
**Windows 2003 Server Standard Edition
&
DOMAIN CONTROLLER
DNS SERVER
DHCP SERVER
&
Exchange Server 2003 SP1**

Installation Procedure

Version 1.0

1 March 09

Information about this document

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<i>Available in:</i>

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1 Objectives

1.1 Objective of this document

This document defines conditions, pre-requisites, software components installation steps for windows server 2003 & exchange server 2003

1.2 Objectives of the documented procedure

This installation procedure provides steps to setup 1st Domain Controller server & exchange server, including:

- Server profile
- Windows 2003 standard edition
- Primary DNS, DHCP
- Exchange server 2003

This procedure is based mainly on screenshots describing step by step operations.

1.3 Intended audience

All **trained** professional who will have to install Windows 2003, DNS, DHCP and exchange server 2003

1.4 Assumptions

- Procedure is defined assuming that Windows 2003 installation under Acer server

1.5 Conditions required to use the procedure

- Internet Access for latest HW drivers
- Windows 2003 Standard Edition CD
- MS Exchange Server 2003 CD
- Security Fix & Update Patch

2. Server Profile

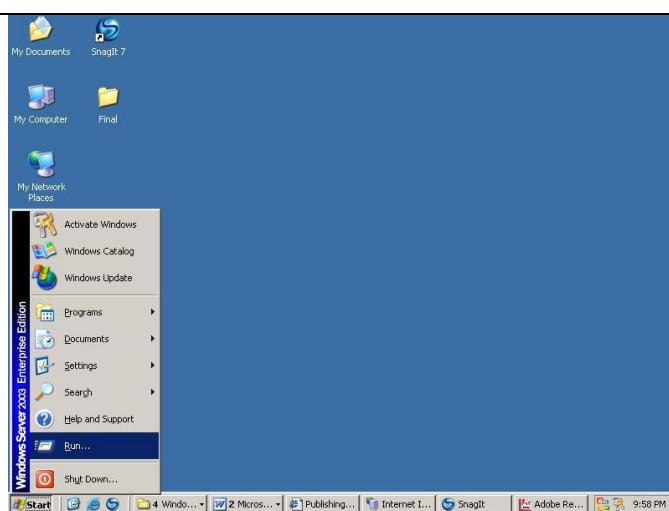
Item	Detail
Machine Name	Acer
Machine Type	N/A
System Serial	N/A
System Memory	4096 MB
RAID Controller	Raid 1
Processors, Processor slot	1
Hard Disk	2
System BIOS version	N/A
Microsoft Windows 2003 Server Standard R2 Edition CD	CD1 & CD2
MS Windows 2003 Server Enterprise Edition License Key	P4DG2-XFF3B-XDHDT-TTY2C-6VJY6
Windows 2003 latest Service Pack and Hot Fixes	In CD - Download from Microsoft
MS Exchange Server 2003 SP1	
DNS Server	Primary DNS server
DHCP Server	50% of scope
Symantec Endpoint Protection 11	
Symantec account Account name:admin Password: 123qwe!@#	
Server Name:	VNSUNDC001
Domain Name	SUNFLOWERVN.LOCAL
NetBIOS Domain Name	SUNFLOWERVN
Administrator Password	123qwe!@#
The password of Directory Service Restore mode	123qwe!@#
IP address: Subnet Mask: Default Gateway: DNS Server:	172.16.11.2 255.255.255.0 172.16.11.1 172.16.11.2 203.162.4.190

3. Installation of Windows 2003 Standard Edition

3.1 Domain Controller

Step 1: Promote to Domain Controller

Click **Start** and click the **Run** command.



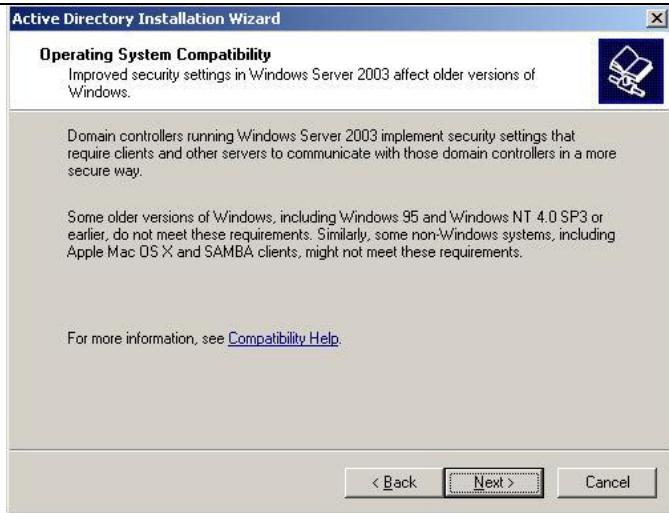
In the **Run** dialog box, enter **dcpromo** in the **Open** text box and click **OK**.



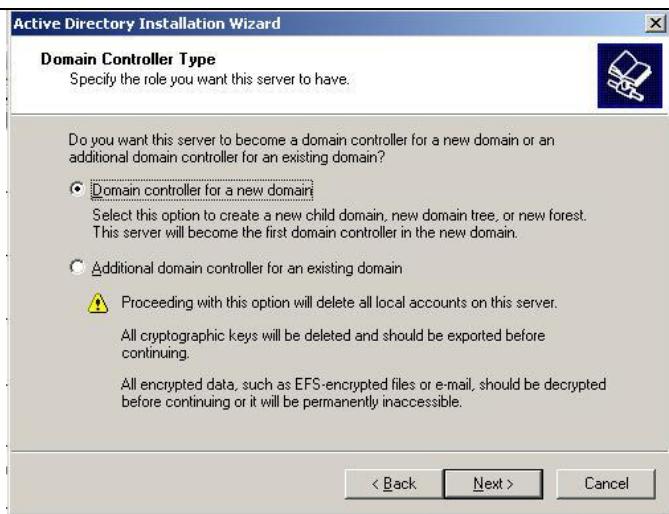
Click Next on the Welcome to the Active Directory Installation Wizard page.



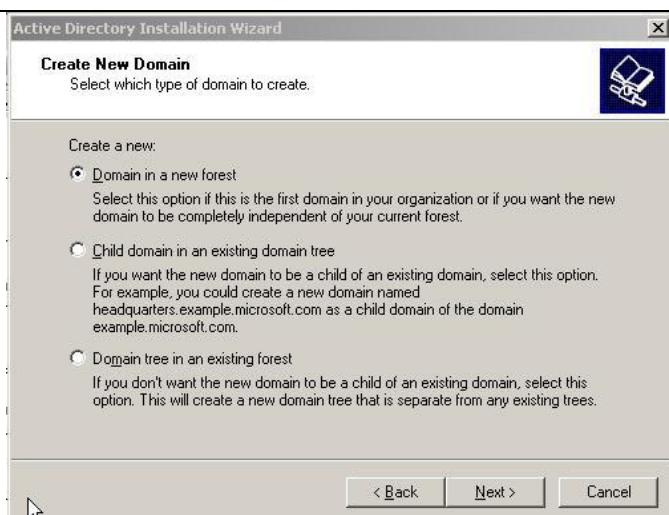
Click **Next on the **Operating System Compatibility** page.**



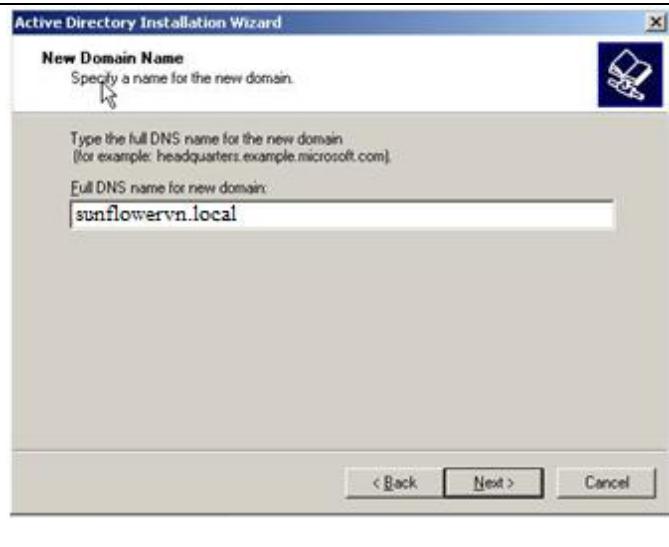
On the **Domain Controller Type page, select the **Domain controller for a new domain** option and click **Next**.**



On the **Create New Domain page, select the **Domain in a new forest** option and click **Next**.**



On the **New Domain Name** page, enter the name of the domain in the **Full DNS name for new domain** text box. Enter **sunflowervn.local** in the text box and click **Next**.



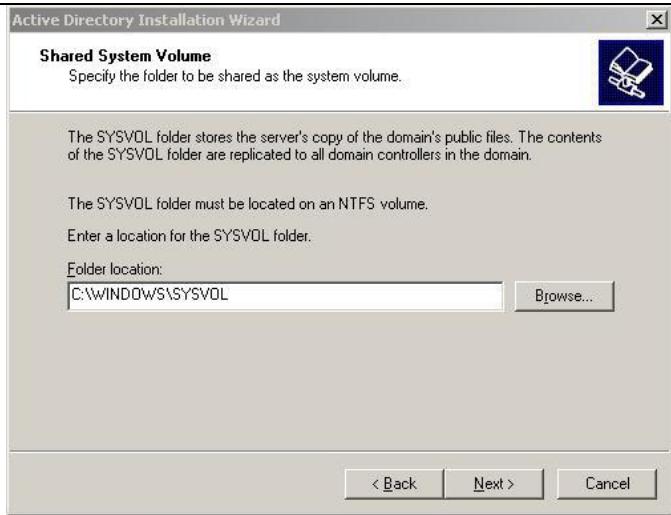
On the **NetBIOS Domain Name** page, enter NetBIOS name **SUNFLOWERVN** for the domain. Click **Next**.



Accept the default settings on the **Database and Log Folders** page and click **Next**.



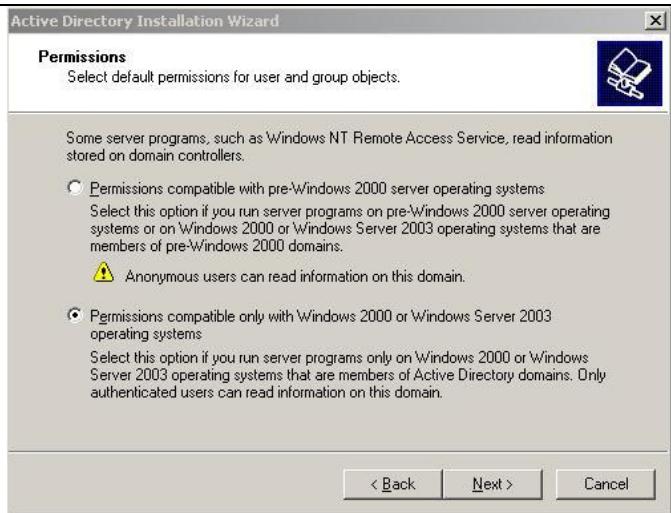
On the **Shared System Volume** page, accept the default location and click **Next**.



On the **DNS Registration Diagnostics** page, select the **Install and configure the DNS server on this computer, and set this computer to use this DNS server as its preferred DNS server**. Click **Next**.

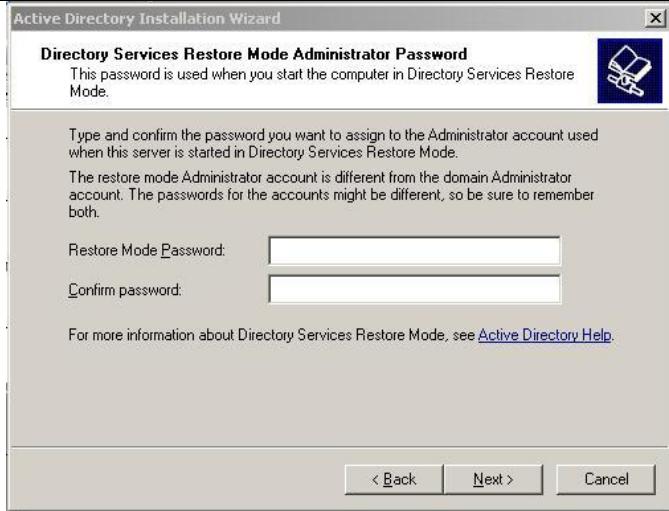


On the **Permissions** page, select the **Permissions compatible only with Windows 2000 or Windows Server 2003 operating system** option. Click **Next**.

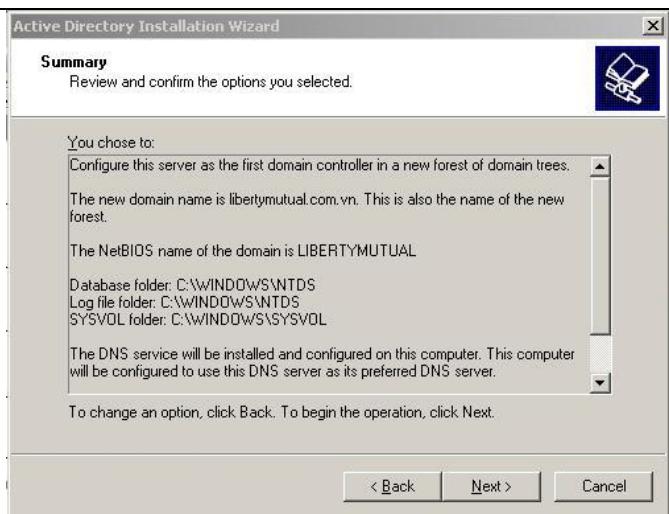


On the **Directory Services Restore Mode Administrator Password** page, enter a **Restore Mode Password** and then **Confirm password**. Click **Next**.

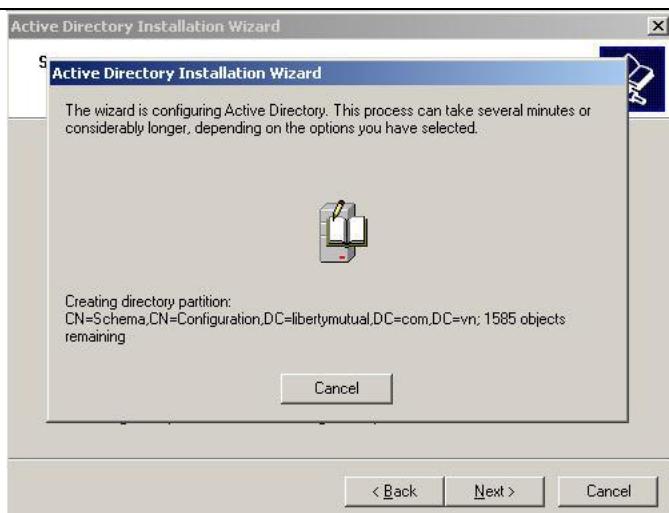
Restore Mode Password:
123qwe!@#



On the **Summary** page, click **Next**.



The machine now starts to configure itself as a domain controller.



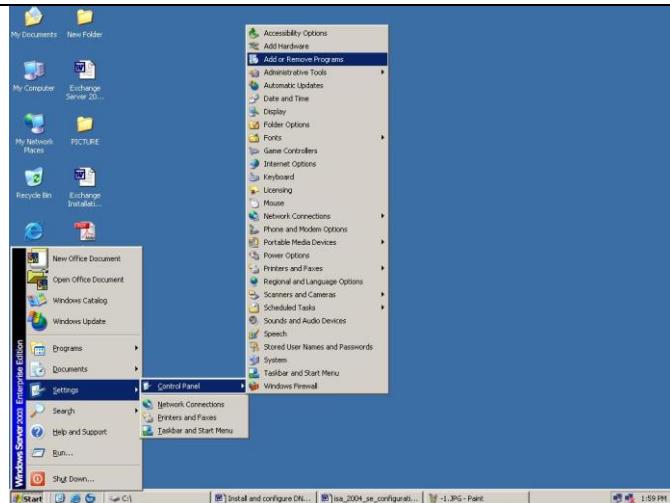
Click **Finish** on the **Completing the Active Directory Installation Wizard** page. Restart the computer and used the domain account to logon to domain controller.



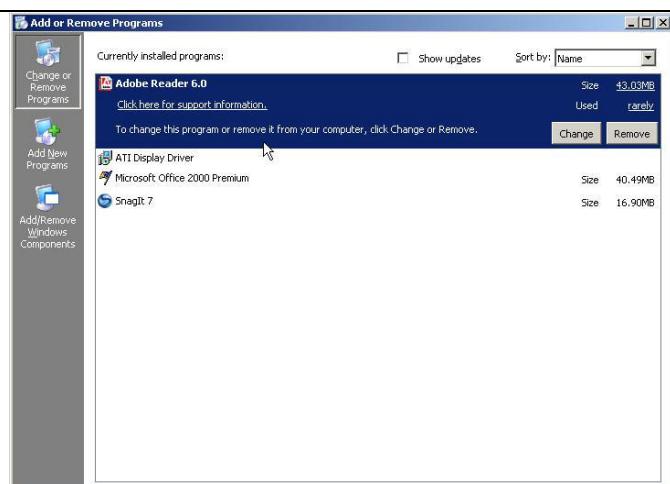
3.2 DNS configuration

Step 1: Installing the DNS server service

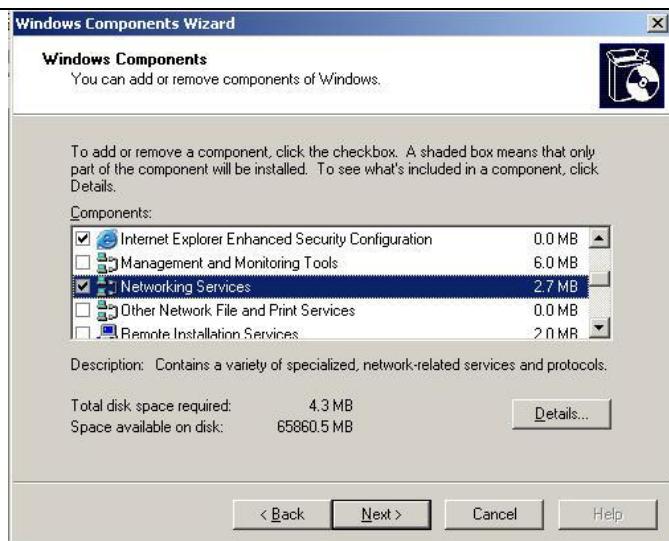
Click **Start**, point to **Control Panel**. Click **Add or Remove Programs**



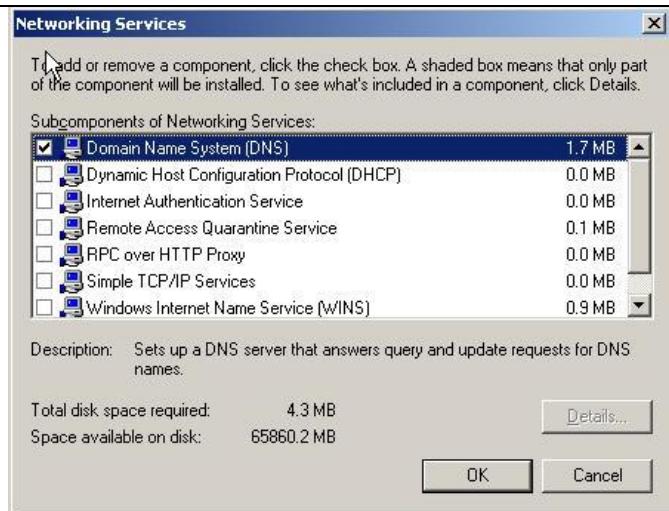
In the **Add or Remove Programs** window, click the **Add/Remove Windows Components** button on the left side of the window.



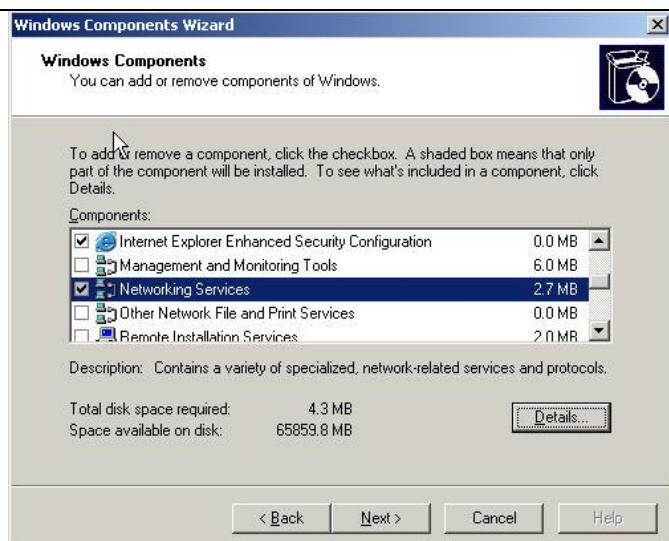
On the **Windows Components** page, scroll through the list of **Components** and select **Networking Services**. Click the **Details** button.

