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Open Enterprise Server

Two editions, one box



NetWare: Service Pack 3 for NW 6.5 with new iManager
Familiar territory, proven technology



Linux: SuSE Enterprise 9 (SLES 9) + OES apps
Current buzz, brings serious server techniques to Linux
Novell Core Protocol, NSS file system, fancy web apps



Users can be largely unaware of the operating system delivering services



"On the Internet, nobody knows you're a dog."

OES Linux



Takes the existing SLES 9 system and *adds* functionality

Does not dominate Linux, OES supplements it

Third party apps work in parallel (or not) with OES

Support NetWare Core Protocol (NCP) logins from Client32 customers

Soon for Mac and Linux customers (entering beta)

eDirectory, full, holds credentials, for authentication and user management. Version 8.7.3.5 today.

OES Linux, file systems

Regular Linux file systems (Reiser, EXT3, etc)

Plus full Novell NSS file system ported to Linux

NSS uses IBM's Enterprise Volume Management System (EVMS) for disk spanning, pools, RAID

Retains Salvage, quotas, TSA based backups

Can move NW NSS disc drives to Linux, and v.v.

Managed through iManager and NSSMU

Nbackup works on Linux and NSS file systems

NetWare rights are applied through NCP connections, no matter which kind of file system

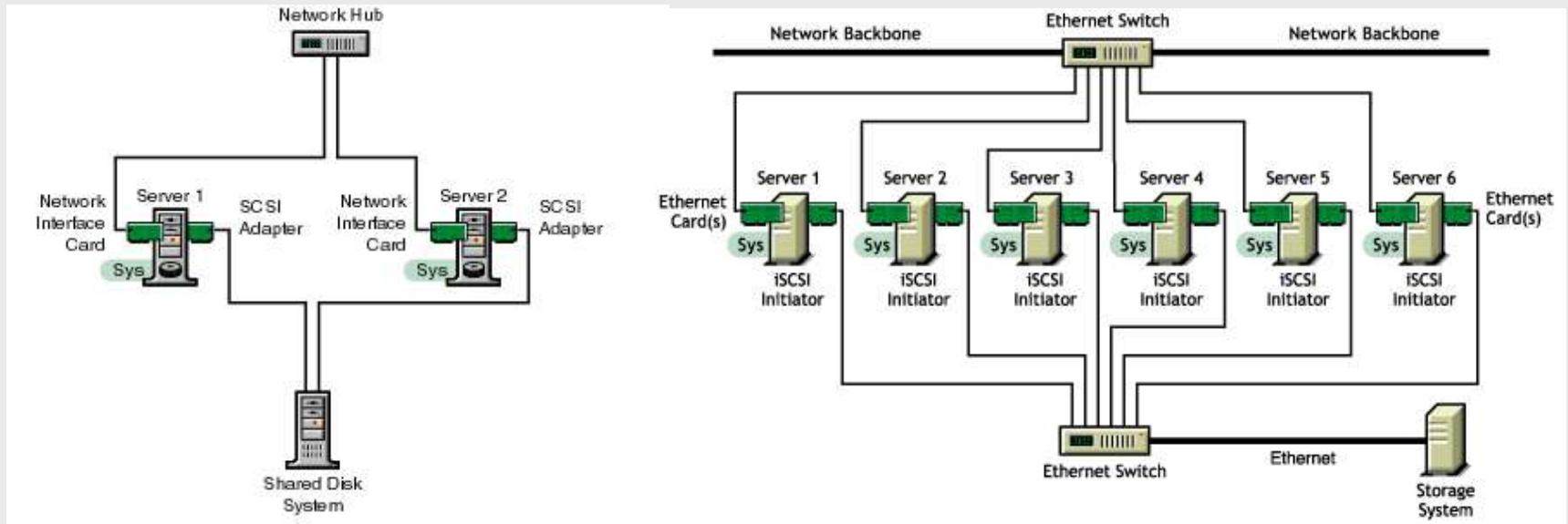
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Clustering

OES Linux systems can be full members of NetWare clusters

Adding Linux to an existing NW cluster

Requires one or more NW 6.5 servers in cluster to update NSS details



Printing

Novell's IPP based iPrint works on Linux too

Server side has full iPrint (drivers, manager, printer)

