

Synology NAS Server Windows ADS FAQ

Synology[®]

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Introduction

This document is aimed to provide solutions to frequently asked questions about using Synology NAS products with Windows ADS. It should solve most cases. However, if you still have technical questions, please visit www.synology.com/support to seek support from Synology.

Frequently Asked Questions

Q1: How do I join Windows domain?

There are three ways of joining Windows domain.

Note : If you failed to join Windows domain, you can always map the error message to the error handling below to find out the solution. If the problem still cannot be solved, please contact us for further assistance. And if you have configured the default settings of the Domain Controller (DC) such as security policy, please provide related information to us. If there are any event logs in DC when the joining fails, please provide them to us too.

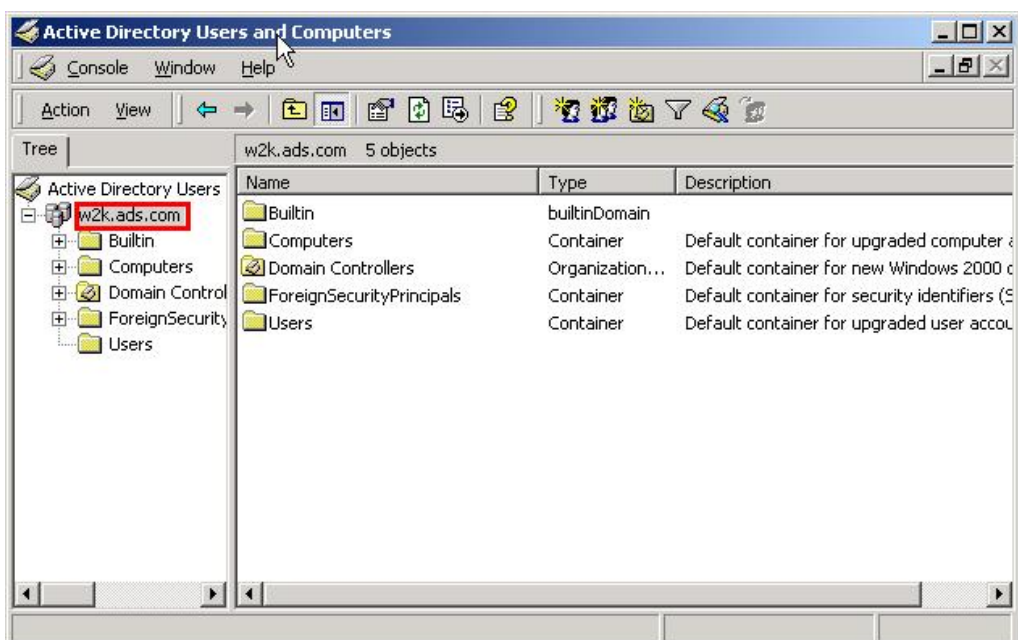
Method 1: Use KDC IP to join Windows domain

Step 1: Synchronize your Synology NAS Server's time to that of the domain controller. .

Step 2: Enter correct DC IP and domain name. If the domain name is incorrect, the Synology NAS Server will correct it automatically.

Method 2: Use Full Qualified Domain Name (FQDN) to join Windows domain

You can find the FQDN under Active Directory Users and Computers of the DC (as marked below).



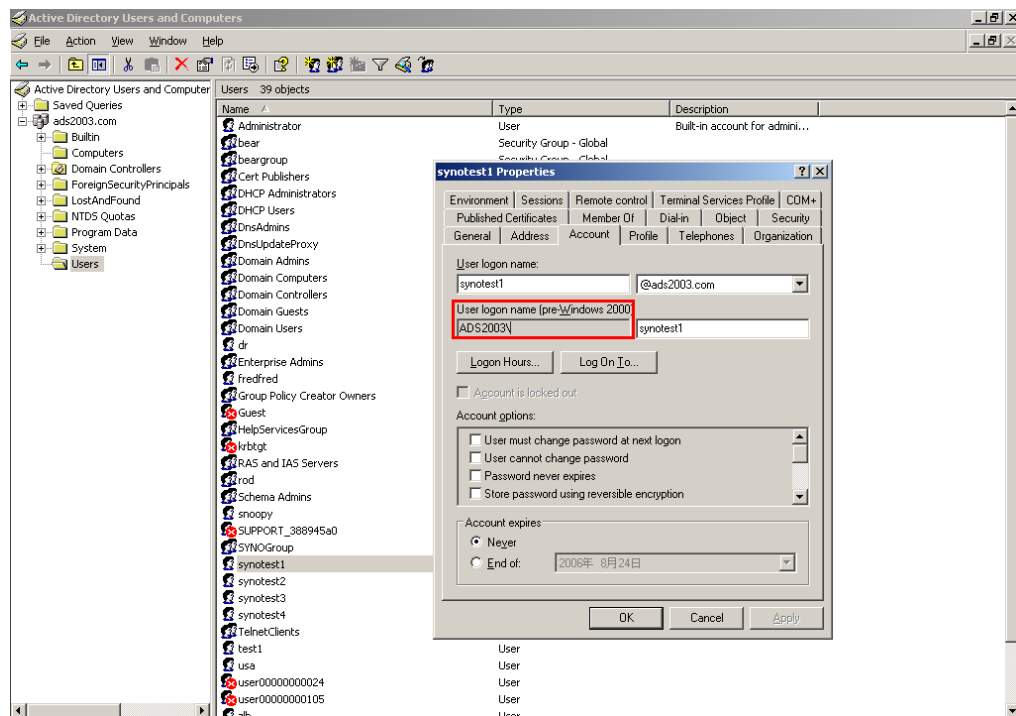
Step 1: Set the Synology NAS Server's DNS server with your DNS server's IP address. Make sure domain DNS name can be found on the Synology NAS Server. You can find how to install DNS server and how to configure DNS server, and how to examine DNS server setting in **Q4: *What should I do when I receive the message "Cannot find the domain workgroup. Please enter a correct KDC IP"?***.

Step 2: Synchronize Synology NAS Server's time to that of the domain controller.

Step 3: Join domain with domain FQDN name on the "Win/Mac OS" page of your Synology NAS Server.

Method 3: Use domain NetBIOS name to join Windows domain

You can find domain NetBIOS name in Active Directory Users and Computers of DC setting (as marked below).



Note: Join domain with domain FQDN name on the "Win/Mac OS" page of your NAS server.

Q2: Why can't I join Windows domain even with KDC IP specified?

There are three possible reasons for this:

1. The KDC and Synology NAS Server are in different subnets. Please make sure the KDC and the Synology NAS Server are in the same subnet. If not, please refer to **Q11: *How do I join domain in different subnets?***.

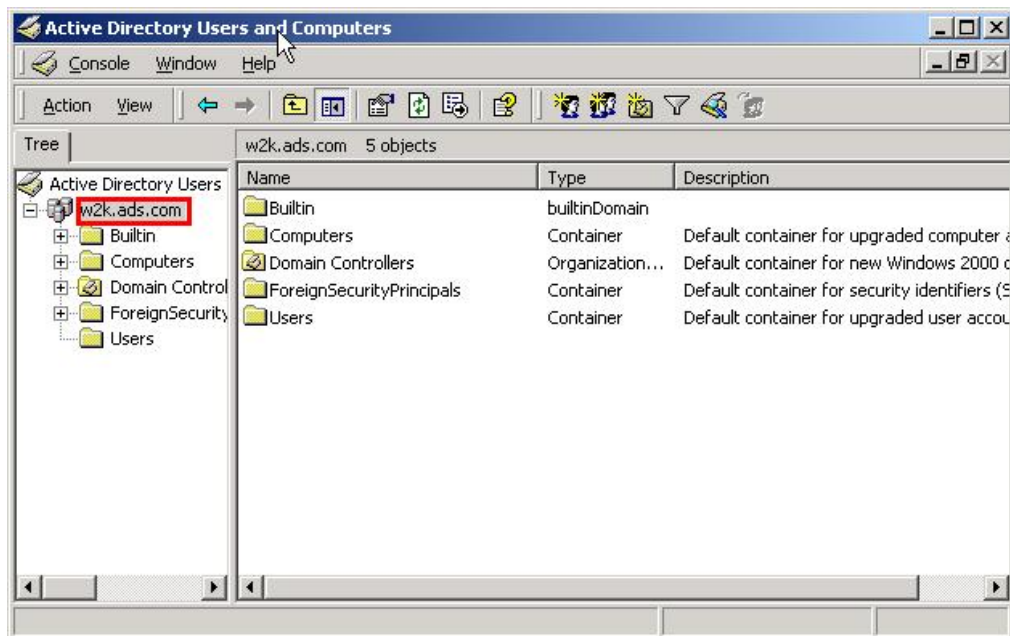
2. The KDC is not the local master browser. Please modify or add the register key "MaintainServerList" as "Yes" in
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Browser\Parameters of the DC.
3. The KDC is not the domain master browser. Please modify or add the register key "IsDomainMaster" as "Yes (or True or 1)" in
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Browser\Parameters of the DC.

Q3: What should I do when I receive the message "Invalid domain name. Please check the DNS setting of the domain server and use complete domain name to join"?

