

Adding Computer Object to Active Directory

	NWS Active Directory Standard Operating Procedure	SOP #: NADS-0007
		Revision #: 1.0
		Implementation Date: 13 Feb 2007
Page #: 1 of 24	Last Reviewed/Update Date: 13 Feb 2007	
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Title – Adding Computer Object to Active Directory

1. Purpose / Background

The purpose of this SOP is to provide the necessary minimal basic guidance to add a computer object to the National Weather Service Active Directory Services (NADS) system.

2. Scope

This SOP pertains to the following types administrators:

- Enterprise Administrators
- Domain Administrators
- Local (OU) Administrators

3. Prerequisites

Installation of adminpak.msi. This installation file is already part of the server baseline, but can also be installed on any client machine (Windows XP SP2). A copy of adminpak.msi is typically available on any domain controller in c:\windows\system32. Your Domain Administrator can provide additional guidance.

The tool, *Active Directory Users and Computers*, should be used for adding computer objects to Active Directory

You must have proper administration privileges for the OU where the computer object is to reside.

4. Procedures

This section covers the necessary procedures to add a computer objects to NADS.

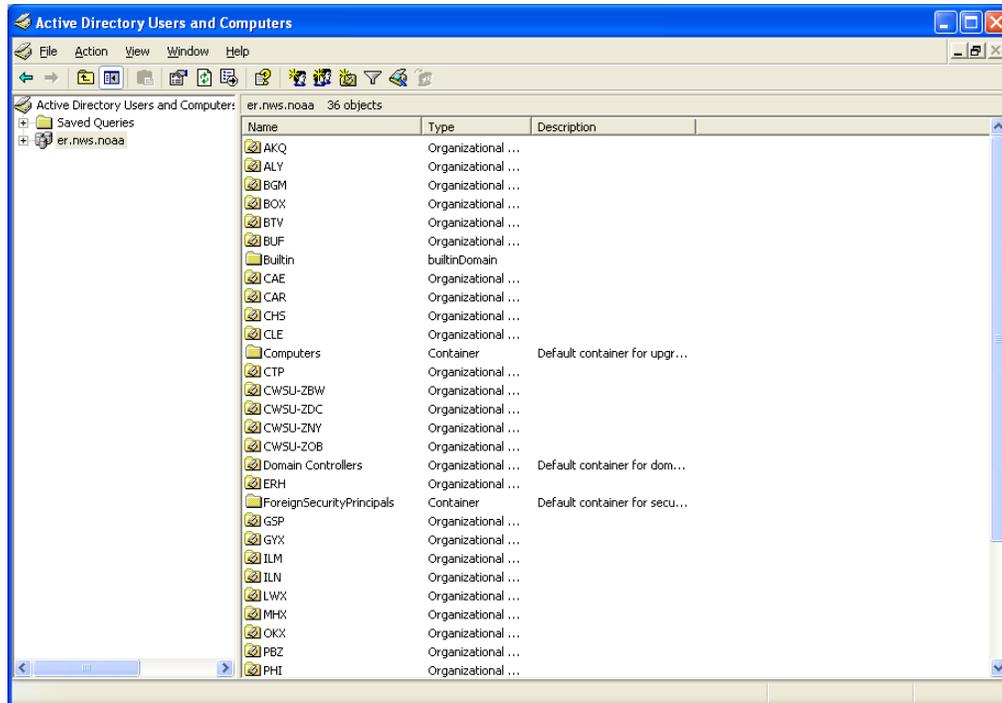
This SOP is divided into two separate sections:

- Pre-stage computer object in Active Directory
- Client configuration and Active Directory joining procedures

Adding Computer Object to Active Directory

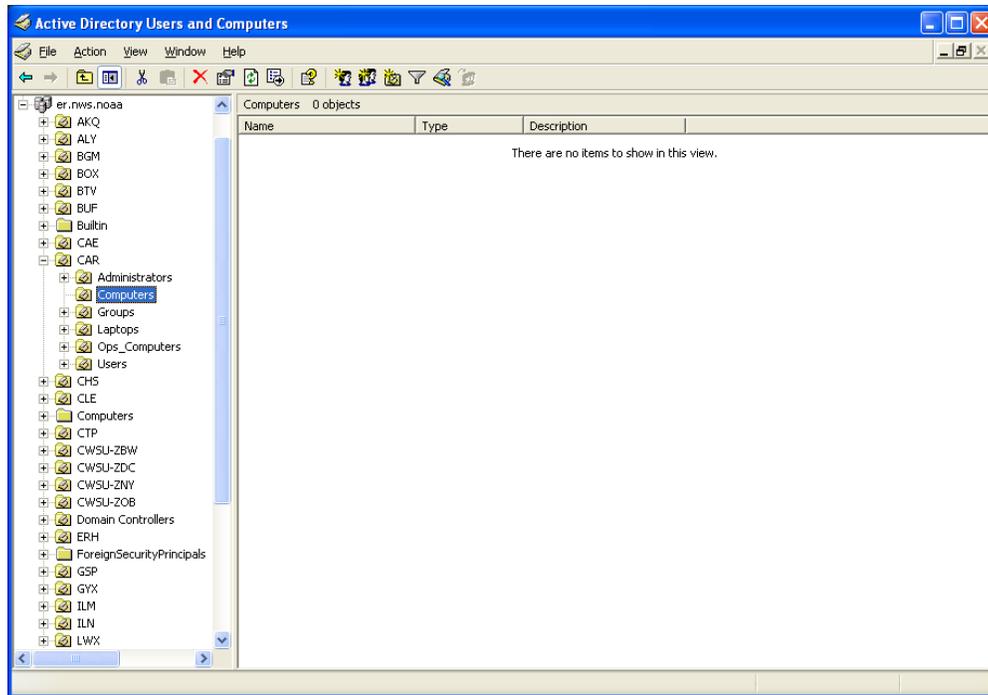
Pre-stage a Computer Object in Active Directory

- A. Before you can add a computer object to Active Directory, you must pre-stage the computer object within Active Directory in the proper OU. To pre-stage a computer object select *Active Directory Users and Computers* from the Administrative Tools suite. A windows similar the following will appear:

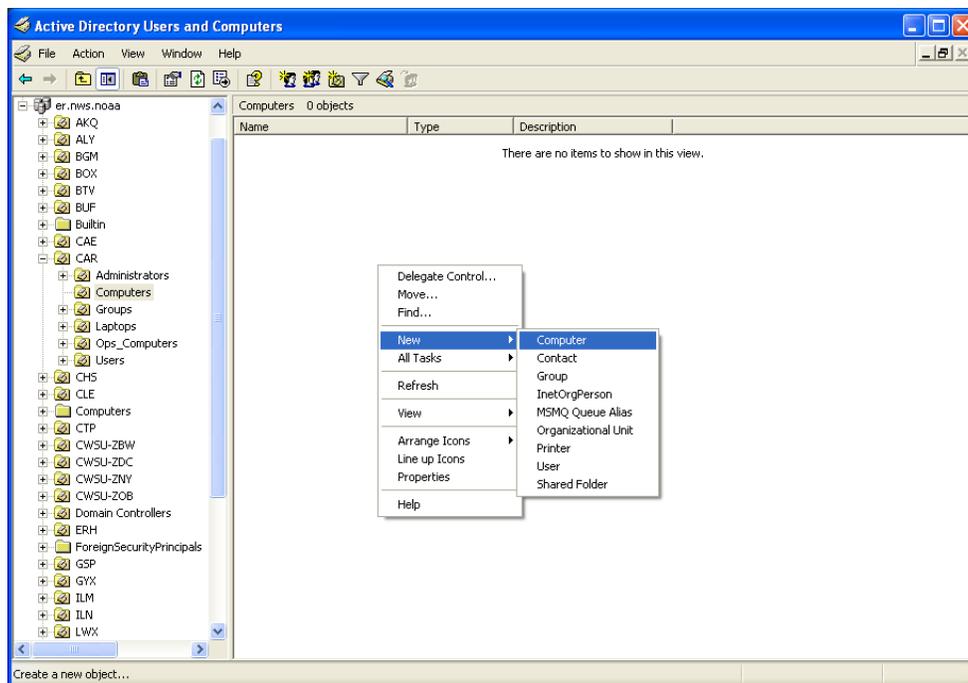


- B. Navigate to the location within Active Directory where the target user account exists. Typically the location is within an Organizational Unit (OU). The following screen depicts an example of navigating to the computers OU at WFO Caribou:

Adding Computer Object to Active Directory

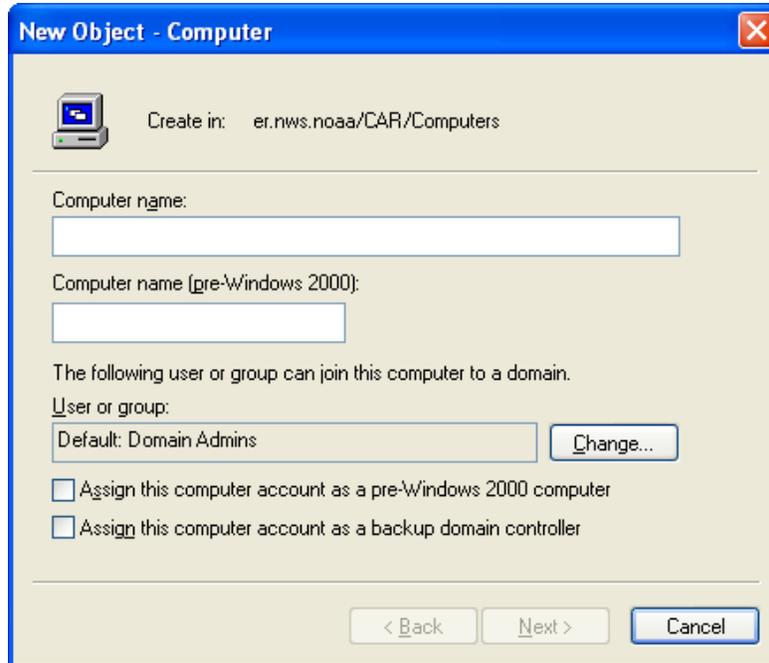


- C. In our example we will be adding the computer object CAR-W-001. To accomplish this, right-click in the right pane. A sub-menu will appear. Select *New* → *Computer ...* (you can also access this from the Action pull-down menu → *New* → *Computer*)

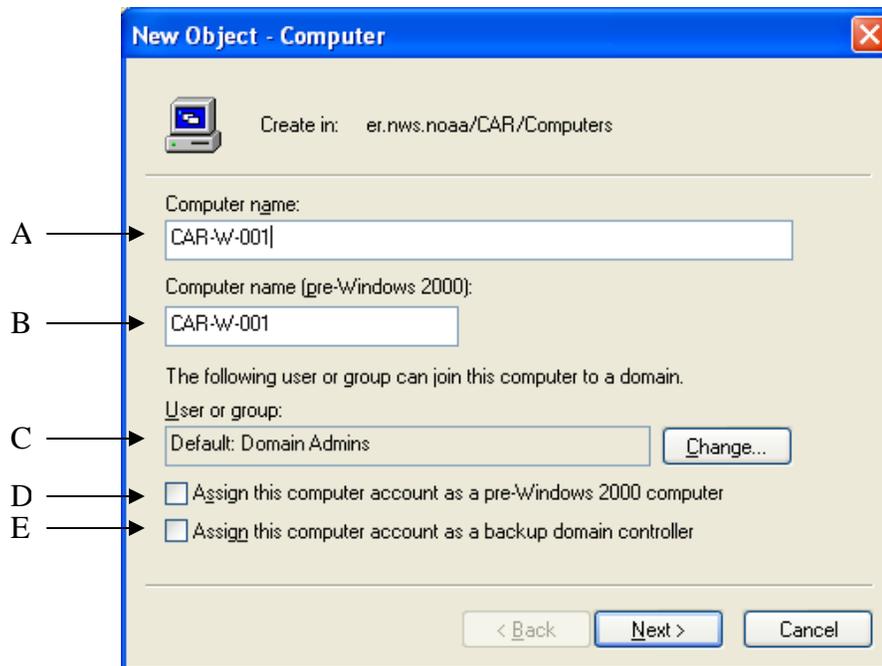


- D. After selecting *New* → *Computer...* the following window will appear.

Adding Computer Object to Active Directory



- E. Within the New Object - Computer window, enter the new Computer name which is in accordance with SOP NWS-0004 – NADS Naming Standards. In our example, we will add the computer object CAR-W-001.

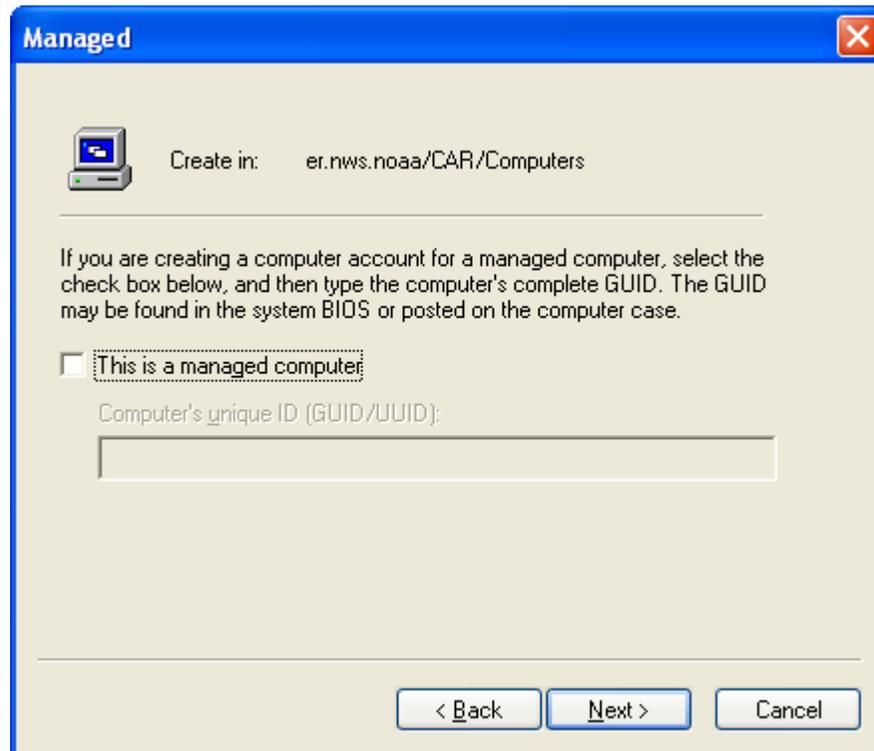


Item	Applicability	Description/Examples
A – Computer Name	Mandatory	Must conform to NADS naming standards
B – Computer name (pre-	Auto-populated (No Action	

