

NETWORK INTERFACE CARD

VOL-N100VF



Volition™
Network Solutions

3M *Innovation*

Installing the 3M VOL-N100VF

Introduction

This manual describes the steps necessary to install the software for the VOL-N100VF Network Interface Card assuming that you have used the Quick Install Guide to install your hardware. After installing the card in your computer, follow the instructions for loading the appropriate software for your system. Software is included in this package to configure the card for any of the systems listed below.

- Windows NT
- Windows 98
- Windows 95
- Netware
- HP-UX
- Irix
- Solaris
- Macintosh

Windows NT

1. Insert the installation disk into your machine's disk drive.
2. Open '**Control Panel**'.
3. Open '**Network**'. The network configuration window will appear.
4. Select '**Adapters**'. A list of available adapters will appear in the list window.
5. Select '**Add**'.
6. Select '**Have Disk**' and enter the name of the drive with the installation disk, followed by the directory '**winnt4**'.

For example: '**D:\winnt4**'.

The OEM Option window will appear. This window lists the software you can install.

7. Select '**3M VOL-N100VF Fiber 100Mbps Fast Ethernet Adapter**'. The software will load and the newly installed adapters will appear in the adapter window.
8. Select '**Close**'. At this point, the dialog appears for assigning network addresses.

Windows '98

The VOL-N100VF is a plug-and-play device and will be automatically detected upon boot up. Windows 98 will suggest loading its own driver, however, we recommend loading the driver on the 3M Installation CD.

6. Upon bootup, the Windows 98 Wizard will search for the appropriate drivers. Select '**Next**'.
7. Select the option to display a list of drivers in a specific location. Select '**Next**'.

8. In the Select Device window, select '**Have Disk**'. Then select '**Browse**' and select the drive containing the 3M CD. Find the '**Win98**' directory and highlight the file '**m100vf98.inf**'.
Select '**OK**'
9. Verify that the driver selected is the '3M VOL-N100VF 100 Mbps Ethernet Card (NDIS4)' driver and select 'B'. Then select '**Next**'.
10. When the machine has completed the file copy, select '**Finish**' and restart the computer.

After restarting Windows 98, you should be able to connect to your network by selecting the '**Network Neighborhood**'.

Windows '95

The VOL-N100VF is a plug-and-play device and will be automatically detected upon boot up. Windows 98 will suggest loading its own driver, however, we recommend loading the driver on the 3M Installation CD.

1. Upon bootup, the '**New Hardware Found**' menu will appear.
2. Select '**driver from disk provided by hardware manufacturer**'.
3. Select '**Browse**'. Locate the 3M CD-ROM and Select the '**Win95**' directory. Select '**3M VOL-N100VF 100 Mbps Ethernet Card (NDIS3)**'.
4. Verify that you have selected the correct path. Select '**OK**'.
5. Restart your computer.

After restarting Windows 95, you should be able to connect to your network by selecting the '**Network Neighborhood**'.

Note: If you are using a version of Windows 95 released before *Service Pack 2.x*, please follow the instructions found in the online documentation.

Netware V.4x and V.5x

Installation using the *INSTALL* or *NWCONFIG* programs:

1. From Console type '**load cdrom**' followed by typing '**cd volume list**'. Note the volume number.
2. Type '**CD mount #**' where # represents the volume number. Then type '**volumes**' to verify the CD volume is mounted.
3. At the NetWare console screen, type '**LOAD INSTALL**' or '**NWCONFIG.**' (for NetWare
4. At the '*Installation Options*' menu, select '**Driver Options**'. At the '*Driver Options*' menu, select '**Configure Network Drivers**'. Two windows will appear: '*Selected Network Drivers*', and '*Additional Driver Actions*'. From the menu select '**Select a Driver**'.
5. When the driver listing window appears, press the *Ins* or *Insert* key to load a driver from disk. At the prompt, press **F3** to specify a different path than the default.
6. Enter the path '**3M:\nwserver\n4**' or '**3M:\nwserver\n5**'
7. After a few seconds, a menu will appear listing the drivers; select '**M100FX.LAN**'.
8. At the prompt asking whether to copy the driver, choose '**Yes**'.
9. If the program asks: "*save the existing files M100FX.LAN and M100FX.LD?*", select '**No**' to overwrite them with the new version from the CD.
10. A screen will appear containing three windows, labeled '*Protocols*', '*Parameters*', and '*Board Actions*'.
11. Refer to the *NetWare Manual* for information on configuring the protocols and completing the installation process.

HP-UX

Login as root or use the ‘**su**’ command to become root. If the machine is already on and is logged in as a user, use the steps below to gain access to the root account: Use the ‘**su**’ command to login as root

su [ENTER]

The system will then request the root password.

Password: ‘**root password**’ **[ENTER]**

Mounting the CD

First place the CD in the CD-ROM drive. It is recommended that you use **HP-UX**’s graphical system management interface, **sam(1M)**, to mount the CD-ROM drive. To start **sam(1M)** type:

/usr/sbin/sam [ENTER]

Then select the icon ‘**Disks and File Systems**’ then the icon ‘**Disk Devices**’ and then highlight your CD-ROM entry under the ‘**Actions**’ menu select ‘**Add Not using the logical volume manager**’. A suggested mount point is ‘**/cdrom**’.

