FYI: Problems Printing Graphics Without NT In CAPTURE Statement
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Problems Printing Graphics Without NT In
CAPTURE Statement
  DOCUMENT ID#:   FYI.P.5174
          DATE: 03MAR92
       PRODUCT: NetWare
PRODUCT VERSION: v2.2
    SUPERSEDES: NA

       SYMPTOM: Graphics printing corruption while using a
remote printer, at times the printer would print text larger than
normal, or skip a character, etc.

ISSUE/PROBLEM

      Printing graphics from Autocad or Lotus would be corrupted
when using a remote printer.

SOLUTION

      Place NT (no tabs) in the CAPTURE statement.

      Note: Always use NT (no tabs) when printing graphics.

FYI: Unable To See Hard Disks. A4000 Controller
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Unable To See Hard Disks. A4000 Controller
  DOCUMENT ID#:   FYI.P.5547
          DATE: 18FEB92

```
        PRODUCT:        NetWare
PRODUCT VERSION:        All Versions
    SUPERSEDES:         NA

        SYMPTOM:        Unable to see hard disks
```

ISSUE/PROBLEM

     Unable to see hard disks when using an old DCB board and the A4000 controller.

SOLUTION

     If the DCB board has 50 pins then it must be at least revision G2 to work with NetWare v2.1x or higher. However, all 37 pin DCB boards will work with v2.1x and up.

     Note: An easy way to tell the boards apart is: the 50 pin board has three rows of pins, the 37 pin board has two rows of pins.

FYI: OS2 RESTORE Will Not Restore To Network Drive
                                FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

```
          TITLE:        OS2 RESTORE Will Not Restore To Network Drive
  DOCUMENT ID#:         FYI.P.5530
           DATE:        13FEB92
        PRODUCT:        NetWare OS2 requestor
PRODUCT VERSION:        v1.3
    SUPERSEDES:         NA

        SYMPTOM:        Unable to restore data to a network drive.
```

ISSUE/PROBLEM

     After using the OS2 BACKUP command to backup data from a NetWare drive, then attempting to use the RESTORE command would generate the message "invalid drive".

SOLUTION

     It is not possible to use the OS2's RESTORE command to
restore data to network drives. The RESTORE command uses direct-
access (DASD) open mode. However, NetWare IFS does not support
this mode, because it would bypass the file system and be
incompatible with some of the security features of IFS.   The
only solution to this problem is to use RESTORE on a local disk,
and then copy the restored data to the network drive.

FYI: Caution Using NCOPY /a Option

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

              TITLE: Caution Using NCOPY /a Option
       DOCUMENT ID#:   FYI.P.5531
               DATE: 13FEB92
            PRODUCT: NetWare
    PRODUCT VERSION: v3.11
         SUPERSEDES: NA

            SYMPTOM: When using NCOPY, not all specified files are
copied.

ISSUE/PROBLEM

     When using the NCOPY command between two servers with the
parameters /s /a /e and /v, only part of the files would be
copied.

SOLUTION

     The /a command option needs to be taken out. The /a option
is used to copy files that have the archive bit set. When any
file is created or has been modified the archive bit is set.
When NCOPY is executed with the /a parameter only those files
which have the archive attribute set are copied.

Note: When using NCOPY with the /a option the archive attribute of the source file is not changed. However, when a backup is executed the archive bit is reset.

FYI: Maximum File Handles On NetWare Workstations

                                FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

             TITLE: Maximum File Handles On NetWare Workstations
   DOCUMENT ID#:   FYI.P.5541
            DATE: 13FEB92
         PRODUCT: NetWare
 PRODUCT VERSION: All versions
     SUPERSEDES: NA

        SYMPTOM: Insufficient file handles.

ISSUE/PROBLEM

     What is the maximum number of file handles allowable?

SOLUTION

     The maximum number of file handles on a workstation using NetWare is 255. To set up these handles there are two parameters. The DOS parameter is set up in the CONFIG.SYS file using the FILES=xx command. The DOS file handles are used to access open files from the local drives. The NetWare parameter is set up in the SHELL.CFG file under the FILE HANDLES=xx command. The NetWare command sets up the use of open files for the NetWare shell.

     However, two of the maximum 255 file handles are reserved (254 and 255). This leaves 253 available handles. File handles specified in the CONFIG.SYS "FILES=" statement begin at the bottom of the file handles table, those specified in the NET.CFG "FILE HANDLES" statement begin at the top of the table. The total of the two can sum up to no more than 253.

Therefore, any workstation can have open, at any one time, a maximum of 253 files.

Some applications will check for this. For example, DOSNP.EXE checks the number of DOS file handles that CONFIG.SYS has requested. If the number of file handles that DOSNP requests is too large, then DOSNP does not load.   Instead, it returns the following error:

"No room in DOS Handle Table for Named Pipe handles!

A maximum of 255 handles is allowed (2 are reserved). You have exceeded that value by xx. Adjust the "FILE HANDLES" parameter in SHELL.CFG (the default is 40) and/or the "FILES =" parameter in CONFIG.SYS so that the two do not exceed 253.

NetWare DOS NP Extender -- NOT loaded!"

Note: On the file server, NetWare v2.2 can have up to 1000 files open at any one time and NetWare v3.11 can have up to 100,000 files open at any one time.

FYI: Adding Ethernet_II Frame Type To Enet/m Board
                                        FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

            TITLE: Adding Ethernet_II Frame Type To Enet/m Board
  DOCUMENT ID#:   FYI.P.5523
            DATE: 11FEB92
        PRODUCT: NetWare
PRODUCT VERSION: v3.11
     SUPERSEDES: NA

        SYMPTOM: Enetm driver asks for the hardware configuration when loading it a second time.

ISSUE/PROBLEM

When using an Enet/m board in a v3.11 network, and loading the Enet/m a second time, to add Ethernet_II as a frame type; the driver will prompt for the hardware configuration, assuming the driver is being loaded for a second card.

SOLUTION

Update the Compex driver to v2.60.

FYI: Maximum User Connections And PSERVER.VAP. NetWare v2.2 (5 User)

FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

         TITLE: Maximum User Connections And PSERVER.VAP. NetWare v2.2 (5 User)
  DOCUMENT ID#:   FYI.P.5495
          DATE: 10FEB92
       PRODUCT: NetWare
PRODUCT VERSION: v2.2
     SUPERSEDES: NA

       SYMPTOM: "Maximum number of allowed connections on this server are used. You must wait until another user logs out".

ISSUE/PROBLEM

     Can five users login to a NetWare v2.2 (5 user) server if the PSERVER.VAP is loaded? What message is displayed when a sixth user tries to login?

SOLUTION

     Yes, five users can login to the NetWare v2.2 (5 user) server with PSERVER.VAP loaded. When the sixth user tries to login the following message is returned: "Maximum number of allowed connections on this server are used. You must wait until another user logs out".

FYI: Plotter Prints Garbage In NetWare v2.2, Serial Pinouts
                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Plotter Prints Garbage In NetWare v2.2,
Serial Pinouts
   DOCUMENT ID#:   FYI.P.5496
           DATE: 10FEB92
        PRODUCT: NetWare
PRODUCT VERSION: All versions
     SUPERSEDES: NA

        SYMPTOM: Plotter printing garbage.

ISSUE/PROBLEM

     Plotter prints garbage in NetWare but prints fine in DOS.

SOLUTION

     This printing problem usually indicates trouble with
handshaking. Another indication is when the printer speed is
lowered to 300 baud and it takes longer for the corruption to
occur. Setting the speed even lower allows the printer to handle
the job for a little longer before the printer is unable to get
the "stop, my buffer is full" signal to NetWare. Some plotters
don't work XON/XOFF properly but this problem can usually be
handled by using the latest serial printer pinout using DTR.

     Set up the printer for XON/XOFF, or DTR, and match that
configuration with the printer configuration from the console
command line. Use the following pinouts for a 25-25 pin cable.

     NETWORK SIDE   PRINTER SIDE
     1----- FG----- 1
     2------------- RXD ----------- 3
     3------------- TXD ------------2
     4 -----------   TIE 4 TO 6 ON THE NETWORK SIDE

     6 -----------

```
    5-------------- DTR ----------- 20 (OR WHICHEVER PIN IS DTR
ON THE PRINTER)
    7 --------------SG ----------- 7
    8 NC
        ------- 4
        -      TIE 4 5 6 & 8 TOGETHER ON THE
        ------- 5        PRINTER SIDE
        -
        ------- 6
        -
        ------- 8
```

FYI: Unable To Load VREPAIR From Floppy. DOS 5.0

                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Unable To Load VREPAIR From Floppy. DOS 5.0
  DOCUMENT ID#:   FYI.P.5500
           DATE: 10FEB92
        PRODUCT: NetWare
PRODUCT VERSION: v3.11
     SUPERSEDES: NA

       SYMPTOM: Returning FAT errors on volume SYS.

ISSUE/PROBLEM

    Unable to load VREPAIR.NLM from a floppy drive.

SOLUTION

    Mount volume SYS, then toggled to the : prompt and load
VREPAIR.

    Next dismount volume SYS and toggled back to the VREPAIR
screen. VREPAIR should run fine.

    Note: This method also works if the working copy diskettes

cannot be found to load VREPAIR from a floppy.

FYI: "Break At 007A8DC Because..." NetWare v3.11

                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: "Break At 007A8DC Because..." NetWare v3.11
  DOCUMENT ID#:   FYI.P.5477
          DATE: 07FEB92
      PRODUCT: NetWare
PRODUCT VERSION: v3.11
    SUPERSEDES: NA

      SYMPTOM: Intermittently receive the message: "Break at
0007A8DC because of INT3 break point using CMS's Lanstack
Subsystemabove".

ISSUE/PROBLEM

     File server screen will intermittently blank out and go into
the debugger with the error message above.

SOLUTION

     The card used is the Western Digital Ethercard Plus CMS
Lanstack Subsystem. The latest CMS driver for NetWare v3.11
(HBASLAND.DSK) will fix this problem.

FYI: Unable To Copy .DBF Files To Server. NetWare v2.2

                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this

          TITLE: Unable To Copy .DBF Files To Server. NetWare
v2.2
   DOCUMENT ID#:   FYI.P.5480
           DATE: 07FEB92
        PRODUCT: NetWare
PRODUCT VERSION: v2.2
     SUPERSEDES: NA

        SYMPTOM: Receiving the error: "Network error on
(servername), error receiving from network"

ISSUE/PROBLEM

     All files could be copied from the workstation to the file
server except for files with the extension of DBF. The .DBF
files were about 600K; however, all the other files were smaller
than 300K. About 400K of the .DBF file would be copied to the
server drive then the error message: "Network error on
(servername), error receiving from network" would be sent.

SOLUTION

     Apparently the problem only occurred with large files. This
type of problem indicates trouble with the network card.
Replacement of the NE1000 card resolved this issue.

FYI: Using The Timeclock Application To Interface COM2 Serial
Port

                              FYI

          TITLE: Using The Timeclock Application To Interface
COM2 Serial Port
   DOCUMENT ID#:   FYI.P.5485
           DATE: 07FEB92
        PRODUCT: NetWare

PRODUCT VERSION: v2.2
    SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

    Attempting to use the Timeclock application which would
interface with the COM2 serial port built into the computer. The
computer was being used as a nondedicated server. The Timeclock
application would fail to communicate through the COM2 serial
port.

SOLUTION

    Disable the core printing and use PSERVER.VAP instead of
core printing. The serial port will be freed up for use by DOS,
and allow the Timeclock application to access the COM2 serial
port.

FYI: Unable to Communicate Using Ethernet_II Frame In OS2
Requester

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

        TITLE: Unable to Communicate Using Ethernet_II Frame
In OS2 Requester
  DOCUMENT ID#:   FYI.P.5475
          DATE: 07FEB92
       PRODUCT: NetWare Requester for OS/2
PRODUCT VERSION: v1.3
    SUPERSEDES: NA

        SYMPTOM: Unable to communicate using Ethernet_II frame
type.

ISSUE/PROBLEM

When using a Western Digital 8013EW 16 bit Ethernet card with v1.22 OS2 driver and attempting to use an Ethernet_II frame, allowed only 802.3 packets to communicate.

SOLUTION

Check the NET.CFG file for proper Ethernet_II Frame information:

The contents of the NET.CFG were:

```
Link {drivername}
frame Ethernet_II
```

Change the "frame Ethernet_II" in the NET.CFG to "Envelope Type Ethernet_II", will solve the problem.

FYI: Printing Problems Using HP Advanced Mail TSR USERLOAD

FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

         TITLE: Printing Problems Using HP Advanced Mail TSR USERLOAD
  DOCUMENT ID#:   FYI.P.5490
          DATE: 07FEB92
       PRODUCT: NetWare
PRODUCT VERSION: v3.11
    SUPERSEDES: NA

       SYMPTOM: Printing garbage

ISSUE/PROBLEM

When using RPRINTER and Windows, anything printed would print garbage and errors like: Stack Overflow, and various other errors mingled with trash.

