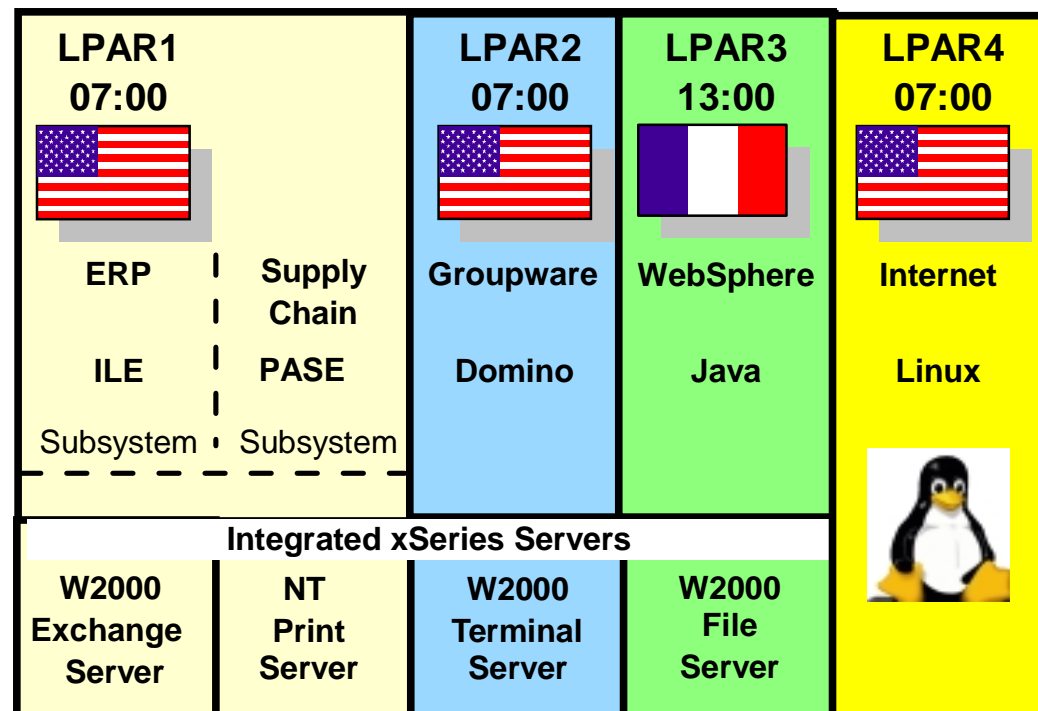# *iSeries Linux*

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iSeries Consolidated Server Strategy

Single server, multiple applications

- ► LPAR for iSeries and AS/400
- ► Domino for NT Domino
- ► iNotes for Exchange
- ► Linux partition for Linux or NT consolidation
- ► OS/400 PASE for Ported UNIX applications
- ► IXS/IXA for Windows applications

Supported across the iSeries product line

Incorporates eServer technology

LPAR1 07:00		LPAR2 07:00	LPAR3 13:00	LPAR4 07:00
ERP	Supply Chain	Groupware	WebSphere	Internet
ILE	PASE	Domino	Java	Linux
Subsystem	Subsystem			

Integrated xSeries Servers

W2000 Exchange Server	NT Print Server	W2000 Terminal Server	W2000 File Server

Ⓔ **server**

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Linux Marketplace

Linux shipments projected to show the highest growth rate of any operating system in the next three years*

* International Data Corporation (IDC) "Server Operating Environments Market Forecasts & Analysis" January 2001

▶ Driving Cross Industry Support: Hardware, Software, Services

Linux Usage Intentions

	Today	In 12 Months
HTML Server	45%	68%
E-mail Server	50%	66%
Web Application Server	43%	65%
Intranet Server	49%	64%
Firewall	48%	63%
File and Print	50%	62%
Software Development	43%	58%
Database Server	38%	50%
Non-Internet, non-Web	33%	49%

Zona Research Market Survey of IT and ISP customers with buying authority: 10/2000
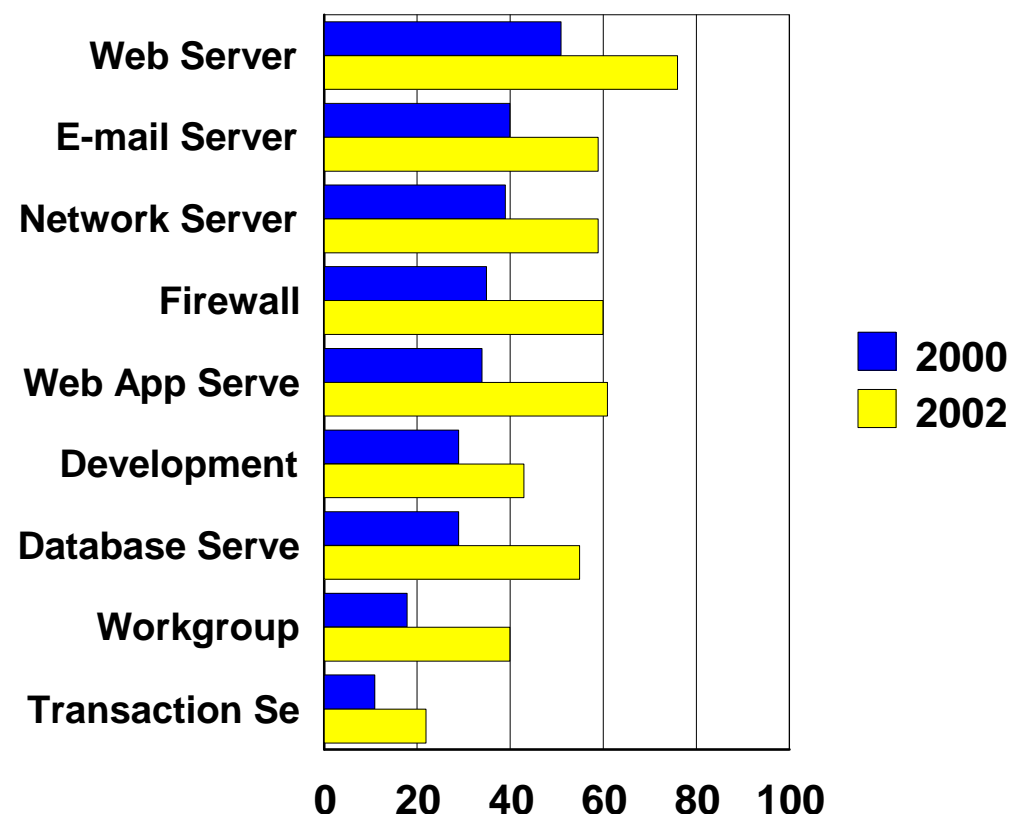
Functions for Which Linux is being used (2000 vs 2002) - IBM Worldwide Linux Study 3/01 - 1704 Responses

