



**Network Attached Storage  
QNAP Disk On-line Server**

**NAS Series  
How to Join AD Domain**

## Check the following items before joining AD domain:

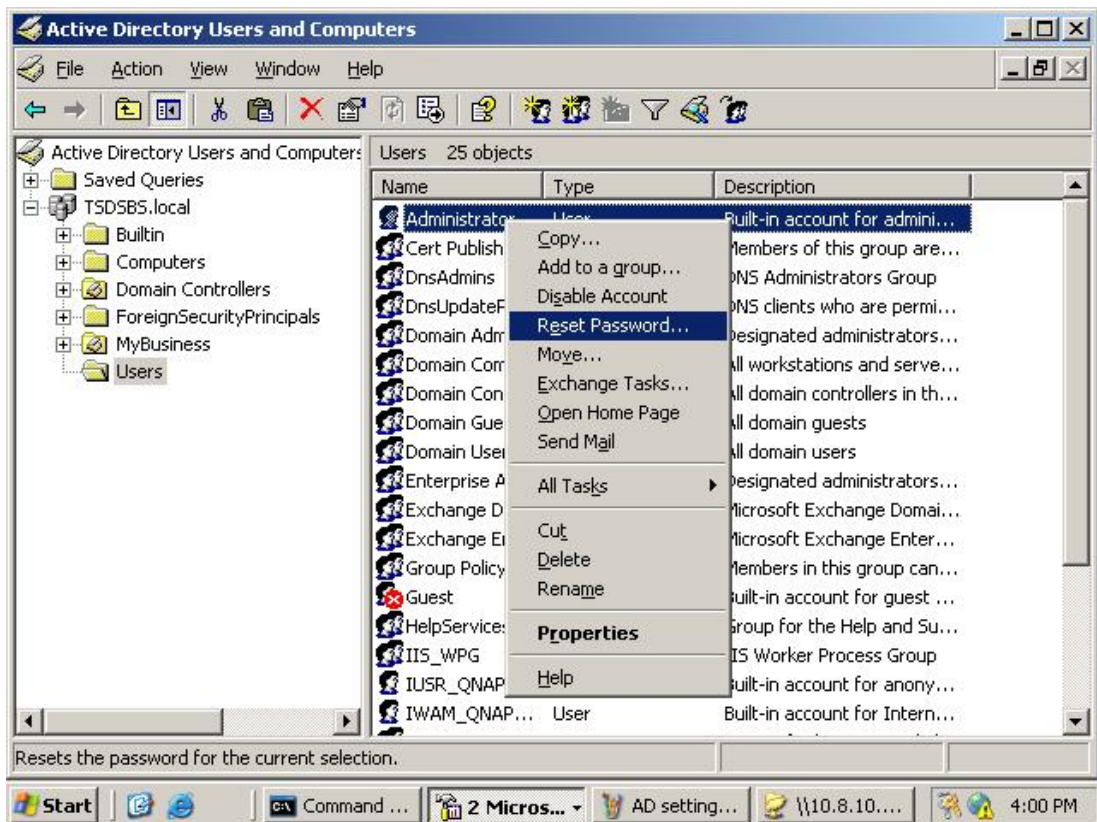
NAS firmware version V4.x can only be joined to pure AD domain (DC, domain controller). To join PDC domain (NT Server, or Windows 2000 with Mixed Mode), please ask your distributor to degrade NAS firmware version to V3.x. It is suggested to use Windows 2000 Service Pack 4 or Windows 2003 Service Pack 1.

## Check your AD server settings:

1. Make sure you have enabled Active Directory Service on the Windows server. If you have enabled AD, you can find the menu "Active Directory Users and Computers" on "Administrative Tools" of Windows.