SOLUTION

    The system had loaded HP Advanced Mail, its front end is a
TSR called USERLOAD.

    The above problem occurs when USERLOAD is loaded after
EMSNETX. Load USERLOAD after IPX, but before EMSNETX, and
printing will resume normally.

FYI: "Not Ready Writing Device LPT1" NetWare v3.11

                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: "Not Ready Writing Device LPT1" NetWare v3.11
    DOCUMENT ID#:   FYI.P.5474
            DATE: 06FEB92
         PRODUCT: NetWare
 PRODUCT VERSION: v3.11
      SUPERSEDES: NA

        SYMPTOM: Receiving the error messages: "NOT READY
WRITING DEVICE LPT1" when trying to print or "GETQUEUEREQUEST
returned error 156" in PCONSOLE.

ISSUE/PROBLEM

    The error "NOT READY WRITING DEVICE LPT1" was displayed
while trying to print. A hard drive had recently been replaced
and the entire system restored from backup. While examining the
queues in PCONSOLE, the error "GETQUEUEREQUEST returned error
156" occurred. Bindfix did nothing.

SOLUTION

    In this case deleting and recreating the print queues
resolved the problem.

FYI: "Illegal Instruction Trapped At Address..."

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
          TITLE:      "Illegal Instruction Trapped At Address..."
   DOCUMENT ID#:      FYI.P.5470
           DATE:      06FEB92
        PRODUCT:      NetWare
PRODUCT VERSION:      v2.2
     SUPERSEDES:      NA
```

        SYMPTOM: Receiving the error message: "Illegal
Instruction Trapped at address 0D80:022C".

ISSUE/PROBLEM

     Receiving the error message "Illegal Instruction Trapped at
address 0D80:022C" while trying to run VREPAIR on a v2.2 server.

SOLUTION

     If using Dos 5.0, boot to DOS 3.3, VREPAIR will run without
a problem.

FYI: Abend: RemoveStation Could Not Find... Solomon Acct.

                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Abend: RemoveStation Could Not Find...

Solomon Acct.
   DOCUMENT ID#:   FYI.P.5459
          DATE: 05FEB92
       PRODUCT: NetWare
PRODUCT VERSION: v3.11
    SUPERSEDES: NA

       SYMPTOM: Receiving the error message: "Abend:
removestation could not find FCB on station list"

ISSUE/PROBLEM

     Receiving the error "abend: removestation could not find FCB
on station list" while using a 3COM 10baseT adapter card which
ran with the Solomon accounting package.

SOLUTION

     To use the Solomon accounting package and the card it is
using; STARTUP.NCF set command needs to be: Set maximum physical
receive packet size=4202.

FYI: Invalid Delete File, Volume SYS Not Mounted. v3.11

                          FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

        TITLE: Invalid Delete File, Volume SYS Not Mounted.
v3.11
   DOCUMENT ID#:   FYI.P.5435
          DATE: 03FEB92
       PRODUCT: NetWare
PRODUCT VERSION: v3.11
    SUPERSEDES: NA

       SYMPTOM: Receiving the error message:
"addtodeletedblocklist found an invalid block"

ISSUE/PROBLEM

Errors received when writing to disk, (downed the server, brought it back up) and while trying to mount volume SYS, would get the error "Invalid delete file. Volume SYS not mounted".

SOLUTION

After running VREPAIR three times the volume mounted and the problems were resolved.

Another possible solution, depending upon the severity of the error, is to use VRPDBL.ZIP. This VREPAIR is for 386 NetWare and will purge all deleted files from the drive. It was specifically written for the error "addtodeletedblocklist found an invalid block," and possibly could have helped in this case, so that VREPAIR may not have had to run multiple times.

FYI: "Error Receiving On Network" Attempting Login

FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

          TITLE: "Error Receiving On Network" Attempting Login
   DOCUMENT ID#:   FYI.P.5428
           DATE: 03FEB92
        PRODUCT: NetWare
PRODUCT VERSION: v3.11
     SUPERSEDES: NA

        SYMPTOM: Receiving the error message: "Error receiving
on network"

ISSUE/PROBLEM

When trying login or if using the preferred server option set in the NET.CFG the message "Error receiving on network" would be returned. In this case tokenring drivers v2.63 at the workstations, v3.16 at file server were being used. The preferred server option would work if IPX.OBJ was linked with the

LANSUP driver. However, there was a need to use both the native
Token Ring driver and the preferred server option.

SOLUTION

     Increase the Maximum Physical Receive Packet Size to 4202 in
the STARTUP.NCF file at the server. Once that is done the
preferred server option and the native Token Ring IPX, login no
longer return the error.

     Explanation: The default transmit buffer size of the LANSUP
IPX is only 1130, while the default for the native Token IPX is
4202. The server needs to be set to receive 4202 size packets
when using the native Token IPX at the default transmit buffer
size.

FYI: "Multiple Volumes Named" NetWare v2.2

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: "Multiple Volumes Named" NetWare v2.2
  DOCUMENT ID#:   FYI.P.5507
          DATE: 12FEB92
       PRODUCT: NetWare
PRODUCT VERSION: v2.2
    SUPERSEDES: NA

        SYMPTOM: Receiving the error message: "Multiple
Volumes Named ABEND: Too Many Volumes on System. Power Off and
Back on to Restart ....running process INIT".

ISSUE/PROBLEM

     When using a DTK KEEN 3304 (386/33) file server with 8 MB of
RAM, and trying to install a QUANTUM LPS240 (IDE) drive. During
INSTALL with the ISADISK driver linked into the operating system,
ZTEST returned the following:

"Improper ROM Parameter Table for Disk Controller"

      The drive was defined as type 48 (user defined). Trying the
new IDE disk driver (in IDE286.ZIP) will give the same error.
DTK suggested enabling the shadow RAM. Once shadow RAM was
enabled ZTEST ran and the installation could be completed.
However, when the server was brought up the following errors
occurred:

              "ERROR: Multiple Volumes Named"
              "ABEND: Too many volumes on system. Power off and
back on to restart."

SOLUTION

      The first thing attempted to solve the problem was to swap
the paddleboard for a BOCA PLUS card. The next thing was to
check to see if there was a scratch RAM setting in the BIOS
(there wasn't). Finally slowing down the machine during bootup
was tried. None of these solutions worked.

      Finally the shadow RAM was disabled and this fixed the
problem. The bizarre thing was the need to enable shadow RAM to
get through the installation, then disable it to get the file
server to bootup and function properly.

FYI: VMS V5.4-3 Padding Files With Extra Null Bytes
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

              TITLE: VMS V5.4-3 Padding Files With Extra Null
Bytes
    DOCUMENT ID#:   FYI.P.5403
            DATE: 31JAN92
         PRODUCT: NetWare For VMS
PRODUCT VERSION: v2.1 r4.01
      SUPERSEDES: NA

         SYMPTOM: VMS v5.4-3 Padding Files With Extra Null
Bytes

ISSUE/PROBLEM

    When using NetWare for VMS on VMS v5.4-3 there are problems
with certain applications when writing files. The files are
being padded with extra null bytes. Also information is being
lost.

SOLUTION

    Apply the following patch.
        File: NW401P3.COM

    NetWare for VMS Patch 3

    The patch is necessary for compatibility with VMS v5.4-3
file sharing. When a file write of 0 length is done to the file
server a truncate is done on the file at the current write
offset. VMS v5.4-3 does not allow this truncate to occur when
the current file access does not allow write sharing. The above
problem occurs when the file is opened with deny write and deny
read/write rights set. This is fixed in VMS by shifting the
SHDEL bit in the access call for these two cases.

        How to use this patch:

    The patch is applied by creating NW401P3.COM in the
NWVMS$COMMON directory. The file is created by either copying
this file to that directory from the distribution media, or by
entering it manually. If entering manually, only those lines not
preceded by an exclamation point (!) need be entered. Once the
file is entered, use the following command: $ PATCH
@NW401P3.COM

    NW_SRV.EXE will be patched and a new version will be
created.   Stop and start NetWare for VMS for the changes to
become active.

    NW_SRV.EXE
            See that it hasn't been applied
    CHECK NOT ECO 3
            Say that it has been applied
    SET ECO 3
            Define a symbol for the base location
    DEFINE
    FACCESS
    ^X0005CFC4

```
      EXIT
            For the deny read/write case, replace SHRNIL(20)
            with SHRDEL(4)
      REPLACE /INSTRUCTION
      ^X0005D607
      'BISB3 #^X00000020,R2,B^^X00000077(R7)'
      EXIT
      'BISB3 #^X00000004,R2,B^^X00000077(R7)'
      EXIT
            For the deny write case, add SHRDEL(4) along with
            existing SHRPUT(40)
      INSERT /INSTRUCTION
      ^X0005D614
      'BISL2 #^X00000040,R2'
      'BISL2 #^X00000004,R2'
      EXIT
      UPDATE
      EXIT
```

FYI: Determining Version For NetWare For VMS

                          FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Determining Version For NetWare For VMS
  DOCUMENT ID#:   FYI.P.5404
            DATE: 31JAN92
         PRODUCT: NetWare for VMS
PRODUCT VERSION: v2.1
      SUPERSEDES: NA

         SYMPTOM: NA

ISSUE/PROBLEM

     With NetWare for VMS, SYSCON does not report both the
version and release of NetWare for VMS. If SYSCON is used to
view the file server information, for a NetWare VMS server, the
display will show the NetWare version as "NetWare v2.1 for VMS

vE.DC" This only gives the version.

SOLUTION

     To find out both the version and release level log into the
VAX and set def to the NWVMS$SPECIFIC directory. Type out the
file NW_SRV.CMD, in the header of this file there will be a line
"RELEASE: NetWare for VMS V2.1, rx.xx dd-mon-yy".

FYI: Unable To Save Changes To Login Script In SYSCON

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Unable To Save Changes To Login Script In
SYSCON
    DOCUMENT ID#:   FYI.P.5377
            DATE: 29JAN92
         PRODUCT: NetWare
 PRODUCT VERSION: v3.11
      SUPERSEDES: NA

         SYMPTOM: Login script not saving properly in SYSCON

ISSUE/PROBLEM

     SYSCON seemed to allow changes to the login script to be
saved. However, when SYSCON was entered to check on the script
the changes were not saved.

SOLUTION

     The login script file, (LOGIN), in the mail/userid directory
was flagged SRO. Because of this the login file could not be
written to. Flag the login to RW (read write), and any changes
will be saved.

FYI: Duplexing Issues With Ultrastor 12f Controllers

FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

           TITLE: Duplexing Issues With Ultrastor 12f
Controllers
   DOCUMENT ID#:   FYI.P.5369
           DATE: 28JAN92
        PRODUCT: NetWare
PRODUCT VERSION: v2.15
     SUPERSEDES: NA

        SYMPTOM: GPPE error or "device # deactivated due to
drive failure"

ISSUE/PROBLEM

     In this case a system was upgraded from v2.15 to v3.11. The
important hardware components were two 350 MB Fujitsu drives on
two Ultrastor 12f controllers. When trying to add a partition to
the second drive (on the second controller) the error GPPE would
occur. Within INSTALL the error "device # deactivated due to
drive failure" would occur. The drive type of the first drive
was set to 1, the second was set to 0 and was loading ISADISK /l
for each drive.

SOLUTION

     There are two other issues with this controller. The first
is documented in FYI.P.3508, which says to check the version of
the BIOS on the controller itself. In this case the chips read
38001-07 and 38001-08. The -0x is the version of the BIOS. For
NetWare v3.11 the BIOS should have a version of 9 or later.

     The second issue is; to set up a secondary controller it is
necessary to go into the debugger, to DRIVE PARAMETER SETUP, and
hit F10 to save the configuration. This will save the drive
type, for the second drive, as type 3.

FYI: Upload Of NWSPOL.ZIP To CompuServe

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

               TITLE: Upload Of NWSPOL.ZIP To CompuServe
      DOCUMENT ID#:   FYI.P.5352
               DATE: 27JAN92
           PRODUCT: NetWare Requester
   PRODUCT VERSION: v1.3
        SUPERSEDES: NA

          SYMPTOM: NA

ISSUE/PROBLEM

     The NetWire file called NWSPOL.ZIP (16511 1-24-92 PTF-P-471)
includes the following files:

          NWSPOOL   EXE   29824 11-19-91 2:55p
          NWSPOL   DOC   (This file)

     PURPOSES ADDRESSED

     1.   You can now remap network printers to queues in Print
Manager without rebooting. Previously if you changed your
printer mappings, print jobs would attempt to print at the
physical port rather than at a network printer.

     2.   You can now disable all message popups using a new
NET.CFG option:

          daemon configuration
          message timeout <NUMBER>

     Replace <NUMBER> with the number of milliseconds you want
the message to stay on the screen. Specify 0 (zero) milliseconds
to disable popup messages entirely. Specify -1 (negative one) to
cause popup messages to remain on the screen until a key is

pressed.

Note: This NET.CFG option only affects errors that popup and tell you to "Press <Esc> to continue."

FYI: NetWare v2.2 Not Recognizing Hard Disk In NCR 386

                                    FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

          TITLE: NetWare v2.2 Not Recognizing Hard Disk In NCR 386
  DOCUMENT ID#:   FYI.P.5334
           DATE: 24JAN92
        PRODUCT: NetWare
PRODUCT VERSION: v2.2
     SUPERSEDES: NA

       SYMPTOM: Unable to load NetWare v2.2 on the NCR model 3421.

ISSUE/PROBLEM

     Unable to get NetWare v2.2 to recognize hard disk when installing NetWare v2.2.

SOLUTION

     The NCR model 3421 (386/20) machine ships with a Conner 100 MB SCSI. A floppy disk comes with the machine which contains the drivers for the hard drives. The standard drivers in NetWare v2.2 will not work.   For help on installation call NCR technical support at (800) 832-1627 or (803) 843-1678.

FYI: "Unresolved External PS2 Flag" NetWare v2.2

                                    FYI

