

Thecus N4100 FAQ

- Thecus N4100 FAQ 1
 - 1. NAS Management 1
 - 1-1. Map a network drive in Windows XP 1
 - 1-2. Map a network drive in Mac OS X.....2
 - 1-3. Configure the firewall software such as Norton Internet Security2
 - 1-4. Firmware upgrade procedure2
 - 1-5. Time, Time Zone and NTP Server2
 - 1-6. Reset NAS IP and admin password3
 - 2. RAID Management3
 - 2-1. Hard disk drive compatibility.....3
 - 2-2. Rebuild a degraded RAID3
 - 2-3. Multiple RAID volumes4
 - 2-4. RAID volume expansion.....4
 - 2-5. RAID migration.....4
 - 3. Services & Functions4
 - 3-1. ADS support4
 - 3-2. Wireless LAN5
 - 3-3. FTP user's home5
 - 3-4. Nsync5
 - 3-5. N4100 disappeared from My Network Places5
 - 4. Miscellaneous5
 - 4-1. Performance level5
 - 4-2. System memory size5
 - 4-3. Share the data over the Internet.....6

1. NAS Management

1-1. Map a network drive in Windows XP

Once you have successfully created the RAID on N4100, follow the steps below to map network drive.

- 1) Create a user john. [Admin Web GUI : Accounts / Users / Add / john]
- 2) Create a share folder on N4100 such as Picture. [Admin Web GUI : Storage / Folder / Add / Picture]
- 3) Set the folder ACL let user john become writable to folder Picture. [Admin Web GUI : Storage / Folder / Picture / ACL / Submit john into writable column]
- 4) Map a drive Z which is corresponding to the share folder Picture on N4100. [Windows XP : Right click *My Network Places* and select *Map Network Drive*]
- 5) Fill in the N4100 folder information such as [\\192.168.1.100\Picture](http://192.168.1.100/Picture) and click "using a

different user name". Then fill in the user name john and the password.

6) Network drive Z will be successfully mapped.

1-2. Map a network drive in Mac OS X

Once you have successfully created the RAID on N4100, follow the steps below to map network drive.

- 1) Create a user john. [Admin Web GUI : Accounts / Users / Add / john]
- 2) Create a share folder on N4100 such as Picture. [Admin Web GUI : Storage / Folder / Add / Picture]
- 3) Set the folder ACL let user john become writable to folder john. [Admin Web GUI : Storage / Folder / Picture / ACL / Submit john into writable column]
- 4) Find the share folder of N4100 by Finder. [Mac OS X : Network / Select the Group N4100 belongs to / Select N4100 / Click on Connect button]
- 5) Select the SMB/CIFS shared volume you want to connect to. [Picture]
- 6) Click on Authenticate button. [Authenticate]
- 7) Fill in the workgroup, name, and password. Then check "Remember this password in my keychain" and OK.
- 8) Folder Picture will be listed in Finder as an icon.

1-3. Configure the firewall software such as Norton Internet Security

- 1) Double click the NIS icon on system tray, and then configure the *Personal Firewall*.
- 2) On *Programs* page, find the *SetupWizard.exe* and change its permission to "Permit All". If it's not in the program list, use *Add* or *Program Scan* button to find it.
- 3) On *Networking* page, manually add N4100 IP address, say 192.168.1.100, to the *Trusted* list.

1-4. Firmware upgrade procedure

For the details about firmware upgrade procedure, please refer to the document at http://www.thecus.com/Downloads/N4100_FWUPG_1200.pdf .

1-5. Time, Time Zone and NTP Server

Since firmware v1.2.00 you are able to set the NTP Server to keep the NAS time synchronized. However, if the NAS can not access the Internet, you may encounter a problem to set the Time and Time Zone. In case it happens, please do this way.

- 1) Click No NTP Server.
- 2) Set Date, Time, and Time Zone.
- 3) Click Apply button.

In addition, if the NAS is able to access the Internet and you want to keep the NTP Server clock.isc.org by default, please make sure the DNS Server is correctly set thus the NTP Server name could be correctly resolved. [Network / LAN 1 / DNS Server]

1-6. Reset NAS IP and admin password

In case you changed the N4100 IP address and then forgot it, or forgot the password of admin, follow the steps below to reset to default settings.

- 1) Power on the N4100 and immediately press the Reset button for 10 seconds.
- 2) This resets the N4100 to its default IP address and password settings. For firmware v1.2.00 and later, Jumbo Frame support will also be disabled.
Default IP: 192.168.1.100 for LAN1 and 192.168.2.100 for LAN2
Default admin password: admin
Jumbo Frame support: disabled

2. RAID Management

2-1. Hard disk drive compatibility

N4100 could not recognize any hard disk drives with SSC (Spread Spectrum Clocking) enabled. So far we know some of Hitachi SATA 1.5G and Seagate Barracuda 7200.9 drives were shipped with SSC enabled by default. Moreover, it cannot be fixed by firmware upgrade. So please make sure SSC has been disabled before installing the drives in N4100. The procedure for 7200.9 is as the following.