Adding Computer Object to Active Directory

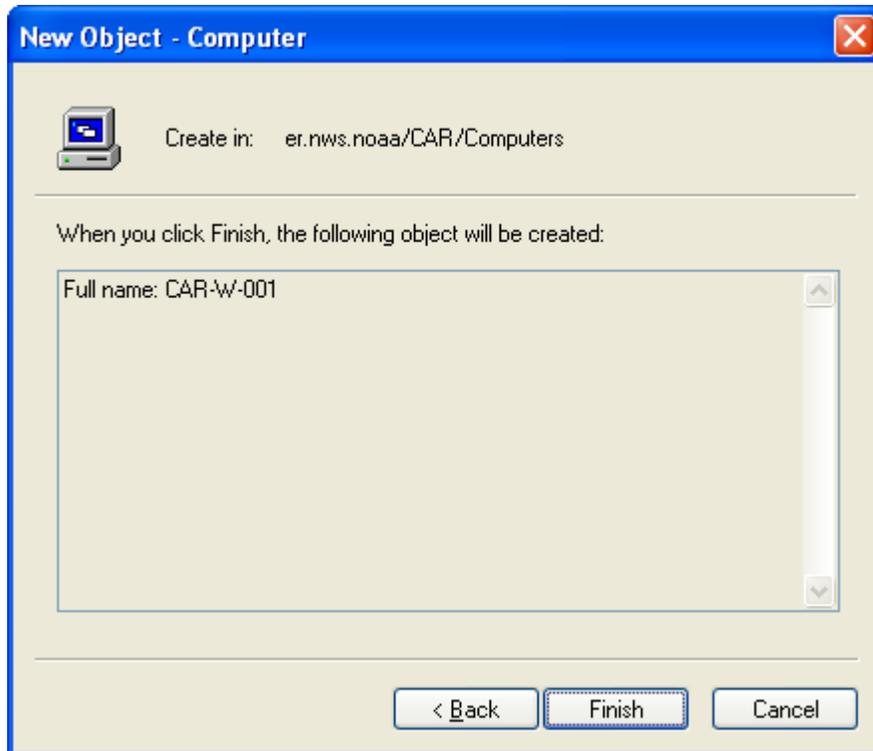
Windows 2000)	Required)	
C - User or Group	No Action	Appropriate permissions to join computers to the domain are set within the domain group policy object (GPO)
D - Assign this computer account...	No Action	
E - Assign this computer account...	No Action	

F. After the New Object - Computer dialog box is properly filled in, click Next.

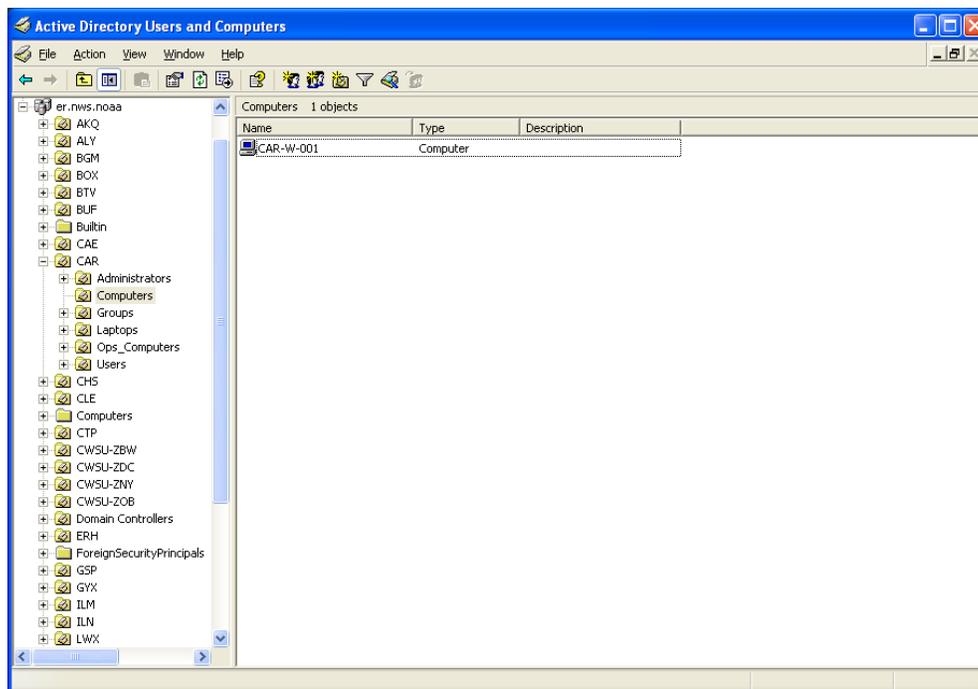


G. The functionality provided in the Managed dialog box is not utilized. Click Next. The New Object - Computer summary dialog box will appear

Adding Computer Object to Active Directory



- H. Click Finish and you will now be able to view the newly created computer object within the Active Directory Users and Computers console.

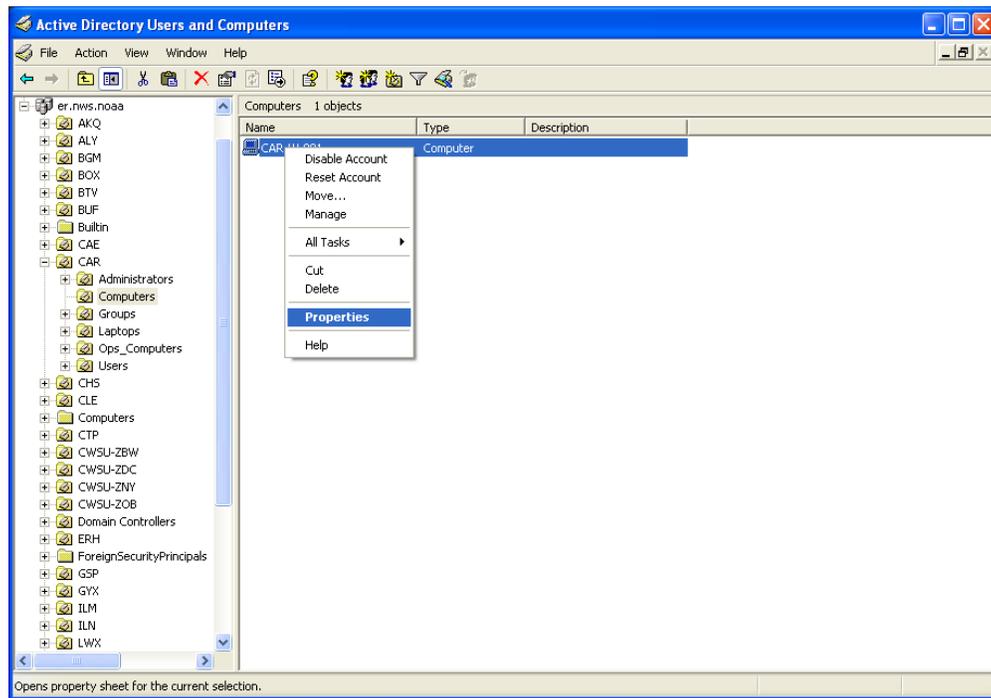


- I. Once the computer object is created, it is then necessary to add the computer object to the appropriate security groups in order to ensure proper permissions and Group Policy