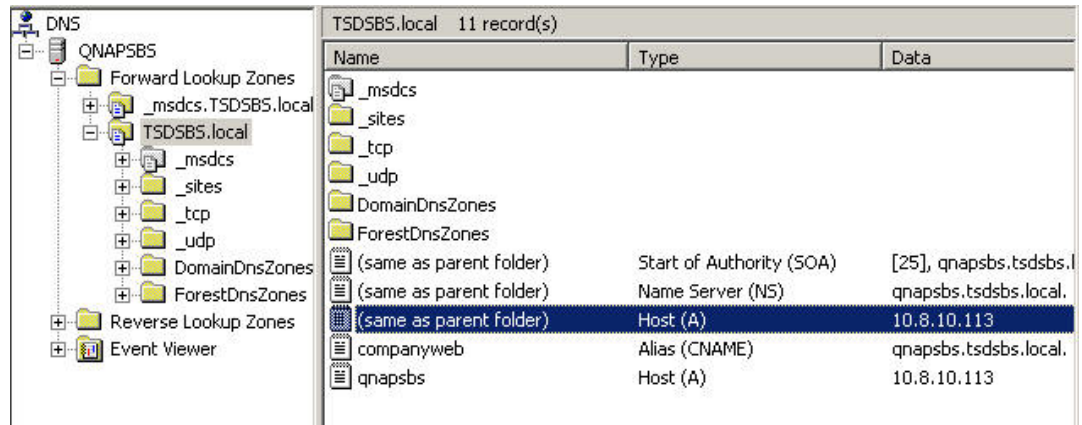
2. Reset the password of "administrator" account on AD server after creating "Active Directory" service on AD server.



- The DNS server settings on the AD server should have at least two records.

For example, you have an AD server with IP address **10.8.10.113**, server name: **qnapsbs.tdsbs.local**, domain name: **tdsbs.local**

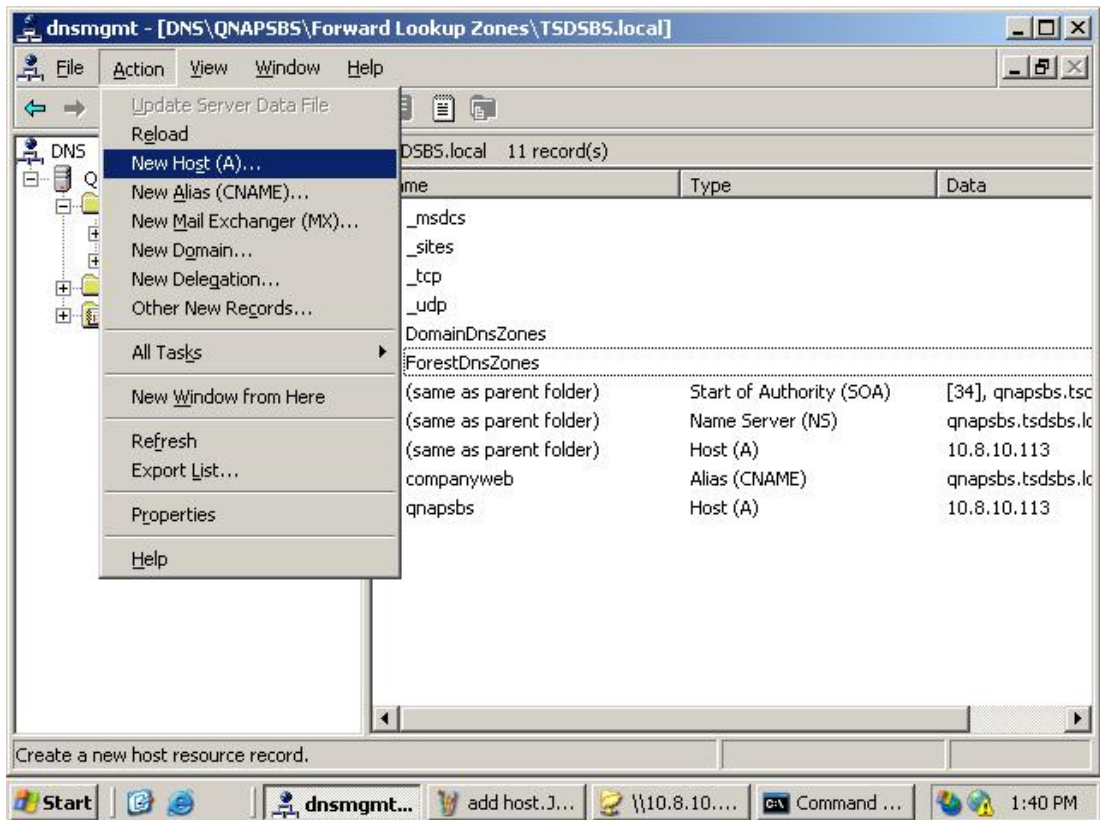
DNS settings on AD server:



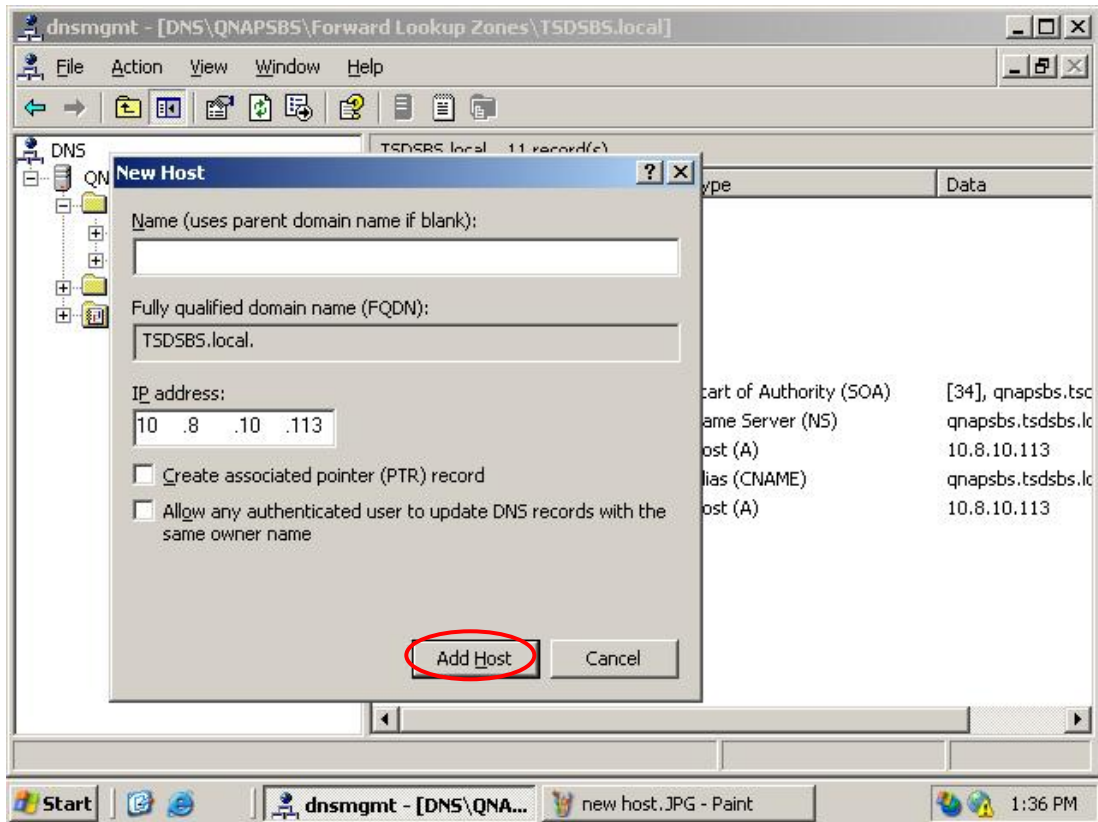
- "A record" for AD server itself → **qnapsbs** **Host(A)**  
**10.8.10.113**
- "A record" for domain → **(same as parent folder)** **Host(A)**  
**10.8.10.113**