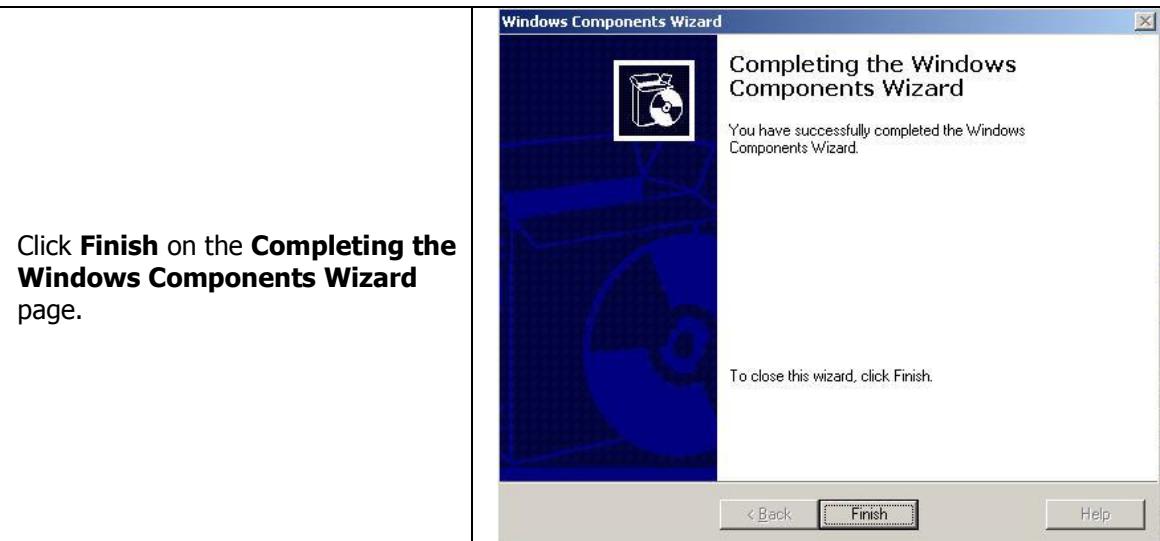


In the **Networking Services** dialog box, put a check mark in the **Domain Name System (DNS)** check box and click **OK**.

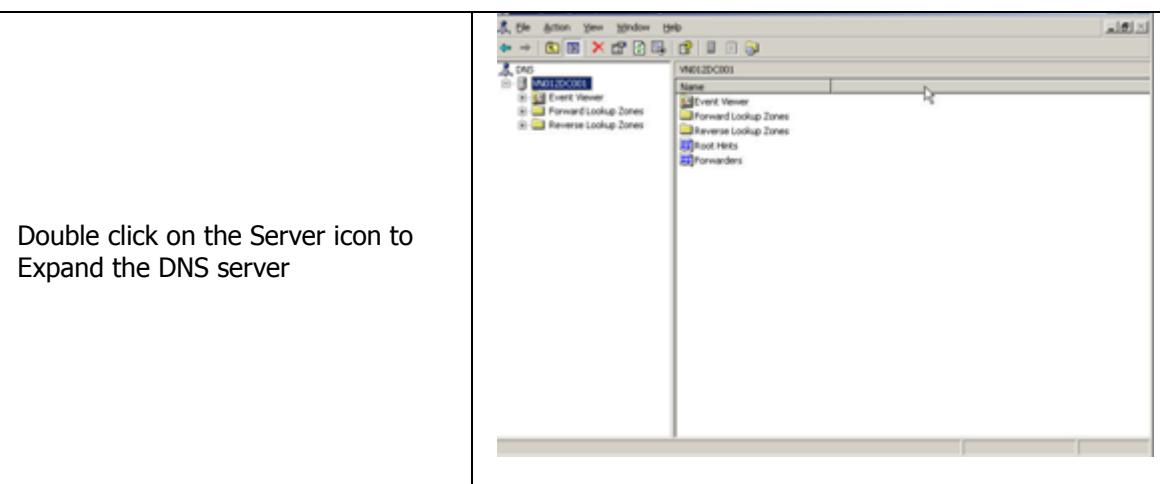
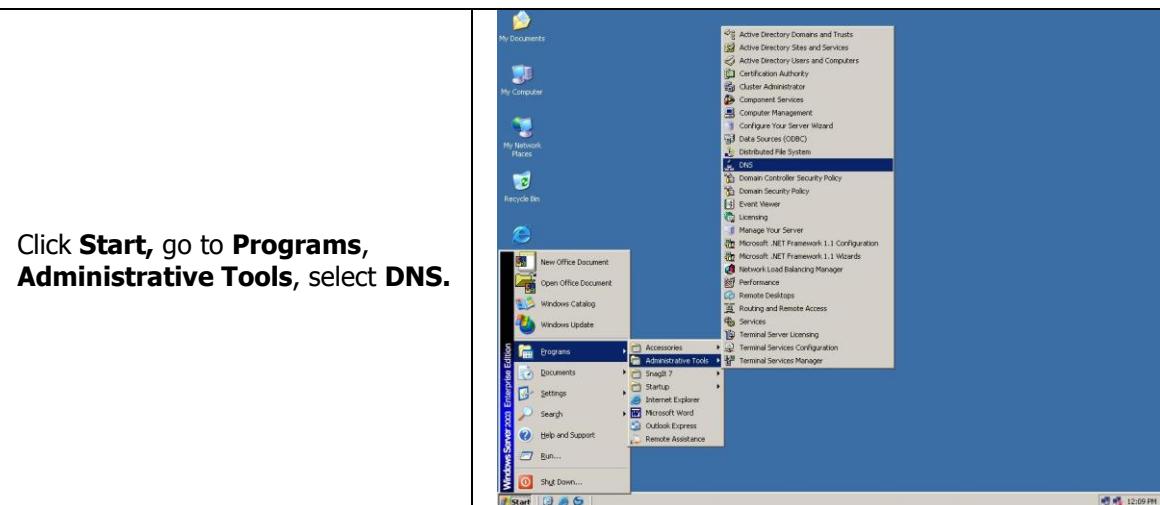


Click **Next** on the **Windows Components** page.





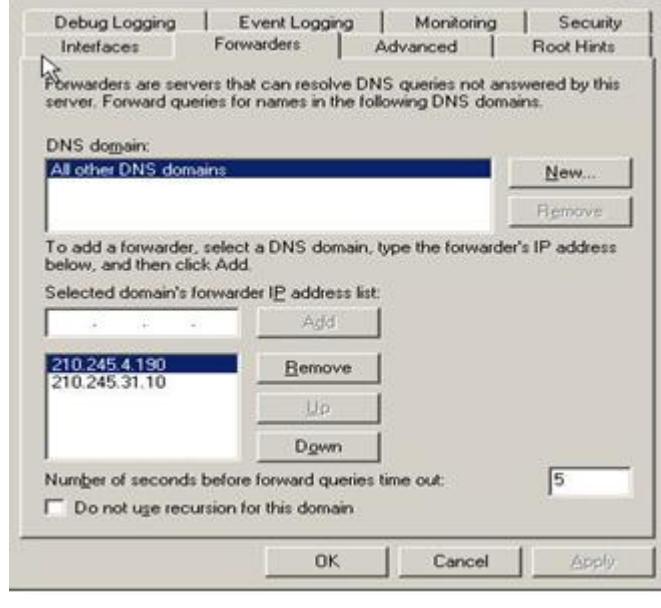
Step 2: Configuring the DNS server



In the **DNS** management console, right-click the server name in the left pane of the console and click **Properties**. Click **Forwarders** tab, Type IP address is ISP's DNS.

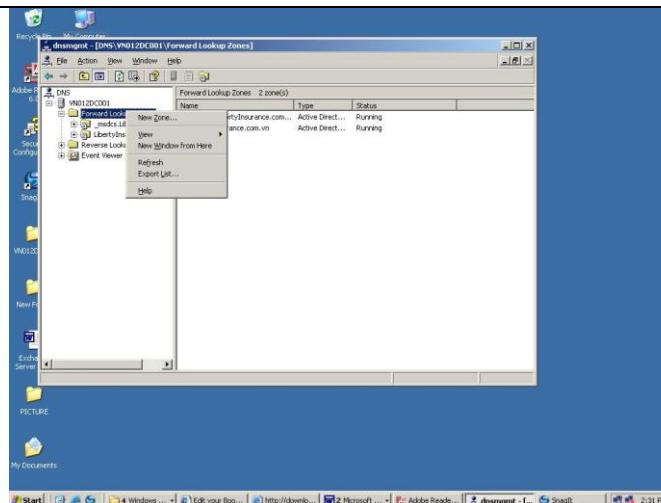
Note :

210.245.31.10
210.245.31.130



Step 3: Create the Primary zone

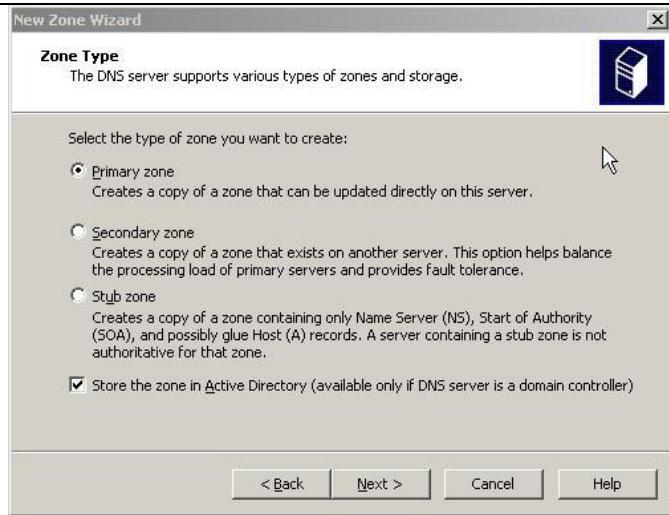
Right click on the **Forward lookup Zones**, Select **New Zone....**



Click **Next** on the **Welcome to the New Zone Wizard**



Select **Primary zone** on the **Zone type** page, Click **Next**.



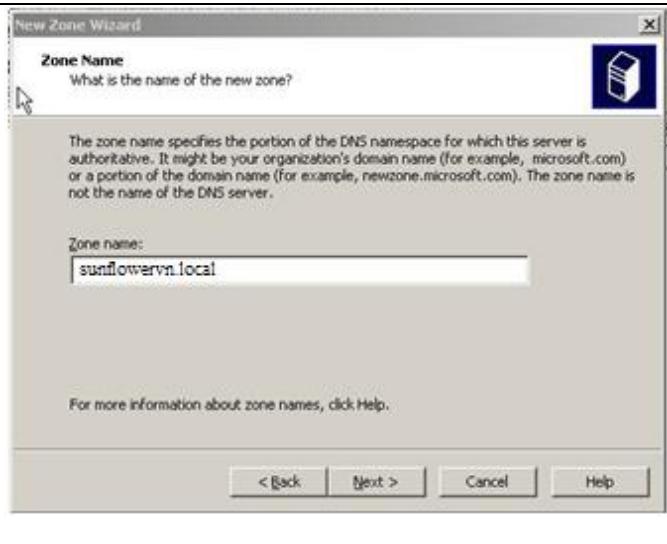
Select **To all domain controller in the Active Directory domain sunflowervn.local**, then click **Next**



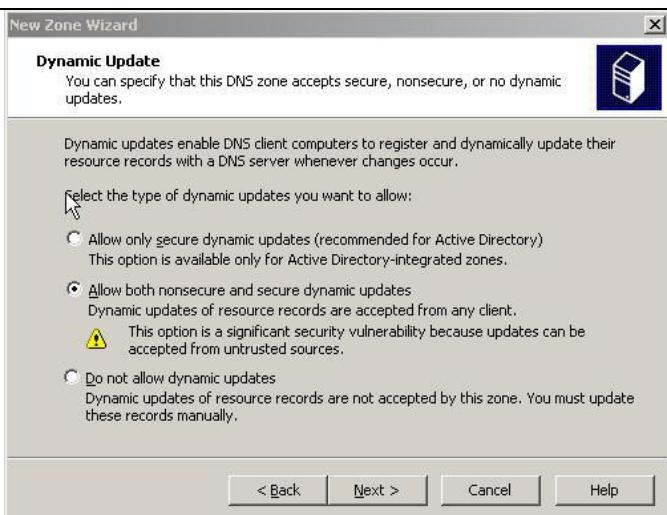
Select **To all domain controller in the Active Directory domain sunflowervn.local**, then click **Next**



Type Zone name is **sunflowervn.local** in **Zone name** text box, click **Next**.

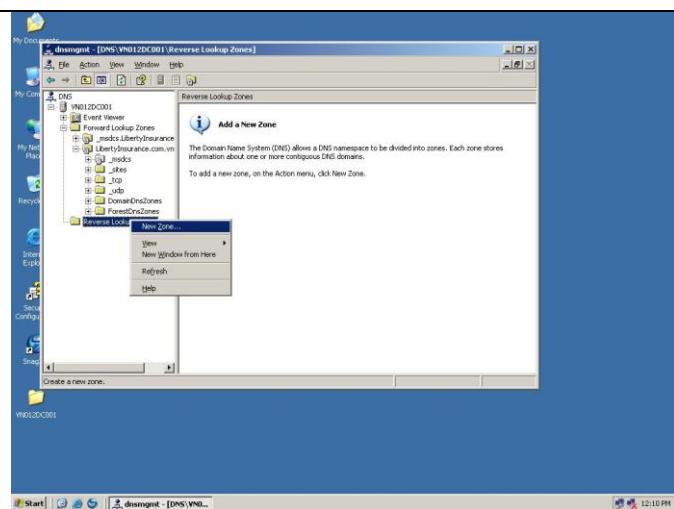


Select **Allow both nonsecure and secure dynamic updates.....** and click **Next**.



Step 4: Create the Forward Lookup Zone

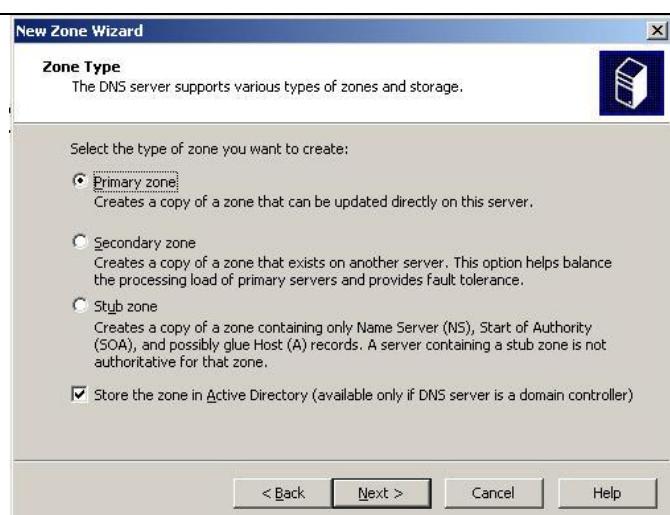
Right click on the **Forward Lookup Zone**, Select **New Zone**



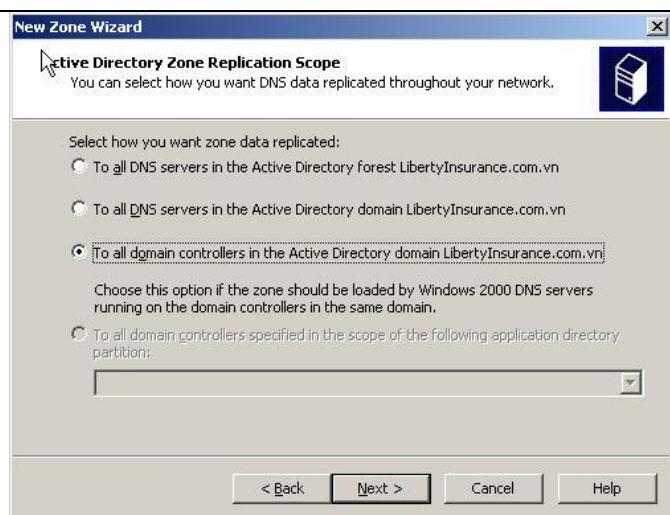
Click **Next on the Welcome to the New Zone Wizard page.**

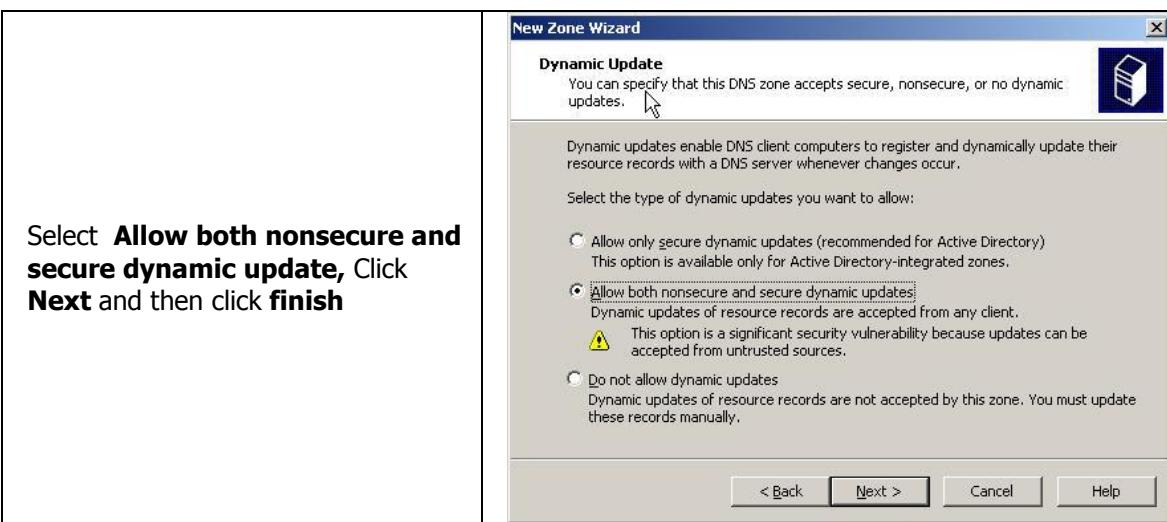
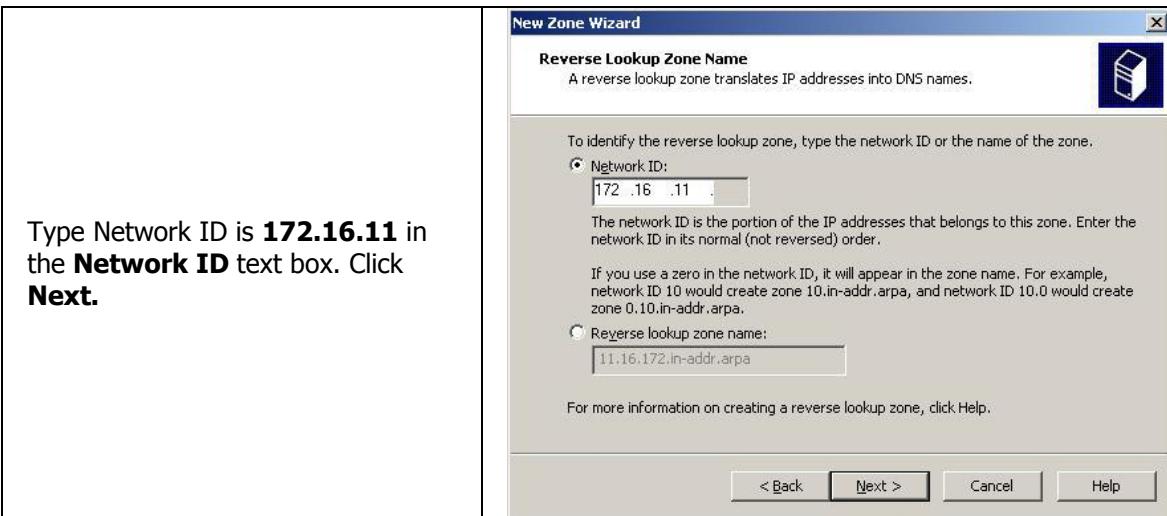


Select Primary Zone on the Zone Type page.



