Novell
Open Enterprise Server

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LINUX TIPS FOR NETWARE
ADMINISTRATORS

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About This Guide

We plan to expand the information in this guide over time. However, it will never become a substitute for the formal, intensive training that is required to become an efficient and successful Linux administrator.

Audience

This guide is designed to help network administrators understand some of the similarities and differences between NetWare and Linux, and to begin working with OES Linux

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with OES. To contact us, use the User Comments feature at the bottom of any page in the online documentation.

Documentation Updates

Changes made to this manual since the initial product release are summarized in Appendix H, "Documentation Updates," on page 285.

Documentation Conventions

In this documentation, a greater-than symbol (>) is used to separate actions within a step and items within a cross-reference path.

A trademark symbol ($^®$, ™, etc.) denotes a Novell trademark. An asterisk (*) denotes a third-party trademark.

When a single pathname can be written with a backslash for some platforms, or a forward slash for other platforms, the pathname is presented with a forward slash to reflect the Linux* convention. Users of platforms that require a backslash, such as NetWare$^®$, should use backslashes as required by the software.

NetWare/Linux Command Map

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NetWare administrators who are transitioning servers and services to OES Linux are interested in finding Linux counterparts for their favorite NetWare commands.

Table 1-1 is designed to provide the mapping between NetWare and Linux that you need. Because NetWare and Linux are completely different operating systems, not every NetWare command has a Linux counterpart. However, many of them do, and in those cases where counterparts don't exist, we have attempted to provide explanations to help you deal with the differences between NetWare and Linux.

For some NetWare commands, the Linux alternative is not available at the command line but is provided by functionality in iManager, Novell Remote Manager (NRM), or YaST. For information on Novell management utilities, see "OES Utilities and Tools" in the *Novell OES SP2 Planning and Implementation Guide*

A substantial number of alternatives are also available through YaST (Yet another Setup Tool). YaST is available in both GUI and text versions and is accessed at a Linux shell prompt by entering the `yast` command. For more information on YaST, see "YaST - Configuration" in the *SUSE LINUX Enterprise Server 9 Administration Guide*.

For detailed information on the Linux counterparts listed in Table 1-1, access the man pages associated with the command by entering `man command` at the Linux shell prompt (command console screen), where *command* is the Linux counterpart command. After reading about the command, type Shift+q to return to the shell prompt.