HP-UX 10.20 or later

Note: The following examples assume that you mounted the CD ROM on to the /cdrom directory. If this is not case then make adjustments to the following commands:

1. Run the standard HP-UX *swinstall* program to install the system software, rebuild the kernel and reboot.
swinstall -s /cdrom/HP-UX -x software_view=products [ENTER]
(*this command should be on one line*)

2. Following standard *swinstall* practices to install the software product “**MQFE_1020**”.
3. The final stage of the *swinstall* process will reboot your system with a new kernel that contains the ‘*mfx*’ driver. The new network interface names are ‘*mfx*’. After the reboot process is complete, login again as ‘root’ and verify that the new interface is present by using the ‘**ifconfig**’ command:
 # ifconfig mfx0 [ENTER]
Which should return:
 mfx0: flags= 822<BROADCAST, NOTRAILERS>

IRIX

You need to be logged on as a root user to install the software.

1. Power up your system. If the system is already on, type **su** and press **[ENTER]** then continue with step 3:
2. Type **root** at the login prompt and press **[ENTER]**.
3. Enter the *root password* and press **[ENTER]**.
The prompt sign will change to a number sign (#).

Insert and Mount the CD

1. Insert the CD into the CD-ROM drive.
2. Type **df** at the prompt and press **[ENTER]** to verify that ‘*mediad*’ is running. If ‘*mediad*’ is not running, use the ‘**hinv**’ command to determine the SCSI address of your CD-ROM drive. Type **hinv** and press **[ENTER]**.

3. Use the '**mount**' command to mount the CD-ROM drive. Type:
mount -r /dev/dsk/dks1d#s7 [ENTER]
(substituting the SCSI address of the CD-ROM drive for the # character)

Install the Driver

1. For systems using the IRIX^a 6.5 operating system, type:
inst -f /CDROM/IRIX/6.5/dist and press **[ENTER]**
2. Type **go** and press **[ENTER]**.
3. Type **quit** and press **[ENTER]** to leave install.
4. Reboot the system by typing **shutdown -go** and press **[ENTER]**.

Solaris

1. Login as root or use the **su** command to become root. If the machine is already on and is logged in as a user, use the steps below to gain access to the root account:

Use the '**su**' command to login as root

su [ENTER]

The system will then request the root password.

Password: "**root password**" **[ENTER]**

2. Mounting the CD.
First place the CD in the CD-ROM drive. It is recommended that you use the command '**volcheck**' to mount the CD-ROM drive.
To start, type: **# volcheck [ENTER]**
3. Add the driver packages.
To install the 3M drivers, add the 3M packages by typing:
pkgadd -d /cdrom/3mvol n100vf/solaris/sparc

or

```
# pkgadd -d /cdrom/3mvol-n100vf/solaris/sparc64
```

for 64 Bit sparc systems

or

```
# pkgadd -d /cdrom/3mvol-n100vf/solaris/x86
```

the Solaris x86 systems.

At this point, you will see the installation options:

The following packages are available:

mmm100fx 3M VOL-N100FX Driver For PCI 100BaseFx Adapter
(sparc) 1.0

1. Select package(s) you wish to process (or ‘**all**’ to process all packages).
2. You can either select the package by number or press:
 - a** - to install all of the packages (recommended)
 - q** - to quit
3. Configure the Hosts File.

Macintosh

Insert the CD into the Macintosh computer. Open the ‘Mac’ folder and there will be two files:

VOL-N100VF Full-Duplex

VOL-N100VF Half-Duplex

Drag the file that you want onto the ***System Folder*** that resides on your hard drive. An alert will appear informing you that the file will be moved to the ***Extensions Folder***. Click ‘**OK**’ and **restart** the Macintosh.

Linux

As root mount the CD-ROM:

```
# mount -o map=off /dev/cdrom /mnt/cdrom
```

*With map=off no name translation is done.

Change directory to **/mnt/cdrom/Linux**:

```
# cd /mnt/cdrom/Linux
```

As root run the program '**install_3m**'

This should install the proper driver and control files into the appropriate directories. This includes the **3Mvf.o** file in the modules directory and the **MFXControl** and **mfx_control files** in the **/usr/bin** directory.

Linux 2.0.36, 2.2.1, 2.2.5, 2.2.10 from RedHat 5.2 and 6.0 are presently supported. Versions 2.2.5 and 2.2.10 also have smp support. The 3Mvf driver can also be hard linked into the kernel as set forth in the **README_3M.nonmodule file**. The necessary .o files are in the respective 'nonmodule' directory for the version of Linux. If you do not have a matching version of Linux, the 3Mvf.o driver closest to your version of Linux may work. You will need to copy the closest version of the driver to your modules directory and you may also need to run '**insmod -f**' to get the driver to load.



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