Adding Computer Object to Active Directory

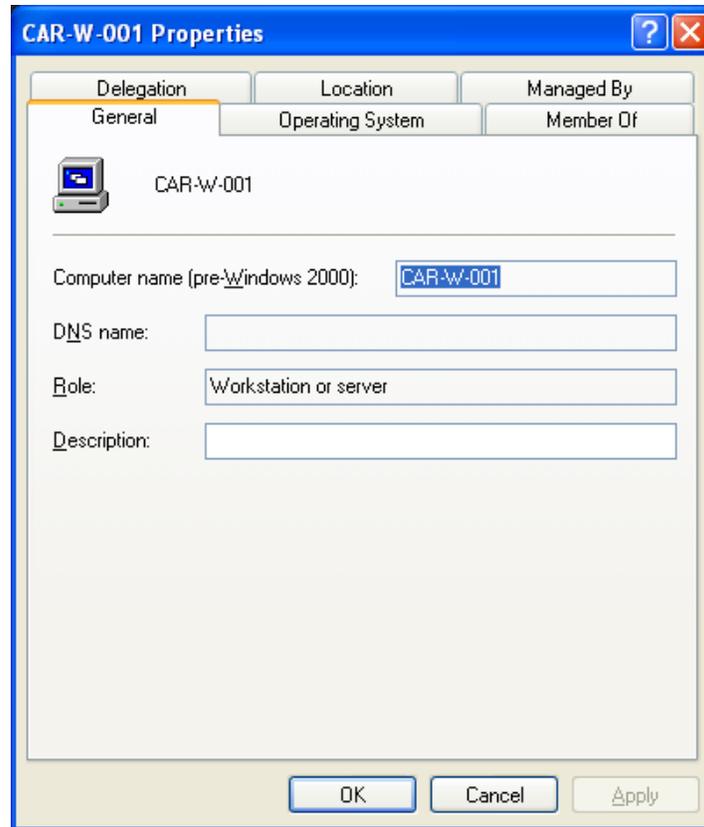
Object (GPO) propagation. In our example, we will add the CAR-W-001 computer object the CAR-Computers security group.

- J. In order to add a computer object to a specific security group, you will need to access the computer object's properties. This is accomplished by right-clicking on the computer object and selecting properties in the sub-menu.



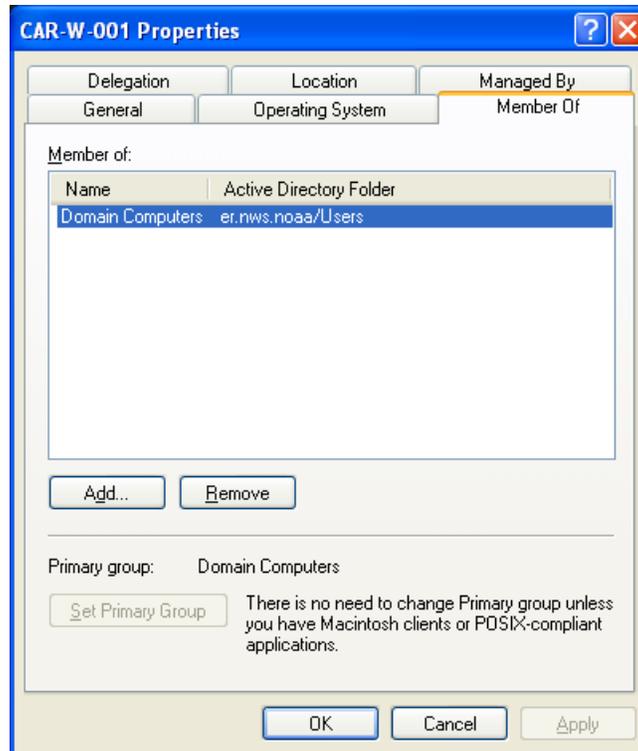
- K. After selecting properties, the computer object's dialog box will appear. There are multiple tabs in the computer object's properties dialog box. Many of the tabs and fields will be auto-populated once the computer object is actually joined to the domain (i.e. Operating system, DNS name). Some of the tabs may be useful to utilize, but this is left to the discretion of the local administrator (i.e. Managed By, Location). We are going to focus on adding the computer object to a specific computer group via the Member Of tab. Click on the Member Of tab.

Adding Computer Object to Active Directory

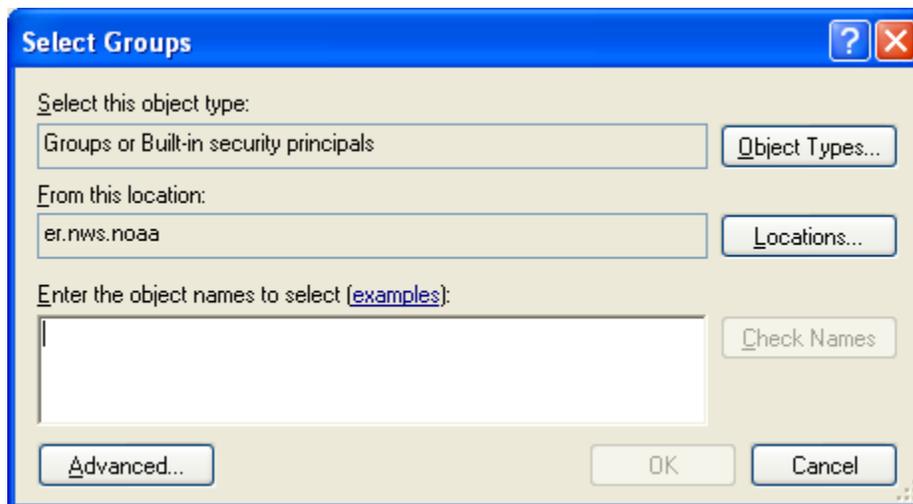


- L. Once you have selected the Member Of tab you will notice that by default the computer object is already a member of the Domain Computer security group.

Adding Computer Object to Active Directory

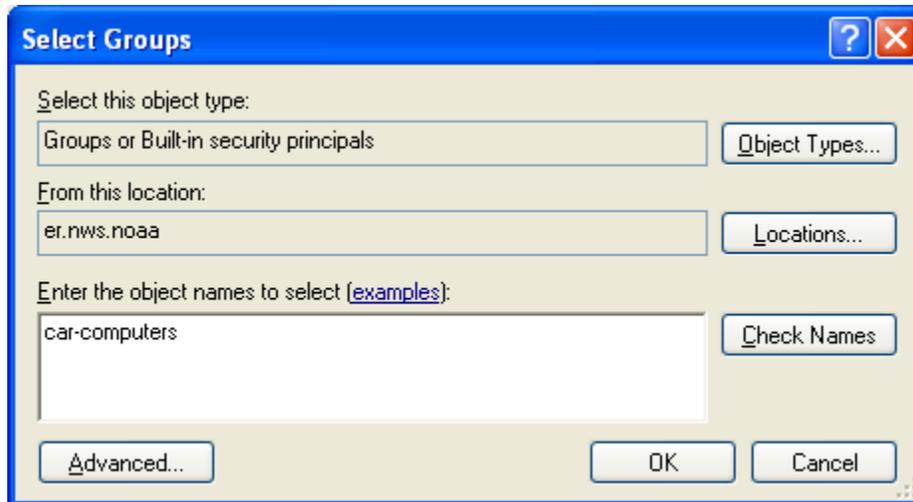


- M. In order to add the computer object CAR-W-001 to the CAR-Computers security group, click the Add... button. The Select Group dialog box will appear.