Table 1-1 *NetWare/Linux Command Map*

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
`ABORT REMIRROR`	Stop remirroring a logical partition.		This functionality is vailable through the `nsscon` utility on OES Linux. The `nsscon` utility is installed with the Novell Storage Services RPMs and is documented in "NSS Console for OES Linux" in the *Novell Storage Services File System Administration Guide for OES*.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
Activatemodule	Load or start modules that are preloaded by the startup.ncf file or modules that were loaded using the load -s command.	chkconfig	By itself, chkconfig lists all the processes available to be loaded at startup and their current state. Including the name of a service (for example, chkconfig apache2) displays the current state: "on" means that the service starts with system, "off" means the service doesn't start with system, and "unknown service" means that the service is not installed. For configuration options, see the chkconfig man page.
ADD NAME SPACE	Add support for storing files for other file systems on a NetWare volume.	yast	Access YaST > *Network Services* CIFS (Samba), AFP and other protocols are supported by specific RPMs. For more information, see "Samba Support in OES" in the *Novell OES SP2 Planning and Implementation Guide* NFS support is native to Linux volumes. If you create an NSS volume on Linux, the name space defaults to UNIX. Changing the setting to Long using either nssmu or iManager will improve performance, especially if you plan to store millions of files on the volume. For help with YaST, enter yast -h at the shell prompt.
ALERT	Manage NetWare® alerts.		KDE System Guard includes a Messages sensor you can add to the Worksheet. However, this requires that the KDE GUI is installed and running on the server, which consumes system resources.
ALIAS	Define an alias.	alias	For more information, see the alias man page.
ARP	Display and modify the ARP table.	arp	For more information, see the arp man page.
BASH	Use a BASH shell, including a variety of useful system utilities, on NetWare.		The Bourne Again SHell is the default command line interface on most Linux systems.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
BIND	Link a communication protocol to a network board and its LAN driver.	ethtool mii-tool ifconfig	'For more information, see the man page associated with each command.
CDDVD	Allow a CD or DVD disk to function as a Novell® Storage Services (NSS) volume.		Support for CDs and DVDs is loaded automatically on Linux. However, removable media cannot be accessed as NSS volumes on OES Linux.
CHARSET	Change the code page currently used by the NetWare server.	yast	Similar functionality is available in YaST > *System* > *Language and System* > *Keyboard Layout* options. For help with YaST, enter yast -h at the shell prompt.
CLEAR STATION	Clear a workstation connection to a NetWare server.		There is no single command to do this. You must discover how users are connected to the server and then stop the processes associated with those connections. For example, use the ps command with the U option to list processes for the user, and then use kill to stop the root process for the user.
CLS	Clear the console screen and move the console prompt to the top of the screen.	clear	For more information, see the clear man page.
CLUSTER . . .	Manage clusters.		Similar commands are provided for functionality that is currently supported on OES Linux. For details, see Novell Cluster Services Console Command (http://www.novell.com/documentation/oes/cluster_admin_lx/data/aj7dggv.html#aj7dggv) in the Cluster Services Administration Guide for OES Linux.
COMPFIX	Repair compressed volumes.	compfix	compfix is available starting with OES SP2. For more information, see the compfix man page.
CONFIG	View the following:		There is no single equivalent command. However, some of the same information is available through specific Linux commands.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
	NetWare server name	hostname cat /etc/ *hostname*	For more information, see the man pages associated with the hostname and cat commands. The server name also appears at the shell prompt by default.
	Internal network number (server ID)		There is no internal network number on Linux.
	Server up time	uptime	For more information, see the uptime man page.
	Loaded LAN drivers	lsmod ifconfig	lsmod lists modules loaded in memory, but not the module versions. ifconfig shows the network card configuration.
	Driver version numbers	modinfo dmesg /var/log/ boot.msg	For more information, see the man pages associated with each command.
	Hardware settings	lsmod ifconfig	lsmod lists modules loaded in memory, but not the version. ifconfig shows the network card configuration.
	Node (station) addresses	ifconfig	In the future, ip will replace this command.
	External network number of the cabling scheme		
	Board name	yast	This information is available in YaST > *Hardware* > *Hardware Information*. For help with YaST, enter yast -h at the shell prompt.
	Frame type		
	Networking protocol for each network board		
	Server's eDirectory tree and bindery context	ndsstat	

CONLOG	Capture and log console messages.	cat /
		  varlog/
		  messages
			Ctrl+F10 shows the console log in real time.