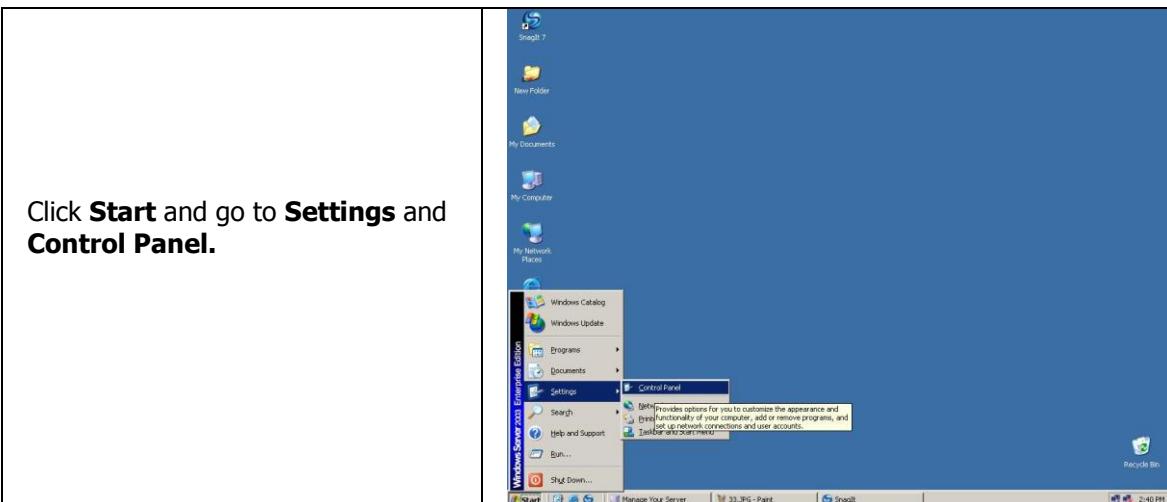
Select To all domain controller in the Active Directory domain sunflowervn.local, then click Next.

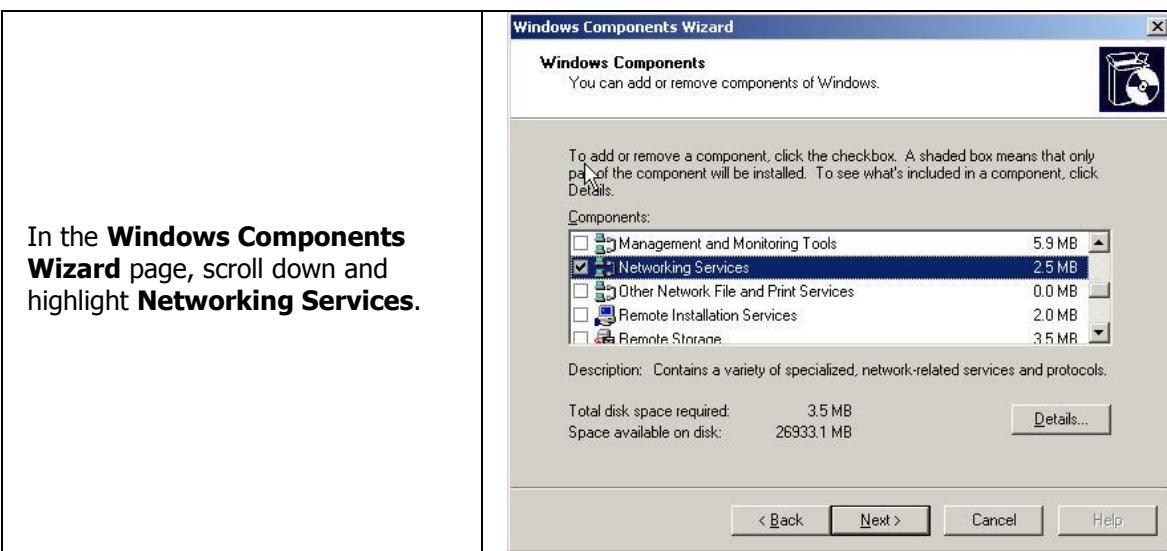
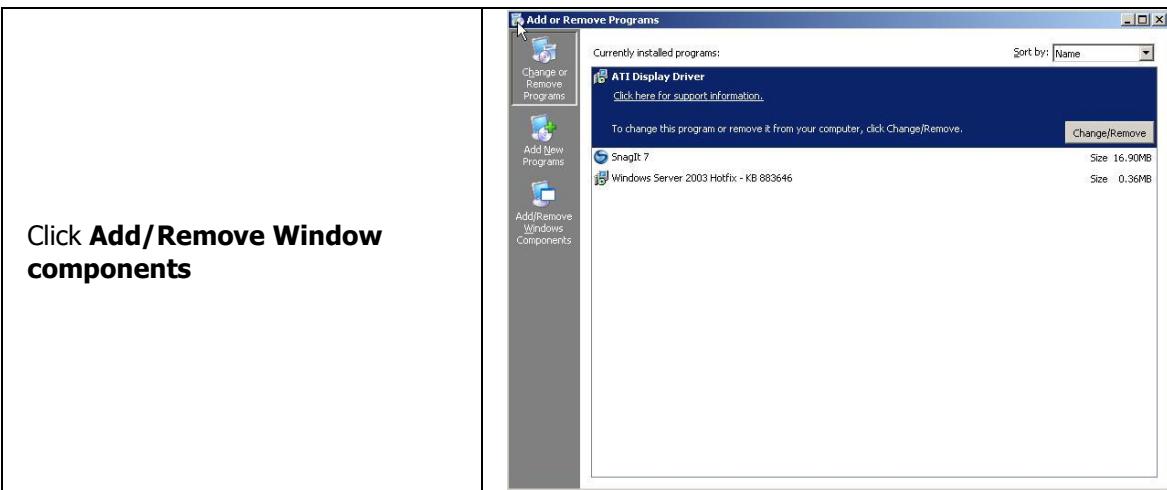
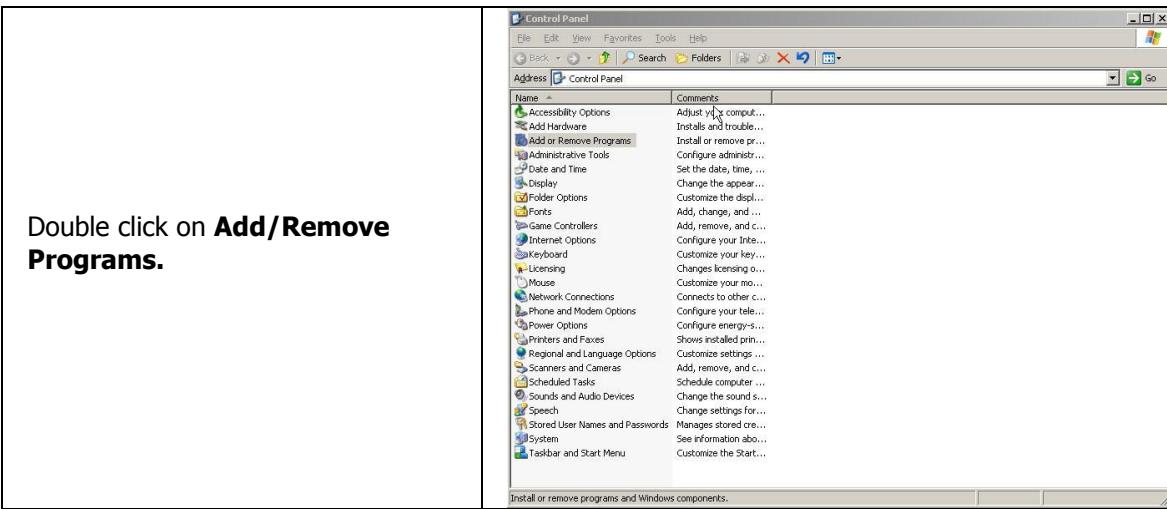


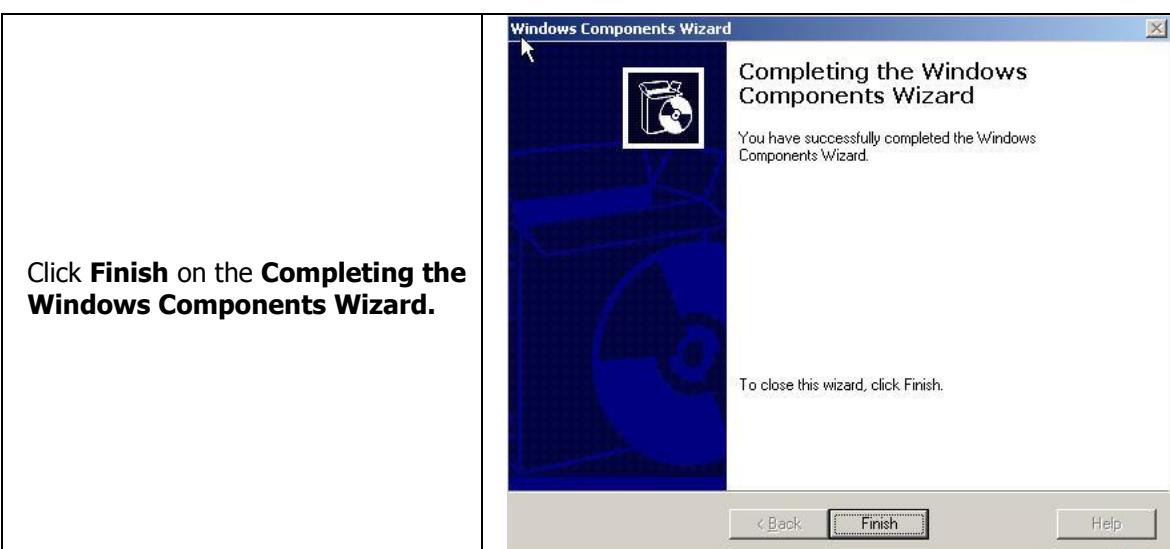
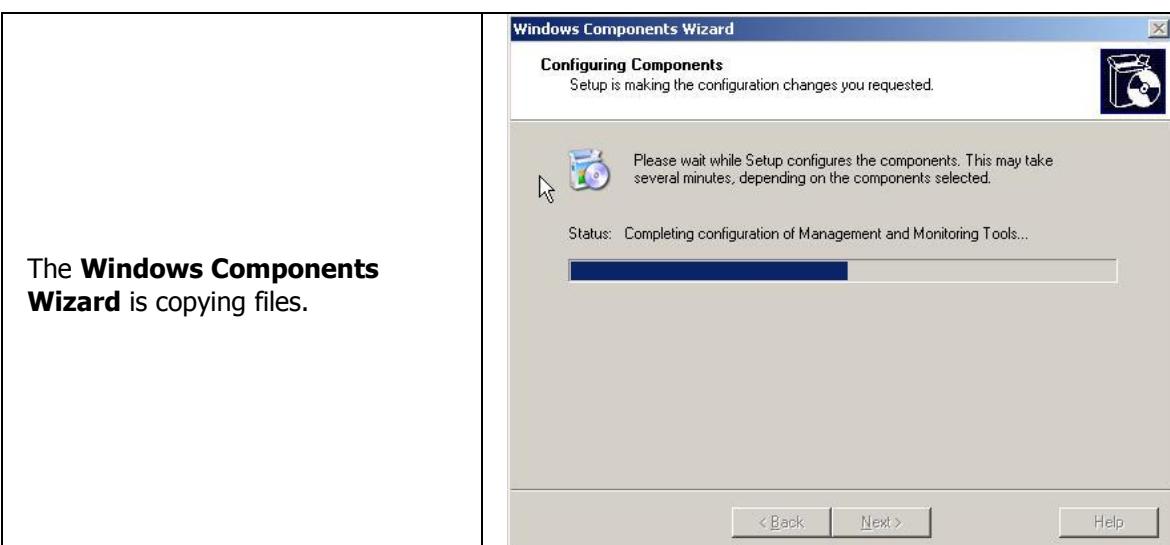
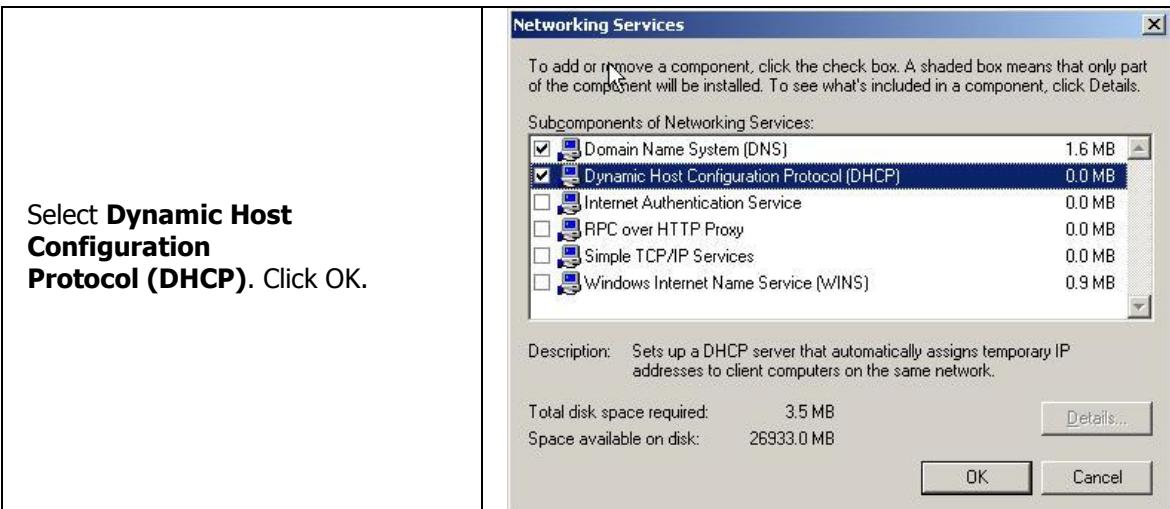


3.4 DHCP configuration

Step 1: Installing and configuring a DHCP server

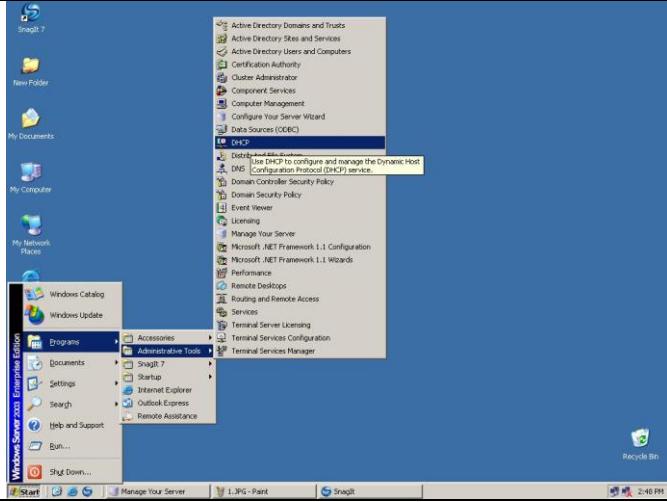




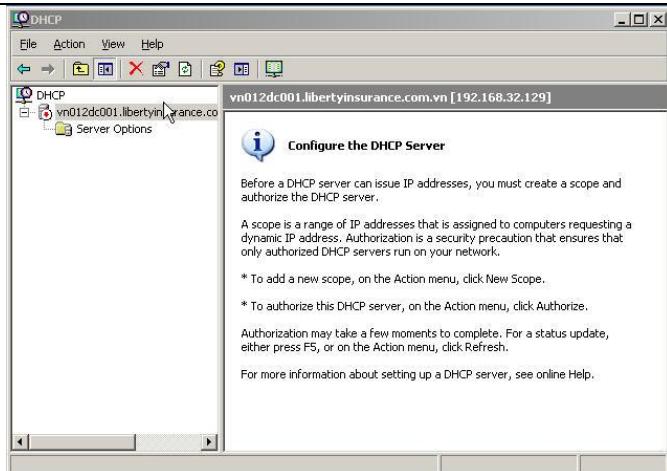


Step 2: Authorizing the DHCP server -> Before a Windows 2000 DHCP server can start giving out IP addresses it must be authorized within Active Directory.

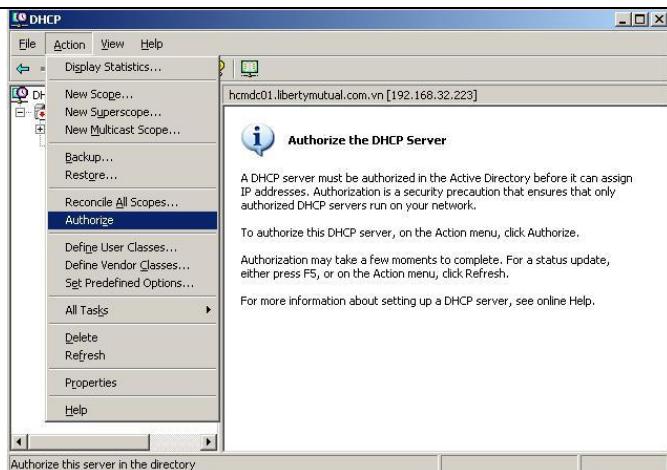
Click Start .Go to Programs, Administrative Tools and select DHCP.

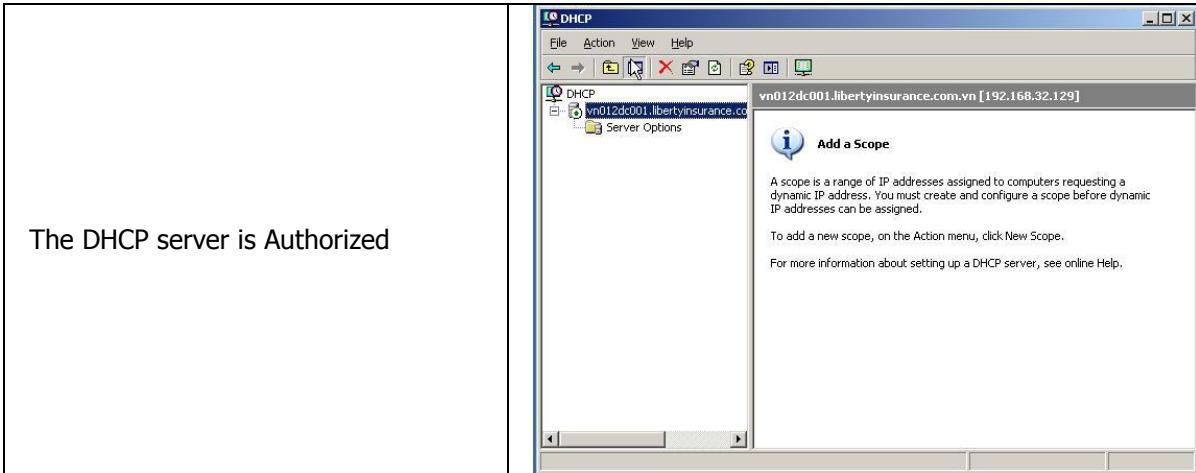


The DHCP server is not authorized in Active Directory.