```
        TITLE:      "Unresolved External PS2 Flag" NetWare v2.2
  DOCUMENT ID#:     FYI.P.5324
         DATE:      24JAN92
      PRODUCT:      NetWare
PRODUCT VERSION:    v2.2
   SUPERSEDES:      NA

      SYMPTOM:      Received the error: "Unresolved external PS/2
flag".
```

ISSUE/PROBLEM

     The error "Unresolved external PS/2 flag" occurred when
linking while installing NetWare v2.2 on an IBM Model 35.
Additionally the PS2ISA patch as well as the 286IDE drivers were
being used.

SOLUTION

     The readme on the 1991 PS2ISA file was unclear and in this
case not all of the steps could be completed.

     Download the current PS2ISA with the new readme file for
clearer instructions.

FYI: Lost Product Key. NetWare For VMS
                                    FYI

```
        TITLE:      Lost Product Key. NetWare For VMS
  DOCUMENT ID#:     FYI.P.5344
         DATE:      24JAN92
      PRODUCT:      NetWare for VMS
```

```
PRODUCT VERSION:      v2.1 r1.04
    SUPERSEDES:       NA

      SYMPTOM:        NA
```

ISSUE/PROBLEM

    Lost product authorization key for NetWare for VMS v2.1
r1.04 and the need to get the system reinstalled.

SOLUTION

    The best solution is order the update of the NetWare for VMS
product to get to v2.1 r3.01. This version has had the product
key removed. The upgrade is free and it is available through
After Market Products.

    However, if the NetWare for VMS server needs to be brought
up prior to receiving the upgrade then use the following
procedure.

    1.   Find out the CPU type of the VAX/VMS system. This is
found by entering the following command at the VMS prompt.

        WRITE SYS$OUTPUT F$GETSYI("CPU")

    This will return a number that is the CPU type. Find the
corresponding key for the CPU type from the list below.

```
        CPU TYPE        Product Key
        1               2F9C99AA9
        2               2F9C98AA9
        3               2F9C97AA9
        4               2F9C96AA9
        5               2F9C95AA9
        6               2F9C94AA9
        7               2F9C93AA9
        8               2F9C92AA9
        9               2F9C91AA9
        10              2F9C90AA9
        11              2F9C99AA8
        12              2F9C98AA8
        13              2F9C97AA8
        14              2F9C96AA8
        15              2F9C95AA8
        16              2F9C94AA8
        17              2F9C93AA8
```

```
         18                  2F9C92AA8
         19                  2F9C91AA8
         20                  2F9C90AA8
```

     The following is a list of some VAX models and their CPU
types. This list is not all inclusive. Use the procedure above
to ensure correct CPU type identification.

```
         Model                CPU Type

         VAX 11-730            3
         VAX 11-780            1
         VAX 11-785            1
         VAX 11-750            2
         MicroVAX I            7
         MicroVAX II           8
         VAXstation 2000       8
         VAX 8600, 8650        4
         VAX 8200, 8250        5
         VAX 8300, 8350        5
         VAX 8530, 8550        6
         VAX 8700, 8800        6
```

FYI: Volume Limitations For NetWare For VMS

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
           TITLE:     Volume Limitations For NetWare For VMS
     DOCUMENT ID#:     FYI.P.5275
            DATE:     21JAN92
         PRODUCT:     NetWare for VMS
 PRODUCT VERSION:     All versions
      SUPERSEDES:     NA


         SYMPTOM:     NA
```

ISSUE/PROBLEM

     What is the maximum volume size limitation for NetWare for

VMS?

SOLUTION

     There is no limitation on volume size with NetWare for VMS
the volumes can be as large as available disk space allows. Also,
there is no limitation to the number of volumes with NetWare for
VMS.

FYI: Invalid OP Code Process During INSTALL

                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Invalid OP Code Process During INSTALL
   DOCUMENT ID#:   FYI.P.5264
           DATE: 20JAN92
        PRODUCT: NetWare
PRODUCT VERSION: v3.11
     SUPERSEDES: NA

        SYMPTOM: Received the error: "Invalid op code process"

ISSUE/PROBLEM

     When the server is booted mirror mismatches occur and volume
SYS will not mount (volume 1 mounts fine). When trying to load
install the error "Invalid op code process" appears on the
monitor.

SOLUTION

     Loading isadisk with the /b /l parameters takes care of the
problem. (see FYI.P.2474 for details on these parameters)

FYI: DIR, VOLINFO, CHKVOL Return Different Values. IBM

              TITLE: DIR, VOLINFO, CHKVOL Return Different Values.
IBM DOS
  DOCUMENT ID#:   FYI.P.5263
           DATE: 20JAN92
        PRODUCT: NetWare
PRODUCT VERSION: V3.11
     SUPERSEDES: NA

        SYMPTOM: DIR, VOLINFO, CHKVOL RETURNING DIFFERENT
VALUES

ISSUE/PROBLEM

     VOLINFO and CHKVOL show the correct amount of available disk space. A DOS <dir> command, however, would return fewer bytes of free disk space.

SOLUTION

     The workstation was booting with IBM DOS 3.3 and using NET3.COM v2.11. Upgrade to NETX.COM, with the same version of DOS, and a DOS <dir> command will return the correct amount of disk space available.

FYI: OS2 Trap 000d Error. SPX$ Driver
FYI: "Token Board 0 Not Found". FIRMLOAD.COM

```
          TITLE:        "Token Board 0 Not Found". FIRMLOAD.COM
 DOCUMENT ID#:          FYI.P.5265
          DATE:         20JAN92
       PRODUCT:         NetWare
PRODUCT VERSION:        v3.11
    SUPERSEDES:         NA

       SYMPTOM:         Receiving the error: "Token board 0 not
found"
```

ISSUE/PROBLEM

The error "Token board 0 not found" occurred when using the TOKEN.LAN driver that shipped with v3.11 NetWare.

SOLUTION

Use TOKENDMA.LAN and be sure to run FIRMLOAD.COM. This error usually occurs when FIRMLOAD.COM is not loaded.

FYI: Media Support Module Driver, NetWare v3.11

FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

```
          TITLE:        Media Support Module Driver, NetWare v3.11
 DOCUMENT ID#:          FYI.P.5256
          DATE:         17JAN92
       PRODUCT:         NetWare
PRODUCT VERSION:        v3.11
    SUPERSEDES:         NA

       SYMPTOM:         System would freeze once every two hours.
```

ISSUE/PROBLEM

Configuration: NE3200 and NE2000 installed in an Everex Step 486/33E Eisa. Drivers installed were those shipped with NetWare

v3.11.   The system would freeze once every two hours. No error
messages were given.

SOLUTION

     Download the MSM drivers off NetWire/ NOVLIB/04, called
NE386.ZIP. Since replacing the NE3200 and NE2000 drivers with
the MSM drivers the server has run for more than 40 hours with no
problems.

     Note: Documentation for these drivers in the NE386.ZIP file
mentions having better functionality on 486 machines with high
traffic.

FYI: Minimum File = Statement For UPGRADE Utility
                                        FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Minimum File = Statement For UPGRADE Utility
   DOCUMENT ID#:   FYI.P.5242
             DATE: 16JAN92
         PRODUCT: NetWare
PRODUCT VERSION: v2.15, v3.11
     SUPERSEDES: NA

        SYMPTOM: Receiving the error: "ERROR 4 CREATING C:\
2.15\UPGR$BND.nnn"

ISSUE/PROBLEM

     Receiving an error when upgrading from ELS II 2.15 to v3.11
with upgrade utility, choosing the DOS Device method and
selecting all defaults. Then select the working directory as c:\
2.15. The upgrade utility creates the directory; however, when
starting the back up, the system returns the error: "ERROR 4
CREATING C:\2.15\UPGR$BND.nnn" and hangs.

SOLUTION

     The manual states that the files must be set to a minimum 30

for the upgrade utility. However, by setting the file handles to 50 the problem was resolved.

FYI: PAUDIT Message: Client Account Has Been Deleted..
                                          FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

        TITLE: PAUDIT Message: Client Account Has Been
Deleted..
  DOCUMENT ID#:   FYI.P.5241
          DATE: 16JAN92
       PRODUCT: NetWare
PRODUCT VERSION: v3.11
    SUPERSEDES: NA

       SYMPTOM: ABOUT [client account has been deleted]
during file server services.

ISSUE/PROBLEM

     While running PAUDIT, one of the transaction reports said the following:

     ABOUT [client account has been deleted] during file server services.

SOLUTION

     The file NET$ACCT.DAT has only bindery object ID's, not the users name. When PAUDIT is run, it goes into the binderies, matches the ID with the user name and puts the appropriate name in the report. This message means that between the time that the transaction occurred and the report was run, that the user has been deleted and the bindery ID isn't matching.

FYI: NetWare v2.2 Install Goes Into Endless Loop.

```
         TITLE:      NetWare v2.2 Install Goes Into Endless Loop.
   DOCUMENT ID#:     FYI.P.5223
          DATE:      15JAN92
       PRODUCT:      NetWare
PRODUCT VERSION:     v2.2
    SUPERSEDES:      NA

      SYMPTOM:       NetWare v2.2 Install Goes Into Endless Loop.
```

ISSUE/PROBLEM

    When trying to install NetWare v2.2 on a NCR 386 Laptop for
a demo. The install would go in to a endless loop asking for
disk #2 of the install.

SOLUTION

    Use NCR DOS 3.3 and the installation of NetWare will work
fine.

FYI: GOTO Command In OS2 Login Script

```
         TITLE:      GOTO Command In OS2 Login Script
   DOCUMENT ID#:     FYI.P.5209
          DATE:      15JAN92
       PRODUCT:      NetWare Requester for OS/2
PRODUCT VERSION:     v1.3
    SUPERSEDES:      NA
```

SYMPTOM: GOTO not executing in an OS2 Login Script

ISSUE/PROBLEM

     While trying to use a GOTO in an IF statement, the error
invalid variable would be returned.

     Text: if FILE_SERVER="ITD15-3" then begin
          goto itd15-4
          end

SOLUTION

     This example contains two errors:

     1)   A dash (-) is not valid in a label.

     2)   A GOTO cannot be between a BEGIN and an END. In this
case it was necessary to use an underscore to replace the dash,
and eliminate the BEGIN and END.

     If a series of commands need to be executed after the IF
statement and one of them is a GOTO, the IF statement must be
repeated.

FYI: No Menu Options Appear Using SBACKUP
                                   FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: No Menu Options Appear Using SBACKUP
   DOCUMENT ID#:   FYI.P.5190
           DATE: 14JAN92
        PRODUCT: NetWare
PRODUCT VERSION: v3.11
     SUPERSEDES: NA

       SYMPTOM: Using SBACKUP and getting no options within
the menu.

ISSUE/PROBLEM

Running SBACKUP with the pc-02 interface to a Wangtek 5150 or even 5525 would show no menu options while trying to do a RESTORE or BACKUP. The sequence of events leading to the no option screen is:

1.   select wangtek tape drive.

2.   select backup menu, restore menu or change volume.

Selecting one of the previous options gives a empty box with no options, titled "select the target service agent". At this point all that can be done is to escape out of the program.

SOLUTION

SBACKCFT.ZIP.

FYI: OS2 v1.3 And v2.0 Errors Accessing DR DOS Files
                                        FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

          TITLE: OS2 v1.3 And v2.0 Errors Accessing DR DOS Files
   DOCUMENT ID#:   FYI.P.5158
           DATE: 09JAN92
        PRODUCT: NetWare Requester for OS/2
PRODUCT VERSION: v1.3, v2.0
     SUPERSEDES: NA

        SYMPTOM: Receiving the error: "SYS0281: The extended attribute system file cannot be opened" and "SYS3175: A program in this session encountered a problem and cannot continue".

ISSUE/PROBLEM

Both OS/2 v1.3 and OS/2 2.0 report the following errors when accessing either 3.5" or 5.25" diskettes on which files have been written using DR DOS v6.0.

"SYS0281: The extended attribute system file cannot be opened."

