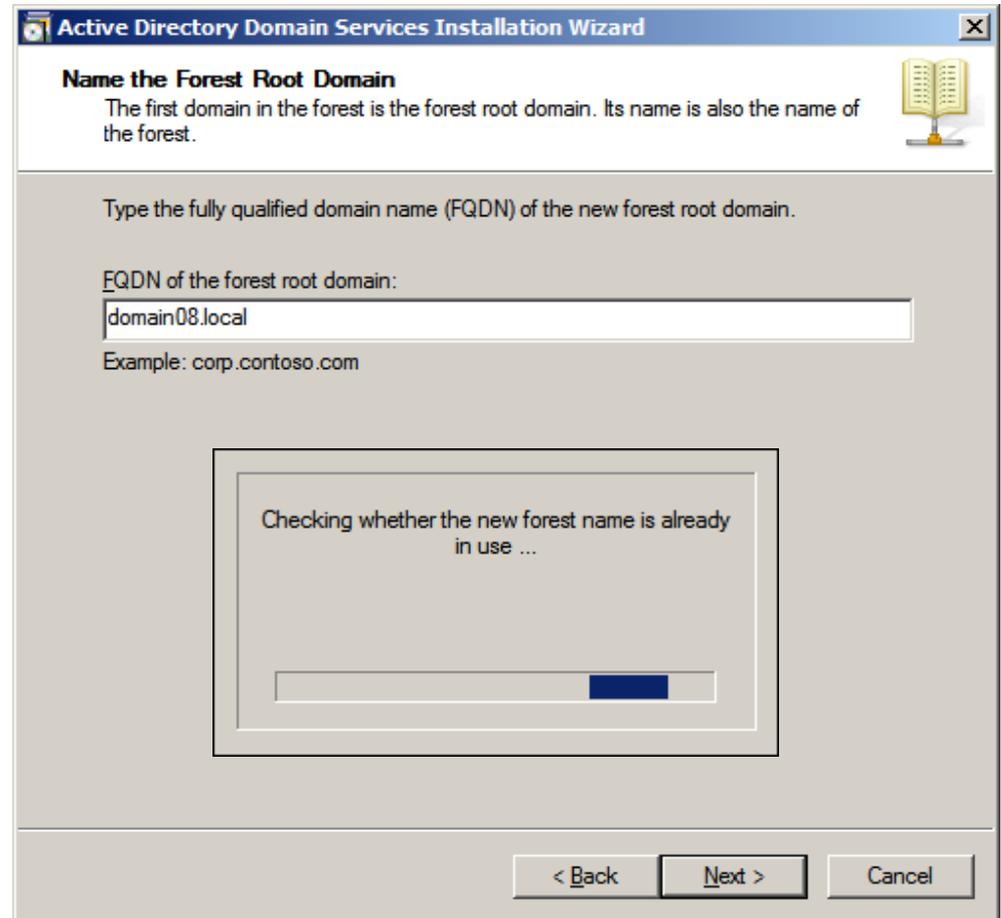
We press the Next button to continue.



Name the Forest Root Domain

We now have to name the forest's root domain. We use our full domain name that we purchased. If we do not own a domain name, we will use a generic name like domain.local or domain08.local.

We select the Next button to proceed.

