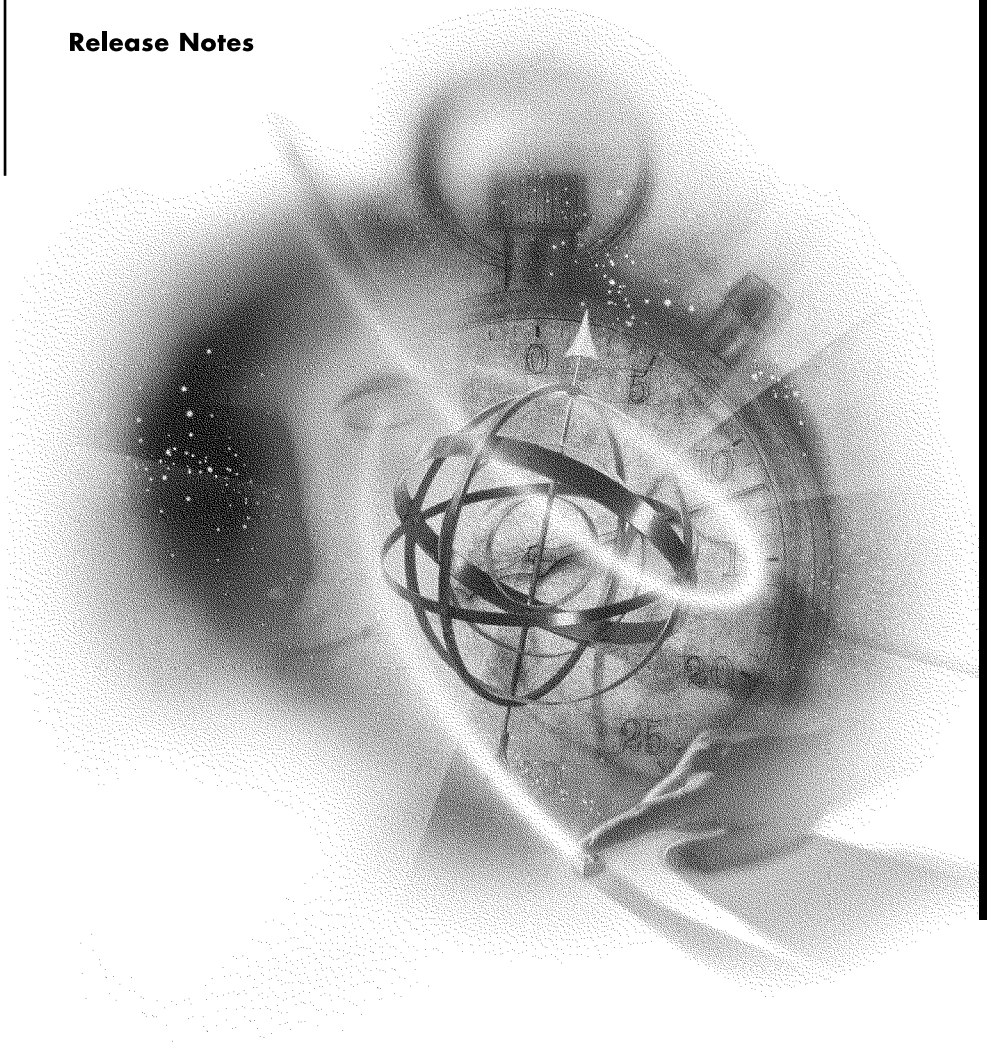
NetWare 3.12

Release Notes



NetWare® 3.12

NETWORKING SOFTWARE

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Overview and Installation
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# Contents


## 1 NetWare 3.12 ReadMe 7

SMS Supported Storage Devices . . . 7
In-Place Upgrade NLM . . . 7
Enhancements to v1.10 . . . 7
Information Regarding 2XUPGRDE.NLM . . . 8
Operating System . . . 9
PS/2 SCSI Driver . . . 9
v3.12 Install . . . 10
BTRIEVE.NLM . . . 10
Ultrastor Driver . . . 10
Ethernet 802.2/802.3 Frame Types . . . 11
Basic MHS . . . 11
Client . . . 11
NetWare SQL v3.0 . . . 12
TCP/IP . . . 12
MultiProtocol Router . . . 13
NetWare Management Agent v1.0 . . . 13