Only OS/2 v2.0 reports the following error when accessing diskettes on which files have been written using DR DOS v6.0.

"SYS3175: A program in this session encountered a problem and cannot continue."

This problem is caused by DR DOS using a reserved byte in the file's directory entry. The byte it uses is at offset 21 (dec)- immediately before the 'file creation / last changed time' filed.

SOLUTION

By using a disk editor (e.g., Norton DISKEDIT) to view and modify directory entries, this byte is shown to be non-zero for files created by DR DOS, however, files created by PCDOS are 0. By setting this byte to 0, the files can again be accessed by OS/2.

Alternatively, using OS/2, the problem can be resolved using the

        CHKDSK /F command.

This will report that the files (written by DR DOS v6.0): 'attempt to claim an extended attribute that does not exist. the error was corrected.' After running CHKDSK, the files may be used normally.

FYI: Error With DPT Caching Controller And NetWare v3.11
                                FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

        TITLE: Error With DPT Caching Controller And NetWare v3.11

```
    DOCUMENT ID#:      FYI.P.5138
           DATE:      08JAN92
        PRODUCT:      NetWare
PRODUCT VERSION:      v3.11
    SUPERSEDES:       NA


        SYMPTOM:       Receiving the error message:
"<date><time>:0.0.0. DPT CTRL 0 DISK 0: COMMAND TIMEOUT:
RESETTING CONTROLLER! <date><time>:0.0.0. DPT CTRL 0 DISK 0:
RETRYING DUE TO SCSI RESET lines.
```

ISSUE/PROBLEM

    Receiving the above errors when installing NetWare.

SOLUTION

    This error means that the drive is not responding to the
controller in the time allotted. It is usually a cabling problem
but sometimes a problem with the BIOS. In this case the cables
were fine. Therefore, a new BIOS from DPT increased the response
time and the problem was resolved.

FYI: Unable To Print Through OS2 Print Manager
                                        FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)
```
          TITLE:     Unable To Print Through OS2 Print Manager
   DOCUMENT ID#:     FYI.P.5128
           DATE:     07JAN92
        PRODUCT:     NetWare Requester for OS/2
PRODUCT VERSION:     v1.21
    SUPERSEDES:      NA


        SYMPTOM:     Unable to print through the OS2 print
manager.
```

ISSUE/PROBLEM

    Can print with NPRINT but unable to print through the OS/2

Print Manager.

SOLUTION

     Apply NWSPOOL.EXE 28752 10-29-91.

FYI: "Write Fault Error LPT1" NetWare v2.2
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: "Write Fault Error LPT1" NetWare v2.2
  DOCUMENT ID#:   FYI.P.4504
           DATE: 30OCT91
       PRODUCT: NetWare
PRODUCT VERSION: v2.2
    SUPERSEDES: NA

      SYMPTOM: Receiving the error: "Write fault error
LPT1".

ISSUE/PROBLEM

     After an upgrade to NetWare v2.2 an error occurred after
having captured when trying to print, the error was: "Write fault
error LPT1". NPRINT would allow two files to print then the same
error would pop up.

SOLUTION

     The error can occur when directory entries are low, however,
in this case the problem occurred when an older Tokenring card
was replaced with a new one and the shell generated with the old
Tokenring drivers.

     The workstation driver was updated to the most recent
version and all jobs were printed without error.

FYI: Windows 3.0 Enhanced Mode Problems
                                    FYI

```
          TITLE:      Windows 3.0 Enhanced Mode Problems
   DOCUMENT ID#:      FYI.P.9523
           DATE:      16JUL91
        PRODUCT:      NetWare
PRODUCT VERSION:      All versions
     SUPERSEDES:      NA
```

        SYMPTOM: Windows hanging at the logo screen -
Unrecoverable Application Errors (UAEs) - Windows defaulting to
real or standard mode even when Win is typed.

ISSUE/PROBLEM

     [NOTE: Information provided by Microsoft.]

     TROUBLESHOOTING WINDOWS v3.0 ENHANCED MODE PROBLEMS

     SUMMARY:

     The following problems may be encountered when running
Microsoft Windows v3.0 in enhanced mode:

     -     Windows hanging at the logo screen
     -     Unrecoverable Application Errors (UAEs)
     -     Windows defaulting to real or standard mode even when
Win is typed.

     MORE INFORMATION:

     The following steps may reduce problems running Microsoft
Windows v3.0 in enhanced mode:

     1.   Ensure that the system has at least an 80386 or 80386SX
processor and has enough memory to run in enhanced mode. It is
necessary to have between 580K to 624K of combined conventional
and extended memory to run Windows in enhanced mode. Also needed
is at least 1024K free extended memory, and at least 2 MB of free
disk space. Although, Windows can be forced into enhanced mode
if it has less than 1024K of extended memory, this is not
recommended because of effects on performance.

2.   Verify that Windows can run in real mode. If so, there may already have been installed mouse, keyboard, video, or printer drivers designed for previous version of Windows. These drivers can prevent Windows from running in standard or enhanced mode. Update to the proper Windows v3.0 drivers. If Windows doesn't run in real or standard mode, it is possible that the wrong driver or computer type was selected during installation. Reinstall Windows.

3.   Check the AUTOEXEC.BAT and CONFIG.SYS files for TSRs (terminate-and-stay-resident programs), sufficient buffers, files, and environmental space. For more information on troubleshooting the AUTOEXEC. BAT and CONFIG.SYS files, query on the following words: TSHOOT and AUTOEXEC.BAT

4.   Verify that Windows 3.00 is correctly installed on the system by clicking the Setup icon from the Main group of Program Manager. Check that the correct keyboard, pointing device, video driver, and network were chosen during setup. Also check through the "Microsoft Windows Version 3.0 Hardware Compatibility List" to see if the computer requires special handling. If so, exit Windows and reinstall Windows, using only minimum drivers (no mouse, no network, lower resolution video driver) with the SETUP/I option.

5.   Disable the auto switching or auto sensing feature on the video card if applicable. Verify that the latest version of the BIOS for that video card are being used (see step 10.)

6.   Disable RAM shadowing if supported by the system.

7.   Verify that the correct version of DOS for the system is being used. DOS v3.10 or later that was designed for the machine should be used. Do NOT use IBM PC DOS on non-IBM computers and vice-versa.

8.   Ensure that HIMEM loads successfully. If not, try ALL A20 handlers 1-8. The CONFIG.SYS file should include the /m:x switch on the DEVICE=C:\HIMEM.SYS line, where x denotes a handler from 1 to 8. For example, if using a PS2, this line should read: DEVICE=C:\HIMEM.SYS /M:2. Some A20 handlers may lock up the computer, so have a bootable DOS floppy disk available in case of problems.

9.   Install Windows in a clean directory. Do not install Windows v3.0 over a 2.x version of Windows because some files and drivers may not get updated properly.

10. Confirm that a recent system BIOS is being used. The BIOS version is usually displayed when the machine is first switched on. It may be necessary to contact the manufacturer to see if a more recent version is available.

11. In the SYSTEM.INI file under the [386enh] section, enter the statement EMMEXCLUDE=A000-EFFF. If this works, then a device conflict may be present. Find the address of the device causing the conflict and narrow the EMMEXCLUDE range. For example, some VGA cards require an EMMEXCLUDEEEE=A000-C7FF. Do NOT leave the EMMEXCLUDE range at A000-EFFF. This is used ONLY to TEST for Device conflicts. Leaving the whole range excluded will greatly hamper system performance.

12. If using a third-party partitioning method (such as Disk Manager) add the line VirtualHDIRQ=OFF to the SYSTEM.INI file under the [386 enh] section. (This will increase the level of compatibility between Windows 3.0 and the third-party partitioner.) The VirtualHDIRQ=OFF line also may be required for some IDE, SCSI and ESDI drives.

13. Remove any additional hardware from the system (mouse, network card, fax board, modem, etc.) After all the unneeded hardware has been removed, reboot the system, and run Windows 3.0 If you can now run in 386 enhanced mode, then an interrupt problem exists. Replace one piece of hardware at a time, then reboot the machine and run Windows 3.0 in enhanced mode. Do this until the symptom occurs, at which point the interrupt conflict is located. It is now necessary to change the interrupt used by the latest installed piece of hardware to a different (unused) interrupt.

14. If running Windows 3.0 and MSDOS 5 make sure the WINA20.386 read-only file is copied to the root directory of the boot drive on the hard disk (C:\) or to the Startup or Startup/Support disk. Enhanced mode Windows 3.0 will not run in Dos 5.0 without it. Windows will hang in Enhanced mode with MSDOS loaded HIGH (DOS=HIGH). If you need more information query on the words "Enhanced Mode Requires WINA20.386 MS-DOS 5.0", without the quotes.

15. If none of the above steps has worked, contact the manufacturer and ask if the manufacturer can duplicate the problem.

FYI: New EPROM For Ultrastor Controller To With v3.11 ISADISK
Driver

                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: New EPROM For Ultrastor Controller To With
v3.11 ISADISK Driver
   DOCUMENT ID#:   FYI.P.3508
           DATE: 31MAY91
        PRODUCT: NetWare 386
PRODUCT VERSION: v3.11
     SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

     Customer had problems with the ISADISK driver which shipped
with v3.11 and consequently reverted to the ISADISK driver from
v3.10.

SOLUTION

     Ultrastor has a new EPROM or PROM for their controller that
will make their controller work with the ISADISK driver from
v3.11. The EPROM from Ultrastor is XXXXXX-010. The last number
being the key. This new EPROM will work better with our 3.11
ISADISK driver. The new EPROM is only available on an individual
basis. Customer must call in and request the update.

     Firmware # .010 will work with 3.11,
            .009 will work with 3.11,
            .008 will work with 3.1, but
                .007 will NOT work with NetWare 3.x.

     You must upgrade the firmware, lowlevel format the HD (with
the parameters needed for NetWare, which are found in the manual
from Ultrastore, do not use the settings for DOS) and then you
can load the ISAdisk.

FYI: Upgrade DCB While Upgrading to NetWare 386 v3.10
                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Upgrade DCB While Upgrading to NetWare 386
v3.10
   DOCUMENT ID#:   FYI.P.9527
           DATE: 29NOV90
        PRODUCT: NetWare 386
PRODUCT VERSION: v3.1x
     SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

            DCB UPGRADE

     NetWare users who are upgrading to 386 v3.10 may need to
upgrade their Novell DCBs.

SOLUTION

     NetWare 386 v3.10 was written to support the latest in
hardware technology. DCBs with firmware revisions "D" and earlier
will therefore NOT work with NetWare 386 v3.10. This will
generally effect those who have had their DCB for a few years and
are now upgrading their Operating System to 386 v3.1. Upon
upgrading, the hard drives will no longer be visible to the
system.
     An upgrade to a DCB with the latest firmware revision will
solve the problem. The DCB upgrade is available through Federal
Technologies RMA Department at (800)-366-4526 or (703)-739-5900.

     If you plan to upgrade your version of NetWare to 386 v3.10
and are uncertain of the revision of firmware on your DCB, look
at location 817-186 located at the bottom left of the board. It
will contain a 28 pin chip with part number 817-186-001. The
revision level will follow the part number in one of two ways.

          1)   817-186-001E   or

2)   817-186-001 rev E.

If the revision level is "D" or earlier, an upgrade is necessary.

FYI: Ncopy Incompatibility With v3.0 Server
                                    FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

              TITLE: Ncopy Incompatibility With v3.0 Server
  DOCUMENT ID#:   FYI.P.9525
          DATE: 29NOV90
       PRODUCT: NetWare 285
PRODUCT VERSION: v2.15c
    SUPERSEDES: NA

       SYMPTOM: Unable to copy file.

ISSUE/PROBLEM

After changing the SYS:PUBLIC mapping from a 2.10 server to a 2.15c server I could no longer NCOPY files stored on a 3.0 server. I got an "unable to copy file" message.

SOLUTION

Use 3.x or 2.10 NCOPY and it works fine.

FYI: "Error Mounting Volume Sys, Invalid Available
                                    FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit

or implied claims to the validity of this information.)

```
        TITLE:       "Error Mounting Volume Sys, Invalid Available
Entry"
  DOCUMENT ID#:      FYI.P.9528
          DATE:      26NOV90
       PRODUCT:      NetWare 386
PRODUCT VERSION:     v3.10
    SUPERSEDES:      NA

       SYMPTOM:      Error mounting vol sys, invalid available
entry.
```

ISSUE/PROBLEM

     3.1 on Compaq Systempro. Got error mounting VOL SYS,
invalid available entry.

SOLUTION

     Finally after 7 tries of running VREPAIR, it cleaned up the
volume and mounted just fine. Sometimes it takes VREPAIR several
tries to clean up all the errors.

FYI: Error "Create Object Returned Error Code 1".
                              FYI

```
        TITLE:       Error "Create Object Returned Error Code 1".
  DOCUMENT ID#:      FYI.P.9532
          DATE:      16NOV90
       PRODUCT:      NetWare 386
PRODUCT VERSION:     v3.10
    SUPERSEDES:      NA

       SYMPTOM:      NA
```

ISSUE/PROBLEM

Had a customer using 3.1 and could not add another user past 22 using SYSCON v3.01. Would get error "create object returned error code -1".