CPUCHECK	Display processor information.	cat /proc/ cpuinfo	

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
CX	View or change the eDirectory™ context.		Use iManager to view the tree.
DISABLE LOGIN	Prevent users from logging in.		You can't disable only the login function for externally defined (eDirectory) users. For local users, this is commonly done by changing the login shell to /bin/false.
Dismount	Make a volume unavailable to users.	umount	umount lets you unmount Linux volume mount points. For NCP volumes, use ncpcon.
Display Environment	Display current search paths and current values of settable server parameters.		
DISPLAY INTERRUPTS	Display hardware interrupt information.	yast	Hardware information for each component is available in YaST > *Hardware > Hardware Information*. For help with YaST, enter yast -h at the shell prompt.
DISPLAY IPX NETWORKS DISPLAY IPX SERVERS			IPX is a legacy NetWare protocol that will not be ported to OES Linux.
DISPLAY MODIFIED ENVIRONMENT	Display all non-default server parameter settings.		Similar functionality is not available on OES Linux.
DISPLAY PROCESSORS	Display the status of available server processors.	cat /proc/ cpuinfo	For more information, see the cat man page.
Down	Execute an orderly shutdown.	init 0 shutdown now	For more information, see the respective man pages.
DSDiag	Document eDirectory; check tree health; diagnose problems.		This functionality is provided through iMonitor.
DSMerge	Merge and rename eDirectory trees; display time synchronization information for all servers in a tree.	ndsmerge	For more information, see the ndsmerge man page. See also iMonitor.
DSRepair	Maintain and repair the database of a Novell eDirectory tree.	ndsrepair	For more information, see the ndsrepair man page. See also iMonitor.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
DTRACE	A menu-driven trace utility for U.S. Robotics* ISDN Allegra adapters.		This is not DSTRACE.
EDIRUTIL	Access all of the eDirectory backend utilities remotely as well as on the server.	edirutil	For more information, enter edirutil -h.
EDIT	Create or modify a text file on a boot, DOS, USB, or NetWare partition.	vi vim	For help, enter vi -h, or man vim.
ENABLE LOGIN	Reenable the login function after using DISABLE LOGIN. Enable the supervisor account (bindery only) when the account has been locked by the intruder detection function.		See "DISABLE LOGIN" on page 13.
FILER (In DOS from a Novell Client)	Manage files and directories in the file system.		Filer is a legacy DOS-based tool. There are numerous shell commands for managing (copying, deleting, moving, etc.) files.
FLAG (In DOS from a Novell Client)	View or modify file and directory attributes, owner, etc.	chmod (Linux only) attrib (NSS only) nssmu (NSS only)	You can also use iManager for this. Understanding and working with Linux file attributes and ownership mechanisms requires training beyond the scope of this guide.
Format	Format a local FAT volume.	makefs	Use NSSMU or the iManager Storage plug-in to create NSS volumes that are managed by EVMS. You can use makefs to create NSS volumes on devices that are managed by non-EVMS volume managers, but some limitations apply for NSS features that depend on EVMS.
HELP	View descriptions and syntax for commands.	man *command*	
Hidescreen	Hide a screen for a utility that is running at the server console.		You can redirect output from the utility to null. However, this is not recommended.
ICAPTURE (DOS)	Capture LPT ports and redirect the output to iPrint printers.		This command applies to legacy NetWare printing. iPrint is OES printing solution.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
ICE	Import/Export LDIF files; migrate LDAP data; compare and update schemas; load information into eDirectory using a template.	`ice`	
IFCONFIG	Configure network interface parameters.	`ifconfig` `ethtool` `mii-tool` `yast`	The `ifconfig` command performs some configuration of network cards, but the changes are not permanent. Instead, use `ethtool` for modifications on the fly, `mii-tool` for older cards. Or use YaST to configure network cards permanently.
iMonitor	Monitor eDirectory and the servers it contains using a Web browser.		In a Web browser go to http:// *server_name*:8008. iMonitor is also accessible through iManager > *Roles and Tasks* icon > *eDirectory Maintenance > Repair via iMonitor*
INETCFG	Set up and customize your internetworking configuration for IPXTM, IP, and AppleTalk*.	`ethtool` `mii-tool`	For more information, see the respective man pages.
INITIALIZE SYSTEM	Enable the multiprotocol router configuration (execute the system NETINFO.CFG file).	`rcnetwork start` `yast`	For help, enter `rcnetwork -h`. Routing is configured through YaST. For help with YaST, enter `yast -h` at the shell prompt.
