

Setting up CIMCO NFS for Heidenhain

CIMCO NFS is a simple but very effective software for installation, configuration and for transmitting files to your TNC. The Cimco NFS server is suited for Windows 9x / Windows NT / 2000 / XP / 2003 / 2008 / 2011, Server 32 und 64Bit, Windows 7 32 and 64Bit and Windows 8.

The shared folders on the server are called exports. When a CNC machine connects to the NFS server, it must specify which export to use. The NFS server can handle multiple exports, so it is possible to export more than one folder on the same computer. It is also possible to export the same folder with different export names and access rights.

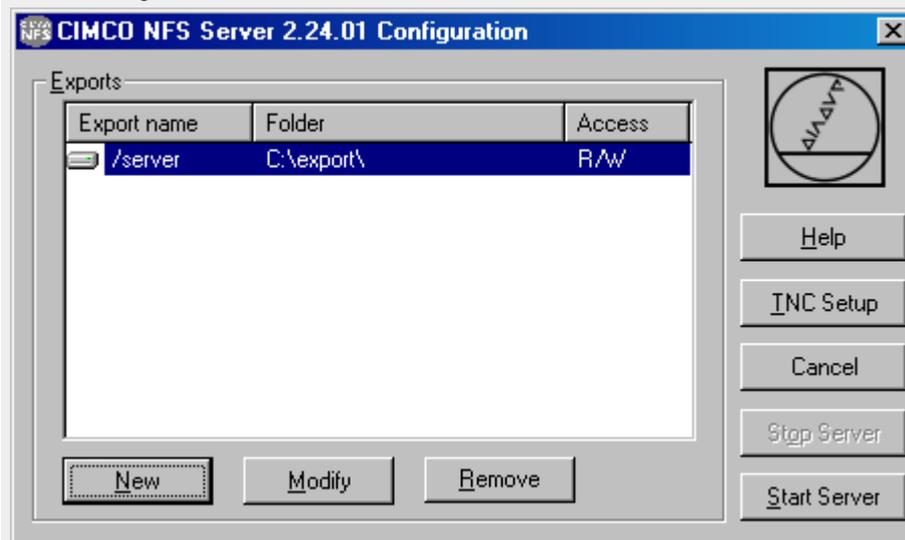
Installation

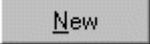
You use the CIMCO NFS configuration program to set up and start the NFS server.

You must log in with administrator privileges when configuring and starting the CIMCO NFS server. On Windows NT / Windows 2000 / XP / 2003 the server runs as a service. It is possible to start the NFS server automatically each time the computer starts.

Start the SETUP.EXE on your CD and follow the instructions on the screen.

The NFS configuration main window:



	Creates a new exported folder. An exported folder can be accessed by the CNC machines via the network.
	Edits the settings for the selected export.
	Deletes the selected export.
	Starts the NFS server and exits the NFS configuration program, saving all changes. In Windows NT / Windows 2000, the NFS server software is immediately updated, if already running, otherwise it is started as a service. In Windows 9x, it is necessary to restart Windows to implement any changes.

Stop Server	Stops the NFS server software from running, and terminates the NFS configuration program. Under Windows NT / Windows 2000, it also removes the service.
Cancel	Exits the NFS configuration program without implementing or saving any changes.
INC Setup	Accesses a help file, showing how the HEIDENHAIN TNC control is to be set up, for the NFS communication to function.
Help	Activates the HELP file.

iTNC530 (NFS protocol)

DEFINE NET	
Configuration of the control for operation with an NFS server (CIMCO NFS Server). Press  and then enter the code number NET123 .	
ADDRESS	IP address of the control e.g.: 192.168.25.120
MASK	Subnet mask of your network e.g.: 255.255.255.0
BROADCAST	Empty; or broadcast address of your network e.g.: 192.168.25.255
ROUTER	Empty; or IP address of the router e.g.: 192.168.25.254
HOST	Empty; or alias name under which the iTNC logs onto the network. e.g.: tnc530 If you are working with a host table: WIN 95 / 98 c:\Windows\hostsLINK WinNT / 2000c:\Winnt\system32\drivers\etc\hostsLINK In the "hosts" file enter the host name as follows: 192.168.180.3 tnc03 # Service TNC, Training/Prog
DOMAIN	Blank; or domain name of your NC control e.g.: tnc Note: If you are working with a "hosts" file, you can enter the path here. e.g.: tnc:\hosts
NAMESERVER	Empty; or IP address of the DNS server e.g.: 192.168.25.251
DEFINE MOUNT (NFS)	
MOUNTDEVICE	Name of the share (directory) that is to be mounted. This entry consists of the IP address of the server followed by a colon and the export name you have defined in the CIMCO NFS Server;. e.g.: 192.168.25.120:/send