**\* How to create "A record" for domain on DNS settings:**

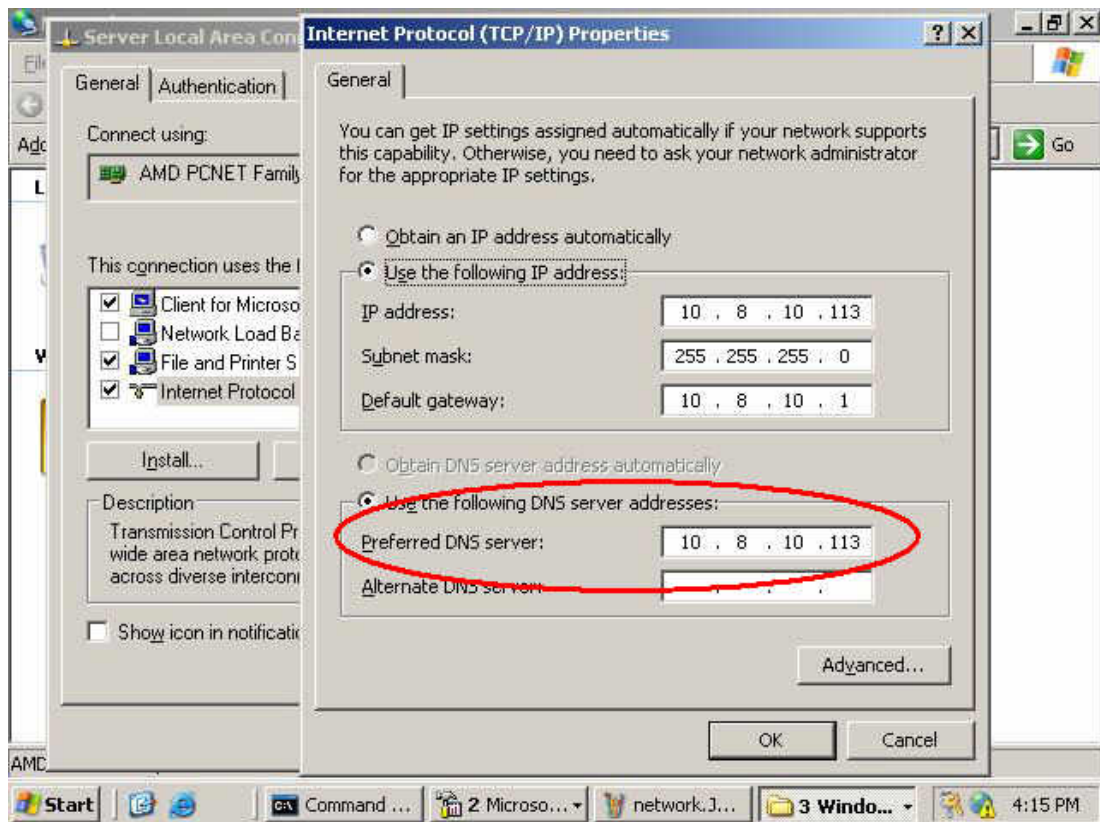
- a. On "dnsmgmt", select New Host(A) in Action.



- b. Enter IP address: 10.8.10.113 (AD server IP address), and then click "Add Host".



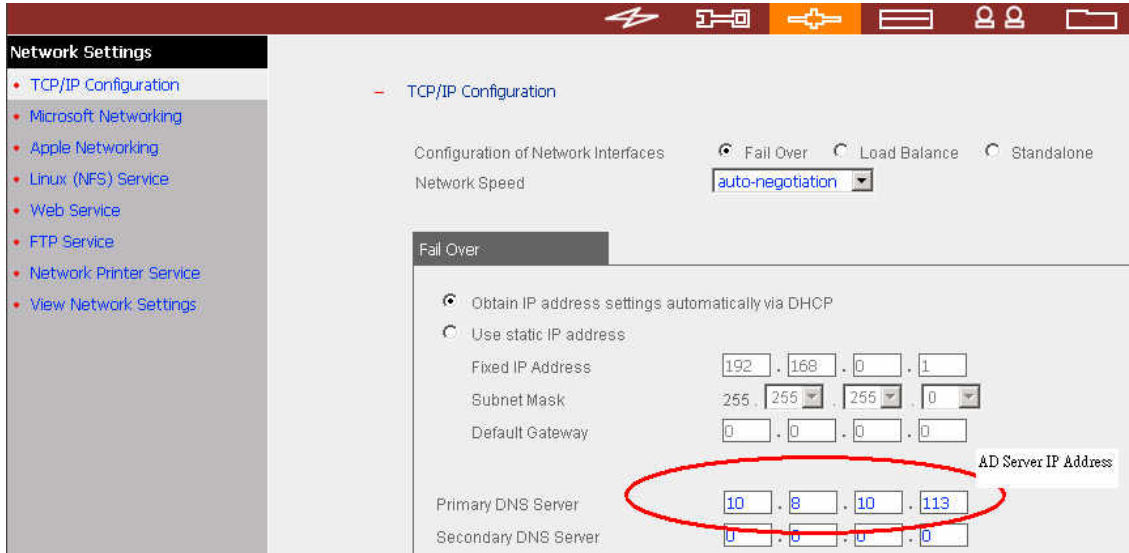
4. The DNS IP on "Network setting" of AD server should have a record of the AD server IP.