IPRNTCMD (DOS workstation)	Install, remove, or set a printer as the default printer.		This is a DOS printing command. iPrint is the OES printing solution.
IPXCON, IPXPING, IPXS			IPX is a legacy NetWare protocol and will not be ported to OES Linux.
JAVA	Start the Novell® JVM for NetWare® product. .	`java`	For more information, see the `java` man page.
KEYB	Change the console keyboard type.	`yast`	You can change keyboard and language settings in YaST. For help with YaST, enter `yast -h` at the shell prompt.
KF8	Enable or disables pausing between commands executed from NCF files.		There is no simple command or switch to enable pausing in script file execution.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
LANGUAGE	Set the language for subsequently loaded modules.	yast	All language settings are managed using YaST. For help with YaST, enter `yast -h` at the shell prompt.
LFVMOUNT	Mount all local FAT volumes not recognized by DOS and assign them a local drive letter.	mount	Parameters specified with the `mount` command determine the file systems mounted and attributes associated with the file systems. Drive letters are not used on Linux. For more information, see the `mount` man page.
LFVOLUMES	Display a list of local FAT volumes currently mounted.	mount	Used alone, the `mount` command shows the currently mounted volumes.
LIST DEVICES	Display a list of the storage devices on the server and register new devices with the server's Media Manager database.	cat /dev/ device ls /dev yast	Linux has many devices, each of which contains information you can view by "walking the /proc file system." Understanding Linux devices and the information displayed requires training beyond of the scope of this guide. You can also display partitions in YaST > *System* > *Partitioner*, but be careful to exit without making changes. For help with YaST, enter `yast -h` at the shell prompt.
LIST STORAGE ADAPTERS	Display a list of registered storage adapters.	hwinfo -- storage-ctrl	The same comments apply as for LIST DEVICES above.
LIST STORAGE DEVICE BINDINGS	List all Custom Device Modules (CDMs) bound to a particular device.		CDM drivers are unique to the NetWare architecture.
LOAD	Link loadable modules (NLMs) to the operating system.		Load and run commands are not used on Linux. Generally, to execute files, you simply enter the filename or path/filename. Most services are run from the /etc/init.d directory.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
`Loggerpath`	Change the directory where the logger.txt file is saved.		The log path is hardcoded in Linux.to `/var/log/messages`. However, some service configuration files include configuration settings that let you change the log path.
`Loggersave`	Save the logger screen buffer to the logger.txt file.		Everything gets written to `/var/log/messages`, unless a specific service configuration file dictates otherwise.
`LOGIN` (DOS workstation)	Access the network by logging in to a server and running a login script.		Login on Linux is a different concept than on NetWare. You log in to a shell session with the server, which is analagous to accessing the console prompt on a NetWare server.
`LOGOUT` (DOS workstation)	Exit the network or log out of servers.		The same comments apply as for `LOGIN` (DOS workstation) above.
`MAGAZINE`	Respond to the screen prompts `Insert Magazine` and `Remove Magazine`.		There is no directly corresponding utility
`MAP` (DOS workstation)	View drive mappings; Create or change network or search drive mappings; Map a drive to a fake root directory (for applications that must use a root directory)		The `mount` command used alone shows both local and remote mount points—the connections between file systems (either local or remote) and a directory on the server. You access the file system (local or remote) by accessing the local directory. Drive letters are not used on Linux. However, if you install the NCP server, Novell Clients can then map drives to NCP volumes on OES Linux servers.
`MEDIA`	Respond to the screen prompts `Insert Media` and `Remove Media`.		On Linux, all media connections, including remote connections and removable media, are handled through the `mount` command.
`Memory`	Display the total amount of installed memory that the operating system can address.	`top` `cat /proc/ meminfo`	There's no memory command per se on Linux. However, the `top` command will give a good start on what's installed, available, being used by buffers, etc. If you want to see a GUI display, You must be running the KDE graphical interface and use KDE System Guard.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
`Memory Map`	Display the amount of memory (in bytes) allocated to DOS and to the server.	`top`	You can also view memory information in Novell Remote Manager (NRM). To access NRM in your Web browser, go to http://*server_name*:8008 > *Manage Linux* > *View Memory Information*. There is, of course, no memory allocated to DOS when Linux is running, even if there's a separate DOS partition on the hard drive.
