Prof Joe R. Doupnik
OUCS
Joe.Doupnik@oucs.ox.ac.uk

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

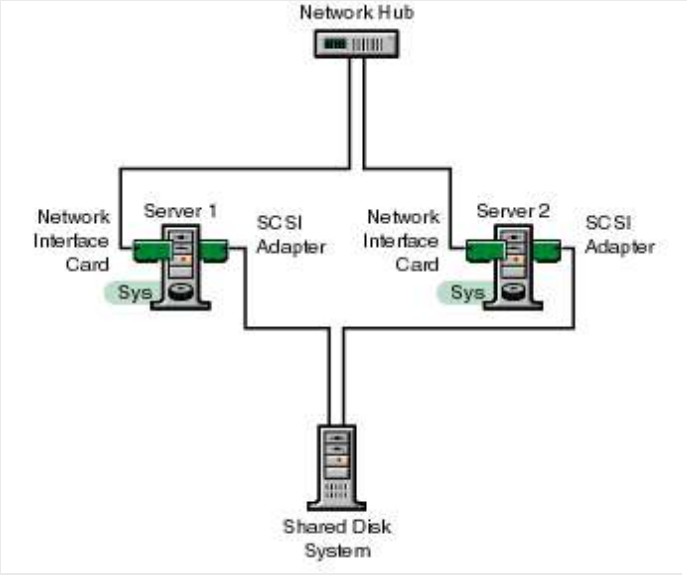
NetWare rights are applied through NCP connections, no matter which kind of file system