SOLUTION

BINDFIX corrected the problem.

FYI: "Error: Read Returned 116". Running Shgen With
                                   FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

         TITLE: "Error: Read Returned 116". Running Shgen
With Slansup.Zip Driver.
  DOCUMENT ID#:   FYI.P.9533
          DATE: 14NOV90
       PRODUCT: NetWare Shells
PRODUCT VERSION: v2.1x
    SUPERSEDES: NA

       SYMPTOM: Error: Read Returned 116

ISSUE/PROBLEM

     Running shgen with slansup.zip driver, the customer gets: "Error: Read Returned 116". File slansup.zip should have 255 bytes read from it." This happens when running from hard disk or floppy and the .lan and .obj files are in the lan_drv_.050 directory (or floppy)

SOLUTION

     He renamed CONFIG.DAT in the shgen-1 directory (hard disk method) and it worked. It doesn't matter what the file is renamed to, just as long as SHGEN doesn't see a CONFIG.DAT file (In this case it was renamed to CONFIG.SAV)

FYI: MONITOR Problems In NW 386 3.1
                                        FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: MONITOR Problems In NW 386 3.1
  DOCUMENT ID#:   FYI.P.9534
            DATE: 13NOV90
         PRODUCT: NetWare 386
PRODUCT VERSION: v3.10
     SUPERSEDES: NA

        SYMPTOM: Open files is different than File Open/lock
Activity.

ISSUE/PROBLEM

    In MONITOR on NW 386 3.1, Connection Information about open
files' lock status is different from what "File Open/Lock
Activity" shows.

SOLUTION

    Connection Information shows RECORD Locking while File
Open/Lock Activity reports FILE locking.

FYI: Error "Bad Directory Handle During Get Current Directory"
                                        FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or
implied claims to the validity of this information.)

            TITLE: Error "Bad Directory Handle During Get
Current Directory"

```
DOCUMENT ID#:      FYI.P.9544
         DATE:     30OCT90
      PRODUCT:     NetWare
PRODUCT VERSION:   All versions
   SUPERSEDES:     NA
```

        SYMPTOM: "Network error: Bad Directory handle during
"Get Current directory"

ISSUE/PROBLEM

        Customer was getting "Network error: Bad Directory handle
during "Get Current directory" when he tried to use NCOPY with a
particular file. He was also getting a message upon logging in
that said: "The following drive mapping operation could not be
completed. 'path'".

SOLUTION

        Had him increase environment space and it allowed his
mappings to work. Once the drive mappings were set the ncopy
worked.

FYI: Error "No Drives Available For Salvage". Net Ware
                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

        TITLE: Error "No Drives Available For Salvage". Net
Ware 3.1
```
  DOCUMENT ID#:      FYI.P.9535
         DATE:     29OCT90
      PRODUCT:     NetWare 386
PRODUCT VERSION:   v3.1
   SUPERSEDES:     NA
```

        SYMPTOM: "No Drives Available for Salvage"

ISSUE/PROBLEM

Error "No Drives Available for Salvage"

SOLUTION

Free up one network drive.

FYI: Command Line Syntax Of Utilities Changed From 286
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

         TITLE: Command Line Syntax Of Utilities Changed From
286 To 386
   DOCUMENT ID#:   FYI.P.9529
           DATE: 28MAR90
        PRODUCT: NetWare 286
PRODUCT VERSION: v2.15c
     SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

     Syntax of certain command line utilities have changes from
NetWare 286 to 386. Once NetWare 386 utilities were installed in
our PUBLIC directories, certain maintenance batch files and Login
Script code paths no longer worked.

SOLUTION

     A couple of changes that solved the problems were changing
#CASTOFF /ALL to #CASTOFF ALL and FLAG NET$LOG.DAT NRW to FLAG
NET$LOG.DAT N.

FYI: Error "Printjob Has Been Removed From Queue", In
                                    FYI

(Note: The origin of this information may be internal or external

```
          TITLE:      Error "Printjob Has Been Removed From Queue",
In Pconsole
  DOCUMENT ID#:     FYI.P.9530
          DATE:     20OCT89
       PRODUCT:     NetWare 286
PRODUCT VERSION:    v2.15a
    SUPERSEDES:     NA

       SYMPTOM:     Printjob has been remonve from queue.
```

ISSUE/PROBLEM

        After sending a printjob to the printq, and then entering
pconsole the error occurs "PRINTJOB HAS BEEN REMOVED FROM QUEUE"
and all jobs would be deleted from the printq.

SOLUTION

        The problem was a bad Printer port, installed a new one and
the problem was solved.

FYI: LPT1 Unavailable In Printer Maintenance
                                  FYI

```
          TITLE:      LPT1 Unavailable In Printer Maintenance
  DOCUMENT ID#:     FYI.P.9531
          DATE:     17OCT89
       PRODUCT:     NetWare 286
PRODUCT VERSION:    ELS II 2.15
    SUPERSEDES:     NA

       SYMPTOM:     LPT 1 not available in maintenance
```

ISSUE/PROBLEM

     When running ELSGEN and trying to do printer maintenance in
miscellaneous. maintenance lpt 1 was not available. Compaq
diagnostics could see the port and dos could print to it.

SOLUTION

     Customer was running elsgen with the O/S booted at the
nondedicated server. Running elsgen from dos only showed the
correct printer table.

FYI: LINK/64 LINK/T1 Internal Router with NetWare 2.15
                                   FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within it's means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
claims to the validity of this information.)

          TITLE: LINK/64 LINK/T1 Internal Router with NetWare
2.15
     DOCUMENT #:   FYI.S.25
           DATE: 7FEB92
        PRODUCT: LINK/64 LINK/T1
PRODUCT VERSION: 1.1
     SUPERSEDES: NA

        SYMPTOM: Various

ISSUE/PROBLEM

     The NetWare 2.15 drivers are in a subdirectory (NW215.INT)
of the LAN_DRV_192/93 diskette. The instructions in the Manual
do not make this clear and a NetWare 2.2 Internal Router may be
installed in error when a NetWare 2.15 Internal Router is
required.

SOLUTION

     Manually copy:

     1.   The *.OBJ files from the NW215.INT subdirectory of the
LAN_DRV_192 [or 193] diskette to the LAN_DRV_.192/193
subdirectory of your generation directory.

2.   The proper BIN file to the SYSTEM subdirectory of the generation directory.

3.   NWLT1.LAN/NWL64.LAN to the AUXGEN subdirectory of the generation directory.

4.   Run NETGEN

FYI: Files transfer empty when the KBD= parameter is used
                                        FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within it's means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit claims to the validity of this information.)

          TITLE: Files transfer empty when the KBD= parameter is used
  DOCUMENT ID#:   FYI.S.24
          DATE: 3FEB92
       PRODUCT: 5250 File Transfer
PRODUCT VERSION: 1.38
    SUPERSEDES: NA

       SYMPTOM: Files transfer empty when the KBD= parameter is used

ISSUE/PROBLEM

     During File Transfer a procedure called DBDLA is created. When NVLFTI is executed specifying the PUT Function, the data activation string DLBDA SECURITY is sent to the host.

     KBD= specifies the language the of the string.
          KBD=F for French speaking countries
          KBD=G for German speaking countries

     However, Version 1.38 of 5250 File Transfer does not process the parameter KBD= (Version 1.37 does), therefore, the string is not sent to the host correctly. The display shows the word SECURITY translated with or without the parameter.

     The PUT function appears to work, the transfer operates normally and the file appears to be transferred. However, the file created is empty.

The GET function works properly.

SOLUTION

Page 7-3 of the NetWare 5250 File Transfer Guide shows the session parameter SSN with only one option when in fact there are three options: It should say SSN[s,kbd,tt] instead of SSN[s]

kbd specifies the keyboard select option to modify the Netware 5250 File Transfer Scan Code Table.

tt=0 (default) specifies that the built-in ASCII to EBCDIC Translation Table will be used -and normally doesn't need to be changed-, or, tt=1 specifies that the ASCII to EBCDIC Translation Table to be used will be the one in the 5250 Emulation Software.

These options can also be set through the environment variable DLSSN, by means of the SET command, in which case no parameters need to be added to the command line when executing NVLFTI.

In either case, it is very important to remember that commas have to be used in place of the parameters that will remain unchanged.

NVLFTI SSN[,G,1] will result in a first session with keyboard select option for Germany and the Translation Table of the 5250 emulation software. The same result is obtained running NVLFTI.EXE, without options after setting the environment variable: SET DLSSN=,G,1

(see Note 3-96 for further information)

FYI: Btrieve Pascal Examples
                                        FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

          TITLE: Btrieve Pascal Examples
  DOCUMENT ID#:   FYI.A.1744
           DATE: 20FEB92

```
        PRODUCT:      Btrieve for DOS
PRODUCT VERSION:      5.10a
   SUPERSEDES:        NA
```

        SYMPTOM: Status 25 or 27 on a Create

ISSUE/PROBLEM

     The sample Pascal programs in the Btrieve Programmer's
Manual (April 1990 edition) were written for IBM (or Microsoft)
Pascal. Programmers using Turbo Pascal can not use the examples
straight out of the book because of the difference in the way
"string" variables work in the two languages. In Turbo Pascal, a
variable declared as "string[4]" is actually 5 bytes long, which
includes a length byte indicating the significant amount of data
in the remaining 4 bytes. Btrieve, however, does not expect this
length byte, and will try to interpret it as a general data byte.
Specifically, the Btrieve Create example in Appendix D will
result in a status 25 - 'Create I/O Error', 27 - 'Invalid Key
Position', or possibly other errors if used in a Turbo Pascal
program. The following changes should be made in order for the
example to function properly under Turbo Pascal:

     a)   The key specification must include a 4-byte "Not used"
field. The sample program has this declared as NOT_USED :
string[4]; which is actually a 5-byte field. This will cause a
status 27 to be returned on the Btrieve create call. Change this
variable to NOT_USED : ARRAY [1..4] OF char;

     b)   Similarly, the file specification includes a 4-byte
"Not used" field as well as a 2-byte "Reserved" field. The
sample program declares these as NOT_USED : string[4]; and
RESERVED : string[2]; respectively. These may also produce a
status 27 on the Btrieve create call. Change the data type of
these fields to ARRAY [1..x] OF char.

     c)   The KeyBuffer parameter passed on the BTRV create call
must contain the name of the file to be created. The example
uses a variable declared as FILE_NAME : string[17]; and then
calls Btrieve with this variable as the key buffer (5th)
parameter. When Btrieve looks at FILE_NAME, the first thing it
sees is the length byte, which is generally not a legal character
for a DOS file name, and a status 25 will be returned. To fix
this, either declare this parameter as an ARRAY [1..x] OF char or
pass it to Btrieve with a [1] subscript, for example:

          STATUS := BTRV (B_CREATE, POS_BLK, ..., FILE_NAME[1],

```
0);

     In addition, many of the sample programs define the data
buffer with a variant record.  This is not necessary in Turbo
Pascal.  For example, the Get First example defines and uses the
data buffer as follows:

     type
       EMP_REC = record
         case integer of
         1: (NAME       : string(20);
             AGE        : string(2);
             HIRE_DATE : string(6));
         2: (ENTIRE     : string(28));
       end;
     var
       DATA_BUF : EMP_REC;
       ...
     begin
       ...
       STATUS := BTRV(B_GET_FIRST, POS_BLK, DATA_BUF.ENTIRE,
DATA_LEN,
                      KEY_BUF, 2);

     When using Turbo Pascal, you can use a simple record type,
such as:

     type
       EMP_REC = record
         NAME       : string[20];
         AGE        : string[2];
         HIRE_DATE : string[6]
       end;

     Then, just specify DATA_BUF as the 3rd parameter:

     STATUS := BTRV(B_GET_FIRST, POS_BLK, DATA_BUF, DATA_LEN,
KEY_BUF, 2);

SOLUTION

     NA


FYI:  Loading DLLs Explicitly in Windows
                                        FYI
```

```
            TITLE:      Loading DLLs Explicitly in Windows
  DOCUMENT ID#:         FYI.A.1650
            DATE:       20FEB92
         PRODUCT:       Network C for Windows
PRODUCT VERSION:        v1.22
     SUPERSEDES:        NA
```

        SYMPTOM: NA

ISSUE/PROBLEM

        How do you develop a Windows program that is NetWare aware,
without relying on NetWare being there? Normally, if a Windows
program makes any calls to any NetWare C Interface-Windows DLL,
that DLL is loaded implicitly (automatically) by Windows at run-
time. All of these DLLs except the NWIPXSPX.DLL require access
to functions in the NETWARE.DRV (which in actuality is a DLL).
NETWARE.DRV is NOT loaded if the NetWare shell is not loaded
before starting Windows.