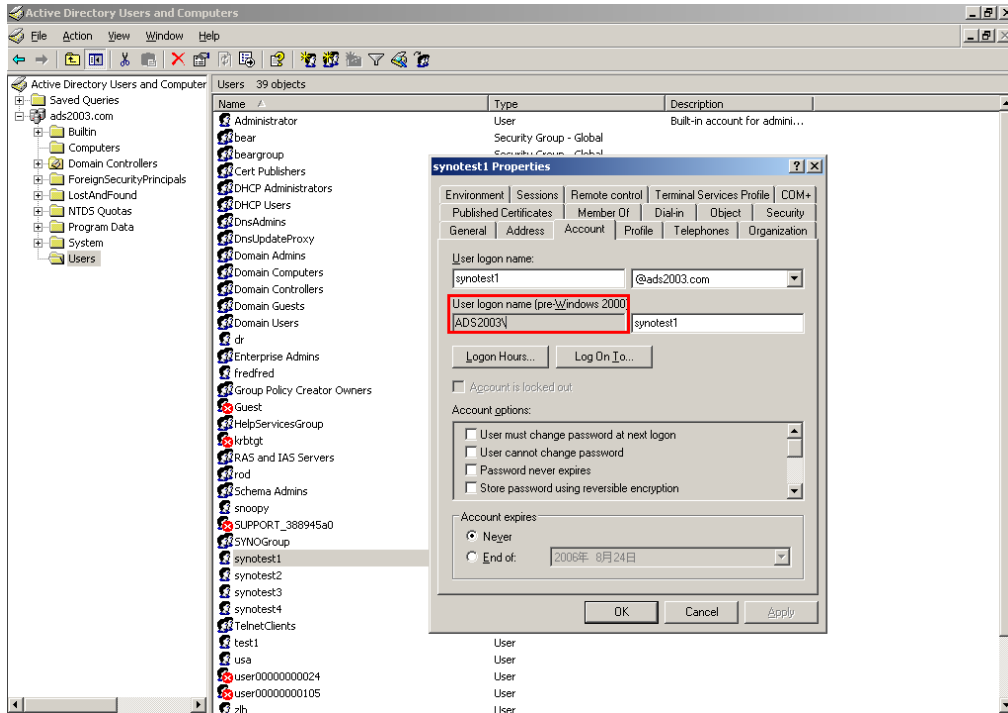
1. Please follow the steps below:

Start > administrative tools > Domain Controller security policy > Security Settings > Local Policies > User Rights Assignment, then double click "Access this computer from the network" and add "Authenticated Users" to the settings.

2. Please specify the KDC IP on the UI to join domain, or contact the domain administrator to confirm the domain name. You can use "full DNS name" (as marked below) with DNS to join domain.



Note: You also can use the "domain NetBIOS name" (as marked below) to join domain.

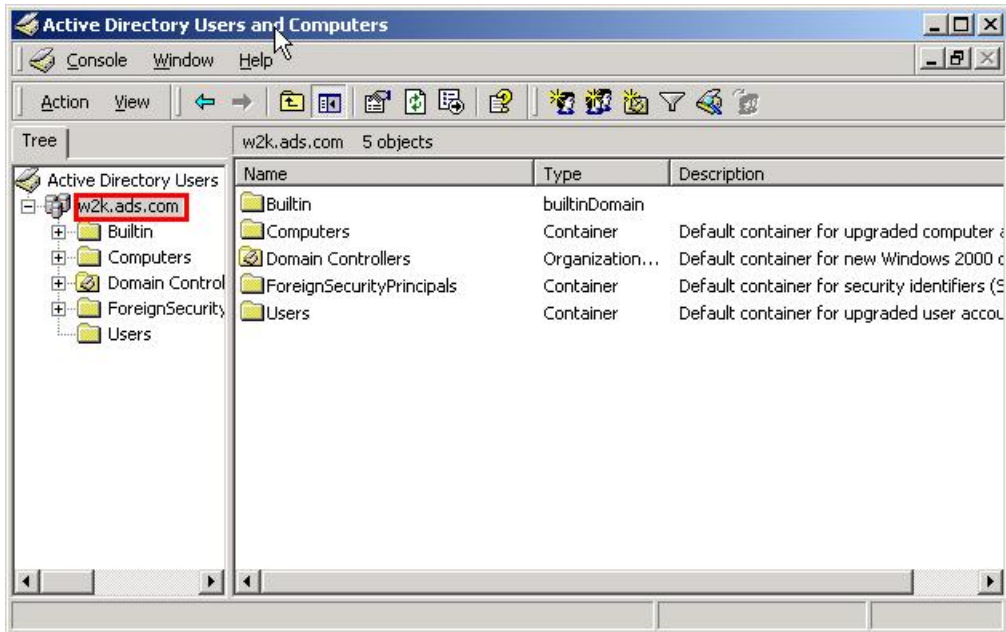


Q4: What should I do when I receive the message “Cannot find the domain workgroup. Please enter a correct KDC IP”?

Please specify the KDC IP on the UI to join domain or contact the domain administrator to confirm the following step.

Step1: Confirm the complete domain name to join by the following the steps:

Start > Programs > Administrative tools > Active Directory Users and Computers.

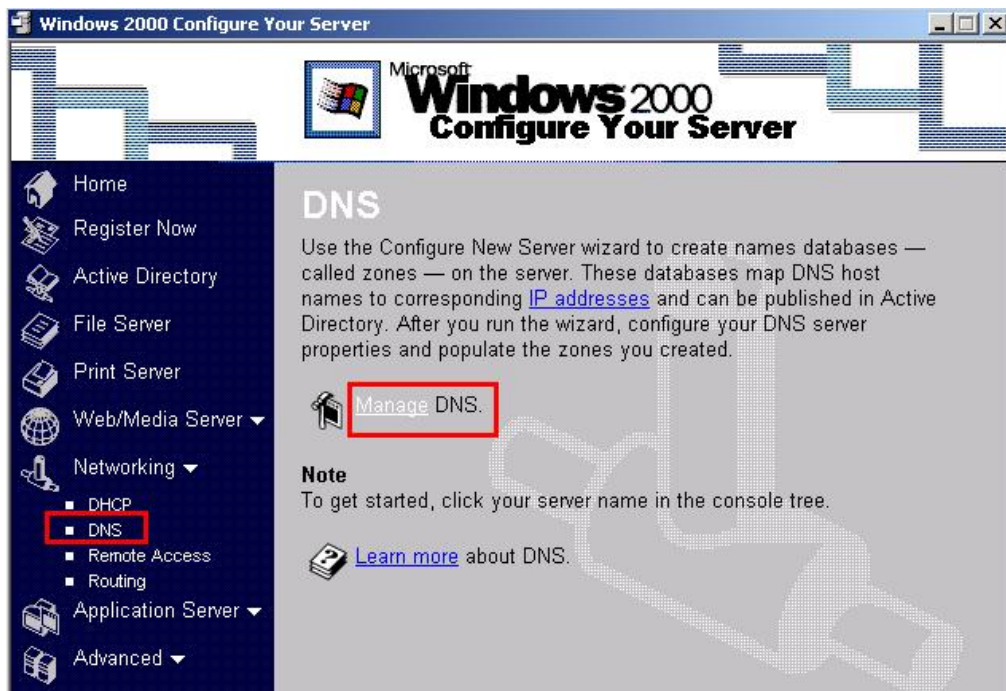


Note: Take above clip as an example, the full to use should be "w2k.ads.com", but not "w2k".

Step2: Install DNS server (only if there is no DNS server in domain environment). Follow the steps below:

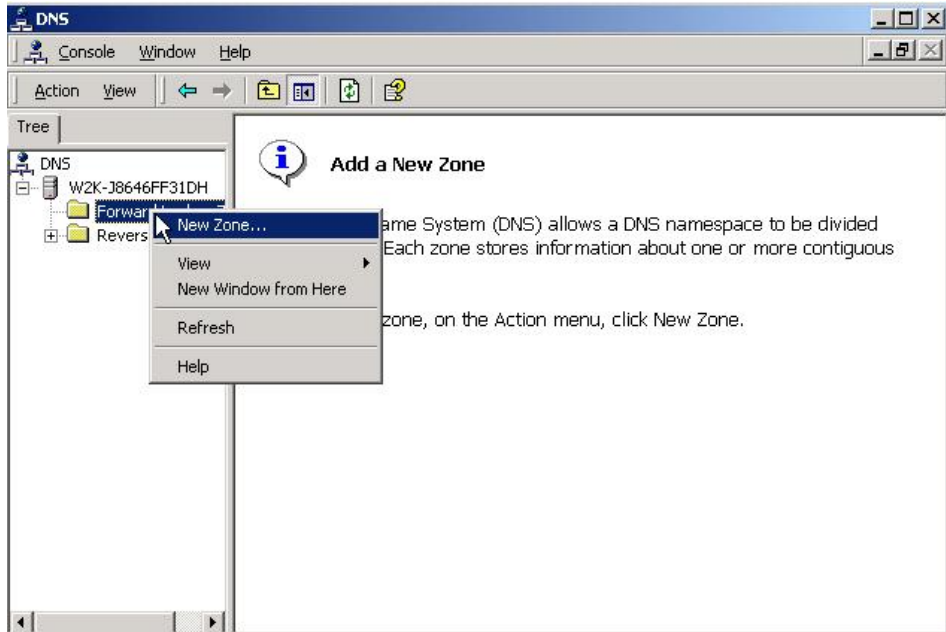
Start > Programs > Administrative tools > Configure Your Server Wizard (in Windows 2003), or, Start > Programs > Administrative tools > Configure Your Server > Networking > DNS > Set up DNS (in Windows 2000 server) to install DNS.