MOUNTPOINT	Alias name the control displays in the file manager. Any desired name may be entered; the maximum length is 8 characters followed by a colon. These settings are independent of the file system type: e.g.: world :
FILESYSTEMTYPE	Type of file system. For operation on an NFS server enter " NFS ".
OPTIONS	Enter the packet size for data reception (rsize), data transmission (wsize), the repetitions of the Remote Procedure Call (time0) as well as the number of repetitions (soft). e.g.: rsize=4096,wsize=4096,time0=10,soft
AM	Automount: Yes = 1 / No = 0 If AM = 1, the control connects to the drive automatically after it has been switched on.
PING	
HOST	IP address of the computer you want to ping. e.g.: 160.1.11.58
TRY	Acknowledgment: HOST RESPOND <ul style="list-style-type: none"> • Connection via TCP/IP exists • No control by NFS protocol <p>Acknowledgment: TIMEOUT</p> <ul style="list-style-type: none"> • No connection to IP address <p>Check:</p> <ol style="list-style-type: none"> 1. Is the TCP/IP protocol of your computer active? 2. Have you entered the correct IP address in the control and is this address identical with the data in your computer? Does the HOSTS file contain the IP address and the name of the control? Example: 192.168.180.100 tnc01 3. Is the wiring okay? (See HARDWARE overview) <p>Acknowledgment: CANNOT ROUTE Data packet could not be transmitted. Check the Internet address of the server and of the router to the TNC.</p>
DEFINE UID / GID	
TNC USER ID	Definition of which USER identification the end user uses to access files in the network. Ask your network administrator for this value. e.g.: 500
OEM USER ID	Definition of which USER identification the OEM uses to access files in the network. Ask your network administrator for this value. e.g.: 501
TNC GROUP ID	Definition of the group identification with which you access files in the network. Ask your network administrator for this value. The group identification is the same for end users and machine manufacturers. e.g.: 100
UID for mount	Defines the USER identification for the log-on procedure. Ask your network administrator for this value. e.g.: USER The user logs on with the USER identification. e.g.: ROOT The user logs on with the ROOT identification.

TNC320, TNC620 (NFS protocol)

CONFIGURING THE NETWORK

Configuration of the control for operation with an NFS server (e.g. CIMCO NFS Server). Select the **NETWORK** softkey in the file manager (PGM MGT).

Press  and then enter the code number **NET123**.

If no alphanumeric keyboard is connected to the control you can display the screen keypad by pressing . Press the **DEFINE MOUNT** soft key to open the dialog box enter for the general network configuration.

Hostname	Name under which the control logs onto the network. This entry is required for working with DHCP. If no name is entered, NULL authentication is used.
DHCP	With DHCP (D ynamic H ost C onfiguration P rotocol) the control retrieves its IP address, subnet mask, default router and possibly sthe broadcast address from a DHCP server. The DHCP server identifies the control by its hostname.
IP address	IP address of the control e.g.: 192.168.25.120
Subnet mask	Subnet mask of your network e.g.: 255.255.255.0
Broadcast	Empty; or broadcast address of your network e.g.: 192.168.25.255
Router	Empty; or IP address of the default router e.g.: 192.168.25.254

DEFINE NETWORK CONNECTION (NFS)

Mount device	Name of the share (directory) that is to be mounted. This entry consists of the IP address of the server followed by a colon and the export name you have defined in the CIMCO NFS Server;. e.g.: 192.168.25.120:/send
Mount point	Alias name the control displays in the file manager (PGM MGT). Any desired name may be entered; the maximum length is 8 characters followed by a colon e.g.: world:
File system	Type of file system. For operation on an NFS server enter " NFS ".
NFS option	Enter the packet size for data reception (rsize), data transmission (wsize), the repetitions of the Remote Procedure Call (time0) as well as the number of repetitions (soft). e.g.: rsize=4096,wsize=4096,time0=10,soft=1
Automatic connection	Automount: Yes / No If AM = Yes , the control connects to the drive automatically after it has been switched on.

PING

Host	IP address or hostname of the computer you want to ping. e.g.: 192.168.25.120
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NETWORK INFORMATION

lo	Information on the local loop-back address.
eth0	Information on Ethernet address and MAC address.