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Linux and iSeries

What does Linux Bring to iSeries

- ▶ Applications
  - ● e-business infrastructure
  - ● New generation of web-based applications
  - ● Provides flexibility and choice of environment
  - ● Ease delivery of open source components
- ▶ Resources and Skills
  - ● Leverage virtual worldwide development team
  - ● Broad skill base to deliver iSeries solutions
  - ● Leverage other IBM investments in Linux
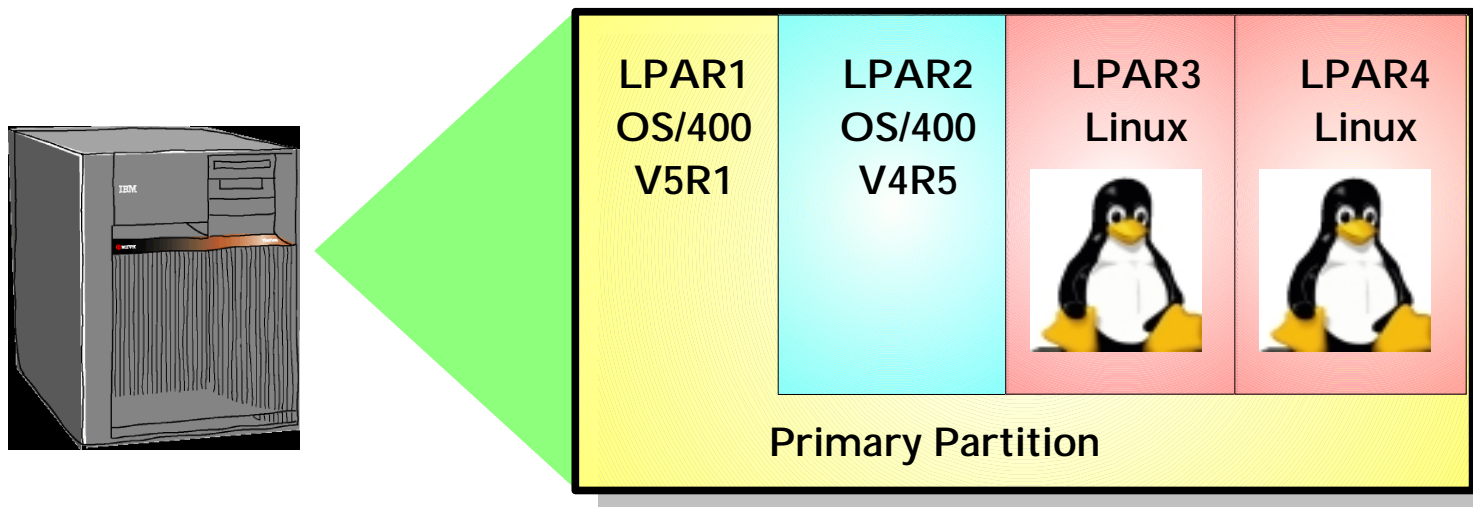
What does iSeries Bring to Linux

- ▶ Ability to consolidate multiple Linux servers
- ▶ A reliable, scalable server to run Linux
- ▶ Resource sharing and management
- ▶ Integration with OS/400

IBM eServer iSeries Wins "Best of Show"

LinuxWorld
San Francisco, CA August 28-30

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Linux on iSeries

LPAR1
OS/400
V5R1

LPAR2
OS/400
V4R5

LPAR3
Linux

LPAR4
Linux

Primary Partition

Consolidate up to 31 Linux servers on one iSeries server

- ► Linux runs in iSeries logical partition
- ► Move processor, memory, and I/O resources between partitions
- ► Supported with V5R1 on iSeries Model 270, 820, 830, and 840

I/O Flexibility

- ► Virtual - Linux shares OS/400 managed disk, tape, CD-ROM, and LAN resources
- ► Direct - Linux owns I/O resources

Standard Linux from Leading Distributors: SuSE, Turbolinux, and Red Hat

- ► Based on a 2.4, 64 and 32-bit PowerPC kernel

www.ibm.com/eserver/iseries/linux

@server

Linux and LPAR

Linux runs in a secondary partition
- ▶ Requires OS/400 V5R1 Primary Partition

Shared Processor Support for SStar Processors
- ▶ On selected iSeries 270 and 8xx models, Linux can share a processor with other Linux or OS/400 partitions
- ▶ Up to 4 partitions per processor
- ▶ Minimum 0.10 processor in a partition
- ▶ Minimum processor movement: 0.01

Dedicated Processor Support for IStar Processors
- ▶ On selected 8xx servers, Linux requires dedicated processors
- ▶ 1 partition per processor
- ▶ Minimum processor movement: 1

Resource Movement
- ▶ Processors, Memory, I/O
- ▶ Requires IPL of Linux partition

Maximum Number of Linux Partitions

# of Processors in Server	Maximum # of Linux Partitions*
1	3
2	7
4	15
8	31
12	31
24	31

* With Shared Processor Support

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iSeries Model 270 Linux Support

Linux is supported on selected new 270 servers

► Requires OS/400 V5R1 Primary Partition

270 Feature #	# of Processors	LPAR and Shared Processor	Supports Linux	Linux Shared Processor
2431	1	Yes	Yes	Yes
2432	1	Yes	Yes	Yes
2434	2	Yes	Yes	Yes
2452 DSD	1	Yes	Yes	Yes
2454 DSD	2	Yes	Yes	Yes

Linux is <u>not</u> supported on the existing 270 servers

270 Feature #	# of Processors	LPAR and Shared Processor	Supports Linux	Linux Shared Processor
2248	1	No	No	No
2250	1	No	No	No
2252	1	No	No	No
2253	2	No	No	No
2422 DSD	1	No	No	No
2423 DSD	1	No	No	No
2424 DSD	2	No	No	No

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iSeries Model 820 Linux Support

Linux is supported on selected 820 servers

► Requires OS/400 V5R1 Primary Partition

New 820 servers

820 Feature #	# of Processors	LPAR and Shared Processor	Supports Linux	Linux Shared Processor
0150	1	Yes	Yes	Yes
0151	2	Yes	Yes	Yes
0152	4	Yes	Yes	Yes
2435	1	Yes	Yes	Yes
2436	1	Yes	Yes	Yes
2437	2	Yes	Yes	Yes
2438	4	Yes	Yes	Yes
2456 DSD	1	Yes	Yes	Yes
2457 DSD	2	Yes	Yes	Yes
2458 DSD	4	Yes	Yes	Yes

Existing 820 servers

820 Feature #	# of Processors	LPAR and Shared Processor	Supports Linux	Linux Shared Processor
2395	1	Yes	No	No
2396	1	Yes	No	No
2397	2	Yes	Yes	No
2398	4	Yes	Yes	No
2425 DSD	1	Yes	No	No
2426 DSD	2	Yes	Yes	No
2427 DSD	4	Yes	Yes	No

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iSeries Model 830 and 840 Linux Support

Linux is supported on 830 and 840 servers

▶ Requires OS/400 V5R1 Primary Partition

Existing 830 servers

830 Feature #	# of Processors	LPAR and Shared Processor	Supports Linux	Linux Shared Processor
2400	4	Yes	Yes	No
2402	8	Yes	Yes	No
2403	8	Yes	Yes	No
2351	4/8	Yes	Yes	No

New 840 servers

840 Feature #	# of Processors	LPAR and Shared Processor	Supports Linux	Linux Shared Processor
2461	24	Yes	Yes	Yes
2352	8/12	Yes	Yes	Yes
2353	12/18	Yes	Yes	Yes
2354	18/24	Yes	Yes	Yes

Existing 840 servers

2418	12	Yes	Yes	No
2420	24	Yes	Yes	No
2416	8/12	Yes	Yes	No
2417	12/18	Yes	Yes	No
2419	18/24	Yes	Yes	No

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02/12/2002

IBM eServer Offerings for Linux

- **Continue Linux eServer Momentum**

- **Offerings for Server Consolidation**

- **Announced at LinuxWorld in New York City January 30**

eServer zSeries Offering for Linux
  - ▶ Enterprise and Internet Data Centers
  - ▶ Packaged z800 with 1-4 processors, z/VM maintenance and support
  - ▶ 20 to 100s of Linux images

eServer iSeries Offering for Linux
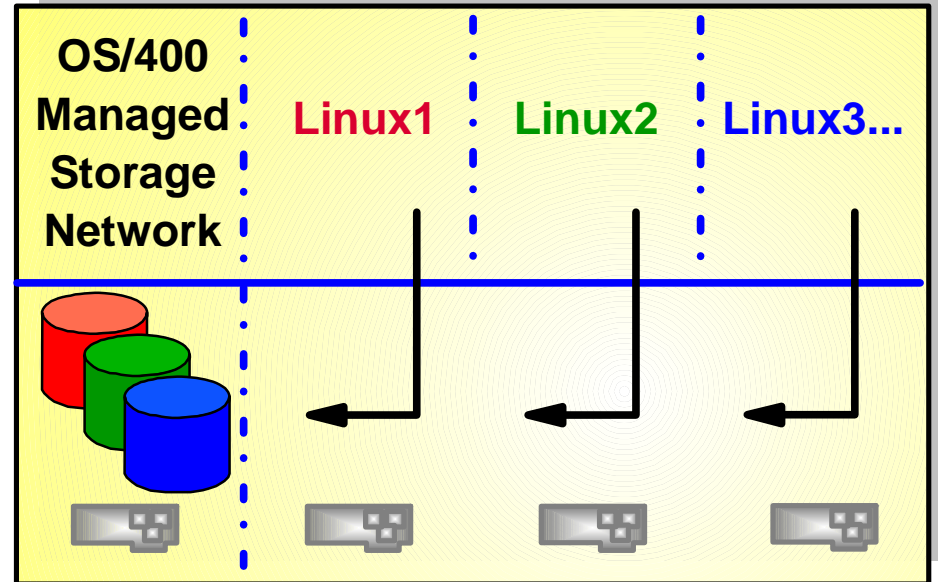 - ▶ Small and Medium Business
  - ▶ iSeries Model 820 with 1-4 processors
  - ▶ 1-15 Linux partitions