Step3: Add a Forward Lookup Zones with your domain name (e.g. w2k.ads.com) in Windows 2000 server:

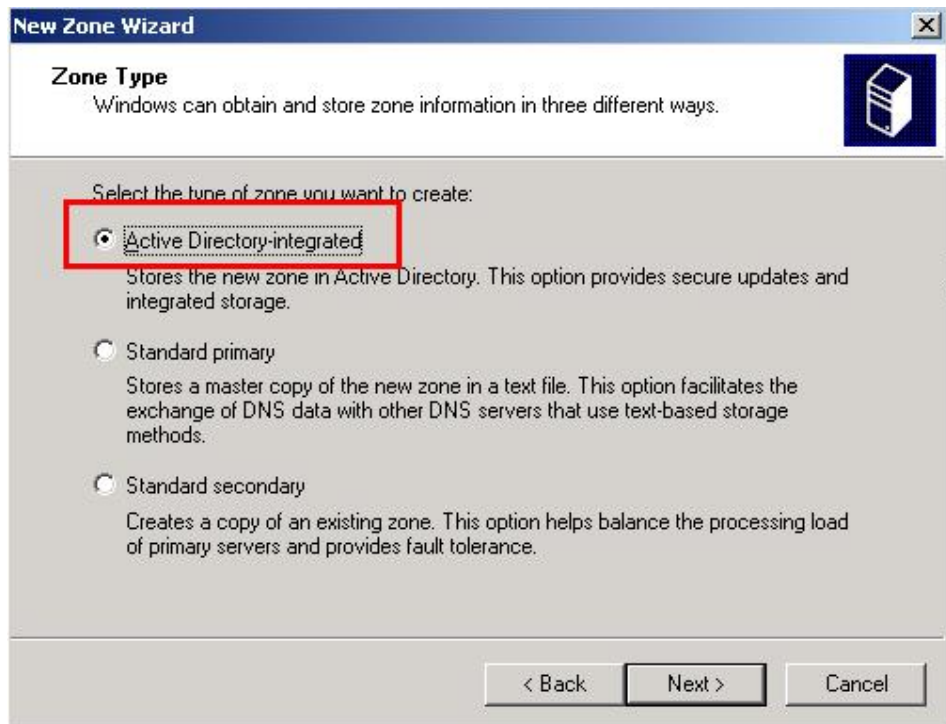


Step 3-1: Manage DNS. Follow the steps below:

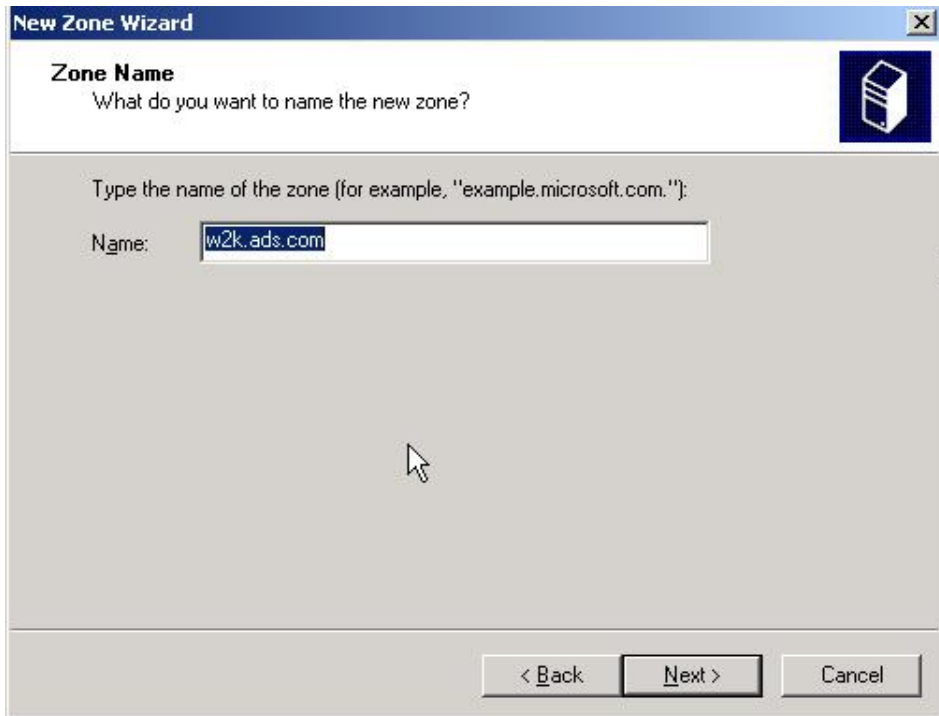
Start > Programs > Administrative tools > Configure Your Server > Networking > DNS > Manage DNS.



Step 3-2: Expand host name, right click Forward Lookup Zone, and click New Zone.



Step 3-3: Select Zone Type Active Directory-integrated.

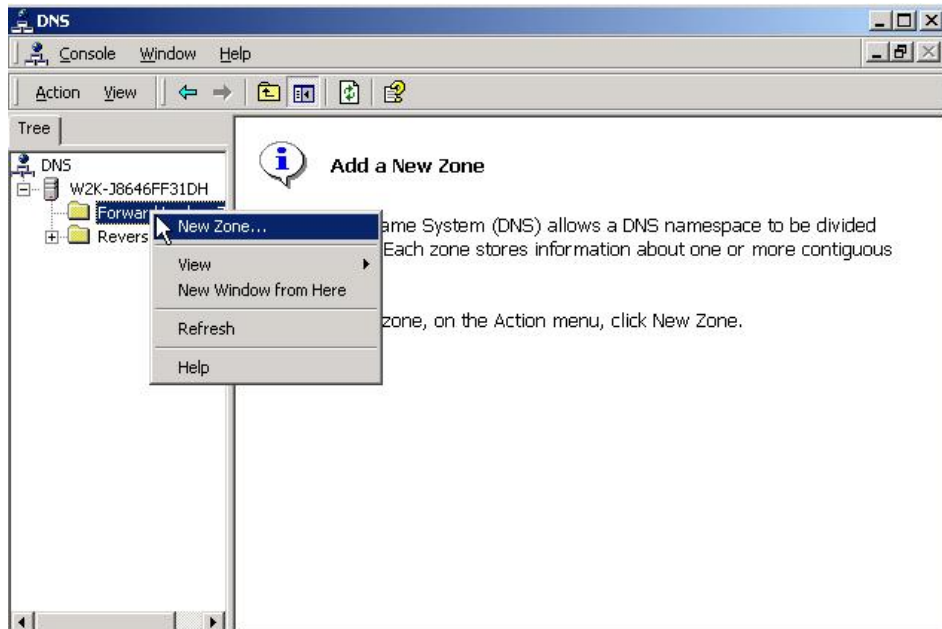


Step 3-4: Enter your complete domain name.

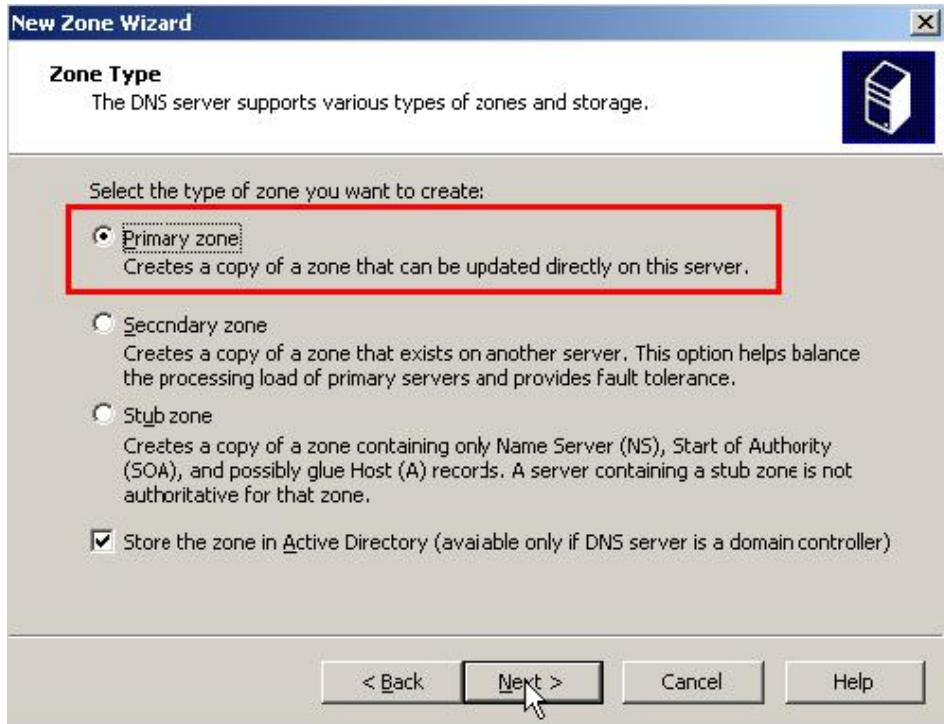
In Windows 2003 :

Step 3-1: Manage DNS. Follow the steps below:

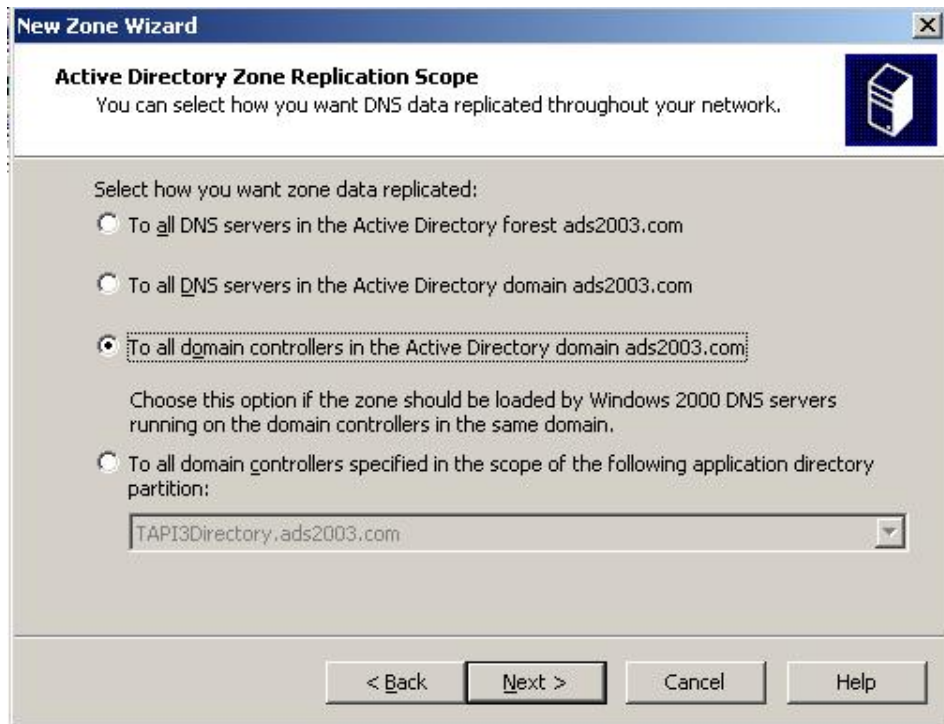
Start > Programs > Administrative tools > Configure Your Server > Networking > DNS.