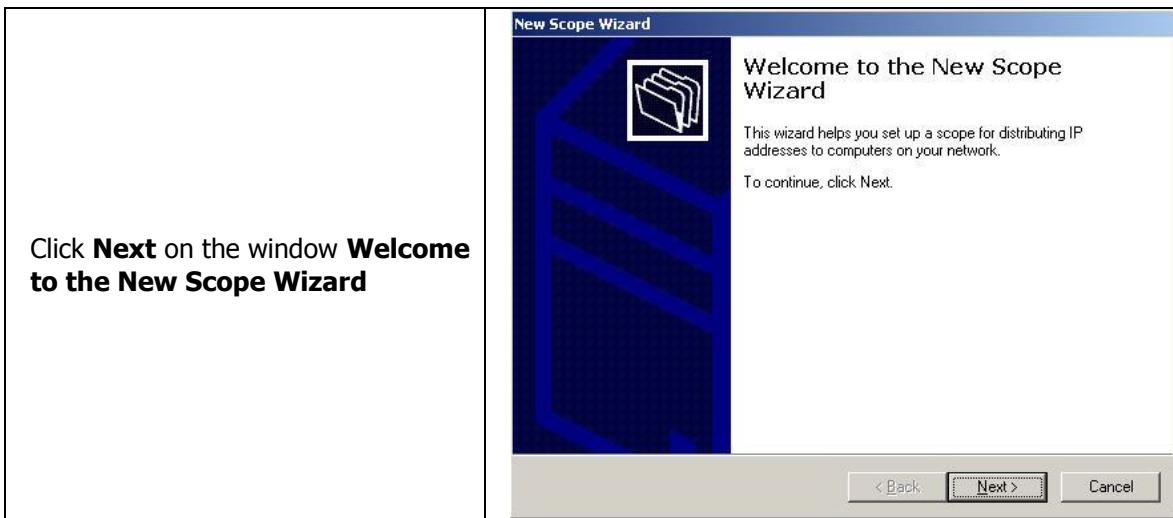
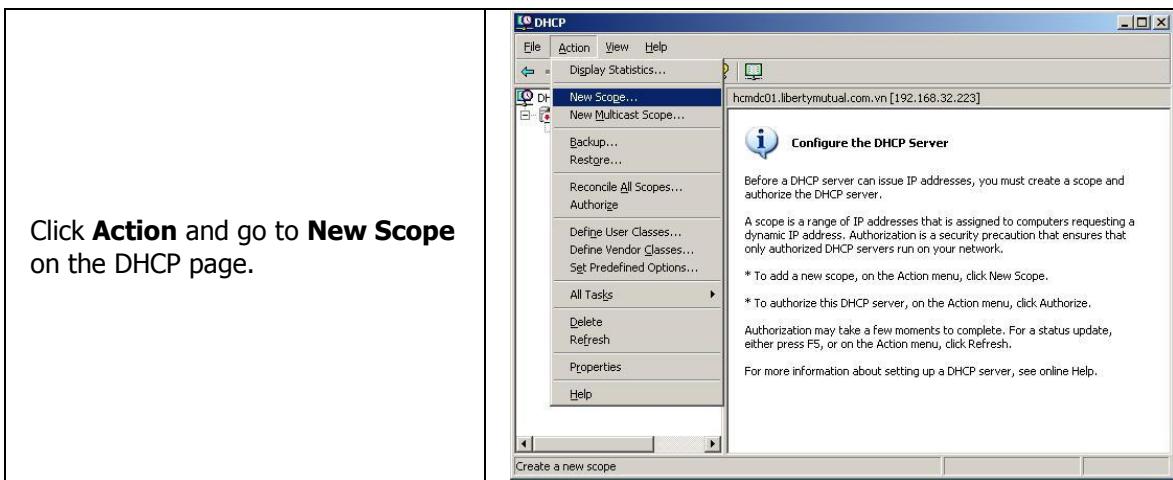


Right click on Server **VNSUNDC001**, select **Authorize**.

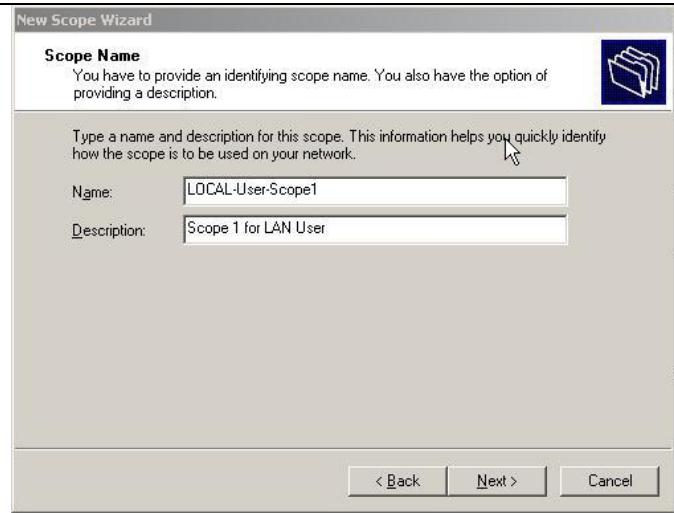




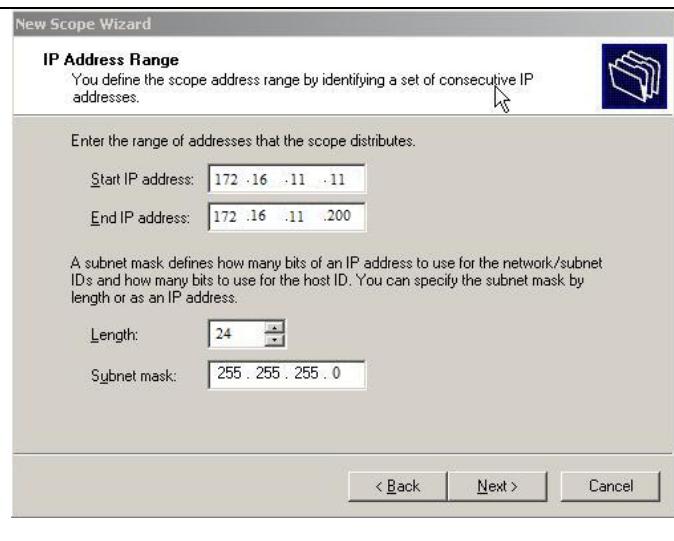
Step 3: Creating the DHCP Scope 1 for LAN Users



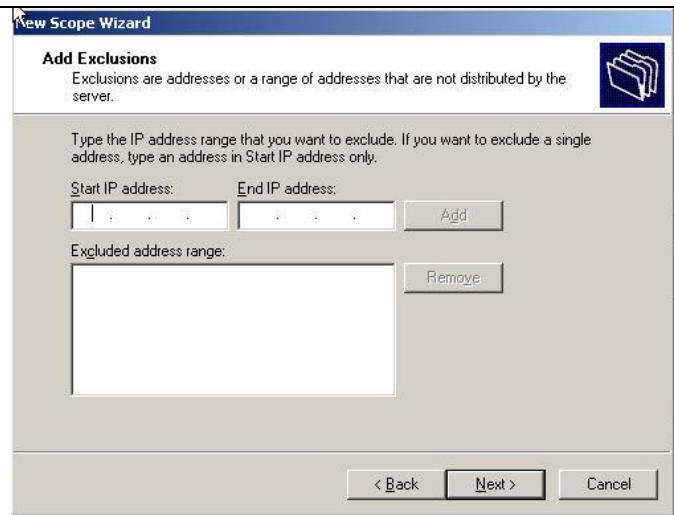
On the **Scope Name** page, enter a name for the scope in the **Name** text box and enter an optional description in the **Description** text box.



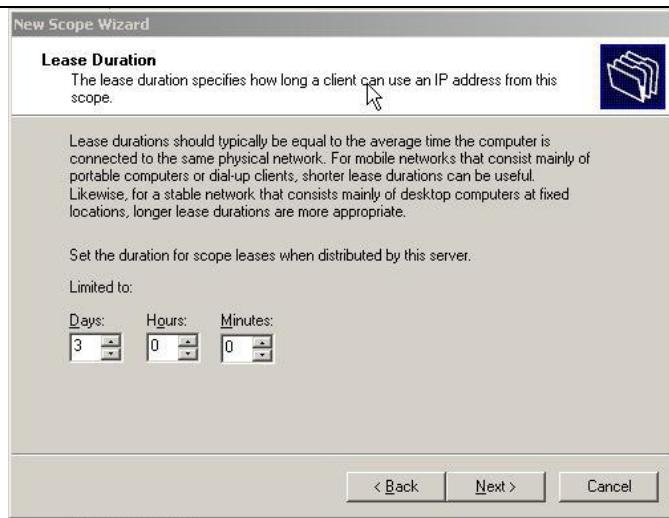
On the **IP Address Range** page, enter a **Start IP address** and a **End IP address** in the text boxes provided. The start and end addresses represent the beginning and end of a range of addresses that available for DHCP clients. Then configure the subnet mask settings in either the **Length** or **Subnet mask** text boxes. Click **Next**.



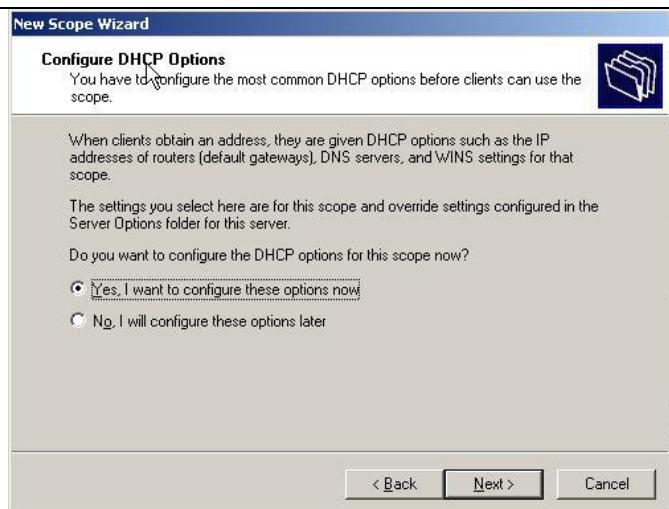
Click Next in **Add Exclusions** page.



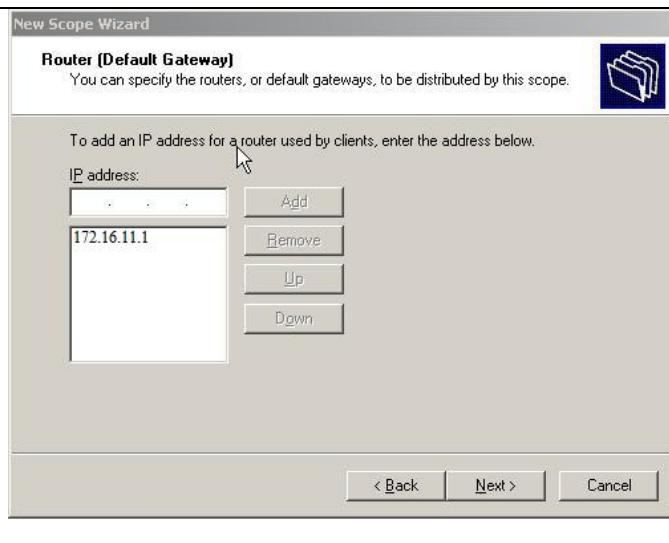
Enter **3 Days** on the **Lease Duration** page. Click **Next**.



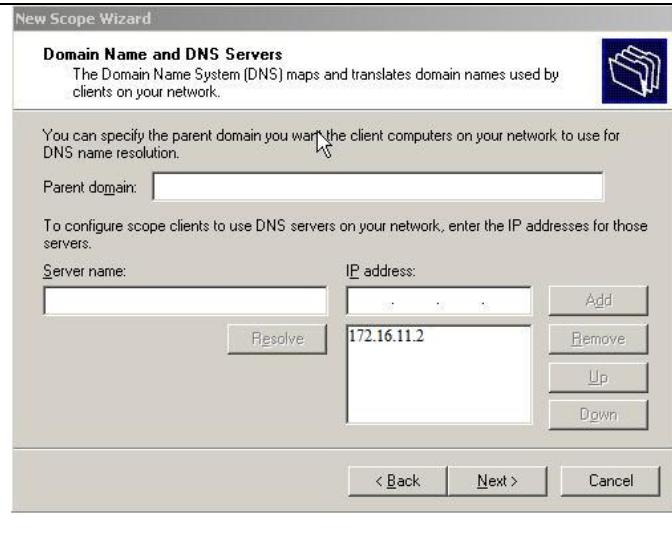
On the **Configure DHCP Options** page, select the **Yes, I want to configure these options now** option and click **Next**.



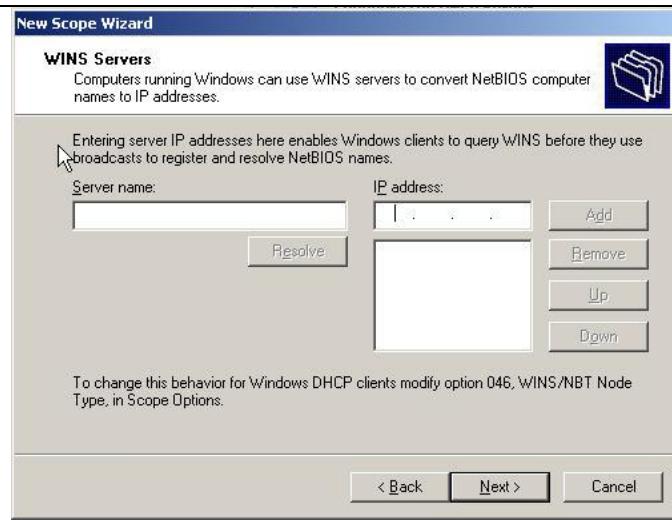
On the **Router (Default Gateway)** page, enter the IP address of the internal interface of the ISA Server 2006 firewall machine in the **IP address** text box and click **Add**. Click **Next**.



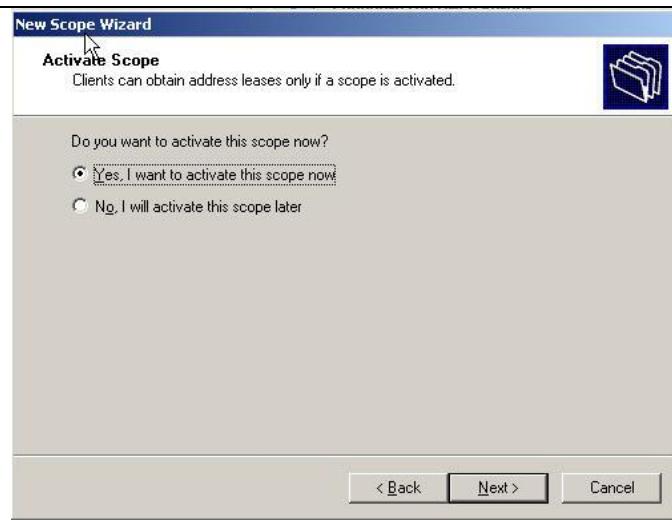
On the **Domain Name and DNS Servers** page. In the **IP address** text box, enter the IP address of the DNS server on the internal network. Click **Add** then click **Next**.



On the **WINS Servers** page, do not enter anything and click **Next**.



On the **Activate Scope** page, select the **Yes, I want to activate this scope now** option and click **Next**

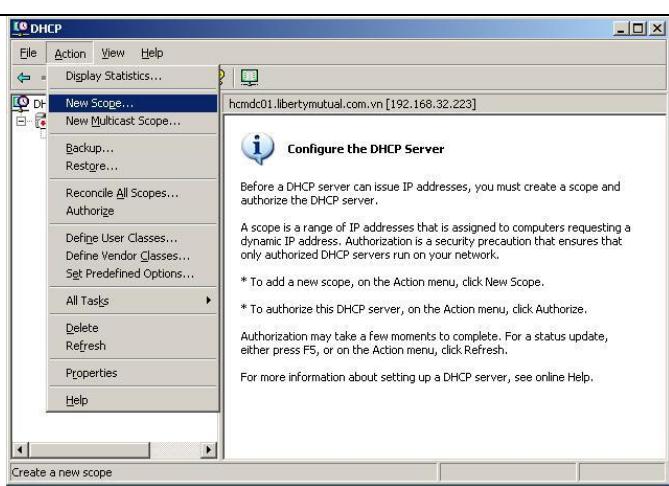


Click **Finish** on the **Completing the New Scope Wizard** page.



Step 4: Creating the DHCP Scope 1 for VPN Users

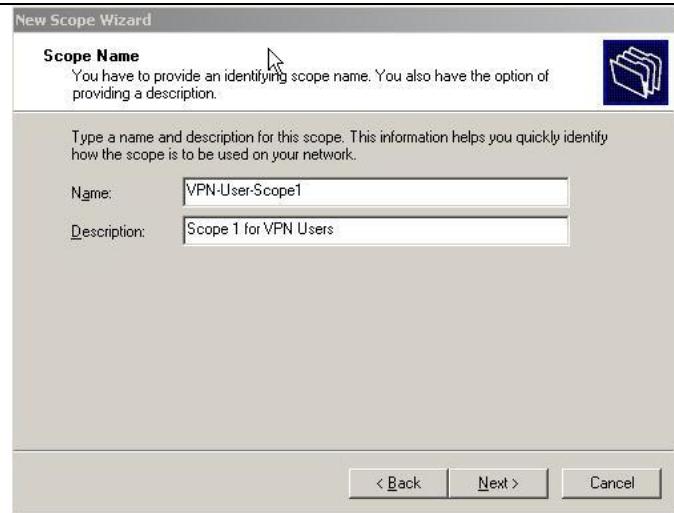
Click **Action** and go to **New Scope** on the DHCP page.



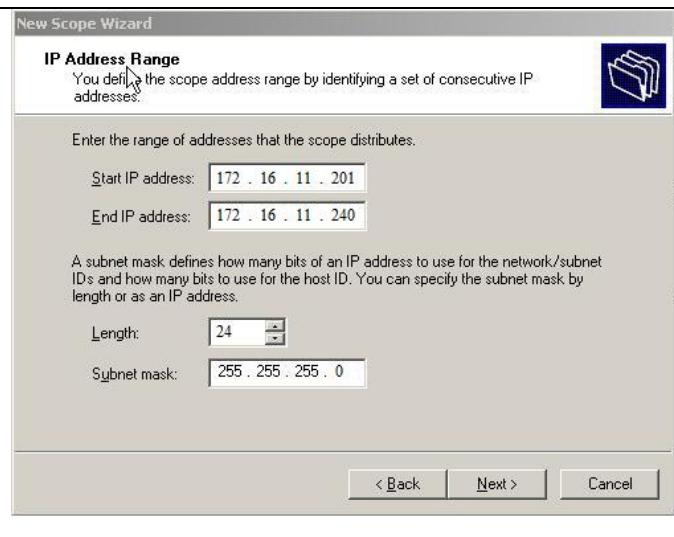
Click **Next** on the window **Welcome to the New Scope Wizard**



On the **Scope Name** page, enter a name for the scope in the **Name** text box and enter an optional description in the **Description** text box.



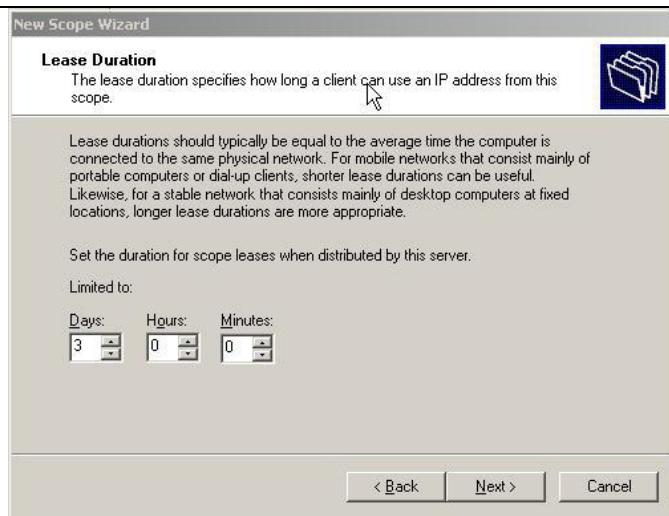
On the **IP Address Range** page, enter a **Start IP address** and a **End IP address** in the text boxes provided. The start and end addresses represent the beginning and end of a range of addresses that available for DHCP clients. Then configure the subnet mask settings in either the **Length** or **Subnet mask** text boxes. Click **Next**.



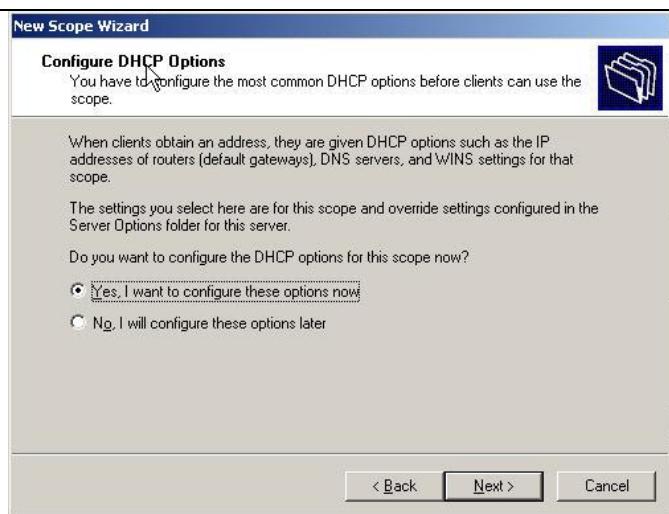
Click **Next** in **Add Exclusions** page.



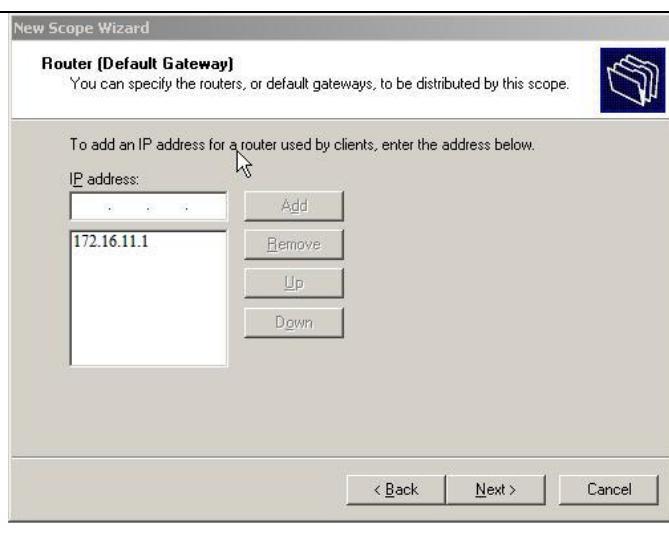
Enter **3 Days** on the **Lease Duration** page. Click **Next**.



