



IBM Systems and Technology Group University 2005

# Linux Solutions: A Foundation for On Demand

**ON** DEMAND BUSINESS™

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## Agenda

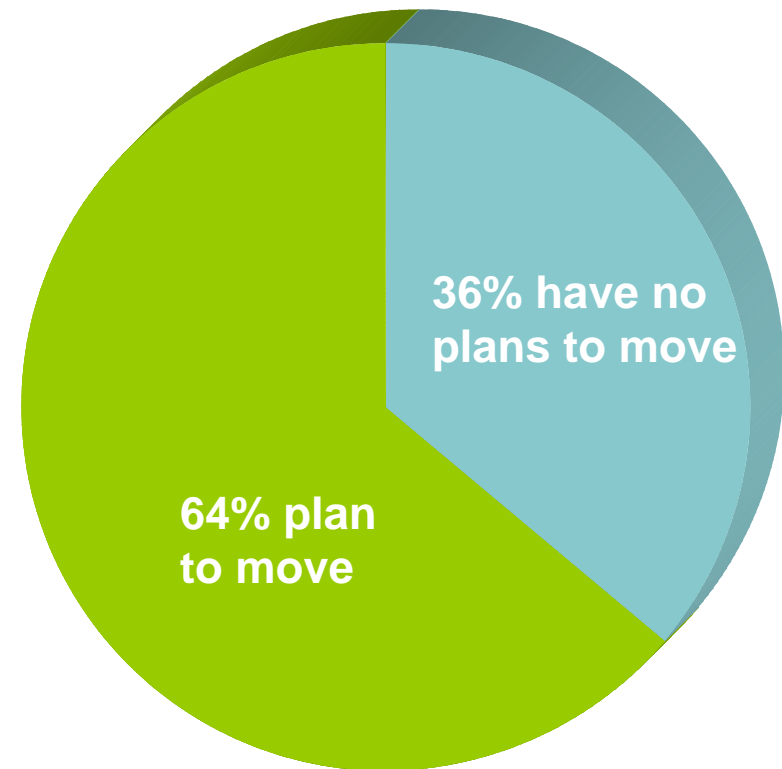
- **Linux – a foundation for On Demand**
  - Linux Market Update
  - IBM and Linux
  - Why & Where customers are buying Linux
- **IBM Linux Middleware – enabling On Demand business**
  - What is On Demand Business?
  - Why On Demand with Linux?
  - IBM's Investments in Linux and On Demand
  - IBM and Customer Experience
- **Resources**

# Linux Market Update

## Linux is a Platform of Choice

*64% of Customers Plan to Move a Portion of Their OS to Linux*

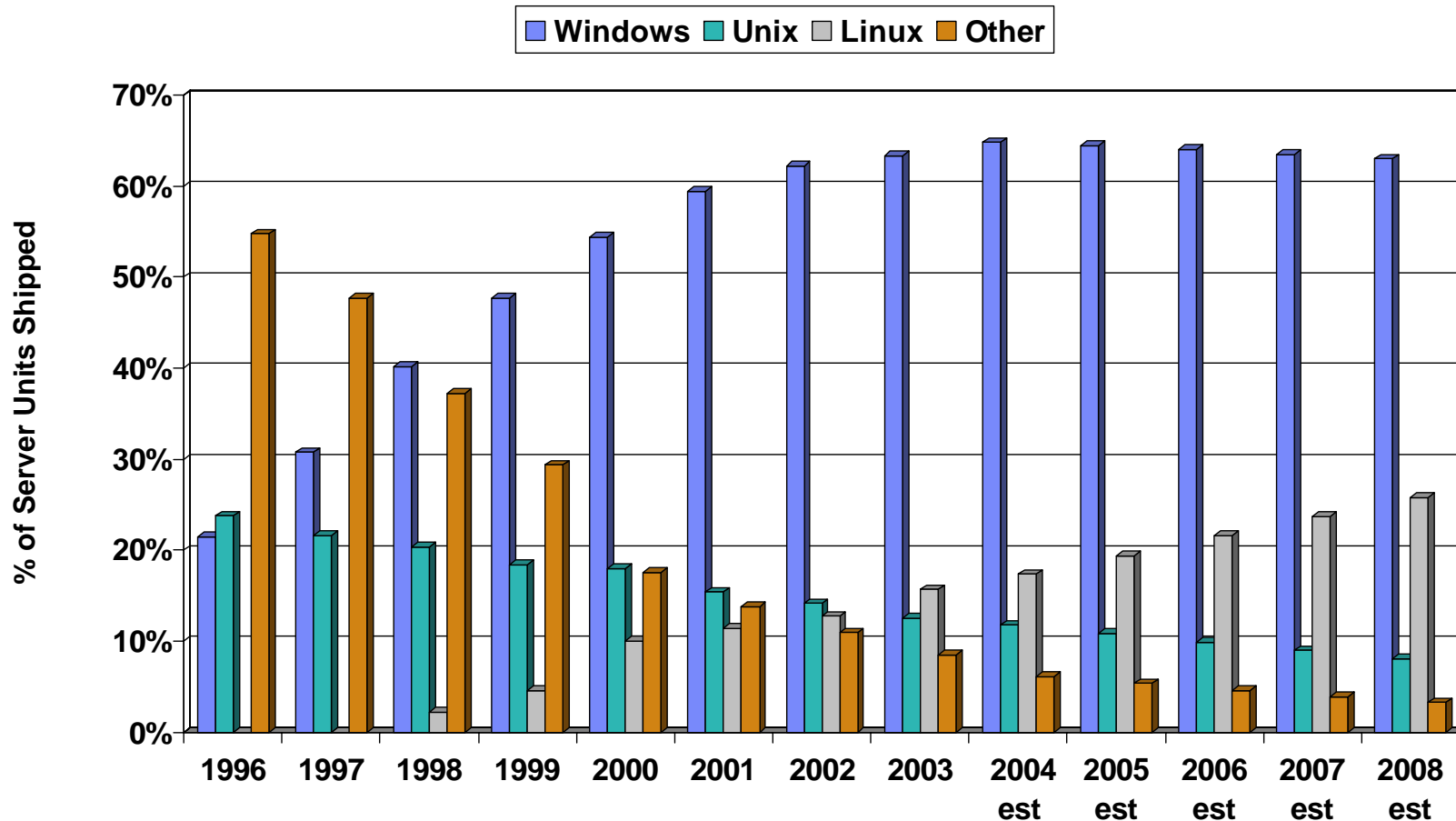
- 25% plan to migrate from Windows to Linux
- 21% plan to add Linux Servers
- 11% plan to replace Windows Servers totally



