CDROM.NLM and supporting files.

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Name	Size
license_agreement.txt	2.1 KB (2252)
cdup5a.exe	291.1 KB (298109)
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Related Product(s)	Patch Status for Product	Superceded By
NetWare 3.12	Active	
NetWare 3.0	Active	
NetWare 4.1	Active	

Platforms

NetWare 3.x/4.1

Localizations

English

→ how to use a download manager

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Associated File

Click the filename to download: cdup5a.exe 298109 bytes 19Aug1998 08:58PM

Abstract

This file contains the latest CDROM.NLM and support files for v3.12 and v4.x.

Installation Instructions

New features and fixes:
- illegal characters were passed to the DOS name space when converting from the MAC name space
- Ncopy would not copy the resource fork using a DOS client
- Error messages on console about the Bundle Bit when AFP is rebuilding the desktop for MAC clients
- NWPA layer was fixed to correct an issue on NetFrame machines.
- the command CD DIR would provide incorrect file and directory names
- the <escape> key did not escape from the CD DIR command as prompted
- lowers CPU utilization during indexing and subsequent IO activity
- provides faster volume mounts
- corrects a problem during large file copies where the copy would slow down dramatically

The most commonly used commands needed to manipulate CD's as NetWare volumes on NetWare 3.12 and NetWare 4.X.

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ving information:

** CD ROM Device List
No. Act. Device Name Volume Name Mounted
2 Y Device # 0 SONY CD-ROM CDU-541 (8100000 NSEPRO Y

No.
--
Defines the Media Manager object number assigned to this particular CD player. When you manipulate the CD in the player by using the "device number" this is the number you should be using and NOT the number listed under "Device Name".

Act.
--
Indicates whether or not the device, cd player, is active.

Device Name
--
Indicates the name of the device as reported by the device. Do NOT use the number that appears here to try and manipulate the CD. Using the above example, you would type "CD MOUNT 2" to mount the CD. You would NOT type "CD MOUNT 0".

Volume Name
--
Indicates the volume name as reported by the CD.

Mounted
--
Indicates whether or not the CD is mounted as a NetWare volume.

The CD CHANGE command hung the server or forced the operating system into the debugger. Novell has fixed any issues with the CDROM.NLM and its' supporting drivers. ASPICD.DSK from Adaptec had problems with the CD CHANGE command at one time. If the CD CHANGE command is exhibiting problems, make sure that all drivers are up to date or use the work-around described below.

CD CHANGE work-around:

1. From the Server console, use the CD DISMOUNT command to dismount the volume.

2. Load monitor and select DISK INFORMATION.

3. On the list of System Disk Drives, select the CD-ROM drive on which the CD-ROM is to be changed.

4. Select Drive Operating Status, take the selection for Deactivate Drive.

5. Change the CD-ROM.

6. Select the Removable Drive Mount Status and take the selection for Mount Drive.

7. Change back to the System Console and issue a CD MOUNT command.

CD-ROM NLM Command Line Options:

CD DEVICE LIST
This command shows a listing of CD-ROM devices that are available on the server, whether they are active, loaded CD-ROMs, and their mount status.

CD VOLUME LIST
This command shows a listing of all CD volumes that have been mounted since the CDROM.NLM was loaded, the device that contains the CD-ROM, and the CD-ROM's mount status.

CD MOUNT [No.] or [volume name] <flags>
This command mounts a CD-ROM as NetWare Volume. The available flags are listed below. The [No.] or [volume name] can be obtained by using the CD VOLUME LIST command.

CD DISMOUNT [No.] or [volume name]
This command dismounts a CD-ROM that has been mounted as a NetWare Volume. The [No.] or [volume name] can be obtained by using the CD VOLUME LIST command.

CD CHANGE [No.] or [volume name] <flags>
This command is used to change a CD-ROM that is mounted as a NetWare volume to another CD-ROM. Available flags are listed below. (See the above note about CD CHANGE in this document).