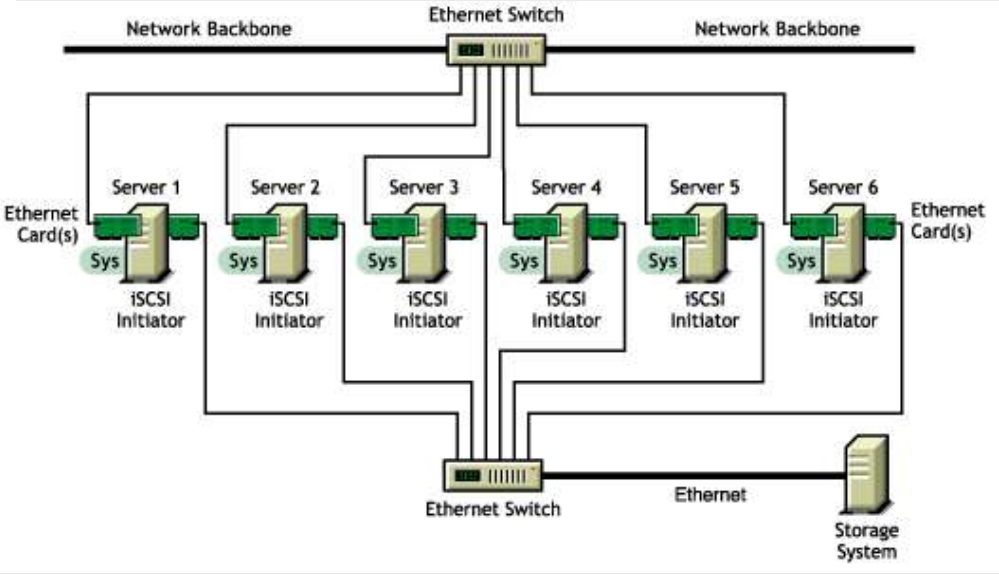
Clustering

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

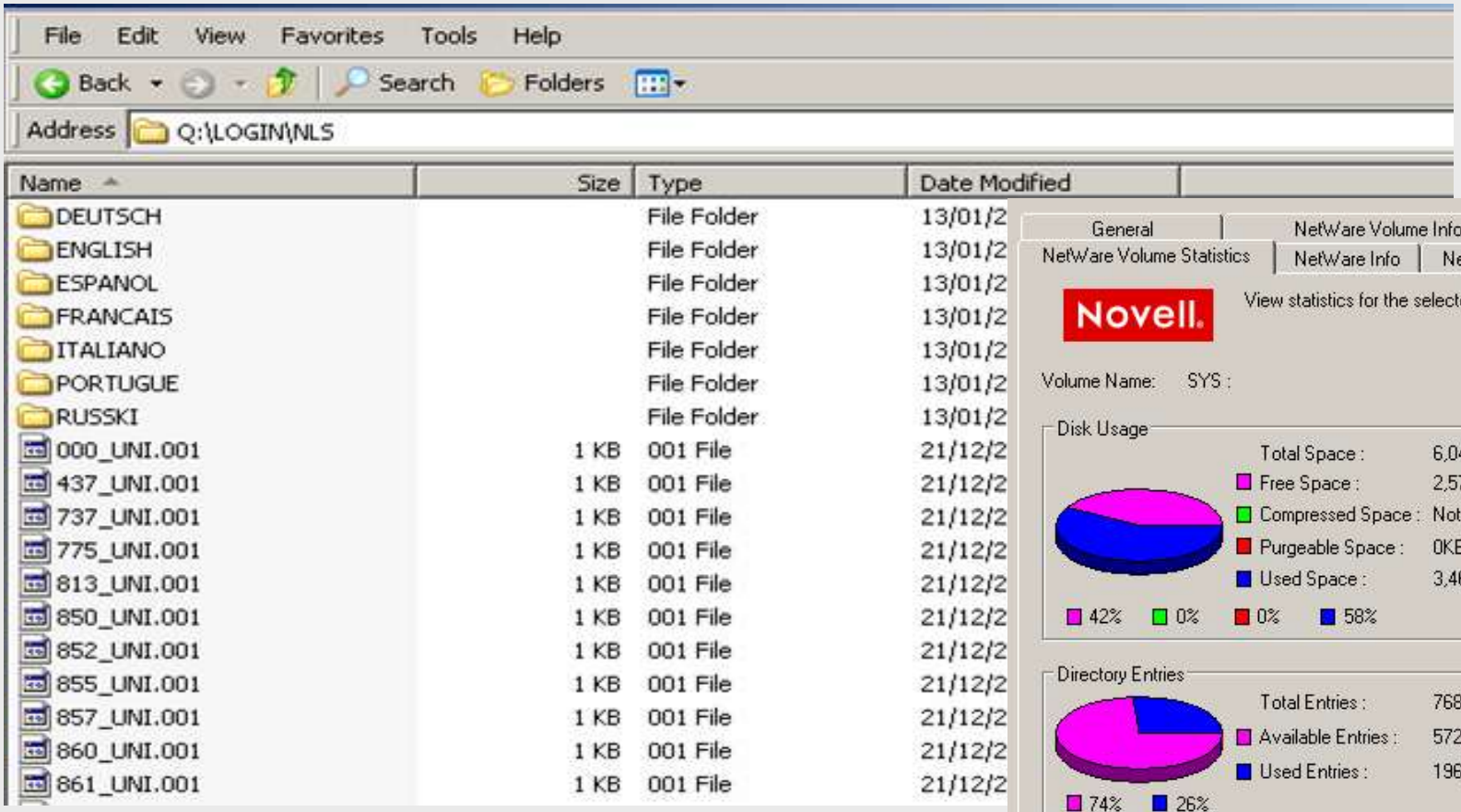
Authentication can be done against eDir, falling back to local Linux files (/etc/passwd, /etc/shadow)

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

C32 Windows client to Linux server



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)
- TCPIP

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.