Source: The Yankee Group and Sunbelt Software, Inc. 2004

# Server Unit Shipments 1996-2001

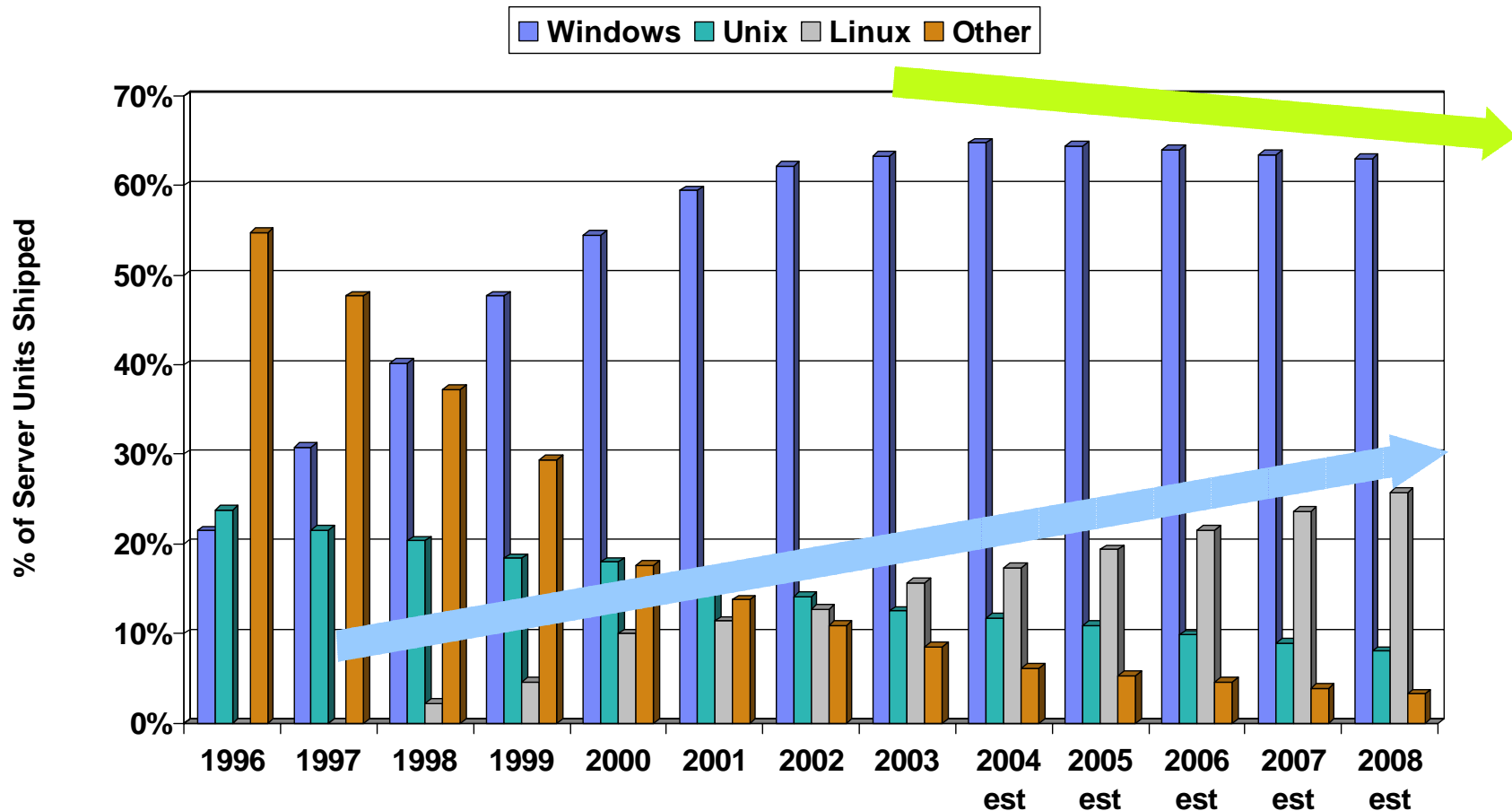
## *Windows was Winning the Server Units War*