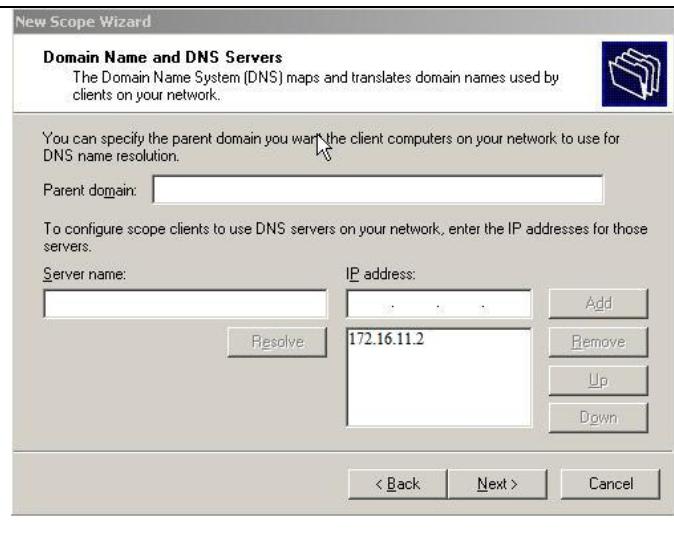
On the **Configure DHCP Options** page, select the **Yes, I want to configure these options now** option and click **Next**.



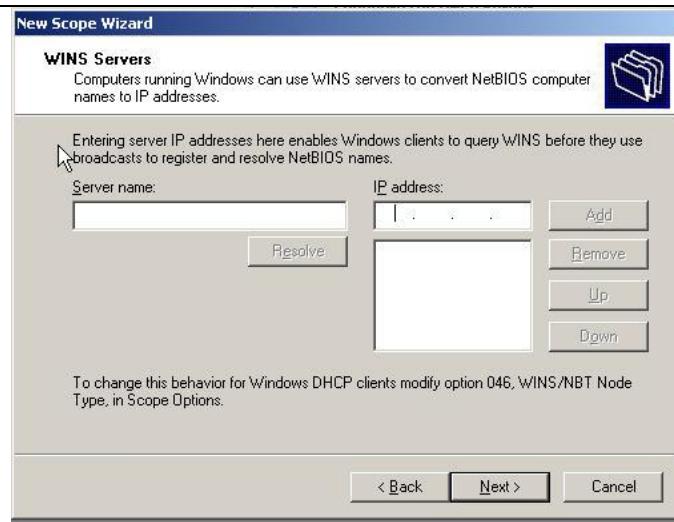
On the **Router (Default Gateway)** page, enter the IP address of the internal interface of the ISA Server 2006 firewall machine in the **IP address** text box and click **Add**. Click **Next**.



On the **Domain Name and DNS Servers** page. In the **IP address** text box, enter the IP address of the DNS server on the internal network. Click **Add** then click **Next**.



On the **WINS Servers** page, do not enter anything and click **Next**.



On the **Activate Scope** page, select the **Yes, I want to activate this scope now** option and click **Next**

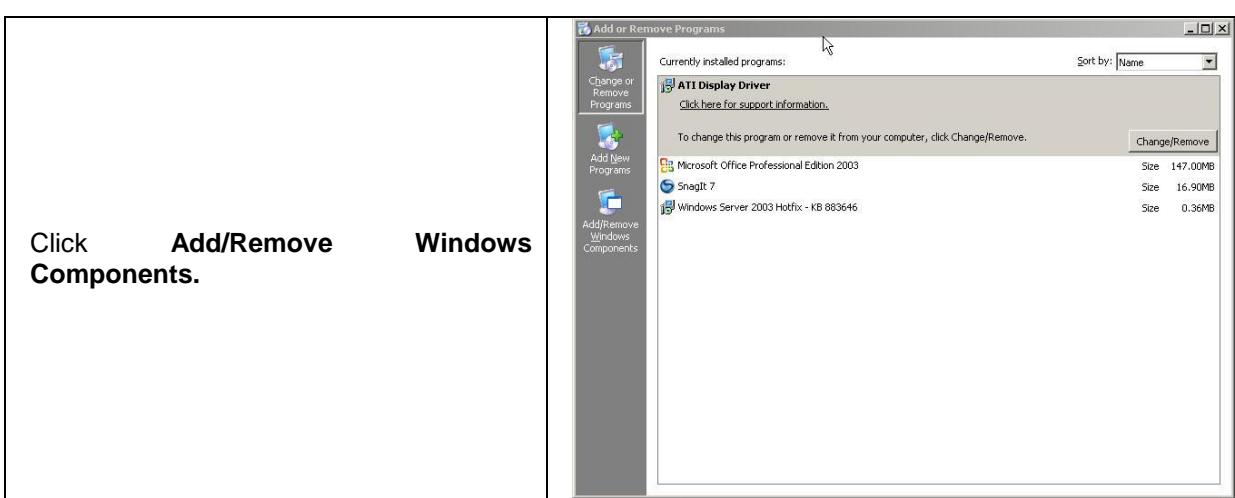
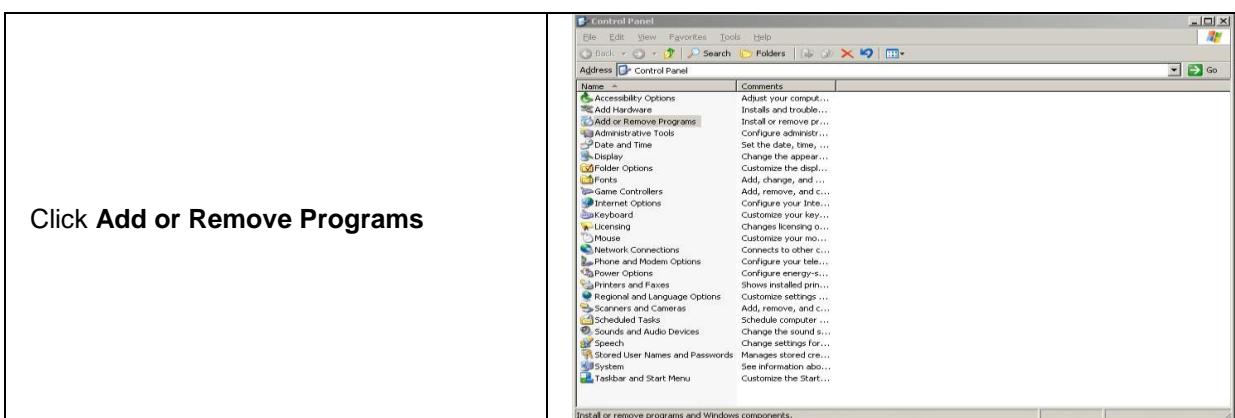
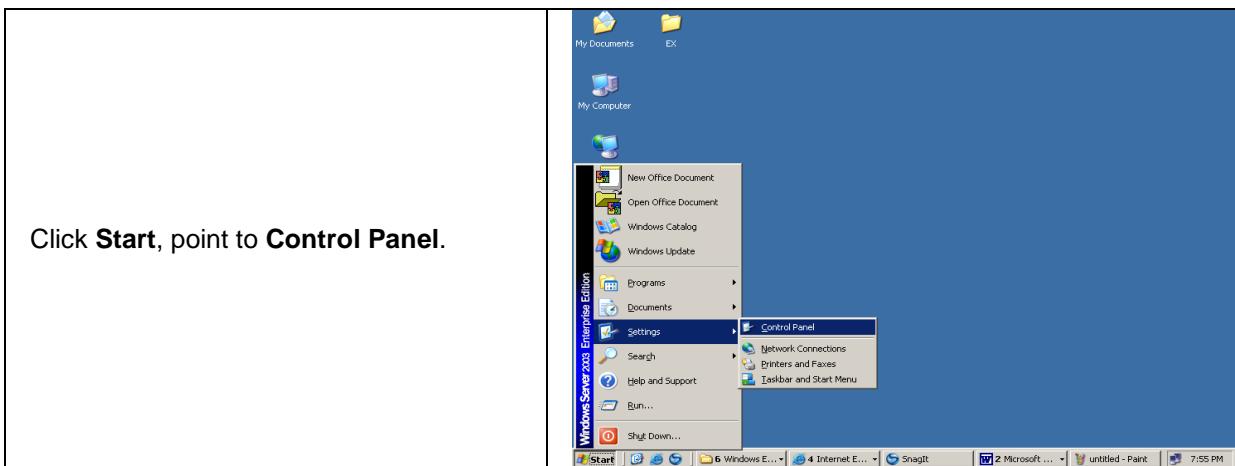


Click **Finish on the **Completing the New Scope Wizard** page.**

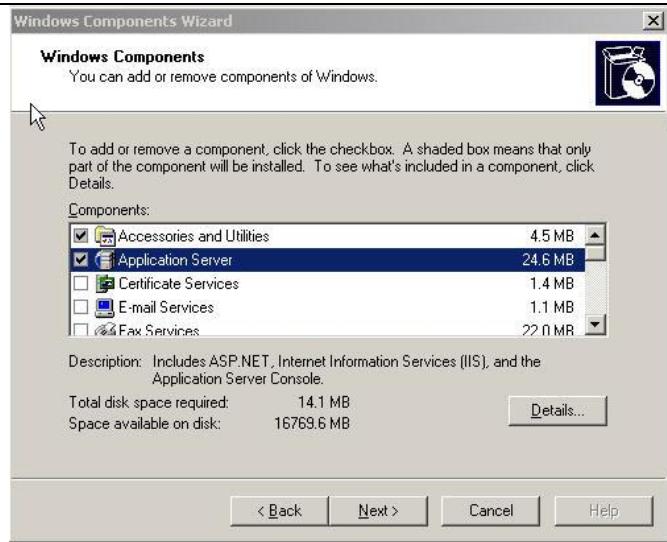


4. Installation of Exchange Server 2003

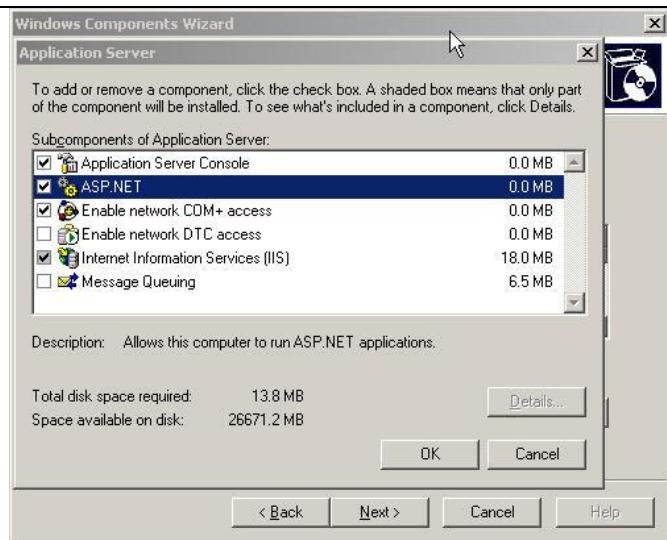
4.1 Add prerequisite components



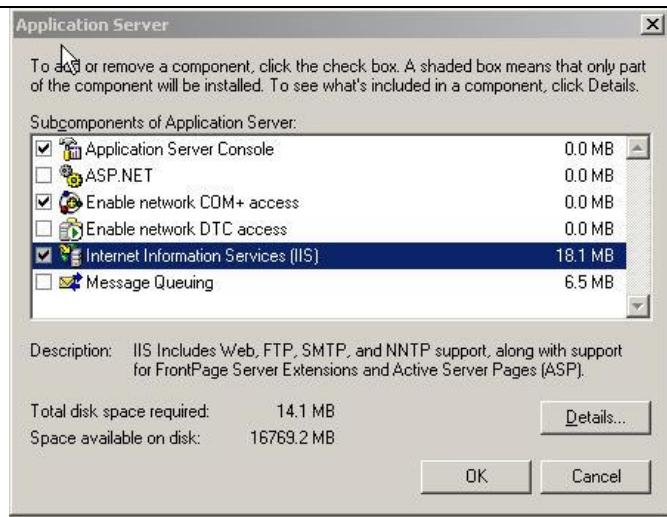
In Windows Component Wizard, on the **Windows Components** page, highlight **Application Server**, and then click **Details**.



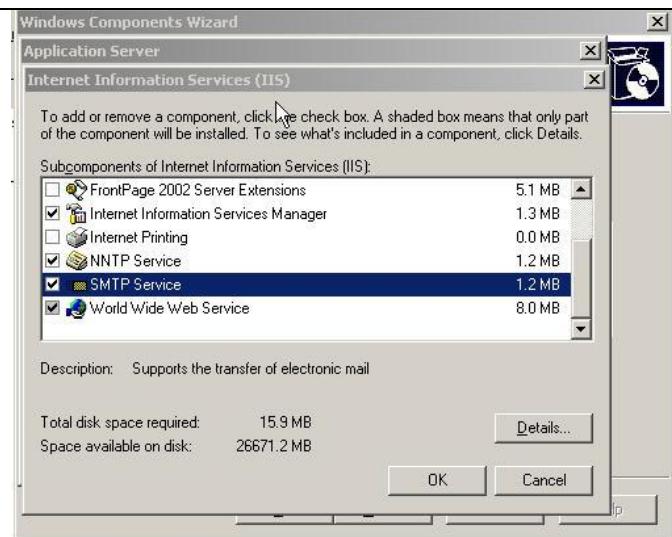
In **Application Server**, select the **ASP.NET** check box.



Highlight **Internet Information Services (IIS)**, and then click **Details**



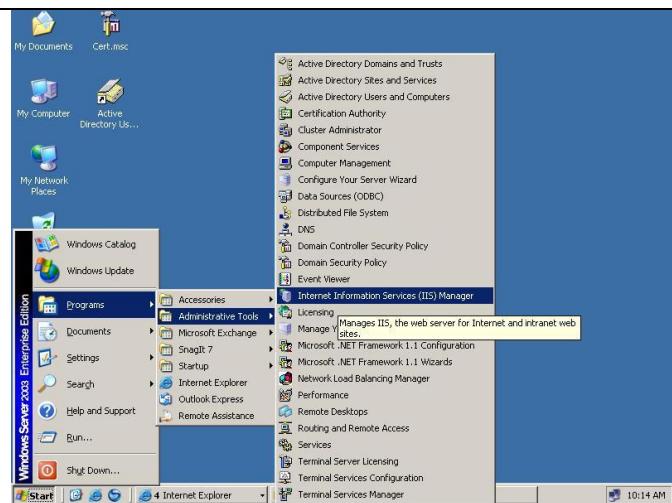
In **Internet Information Services (IIS)**, select the **NNTP Service**, **SMTP Service**, and **World Wide Web Service** check boxes, and then click **OK**.



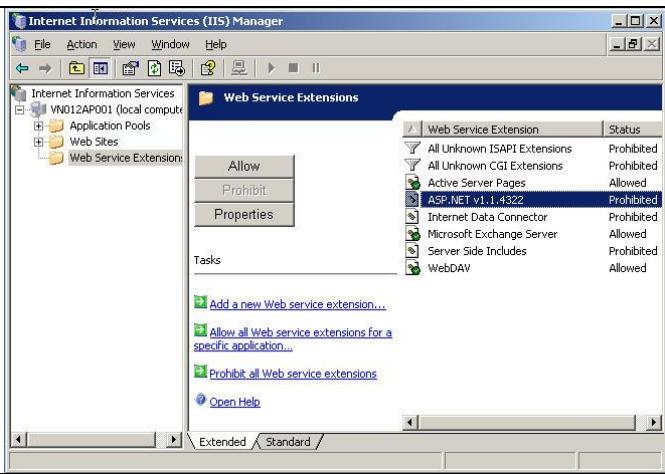
Click **Next**, and when the Windows Components Wizard completes, click **Finish**.



Click **Start**, point to **Administrative Tools**, and then click **Internet Information Services (IIS) Manager**

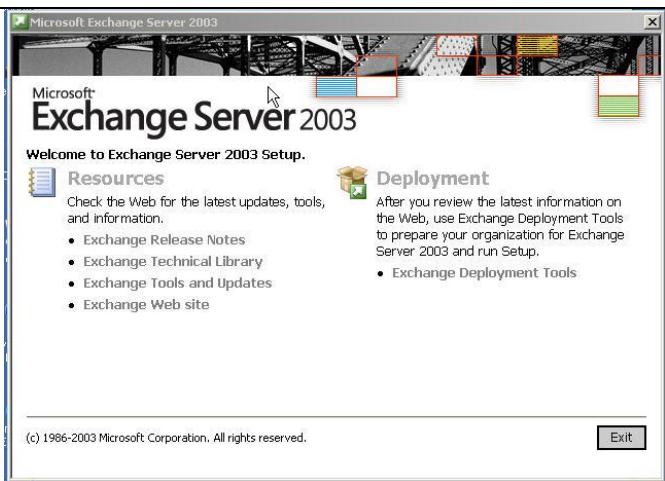


In the console tree, expand the local computer, and then click **Web Service Extensions**. In the details pane, click **ASP.NET**, and then click **Allow**.

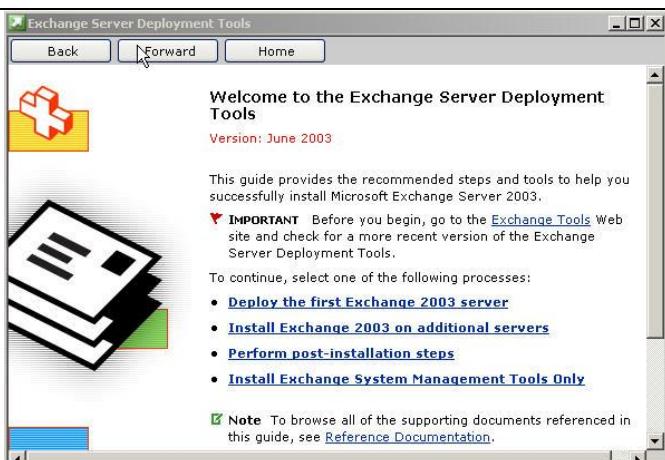


4.2 Run ForestPrep

- Insert the Exchange Server 2003 CD into your CD-ROM drive.
- On the **Welcome to Exchange Server 2003 Setup** page, click **Exchange Deployment Tools**.
- If the **Welcome to Exchange Server 2003 Setup** page does not appear after you insert your CD, double-click **Setup.exe**, and then click **Exchange Deployment Tools** to begin.



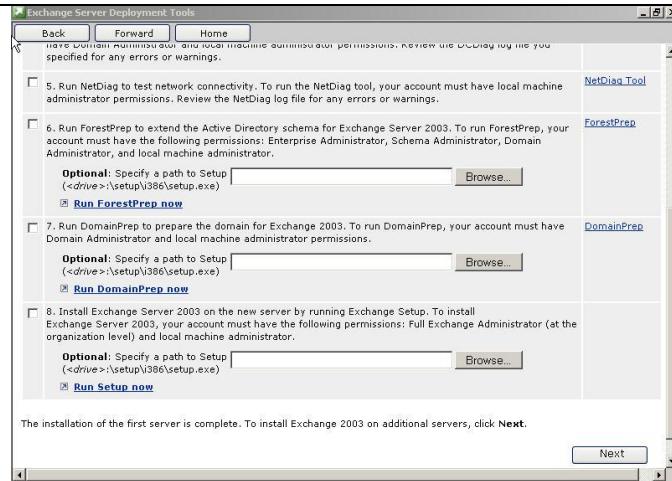
Click **Deploy the First Exchange 2003 server** on the **Welcome to the Exchange Server Deployment Tools** page.