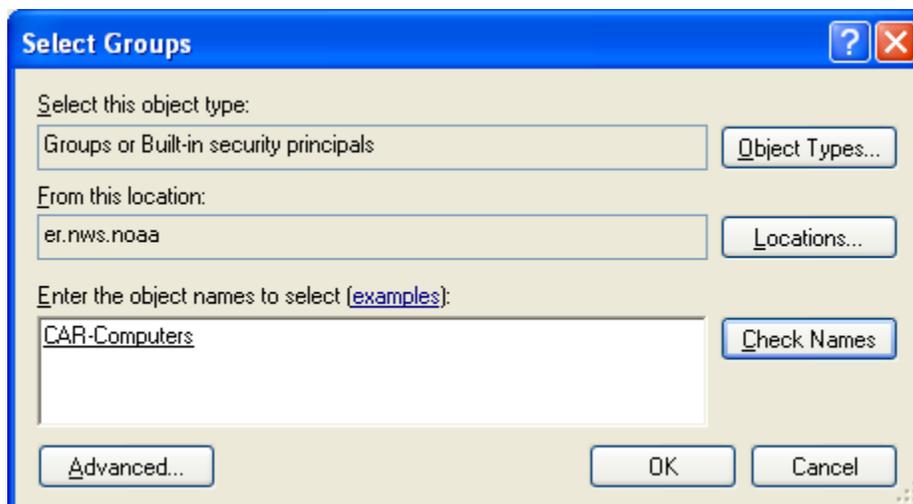


- N. In the Select Group dialog box, enter the name (or partial name) of the security group that you wish to add the computer object to. In our example, we will enter CAR-Computers.

Adding Computer Object to Active Directory

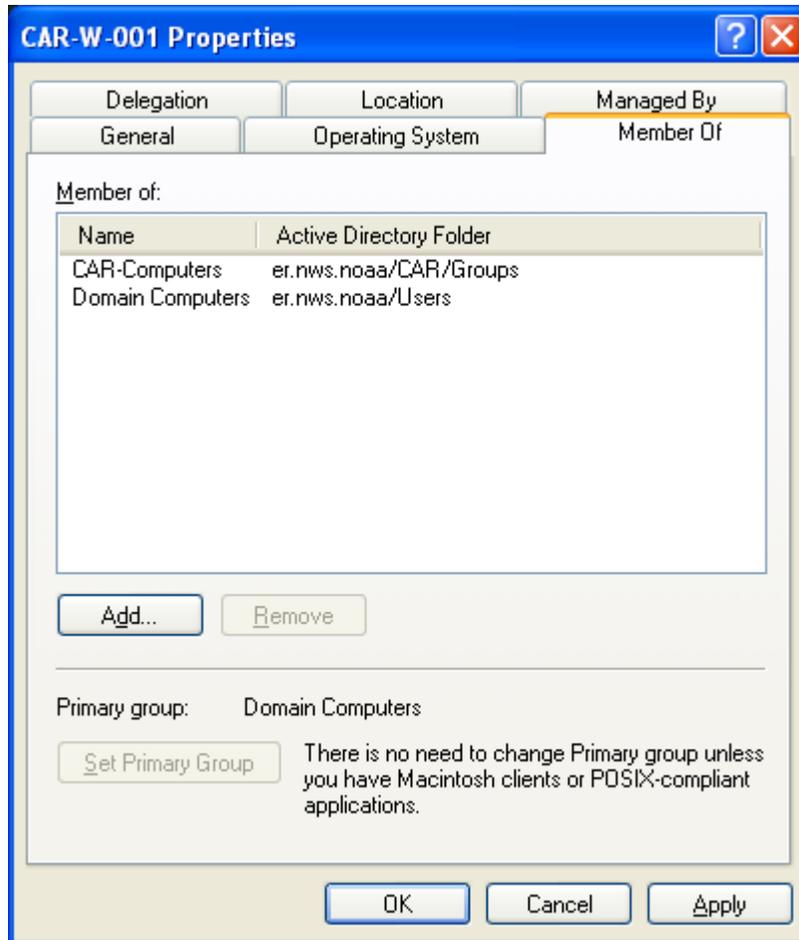


- O. Once you type in the name of the security group, click OK. A query is then performed against the Active Directory LDAP database. If a match is found it will return the result (or results if you typed in a partial security group name).



- P. Click OK to add the computer object CAR-W-001 to the security group CAR-Computers.

Adding Computer Object to Active Directory



- Q. You will now see the computer object CAR-W-001 is now a member of the security group CAR-Computers. Click OK to return to the Active Directory Users and Computers console.
- R. This completes the procedures for pre-staging a computer object in Active Directory.

Client Configuration and Active Directory Joining Procedures

- A. After you have successfully pre-staged the computer object in Active Directory, you will now join the client computer to Active Directory. The following procedures are generated from a Windows XP SP2 client and designed to aid the local administrator in adding a client to the domain.
- B. For the purpose of joining the domain, disable any firewall software. **NOTE:** During these procedures, you will be required to reboot the client. After the client has rebooted, be sure to check and make sure that the firewall is still off.

Adding Computer Object to Active Directory

- C. You will need to change the host name of the client which is joining Active Directory and disjoin any current Active Directory domain the client may be a part of. The client host name must be the same hostname as that which was pre-staged in Active Directory also the host name must conform to the NADS Naming Standards described in NADS SOP NWS-0004.
- D. In order to change the hostname and/or disjoint a computer from an existing Active Directory domain, right-click on the My Computer icon which is either on the desktop or pinned to the Start menu and select properties.



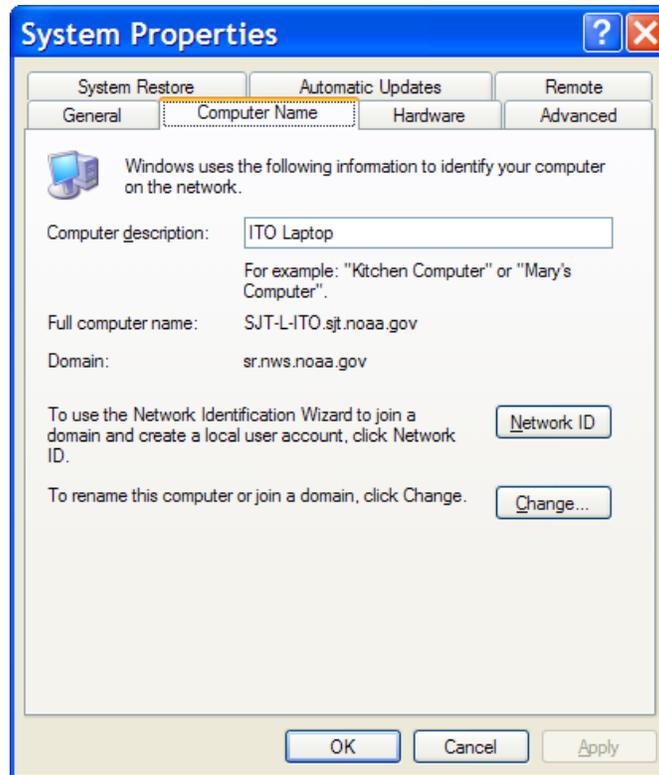
- E. The System Properties dialog box will now appear.