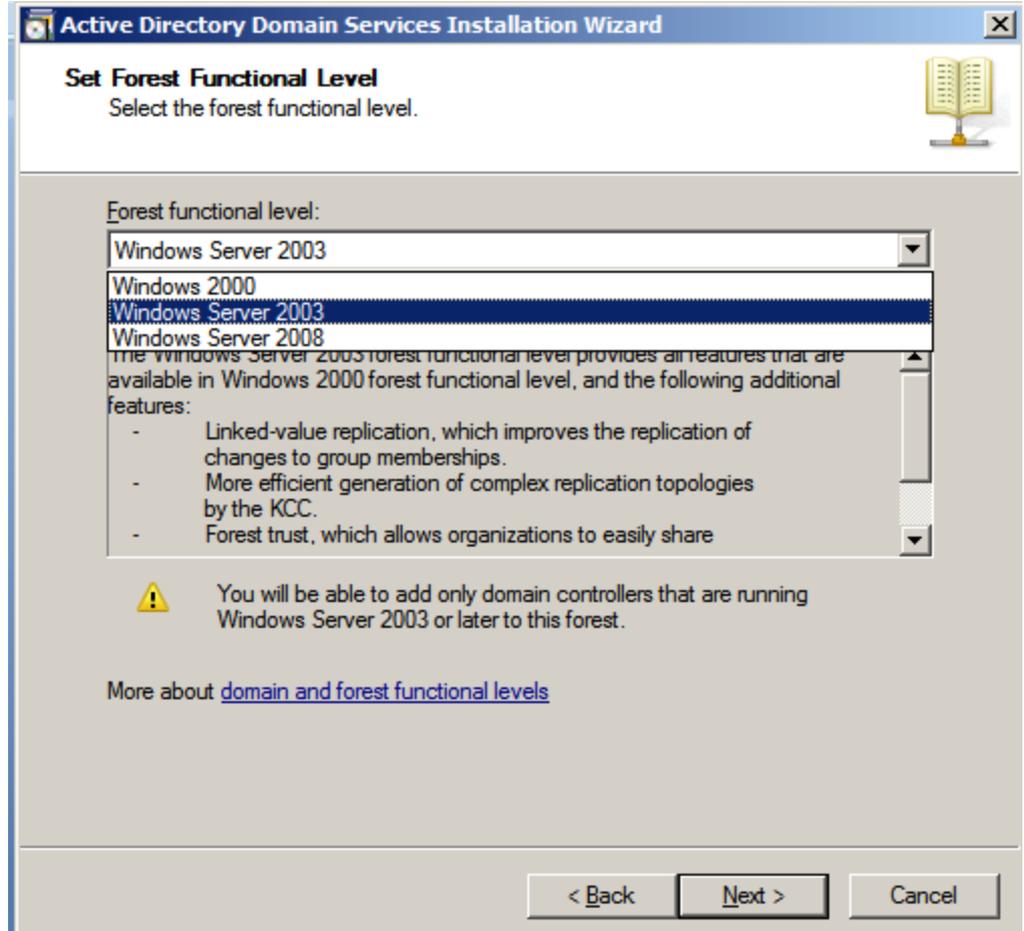


The screenshot shows the 'Active Directory Domain Services Installation Wizard' window. The title bar reads 'Active Directory Domain Services Installation Wizard'. The main heading is 'Name the Forest Root Domain'. Below the heading, it says 'The first domain in the forest is the forest root domain. Its name is also the name of the forest.' There is a small icon of a book on the right. The instruction says 'Type the fully qualified domain name (FQDN) of the new forest root domain.' Below this, there is a text box labeled 'FQDN of the forest root domain:' containing the text 'domain08.local'. An example 'Example: corp.contoso.com' is shown below the text box. A progress indicator box is centered on the screen, containing the text 'Checking whether the new forest name is already in use ...' and a progress bar that is approximately 25% full. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Set Forest Functional Level

We can choose the forest functional level. If we only had 2008 servers, we could opt for 2008 servers only. We can choose even earlier version of Windows server. We only have 2003 servers running at our organization, so we will select Windows Server 2003.

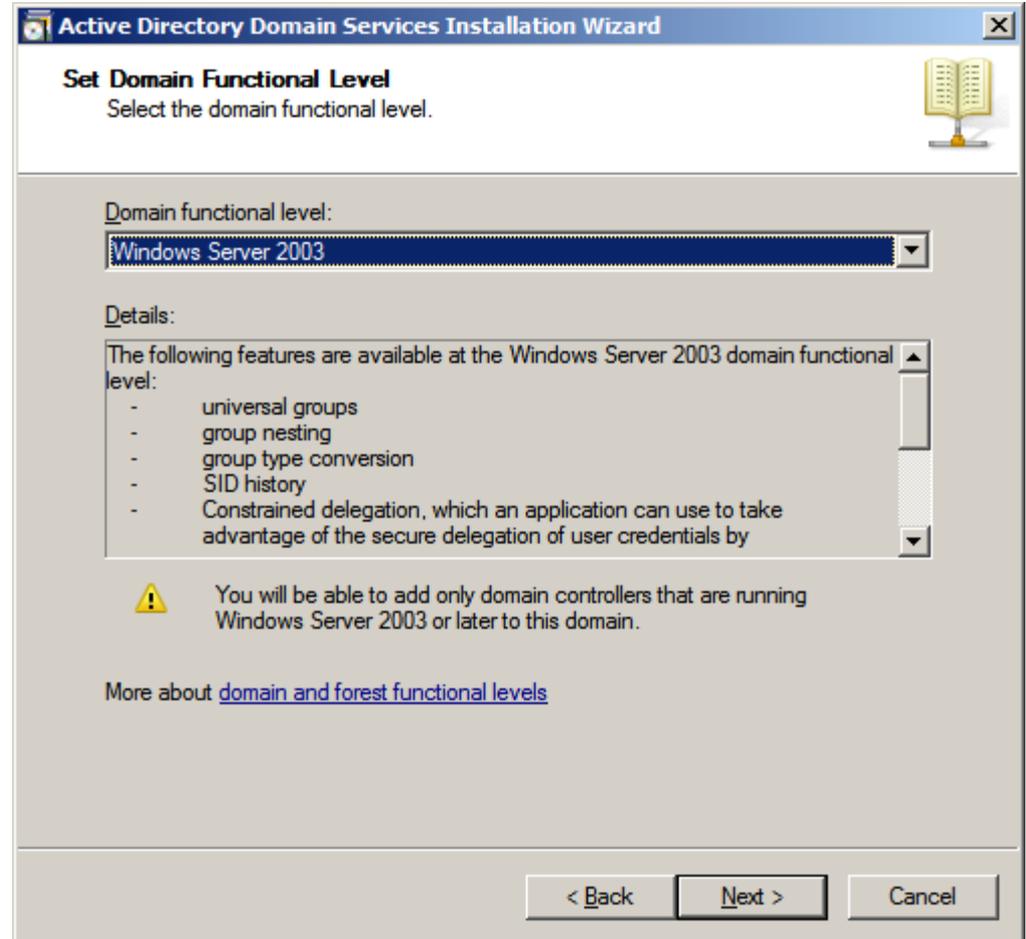
We pick Next to continue.