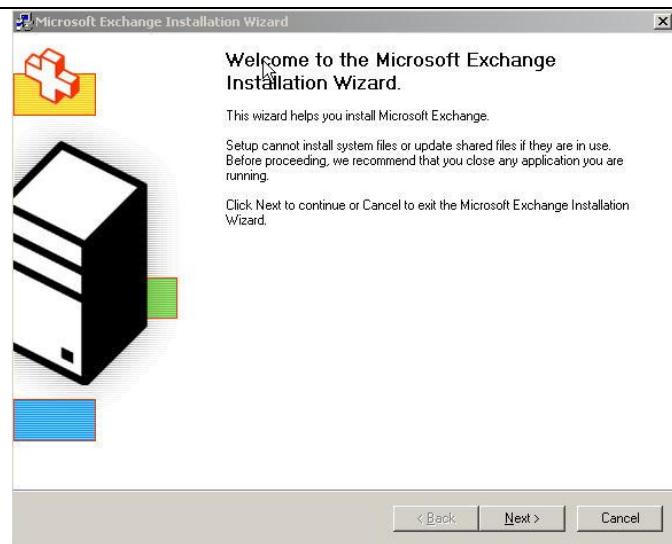
Click New Exchange 2003 Installation on Deploy the first Exchange 2003 Server page.

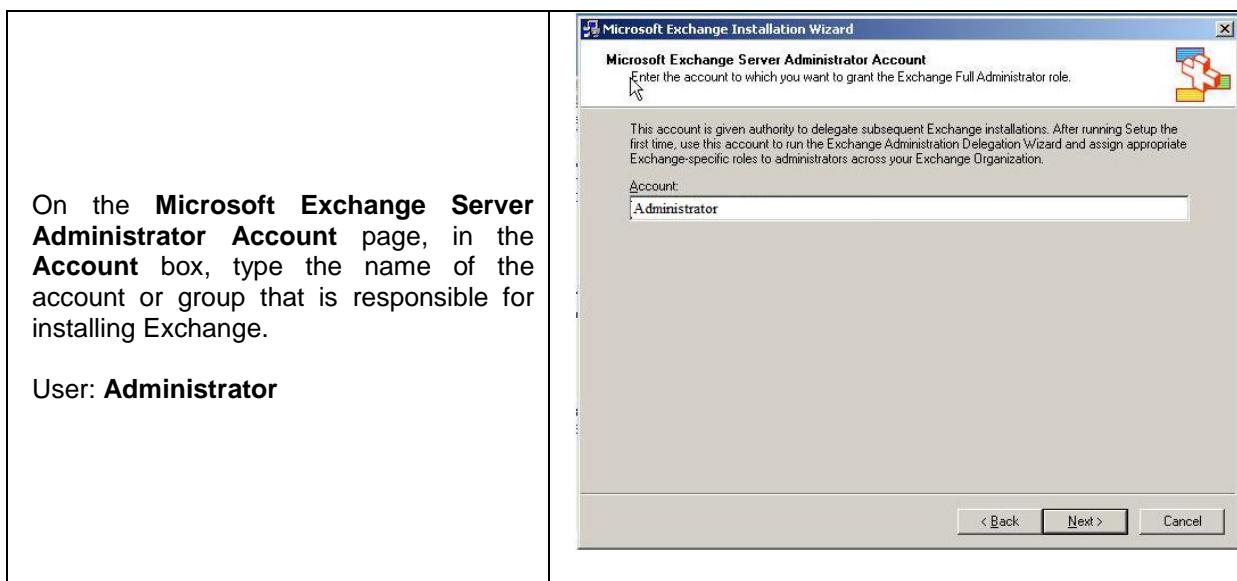
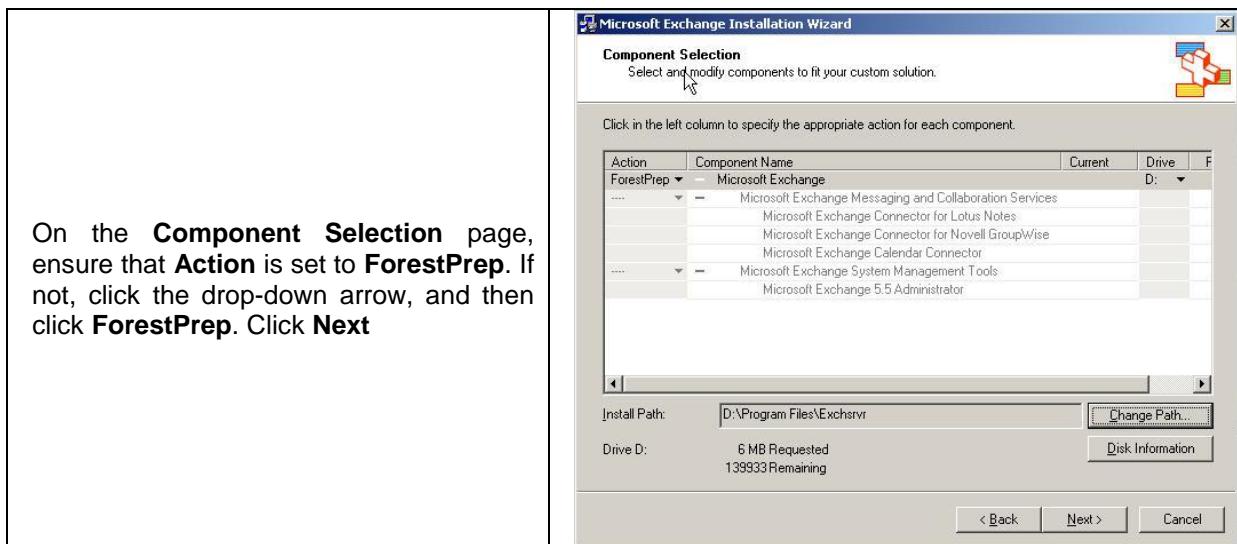
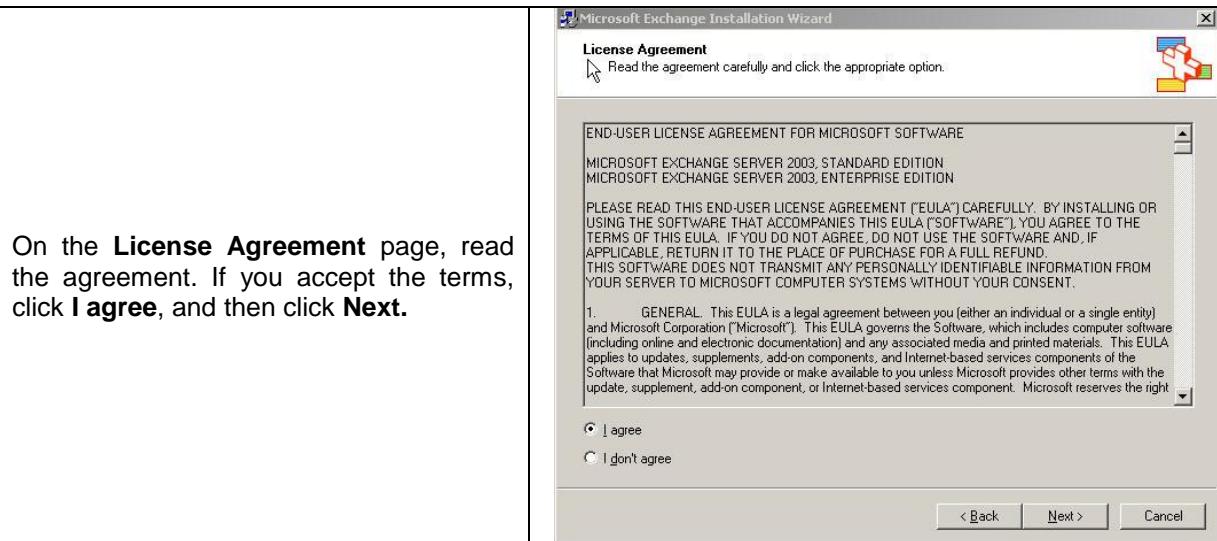


Click Run ForestPrep now on the New Exchange 2003 Installation page.

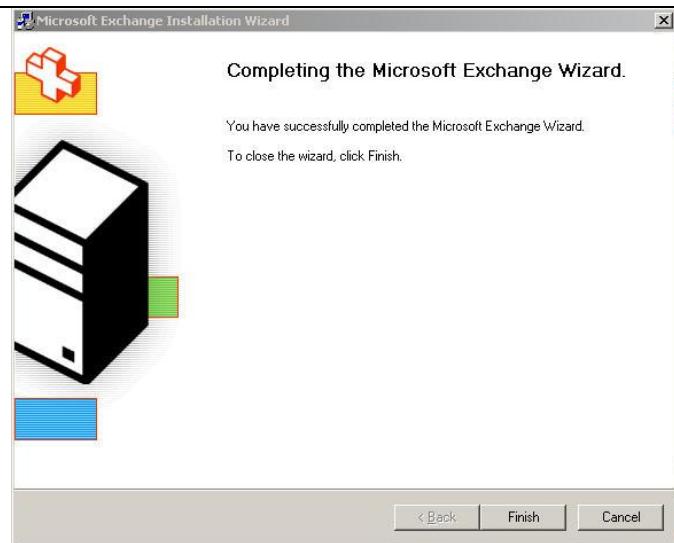


On the Welcome to the Microsoft Exchange Installation Wizard page, click Next.



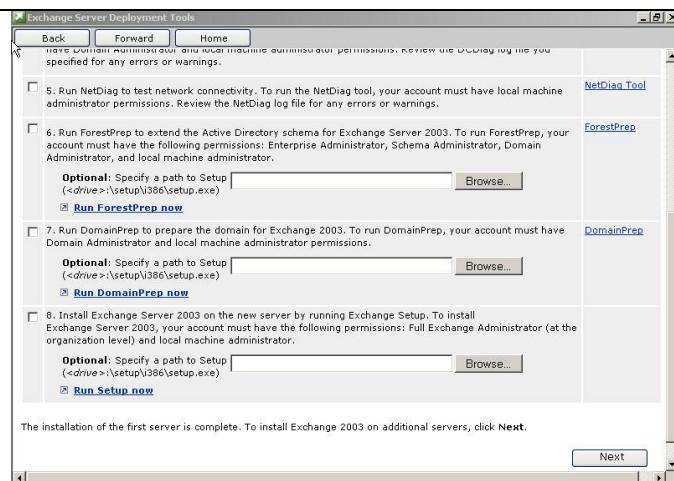


On the **Completing the Microsoft Exchange Wizard** page, click **Finish**.



4.3 Run ForestPrep

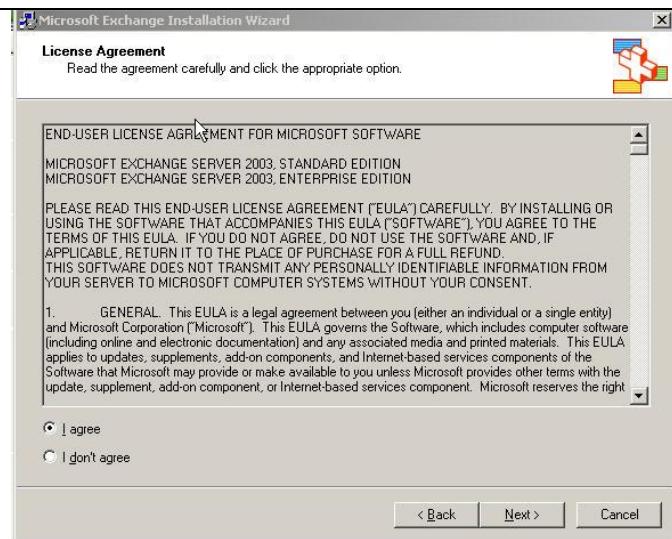
Click **Run Domainprep now** on the **New Exchange 2003 Installation** page.



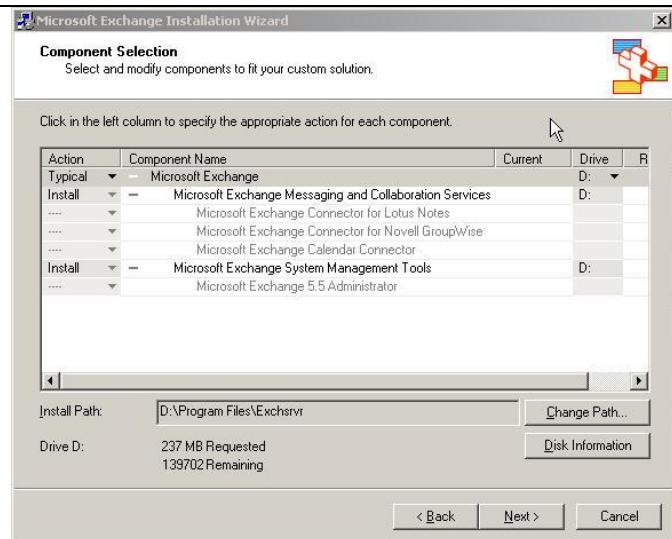
On the **Welcome to the Microsoft Exchange Installation Wizard** page, click **Next**.



On the **License Agreement** page, read the agreement. If you agree to the terms, click **I agree**, and then click **Next**



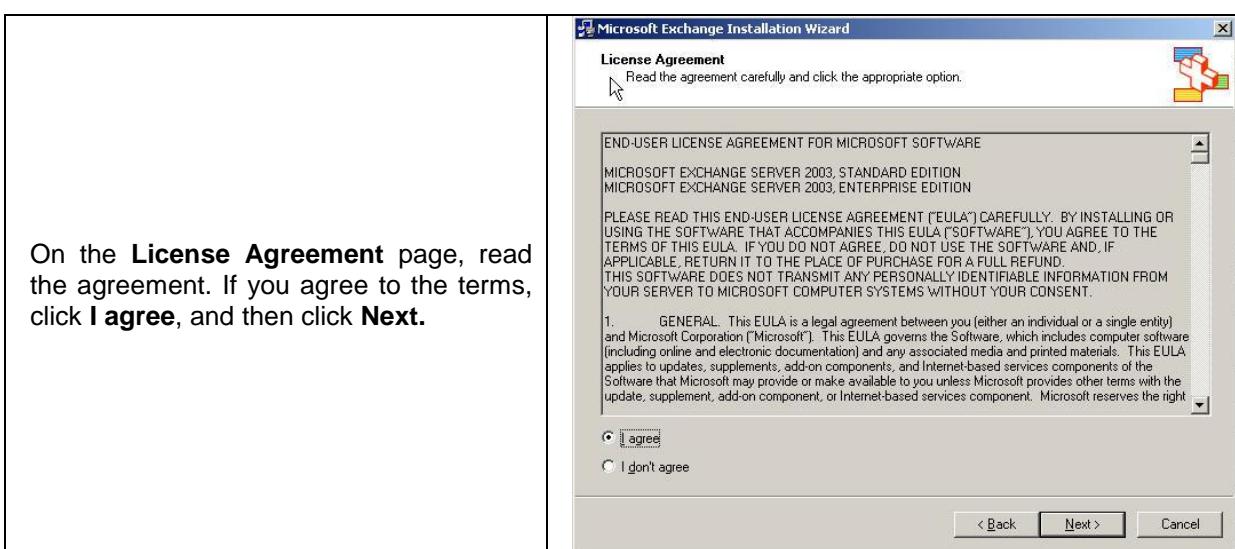
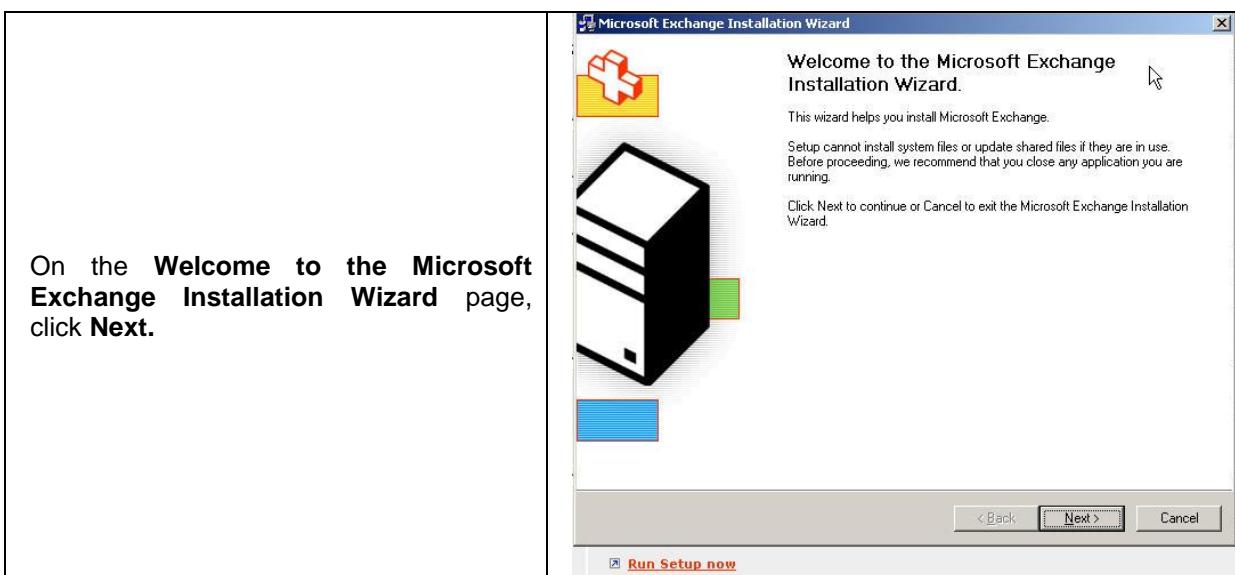
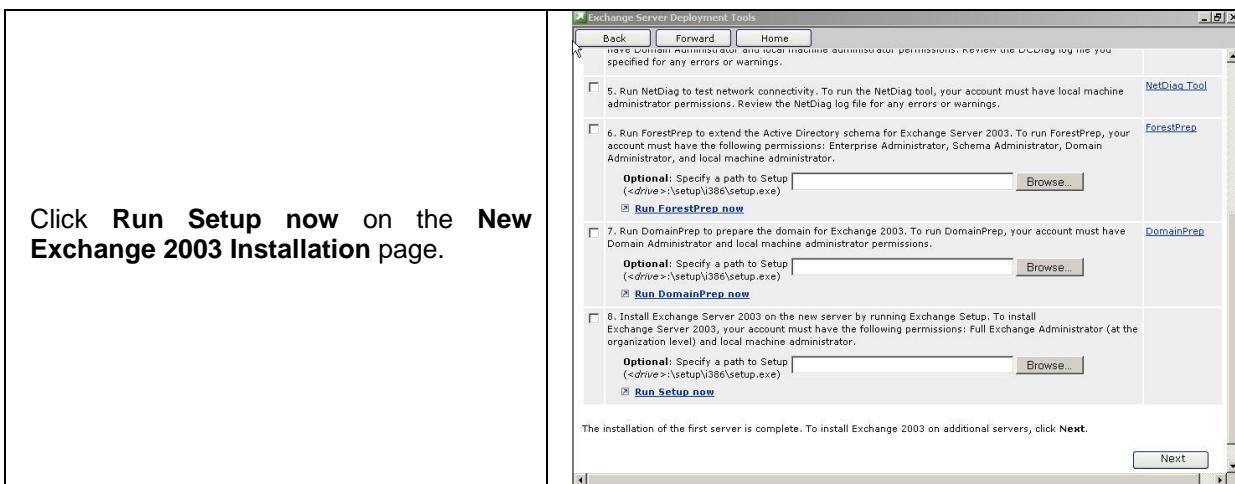
On the **Component Selection** page, ensure that **Action** is set to **DomainPrep**. If not, click the drop-down arrow, and then click **DomainPrep**. Click **Next**



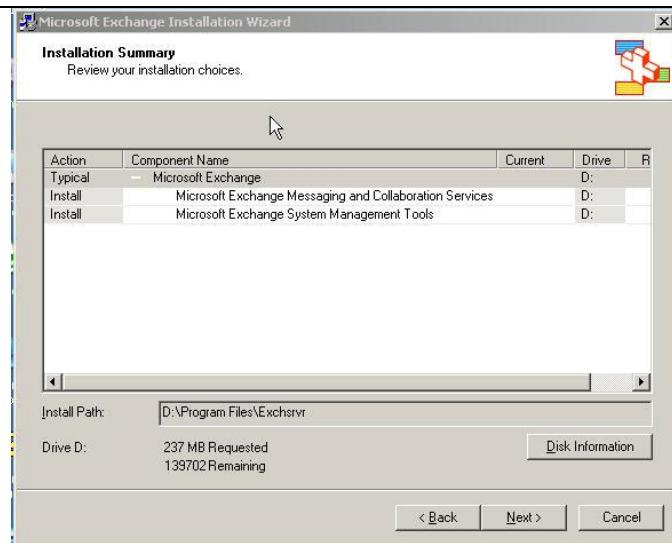
On the **Completing the Microsoft Exchange Wizard** page, click **Finish**



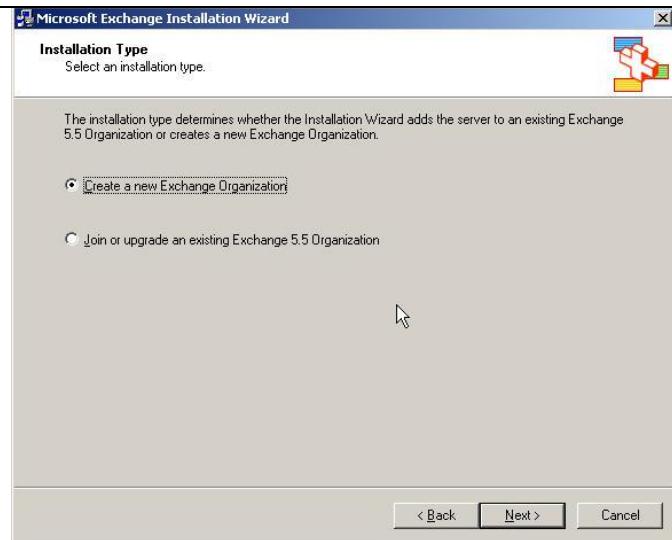
4.4 Install exchange server 2003



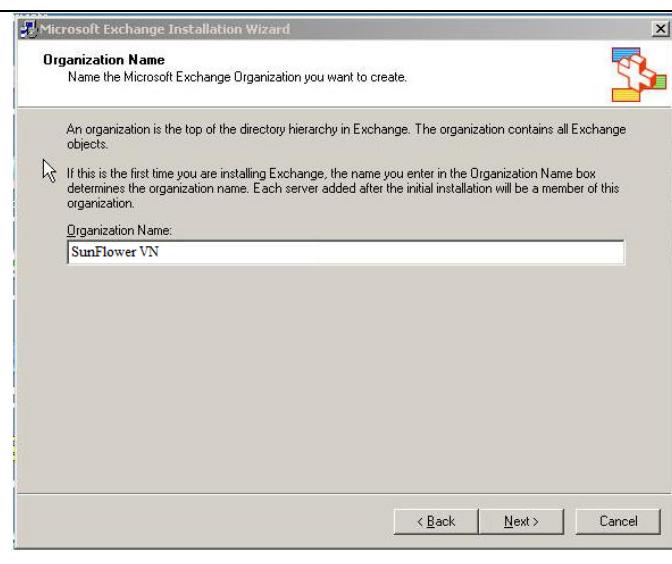
On the **Component Selection** page, in the **Action** column, use the drop-down arrows to specify the appropriate action for each component, and then click **Next**.