**User access and print configuration done through
iManager working with eDirectory**

Client iPrint clients for Windows, Macs, Linux

**Linux client iPrint support is through Novell enhancements
to CUPS**

Linux users in an eDir machine

Authentication can be done against eDir, falling back to local Linux files (/etc/passwd, /etc/shadow)

File access via Linux login uses Linux perms, not NCP

Users can be imported from Linux to eDir, and from eDir to Linux

OES Linux User Management (LUM) is iManager facility to configure users in both eDir and regular Linux environments

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C32 Windows client to Linux server

The screenshot shows a Windows Explorer window with the address bar set to `Q:\LOGIN\NLS`. The main pane displays a list of folders and files:

Name	Size	Type	Date Modified
DEUTSCH		File Folder	13/01/2
ENGLISH		File Folder	13/01/2
ESPANOL		File Folder	13/01/2
FRANCAIS		File Folder	13/01/2
ITALIANO		File Folder	13/01/2
PORTUGUE		File Folder	13/01/2
RUSSKI		File Folder	13/01/2
000_UNI.001	1 KB	001 File	21/12/2
437_UNI.001	1 KB	001 File	21/12/2
737_UNI.001	1 KB	001 File	21/12/2
775_UNI.001	1 KB	001 File	21/12/2
813_UNI.001	1 KB	001 File	21/12/2
850_UNI.001	1 KB	001 File	21/12/2
852_UNI.001	1 KB	001 File	21/12/2
855_UNI.001	1 KB	001 File	21/12/2
857_UNI.001	1 KB	001 File	21/12/2
860_UNI.001	1 KB	001 File	21/12/2
861_UNI.001	1 KB	001 File	21/12/2

Overlaid on the right is the 'Novell NetWare Volume Information' dialog box for volume 'SYS'. It displays two pie charts:

Disk Usage:

- Total Space: 6,048,352KB
- Free Space: 2,578,404KB (42%)
- Compressed Space: Not Available (0%)
- Purgeable Space: 0KB (0%)
- Used Space: 3,469,948KB (58%)

Directory Entries:

- Total Entries: 768,544
- Available Entries: 572,108 (74%)
- Used Entries: 196,436 (26%)

EXT3 file system

Applications, on both systems

Almost all NW high level applications are on Linux

NetStorage

iFolder2

iFolder3 (may ship on a delayed schedule)

iPrint

eGuide

Virtual Office

iManager

iMonitor

iSCSI

Novell Remote Manager

QuickSearch search engine

GroupWise (not part of OES bundle)

Open Enterprise Server

An early view of welcome page

Novell® Open Enterprise Server

NetWare 6.5

End User Software

- [Novell eDirectory 8.7](#)
- [eGuide 2.1](#)
- [iFolder](#)
- [iPrint](#)
- [Novell NetStorage](#)
- [QuickFinder 4.0](#)
- [Virtual Office](#)

Open Source

- [Apache 2.0](#)
- [MySQL 4.0](#)
- [OpenWBEM](#)
- [Perl for NetWare](#)
- [PHP for NetWare](#)
- [OpenSSH](#)
- [Tomcat 4.1](#)

Network Management

- [Identity Manager 2.x](#)
- [Novell DNS/DHCP Services](#)
- [iManager 2.5.x](#)
- [NTPV3](#)
- [WAN Connectivity](#)

Server Management

- [Health Monitoring Services 1.0](#)
- [IP Address Management](#)
- [IPv6](#)
- [Novell Storage Services](#)
- [Remote Manager](#)
- [Storage Management Services \(SMS\)](#)
- [TCP/IP](#)

Open Enterprise Server

OPEN SOURCE CHOICE AND FLEXIBILITY



Novell Open Enterprise Server is a secure, highly available solution that combines proven services for application delivery, networking, communication and collaboration in an open, easy-to-deploy environment. Unlike other server platforms that force vendor lock-in or are insufficiently supported for enterprise customers, Novell Open Enterprise Server

incorporates the best from both open source and commercial technology leaders. It provides an ideal platform for the organization that wants open source choice and flexibility without sacrificing enterprise class networking services or the support of an industry-leading solution partner.