IDC Server Market Quarterly Forecaster & Tracker, 2Q04

# Linux Changes the Server Shipment Trend

*Linux is Fastest Growing Server OS Since 1999*

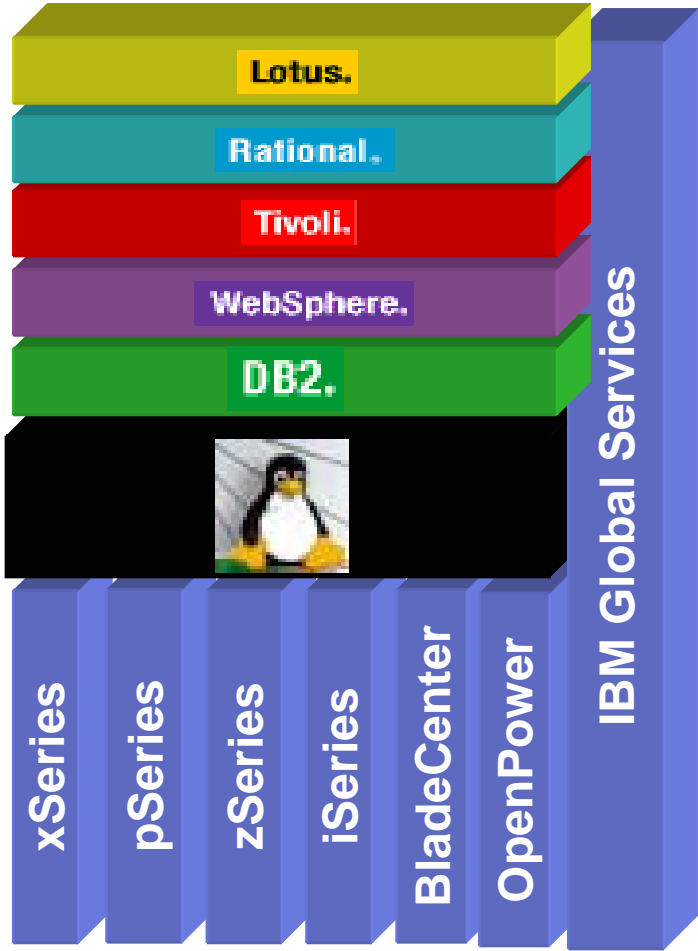


IDC Server Market Quarterly Forecaster & Tracker, 2Q04

# Linux and IBM

**Over 300  
Middleware  
Products Enabled**

**Linux Runs Across  
All IBM eServer  
Platforms**



**Over 7,000  
Services  
Professionals**

## Linux momentum....and IBM stats

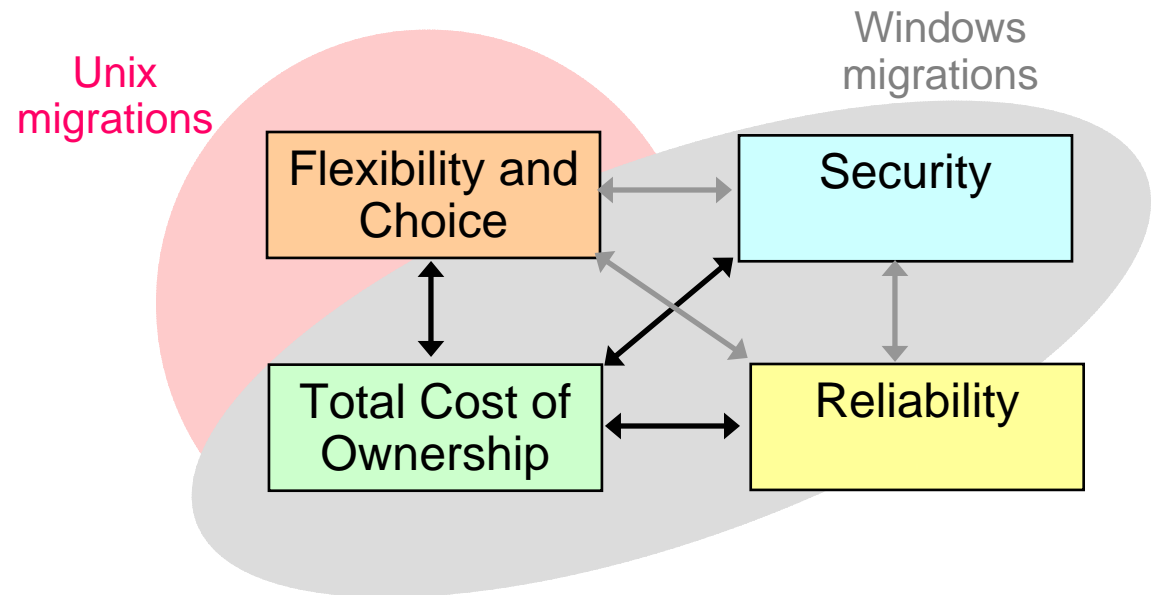
- Over 1 million Linux servers will ship this year (2004, all vendors).
- In 2004, IBM generated more than \$3 billion in Linux-related revenue across our Servers, Software and Services – a growth rate of 50%.
  - **The strong momentum continues into 2005.**
- Over 300 Business Partner Value Networks worldwide, teaming up top partners to create repeatable Linux-based industry customer solutions. We have over 6,000 total IBM BPs supporting Linux.
- 250 new Linux references and case studies in 2004, with over 700 total available – searchable on the web from our Linux site
- IBM has over 20 Linux Centers of Competency including in Brazil, Russia, India, China, and Korea (BRICK) to drive Linux-based skills and solutions in these emerging markets.
- IBM has done thousands of government Linux implementations around the world, with an average of 200 active government engagements at any time – across all majors countries & spanning over 80 developing countries – unstoppable WW momentum....