SOLUTION

        Load the DLLs explicitly instead of implicitly, as follows:

        a)   Determine if the NETWARE.DRV is loaded:

```
        HANDLE hNetWare;

        hNetWare = GetModuleHandle("NETWARE.DRV");
        if (hNetWare == NULL)
           // not loaded
        else
           // loaded!
```

        b)   See if you can load the DLL (in this case, NWBIND.DLL):

```
        HANDLE hDLL;

        hDLL = LoadLibrary("NWBIND.DLL");
        if (hDLL < 32)
           // some kind of error (file not found = 2)
```

```
        else
            // loaded!
```

c)   Make the function(s) point to their location(s) in the DLL. Below
        are two examples for accomplishing this:

```
        // This method uses the function string name
        // (very memory hungry; pointers + strings, slow load
time)
        GetBinderyObjectID =
                (WORD (FAR PASCAL *)()) GetProcAddress(hDLL,
"GetBinderyObjectID"
    ;
        // This method uses the function ordinal number (in this
case, 14)
        // (little memory; just pointers, very fast)
        GetBinderyObjectID =
                (WORD (FAR PASCAL *)()) GetProcAddress(hDLL,
(LPSTR)14);
```

These steps also require the use of modified prototypes for
the functions, so they are pointers to functions. For example,
to modify the prototype for GetBinderyObjectID(), change the line
in the NWBINDRY.H file from:

```
    extern WORD FAR PASCAL GetBinderyObjectID(char    far
*objectName,
                                              WORD
objectType,
                                              DWORD   far
*objectID );
```

to:

```
    WORD (FAR PASCAL *GetBinderyObjectID)(char    far
*objectName,
                                   WORD    objectType,
                                   DWORD   far
*objectID );
```

In addition, do NOT import the functions from the DLLs you
explicitly load. The actual calls to the functions do not have
to be changed once all the above steps are taken.

FYI: Internals of the XQL Data Segment

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Internals of the XQL Data Segment
    DOCUMENT ID#:   FYI.A.1745
            DATE: 10FEB92
         PRODUCT: XQL for DOS
 PRODUCT VERSION: 2.11
      SUPERSEDES: NA

         SYMPTOM: NA

ISSUE/PROBLEM

     When XQL is loaded, it allocates a 64K data segment which is
where all its local variables are stored when executing the
functions requested by an application. Out of this 64K data
segment there is a fixed amount of memory which is taken up by
global data and data that is allocated at load-time. The
remaining memory is divided up according to the specified load-
time parameters. The following chart shows how the 64K buffer is
divided up. Note: The use of expanded memory will not change
the information below. The benefit of expanded memory is that
you will have more free memory available on your system once XQL
loads.

      BYTES   DESCRIPTION

      13856   XQL's global data
        980   Memory allocated to hold information about active
dictionary
        539   Current Session data structure
        867   Current View data structure
       1400   Join List data structures
       2267   Data buffer allocated at load-time which is used
for swapping
              data structures to disk
       2062   Memory used for extended Btrieve operations
        896   Dictionary position blocks
        817   Miscellaneous key buffer, currency addresses, etc.

```
      ------
      23684   This is the fixed size of data that resides in
XQL's 64K data segment.  There are 41852 bytes of data left for
the load-time parameters.  Space will be allocated in the data
segment for the /w, /t and /b parameters as follows:


         w    Fetch buffer.  w = value in /w: parameter
     t * 130  Transaction processing.  t = value in /t:
parameter
              Defaults to 12.
     b * 1024  Heap buffer.  b = value in /b: parameter
      --------
      65536   If this number is exceeded, XQL will display an
"insufficient memory" error and fail to load.


     1.   The following load parameters will cause insufficient
memory
          xql /t:12 /v:8 /w:8000 /b:32 /e

          23684 + (12 * 130) + 8000 + (32 * 1024) = 66012


     2.   Dropping the /t parameter to 8 will allow XQL to load.
           xql /t:8 /v:8 /w:8000 /b:32 /e

          23684 + (8 * 130) + 8000 + (32 * 1024) = 65492
```

SOLUTION

     NA

FYI: Loading/Unloading Xtrieve Many Times Hangs DOS v5
Workstation
                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
        TITLE:     Loading/Unloading Xtrieve Many Times Hangs
DOS v5 Workstation
  DOCUMENT ID#:     FYI.A.2417
         DATE:      07FEB92
      PRODUCT:      Xtrieve PLUS Network
PRODUCT VERSION:    4.10
```

SUPERSEDES: NA

          SYMPTOM: Workstation hangs

ISSUE/PROBLEM

     On a standalone machine, running DOS 5.0, if you load and
unload Xtrieve PLUS v4.10 approximately 14 times, the workstation
will hang. This problem was reproduced with the following
products:

     DOS v5.0
     Btrieve for DOS v5.10a (patched to #114)
     XQLP v2.11a (shipped with Xtrieve PLUS v4.10)
     Xtrieve PLUS v4.10 (patched to #15)

     Xtrieve loaded Btrieve and XQLP automatically, and default
load parameters were used. The AUTOEXEC.BAT contained the
statement: "prompt pg", and the CONFIG.SYS contained the
statements: "files=60" and "buffers=20".

SOLUTION

     If SHARE.EXE (which ships with DOS 5.0) is loaded before
loading and unloading Xtrieve, the workstation does not hang.

FYI: VGA Card Conflict With Xtrieve PLUS
                                   FYI

          TITLE: VGA Card Conflict With Xtrieve PLUS
  DOCUMENT ID#:   FYI.A.1922
           DATE: 07FEB92
        PRODUCT: Xtrieve PLUS
PRODUCT VERSION: 4.10
     SUPERSEDES: NA

          SYMPTOM: Machine hangs when loading Xtrieve

ISSUE/PROBLEM

    When trying to load Xtrieve PLUS v4.10, the machine locks
up, without even loading the record manager (or relational
manager). No error messages are displayed.

SOLUTION

    The problem appeared to be related to a particular VGA card,
which when replaced by another brand, allowed Xtrieve PLUS to
load at the workstation.

    The VGA card with which the problem occurred was an AHEAD
AVGA Deluxe board; perhaps also referred to as the A2000 series.
The company name for this card is "AHEAD".

FYI: MapDrive() And Search Drives
                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: MapDrive() And Search Drives
   DOCUMENT ID#:   FYI.A.3354
            DATE: 07FEB92
         PRODUCT: NetWare C Interface DOS
 PRODUCT VERSION: 1.20
      SUPERSEDES: NA

      SYMPTOM: Mapped drives can not be deleted.

ISSUE/PROBLEM

    Numerous problems have been reported by developers when
attempting to delete search drives with the MapDrive() function.
The function will successfully delete mapped search drives, but
there are a few undocumented prerequisites. Below is an example
of what is required to delete a mapped search drive.

```
        GetSearchDriveVector(vectorBuffer);
        for(i=0;i<16;i++)
        if(vectorBuffer[i] == driveLetter - 'A') break;
        if(i == 16) i=0;
```

```
            else i++;                         /* Search Drives Are
Relative*/
                                              /* to 1 not 0.
*/
        cCode=MapDrive(connectionID,     /* File Server Connection
ID */
                    NO_BASE_DRIVE,    /* No Relative Drive
Mapping */
                    "",               /* No Path Required
*/
                    DRIVE_DELETE,     /* Delete This Drive
*/
                    i,                /* Number Of Search Drive
*/
                    &driveLetter);    /* Drive To Be Deleted
*/
```

The two most common problems are not using the proper
connectionID and not passing in the proper search drive number.
The connectionID is the file server to which the drive is mapped.
The search drive number is a number from 1 to 16 which indicates
the order of the search drive in the search drive vector table.

SOLUTION

   NA

FYI: Status 27 On a Btrieve Create
                                      FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

         TITLE: Status 27 On a Btrieve Create
  DOCUMENT ID#:   FYI.A.2416
          DATE: 06FEB92
       PRODUCT: Btrieve
PRODUCT VERSION: ALL
    SUPERSEDES: NA

     SYMPTOM: Status 27 - Invalid Key Position

ISSUE/PROBLEM

     When creating a Btrieve file, a position must be specified
for each key segment. This is the starting position of the
segment within the data record. If the value 0 is specified for
a key position, a status 27 (Invalid Key Position) will be
returned.

SOLUTION

     A key position must be between 1 and the specified record
length. This is true for both a BUTIL -CREATE or an application
making a Btrieve call which performs an operation 14 (Create).

FYI: The PUBLIC User in Xtrieve PLUS v4.10
                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

           TITLE: The PUBLIC User in Xtrieve PLUS v4.10
     DOCUMENT ID#:   FYI.A.1921
             DATE: 05FEB92
          PRODUCT: Xtrieve Plus Network
  PRODUCT VERSION: 4.10
       SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

     Xtrieve's "PUBLIC" user - what is it?

SOLUTION

     Xtrieve PLUS v4.10 has introduced a user called "PUBLIC" in
it's Security implementation. This is not really a user, in the
sense that one cannot use this username to get into a dictionary
that has security installed. It does not even have a password -
but, again, that's because it is not a username.

It can be thought of as a group (similar to NetWare - there can be individual users and groups). The "Master" user can assign rights to this user, and then, for every individual user that's added, the rights do not have to be re-defined. Each user can be assigned the rights that have been assigned to PUBLIC (similar to security equivalences in NetWare).

FYI: HLLAPI Application Hangs
                              FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

            TITLE: HLLAPI Application Hangs
  DOCUMENT ID#:   FYI.A.2831
          DATE: 04FEB92
       PRODUCT: 3270 Tools for DOS
PRODUCT VERSION: 1.5
    SUPERSEDES: NA

     SYMPTOM: Program hangs when WAIT function is called.

ISSUE/PROBLEM

     The wait function does not always return control to the calling application when the NWAIT option is set in Function-9: Set Session parameters.

     If the PS (Presentation Space) is changed before you call Function-24 (Query Host Update) HLLAPI returns a status 22 - 'PS updated'. Subsequent calls to Function-24 always return a status 22 regardless of whether or not the PS is changed.

SOLUTION

     The PTF253.ZIP file, located in library 9 of the NOVLIB forum on Compuserve contains a fix for this problem.

FYI: Calling GlobalAlloc() from a Windows DLL
                              FYI

```
         TITLE:      Calling GlobalAlloc() from a Windows DLL
   DOCUMENT ID#:     FYI.A.2934
          DATE:      04FEB92
       PRODUCT:      Network C for Windows
PRODUCT VERSION:     1.22
    SUPERSEDES:      NA
```

       SYMPTOM: NA

ISSUE/PROBLEM

     When allocating an ECB (Event Control Block) dynamically
using GlobalAlloc(), the following flags should be specified:
GMEM_DDESHARE, GMEM_FIXED, GMEM_NOT_BANKED. However,
GlobalLock() OR GlobalWire() must be called, followed by
GlobalPageLock(). The reason for calling GlobalPageLock() is to
inform the Windows Kernel not to switch the memory containing the
ECBs. This is very important when using ESRs.

     In any case, it is highly recommended that the ECB memory be
locked in the DATA Segment. To accomplish this, declare the data
segment containing both the ECBs and packet fragments as FIXED in
the program's .DEF file.

SOLUTION

     NA

FYI: CLib GetVolumeNumber() Returns Garbage
                                   FYI

```
         TITLE:      CLib GetVolumeNumber() Returns Garbage
   DOCUMENT ID#:     FYI.A.1649
```

DATE: 04FEB92
             PRODUCT: Network C for NLMs
     PRODUCT VERSION: SDKb
          SUPERSEDES: NA

        SYMPTOM: Gargadge is returned for a volume number

ISSUE/PROBLEM

    GetVolumeNumber(), when called for a volume on a remote
server, returns garbage for a volume number.

SOLUTION

    Actually, the volume number is returned in the first byte.
The remainder of the 2-byte integer, however, is not cleared, and
contains the "old" information it had before the call. For
example:

    Source:

      int volNumber = 0xFFFFFFFF;
      GetVolumeNumber("SYS", &volNumber);
      printf("0x%X\n", volNumber);

    Output:

      0xFFFFFF00

    Just clear the volume number to 0's before making the call.

FYI: Queue Functions For NetWare 3.11
                                   FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Queue Functions For NetWare 3.11
      DOCUMENT ID#:   FYI.A.3222
             DATE: 04FEB92
          PRODUCT: NetWare C Interface DOS

PRODUCT VERSION: 2.0a
   SUPERSEDES: NA

       SYMPTOM: NA

ISSUE/PROBLEM

     The API GetQueueJobList() returns up to 250 job numbers for
a specified queue. In NetWare 2.15 and 3.10, a queue could only
have 250 jobs. However, NetWare 3.11 allows up to 8000 jobs in a
queue. GetQueueJobList() can only access the first 250 jobs of a
queue.

SOLUTION

     NA

FYI: Send_Data Verb Hangs
                              FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

         TITLE: Send_Data Verb Hangs
   DOCUMENT ID#:   FYI.A.2830
          DATE: 04FEB92
       PRODUCT: LU6.2 Tools for DOS
PRODUCT VERSION: 1.1
   SUPERSEDES: NA

       SYMPTOM: Send_Data verb hangs workstation

ISSUE/PROBLEM

     Send_Data verb hangs even after setting attach_pu.retcode =
Incomplete. It hangs (doesn't return) when the receive program
is paused (and the pacing count is used up). This behavior is
only expected if attach_pu.return_code was set to Complete; when
set to Incomplete, send_data is expected to return with some
'incomplete' error.

SOLUTION

     Currently, there is no work around.

FYI: CPI-C Interface Support for NetWare LU6.2
                              FYI

              TITLE: CPI-C Interface Support for NetWare LU6.2
        DOCUMENT ID#:   FYI.A.2829
                DATE: 04FEB92
             PRODUCT: LU6.2 Tools for DOS
     PRODUCT VERSION: 1.2
          SUPERSEDES: Netware LU6.2 Tools v1.2

         SYMPTOM: NA

ISSUE/PROBLEM

     NetWare LU6.2 supports two IBM LU6.2 programming interfaces:
CPI-C (Common Programming Interface for Communications) and APPC
(Advanced Program-to-Program Communication). CPI-C and APPC are
two separate implementations of the SNA LU6.2 architecture.
Many, but not all, of the APPC functions are included in CPI-C.
Transaction programs using CPI-C can communicate with most of the
CICS programs that use the APPC interface but there are some
things that CPI-C does not support. For example, it does not
support PIP (Program Initialization Parameters), Locks, Map_Name,
FMH_Data and Synch_Point. CPI-C programs also do not control
security.

SOLUTION

     NA

FYI: rename() Directory Against a 2.x Server
                              FYI