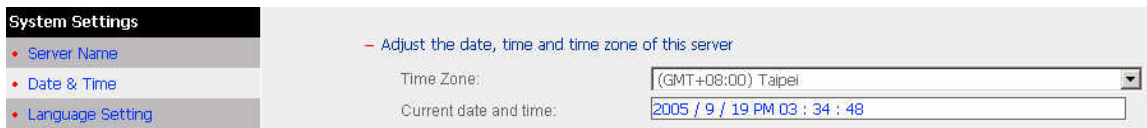


**Check the following items on NAS :**

- i. DNS server setting on NAS should be directed to AD server.



- ii. Check the "time zone" and "Current date and time" on NAS, AD server can synchronize only if their time difference is less than 5 minutes.





5. You should use the full domain name in AD settings of NAS.

For example, if your FQDN name of AD server is "qnapsbs.tdsbs.local", you should use "**tdsbs.local**" as the domain name.

Domain Username must be entered for AD domain. (We use "**administrator**" in this case).

The screenshot shows the 'Network Settings' window with the 'Microsoft Networking' section selected. The 'Enable file service for Microsoft networking' checkbox is checked. Under the 'AD Domain Member' radio button, the following fields are filled: 'Server Description' is 'NAS Server', 'Workgroup' is 'TSDSBS', 'Domain Name' is 'tdsbs.local' (circled in red), 'Domain Username' is 'administrator', and 'Password' is masked with asterisks. There are also checkboxes for 'Enable WINS server', 'Use the specified WINS server', and 'Domain Master', all of which are unchecked. The 'WINS server IP address' field is empty. An 'Apply' button is visible at the bottom right.

6. NAS and AD server will synchronize each 5 minutes. To configure the settings manually, NAS has to be set as standalone mode and then added to AD domain again.

If you cannot join AD domain, please switch to "Standalone" setting. Check all the settings and join AD again.

The screenshot shows the 'Network Settings' window. On the left, a sidebar lists various network services, with 'Microsoft Networking' selected. The main area is titled 'Microsoft Networking' and contains the following options:

- Enable file service for Microsoft networking
- Standalone Server (circled in red)
- NT Domain Member
- AD Domain Member

Below these options are input fields for:

- Server Description: NAS Server
- Workgroup: TSDSBS
- Domain Name: (empty)
- Domain Username: (empty)
- Password: (empty)

The screenshot shows the 'Network Settings' window. On the left, a sidebar lists various network services, with 'Microsoft Networking' selected. The main area is titled 'Microsoft Networking' and contains the following options:

- Enable file service for Microsoft networking
- Standalone Server
- NT Domain Member
- AD Domain Member

Below these options are input fields for:

- Server Description: NAS Server
- Workgroup: TSDSBS
- Domain Name: tsdsbs.local
- Domain Username: administrator
- Password: (masked with asterisks)

Additional options at the bottom include:

- Enable WINS server
- Use the specified WINS server
- WINS server IP address: (four empty boxes)
- Domain Master

An 'Apply' button is located at the bottom right.

## Notes on joining AD:

- i. After joining NAS to AD domain, you must login the share folder of NAS by "**domain\_name\Username**". NAS local user account cannot be used anymore on network sharing.

For example: norman is an account on the AD domain (tsdsbs.local):



- ii. AD can be joined successfully even if NAS and AD server are on different subnets.
- iii. After NAS has joined AD domain, the authority of "everyone" will not work, "everyone" is the original account of NAS, but is not included AD. Therefore the authority has to be reset.
- iv. DNS settings on Windows 2000 server should be added as "Active Directory DNS".
- v. If you change the DNS setting on the Windows server, please reboot the server to avoid DNS cache error.