Adding Computer Object to Active Directory



F. Select the Computer Name tab.

Adding Computer Object to Active Directory

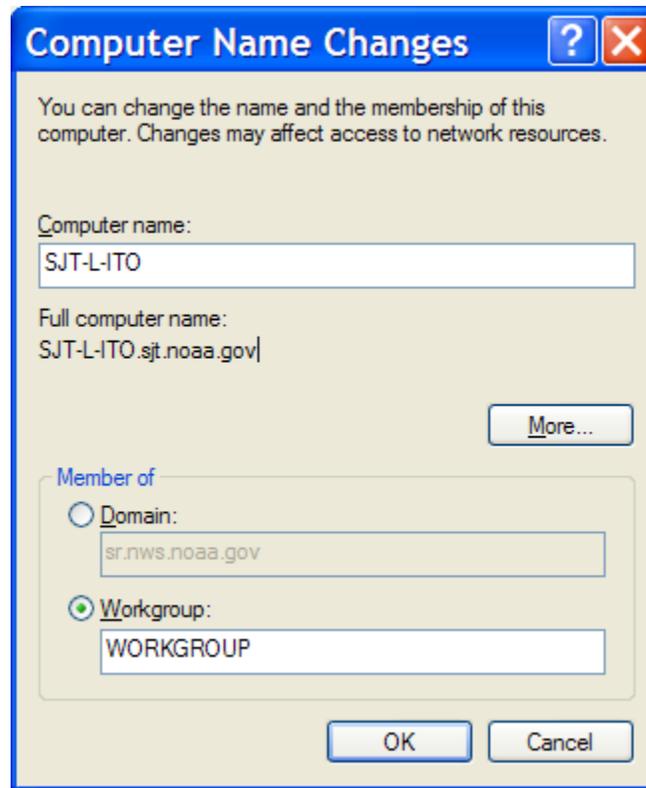


- G. Within the Computer Name tab select Change... The Computer Name Changes dialog box will appear



Adding Computer Object to Active Directory

- H. If the client is already a member of an existing domain, it is necessary to remove the client from the current domain. You accomplish this by selecting Workgroup and type in WORKGROUP for the workgroup name.



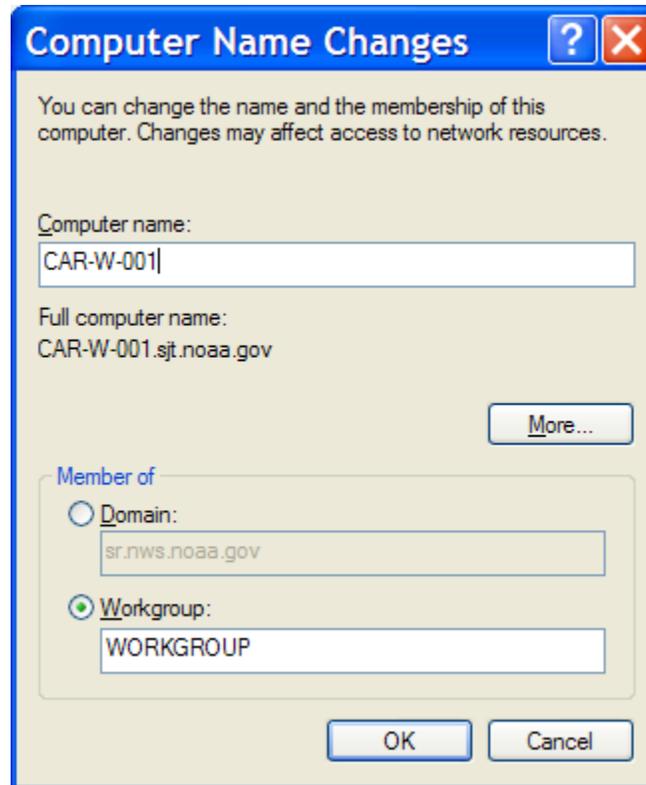
- I. Click OK. You may be prompted to provide network credentials to the old domain. If so, enter the credentials which have the authority to remove clients from the old Active Directory domain. Follow the instructions on the screen to reboot the machine
- J. After the client computer has rebooted, logon as the local administrator and return to the Computer Name Changes Dialog box.

Adding Computer Object to Active Directory



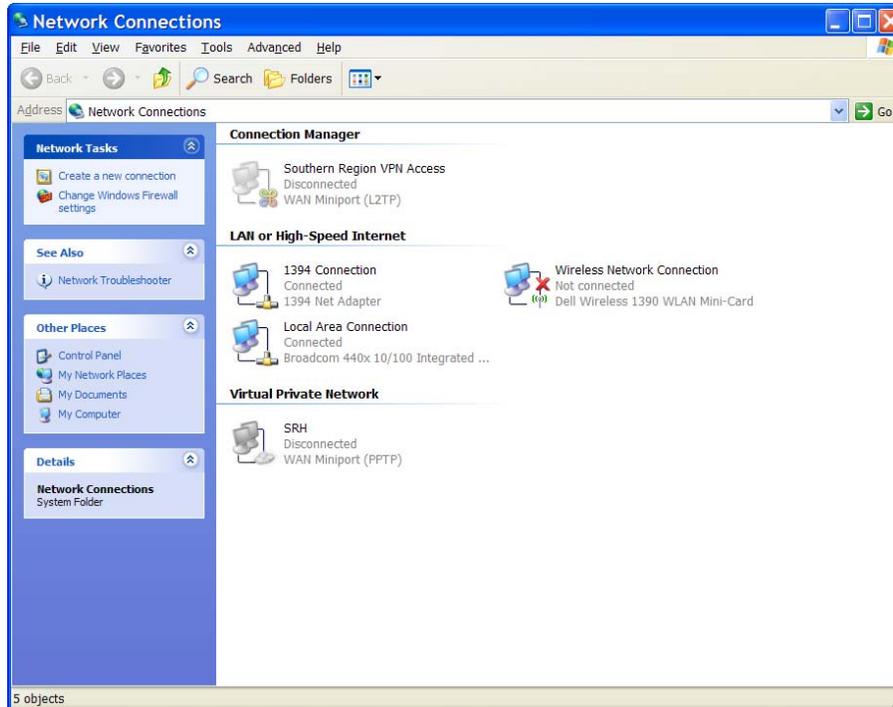
- K. Now we will change the computer name to match the name which was previously pre-staged in Active Directory. Change the computer in the Computer name field. In our example, we will change SJT-L-ITO to CAR-W-001.