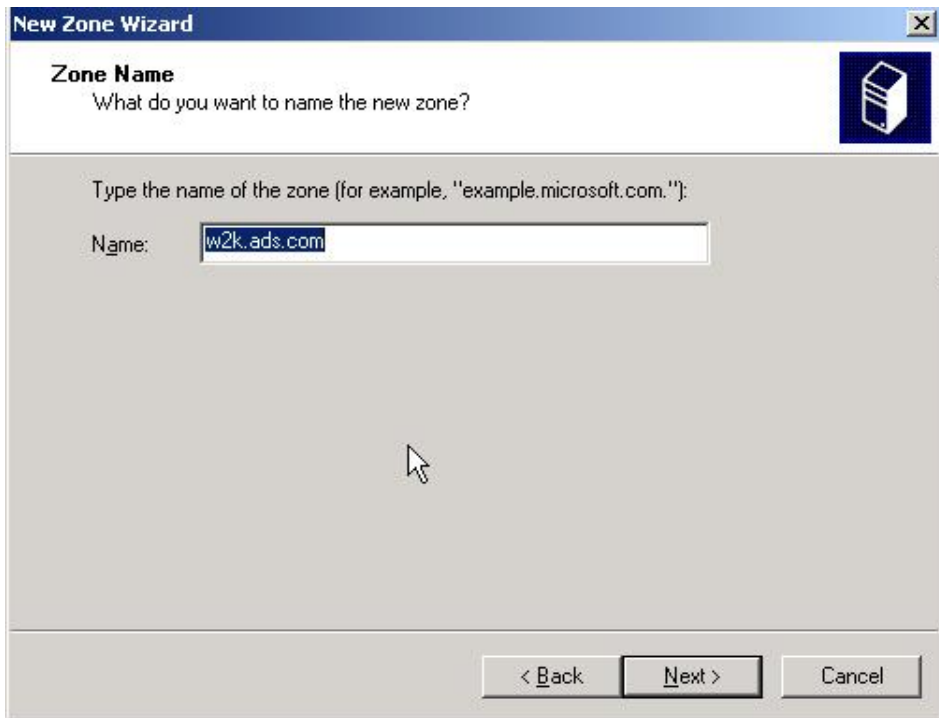
Step 3-2: Expand host name, right click Forward Lookup Zone, and click New Zone.



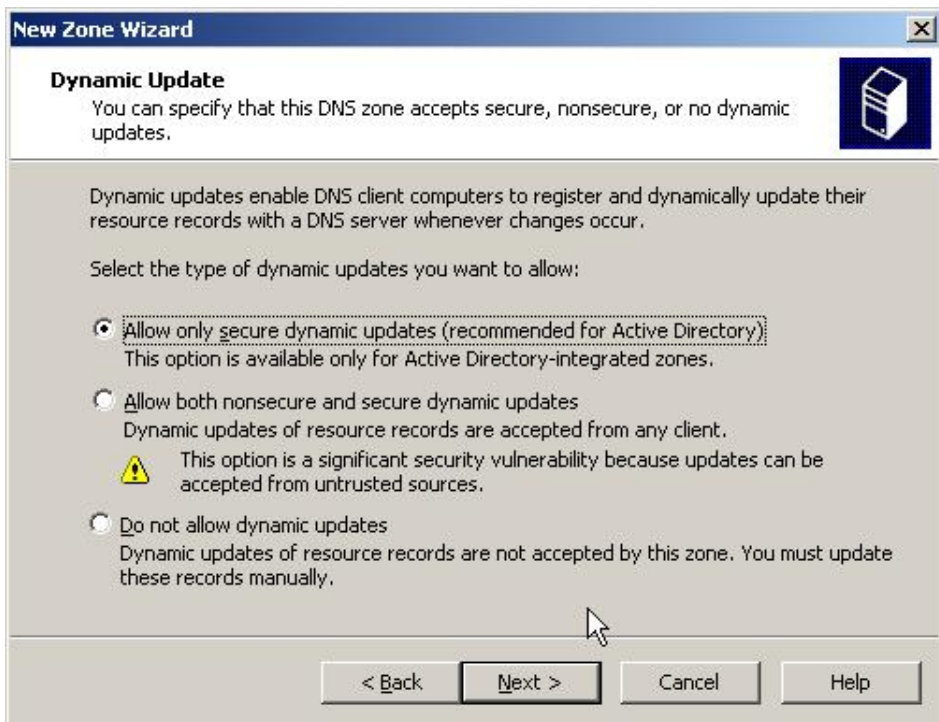
Step 3-3: Select the Zone Type you want to create.



Step 3-4: Select the Zone Replication Scope you want to use.



Step 3-5: Enter your complete domain name.



Step 3-6: Allow secure dynamic updates.

Step 4: Specify DNS of Domain server to this DNS server.

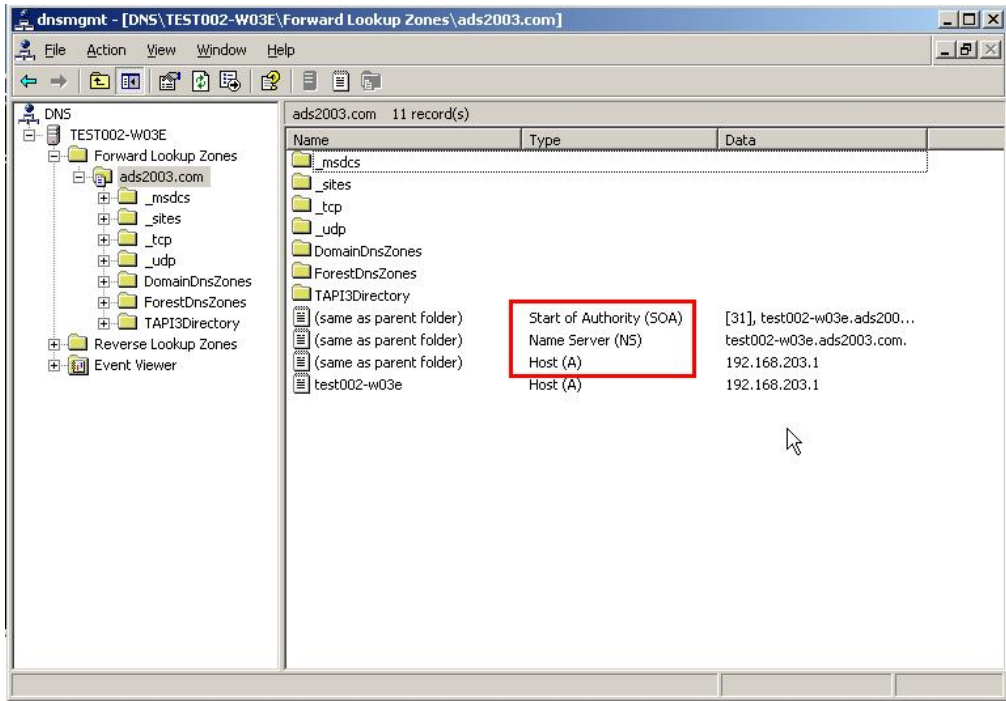
Step 5: Execute command "ipconfig /flushdns" on cmd line of DNS server.

Step 6: Execute command "ipconfig /registerdns" on cmd line of DNS server.

Step 7: Execute command “net stop netlogon” on cmd line of DNS server.

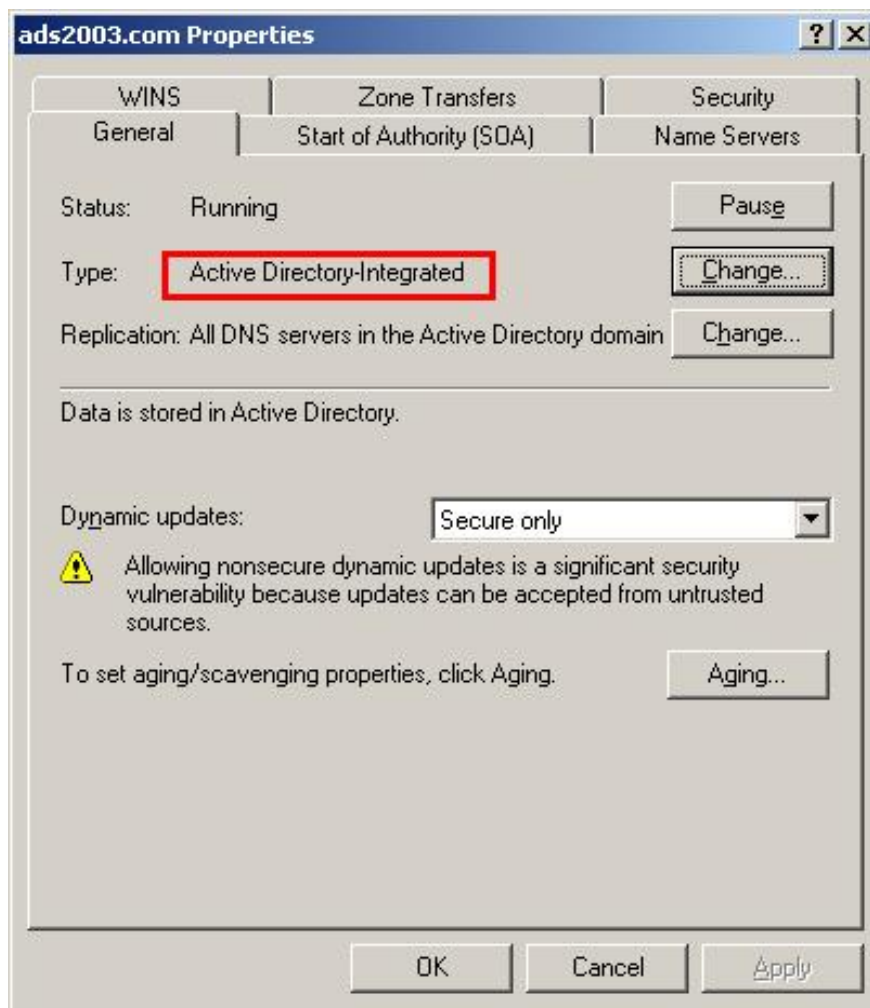
Step 8: Execute command “net start netlogon” on cmd line of DNS server.

