



NetWare Core Dump: Create and Copy

Alexander Support Document

www.alexander.com

TASK: *How to make a NetWare core dump and move it from the server for analysis*

If you need to make a NetWare core dump and are not using the automated features of the Alexander SPK NetWare (which does this for you), follow the information in this document. It will show you what you need to know to make a core dump and how to move it so that you can analyze it or submit it for remote analysis.

Creating a Core Dump

You can start a core dump in these two ways:

1. By selecting the core dump option when an ABEND occurs.
NOTE: After the core dump is completed, the server ABEND handler restarts or reboots itself depending on the Auto Restart After ABEND parameter setting.
2. By forcing a core dump by entering `.c` while in the NetWare internal debugger. If the server is not completely frozen, you can enter the debugger by pressing Shift+Shift+Alt+Esc.

WARNING: *If you enter the debugger on a running server, all server operations will freeze until you leave the debugger!*

HINT: Press the left Shift key with the left hand, and press both the right Shift key and Alt with the right hand. Then press Esc with the most convenient finger of the left hand. Then enter `.c` at the # prompt and respond to the Core Dump Prompt Options. When the core dump is finished, enter "g" to resume the server's execution if possible, enter h to display Help, or enter q to exit the debugger.

Core Dump Prompt Options

Whether you selected the core dump option after an ABEND or are forcing a core dump, you have the following options when responding to the core dump prompts.

Sending a Dump to a Local Partition

After you start the core dump, you are asked to specify the DOS drive letter and file path that the memory image file will be written to. The drive can be any writable DOS device that contains enough storage space. This could be the C: drive or another FAT partition (on a USB storage device, for example).

IMPORTANT: *If the device is a USB device, you must format it and plug it in to the server so that it has a drive letter assigned to it before the core dump is initiated.*

You can plug in a preformatted USB storage device when the server is halted in the debugger (# prompt). The device is recognized and mounted automatically as a FAT partition. Then, when you initiate the core dump with the `.c` option, the USB storage device shows up as one of the local drives with the associated drive letter.

When the image is written to a local hard disk on the server, the default name of the image file is `c:\coredump.img`.

To write to a different device, substitute the drive letter and file-name. For example, `d:\coredump.img`

The image file can also be written to a network drive later. This can be done using `sys:system\imgcopy.nlm` or any other third-party NLM™ that provides this functionality.

Sending a Dump to a Network Device

Start an image host agent by doing the following: On a NetWare server, load `imgghost.nlm` or from a Windows workstation, run `sys:public\imgghost.exe`. When loading the `imgghost.nlm` or running the `imgghost.exe`, you can specify a directory where you want the image to be sent (the directory must already be created) or accept the default paths. For example: load `imgghost sys:coredump`. The default path for `imgghost.nlm` is volume `sys:`. The default path for `imgghost.exe` is the directory that you run the `.exe` from.

At the "Where should the diagnostics coredump be sent?" prompt, select the Network option. At the "IP Address of IMGHOST" prompt, enter the IP address of the server or workstation where you started the image host agent. The image host agent receives the core dump from server and stores it in a directory based on the server name and the file name based on the date (year, month, day, version) of the core dump with an `.img` extension. For example, if a file was sent from a server named `DASERVER1` on April 3, 2003 to a server running `imgghost.nlm`, the `DASERVER1\030403aa.img` directory and file would be created on volume `sys:`.

Core Dump Copy/Move Tool

<http://www.novell.com/cooltools/tools/1115.html>
Note this web page discusses NetWare 3.x/4.x but it should work fine on the most recent 6.x release. If not, contact Alexander LAN, Inc.

For additional information

Alexander LAN, Inc.

100 Perimeter Road

Nashua, New Hampshire 03063 USA

Tel: (603) 880-8800

Fax: (603) 880-8881

www.alexander.com

support@alexander.com

PROMPTS	RESPONSE / EFFECTS
Reboot server after core dump?	Y: Reboots server after the core dump. N: Leaves the server in same state after dump.
List shows available drives and space	Lets you choose a local partition, including USB devices, for the dump.
Core dump Type	FULL: Copies all server memory to the specified location. The size of the full image file will be approximately equal to server RAM. Full w/o cache: Copies all server memory except file cache (disk cache). The size of the image file will be equal to RAM minus file cache (Note that cache is NOT needed for analysis.)
Compress Core Dump	Yes: Takes longer but saves lots of space. No: Takes less time but uses more disk space.
Where should diagnostic core dump be sent?	HDISK: Sends the file to a local partition. Network: Sends the file to the IP address of the image host (server or workstation). This greatly decreases the time that the server must remain in a downed state for diagnostics.