Set Domain Functional Level

We then set the Domain Functional Level. Details are listed for whatever server we select. Since we selected Windows 2003 Server, we can only add domain controllers that are running Windows 2003 or later.

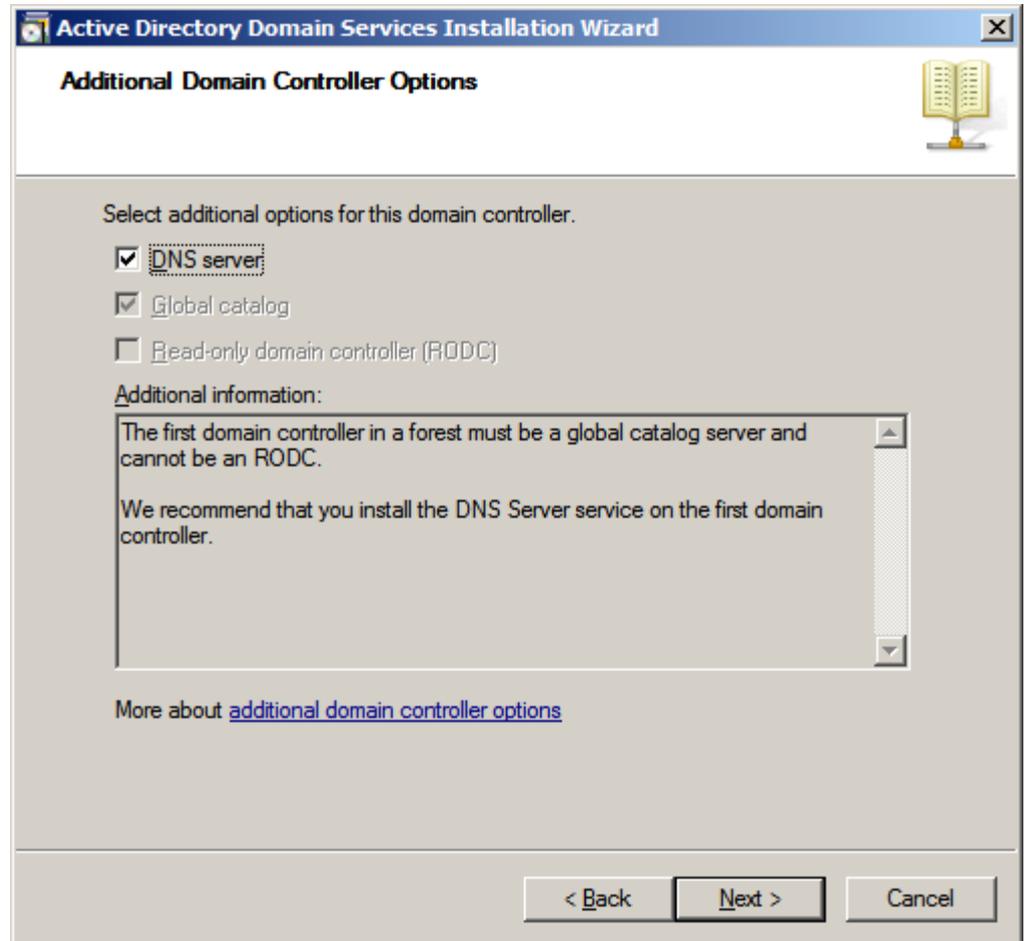
We push the Next button to advance.