# Why & Where customers are buying Linux

## Why Linux is Important to Customers

- **Linux is flexible**
- **Linux is secure**
- **Linux is reliable**



- **Linux can reduce Total Cost of Ownership**
- **Linux is an excellent path to On Demand**

## Return on Investment

### ➤ **Robert Francis Group (RFG) – Return on Investment in Linux Implementations (2004):**

- 

- “Linux-based deployments of Java and PHP application servers...”

- “Continued revenue growth from compute and data grid implementations...”

- “Hardware selection flexibility without requiring adoption of multiple operating systems.”

- “With developer and SA skill-sets common across Linux platforms, firms will lower costs and improve time-to-market by leveraging Linux...”

*“...senior IT executives can...improve their platform ROI by implementing Linux-based solutions that take advantage of reduced hardware and support costs while enabling innovation by taking the sticker-shock out of large-scale data and compute grid deployments.”*

# How Customers Start to Implement Linux

## Infrastructure

- NT/2000 to Linux
- UNIX to Linux
- New Workloads

- Firewall - Check Point, etc.
- Print / File - Novell OES, SAMBA
- Web Server - WebSphere
- e-mail - Domino



Moore Wallace



# Customers Continue to Implement Linux

## Infrastructure

## Applications

- Database servers
- eCommerce
- Super Computing Clusters
- SW Development
- Web Hosting
- Store & Branch Automation



Bristol-Myers Squibb Company



HEALTH MANAGEMENT ASSOCIATES, INC.