CD DIR [No.] [volume name]
This command is used to list the ROOT DIRECTORY contents of an UNMOUNTED CD.

CD GROUP ([group name] and [group num])
This command is used to show assigned groups and assign groups to a group number 0 through 9. For example: Group "CDGROUP" needs to be assigned to the CD group number 1. The syntax would be the following:

CD GROUP CDGROUP 1

NOTE: The "del" as the group name will remove a group number assignment.

The assignment could then be displayed by typing:

CD GROUP

The results would be as follows:

** CD ROM Access Group List
*Group: 0 > EVERYONE (assigned by default)
*Group: 1 > CDGROUP

To assign the group to a CD-ROM, see the available CD MOUNT flags below.

CD PURGE
This command will destroy all index files.

CD RENAME /D=[No.] [new volume name]
This command is used to change the name of a CD-ROM. The syntax is as follows:

CD RENAME /D=<device #> new name
CD MOUNT device#|volume name /R

(NOTE: The "/R" must be used when remounting the volume.)

The [No.] or [volume name] can be obtained by using the CD VOLUME LIST command.

CD HELP
This command displays the help screen for CDROM.NLM.

CD MOUNT and DISMOUNT FLAGS
• The "/mac" is used to add Macintosh Name Space Support. This adds the necessary DATA and RESOURCE forks so that Macintosh workstations can access the information on the CD.

• The "/nfs" is used to add NFS Name Space Support.

• The "/G=x" is used to set the default volume group access rights. This is used with the CD GROUP command previously listed. The mount syntax to assign a group to a CD would be as follows:

CD MOUNT <device # | volume name> /G=x

where "x" is the group number assigned to a group. (See CD GROUP command above).

• The "/R" is used to rebuild the index file on the selected Volume.

NOTE: In previous releases, the /R option forced the CDROM.NLM to reuse an index file if it existed. The CDROM.NLM now does this by default.

• The "/rx" command is used to rebuild the index file and extend the space that would normally be allocated for the file. This is useful when trying to mount CD's that have unusually large files or numbers of directories.

• The "/dup" command is used to eliminate duplicate file names in directories as a CD volume is being mounted. This situation occurs when there are extended file names on the CD that look to be duplicate as they are converted to 8.3 naming conventions.

• The "/X=name" is used to exclude a directory tree from the mounted volume as the CD is being mounted.

• Special option "/I": This option is used to ignore errors found with the
CD while attempting to mount the CD.

NOTE: Use of this flag could result in files not showing up after the CD mounts.

• The "/W" is used to mount a CD volume with the R/O attribute turned off. With versions of the CDROM.NLM before v4.10g, the CD would be mounted with the R/O option already disabled (that is, the CD would be mounted R/W). This allowed the changing of file attributes, inherited rights masks, trustee assignments and the adding of groups and users to a CD volume. If an attempt is made, with 4.10g version of the CDROM.NLM, to change any of the above items, an error writing to the CD will occur. To change the volume to R/W, dismount the CD (CD Dismount <cd #| cd volume name> and remount it using the "/W" option.

Issue

Changes since CDUP5.EXE:

The NBI31X.NLM was updated.

INSTALLATION INSTRUCTIONS:

NetWare 4.10 instructions:

Copy all of the files from the c:\NETWARE.410 directory of this kit to both the boot partition of your server (c:\NETWARE.410 and the SYS:SYSTEM directory.

NetWare 3.12 instructions:

1. Copy all of the files from the c:\NETWARE.312 directory of this kit to both the boot partition of your server (c:\NWNETWARE and the SYS:SYSTEM directory.