```
          TITLE:       rename() Directory Against a 2.x Server
   DOCUMENT ID#:       FYI.A.3219
           DATE:       04FEB92
        PRODUCT:       Network C for NLMs
PRODUCT VERSION:       2.0b
     SUPERSEDES:       NA
```

        SYMPTOM: NA

ISSUE/PROBLEM

     The rename() API does not work on a directory when a 2.x
file server is the target.

SOLUTION

     The rename() function takes an old name and a new name.
When the target is a 2.x server, the old name must be a full path
and the new name should be the new directory name, without a path
specified.

FYI: Calling EstablishConnection() From an NLM
                                    FYI

```
          TITLE:       Calling EstablishConnection() From an NLM
   DOCUMENT ID#:       FYI.A.3220
           DATE:       04FEB92
        PRODUCT:       Network C for NLMs
PRODUCT VERSION:       2.0b
     SUPERSEDES:       NA
```

        SYMPTOM: NA

ISSUE/PROBLEM

EstablishConnection() from an NLM fails when its client is a DOS workstation.

SOLUTION

The DOS client uses an ESR (Event Service Routine) which keeps interrupts disabled while it's registering the client. If the ListenForConnection() on the DOS client checks the inuse flag, the problem does not occur.

FYI: What is the Poll Function?

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

```
          TITLE:       What is the Poll Function?
  DOCUMENT ID#:        FYI.A.3221
           DATE:       04FEB92
        PRODUCT:       Network C for NLMs
PRODUCT VERSION:       2.0b
     SUPERSEDES:       NA
```

SYMPTOM: NA

ISSUE/PROBLEM

When writing TLI (Transport Layer Interface) code, a t_look call can be used to poll the status of a TLI event. Alternatively, there is a function "poll" in the UNIX STREAMS section of the NLM SDKb which allows the same functionality. This function takes an array of handles returned by t_open, and will return control to the application when an event occurs on any of these handles or the specified timeout expires. This allows the TLI programmer to wait until an event happens and then handle it. In addition: poll can only be passed 20 handles.

SOLUTION

NA

FYI: ScanDirEntry Sequence Number
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: ScanDirEntry Sequence Number
  DOCUMENT ID#:   FYI.A.3218
            DATE: 04FEB92
        PRODUCT: NetWare C Interface DOS
PRODUCT VERSION: 1.2
    SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

    When using the ScanDirEntry() API against a NetWare 2.x
server, only one or two files are returned. The sequence number
is not being updated by this function when a 2.x server is
detected.

SOLUTION

    To avoid this problem, either change the source code to
update the sequence number, or use the sequence number returned
in the DirStructure.

FYI: Undefined Symbols, while Loading an NLM under NetWare 3.10
FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Undefined Symbols, while Loading an NLM under
NetWare 3.10
  DOCUMENT ID#:   FYI.A.2827
            DATE: 04FEB92
        PRODUCT: Network C for NLMs
PRODUCT VERSION: 2.00

SYMPTOM: "Undefine Symbols-GetFileServerID and GetLanAddress" error

ISSUE/PROBLEM

If an NLM containing the API function, GetFileServerID, is loaded on a NetWare 3.10 server, an error will be returned saying the symbol "GetFileServerID" cannot be found. This is because in NetWare 3.10, this function is named GetCurrentConnectionID; the 'GetFileServerID' API was implemented under NetWare 3.11 and will not work under NetWare 3.10.

If the message, "Undefined Symbol for GetLanAddress" is returned under NetWare 3.10, then this function should not be used, because it is a brand new function implemented under NetWare 3.11 and does not work under NetWare 3.10.

SOLUTION

Use GetCurrentConnectionID instead of GetFileServerID under NetWare 3.10.

FYI: Deleted OwnerID Causes Append Problems
                                        FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

SYMPTOM: I/O error from NLM

ISSUE/PROBLEM

When a file is created, it is given an onwerID. If, for some reason the owner of this file gets deleted from the bindery,

the file will have an invalid ownerID. When this file is opened
by an NLM in append mode and writes are made to the file, the NLM
will get an I/O error when a write occurs which causes the file
to expand past the next file allocation unit (default 4096).
When using the Btrieve NLM, this problem generates a status 18 -
"Disk Full".

SOLUTION

     If a user is deleted from the bindery all the files owned by
that user should be assigned a valid ownerid or should be
deleted. If there is a file that it is absolutely neccessary to
protect, making the ownerid supervisor will ensure it never has
an invalid ownerID.

FYI: Problem with GetBinderyObjectDiskSpaceLeft()
                                   FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Problem with GetBinderyObjectDiskSpaceLeft()
   DOCUMENT ID#:   FYI.A.2828
            DATE: 04FEB92
         PRODUCT: NetWare C Interface DOS
PRODUCT VERSION: 1.20
     SUPERSEDES: NA

     SYMPTOM: UsedDiskBlocks is returned instead of
UnusedDiskBlocks

ISSUE/PROBLEM

     In the GetBinderyObjectDiskSpaceLeft() API, the value
returned in the unusedDiskBlocks parameter is in fact the value
for Used Disk Blocks of the specified object. The returned value
also includes the Used Disk Blocks for all the volumes on the
specified server.

SOLUTION

     There is no work around available at this time.

FYI: System Calls & SetCapturePrintQueue
                                          FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: System Calls & SetCapturePrintQueue
   DOCUMENT ID#:   FYI.A.2652
            DATE: 03FEB92
         PRODUCT: NetWare System Calls
PRODUCT VERSION: 1.0
      SUPERSEDES: NA

       SYMPTOM: NA

ISSUE/PROBLEM

      There is a documentation error for the SetCapturePrintQueue
system call. The DL register must be set to the server connection
ID for the server that contains the specified queue.

SOLUTION

      NA

FYI: C Interface - Windows & IPXTaskID Values
                                          FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: C Interface - Windows & IPXTaskID Values
   DOCUMENT ID#:   FYI.A.2653
            DATE: 03FEB92
         PRODUCT: Network C for Windows
PRODUCT VERSION: 1.22
      SUPERSEDES: NA

SYMPTOM: NA

ISSUE/PROBLEM

        What values can IPXTaskID be following IPXInitialize() or
SPXInitialize calls?

        In ENHANCED mode, it can be any value, but most likely will
be the value that was passed into the initialize calls. It is
not used and serves only as a dummy parameter.

        In STANDARD and REAL modes, it is still required and needs
to be used.

SOLUTION

        NA

FYI: WATCOM C/386 Compiler Documentation Error
                                        FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

           TITLE: WATCOM C/386 Compiler Documentation Error
     DOCUMENT ID#:   FYI.A.1647
             DATE: 30JAN92
          PRODUCT: Network C for NLMs
  PRODUCT VERSION: SDKb
       SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

        The WATCOM C/386 manual, "Optimizing Compiler and Tools
User's Guide" has an error in it on page 38. A predefined macro,
__NETWARE_386__, is described as being defined by the
Novell/WATCOM C SQL Compiler. These manuals ship with version
8.5 of the Watcom Compiler, which does NOT include Embedded SQL,
and this was the only time this macro was defined in the past.

SOLUTION

     If you need to determine if your code is being compiled by
the Watcom C/386 compiler, check for the __386__ and __WATCOMC__
macros to be defined as follows:

     #if defined(__WATCOMC__) && defined(__386__)

        // special code goes here

     #endif

FYI: Unresolved Externals _end and _edata
                                   FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

            TITLE: Unresolved Externals _end and _edata
     DOCUMENT ID#:   FYI.A.1648
             DATE: 30JAN92
          PRODUCT: Network C for NLMs
  PRODUCT VERSION: SDKb
       SUPERSEDES: NA

        SYMPTOM: NA

ISSUE/PROBLEM

     When linking, using NLMLINK, the linker reports two
unresolved externals: _end and _edata.

SOLUTION

     Link in OPRELUDE.OBJ instead of PRELUDE.OBJ if using
NLMLINK. Both OPRELUDE.OBJ and NLMLINK are supplied on SDKa, NOT
SDKb. But, a number of programmers who have SDKb are still using
NLMLINK. It seems WLINK supplies these externals at link time
and they are required by PRELUDE.OBJ, while NLMLINK does not
supply them, and hence, OPRELUDE.OBJ must be linked in instead.

FYI: EMSNETX Bug

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
         TITLE:        EMSNETX Bug
  DOCUMENT ID#:        FYI.A.1645
          DATE:        30JAN92
       PRODUCT:        EMSNETX
PRODUCT VERSION:       3.22
    SUPERSEDES:        NA


       SYMPTOM: NA
```

ISSUE/PROBLEM

      Under certain conditions, file writes using EMSNETX v3.22
can become corrupted. Specifically, this happens when the buffer
being written from/to is in EMS memory, as well as the buffers
the shell is using. The error usually does not occur right away,
but instead it occurs within one or two hours, with one to six
bytes typically being corrupted each time.

SOLUTION

      Set CACHE BUFFERS=0 in NET.CFG or SHELL.CFG or don't use the
EMS shell, to keep this from occurring.

FYI: ChangeBinderyObjectPassword() as a Supervisor or Equivalent

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

         TITLE: ChangeBinderyObjectPassword() as a Supervisor
or Equivalent

```
     DOCUMENT ID#:        FYI.A.1316
             DATE:        29JAN92
          PRODUCT:        NetWare C Interface DOS
PRODUCT VERSION:          1.20
      SUPERSEDES:         N/A


          SYMPTOM: N/A
```

ISSUE/PROBLEM

     Suppose a user with supervisor equivalence or a supervisor
wants to change a user's password using the APIs. The use of
ChangeBinderyObjectPassword() requires the old password as an
input parameter.

SOLUTION

     Using the ChangeBinderyObjectPassword() and passing NULL as
the old password parameter will work as follows...

```
     cCode = ChangeBinderyObjectPassword(userNameToChange,
          OT_USER,
          NULL,
          newPswd);
```


FYI: ScheduleSleepAESProcessEvent Documentation Error
                                   FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
            TITLE:        ScheduleSleepAESProcessEvent Documentation
Error
   DOCUMENT ID#:        FYI.A.3830
             DATE:        28JAN92
          PRODUCT:        Network C for NLMs
PRODUCT VERSION:          SDKb
      SUPERSEDES:         NA


          SYMPTOM: NA
```

ISSUE/PROBLEM

In the documentation of ScheduleSleepAESProcessEvent, under the heading of Syntax, the function name is mentioned as ScheduleNoSleepAESProcessEvent.

SOLUTION

It should be ScheduleSleepAESProcessEvent.

FYI: CLib rename() Failure
                              FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

           TITLE: CLib rename() Failure
  DOCUMENT ID#:   FYI.A.1646
          DATE: 28JAN92
       PRODUCT: Network C for NLMs
PRODUCT VERSION: SDKb
    SUPERSEDES: NA

     SYMPTOM: NA

ISSUE/PROBLEM

     The rename() function returns 0xFF when trying to rename directories on remote 2.x servers when the new directory name includes an extension. This is somewhat similar to the problem with mkdir() not making remote 2.x directories with extensions.

SOLUTION

    NA

FYI: KeyServer
                              FYI

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit

or implied claims to the validity of this information.)