Adding the DNS Server Role

The Domain Controller running Active Directory also is typically the DNS server, so this role is added to the setup.

We depress the Next button to go on.



Delegation for the DNS Server

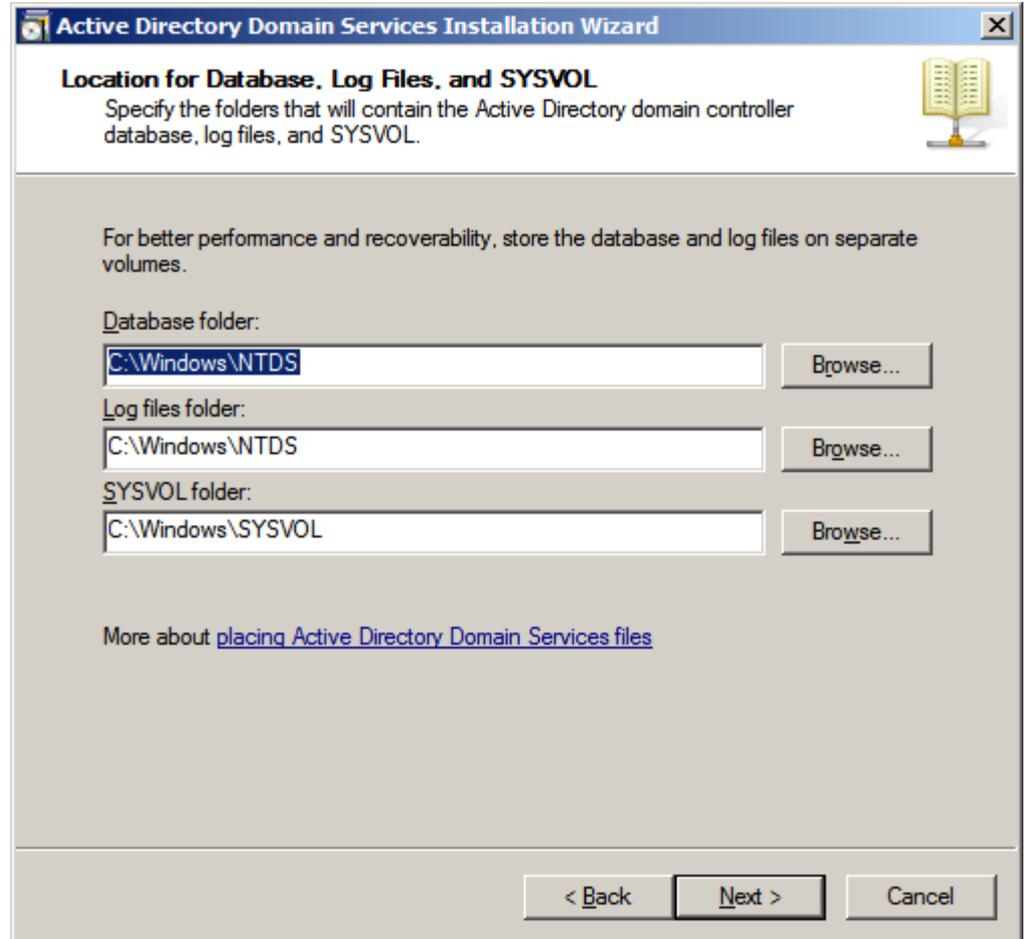
We now will get a delegation warning since our 2008 Server does not have a DNS server to resolve the DNS query. We will ignore this warning, since that DNS forwarders are directed to the Internet Service Provider (ISP).

We select the Yes button and continue.



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.