With Novell Open Enterprise Server, you can deploy exactly the platform mix that meets your organization's needs. Novell Open Enterprise Server delivers the most reliable and most secure networking services in the industry. You can choose to deploy those services on the trusted Novell NetWare platform, or you can choose to deploy them on SUSE LINUX Enterprise Server 9, the leading open platform for business level applications. Or you can even choose to deploy the services on a combination of the NetWare and SUSE LINUX platforms. Novell Open Enterprise Server also includes a shared portfolio of integrated management tools.

At Novell, we know firsthand both the power of open source development and the must-run reality of enterprise IT management. We're committed to making Linux and open source a practical, no-risk option for companies of every size. We're bringing together the Linux and open source products that technology managers want, and adding proven, scalable network services and global support that they need. The result is Novell Open Enterprise Server.

OES Links

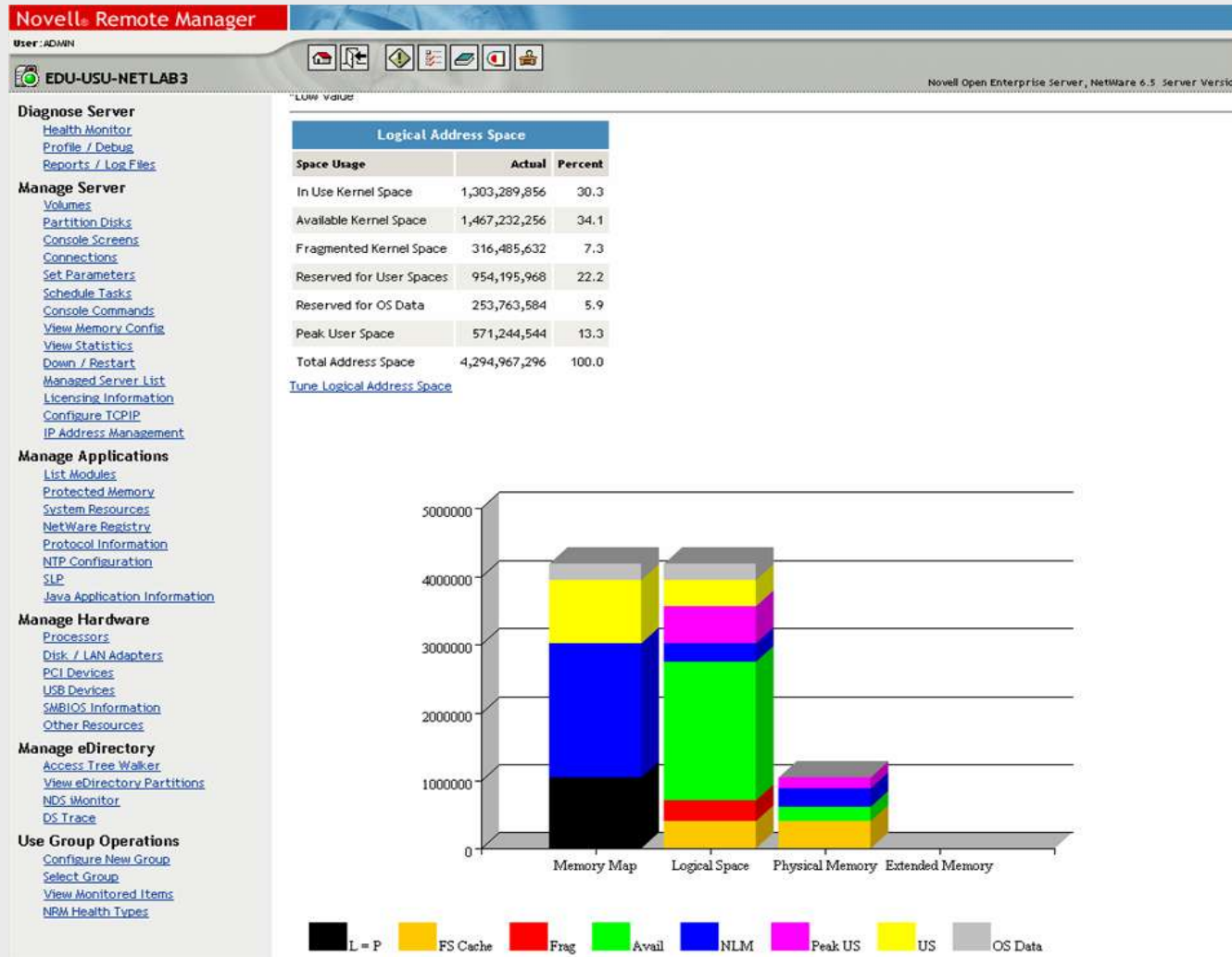
[OES Documentation](#)