`MIRROR STATUS`	View the status of mirrored disk partitionsView the percentage of mirrored data on each partition		This functionality is vailable through the `nsscon` utility on OES Linux. The `nsscon` utility is installed with the Novell Storage Services RPMs and is documented in "NSS Console for OES Linux" in the *Novell Storage Services File System Administration Guide for OES*.
`MODULES`	Display a list of currently loaded modules (NLMs).	`lsmod` for kernel modules ps -eaf	Use lsmod to view kernel modules. For more information, see the `lsmod` man page, or enter `ps -?`.
`MONITOR`	View server statistics and activity		Most of the information you get traditionally through MONITOR is available in Novell Remote Manager (NRM). To access NRM, browse to http://*server_name*:8008 in your Web browser.
	General Information Options:		
	Operating system version and date		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Server server name on network tree name	`ndsstat`	For more information, see the `ndsstat` man page. Also see the *Novell Remote Manager Administration Guide for Linux for OES*.
	Utilization		See the *Novell Remote Manager Administration Guide for Linux for OES*.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
	Server Up Time	`uptime`	For more information, see the `uptime` man page.
			Also see the *Novell Remote Manager Administration Guide for Linux for OES*.
	Online Processors		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Original Cache Buffers		See the *Novell Remote Manager Administration Guide for Linux for OES*.
			You can also enter `cat /proc/mem/meminfo` at the shell prompt to get some of this.
	Total Cache Buffers		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Dirty Cache Buffers		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Long Term Cache Hits		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Current Disk Requests		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Packet Receive Buffers		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Directory Cache Buffers		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Maximum Service Processes		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Current Service Processes		See the *Novell Remote Manager Administration Guide for Linux for OES*.
			The information is presented differently on Linux, but it is there.
	Current Connections		See the *Novell Remote Manager Administration Guide for Linux for OES*.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
	Open Files		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Available Options:		
	Connections		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Storage Devices		See the *Novell Remote Manager Administration Guide for Linux for OES*. You can see local, but not unallocated file systems.
	Volumes	ncpcon	For more information, see the ncpcon man page.
	LAN/WAN Drivers	lsmod	For more information, see the lsmod man page.
	Loaded Modules		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	File Open/Lock Activity		
	Disk Cache Utilization		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	System Resources		
	Virtual Memory		
	Kernel		See the *Novell Remote Manager Administration Guide for Linux for OES*.
	Server Parameters		Linux doesn't have server parameters.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
MOUNT	Make a volume available to users.	mount (for traditional Linux volumes) nsscon (use the mount option for NSS volumes) nssmu (for the first mount of encrypted NSS volumes after a reboot)	For NSS volumes, in nssmu, select volumes, then press F7. For encrypted NSS volumes, the nssmu utility is required for mounting the encrypted volume on the first mount following a system reboot because you must enter the encryption password to activate the volume. Thereafter, you can use the mount command in nsscon. The nsscon utility is installed with the Novell Storage Services RPMs and is documented in "NSS Console for OES Linux" in the *Novell Storage Services File System Administration Guide for OES*. The nssmu utility is installed with the Novell Storage Services RPMs and is documented in "NSS Management Utility" in the *Novell Storage Services File System Administration Guide for OES*.
NAME	Display the server name.	hostname	The server name appears at the shell prompt by default. You can also view the contents of the /etc/hosts file by entering cat /etc/hosts at the shell prompt.
NCMCON	Control and monitor PCI Hot Plug.		Hot Plug monitoring is available for only some hardware. Messages are commonly logged in /var/log/messages.
NCOPY	Specify your intention for copying a compressed file to a compressed volume or a non-compressed volume.		There is no equivalent on OES Linux.