## 2 NetWare 3.12 Release Notes 15

Before You Start . . . 15
Documentation Changes to Installation and Upgrade . . . 15
Page 15, Steps 5 and 6 . . . 15
Page 20, Step 5 . . . 15
Page 20, Step 1 . . . 16
Page 22, Step 2b . . . 16
Page 24, Step 1 . . . 16
Page 24, Step 3 . . . 16
Page 24 . . . 16
Page 25, Step 3d . . . 16
Page 25, after Step 3c . . . 17

# 1 NetWare 3.12 ReadMe

## SMS Supported Storage Devices

NetWare 3.12 supports tape drive technologies including 1/4-inch, 4mm and 8, storage devices. While most tape drives will work with the device drivers and the SBACKUP backup/restore utility provided in NetWare 3.12, Novell does not pre-certify any tape drives for use with NetWare. Novell's internal system qualification and testing exercise tape storage devices to a reasonable extent. However, Novell encourages all users to contact Novell Labs for a list of tape drives that have been certified as "Yes, Tested and Approved" with NetWare 3.12 to ensure reliable operation.

**IMPORTANT:** A backup system is only as good as its ability to restore information consistently and reliably. Novell strongly recommends that users thoroughly pre-test non-Novell-certified tape storage devices with the appropriate NetWare device driver and SBACKUP backup/restore utility prior to using the backup system as an "insurance policy" or safety net for network data.

## In-Place Upgrade NLM

### Enhancements to v1.10

The following enhancements have been added In-Place Upgrade NLM v1.10:

- Fixed all problems listed in the version 1.00 README file.
- Added color.
- Quickly estimates the memory needed to upgrade during System Analysis.
- Detects if the MAC.NAM module needs loading during System Analysis.

- Makes more efficient use of memory, shrinking the size of the NLM.
- Added the /BATCH2 option to not pause on non-critical errors.
- Renames the server object in the bindery if the server is renamed.
- Added the /BINDERY option to upgrade the v2.1x bindery only.
- No longer upgrades DYNAMIC bindery objects, like advertising servers.
- Added seven new error messages (104, 114, 123, 135, 214, 248, 249).
- Allows users to easily exit the upgrade whenever the screen pauses.
- Formats the random password file (NEW.PWD) better.
- Shortened random passwords to their original length.
- Added a command-line error locator.
- Made some text changes on the screens.
- Enhanced the NLM to work with the NetWare v3.12 operating system.

## Information Regarding 2XUPGRDE.NLM

Known problems in 2XUPGRDE.NLM v1.10 include:

- Will not upgrade disks on IBM PS2 models 56 and 95. Models 57 and 90 have not been tested but are similar to the model 56 and 95. These models contain a hidden disk partition which stores the microchannel reference disk information. The In-Place Upgrade fails at the beginning of the Disk Modification phase and does not harm the file system.
- For the v3.1x Read Only attribute to be functionally equivalent to the v2.1x Read Only attribute, the Delete Inhibit and Rename Inhibit attributes should be set. Unlike v3.1x, the v2.1x Read Only attribute does not allow a file to be deleted.
- If the /BINDERY option is used, trustee assignments for all users, except the SUPERVISOR and GUEST are lost. Simply use the GRANT utility to restore trustee rights.
- Under rare circumstances the In-Place upgrade will run out of memory after upgrading the file system and bindery, but before updating trustee assignments. If this happens, simply use the GRANT utility to restore trustee rights.

It is strongly recommended that you read the detailed readme file, README.UPG. To view this and other readme files, run the NWNSTLL.EXE

program (on the INSTALL diskette) and select the "Select A README to view" option.

## Operating System

- In v3.11 database application would often return errors that the disk was full. These errors generally occurred when a files owner field was marked N/A. The OS would not allocate another disk block for the file when the file was written to. The N/A file owner situation generally occurred when the owner of the file was deleted from the bindery. This potential problem has been fixed. When the owner of the file is deleted the file ownership is given to SUPERVISOR instead of being set to N/A.
- Support has been added to the console command processor for the PAUSE command in the NCF files. You can also pass an argument to pause, and it will be printed before the user is prompted for a key to continue.
- The RIP and SAP handling code has been made more efficient (like 4.0). Note that on slower machines, the 3.11 router spends a significant amount of time handling RIP and SAP traffic on large networks. NetWare v3.12 has been optimized to be more efficient.
- The "Maximum Alloc Short Term Memory" has been changed so that the default minimum value is 8 meg and the maximum value is 32 meg. The old values were 2 meg and 16 meg. Some of the SFTIII changes shifted more OS memory usage to the alloc memory pool and with 4.0 alloc memory will be used even more. Because of this, it will be more common for the 3.12 OS to need more than 2 meg in its alloc memory pool.