Note: After completing all steps above, the record in the right plane must have at least the entries SOA, NS, A, as below framed in red.

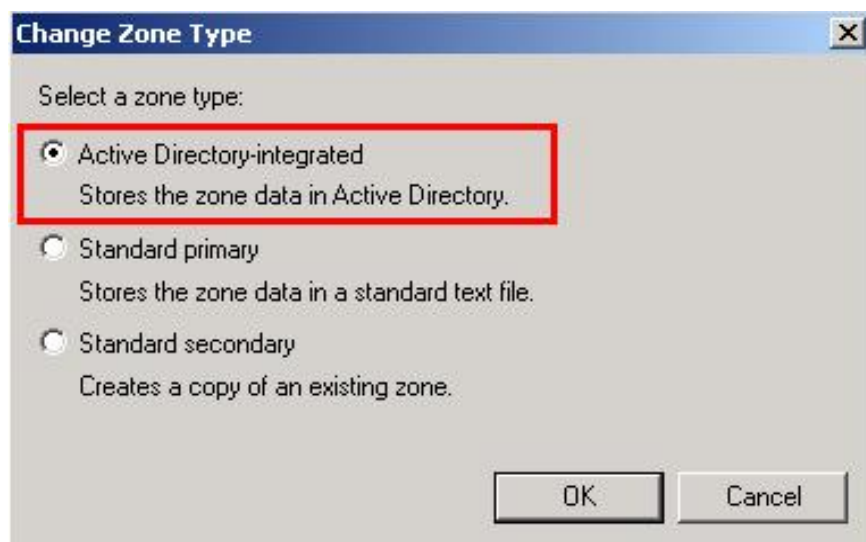


Step9: Examine DNS setting. The DNS server assigned to Synology NAS Server should be Active Directory-integrated as marked below. You can configure it by follow the steps below:

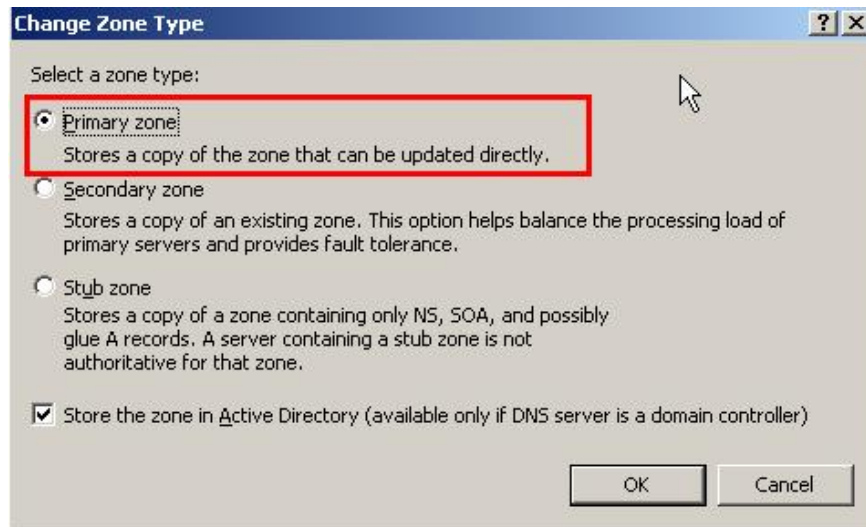
Start > Programs > Administrative tools > DNS, expand the host name of DNS server ,expand Forward Lookup Zones, and right click your domain name.



Note: If the type is NOT Active Directory-Integrated, click the Change button on the right hand side and configure it as Active Directory-Integrated as marked below.



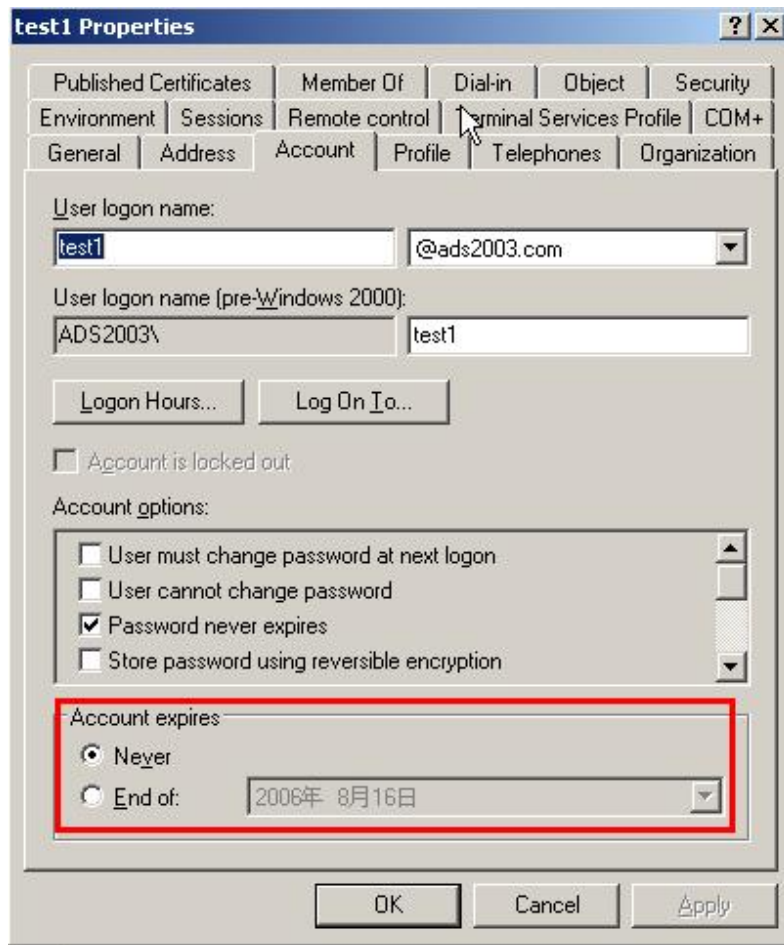
(Windows 2000 Server)



(Windows 2003)

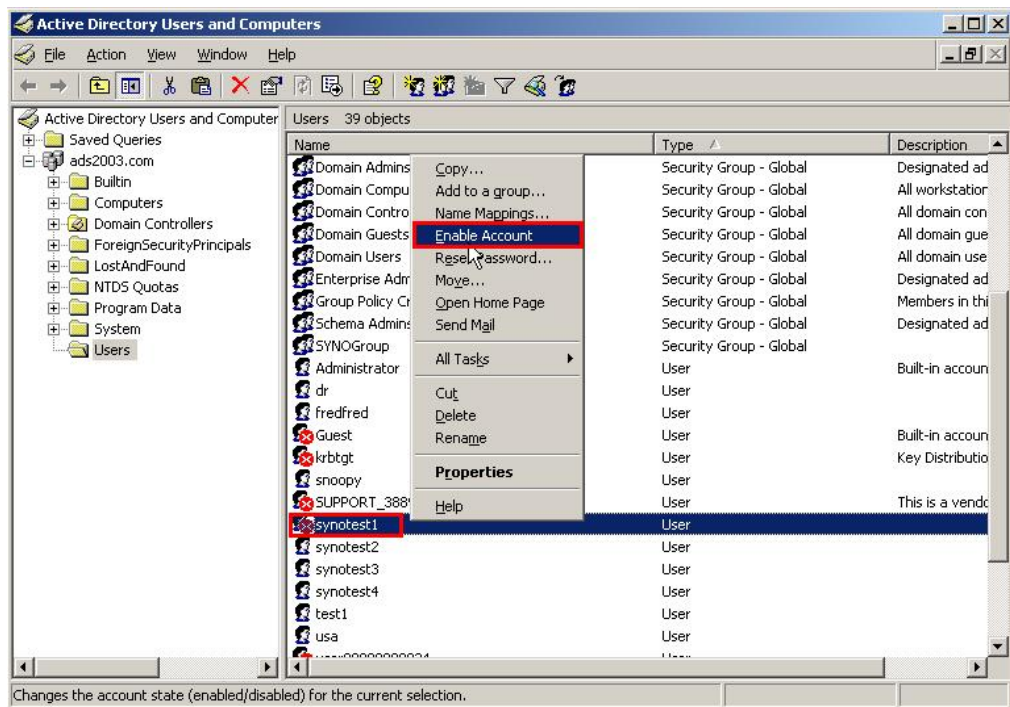
Q5: What should I do when I receive the message “account expires”?

Please contact the domain administrator immediately to examine your account setting as marked below.