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IBM ^   *iSeries Offering for Linux*

**Best of Show:
iSeries**

OS/400 Managed Storage Network	Linux1	Linux2	Linux3...

iSeries Linux Edition

- **1 - 4-way i820**
- **up to 32 GB memory**
- **up to 8 TB disk**

SuSE

redhat

turbolinux®

- ▶ **Consolidated e-infrastructure application server**

- ▶ **Wizard for simple Linux installation and LPAR setup**

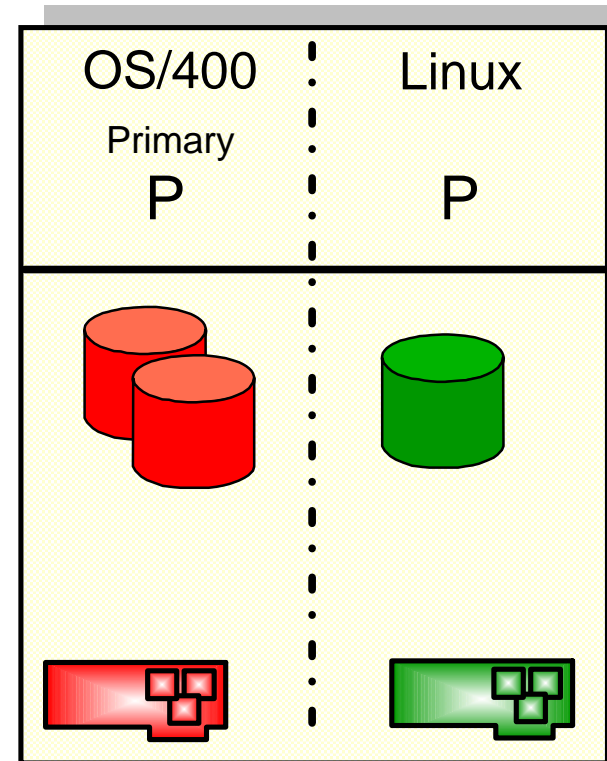- ▶ **Granular logical partitioning, supports up to 15 Linux servers**

I/O Flexibility

Virtual I/O

Direct I/O

Virtual I/O panel:
- OS/400 — Primary / Host — P
- Linux — P
- Virtual LAN

Direct I/O panel:
- OS/400 — Primary — P
- Linux — P
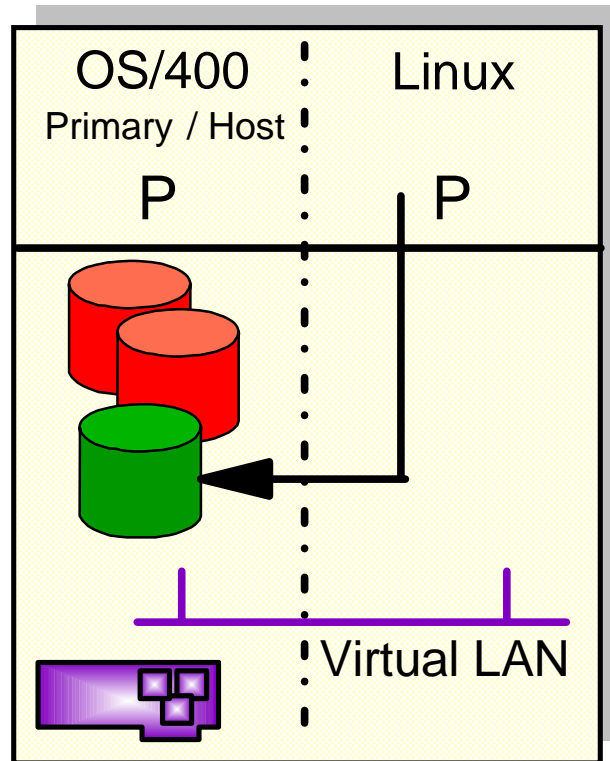
▶ Leverage iSeries resources
▶ OS/400 management

▶ Dedicated resources
▶ Linux management

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Virtual Ethernet LAN

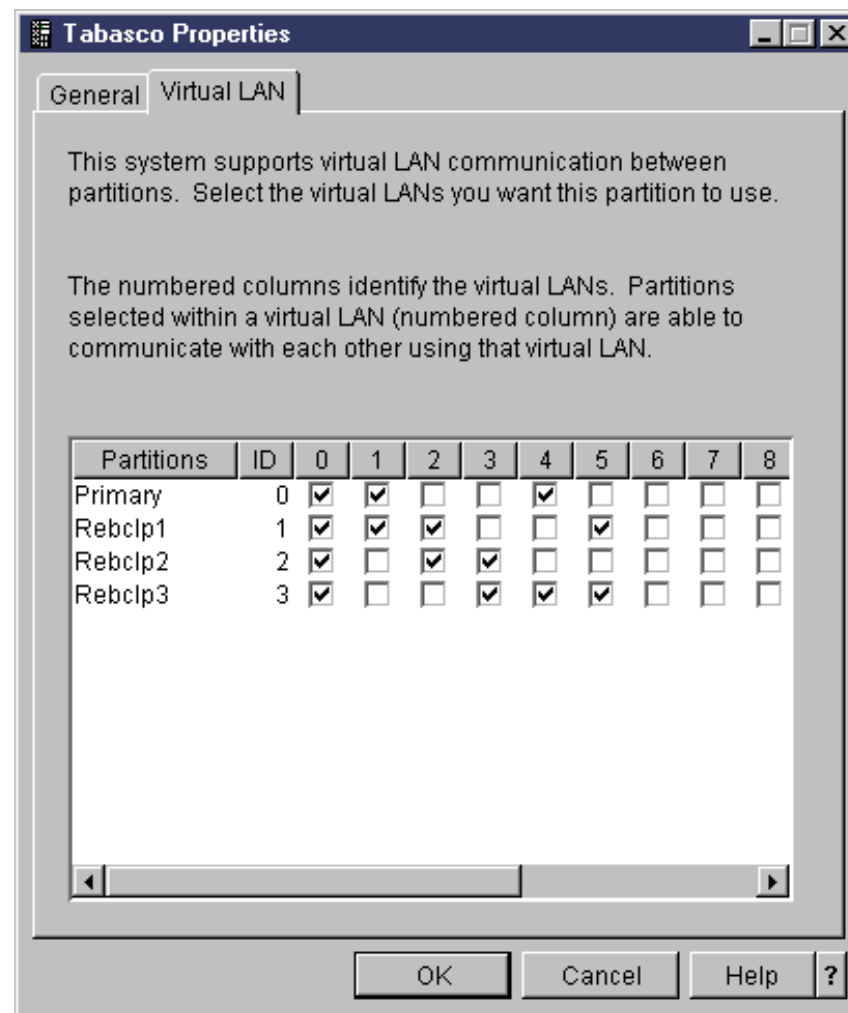## Up to 16 high speed TCP/IP connections between partitions

▸ Emulates 1 Gb Ethernet Adapters

▸ Selective communications paths between partitions

▸ Utilizes iSeries memory bus

No additional hardware required

Supports communications between

▸ OS/400 to OS/400

▸ Linux to OS/400

▸ Linux to Linux

Included with OS/400 V5R1

Tabasco Properties

General | Virtual LAN

This system supports virtual LAN communication between partitions. Select the virtual LANs you want this partition to use.