NCS Debug	Save a record of all NCS port activity in an ASCII text file named NCSTRACE.LOG in the sys:system directory.		See Novell Cluster Services Console Commands (http://www.novell.com/documentation/oes/cluster_admin_lx/data/aj7dggv.html#aj7dggv) in the Cluster Services Administration Guide for OES Linux.
NDIR	View file attributes and compression information for all files in a directory..	ls	For more information, see the ls man page.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
NETSTAT	Monitor the network status..	netstat	For more information, see the netstat man page.
Nslookup	Diagnose DNS setup problems or DNS problems in an application.	dig	The nslookup command has been deprecated on Linux.
NSS	Manage NSS at the command line.	nsscon	The nsscon utility is installed with the Novell Storage Services RPMs and is documented in "NSS Console for OES Linux" in the *Novell Storage Services File System Administration Guide for OES*.
NSSMU	Manage NSS storage media on a server.	nssmu	The nssmu utility is installed with the Novell Storage Services RPMs and is documented in "NSS Management Utility" in the *Novell Storage Services File System Administration Guide for OES*.
NSWEB	Start and stop the NetWare Web Manager and NetWare Enterprise Web Server.		NetWare Web Manager is not available on Linux.
NVXADM	Start and stop the NetWare Web Manager.		NetWare Web Manager is not available on Linux.
NVXWEB	Start and stop the NetWare Web Manager.		NetWare Web Manager is not available on Linux.
NWCONFIG	Manage the server and install additional products.	yast	YaST is the tool for installing OES Linux and OES services. Many configuration parameters are similar to NetWare. For help with YaST, enter yast -h at the shell prompt.
NWPING	Ping a remote host from a NetWare server.	ping	For more information, see the ping man page.
NWTrace	Print the route that packets take to the network host..	traceroute	For more information, see the traceroute man page.
PING	Send an Internet Control Message Protocol (ICMP) echo request packet to an IP node on your internetwork..	ping	For more information, see the ping man page.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
PPPCON	View Point-to-Point Protocol (PPP) interface configuration and statistical information.	yast	Point-to-Point interfaces are configured in YaST > *Network Devices*. For help with YaST, enter yast -h at the shell prompt.
PPPTRACE	Debug PPP data link problems.		This is a NetWare utility that is not ported to Linux.
PROTECT	Load NLM™ programs into a protected address space.		Protected address space is a NetWare concept.
PROTECTION	Display a list of protected address spaces, or add/remove/restart functionality from an existing address space.		Protected address space is a NetWare concept.
PROTOCOL	View the protocols registered; register additional protocols and frame types.	ifconfig	For more information, see the ifconfig man page.
PSERVER	Monitor and manage printers and print queues (legacy).		This is for managing legacy NetWare printing. iPrint is the OES printing solution.
RCONAG6	Allow remote console access to the server.		Novell Remote Manager has a secure console. You can also use SSH (or VNC for GUI access). Telnet is not secure and therefore not recommended.
RCONPRXY	Allow RConsoleJ to access target servers.		Novell Remote Manager has a secure console. You can also use SSH (or VNC for GUI access). Telnet is not secure and therefore not recommended.
RConsoleJ	Remotely control a NetWare server.		Novell Remote Manager has a secure console. You can also use SSH (or VNC for GUI access). Telnet is not secure and therefore not recommended.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
REBUILD	Recover corrupted Novell Storage Services (NSS) pools.	ravsui ravview fsck	The ravsui and ravview utilities are installed as part of Novell Storage Services NSS.
			Use ravsui to rebuild or verify an NSS pool on Linux that is in a maintenance state.
			Use ravview to dump specified NSS rebuild or verify files to a human-readable file format.
			For help with ravsui and ravview, use the -h option. For more information about fsck, see the fsck man page.
RECORD	Record command sequences that you enter at the console over and over.		Similar functionality is available through shell scripting, a topic that is beyond the scope of this guide.
Register Memory	Configure the operating system to recognize installed memory above the amount of memory that is automatically registered.		This is NetWare functionality that doesn't apply to Linux.
REINITIALIZE SYSTEM	Enable configuration changes made since the commands in the netinfo.cfg file were executed.	rcnetwork restart	For help, enter rcnetwork -h at the shell prompt.