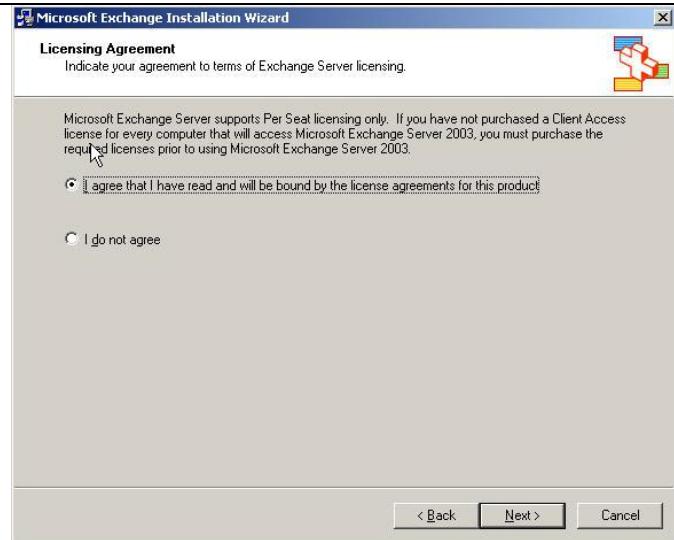
On the **Installation Type** page, click **Create a new Exchange Organization**, and then click **Next**.



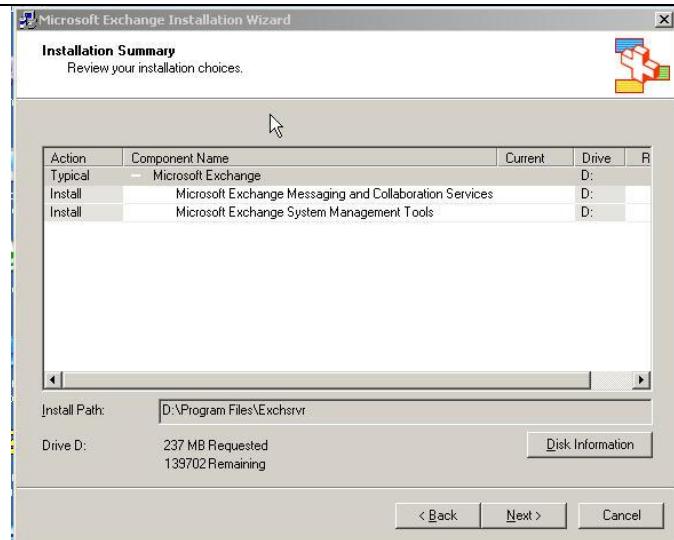
On the **Organization Name** page, in the **Organization Name** box, type your new Exchange organization name, and then click **Next**.



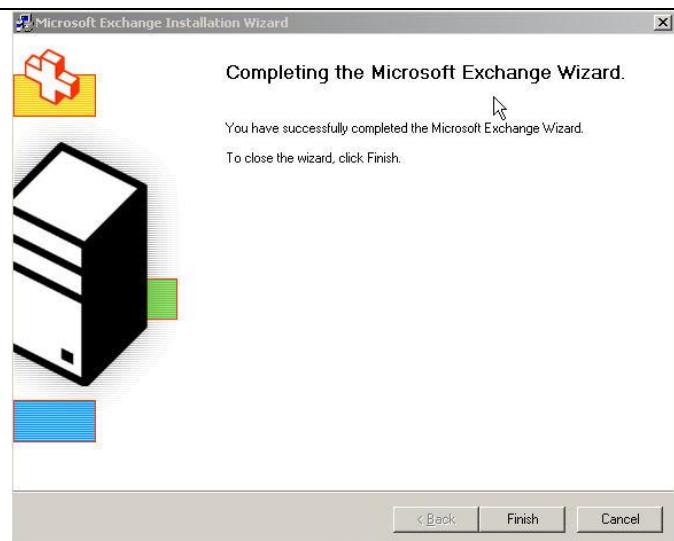
On the **License Agreement** page, read the agreement. If you agree to the terms, click **I agree that I have read and will be bound by the license agreements for this product**, and then click **Next**.



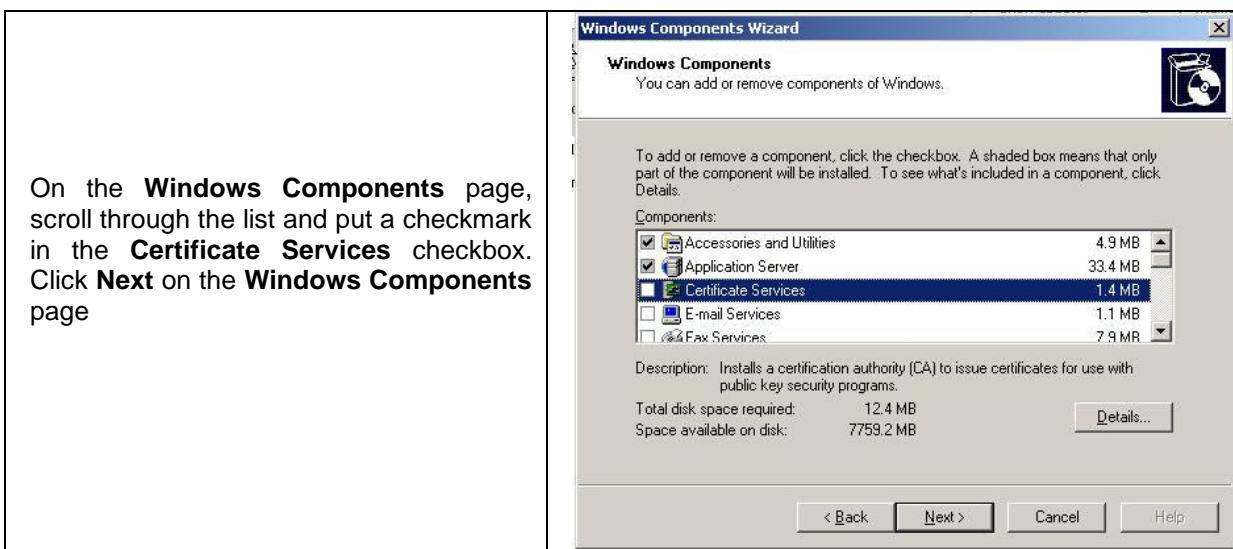
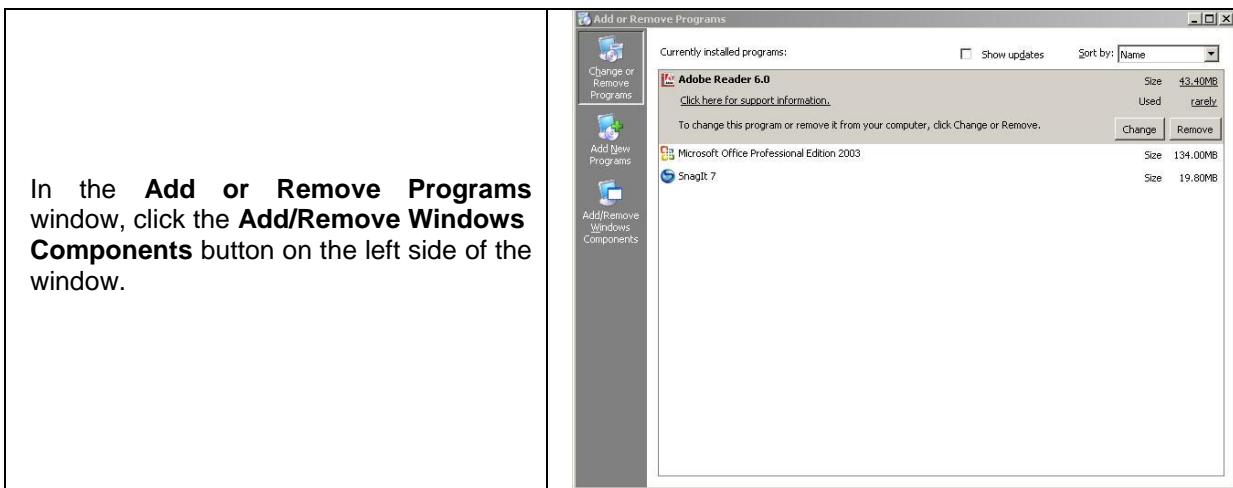
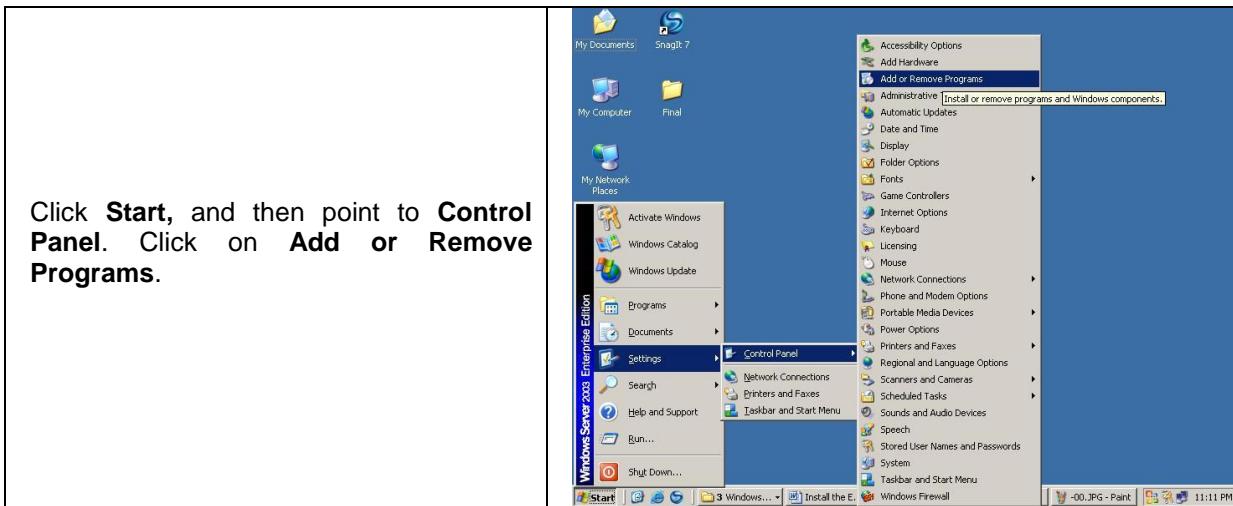
On the **Installation Summary** page, confirm that your Exchange installation choices are correct, and then click **Next**.



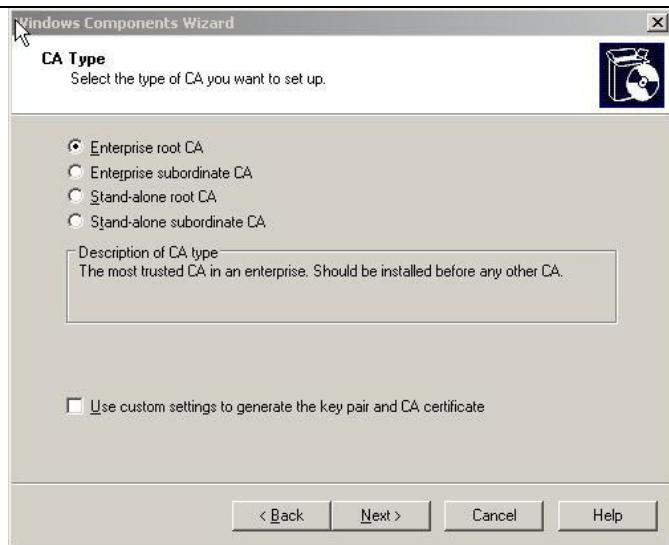
On the **Completing the Microsoft Exchange Wizard** page, click **Finish**.



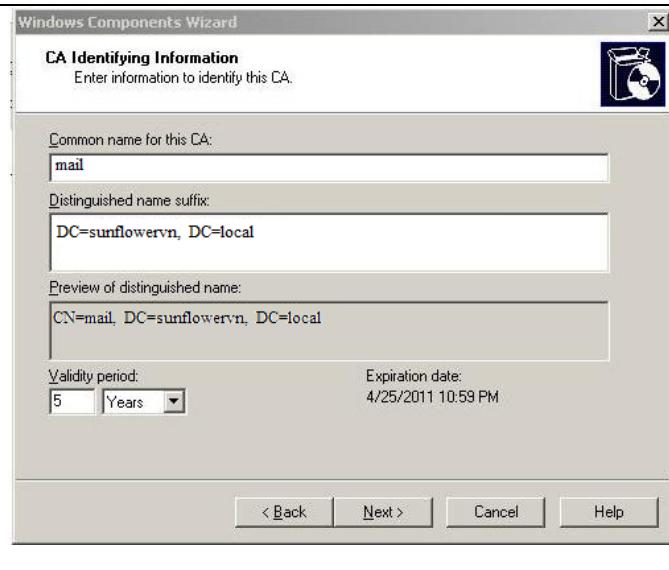
4.5 Add certificate service



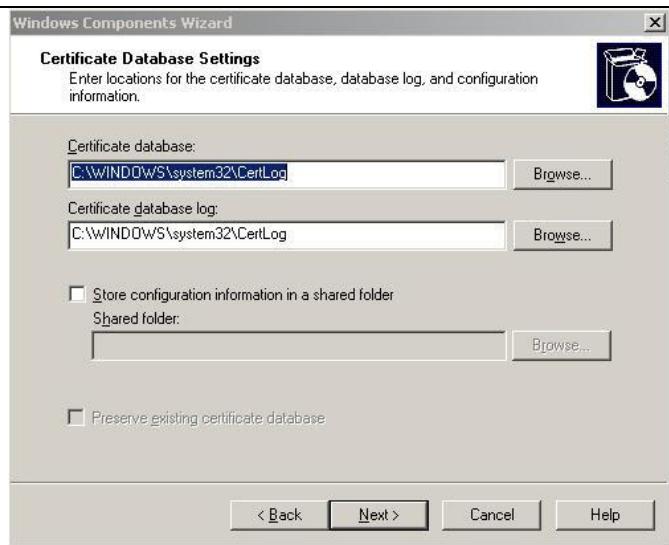
On the **CA Type** page, select the **Enterprise root CA** option and click **Next**.



On the **CA Identifying Information** page, enter a name for the CA in the **Common name for this CA** text box. This should be the DNS host name for the domain controller.



In the **Certificate Database Settings** page, use the default locations for the **Certificate Database** and **Certificate database log** text boxes. Click **Next**.

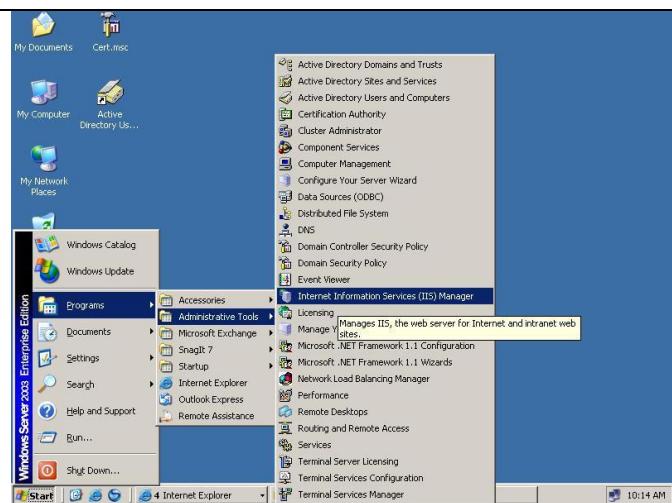


Click **Finish** on the **Completing the Windows Components Wizard** page. Close the **Add or Remove Programs** window.

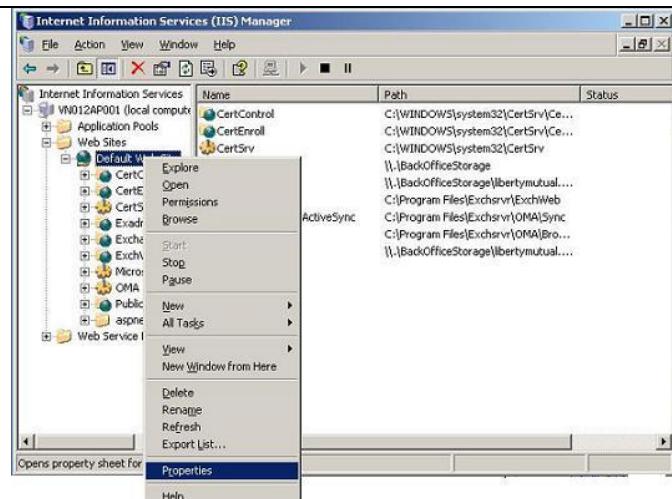


4.6 Create CA certificate SSL

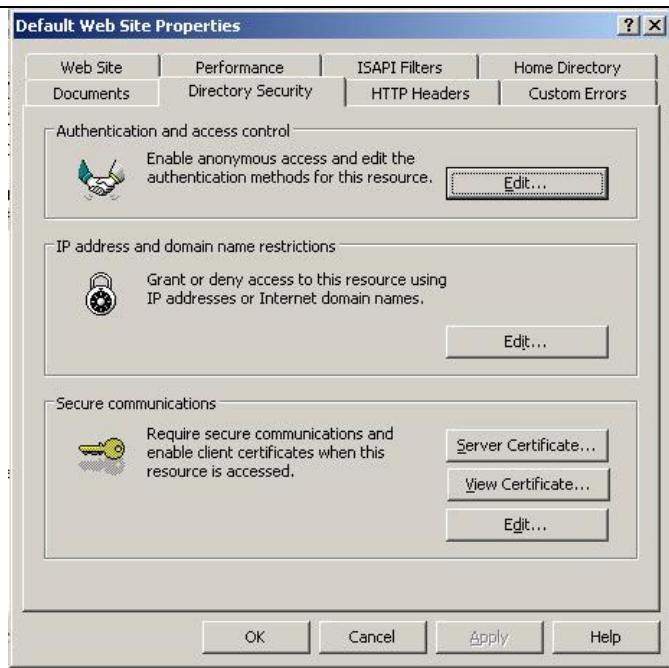
Click **Start** and point to **Administrator Tools**. Click **Internet information services (IIS) manager**.