The numbered columns identify the virtual LANs. Partitions selected within a virtual LAN (numbered column) are able to communicate with each other using that virtual LAN.

Partitions	ID	0	1	2	3	4	5	6	7	8
Primary	0	☑	☑	☐	☐	☑	☐	☐	☐	☐
Rebclp1	1	☑	☑	☑	☐	☐	☑	☐	☐	☐
Rebclp2	2	☑	☐	☑	☑	☐	☐	☐	☐	☐
Rebclp3	3	☑	☐	☐	☑	☑	☑	☐	☐	☐

OK | Cancel | Help | ?

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I/O Devices

Virtual
- Devices owned and managed by OS/400
  - Linux started with a Vary On of the OS/400 Network Server Description
- Disk
  - Space is reserved in OS/400 for use by Linux
  - Virtual Storage Spaces easily moved between partitions
- Tape, CD-ROM and DVD
  - Linux has access to all the devices in the hosting partition
- Virtual Ethernet LAN
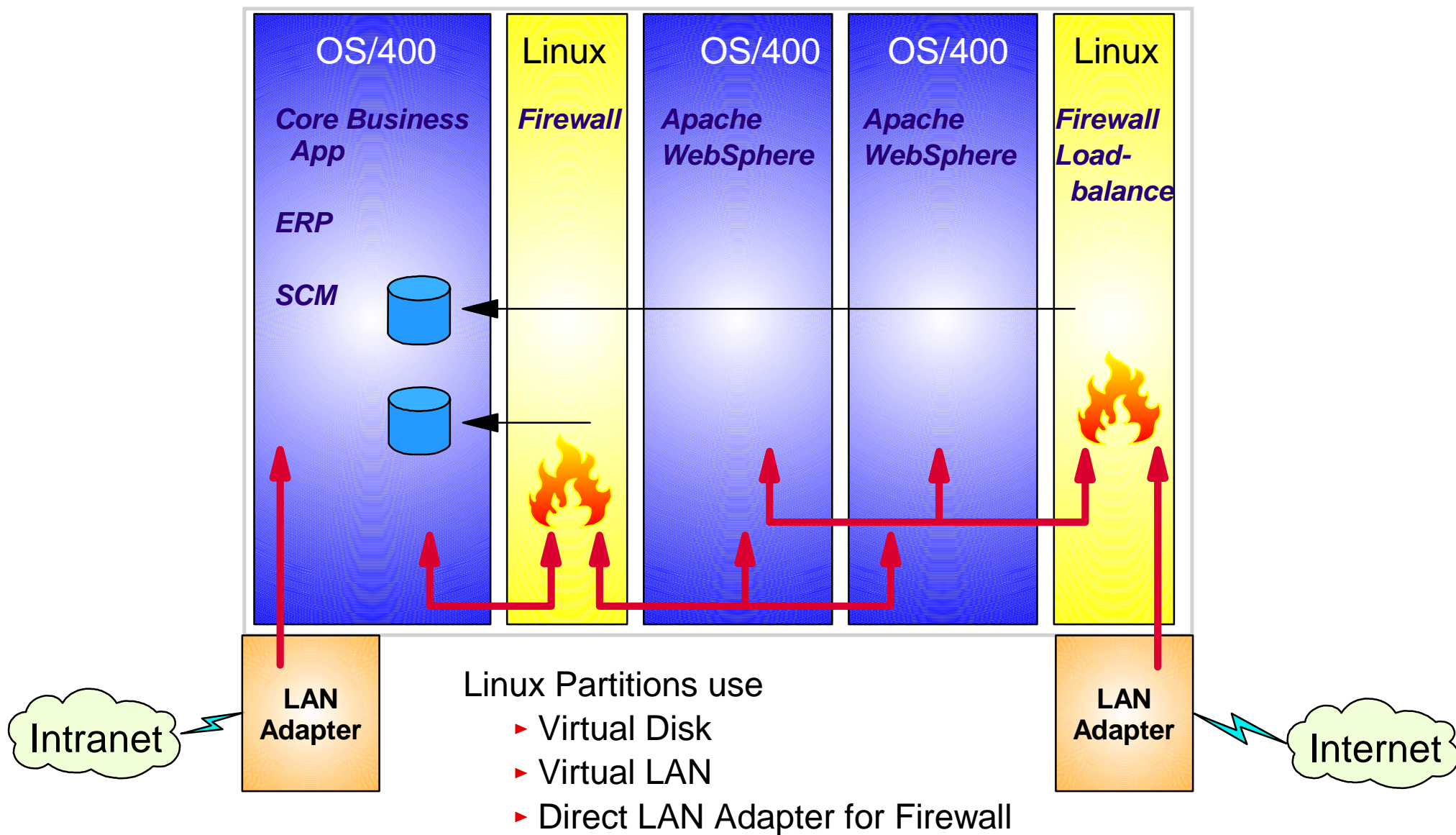 - Request from client comes in through other partitions

Direct
- Owned by Linux
  - OS/400 does not see them
  - Uses iSeries I/O Adapters, IOPs are not used
- Ultra-2 SCSI to connect Disk, Tape, CD-ROM, DVD
  - Hardware RAID and compression are not supported
- LAN
  - 1 Gb Ethernet, 10/100 Mb Ethernet, 100/16/4 Mb Token Ring
- WAN
  - Ordered via RPQs 847141 (#4745 PCI 2 Line WAN IOA) 847142/3 (#2772/3 Dual WAN/Modem IOA)

Console
- PC with Telnet attached via network to iSeries OS/400 Hosting Partition
- Telnet included with Windows operating systems

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iSeries Linux Example

OS/400	Linux	OS/400	OS/400	Linux
Core Business App	*Firewall*	*Apache WebSphere*	*Apache WebSphere*	*Firewall Load-balance*
ERP				
SCM				

LAN Adapter

Intranet

LAN Adapter

Internet

Linux Partitions use
- ▶ Virtual Disk
- ▶ Virtual LAN
- ▶ Direct LAN Adapter for Firewall

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Linux Kernel

Linux consists of one source tree that is compiled for a specific hardware platform to generate a kernel

IBM has contributed modifications for the Linux PowerPC kernel

- ► **2.4, 32-bit Kernel**

- ► **Architecture Independent Code - no changes**

- ► **Architecture Dependent Code - some changes**
  - Device drivers to direct and virtual iSeries I/O
  - Get Time of Day from iSeries

- ► **These modifications are Open Source**

- ► **These modifications are available on Linux PowerPC web sites**
  - http://linuxppc64.org/

- ► **These modifications are expected to be apart of the Linux kernel for PowerPC**

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Linux Distributions

Distributors

- ► Use PowerPC kernel with iSeries modifications
- ► Add Operating System, Middleware, and Application components on top of Linux kernel
- ► The things that most people are using Linux for come with the distribution

Example: Functions included in Typical Distribution

Functions	Key Middleware and Applications
Web Serving	Apache, PHP,Tux, thttpd, Zope
Mail Serving	sendmail, postfix, exim, WU IMAP
Print Server	lprng, cups
File Server	Samba, NFS
News Server	INN
FTP Server	w-ftpd
Firewall	NetFilter
DHCP	dhcpd
DNS	bind

Distribution

K
OS
MW
Apps
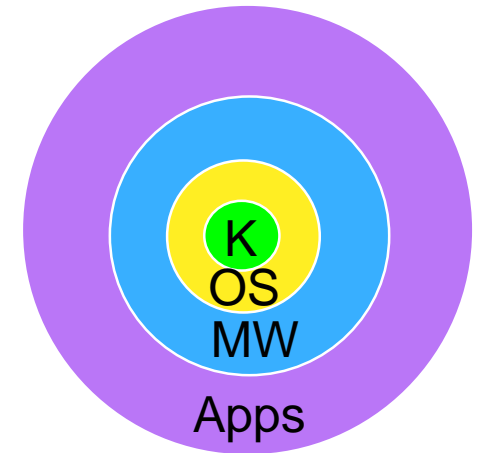
Kernel +
Operating System +
Middleware +
Applications =
Distribution