REMIRROR PARTITION	Start the remirroring of a logical NSS partition.		This functionality is vailable through the nsscon utility on OES Linux.
			The nsscon utility is installed with the Novell Storage Services RPMs and is documented in "NSS Console for OES Linux" in the *Novell Storage Services File System Administration Guide for OES*.
REMOVE NETWORK ADAPTER	Unload one LAN driver when the LAN driver has been loaded multiple times to support multiple boards.		On Linux it is common for drivers to support multiple instances of hardware. Loading is done only once and removal should not be necessary.
REMOVE NETWORK INTERFACE	Unload one frame type when there are multiple frame types loaded with one LAN driver.	ip	For more information, see the ip man page.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
Remove Storage Adapter	Remove one instance of a storage driver.		Although `rmmod module_name` will unload a kernel module, this is not recommended. On Linux it is common for drivers to support multiple instances of hardware. Loading is done only once and removal should not be necessary.
Removemodule	Remove modules that are preloaded by the startup.ncf file or modules that were loaded using the load -s command.	`chkconfig`	For more information, see the `chkconfig` man page.
REPLACE	Unload and reload a specific module in one step.		Performing an equivalent action on Linux can prevent the system from running. Not recommended.
REPLAY	Execute a list of commands that were recorded in and saved in a session using the RECORD command.		This is related to the comment for the RECORD utility. Using your chosen shell script methods, run the script you have created.
RESET ENVIRONMENT	Reset server parameters that have been modified to their default values.		This is NetWare functionality that is available for selected services in YaST but not at the shell prompt.
RESET NETWORK ADAPTER	Reset a network adapter manually.	`ifdown` `ifup`	For more information, see the respective man pages.
RESET NETWORK INTERFACE	Restart a logical board that has been shut down using the SHUTDOWN NETWORK INTERFACE command.	`ifdown` `ifup`	For more information, see the respective man pages.
RESET ROUTER	Reset the router table in the server if the table becomes inaccurate or corrupted.	`rcnetwork restart` `yast`	For help with `rcnetwork`, enter `rcnetwork -h` at the shell prompt. For help with YaST, enter `yast -h` at the shell prompt.
RESET SERVER	Bring down the server and then restart it immediately.	`init 6` `shutdown -r now`	For more information, see the respective man pages.
Restart Server	Bring down the server and then restart it immediately.	`init 6` `shutdown -r now`	For more information, see the respective man pages.
RIGHTS	View or modify user or group rights for files, directories, and volumes.	`rights`	The `rights` command works only on NSS file systems.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
ROUTE	Pass frames (packets) from NetWare through IBM*-compatible source route bridges.	`route`	For more information, see the `route` man page.
ROUTECON	Manipulate the routing tables manually.	`route`	For more information, see the `route` man page.
SCAN ALL	Scan all LUNs of all SCSI adapters in the server or all LUNs associated with a designated SCSI adapter.	`iscsi*`	iscsi support is not installed by default. After installing, type `man iscsi` and press the Tab key to view the related commands.
SCAN FOR NEW DEVICES	Scan on LUN0 of SCSI adapters and to register new devices with the Media Manager so that they are available to the operating system.		iscsi support is not installed by default. After installing, type `man iscsi` and press the Tab key to view the related commands. Any EVMS-managed devices that are added after the server boots can be scanned using iManager > *Storage* > *Scan for Devices*.
SCRSAVER	Lock the server console and to activate a screen saver for the console display.		There are no screen savers associated with shell sessions on Linux. You should simply close any shell sessions you do not want to have open, using the `exit` command.
SEARCH	Specify search paths for NLM and .ncf files; add/delete search paths; view current search paths.	`export`	Modify the PATH and `export` it. For more information, see the `export` man page.
SECURE CONSOLE	Prevent NLMs from being loaded from any directory other than the boot directories; prevent keyboard entry into the operating system debugger; prevent the server date and time from being changed		The concept of securing the console through a command doesn't exist in Linux. You should always limit physical and remote access to the Linux console and never leave a root session open.
Server			This is roughly equivalent to the running Linux kernel. There is no direct equivalent. Linux boots using the GRUB boot manager. There is no direct connection between Linux and a bootable DOS partition (if present)