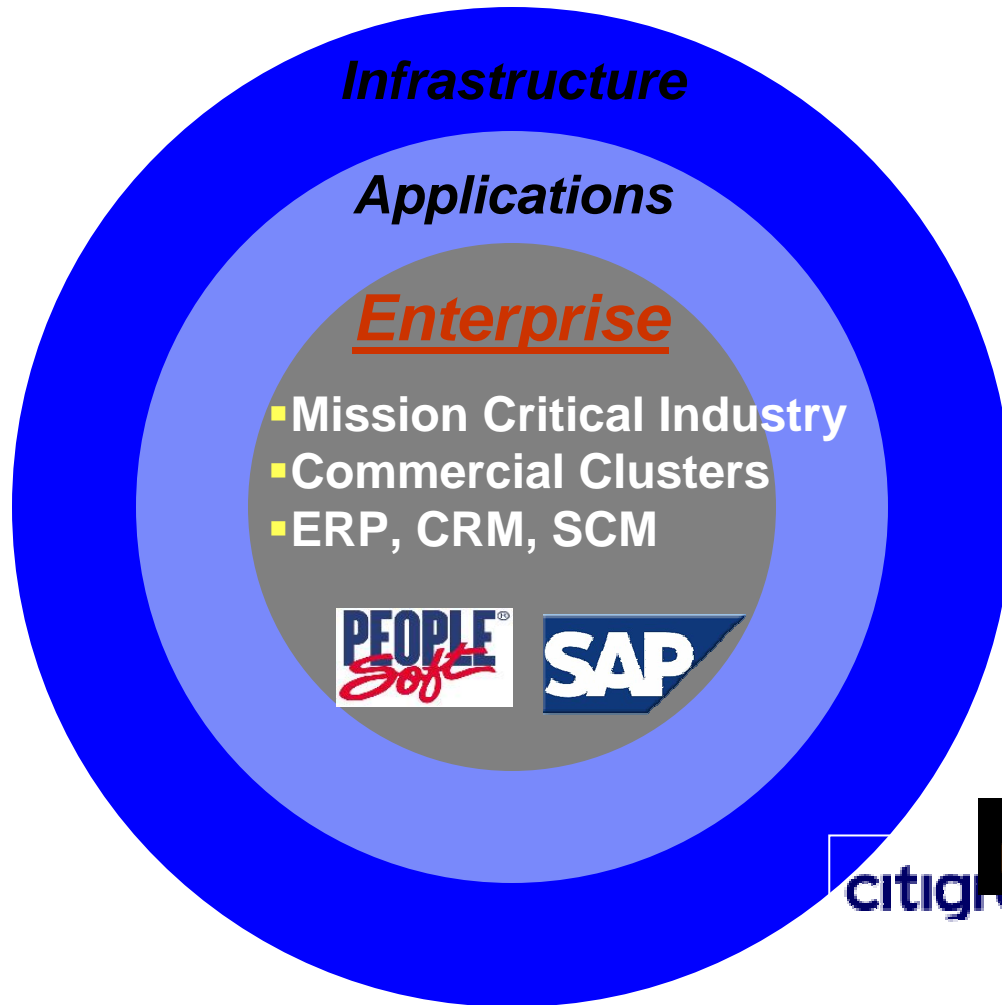


Deutsche Bank



DAIMLERCHRYSLER

# How Customers Exploit Linux



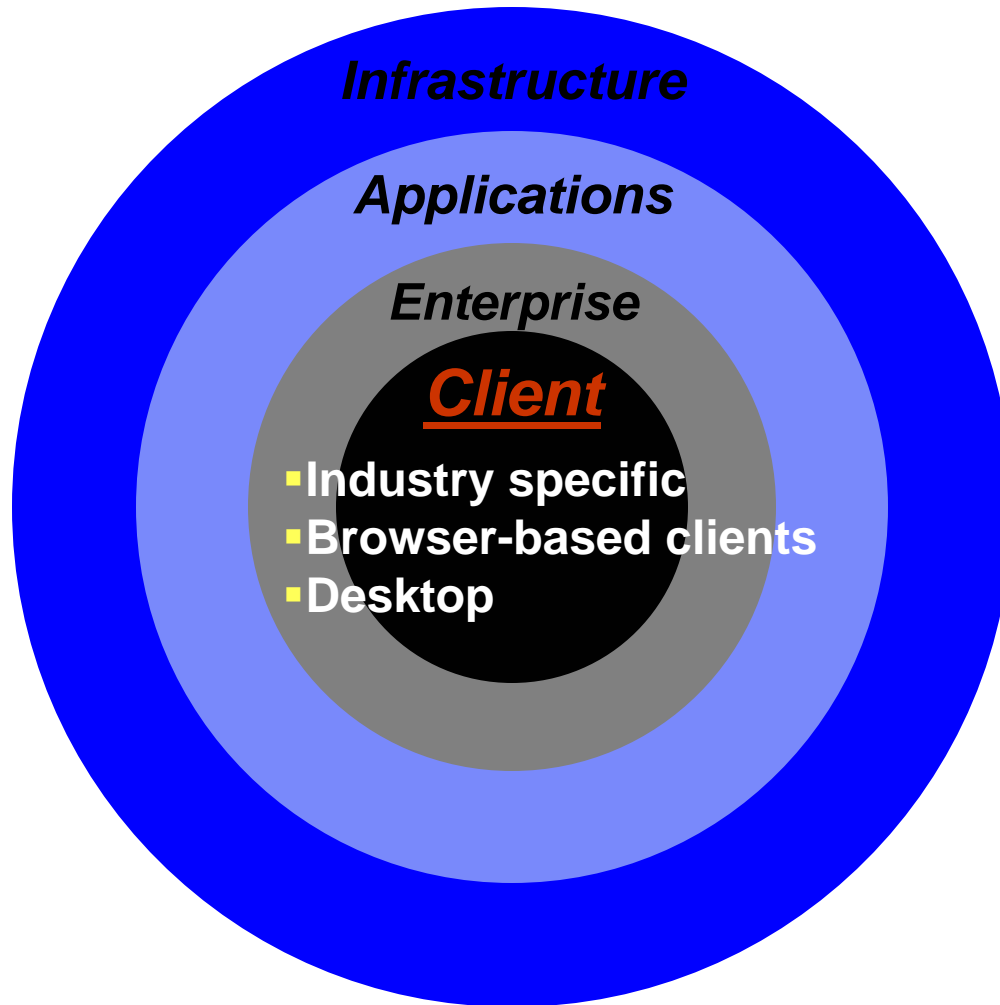
**FAMILY DOLLAR**



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# Customers Are Looking For New Options