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Linux for iSeries

Available from distributors

▶ **SuSE Linux Enterprise Server 7**
- Announced January, 2002
- Replaces SuSE Linux Developer Edition for iSeries
- http://www.suse.com/us/products/suse_business/sles /sles_iSeries_pSeries/index.html

▶ **Turbolinux 6.5 for iSeries**
- General Availability August, 2001
- http://www.turbolinux.com/products/iseries/index.html

▶ **Red Hat 7.1 for iSeries**
- General Availability 1Q 2002
- http://www.redhat.com/software/linux/ibmseries/

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Support for Linux on iSeries

Support is available for Linux on iSeries from distributors

- SuSE

- Turbolinux

- Red Hat (when available)

Support for Linux on iSeries from IBM

- IBM Support Line provides answers to usage questions and suspected Linux code defects

- Requires Linux SupportLine contract

Support for the Integration of iSeries, OS/400 and Linux on iSeries

- Asking questions regarding OS/400 logical partitioning and reporting suspected defects in the OS/400 implementation of logical partitions are included within the IBM Support Line OS/400 offering contract.

- The OS/400 Support Line representative will attempt to answer basic Linux on iSeries installation questions.

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IBM Middleware

JavaJ

- IBM JVM 1.3 included in SuSE Enterprise Linux 7 for iSeries, SuSE Developer Edition for iSeries, and planned to be available for Red Hat Linux 7.1 for iSeries

- iSeries Toolbox for Java   provides access to DB2 UDB and OS/400 Services

DB2 UDB for Linux

- Technology Preview planned 1st quarter 2002

WebSphere Application Server for Linux

- Technology Preview planned 1st quarter 2002

Application Sources

Linux enables a new stream of e-business applications for iSeries

PowerPC Linux applications

- ▶ Will run out of the box
- ▶ iSeries, pSeries, Apple PowerBook,,,

Intel Linux applications

- ▶ Need to be compiled for PowerPC

Open Source Applications

- ▶ Download and compile for PowerPC
    - Tomcat for Java Servlets and Java Server Pages   http://java.sun.com/products/jsp/tomcat/
    - OpenOffice - Productivity Suite   www.openoffice.org

Development Options

- ▶ Linux on iSeries
- ▶ PowerPC workstation or server
- ▶ Cross Compilers from Intel systems

PartnerWorld is working with ISVs

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Linux and OS/400 Integration

File and Print Sharing

► OS/400 NetServer Support for Samba

File Sharing

► NFS

Database Access

► IBM Toolbox for Java including JDBC

► ODBC for DB2 UDB for OS/400 (Beta 4Q 01)

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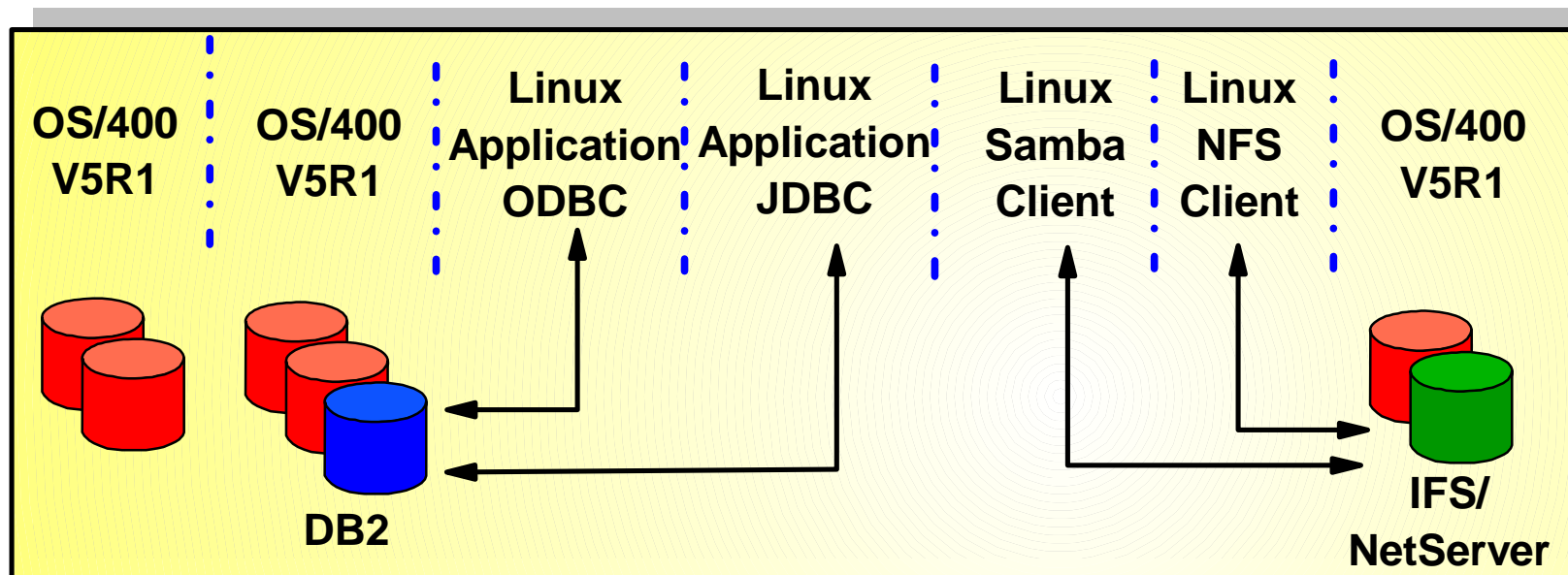
iSeries Linux Opportunities

Consolidation

- ► **Replace Windows or Linux Infrastructure servers**
- ► **Run multiple Linux servers in partitions**
- ► **Consolidation Lowers Cost of Computing**

Linux for iSeries Partitions

Server farms

OS/400

iSeries LPAR
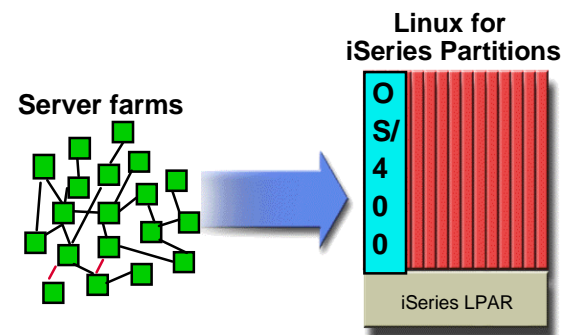
Integration

- ► **Extend OS/400 applications with Linux Applications**
- ► **Run Linux applications on same server as OS/400**
- ► **Integration Lowers Cost of Computing**