Adding Computer Object to Active Directory

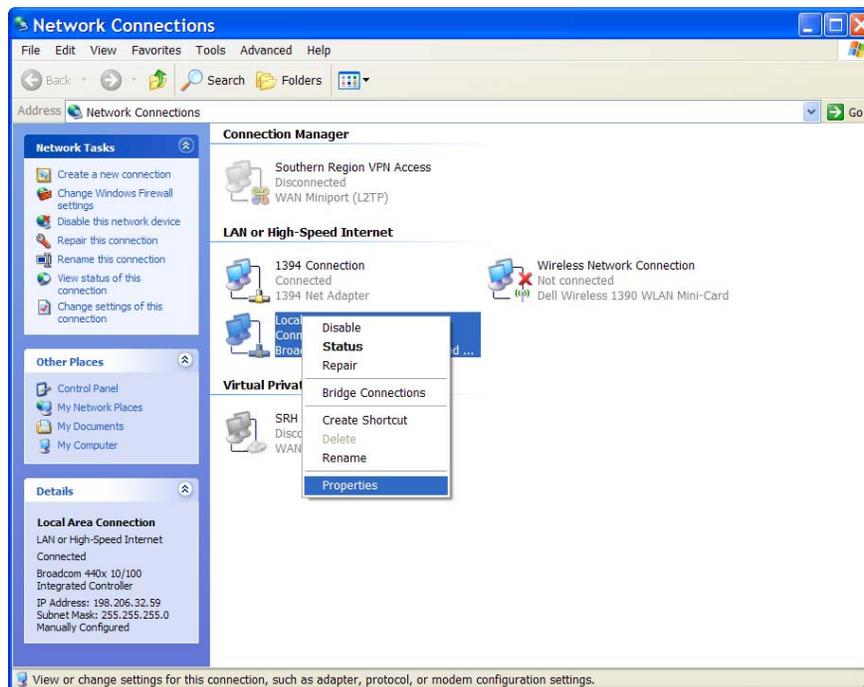


- L. Click OK. NOTE: The full computer name may not reflect the correct Full Computer Name at this time. This will be corrected once the client joins the new domain. After clicking OK you will be prompted to reboot the client.
- M. After the machines reboots and logon as the local administrator. You will now need to configure your DNS servers on your primary Network Interface Card (NIC) to point to your new domain's DNS servers. Your Domain Administrators or the Enterprise Administrator can supply you with the specific IP addresses applicable to your location.
- N. In order to configure the DNS servers for your primary NIC, access the Network Connections applet through the control panel. The following is an example of the Network Connections dialog box.

Adding Computer Object to Active Directory

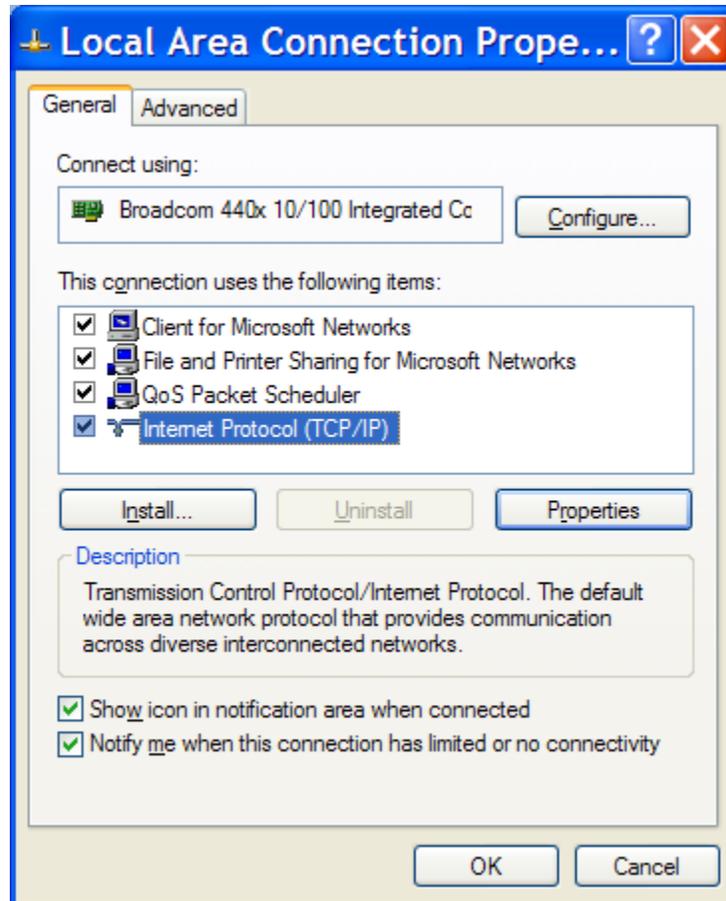


O. Right-click on the LAN connection you need to modify and select Properties.



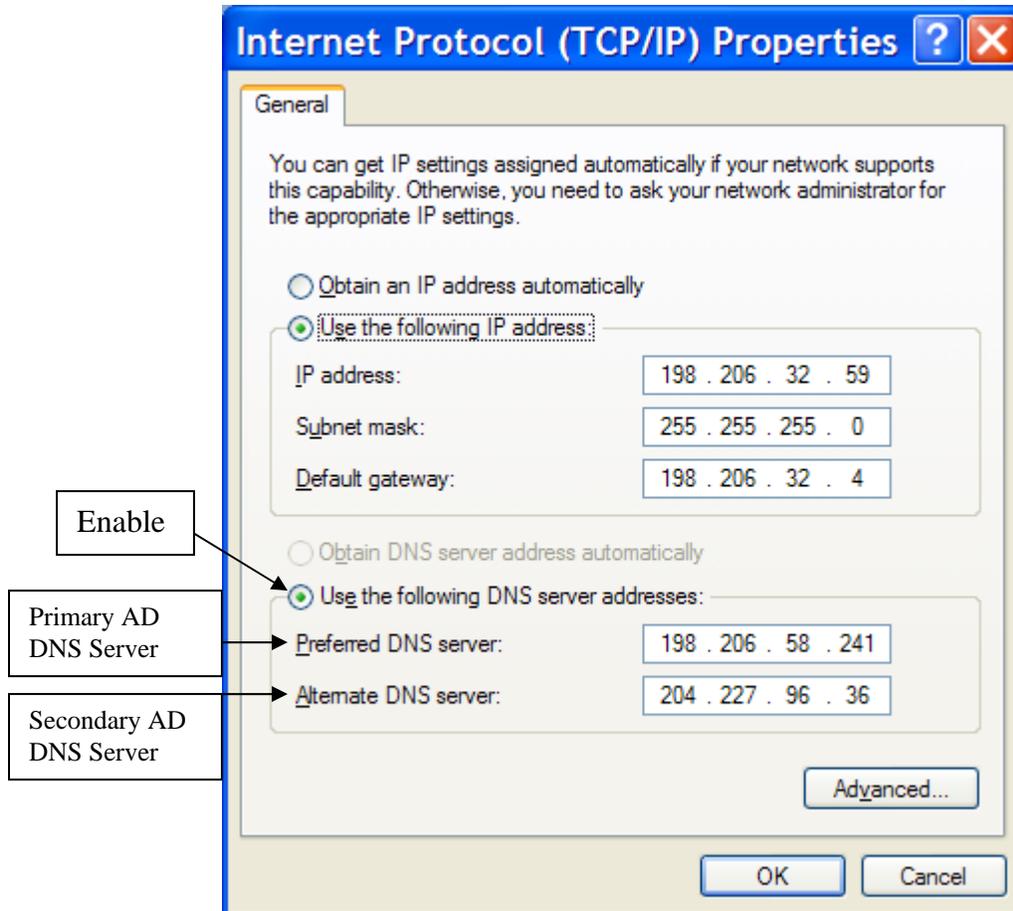
P. After selecting the NIC's properties, the NIC's Properties dialog box will appear.