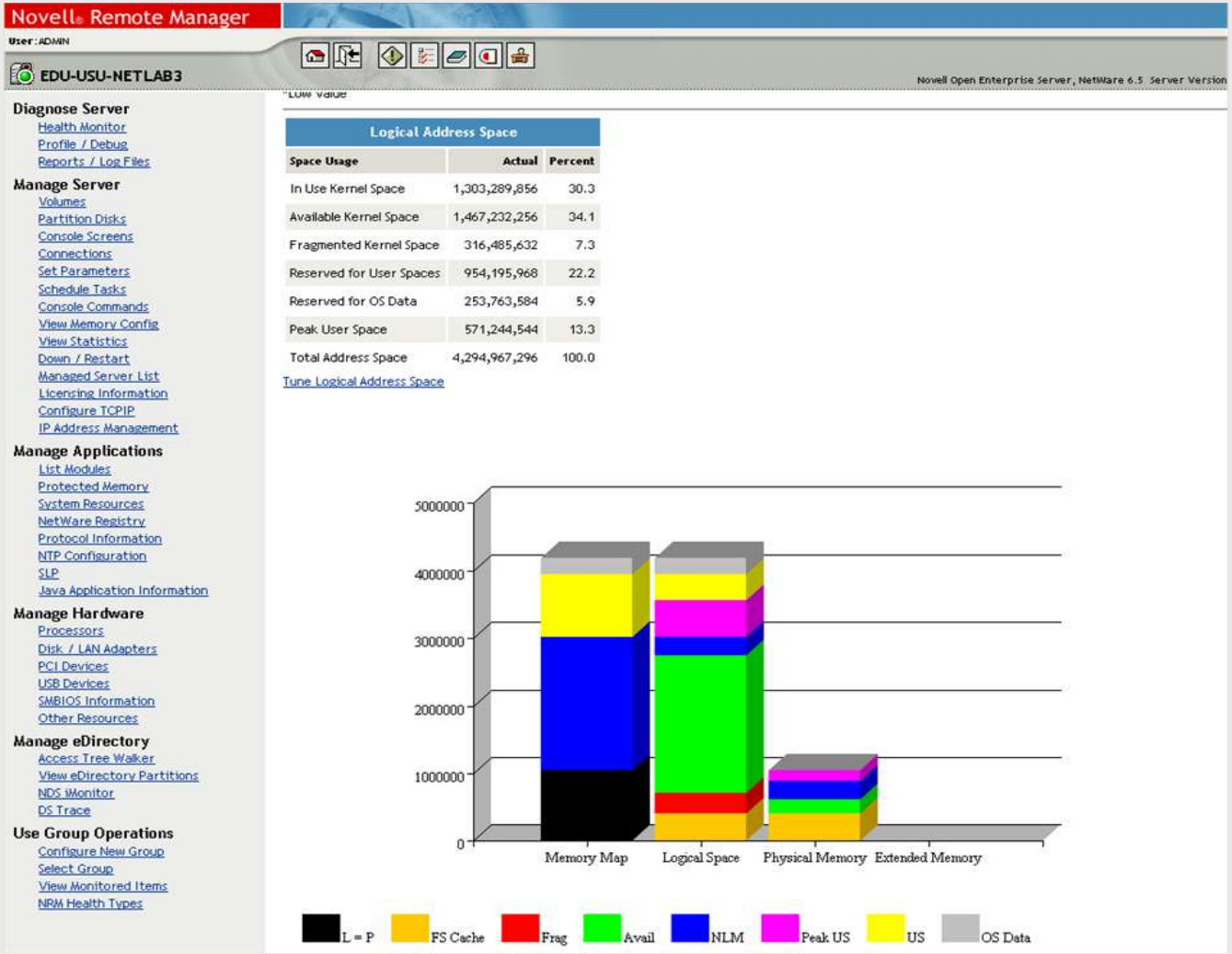
OES Links

OES Documentation