2. Modify your STARTUP.NCF file so that the VERY FIRST patch loaded after the LOAD PM312.NLM is the NPAPATCH.NLM.

NPAPATCH.NLM is dependent on PM312.NLM and will attempt to auto-load the PM312.NLM file. This patch fixes a couple of known issues with the media manager and in as much as the Media Manager manages all communication with devices this patch must be loaded first. Failure to load this patch before any drivers establish communication with the hardware may cause your server to ABEND. This patch, like all other dynamic patches should not be unloaded once the server is up. Unloading any patch while the server is running can and most likely will cause unpredictable results.

3. The current version of the CDROM.NLM needs to have AFTER311.NLM, STREAMS.NLM and CLIB.NLM files loaded before it will load.

You can accomplish this by loading the AFTER311.NLM file at the server console. The CLIB.NLM and STREAMS.NLM files will be automatically loaded. Because the latest CDROM.NLM is message enabled it must be loaded from the SYS volume and you MUST follow the instructions below carefully for your 3.12 server:

4. Search the SYS volume for files named CDROM.MSG and delete them. Using the NDIR command from the root is suggested. For example "NDIR CDROM.MSG /s".

Note: If you experience problems with the server after loading this new NLM make sure that the first search path is set to the location where the CDROM.NLM was loaded from.

Additional Information:

IDE specific driver Load Order:

NetWare 3.12 startup.ncf:
```
Load NPAPATCH
Load IDEATA port=1f0 int=14
```

NetWare 3.12 autoexec.ncf
```
Load After311
Load CDROM
```

NetWare 4.10 startup.ncf:
```
Load IDEATA port=1f0 int=14
```

NetWare 4.10 autoexec.ncf
```
Load CDROM
```

When IDEATA.HAM is loaded, it will scan for any attached devices. If a CD-ROM device is discovered, IDECD.CDM will be loaded. For hard drives, IDEHD.CDM is loaded.

The new CDROM.NLM will autoload the NWPALOAD.NLM which will in turn autoload the NWPA.NLM. After the NWPA.NLM loads the NWPALOAD.NLM will unload itself.Mount your CD's as NetWare volumes as you normally would.

For a list of available CDROM.NLM commands, type CD HELP at the SYSTEM CONSOLE prompt after the CDROM.NLM has been loaded. Additional information about CDROM.NLM commands can be obtained by studying the September 1994 AppNote.

Background Information on NWPA (NetWare Peripheral Architecture):

The use of HAM's and CDM's on NetWare 4.1 SFTIII is not currently supported. If you need to mount CD's on a NetWare 4.1 SFTIII server, we suggest that you attempt this only with SCSI devices.

IDE CDROM devices are supported under NetWare 4.1 and 3.12 using the NWPA (NetWare Peripheral Architecture) layer of support. The files NWPA.NLM, NWPALOAD.NLM, and NPAPATCH (3.12 specific) provide this layer of support. NWPA.NLM, NWPALOAD.NLM, IDECD.CDM, IDEHD.CDM, IDEATA.HAM, and CDROM.NLM are now universal files meaning that they are not NetWare version specific. They can be loaded on either 3.12 or 4.10. The NWPA layer uses *.HAM and *.CDM files instead of the normal *.DSK files. Breaking the monolithic *.DSK drivers out into *.HAM and *.CDM files makes them much easier to support and much easier to maintain from a development standpoint. The HAM (Host Adapter Module) extension refers to the driver that would be loaded to support a specific HBA (HostBus Adapter). The CDM (Custom Device Module) extension refers to the driver that would be loaded to support specific types of devices attached tothe HBA.

Features and Functions of NWPA:

Under the new NWPA the devices appear slightly differently than they did under the old *.DSK regime. Issuing a "List Devices" command from the server console could yield the following information: (this is for illustration only and most likely will not be exactly what you will see):

```
1. Device # 0 Quantum LPS540S (5E000000) (A SCSI hard drive attached).
19. [V025-A0-D1:1] NEC CD-ROM DRIVE:260 FW:1.01. (An IDE CDROM player).
```

The numbers to the far left of the above example are the Media Manager object numbers. These numbers are used internally in the OS and are simply reported here. Basically it is the order in which these devices registered themselves with the Media Manager. DOS partitions, NetWare partitions, logical partitions, physical partitions, Hot Fix areas, etc. are all examples of objects that the Media Manager has to manage. Consecutive numbers are very rare and usually found in the most basic server setups, sometimes not even then. Do not be alarmed if your server does not have consecutive numbers!