LPAR1
OS/400

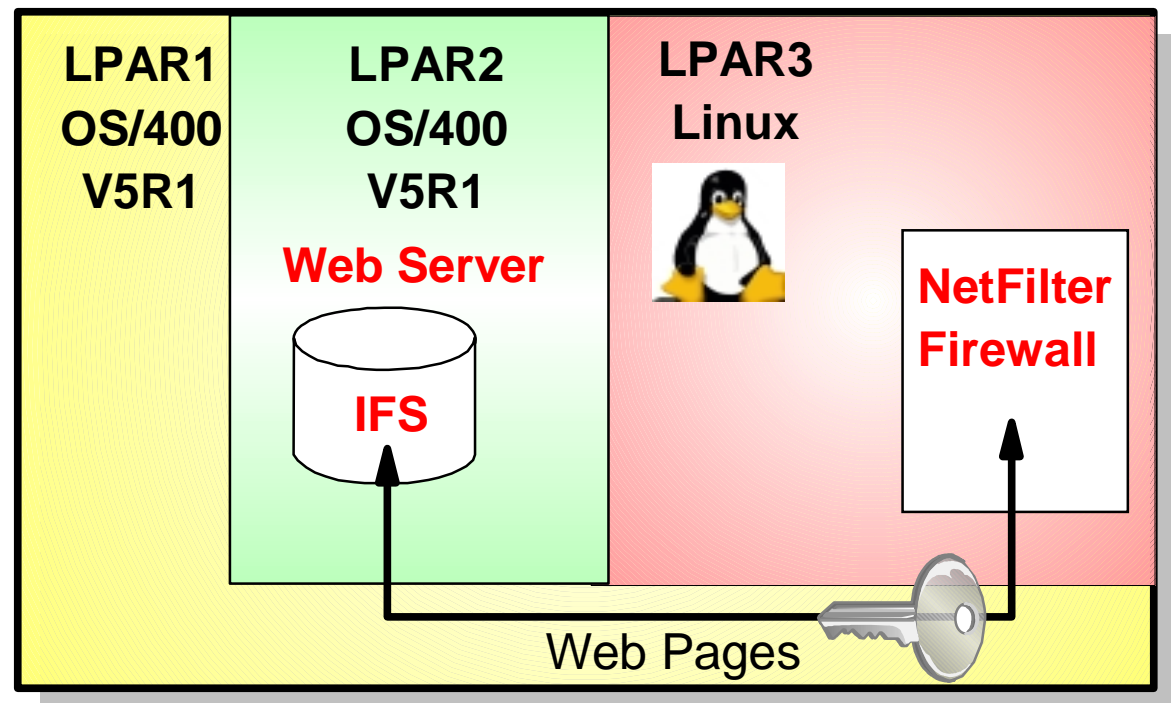LPAR2
Linux

DB

Web Server
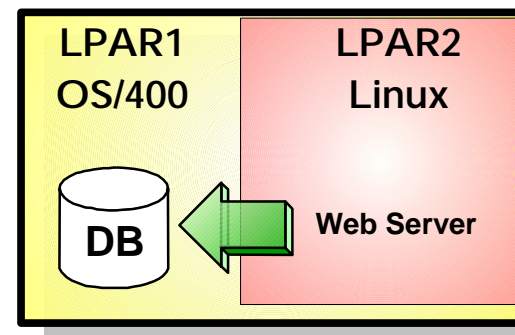
Application Flexibility

- ► **Leverage Linux LOB application portfolio**
- ► **Run Linux applications on iSeries**
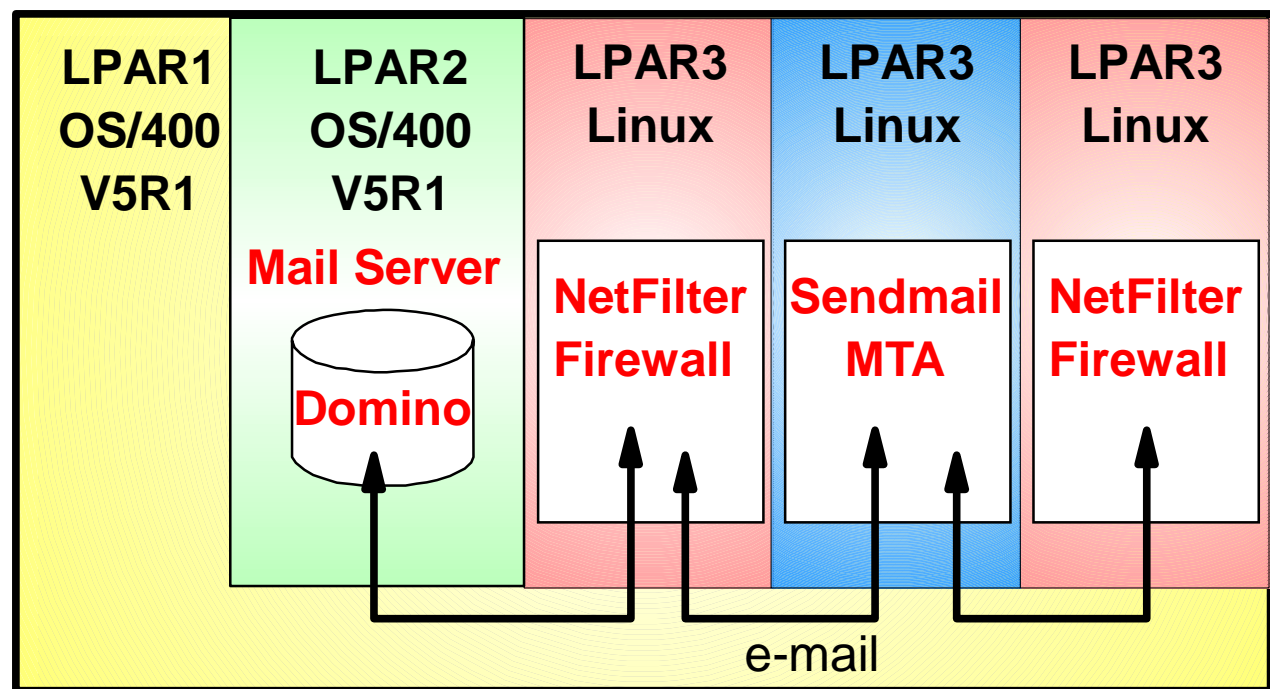- ► **Flexibility Lowers Cost of Computing**

LPAR1
OS/400

LPAR2
Linux

DB

DB
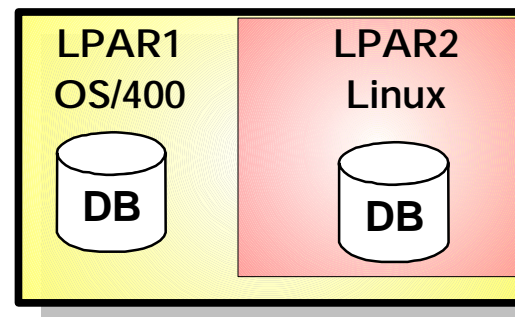
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Firewall

Protect OS/400 Resources

- ► NetFilter is a Firewall
  - Included in SuSE and Turbolinux distributions

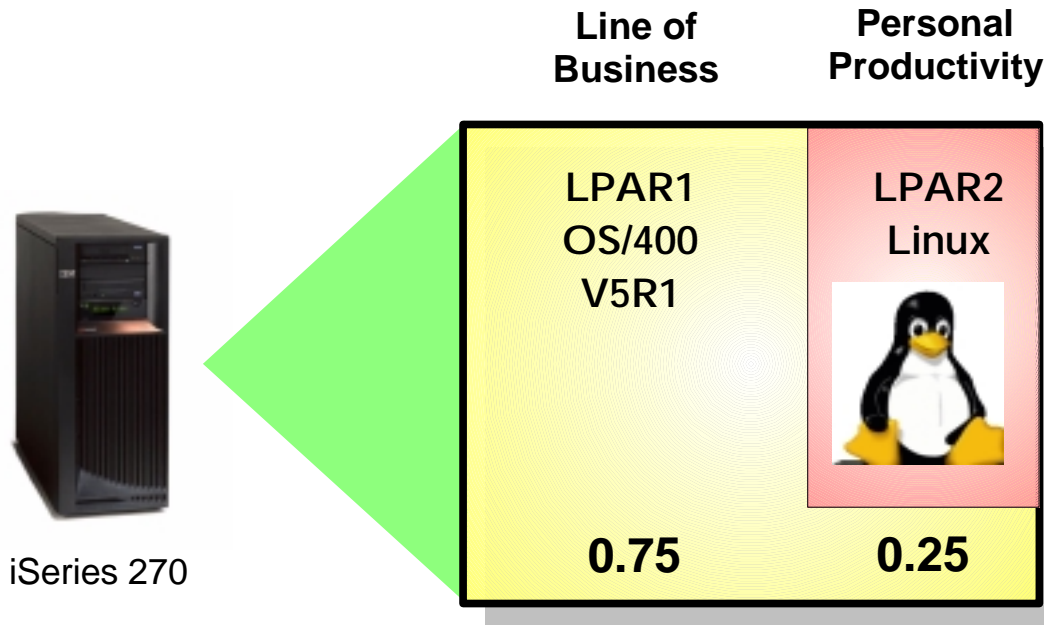| LPAR1 OS/400 V5R1	LPAR2 OS/400 V5R1 **Web Server** **IFS**	LPAR3 Linux **NetFilter** **Firewall**