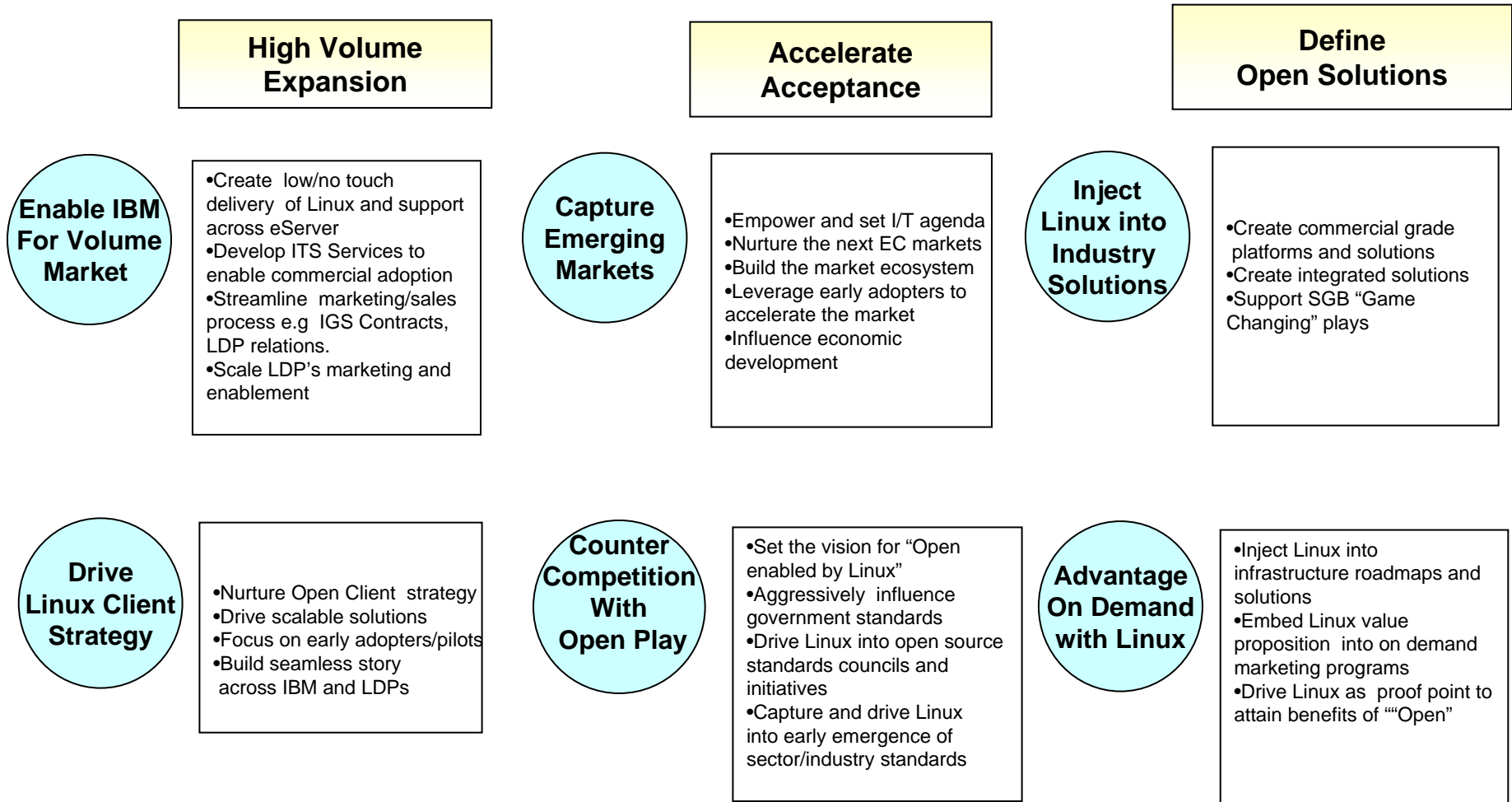


## Linux Solutions open the door for CxO level meetings

- **CIOs/CTOs/CFOs are considering Linux today**
  - Be proactive and part of the discussion
  - Discussion often starts with TCO but moves to Open computing
- **IBM is seen as the “industry expert” on Linux**
  - Leverage this perception to be seen as the trusted advisor
- **Only IBM SWG offers a complete Linux software stack**
  - From databases ... to web software ... to application development ... to collaboration ... to systems management
  - Over 300 software products on Linux and growing rapidly