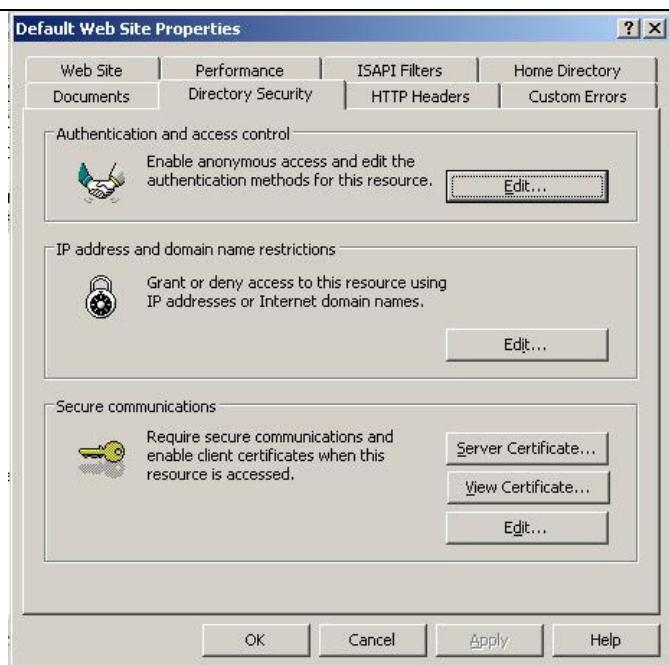
In the left pane of the **Internet Information Services (IIS) Manager** console, expand the **Web Sites** node and click the **Default Web Site**. Right click **Default Web Site** and click **Properties**.



On the **Default Web Site Properties** dialog box, click the **Directory Security** tab.



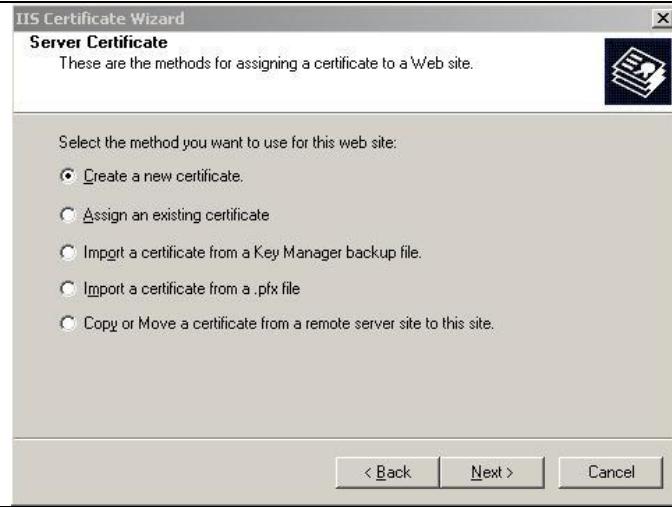
On the **Directory Security** tab, click the **Server Certificate** button in the **Secure communications** frame.



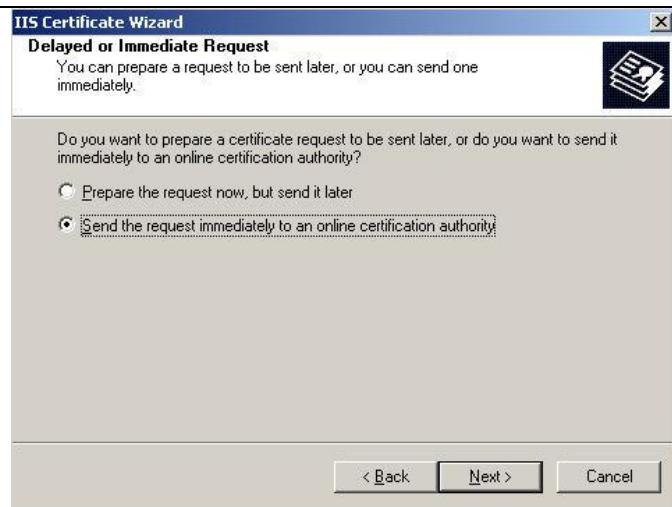
On the **Welcome to the Web Server Certificate Wizard** page, click **Next**.



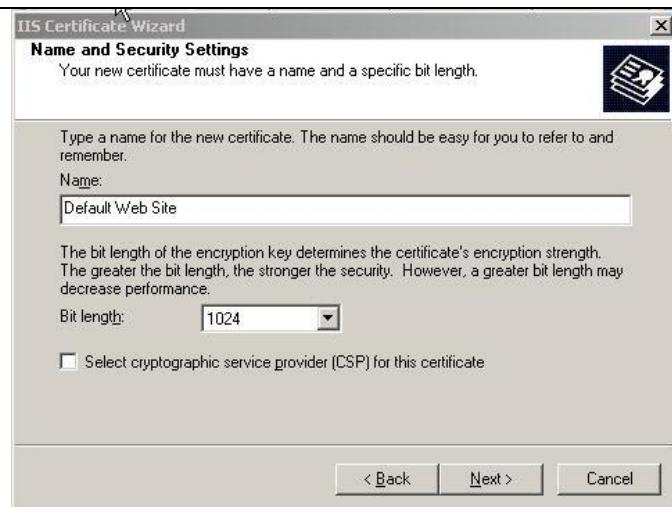
On the **Server Certificate** page, select the **Create a new certificate** option and click **Next**.



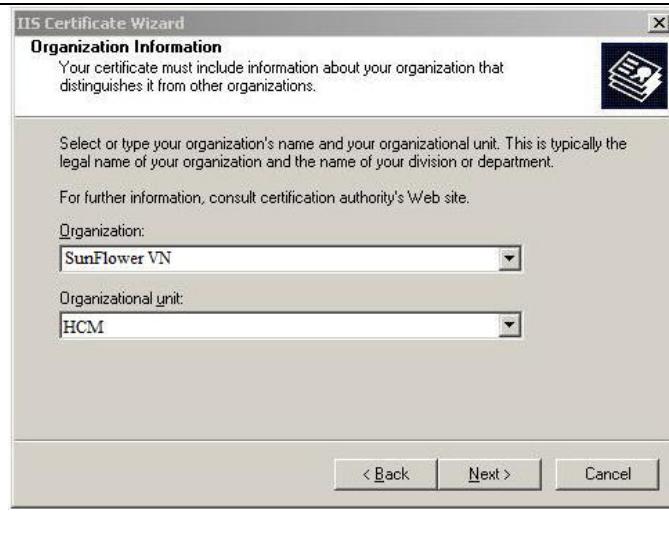
On the **Delayed or Immediate Request** page, select the **Send the request immediately to an online certificate authority** option and click **Next**.



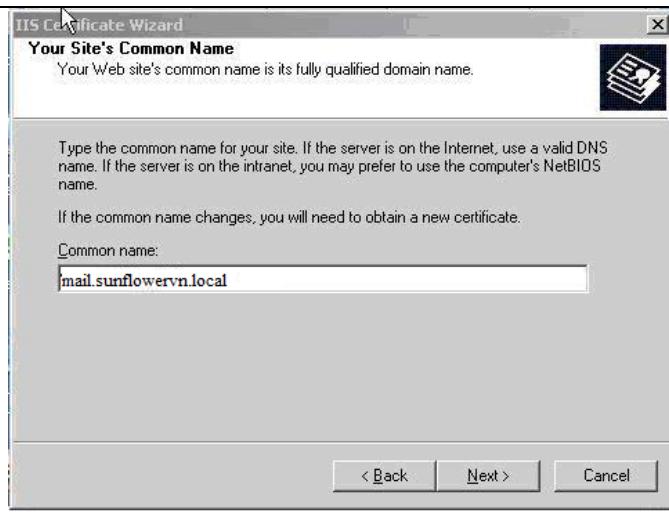
On the **Name and Security Settings** page, accept the default settings and click **Next**.



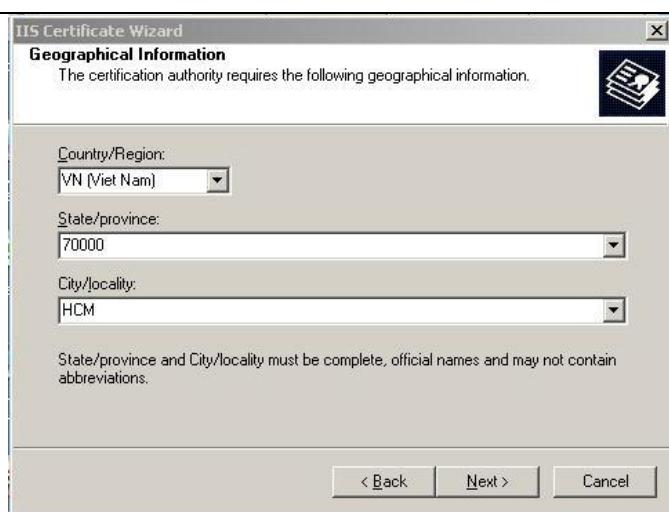
On the **Organization Information** page, enter your organization's name in the **Organization** text box and your Organizational Unit's name in the **Organizational Unit** text box. Click **Next**.



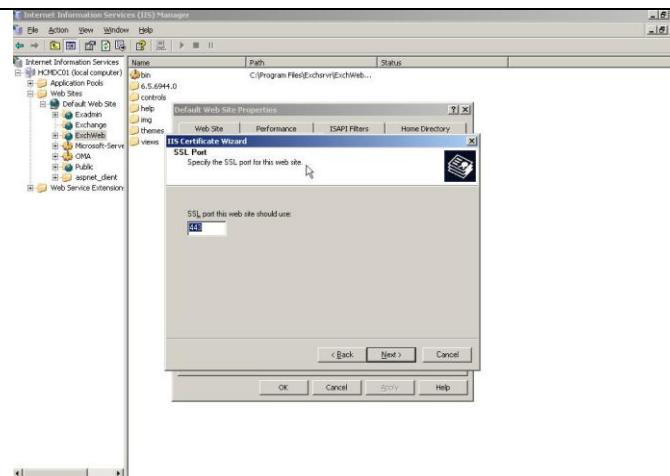
On the **Your Site's Common Name** page, enter the common name of the site. The common name is the name that external and internal users will use to access the site. Click **Next**.



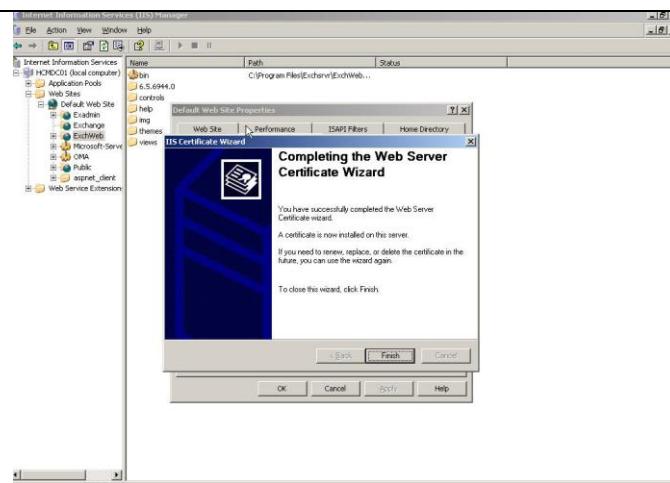
On the **Geographical Information** page, enter your **Country/Region**, **State/province** and **City/locality** in the text boxes. Click **Next**.



Go to properties of default website on IIS. On the **SSL Port** page, accept the default value, **443**, in the **SSL port this web site should use** text box. Click **Next**.

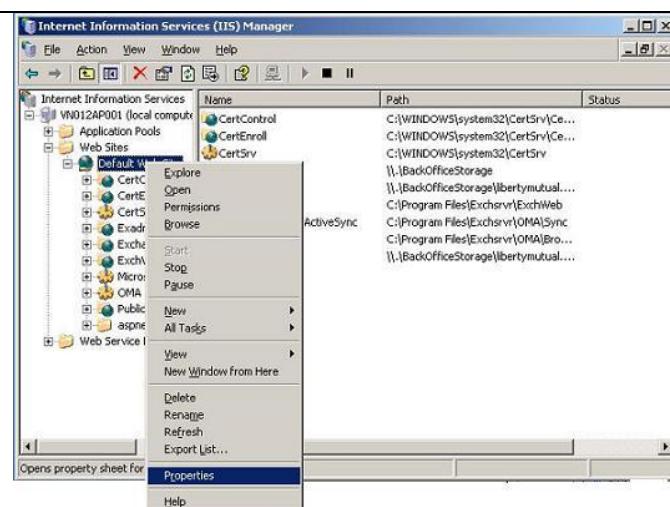


Click **Finish** on the **Completing the Web Server Certificate Wizard** page.
Click **OK** in the **Default Web Site Properties** dialog box.

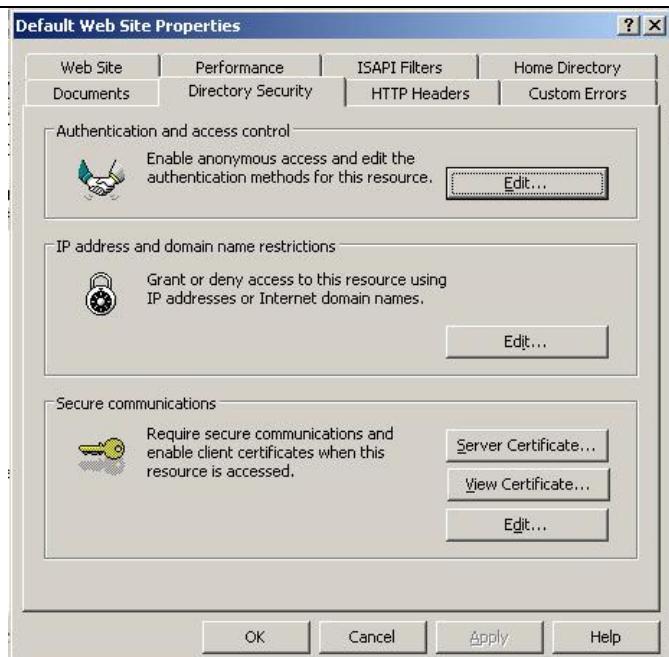


4.7 Export CA to a file

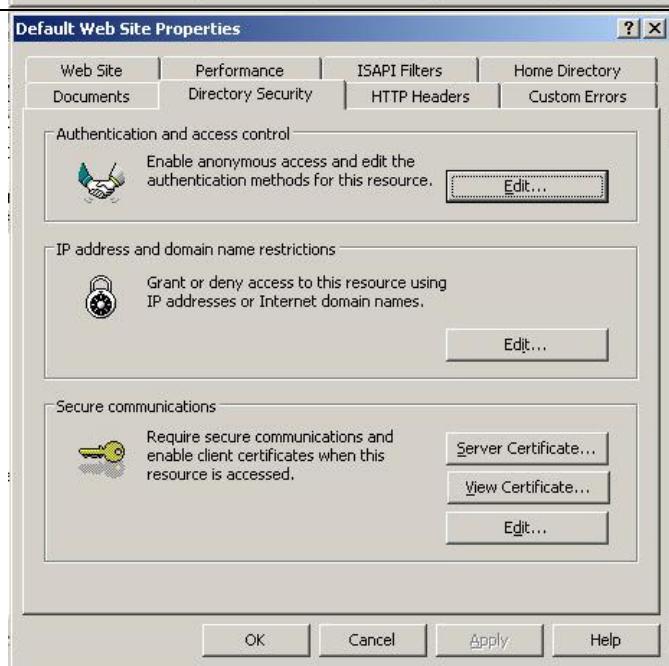
In the **Internet Information Services (IIS) Manager** console, expand the **Web Sites** node in the left pane of the console and then click the **Default Web Site**. Right click the **Default Web Site** and click **Properties**.



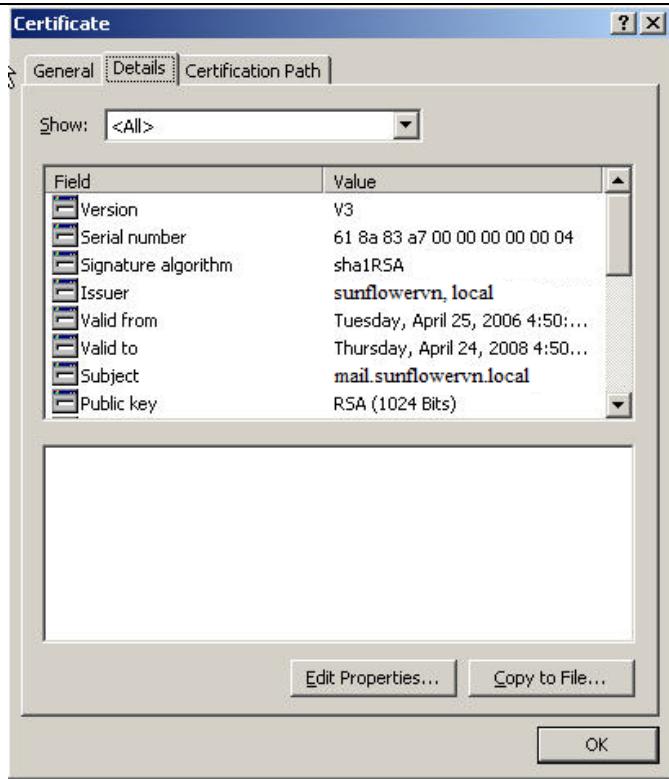
In the **Default Web Site Properties** dialog box, click the **Directory Security** tab.



On the **Directory Security** tab, click the **View Certificate** button in the **Secure communications** frame



In the **Certificate** dialog box, click the **Details** tab. On the **Details** tab, click the **Copy to File** button.



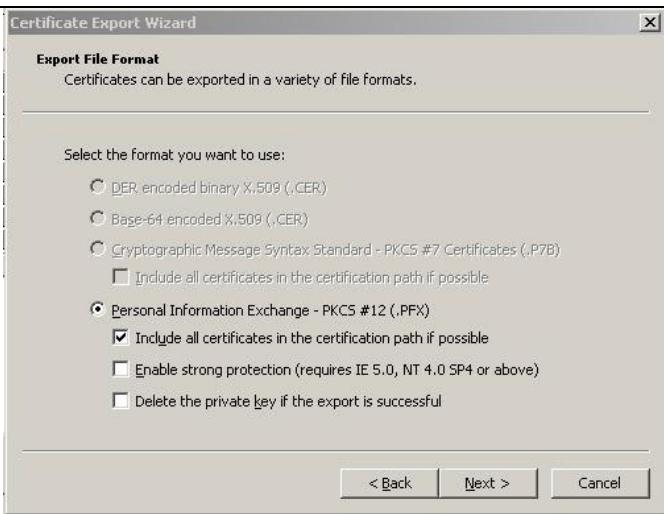
Click **Next** on the **Welcome to the Certificate Export Wizard** page.



On the **Export Private Key** page, select the **Yes, export the private key** option and click **Next**.



On the **Export File Format** page, select the **Personal Information Exchange - PKCS #12 (.PFX)** option. Put a checkmark in the **Include all certificates in the certification path if possible** checkbox and remove the checkmark from the **Enable strong protection (requires IE 5.0, NT 4.0 SP4 or above)** checkbox. Click **Next**

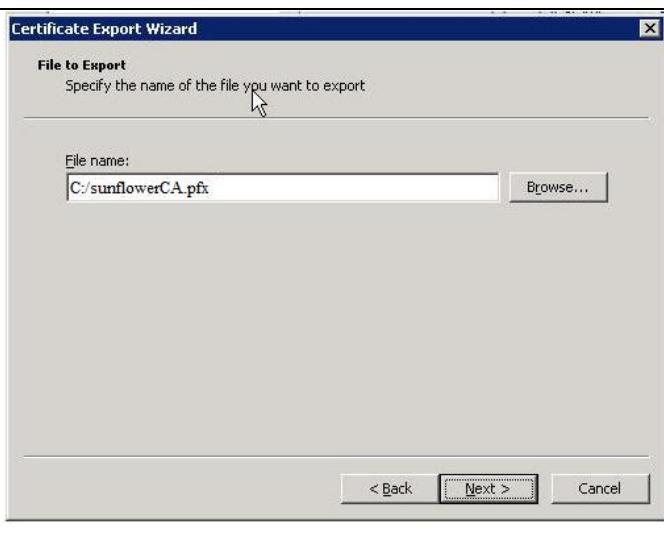


On the **Password** page, enter a **Password** and then enter it again in the **Confirm Password** field. Click **Next**.

Note: 123qwe!@#



On the **File to Export** page, enter **c:\sunflowerCA.pfx** in the **File name** text box. Click **Next**



Click Finish on the Completing the Certificate Export Wizard page.