- 1) Download SSC Toggle Utility from Seagate website.
<http://www.seagate.com/support/kb/disc/faq/ssc.html>
- 2) Create a bootable disk.
- 3) Copy SETSSC.EXE to the bootable disk.
- 4) Remove all HDD from PC, just install Seagate HDD.
- 5) Boot up PC from floppy disk.
- 6) When booting is done and system shows prompt A:\>, type "sscset" to run SSC Toggle Utility.
- 7) When get into the SSC Toggle Utility, press "t", and then a red message "SSC Is Currently DISABLEED" will pop up on the screen. In case you see a green message "SSC Is Currently ENABLED", please press "t" key again to disable it.
- 8) Now the Seagate HDD has SSC disabled. The function takes effect immediately, so no need to save the setting.

2-2. Rebuild a degraded RAID

In case one HDD failed in RAID 1 or RAID 5 configuration, please hot unplug failed one and hot plug in new one; then RAID rebuilding will automatically start. If the replacement is done after NAS rebooting or shutdown, administrator has to manually add spare in Admin Web GUI to start the RAID rebuilding.

- 1) Login into Admin Web GUI as admin.
- 2) Check new HDD as a spare and then rebuild the RAID. [Storage / RAID / Config / Check new HDD as a spare / Add spare]

2-3. Multiple RAID volumes

N4100 doesn't support multiple RAID volumes. It means the following configurations are not allowed.

- Configure HDD 1 and 2 as RAID 1. Then configure other HDD as another RAID volume.
- Configure HDD 1 and 2 as RAID 0. Then configure other HDD as another RAID volume.
- Configure HDD 1, 2, and 3 as RAID 5. Then set HDD 4 as a single disk (JBOD).

2-4. RAID volume expansion

N4100 doesn't support RAID volume expansion. It means that once a RAID 5 with three HDD created, inserting 4th HDD won't expand the total usable capacity. It will just work as a spare disk.

2-5. RAID migration

Once a RAID has been set, you could not add more disks and change the RAID mode. Say, create a JBOD with one HDD, then you could not change it to RAID 5 even another two or three HDD are added.

3. Services & Functions

3-1. ADS support

Here is an example for setting up an ADS support. [Accounts / Authentication / ADS/NT Support / Enable]

ADS Support	
WINS Server	
Work Group/Domain Name	thecus
ADS Support	Enable
ADS Server Name	adserver
ADS Realm	thecus.com
Administrator ID	Administrator
Administrator Password	*****
Confirm Password	*****

In addition, you have to note something listed below.

- 1) The administrator password means that of ADS admin, instead of N4100 admin.
- 2) The DNS server of LAN1 configuration should be correct thus the ADS server name could be successfully resolved.
- 3) The time and time zone should be identical on both N4100 and ADS.

3-2. Wireless LAN

N4100 supports the following wireless min-PCI cards; which are based on Ralink RT2561 chip.

- MSI MS-6833B
- CNet CWM-854
- Gemtek WMIR-174G

3-3. FTP user's home

Owing to the design concept of NAS is different from a traditional FTP server, FTP users won't enter their home directory when logged in. The FTP root folder is with read-only permission and FTP users have to manually change to sub-folders to put files or create subfolders. Of course they have to be in the writable list of the folder ACL.

3-4. Nsync

Nsync is a folder-to-folder level synchronization/backup function brought by Thecus NAS N4100. The backup task could be scheduled periodically or manually start it whenever you want. Basically you will need a target machine to store the backup data. Either another N4100 or a traditional FTP server is okay. For more details, please refer to Nsync quick guide.

3-5. N4100 disappeared from My Network Places

In case the NAS users are accessing the NAS via the host name rather than its IP, the mapped network drives may occasionally disappear. At this moment, N4100 also disappears from My Network Places. This issue had been fixed on firmware v1.0.15b, v1.2.01, and later release.

4. Miscellaneous

4-1. Performance level

In general, the transfer rate of N2100 is around 8 ~ 12 MB/sec; but it may vary a lot according to different network environment.

Jumbo Frame could significantly improve the performance. However, before enabling it, you have to make sure the Switch or Router in front of the N2100 supports Jumbo Frame. Otherwise, you may lose connection with the NAS. In case it happens, use reset button (FAQ 1-6) to disable Jumbo Frame.

4-2. System memory size

Some users are wondering if they could replace the memory module with bigger capacity. Firstly, N4100 features Intel XScale technology and needs special memory timing. So, not all memory modules can work on it. In case customers replace the certified module with another one, either the same or different size, the NAS might be unstable or no boot. The worst case we encountered is, some incompatible memory modules seem work fine at

system booting, but suddenly cause NAS locked up at heavy loading. It's terrible that users may feel the memory module work well but NAS is unstable.

System memory is not a user serviceable part. Please do not replace the memory modules. Changing memory modules might cause system instability and data loss.

4-3. Share the data over the Internet

You could share with friends the data on the NAS. Just refer to this case study:

http://www.thecus.com/storage_case03.php

EOF