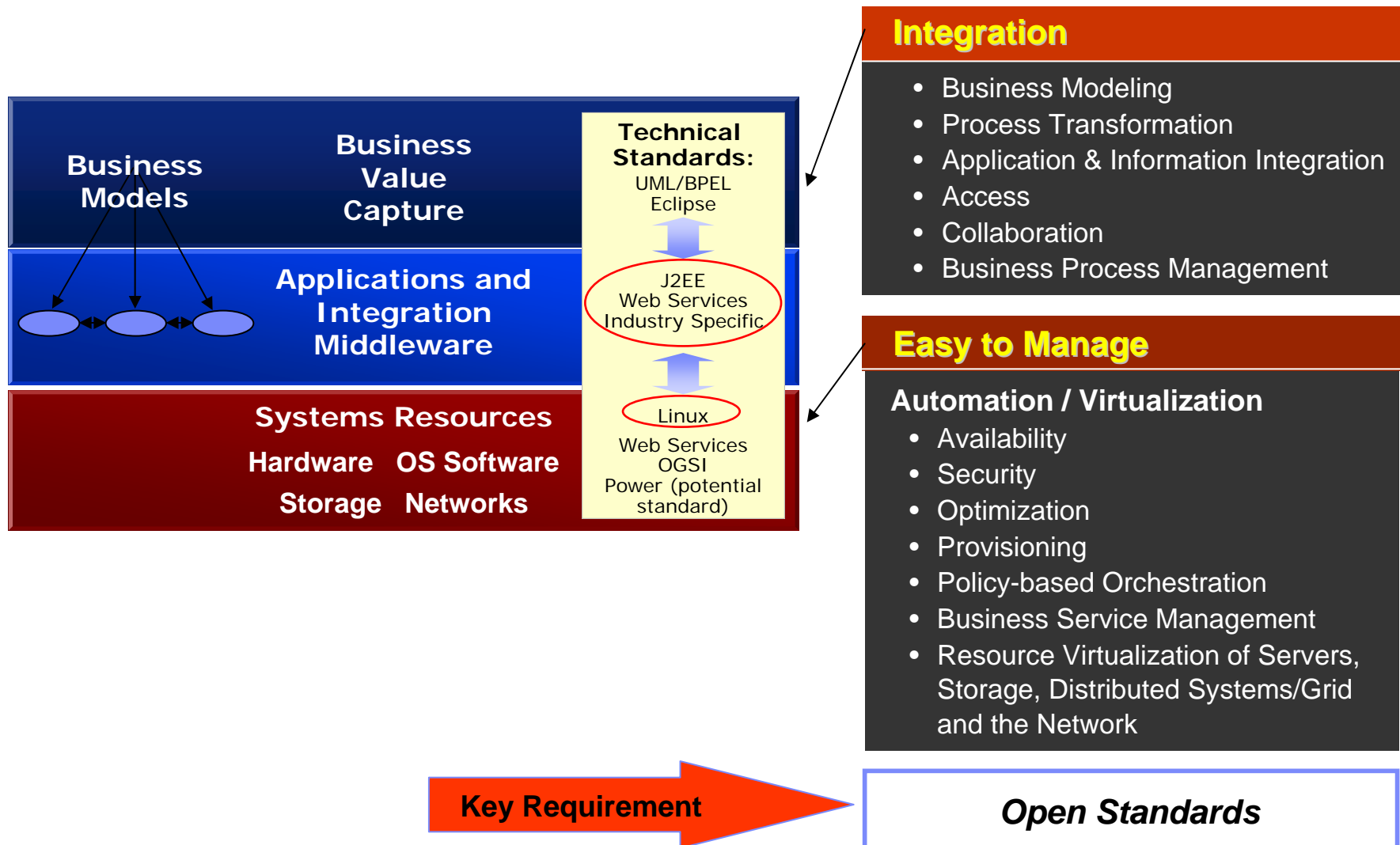


# 2005 WW Linux Strategy: Market-Driven Deployment



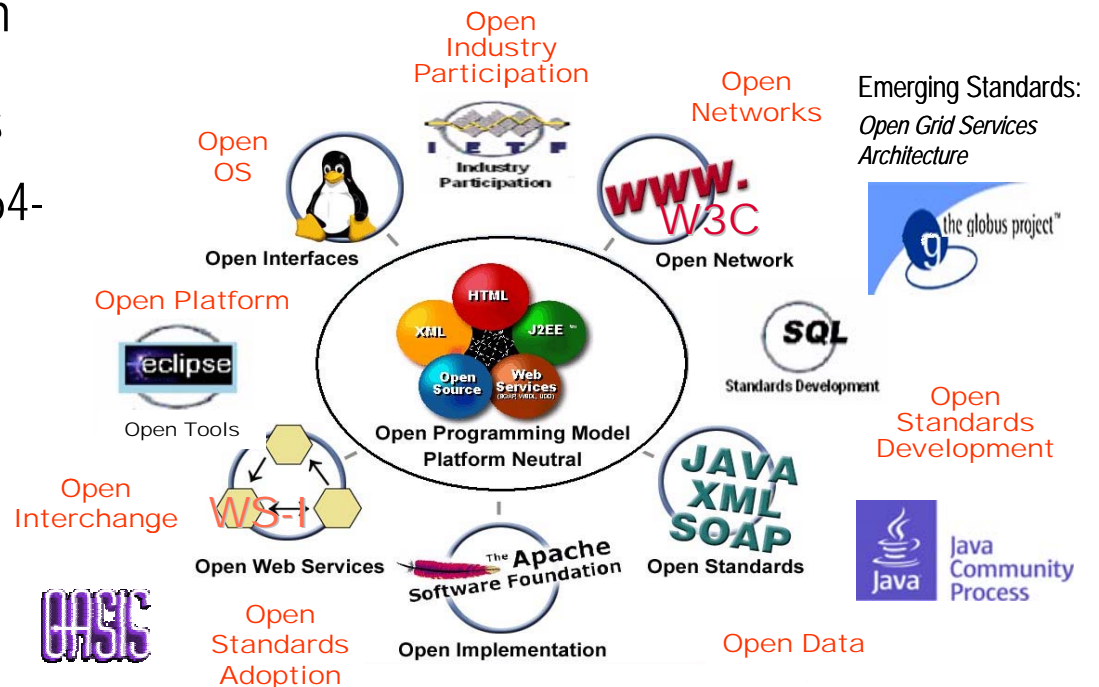
# IBM Middleware and Linux in an On Demand World