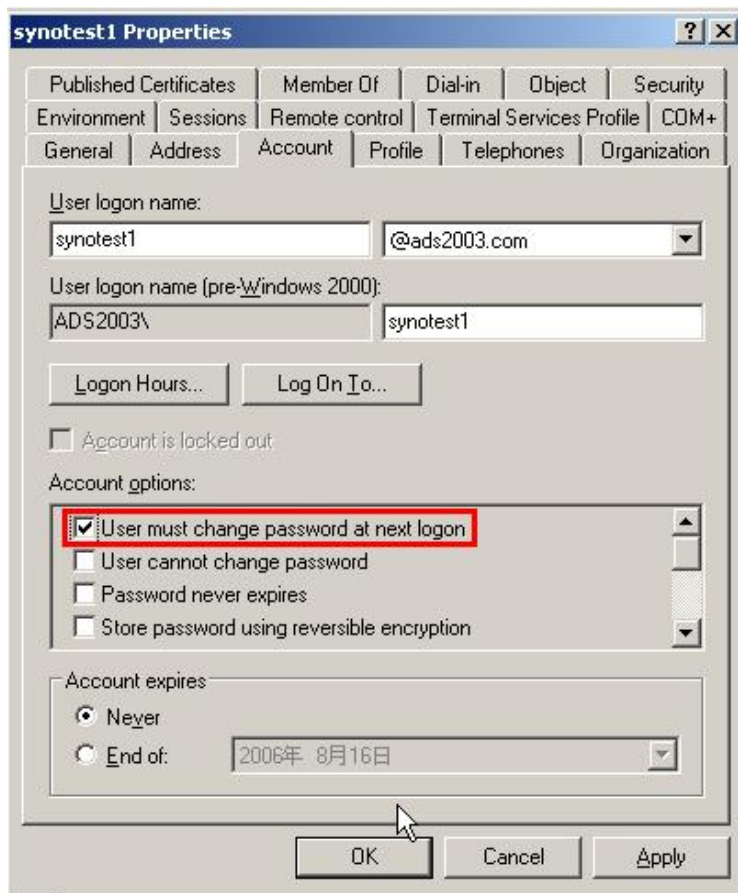


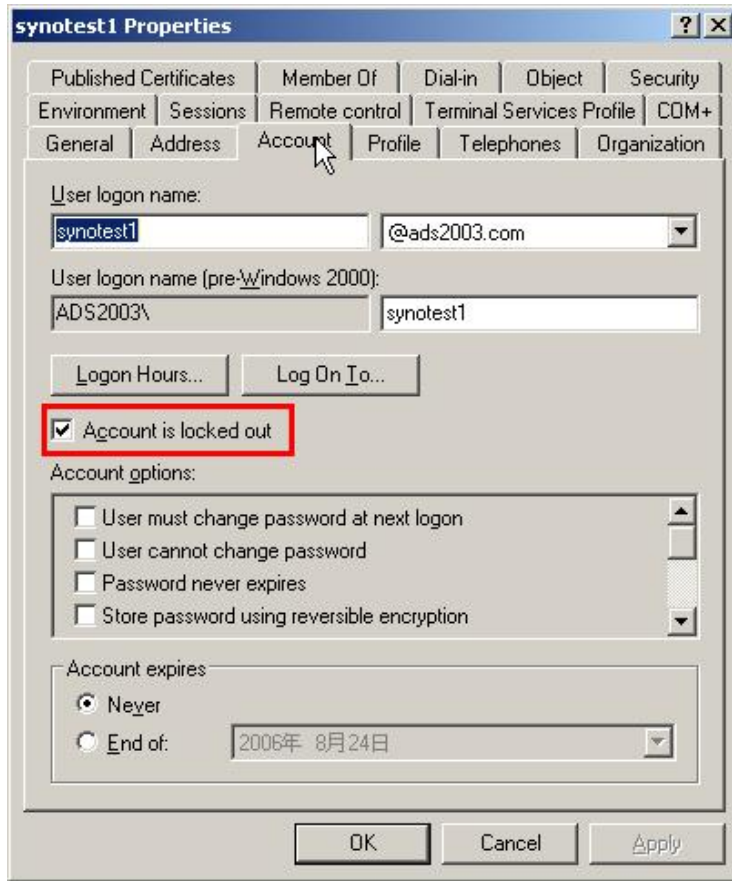
Q6: What should I do when I receive the message “this account has been disabled”?

Please contact the domain administrator immediately to enable your account as marked below.



Note: The other option is to disable the checked options framed below in red.



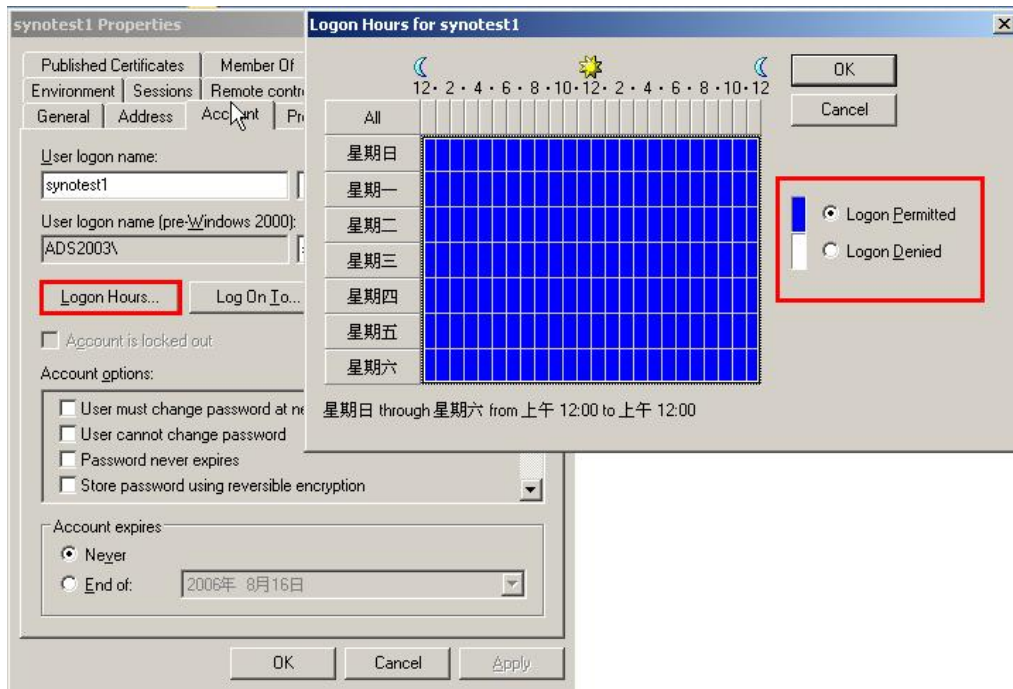


Note: If your account is often locked, please check account policy setting. Follow the steps below:

Start > Programs > Administrative Tools > Domain Security Policy > Account Policies.

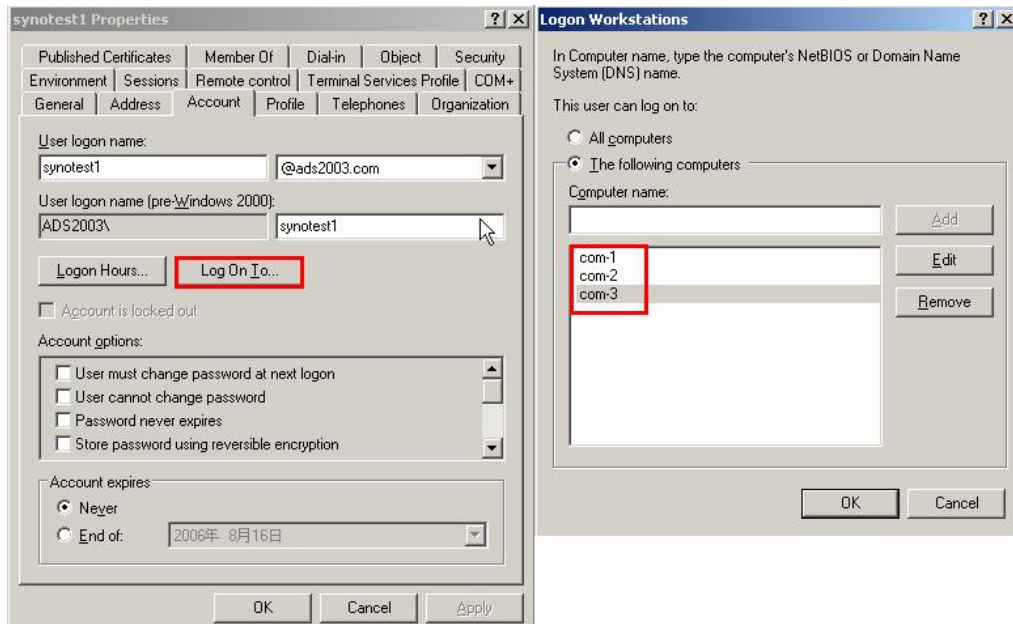
Q7: What should I do when I receive the message “this account cannot logon at present”?

This suggests your account is not in the permitted at specific logon hours, please contact the domain administrator to enable it.