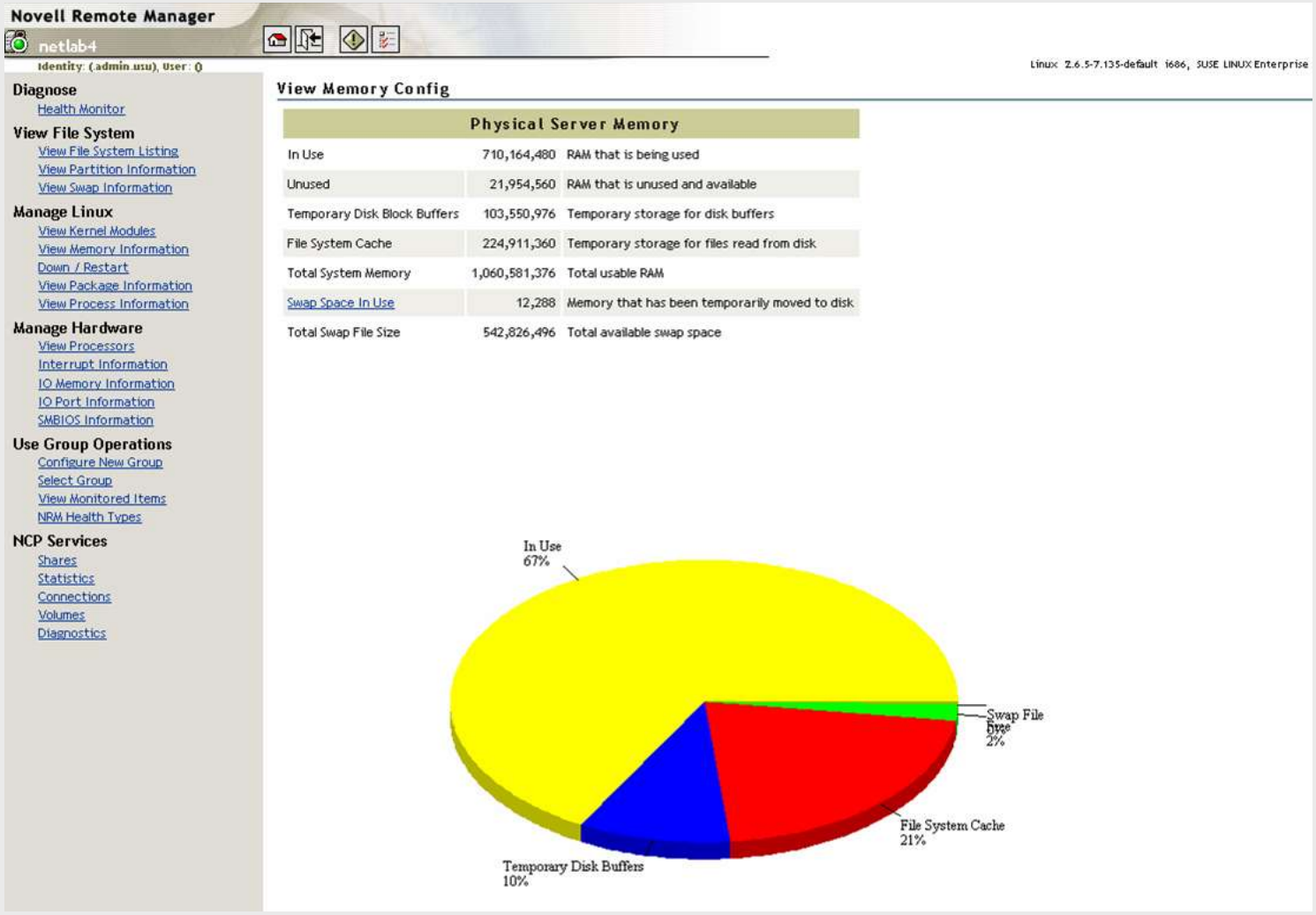
OES Provides:

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

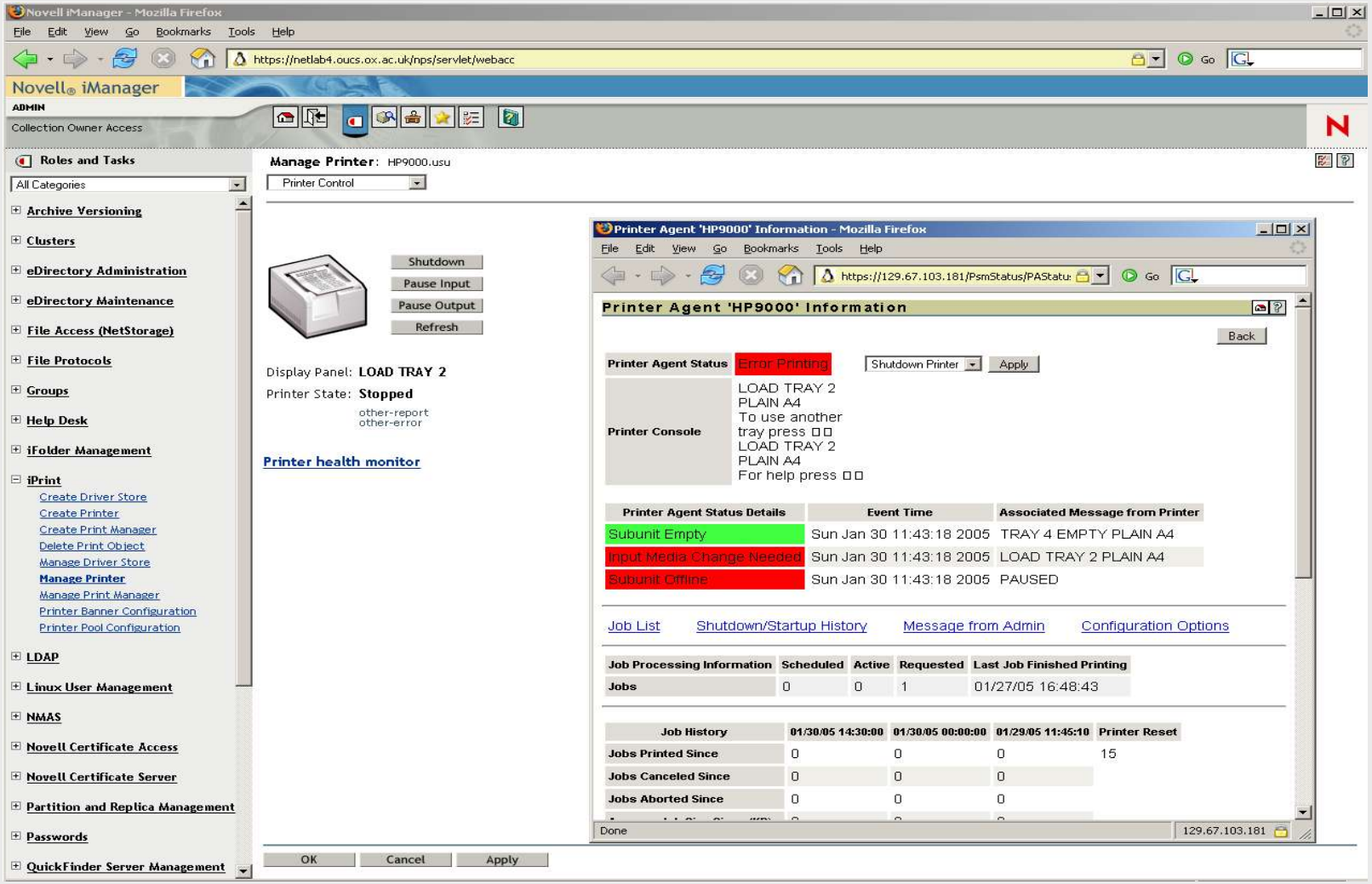
Novell Remote Manager (NW)