OES Provides:

- ◆ Unmatched enterprise security
- ◆ Common management tools
- ◆ Reliable, scalable enterprise services
- ◆ Support for thousands of applications
- ◆ Greater choice and flexibility
- ◆ The benefits of Open Source

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Novell Remote Manager (NW)



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Remote Manager on Linux

Novell Remote Manager

netlab-4

identity: (admin.usu), User: 0

Linux: 2.6.5-7.135-default 1686, SUSE LINUX Enterprise

Diagnose
[Health Monitor](#)

View File System
[View File System Listing](#)
[View Partition Information](#)
[View Swap Information](#)

Manage Linux
[View Kernel Modules](#)
[View Memory Information](#)
[Down / Restart](#)
[View Package Information](#)
[View Process Information](#)

Manage Hardware
[View Processors](#)
[Interrupt Information](#)
[IO Memory Information](#)
[IO Port Information](#)
[SMBIOS Information](#)

Use Group Operations
[Configure New Group](#)
[Select Group](#)
[View Monitored Items](#)
[NRM Health Types](#)

NCP Services
[Shares](#)
[Statistics](#)
[Connections](#)
[Volumes](#)
[Diagnostics](#)

View Memory Config

Physical Server Memory		
In Use	710,164,480	RAM that is being used
Unused	21,954,560	RAM that is unused and available
Temporary Disk Block Buffers	103,550,976	Temporary storage for disk buffers
File System Cache	224,911,360	Temporary storage for files read from disk
Total System Memory	1,060,581,376	Total usable RAM
Swap Space In Use	12,288	Memory that has been temporarily moved to disk
Total Swap File Size	542,826,496	Total available swap space

A 3D pie chart illustrating the distribution of memory usage. The largest slice is yellow, representing 'In Use' at 67%. The next largest is red, representing 'File System Cache' at 21%. A blue slice represents 'Temporary Disk Buffers' at 10%, and a small green slice represents 'Swap File' at 2%.

Category	Percentage
In Use	67%
File System Cache	21%
Temporary Disk Buffers	10%
Swap File	2%

Open Enterprise Server

iManager v2.5 NW & Linux

Novell iManager - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
https://netlab4.oucs.ox.ac.uk/nps/servlet/webacc

ADMIN
Collection Owner Access

Roles and Tasks
All Categories

- Archive Versioning
- Clusters
- eDirectory Administration
- eDirectory Maintenance
- File Access (NetStorage)
- File Protocols
- Groups
- Help Desk
- iFolder Management
- iPrint
 - Create Driver Store
 - Create Printer
 - Create Print Manager
 - Delete Print Object
 - Manage Driver Store
 - Manage Printer**
 - Manage Print Manager
 - Printer Banner Configuration
 - Printer Pool Configuration
- LDAP
- Linux User Management
- NMAS
- Novell Certificate Access
- Novell Certificate Server
- Partition and Replica Management
- Passwords
- QuickFinder Server Management

Manage Printer: HP9000.usu
Printer Control

Shutdown
Pause Input
Pause Output
Refresh

Display Panel: **LOAD TRAY 2**
Printer State: **Stopped**
other-report
other-error

[Printer health monitor](#)

Printer Agent 'HP9000' Information - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
https://129.67.103.181/PsmStatus/PAStatus

Printer Agent 'HP9000' Information

Printer Agent Status: **Error Printing** Shutdown Printer Apply

Printer Console
LOAD TRAY 2
PLAIN A4
To use another tray press [OK]
LOAD TRAY 2
PLAIN A4
For help press [OK]

Printer Agent Status Details

Printer Agent Status Details	Event Time	Associated Message from Printer
Subunit Empty	Sun Jan 30 11:43:18 2005	TRAY 4 EMPTY PLAIN A4
Input Media Change Needed	Sun Jan 30 11:43:18 2005	LOAD TRAY 2 PLAIN A4
Subunit Offline	Sun Jan 30 11:43:18 2005	PAUSED

[Job List](#) [Shutdown/Startup History](#) [Message from Admin](#) [Configuration Options](#)

Job Processing Information

	Scheduled	Active	Requested	Last Job Finished Printing
Jobs	0	0	1	01/27/05 16:48:43

Job History

	01/30/05 14:30:00	01/30/05 00:00:00	01/29/05 11:45:10	Printer Reset
Jobs Printed Since	0	0	0	15
Jobs Canceled Since	0	0	0	
Jobs Aborted Since	0	0	0	

Done 129.67.103.181

OK Cancel Apply

Management on Linux



OES/Linux provides GUI tools iManager, Novell Remote Manager, etc.