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
SET	View and configure operating system parameters.		There is no direct map to the concept of SET parameters in Linux.

You can set environment variables using the export command. For more information, see the export man page.

To make configurations persistent, you must edit the config file associated with the service. |
Showscreen	Restore a screen that has been hidden by the Hidescreen command..		As with Hidescreen, there is no Linux equivalent.
SHUTDOWN NETWORK INTERFACE	Shut down a logical board without removing its resources.	ifdown	For more information, see the ifdown man page.
SPEED	Display the speed at which the processor is running.	cat /proc/ cpuinfo	For more information, see the cat man page.
SPFCON, SPXCONFG, SPXS			SPX is a legacy NetWare-only protocol.
START PROCESSORS	Start one or more secondary processors when the server is running on a multiprocessor computer.		Control of individual processors is not available as part of OES Linux.
STOP PROCESSORS	Stop one or more secondary processors in a multiprocessor computer..		Control of individual processors is not available as part of OES Linux.
SWAP	Display information about swap files, add or delete swap files, and specify the parameters of swap files.	mkswap swapon swapoff	For more information, see the respective man pages.
_TCP	Monitor TCP/IP activity and connection status.	tcpdump	For more information, see the tcpdump man page.
TCPCON	Monitor TCP/IP activity, configuration and statistics information, known routes, trap log.

Use SNMP to access TCP/IP information in any remote protocol stack supporting the TCP/IP Management Information Base (MIB). | netstat | For more information, see the netstat man page. |

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
TECHWALK	Record NetWare® configuration information.		Similar functionality is not available as part of OES Linux.
TIME	Display date and time, Daylight saving time status, and Time synchronization information	date	For more information, see the date man page.
TIMESYNC			Timesync is a NetWare time protocol that is compatible with and being replaced by NTP.
TLI	Provide Transport Level Interface (TLI) communication services.		This command is not ported to OES Linux.
TPING	Send an ICMP echo request packet to an IP node on your internetwork.	ping	For more information, see the ping man page.
TRACK OFF	Prevent the server from displaying the RIP Tracking Screen.		RIP tracking is a NetWare concept that is not relevant to OES Linux.
TRACK ON	View the RIP Tracking Screen and make it the active screen.		RIP tracking is a NetWare concept that is not relevant to OES Linux.
UNBIND	Remove a communication protocol from the LAN driver of a network board; disable communication on a specific board	ifdown	For more information, see the ifdown man page.
UNLOAD	Unload a module that was previously loaded with the LOAD command		For OES services, use the service's stop script: /etc/init.d/*service* stop.
UPS_AIO	Provide the software link between your server and the UPS.		Support is hardware-specific. See man apcupsd in the apcupsd package.
VERIFY	Validate all blocks in an NSS pool.	ravsui verify *poolname* ravview	The ravsui and ravview utilities are installed as part of Novell Storage Services NSS. Use the ravsui utility to find out whether you need to rebuild a pool to correct NSS volume problems. Use ravview to view the output. For help, enter one of the commands with the -h option.

NetWare Command	Purpose	Linux Counterpart	Alternatives and Notes
VERSION	View the file server version, license information, and copyright notice from the System prompt.	uname -a ndsstat	For more information on the uname command, see the uname man page. For help with ndsstat, enter the command with the -h option.
VIEW	View a file from the NetWare® server console.	cat	For more information, see the cat man page.
VOLUME	List mounted volumes..	mount	The mount command displays a list of all available file systems, both local and remote. The volume command in the nsscon utility list the NSS volumes on OES Linux. The nsscon utility is installed with the Novell Storage Services RPMs and is documented in "NSS Console for OES Linux" in the *Novell Storage Services File System Administration Guide for OES*.
VREPAIR	Correct volume problems on NetWare Traditional volumes; remove name space entries from Directory Entry Tables	fsck	For more information, see the fsck man page.
XLOG	Diagnose ISDN-related connection problems with Eicon* Technology ISDN adapters..		This command is not ported to OES Linux.
XNTPD	Synchronize time with servers that are NTPv3 compliant..	xntpd	For more information, see the xntpd man page.

Documentation Updates

A

This section summarizes the changes made to this manual since the initial release of Novell® Open Enterprise Server.

There have been no changes made.