## PS/2 SCSI Driver

- On Model 90 and 95s it is common for the PS/2 SCSI driver to hang the server when the volumes are mounted. The problem does not present itself when the partition and volumes are being created, just when the volume/s are being mounted. We have seen similar issues with NetWare v3.11. The resolution for this problem is to download the PS2OPT.ZIP file from Netwire (located in the NSD area which requires a password to access) and load the updated PS/2 SCSI driver.

# v3.12 Install

- In the front-end install the installer is given the option to have SERVER.EXE executed from the AUTOEXEC.BAT file. If this option is selected the AUTOEXEC.BAT is copied to the dos partition (i.e. C:). However, the file is copied to the subdirectory in which the v3.12 server startup files are copied. The default is C:\SERVER.312. This problem has been fixed in beta 2. The AUTOEXEC.BAT file is copied to the root of the C drive.
- In 3.12 beta 2 the DOS front-end install does not load INSTALL.NLM after the server is invoked. Instead the server loads and remains at the console prompt. Load the disk driver and then load INSTALL to copy the SYSTEM and PUBLIC files to the server.
- INSTALL.NLM no longer needs to be loaded with the -J option. INSTALL now loads with this option by default.
- Before installing other products using the Product Option in INSTALL.NLM the PRODUCTS.DAT file in the SYS:SYSTEM directory will need to be manually flagged SRW. When the PRODUCTS.DAT file is copied to the system directory along with all of the other files it is flagged by default as RO. If the file is RO other products will fail to completely install.

# BTRIEVE.NLM

The BTRIEVE.NLM now auto loads the AFTER311.NLM.

# Ultrastor Driver

It has been reported that the Ultrastor driver will not work with v3.12. Ultrastor has sent new drivers for testing. They are not in beta 2 but are currently in IMSP for testing

## Ethernet 802.2/802.3 Frame Types

- NetWare v3.12 will ship with rev E versions of the LAN drivers. This means that ethernet drivers will load with a default frame type of ETHERNET_802.2. If the client ODI drivers are set to ETHERNET_802.3 frame type it will NOT see a server that with ETHERNET_802.2 frame type.

## Basic MHS

- The file server will abend when downed if the BASICMHS.NLM is loaded from the AUTOEXEC.NCF. For beta 2 if BASICMHS is installed, unload the NLM before "DOWNing" the server. If Basic MHS is load from the console prompt after the server is loaded, the down command will not cause the server to abend.
- If the PRODUCTS.DAT file is flagged read only (RO) the Basic MHS product will not install completely. To install the product, log in to the server and 1)flag PRODUCTS.DAT RW, 2)delete the MHS directory and subdirectories, and 3)reinstall the product using the Product Option in INSTALL.NLM. If these steps are not followed and you attempt to install Basic MHS again an error about "MHS\MAIL file not found" will be displayed.

## Client

- The new VLM DOS requestor will ship with NetWare v3.12. The
- The NetWare shell will be left in NetWare v3.12. They (NETX, EMSNETX, XMSNETX) will ship on the SYSTEM_3 diskette and will be copied to the SYS:LOGIN directory at installation time.

# NetWare SQL v3.0

Although most NetWare SQL v3.0 programs run successfully with NetWare v3.12, the following programs do not currently work properly with NetWare v3.12:

- NetWare SQL Backup Support program (TSA-NWS.NLM)
- NetWare SQL DAL Server (DALSVR.NLM)

New versions of these two programs will be uploaded to NetWire as soon as they are available. Call 1-800-NetWare (1-800-638-9273) for information on the programs' availability and for technical support.

# TCP/IP

Chapter 2 of the TCP/IP Transport Supervisor's Guide includes information on configuring TCP/IP with INETCFG. INETCFG is available with add on products, such as the NetWare MultiProtocol Router. It is not included with NetWare 3.12. If you do not have INETCFG, refer to Appendix C, "Manually Configuring and Loading TCP/IP" for information on the use of manual LOAD and BIND commands for TCP/IP.