Very familiar to NW managers

Command line versions of all tools

**ndsrepair, ndstrace, nssmu, rights, tsafs,
nbackup, etc**

Novell Account Manager (NAM) does extensive user management: namuseradd... unix2edir, pam_nam

Finding things: QuickFinder

Novell's search engine has been improved and ported to Linux. New name is *QuickFinder*

Enterprise class search engine, equivalent to expensive alternatives. Used by www.novell.com

Multi-lingual, multi-format documents, fast, Free!

Works well across platforms, can authenticate callers against NDS to confine access

Easily configured for local look & feel



Search results pick lists

user: public
sign in

Sort Results by:
Relevance
Title
Date

Print Results:
1 - 25
All hits (119)

Result List Format:
Brief
Normal
Detailed

Search Results

Powered by 

OES Search Help
 Search within this result set

results by relevance
Showing Hits: 1 to 25 Total Search Results: 119 Time to search: 0.235 seconds

- OES is now in the public beta stage** 77% highlight
OES is now in the public beta stage KUENY Serge Thu Dec 30 09:27:11 GMT 2004 Previous message: Next message: Messages sorted by: Date: Mon, 27 Dec 2004 14:29:08 0700 (MST) From: Joe Doupnik To: Cc: Subject: OES is now in the public beta stage Reply to: ... Dec 30, 2004 9:27:11 AM
- OES is now in the public beta stage** 77% highlight
OES is now in the public beta stage Marin Dowlin Tue Dec 28 14:30:40 GMT 2004 Previous message: Next message: Messages sorted by: Why does Novell use Apache in a non-standard way? Is it something they particularly need out of it or are they just being c... Dec 30, 2004 9:27:11 AM
- OES is now in the public beta stage** 77% highlight
OES is now in the public beta stage Cal Frye Tue Dec 28 16:20:36 GMT 2004 Previous message: Next message: Messages sorted by: Thanks. I had neglected the schema extension issue, but had noted the Apache difference in your earlier post. Some days I don't... Dec 30, 2004 9:27:11 AM


user: public
sign in

Sort Results by:
Relevance
Title
Date

Print Results:
1 - 25
All hits (119)

Result List Format:
Brief
Normal
Detailed

Search Results

Powered by 

OES Search Help
 Search within this result set

results by relevance
Showing Hits: 1 to 25 Total Search Results: 119 Time to search: 0.064 seconds

- OES is now in the public beta stage** Dec 30, 2004 9:27:11 AM 77% highlight
- OES is now in the public beta stage** Dec 30, 2004 9:27:11 AM 77% highlight
- OES is now in the public beta stage** Dec 30, 2004 9:27:11 AM 77% highlight
- OES is now in the public beta stage** Dec 30, 2004 9:27:11 AM 77% highlight
- Problems downloading OES Beta** Jan 18, 2005 2:34:10 PM 77% highlight
- Problems downloading OES Beta** Jan 18, 2005 9:57:15 AM 76% highlight
- Installing OES/Linux, part 1 of likely many** Jan 11, 2005 11:45:19 PM 76% highlight
- Installing OES/Linux, part 1 of likely many** Jan 11, 2005 11:45:19 PM 76% highlight

Web servers



OES/Linux uses Apache v2.latest

Can run with Novell's threaded Apache

Can run with regular pre-forked Apache

Need only one Apache

Tomcat4 back end engine to support Java apps

Full working LDAP support, plus PHP, Python, ...

HTTPSTKD present for Remote Manager, non-Apache



Updates and Patches

NetWare and Linux: www.novell.com

Linux SLES 9 and OES use the Ximian RedCarpet update facility. Registration code is required.

Local RedCarpet redistribution centres are possible

SLES 9 has 5 year support guarantee. It is updated regularly; it does not stand frozen for 5 years.

Questions?