Web Pages

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Sendmail

Separate Mail Server from Internet

- ► Sendmail Message Transfer Agent (MTA)
    - Included in SuSE and Turbolinux distributions
    - High performing reliable mail gateway
- ► Mail Server Options
    - Domino on OS/400
    - Exchange on direct attach xSeries server
    - IMAP / POP server on Linux

LPAR1 OS/400 V5R1	LPAR2 OS/400 V5R1 Mail Server Domino	LPAR3 Linux NetFilter Firewall	LPAR3 Linux Sendmail MTA	LPAR3 Linux NetFilter Firewall

e-mail

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Open Office

Line of Business	Personal Productivity
LPAR1 OS/400 V5R1	LPAR2 Linux
0.75	0.25

iSeries 270

OpenOffice

▸ Word processor, Spreadsheet, Presentation Builder

▸ Runs on server, GUI sent to X-Windows client

▸ Open Source Project
   Millions of Downloads
   http://www.openoffice.org/

Consolidated Server

▸ OS/400 runs line of business applications

▸ Linux runs OpenOffice for personal productivity applications

Inexpensive Linux Server

▸ Linux server needs less than a processor, memory, and disk

▸ Linux shares RAID adapters, tape drives, CD-ROM, and LAN adapters with OS/400

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Apache

Line of Business	Web Front End
LPAR1 OS/400 V5R1	LPAR2 Linux
2.75	1.25

iSeries 820
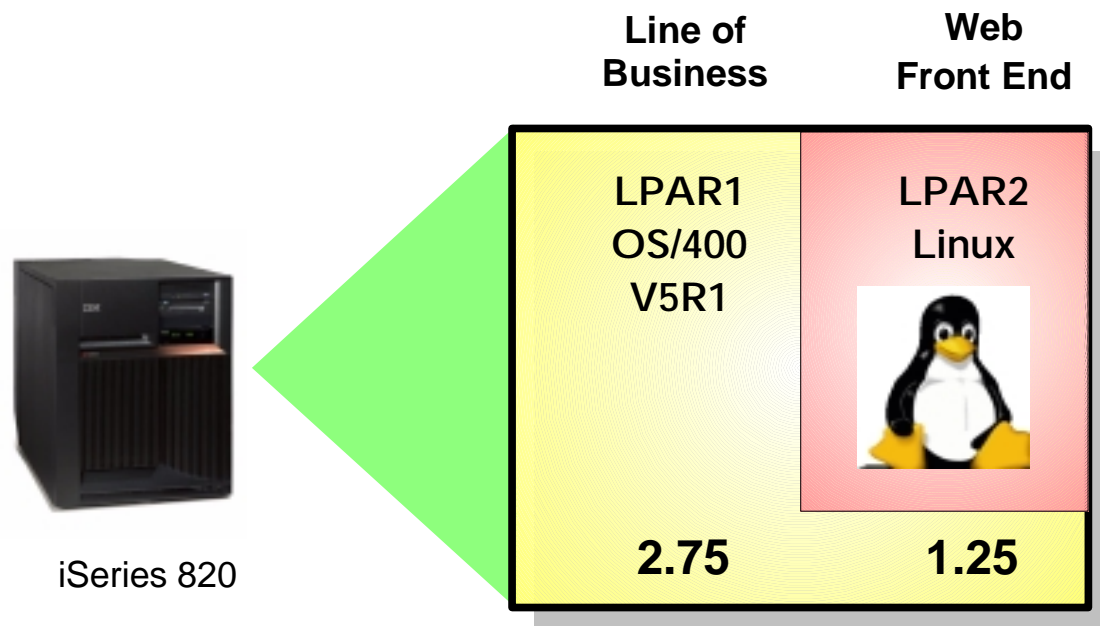
Web Front End

- ▶ Apache Web Server
- ▶ Tomcat App Server
  - http://java.sun.com/products/jsp/tomcat/
- ▶ IBM JVM 1.3 for Linux PPC
  - Included in SuSE Developer Edition for iSeries
- ▶ **iSeries Toolbox for Java**

http://www-1.ibm.com/servers/eserver/iseries/toolbox/

Extend LOB Applications with Linux

- ▶ OS/400 runs line of business applications
- ▶ Linux runs most popular web server
- ▶ Java Toolbox provides interfaces to DB2, IFS, Spool files, Systems Values, Messages, Programs, Commands, Data Queues, Jobs, ...

Consolidate Linux Server

- ▶ Shared resources reduce costs of managing Linux environment
- ▶ Resource movement adds flexibility to support changing workloads

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Performance Sizing

Apache is the most popular web server on the Internet

Performance information to assist in selecting the right iSeries server to run a given Apache workload

# of iSeries Processors	0.5	1	2	4
# of web server hits per second, Apache	514	1024	1878	3755

The performance results are based on information collected by IBM in December 2001 and January 2002. The specific configuration used includes

- ► Model 840 with 600 MHz CPUs
- ► 1 to 4 Processors in Linux partition
- ► Memory 512 MB to 16 GB
- ► OS/400 V5R1 with latest Linux related PTFs
- ► SuSE Linux Distribution
- ► 64 bit PowerPC kernel 2.4.13
- ► Apache release 1.3
- ► khttp daemon

The information in this document is subject to change without notice. IBM assumes no responsibility for any errors that may appear in this document. The performance information in this document is for guidance only. System performance is highly dependent on many factors including system hardware, system and user software, and user application characteristics. Customer applications must be carefully evaluated before estimating performance. IBM does not warrant or represent that a user can or will achieve a similar performance. No warranty on system performance or price/performance is expressed or implied in this document.

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iSeries Linux Applications

Infrastructure / edge server

- ► Samba
  - Linux Distribution -Windows File/Print Server
- ► Apache
  - Linux Distribution -Web Server
- ► Sendmail MTA
  - Linux Distribution - Mail Transfer Agent
- ► H.A. Clusters for Linux
  - H.A. Solutions Technology - detects failures and kick off recovery.
- ► H.A. EchoStream Data Replication
  - H.A. Solutions Technology - automatically replicates data in real time.
- ► VigilEnt Security Agent for Linux on iSeries
  - PentaSafe Security Technologies - auditing, security management
- ► PATROL system-management
  - BMC - service-level management

Web enablement / e-business / tools

- ► Tomcat
  - Open Source - Web Application Server
- ► Open Office
  - Open Source - Office Suite
- ► IBM JVM
  - Linux Distributions - Java environment
- ► IBM Toolbox for Java
  - Open Source - Access to OS/400 services
- ► DI Atlantis Solution
  - Dimensional Insight, Inc. - BI applications
- ► Parallel Sort Engine and ETL Interface
  - Cosort - sorting and flat-file ETL technology
- ► e-VoiceTour
  - Real Person - Internet publishing, sales force presentations and web-based training.
- ► Web.up
  - Query - web publisher

Industry / SMB

- ► eMerchant
  - Magic Software - CRM solution.
- ► Linux General Ledger
  - Linux Business Accounting Systems - small to medium company general bookkeeping.