Adding Computer Object to Active Directory



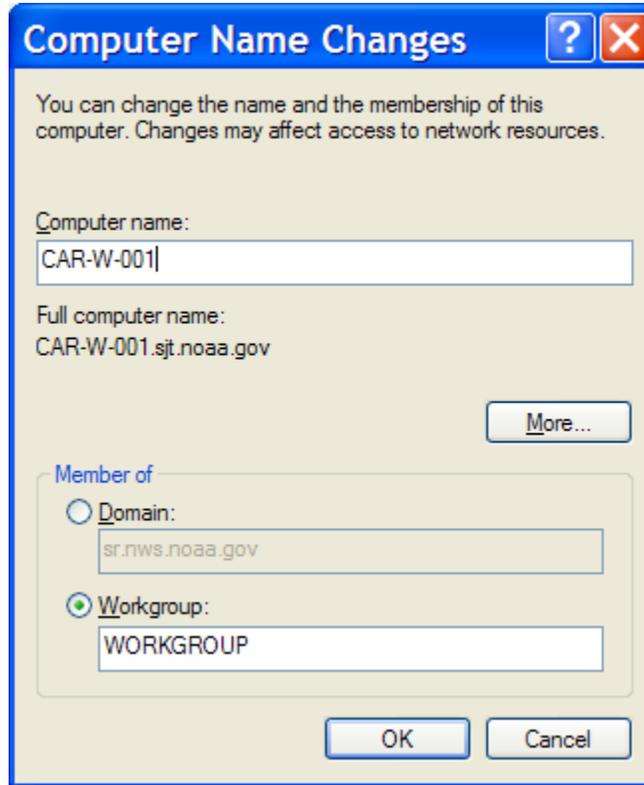
- Q. Select Internet Protocol (TCP/IP) and click on Properties. The Internet Protocol (TCP/IP) properties dialog box will appear.

Adding Computer Object to Active Directory



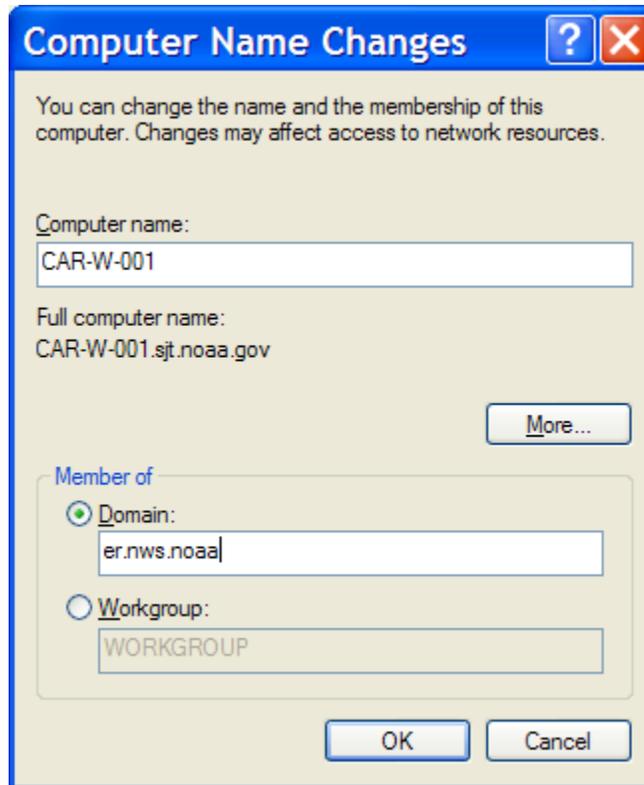
- R. Check the *Use the following DNS server Addresses* toggle. Enter the IP addresses for the primary and secondary AD DNS servers applicable to your location.
- S. Click OK to close the Internet Protocol (TCP/IP) Properties dialog box. Click OK within the NICs properties dialog box to apply the changes.
- T. Now we are ready to join the machine to the new Active Directory domain. You need to return to the Computer Name Changes dialog box. Paragraphs D-G of this section explain how to navigate to this dialog box.

Adding Computer Object to Active Directory



- U. We will now add the client CAR-W-001 to the ER.NWS.NOAA domain. In order to accomplish this, select the Domain toggle button under the Member of section of the Computer Name Changes dialog box. Then enter the full qualified domain name of the domain which you are joining. In our example, we are joining the ER.NWS.NOAA domain.

Adding Computer Object to Active Directory



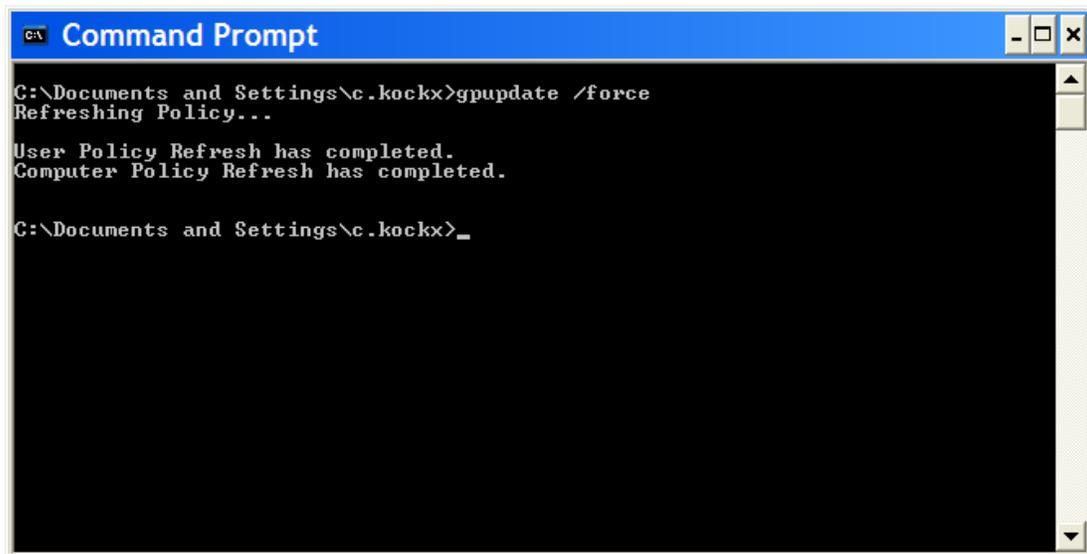
- V. Click OK and you will be requested to provide credentials that have the permissions to add objects to the Active Directory.



- W. After providing the correct credentials, click OK. Once you have successfully joined the domain you will receive a dialog box welcoming you to the new domain. Click OK and then you will be prompted to reboot the machine. Follow the instruction on the screen.

Adding Computer Object to Active Directory

- X. After the machine has rebooted, logon with domain credentials. Once logged-on, you should force the Group Policy Objects to refresh the machine. This is accomplished by opening a DOS window and running the command `gpupdate /force`.



```
Command Prompt
C:\Documents and Settings\c.kockx>gpupdate /force
Refreshing Policy...
User Policy Refresh has completed.
Computer Policy Refresh has completed.
C:\Documents and Settings\c.kockx>_
```

- Y. You should see that your User and Computer policies have been refreshed. You may receive an additional messages stating that a reboot is required to apply all the necessary setting. If this is the case, follow the on-screen instructions.
- Z. This completes the procedures for joining a computer object Active Directory.

5. Roles & Responsibilities

The Enterprise and Domain Administrators are the subject matter experts for the above listed procedures.

6. Training

Additional training information is available from your Domain Administrator, as well as, various courses located on the NOAA E-Learning web site <http://e-learning.doc.gov/noaa/>.

7. Monitoring Requirements

Computer object naming convention must adhere to NADS Naming Standards (SOP NWS-0004)

8. Record Management

None required

9. References

NWS-0004 NADS Naming Standards