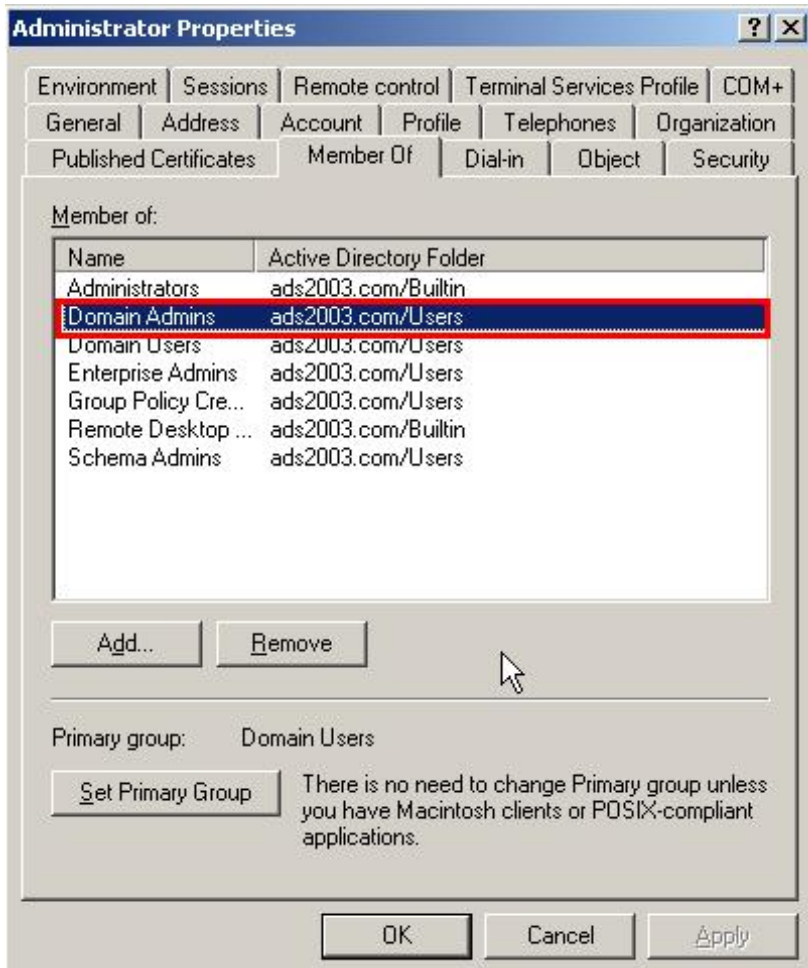
Q8: What should I do when I receive the message “cannot logon to the workstation”?

This suggests logon workstations list does not contain the domain server, Please contact the domain administrator to add the server.



Q9: What should I do when I receive the message “Permission denied. Please use domain Admins to join”?

The account needs to be a member of Domain Admins in order to join, please contact the domain administrator to examine the account setting.



Q10: What should I do when I cannot access shared folders as a domain user even with the correct password?

Please follow the steps below to solve this problem:

Step1: Make sure settings of the account in the DC are all correct.

Step2: Make sure to synchronize the time of the Synology NAS Server with that of the DC.

If you are accessing shared folders through Samba connection or mapping network drive, please try to use IP address of the Synology NAS Server instead of NetBIOS name of the Synology NAS Server.

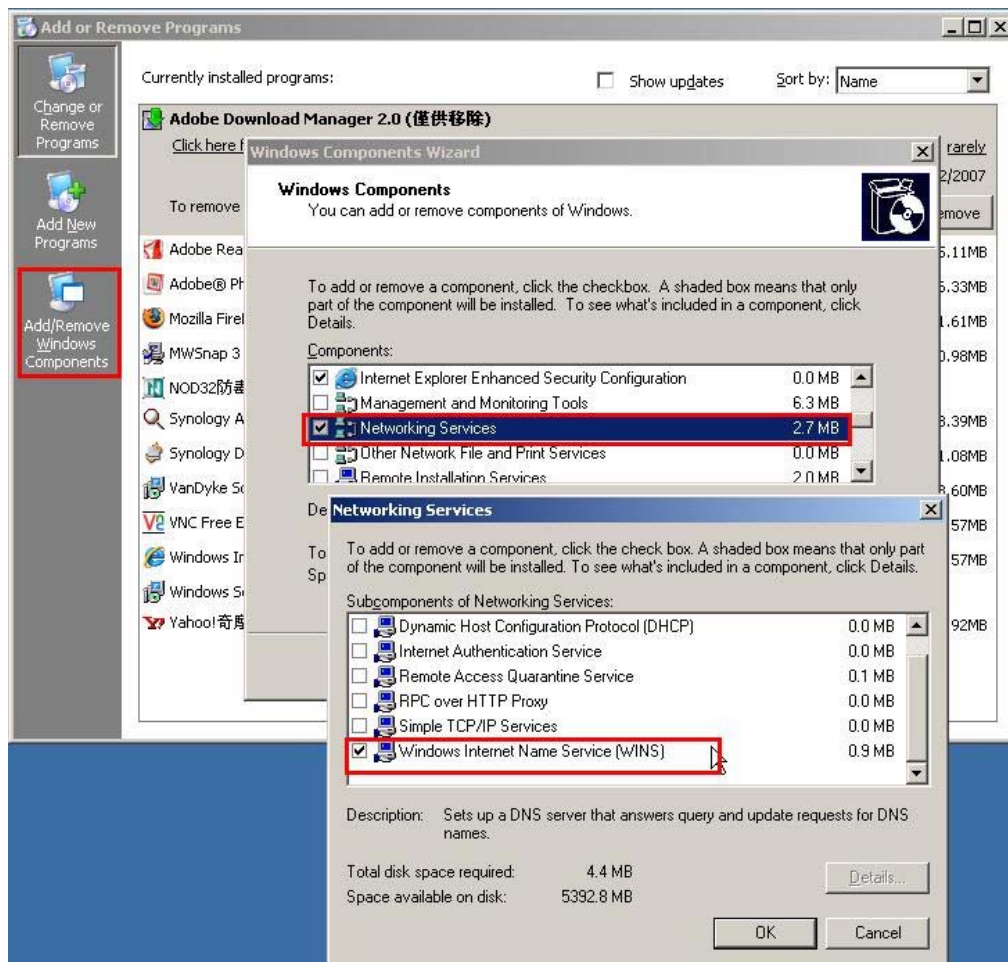
Step3: Please try to use both domain names \$(domain_nebios_name)\\$(user_name) and \$(domain_FQDN_name)\\$(user_name) when accessing shared folders.

Note:

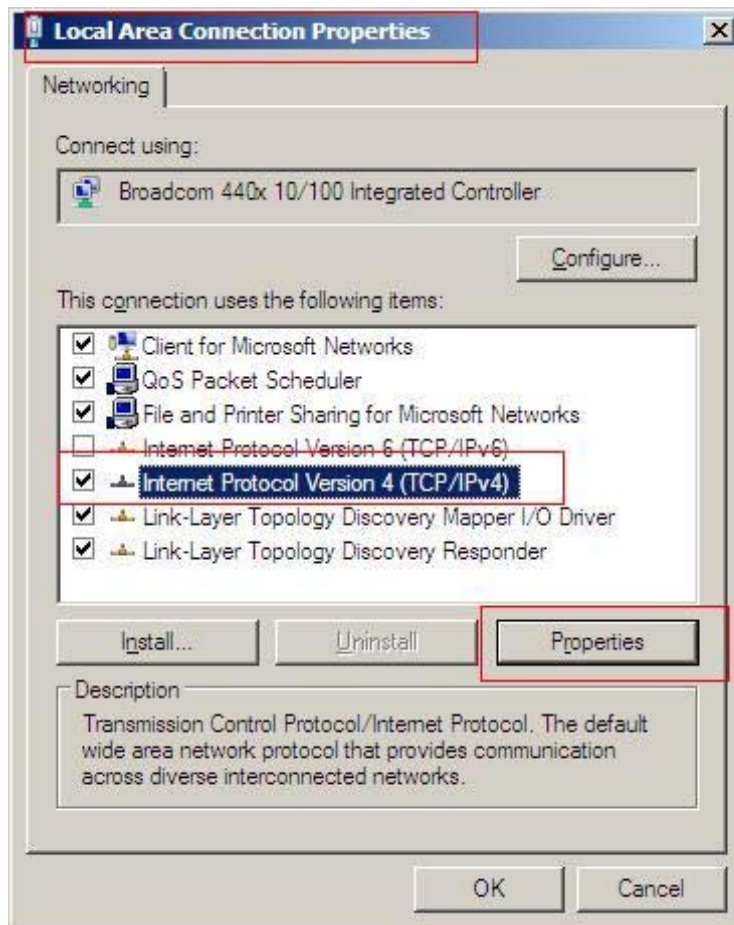
1. If you still cannot access shared folders, please contact Synology for further assistance.
2. If you can only access the Synology NAS Server with IP, it means the PC's time setting is not synchronized with that of domain controller and the Synology NAS Server. If the time setting is synchronized, then users can use NetBIOS name of the Synology NAS Server to map network drive.

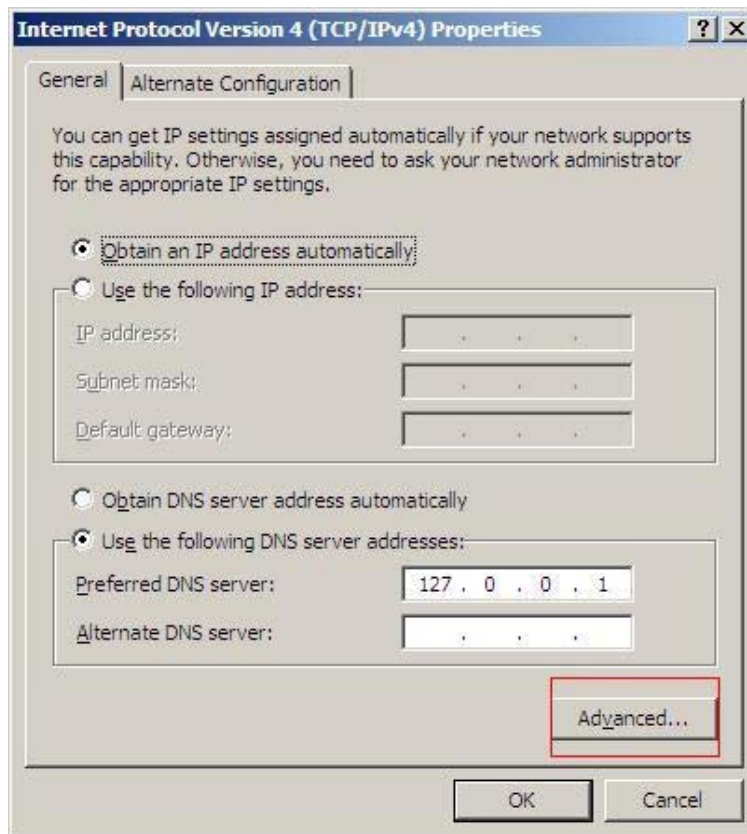
Q11: How do I join domain in different subnets?