Name files in the /etc. directory, such as HOSTS, NETWORKS, SERVICES and PROTOCOLS are now cached into memory for fast lookup. As such, TCP/IP uses more memory than before. If this is not desirable, cut down the size of (or delete) those database files.

The system will fail if the TCPIP.NLM is unloaded while any application is actively using the AT&T Streams interface for TCP, UDP,or IP communications. If any such application is present, TCP/IP will issue the following warning:

Warning: Some utilities have streams open to the TCP/IP protocols. TCP/IP service to those utilities will be terminated, and SYSTEM INTEGRITY MAY BE COMPROMISED

Unload module anyway? N

Novell strongly discourages you from unloading TCP/IP until you have found the utilities using the streams interface and have unloaded them.

## MultiProtocol Router

If you plan to use the NetWare MultiProtocol Router with NetWare v3.12 you must use NetWare MultiProtocol Router v2.1 or later; NetWare MultiProtocol Router versions 2.0 or earlier are not compatible with NetWare v3.12.

## NetWare Management Agent v1.0

If you encounter problems with NetWare Management Agent v1.0 running on a NetWare 3.12 server, please access the upgrade to NetWare Management Agent v1.5 on NetWire NOVLIB LIB8.

# 2 NetWare 3.12 Release Notes

## Before You Start

- You can use either the NetWare DOS Requester (VLM software) or NETX (shells) with NetWare 3.12. (See *Overview* and *Workstation for DOS and Windows*.)
- The default Ethernet frame type has changed from 802.3 to 802.2. (See Chapter 2 of *Installation and Upgrade*.)
- Because installation files are compressed, they take time to uncompress during installation.

## Documentation Changes to Installation and Upgrade

### Page 15, Steps 5 and 6

Replace with the following:

When all NetWare diskettes have been copied to the NETWARE directory, format three 5.25-inch, high-density diskettes and make them bootable by typing**`FORMAT A:/S`**

Label the diskettes *Install*, *Unicode*, and *System_1*.

### Page 20, Step 5

Replace with the following:

Change to the drive letter corresponding to the CD-ROM, then change to the NETWARE.312/ENGLISH directory and type**`INSTALL <Enter>`**

## Page 20, Step 1

Replace the first sentence with the following:

"Copy the following *Install*, *Unicode*, and *System_x* diskettes to a directory on an existing NetWare server."

## Page 22, Step 2b

NWSNUT.NLM is compressed on the *System_8* diskette, not on the *System_1* diskette. To uncompress this NLM, place the *Install* diskette in drive A: and type

```
NWXTRACT A:NWSNUT.NLM
```

You are then prompted to insert the *System_8* diskette (which contains NWSNUT) into drive A: to uncompress NWSNUT.NLM.

## Page 24, Step 1

Don't type A:INSTALL. Instead, change to drive A:, then type

```
INSTALL <Enter>
```

## Page 24, Step 3

Add the following sentence:

"If you already have an adequate DOS partition, select `Retain Current Disk Partitions' and skip to Step 5."

## Page 24

Step 3a should read "Select `Create a new DOS partition or retain DOS partition.'" Also add the following sentence:

"If you select the option to retain a DOS partition, skip to Step 5 on page 25."

## Page 25, Step 3d

To restart INSTALL, type

```
INSTALL <Enter>
```

## Page 25, after Step 3c

If you use a CD-ROM, use the following instructions (rather than Steps 3d, 4, 4a, 4b, and 4c):

Make sure that the *SYSTEM_1* diskette is in drive A: prior to rebooting your system.

**NOTE:** All data is destroyed on an existing DOS partition. This could include the driver used to access the CD-ROM.

1. After the system reboots, format the new DOS partition. At the A: prompt, type**DOSTOOLS\FORMAT C: /X/S <Enter>**

   **NOTE:** The /X option is a DR DOS option that indicates you are formatting a hard disk.

2. To access the CD-ROM drive, reinstall the CD-ROM files on the DOS partition. Reboot the computer after installing the CD-ROM files.

3. Change to the NETWARE.312\ENGLISH directory on the CD-ROM and type**INSTALL <Enter>**