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iSeries Linux Test Drive

New Porting /Testing Resource for ISVs

- ▶ Announced December 2001
- ▶ iSeries Linux Partitions Accessible over Internet
- ▶ Goal is to rapidly increase the number of Linux applications available

Process

- ▶ ISVs fill out nomination

  http://www.iseries.ibm.com/developer/factory/testdrive/index.html

- ▶ Free and Fee Options
- ▶ Shared and Dedicated Partition Options
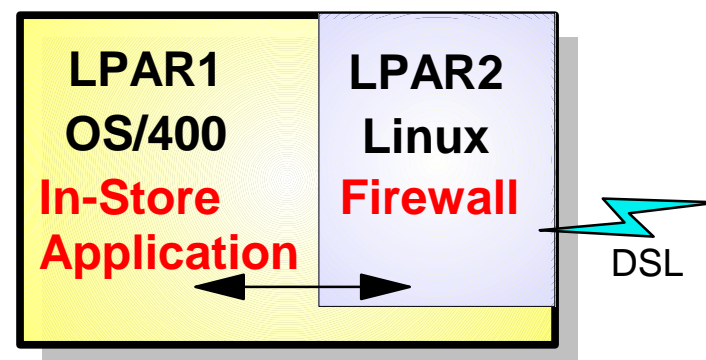- ▶ SuSE and Turbolinux available

Results in 1st Month

- ▶ Over 400 Nominations

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iSeries Linux Success

Large retail customer with 450 in-store iSeries systems

- ▸ Current network is Frame Relay and X.25
- ▸ Moving to DSL....but needed a firewall

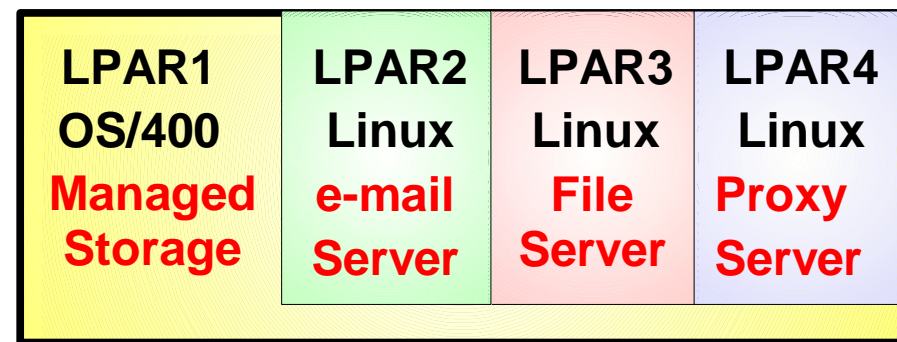| LPAR1 OS/400 In-Store Application	LPAR2 Linux Firewall

DSL

Municipal Government

- ▸ OS/400 partition running all of the city's major financial applications
- ▸ OS/400 partition as a hot backup partition for the public safety server
- ▸ Linux for Web Server and Firewall

LPAR1 OS/400 Financials	LPAR2 OS/400 Public Safety	LPAR3 Linux Web Server	LPAR4 Linux Firewall
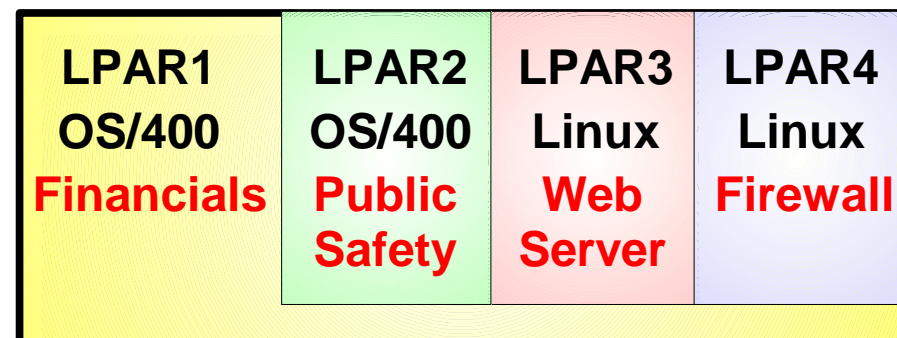
Large supplier of electronics products (80,000 products)

- ▸ Moved Linux applications from stand-alone Intel boxes to iSeries
- ▸ Squid, SAMBA, e-mail

LPAR1 OS/400 Managed Storage	LPAR2 Linux e-mail Server	LPAR3 Linux File Server	LPAR4 Linux Proxy Server

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iSeries Linux Success

Agriportal Ltd.
▶ Firewall security services

Beijing City Commercial Bank
▶ ATM control system

Churchill China
▶ Firewall security services

Elektro-Material
▶ Proxy, e-mail and Samba file server

Exogen
▶ Web serving with Apache and file and print services with Samba

Korea Van Telecom
▶ Mobile phone service

Lauffenmuehle
▶ Firewall security services

Polygon
▶ Apache web server, Samba file and print server, and a a boot server for diskless PCs

...

Please send Craig Johnson - johnsonc@us.ibm.com - your
iSeries Linux success story

Churchill China

The Challenge

▶ The need to develop a robust and scalable commerce for e-business supply chain management system

The Solution

▶ An ideal system for Churchill's needs was developed using Wizz400, a Clover product, running in a Logical Partition (LPAR) environment, with a Linux based firewall system on a powerful iSeries * Model 820

The Benefit

▶ Churchill now have a solution that perfectly meets their commerce for e-business supply chain management needs and is scalable to meet the company's future needs.

"iSeries has dramatically reduced our costs by providing the power to run different applications on different operating systems on a single machine. The legendary reliability of the system makes it the perfect platform for taking our business online."

David Garnett, Information Technology (IT) Director, Churchill China

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Linux on iSeries Advantages

Server Consolidation
- ► OS/400, Linux, and Windows 2000 Server
- ► Support for up to 31 Linux partitions

Resource Sharing
- ► Partitioning
- ► Shared Processors
- ► Virtual I/O: Disk, LAN, Tape, CD-ROM

Minimal Hardware Requirements for a Linux Environment
- ► Part of a processor, memory
- ► Virtual I/O: Disk, LAN, Tape, CD-ROM

Reliable Server
- ► Leading single server availability
- ► Unique virtual disk support provides excellent test/development environment

Storage Area Network facilities
- ► Full OS/400 system backup provides disaster recovery for Linux virtual disks
- ► Linux backup saves daily Linux files changes direct to iSeries tape device

OS/400 Integration

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Linux for iSeries Information

Additional Solutions are Coming
- ▸ **Watch for ISV announcements**
- ▸ **iSeries Linux Test Drive**

Events
- ▸ **IBM Linux Roadshow**
- ▸ **LinuxWorld**
- ▸ **PartnerWorld**
- ▸ **Common**

Stay Connected
- ▸ **iSeries Linux newsletter**
- ▸ **Send note to johnsonc@us.ibm.com**

Resources
- ▸ **http://www.ibm.com/eserver/iseries/linux**
- ▸ **iSeries Linux White Paper**
- ▸ **iSeries Linux Sales Guide**
- ▸ **iSeries Linux Apache Sizing Guide**
- ▸ **Redbook**
- ▸ **3-Day Implementation Class**
- ▸ **Consulting Engagements for Planning**
- ▸ **Sales Contacts**
  - ● Americas - Kevin Klora
  - ● EMEA - Imran Waheed
  - ● AP - Mahesh Ramanayake

Product Directions
- ▸ **64-bit kernel support**
- ▸ **Additional iSeries - OS/400 Integration**
- ▸ **LPAR Enhancements**

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Linux for iSeries Summary

Linux for iSeries is available from distributors

iSeries offers consolidation solution for Linux by leveraging LPAR and Virtual I/O resources

OS/400 applications can be extended with Linux Offerings

www.ibm.com/eserver/iseries/linux

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Advanced Function Printing	ClusterProven	Host Publisher	MQSeries Integrator	PCOM	VisualAge for Java
AFP	CODE/400	HTTP Server for AS/400	Net.Commerce	PowerPC	VisualAge for RPG
AIX	DataGuide	IBM	Net.Data	PowerPC AS	WebSphere
AnyNet	DB2	IBM Logo	Netfinity	Print Service Facility	WebSphere Advanced Edition
Application Development	DB2 Extenders	IBM Network Station	NetView	pSeries	WebSphere Commerce Suite
APPN	DB2 UDB for AS/400	Information Warehouse	NUMA-Q	PSF	WebSphere Development Tools for AS/400
AS/400	DB2 Universal	Integrated Language Environment	OfficeVision	S/390	WebSphere Standard Edition
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BrioQuery	Enterprise Storage Server	iSeries	OS/400	SmoothStart	

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