

Subject:	Using BootWare with NetWare Client32
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Using BootWare with NetWare Client32

Whenever you are using ODI drivers with BootWare ROMs you must include RPLODI.COM in your batch file. The same applies when using Novell's Client 32 for NetWare. Unfortunately, RPLODI will not load if LSL.COM is not loaded first. Since LSL.COM is not used with the Client32, you must use Lanworks' BWLOADHI utility instead.

Windows v3.x will try to access the NIOS.EXE on the boot drive when started in enhanced mode. When remotebooting, the boot ROM creates a "Virtual Drive A" and fools DOS thinking it's booting from drive A. When you try to start Windows in enhanced mode, it will look for NIOS.EXE on drive A. Until Novell decides to build boot ROM support into Client32, here are 4 workarounds:

1. Map drive letter A to a network directory containing NIOS.EXE.

The drawback to this approach is that you will not have access to your physical drive A. Of course, if you are using a diskless workstation this is not a concern.

2. Another workaround for the problem does not require sacrificing your A: drive, or memory for a RAM drive:

Use SUBST d: a:\ from within your boot image file, to create a virtual drive that will point to the location of NIOS.EXE (d: is any available drive letter). Before unloading BWLOADHI use SUBST d: /D to remove this drive again. After logging in simply map d: to a network directory where the NIOS software resides.

This will enable you to start Windows with no problem.

Using your original files, here is an example (using drive J:):

CONFIG.SYS

```
DEVICE=HIMEM.SYS
DEVICE=EMM386.EXE NOEMS /Y=X:EMM386.EXE
INSTALL=BWLOADHI.COM
BUFFERS=30,0
FILES=50
```

DOS=HIGH, UMB
LASTDRIVE=Z
SHELL=COMMAND.COM /P /E:512

AUTOEXEC.BAT

LH DOSKEY
SET NWLANGUAGE=ENGLISH
SUBST J: A:\
J:\NIOS.EXE
LOAD J:\LSLC32.NLM
LOAD J:\CMSM.NLM
LOAD J:\ETHERTSM.NLM
LOAD J:\3C5X9.LAN PORT=300 FRAME=Ethernet_802.2 INT=A ISA
LOAD J:\3C5X9.LAN PORT=300 FRAME=Ethernet_802.3 INT=A ISA
LOAD J:\IPX.NLM
LOAD J:\CLIENT32.NLM
F:
FREEMEM.BAT

FREEMEM.BAT

A:\SUBST J: /D
BWLOADHI /U
LOGIN CONRAD

System Login Script

MAP ROOT J:= SERVER1/SYS:NOVELL\CLIENT32

3. If you have a drive A, place a floppy containing NIOS.EXE in drive A everytime you start Windows.

4. The final workaround is to create a RAM drive (using RAMDRIVE.SYS, for example) from within your boot image file, copy all the network drivers and files to that RAM drive, and a load them from there. See the example below. The obvious disadvantage of this approach is the sacrifice of RAM.

CONFIG.SYS

DEVICE=HIMEM.SYS
DEVICE=EMM386.EXE NOEMS /Y=X:EMM386.EXE
DEVICE=RAMDRIVE.SYS 1440 /E
INSTALL=BWLOADHI.COM
BUFFERS=30,0
FILES=50 DOS=HIGH, UMB

LASTDRIVE=Z
SHELL=COMMAND.COM /P /E:512

AUTOEXEC.BAT

COPY A:*.* D:\ D:
LH DOSKEY
SET NWLANGUAGE=ENGLISH
D:\NIOS.EXE
LOAD D:\LSLC32.NLM
LOAD D:\CMSM.NLM
LOAD D:\ETHERTSM.NLM
LOAD D:\3C5X9.LAN PORT=300 FRAME=Ethernet_802.2 INT=A ISA
LOAD D:\3C5X9.LAN PORT=300 FRAME=Ethernet_802.3 INT=A ISA
LOAD D:\IPX.NLM
LOAD D:\CLIENT32.NLM
F:
FREEMEM.BAT

FREEMEM.BAT

BWLOADHI /U
LOGIN USERNAME

Client32 frees up more conventional memory and only has a 4K footprint in upper memory. As a result, we can expect to see many more network administrators upgrading to NetWare Client32 to take advantage of the benefits it offers.

Please note, the current release of NetWare Client32 does not support remotebooting Windows 95 clients. The instructions mentioned above are for DOS and Windows 3.x clients only.