The NWPA also introduces an enhanced numbering sequence. In the above example you see a number within the []'s. This number is defined as follows [Sx-Vxxx-Ax-Dxx:x]:

Sx - denotes the server number. In non-SFTIII environments the "S" and following number will not appear. In a SFTIII environment you will see either a 0 (Primary Server) or 1 (Secondary Server) following the "S".

Vxxx - denotes the manufacturer ID. This was a two position number under the *.DSK drivers. The number has been expanded to 3 hexadecimal characters for use under NWPA. Numbers less than 100 have been assigned to Novell drivers.

Ax - denotes the NWPA assigned unique adapter number. This number increments by one for each load of a HAM.

Dxx:x - denotes the device number. This number has been expanded to handle the need to report more and more devices as technology advances. For IDE devices the first digit will be 1 if the port is 1F0, 2 if the port is 170, 3 if the port is 1E8 and 4 if the port is 168. In the case of SCSI the first digit denotes the SCSI id set on the device. For IDE the digit following the ":" denotes either Master (0) or slave (1). Under SCSI the digit following the ":" denotes the LUN (Logical Unit Number).

By default the HAM's will try and load any needed CDM's for devices that are attached to the HAM. If you do not want the HAM's to autoload all of the required CDM's then instead of loading the HAM's first, which then autoloads the NWPA layers, we suggest that you explicitly load the NWPA.NLM with the /naload flag before any HAM's are loaded in the Startup.ncf. This will tell the NWPA.NLM NOT to autoload the HAM's and CDM's that it normally would. You will then need to load the HAM's and CDM's manually.

For example: Startup.ncf where the CDM's are NOT autoloaded
```
load NWPA /naload
load ideata port=1f0 int=14
load idecd
```

File Contents

```
Self-Extracting File Name:  cdup5a.exe

Files Included       Size   Date         Time    Version   Checksum

\
    CDUP5A.TXT      17552   19Aug1998    08:54PM
\NETWARE.312
     CDROM.NLM     134421   19Jun1996    05:57PM
     CDUP5.TXT      16737   13Nov1997    07:52PM
    IDEATA.DDI       6855   14Oct1996    10:04PM
    IDEATA.HAM      16001   18Oct1996    08:00PM
     IDECD.CDM       9572   18Oct1996    08:13PM
     IDECD.DDI       5311   08Oct1996    11:58PM
     IDEHD.CDM       9680   18Oct1996    08:16PM
     IDEHD.DDI       5527   14Oct1996    08:40PM
    NBI31X.NLM      37802   29Aug1997    08:09PM
  NPAPATCH.NLM       2516   12Aug1996    07:50PM
      NWPA.NLM      89217   23Oct1996    02:07PM
  NWPALOAD.NLM       3219   02Jul1996    03:34PM
     PM312.NLM      14825   05Feb1996    05:19PM
\NETWARE.410
     CDROM.NLM     134421   19Jun1996    05:57PM
    IDEATA.DDI       6855   14Oct1996    10:04PM
    IDEATA.HAM      16001   18Oct1996    08:00PM
     IDECD.CDM       9572   18Oct1996    08:13PM
     IDECD.DDI       5311   08Oct1996    11:58PM
     IDEHD.CDM       9680   18Oct1996    08:16PM
     IDEHD.DDI       5527   14Oct1996    08:40PM
      NWPA.NLM      89217   23Oct1996    02:07PM
  NWPALOAD.NLM       3219   02Jul1996    03:34PM
```

document

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