Remote Manager on Linux



iManager v2.5 NW & Linux



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*

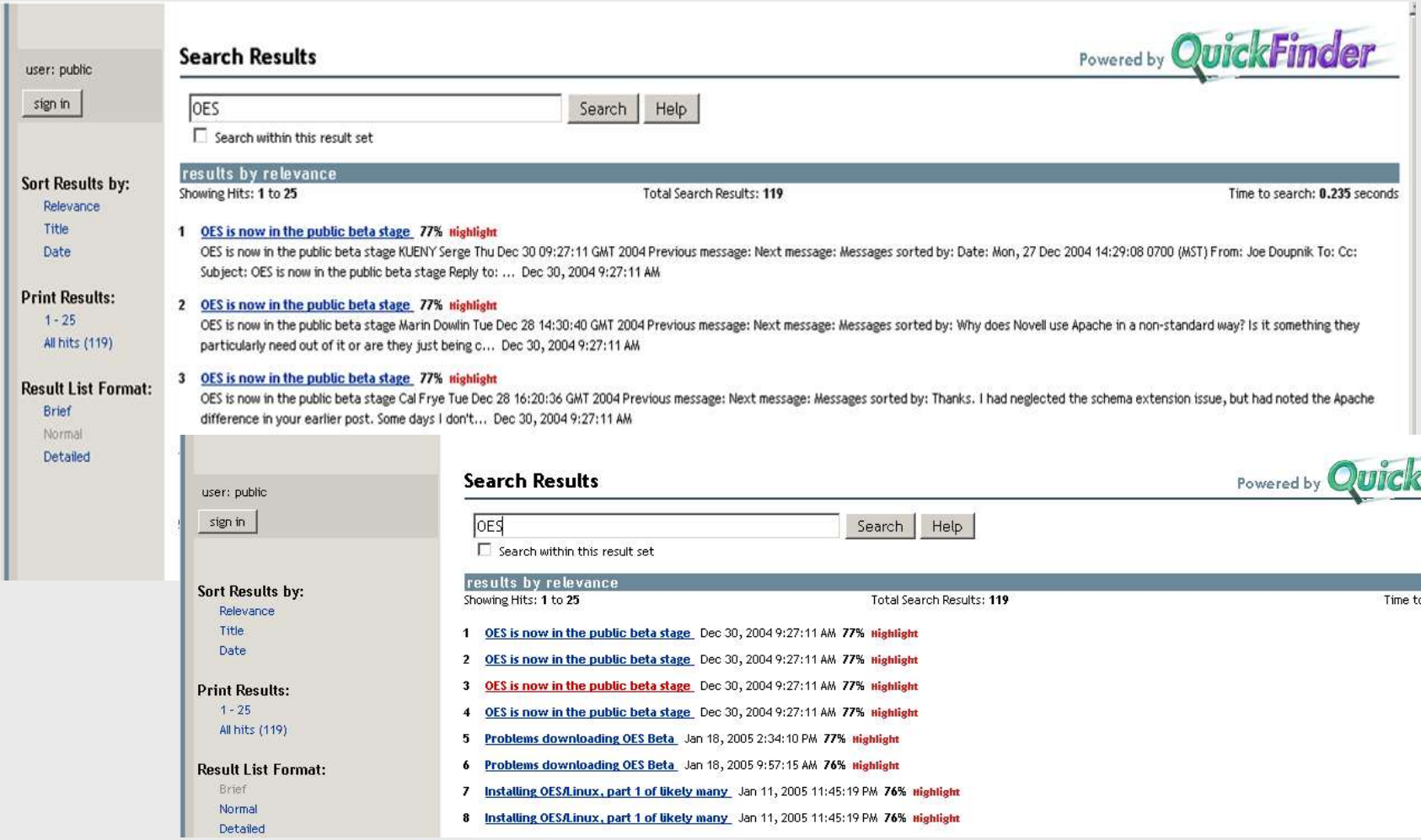
Enterprise class search engine, equivalent to expensive alternatives. Used by www.novell.com

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



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?