```
            TITLE:      KeyServer
   DOCUMENT ID#:        FYI.W.0078
             DATE:      02MAR92
          PRODUCT:      NetWare for Macintosh
  PRODUCT VERSION:      3.x
       SUPERSEDES:      NA
```

SYMPTOM: Can't log into KeyServer. KeyServer is
concurrent-use license management software for networks.
KeyServer manages access to Macintosh applications much like a
library. Whenever usage of a "keyed" application is below the
licensed limit, a key is checked out. If all keys are in use,
the launch attempt aborts, and a dialog box offer's a place for
the user in a waiting queue.

ISSUE/PROBLEM

    KeyServer shows up in the Chooser, but when you attempt to
select it, a login dialog comes up. According to the vendor,
this dialog should not appear in KeyServer, and indicates that
the INIT can't connect to the network service. Turns out there's
a bug in the Chooser that causes the Chooser not to update
resources that belong to it if the network has a single named
zone. When switching from the VAPs (which had no router so the
only zone was "*") to the NLMs (whose router requires at least
ONE zone name on non-extended networks), the problem showed up.
The zone name resource in KeyAccess was not being updated.

SOLUTION

    Change a resource in the KeyAccess program (the client part
of the KeyServer package). Sassafras Software had sent it out
with a zone name in that resource instead of a "*", and the
Chooser didn't update it with our zone name. In KeyAccess,
change the STR resource -4090, replacing the bogus name with "*",
then pad the data section with zeroes to a length of 33 bytes.
This was KeyServer Light version 2.3.91, KeyAccess version 2.3.9.
These resources can be edited with any resource editor like
Apple's ResEdit program, but users should be careful and only
edit of copy of KeyServer. Resource editors can corrupt files
when used improperly.

FYI: Novell NL1000 & 3.11

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
         TITLE:       Novell NL1000 & 3.11
   DOCUMENT ID#:      FYI.W.0077
           DATE:      24FEB92
        PRODUCT:      NetWare for Macintosh
PRODUCT VERSION:      v3.x
     SUPERSEDES:      NA

        SYMPTOM:      Novell NL1000 LocalTalk card doesn't work
with NetWare 3.11.
```

ISSUE/PROBLEM

     The Novell NL1000 is not supported by NetWare 3.11, due to
the fact that the NL1000 has poor performance in 386/486 based
computers. It is supported in the 286 product line. The Dayna
DL2000 and DL/2 are the only supported LocalTalk cards with v3.11
NetWare.

SOLUTION

     Customers must use a Dayna DL2000 or DL/2 card with v3.11
NetWare for LocalTalk connectivity.

FYI: Grace Login Notification

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

```
         TITLE:       Grace Login Notification
   DOCUMENT ID#:      FYI.W.0071
           DATE:      20FEB92
        PRODUCT:      NetWare for Macintosh
PRODUCT VERSION:      v3.0 and v3.01
```

SUPERSEDES: NA

          SYMPTOM: When the Macintosh client logs into a server
and a grace login is used there is no notification.

ISSUE/PROBLEM

     Because NetWare for Macintosh corresponds to AppleShare
specifications, the Macintosh is not notified when a grace login
is used. AppleShare does not have this functionality.

SOLUTION

     As a workaround, AFPFIX3.NLM was developed. This patch will
notify Macintosh clients when a grace login is used so they may
be warned they need to change their password. The Macintosh
client will need to have the Notify init installed to receive
these messages. The Notify init comes with NetWare for Macintosh
utilities. AFPFX3.ZIP is posted to CompuServe's NetWire in
NOVLIB library 8, with instructions on how to use.

FYI: Macintosh print queues disappear.
                                        FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Macintosh print queues disappear.
   DOCUMENT ID#:   FYI.W.0070
           DATE: 20FEB92
        PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v1.1
     SUPERSEDES: NA

          SYMPTOM: Macintosh print queues unpublish themselves
randomly.

ISSUE/PROBLEM

     The server is running 2.15c and the 1.1 Mac VAPs and a
Novell NL1000 LocalTalk card. The customer mentioned that the

server has had hardware problems in the past.

SOLUTION

The customer discovered a bad LocalTalk cable, and upon removing it the queues have remained published.

FYI: Error "ATPS: can't login as ####"
                                        FYI

TITLE:	Error "ATPS: can't login as ####"
DOCUMENT ID#:	FYI.W.0073
DATE:	20FEB92
PRODUCT:	NetWare for Macintosh
PRODUCT VERSION:	v3.0 and v3.01
SUPERSEDES:	NA

SYMPTOM: When loading the ATPS.NLM the error "ATPS: can't login as ####" is received.

ISSUE/PROBLEM

The number generated in this message is a bindery number. The message itself indicates this bindery could not be accessed by ATPS and therefore can't load the ATPS NLM.

SOLUTION

There are many possible solutions to this problem. They include:

1.   Verify the group Everyone has not been deleted. The group Everyone is required by ATPS, but does not have to include any members.

2.   Make sure that login is enabled. Login is enabled by default, so only if login was disabled is this an issue. 3. Go into PCONSOLE and delete the Print Server "ATPS_PSRVR" and also delete any queues created by the ATPS.CFG file. After all of the

above is completed load ATPS and all should work.

FYI: Getting notification when print jobs are completed

          TITLE: Getting notification when print jobs are
completed
   DOCUMENT ID#:   FYI.W.0072
          DATE: 20FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v3.01
    SUPERSEDES: NA

       SYMPTOM: Since upgrading to v3.01 NetWare for
Macintosh, my Macintosh clients receive messages every time a
print job is completed. How can I turn this off?

ISSUE/PROBLEM

     With v3.0 NetWare for Macintosh, the Macintosh client would
not receive any messages regarding their print jobs. With v3.01
NetWare for Macintosh, the Macintosh client is informed when a
print job is complete if the Notify init is installed.

SOLUTION

     If you do not want to receive these messages, remove the
Notify init, or disable the "Accept Messages" option from within
the NetWare DA.

FYI: Can't see the NetWare for Macintosh file server

or implied claims to the validity of this information.)

          TITLE: Can't see the NetWare for Macintosh file
server
  DOCUMENT ID#:   FYI.W.0075
          DATE: 20FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v2.2
    SUPERSEDES: NA

       SYMPTOM: The NetWare for Macintosh server does not
appear in the Chooser on the Macintosh client.

ISSUE/PROBLEM

     When an AppleTalk router is on a network that advertises
zones, if special characters are used for the zones names (for
example: *, ^, ~, etc...) the file server will not be able to
advertise itself in zones with special characters.

SOLUTION

     There is a new version of the ATALK and ATALK2 VAPs that
will allow this support of special characters in the zone name.
This patch can be downloaded from CompuServe's NetWire in NOVLIB
library 8, and is called ATALK.ZIP. It includes instructions on
how to install.

FYI: Can't attach printer to the queue
                                FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: Can't attach printer to the queue
  DOCUMENT ID#:   FYI.W.0076
          DATE: 20FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v2.2
    SUPERSEDES: NA

       SYMPTOM: I can't attach the printer to the queue.

ISSUE/PROBLEM

     Some printers use DDP checksums when receiving packets on
the network. NetWare for Macintosh v2.2 incorrectly determines
the DDP checksum value so the printer will not communicate to the
server.

SOLUTION

     To resolve this problem install new ATALK and/or ATALK2
VAPs. These can be obtained from CompuServe's NetWire on NOVLIB
library 8 and the patch is called ATALK.ZIP. Instructions for
use are included.

FYI: EtherPrint by Dayna
                                  FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

          TITLE: EtherPrint by Dayna
  DOCUMENT ID#:   FYI.W.0074
           DATE: 20FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: All versions
    SUPERSEDES: NA

       SYMPTOM: Printers that are connected to the network
with the EtherPrint by Dayna will appear in various zones
intermittently.

ISSUE/PROBLEM

     The EtherPrint box has a known problem that will cause this
symptom.

SOLUTION

     Dayna has developed a new v1.5 ROM to resolve this. Contact
Dayna at 801-972-2000.

FYI: ATPS: Printing to LaserWriter II NT attached to the serial port on the server, substitutes certain characters.
<div align="center">FYI</div>

(Note: The origin of this information may be internal or external to Novell. Novell makes every effort within its means to verify this information. However, the information provided in this document is FOR YOUR INFORMATION only. Novell makes no explicit or implied claims to the validity of this information.)

          TITLE: ATPS: Printing to LaserWriter II NT attached
to the serial port on the server, substitutes certain characters.
  DOCUMENT ID#:   FYI.W.0067
          DATE: 14FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v3.x
    SUPERSEDES: NA

       SYMPTOM: When printing a file from a Macintosh to an
ATPS queue that services an Apple LaserWriter II NT connected to
the COM1 port of the server, certain characters (bullets,
quotes...) are substituted with other characters (%, U, R, etc.).
When the same file is printed to the LaserWriter via LocalTalk,
the proper characters are printed.

ISSUE/PROBLEM

     When the Apple LaserWriter has its dip switches changed to
communicate via the RS232 serial port, it communicates in a 7bit
mode instead of 8bit when communicating via LocalTalk. When
printing characters such as the bullet character or the copyright
symbol, which are ASCII valued characters that are larger that
7bits, they are substituted for a lower ASCII value character.

SOLUTION

     To switch the printer to 8bit mode print the SERIAL.PS file
to the printer from a DOS workstation. This is done by capturing
to the queue and then typing:COPY SERIAL.PS LPT1 SERIAL.PS comes
with version 3.01 NetWare for Macintosh and is copied to
sys:public on the server.

FYI: ATPS: Printing through QMS PS410 using Posttext, text cut in
half at the top of the page.
<div align="center">FYI</div>

TITLE: ATPS: Printing through QMS PS410 using
Posttext, text cut in half at the top of the page.
  DOCUMENT ID#:   FYI.W.0066
          DATE: 13FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v2.x, v3.x
    SUPERSEDES: NA

       SYMPTOM: When printing a DOS or ASCII text file from a
DOS workstation to a QMS PS410 and using the APLASER2.PDF, the
first line of the text would be cut in half at the top of the
page.
ISSUE/PROBLEM

       There are two PDFs that allow post text printing;
APLASER2.PDF for Apple Laser Writers, and PSTSCRPT.PDF for third
party PostScript printers. The margins used for Apple
LaserWriters are different then those used for third party
printers. Therefore, you must use the PSTSCRPT.PDF for third
party printers.

SOLUTION

       After changing the Device to 'PostScript Printer' by using
the PSTSCRPT.PDF, the DOS text file printed with approximately
1/2" margins. This did not cut off the text.

FYI: ATPS: Abend: Invalid semaphore number passed to to kernel.
Running process FSP #6.
                              FYI

       TITLE: ATPS: Abend: Invalid semaphore number passed
to kernel. Running process FSP #6.

```
    DOCUMENT ID#:      FYI.W.0068
          DATE:        13FEB92
       PRODUCT:        NetWare for Macintosh
PRODUCT VERSION:       v2.2
    SUPERSEDES:        NA
```

        SYMPTOM: When trying to create a folder on the server
volume with a Macintosh, the following error is returned: "Abend:
Invalid semaphore number passed to kernel. Running process FSP
#6", and as a result, the server is frozen. The error message
that is displayed on the Macintosh is as follows: "Unable to
create folder, due to error -1072 (Session Closed)". An attempt
to delete a file from the server volume causes the following
error, "Directory access by unauthorized process". The DOS
workstations are able to perform both functions without error.

ISSUE/PROBLEM

    The machine had an Everex controller in it that was using
Novell's standard ISA disk driver (ISADISK.OBJ 6444 bytes, 12-19-
90, ISADISK.DSK 1027 bytes, 2-12-91).

SOLUTION

    After upgrading the ISA disk driver (ISADISK.OBJ 6369 bytes,
12-9-91, ISA22.DSK 1027 bytes, 12-10-91) the problem was resolved
and the Macintosh could function properly. The newer driver can
be downloaded from NetWire NOVLIB Library 3, ISAREM.ZIP.

FYI: ATPS: Can't place job in queue, queue write error.
                                    FYI

(Note: The origin of this information may be internal or external
to Novell. Novell makes every effort within its means to verify
this information. However, the information provided in this
document is FOR YOUR INFORMATION only. Novell makes no explicit
or implied claims to the validity of this information.)

         TITLE: ATPS: Can't place job in queue, queue write
error.
   DOCUMENT ID#:   FYI.W.0069
          DATE: 12FEB92
       PRODUCT: NetWare for Macintosh
PRODUCT VERSION: v3.01
    SUPERSEDES: NA
```

SYMPTOM:     When trying to print to an ATPS queue from a
Macintosh, the following error comes up on the Macintosh: "ATPS:
Can't place job in queue, queue write error".  The problem only
occurred on three of the Macintoshes on the network, other
Macintoshes worked fine.

ISSUE/PROBLEM

    The problem seemed to be related to which user was trying to
print.  After some investigating, it was found that each user was
being limited to a certain amount of disk space.  The users that
weren't able to print had used up all their allotted disk space.

SOLUTION

    To solve this, the users' that had used up their allotted
disk space would need to delete some information, or the amount
of disk space would need to be increased for that particular
user.