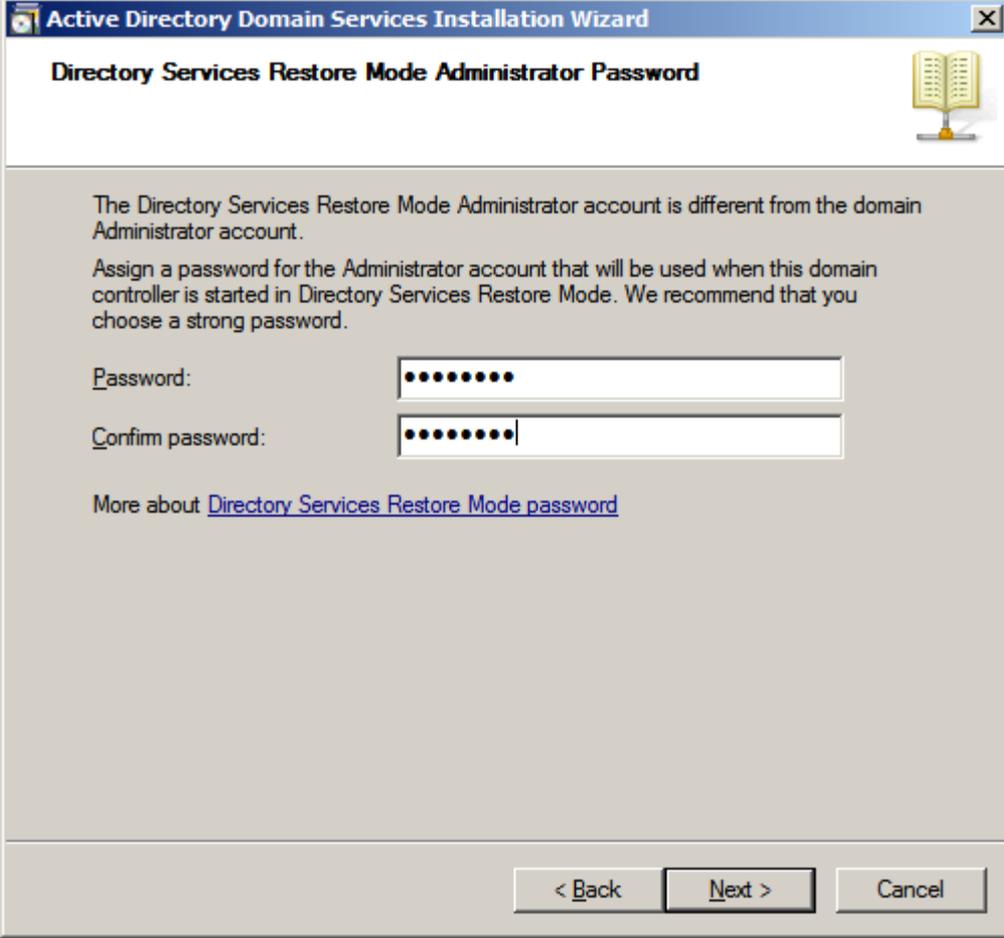


The screenshot shows the 'Active Directory Domain Services Installation Wizard' window. The title bar reads 'Active Directory Domain Services Installation Wizard'. The main heading is 'Location for Database, Log Files, and SYSVOL'. Below the heading, it says 'Specify the folders that will contain the Active Directory domain controller database, log files, and SYSVOL.' There is a small icon of an open book on the right. The main content area has a grey background and contains the following text: 'For better performance and recoverability, store the database and log files on separate volumes.' Below this, there are three rows of input fields, each with a 'Browse...' button to its right. The first row is labeled 'Database folder:' and contains the text 'C:\Windows\NTDS'. The second row is labeled 'Log files folder:' and contains the text 'C:\Windows\NTDS'. The third row is labeled 'SYSVOL folder:' and contains the text 'C:\Windows\SYSVOL'. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Administrative Password

We type and confirm the administrative password for the 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" with the subtitle "Directory Services Restore Mode Administrator Password". The dialog contains the following text:

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 the text are two input fields:

Password:

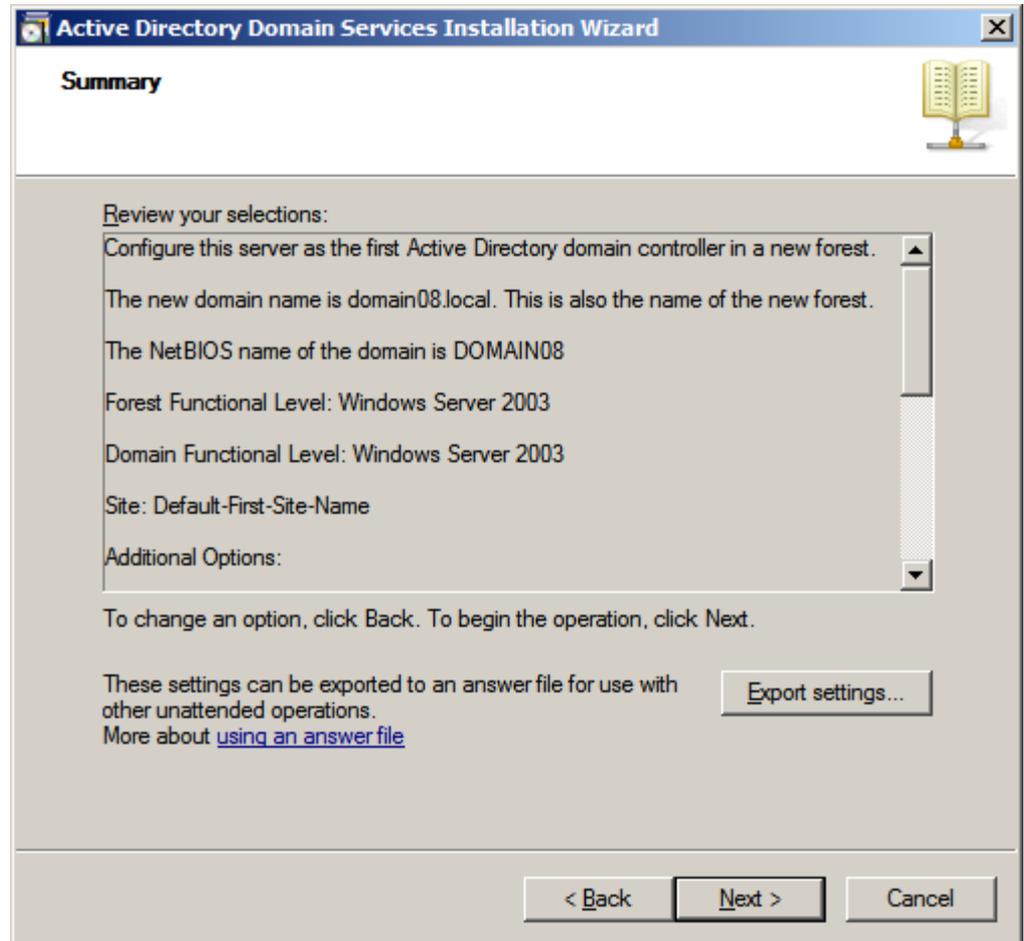
Confirm password:

At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". A small icon of an open book is visible in the top right corner of the dialog.

Summary

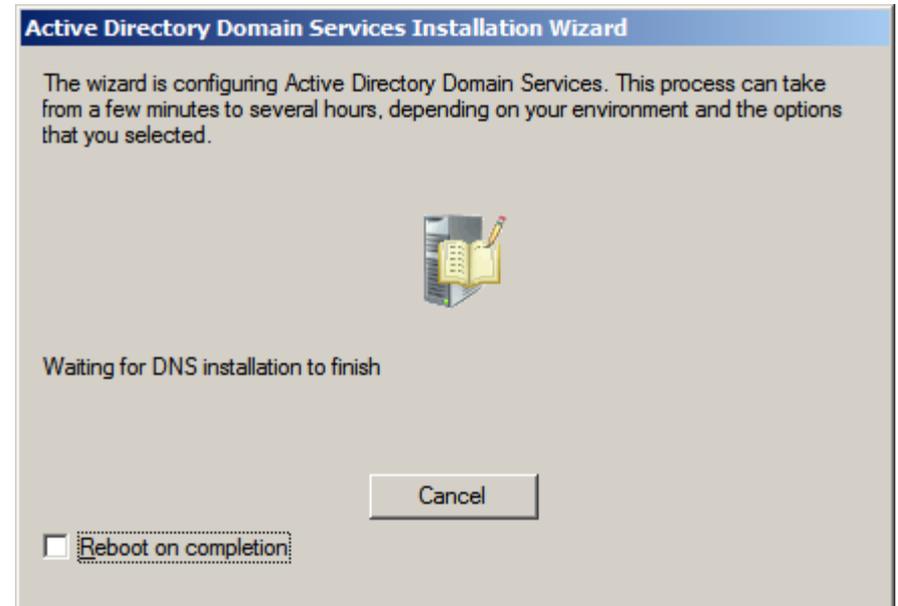
We now see a summary of the choices we made with the Active Directory Installation Wizard. If we need to change anything we can go back to the particular window and make the change and advance back to this point.

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.



Active Directory Setup Complete

The Domain Controller for our new forest is now built. We choose the Finish button and we must restart the server to have Active Directory take effect.