Step1: Add a WINS server which is in the same subnet with the DC. (Go to Control Panel > Add or Remove Programs > Add/Remove Windows Components > Network Services to add, as below framed in red).

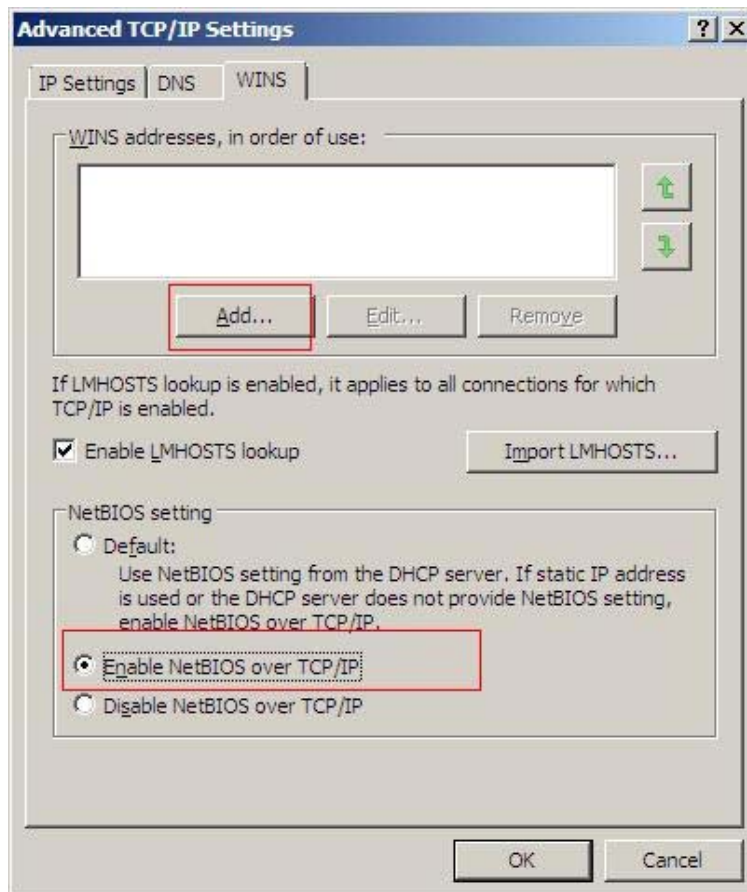


Step2: Add the WINS server to the DC (Go to Local Area Connection > Internet Protocol (TCP/IP) > Properties > Advanced > WINS > Add).





Step3: On the same page, select "Enable NetBIOS over TCP/IP".



Step4: Add the WINS server to your Synology NAS Server (Go to “Network Services > Win/Mac OS” page)

Q12: What should I do when I receive the error message “Failed to connect to the server. The client may not to be connected with the server or the client does not pass the authentication. (Error code: 1240) when using domain user map to drive by assistant”?

Follow the steps below when you received the error message:

Step1: Type “regedit” in command of windows client.

Step2: Set RequireSecuritySignature to 0. The path is:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanWorkstation\Parameters\RequireSecuritySignature

Q13: Why can't some domain users log in or map drive while others can?

Follow the steps below to solve this problem:

Step1: Delete accounts that cannot log in from domain server and re-create them.

Step2: Reboot the Synology NAS Server.

Step3: Please examine domain FAQ **Q10: *What should I do when I cannot access shared folders as a domain user even with the correct password?*** about the issue of time synchronization with PC.

Q14: Why can't any domain users within my domain log in or map drive?

Follow the steps below to solve this problem:

Step 1: Make sure the domain controller is activated and functions properly.

Step 2: Make sure network connection between the Synology NAS Server and the domain controller is good, including firewall setting.

Step 3: If step 1 and 2 help solve the problem, please then try to log in or map network drive again. If step 1 and 2 does not work, please try to leave the domain and re-join again.

Q15: Why can't some domain users access the Synology NAS Server after privileges are set?

If domain users cannot access the domain after their privileges being set, follow the steps below to solve the problem.

Step1: Have domain users leave the domain first.

Step2: Upgrade the Synology NAS Server to firmware version 0700 or onwards.

Step3: Have domain users re-join the domain.

Note: Synology Disk Station Manager version 0700 and onwards ensure larger domain support.

Q16: How do I join domain in a Windows server 2008 domain controller?

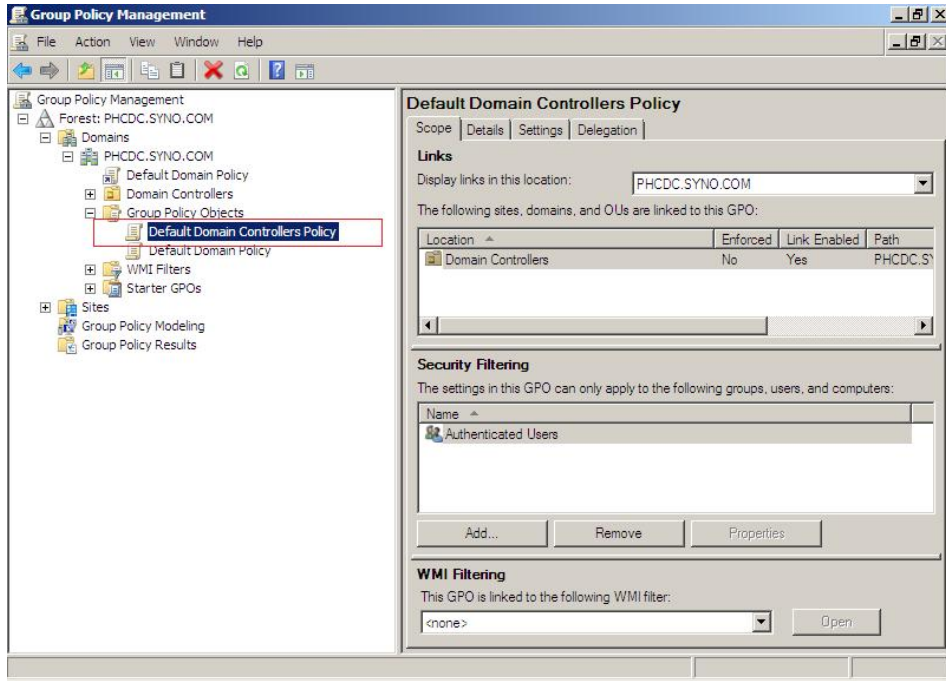
Follow the steps below to join domain hold by Windows server 2008:

Step1: Upgrade the Synology NAS Server to firmware version 0700 or onward.

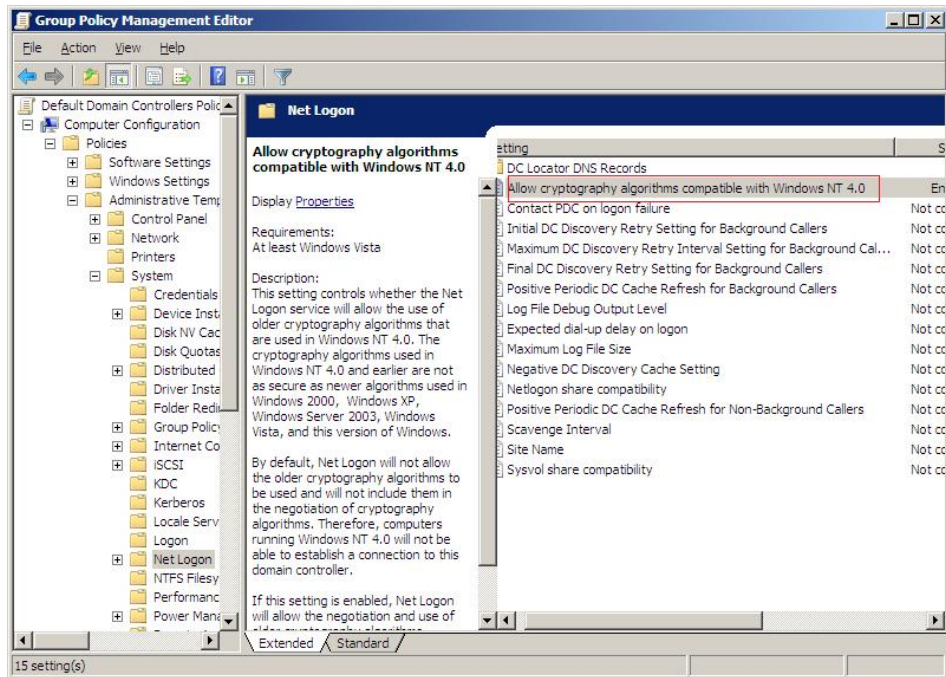
Step2: Enable the domain controller's security policy "Allow cryptography algorithms compatible with windows NT 4.0" by following the steps below:

Step2-1: Run command "gpmmc.msc" in command prompt of Windows server 2008.

Step2-2: Go to "Group Policy Management > Forest > Domains > Your domain > Group Policy Objects", right click "Default Domain Controller Policy", and then click "Edit". (do not understand this sentence)



Step2-3: Go to “Default Domain Controller Policy > Computer Configuration > Policies > Administrative Template > System > Net Logon”, enable the policy “Allow cryptography algorithms compatible with windows NT 4.0”.



Step2-4: In command prompt, type “net stop netlogon” and enter.

Step3: Setting the Synology NAS Server’s DNS server, make sure the Synology NAS Server can find FQDN name of domain. (Normally, the domain controller is the DNS server)

Step4: Setting the Synology NAS Server’s NTP server as the domain controller, and then synchronize time setting immediately

Step5: On the Synology NAS Server management UI, enter the NetBIOS name or FQDN name of win2008 domain to join Windows server 2008 domain.

Document Revision History

This table describes the changes to the *Synology NAS Server Windows ADS FAQ*.

Date	Note
2008-11-14.	Document originally released
2008-10-31	Document drafted