# Transformation into an on demand Business



# Why Open Standards and Linux ?

- ★ Ensures cross-platform integration within the enterprise and with its customers, partners and suppliers
- ★ Provides a stable and secure 32/64-bit platform that is very scalable
- ★ Excellent price/performance
- ★ Delivers greater flexibility and customer choice (avoids proprietary vendor lock-ins)
- ★ Portability of applications and skills

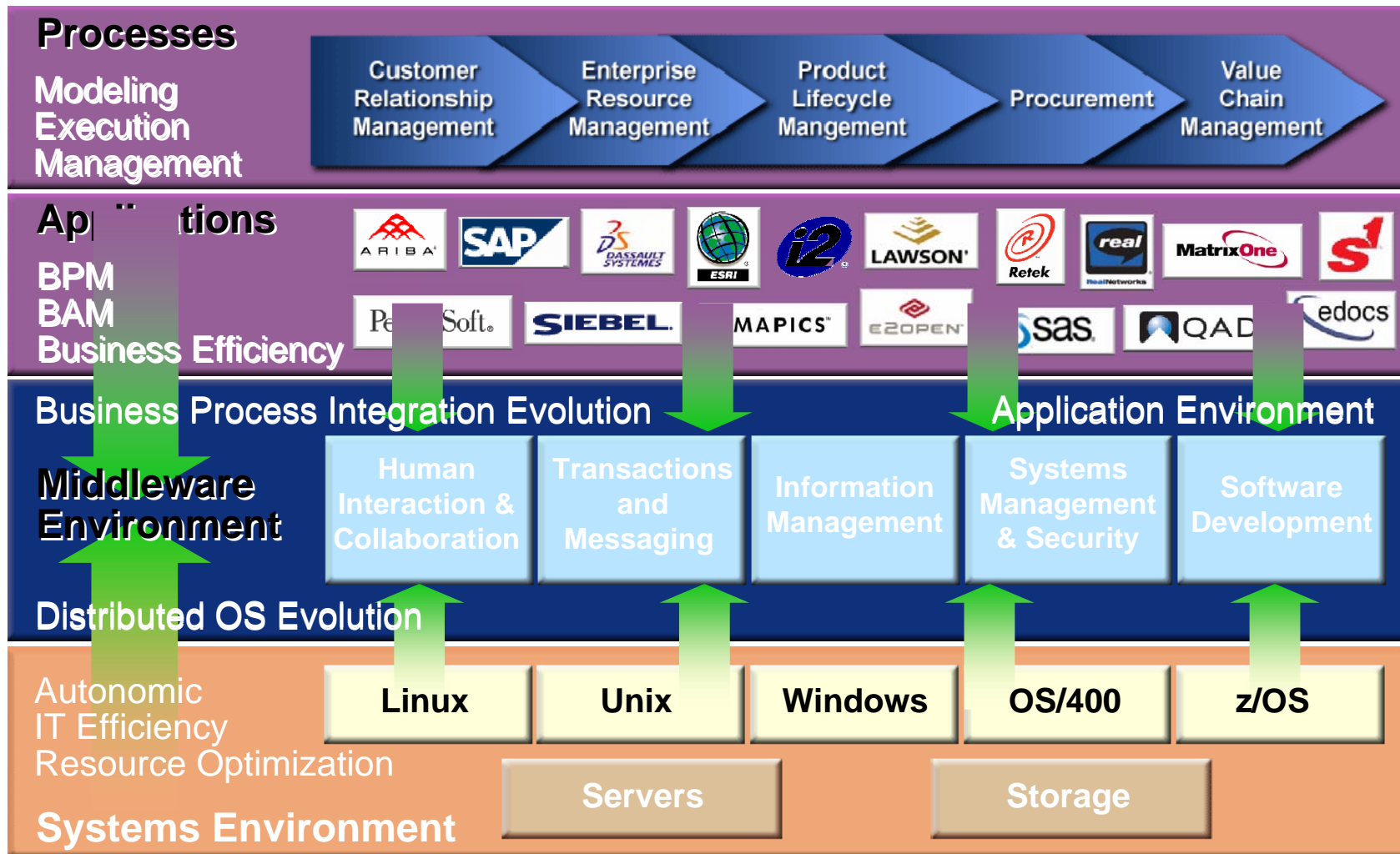


Linux Windows AIX Solaris HP-UX OS/400 z/OS

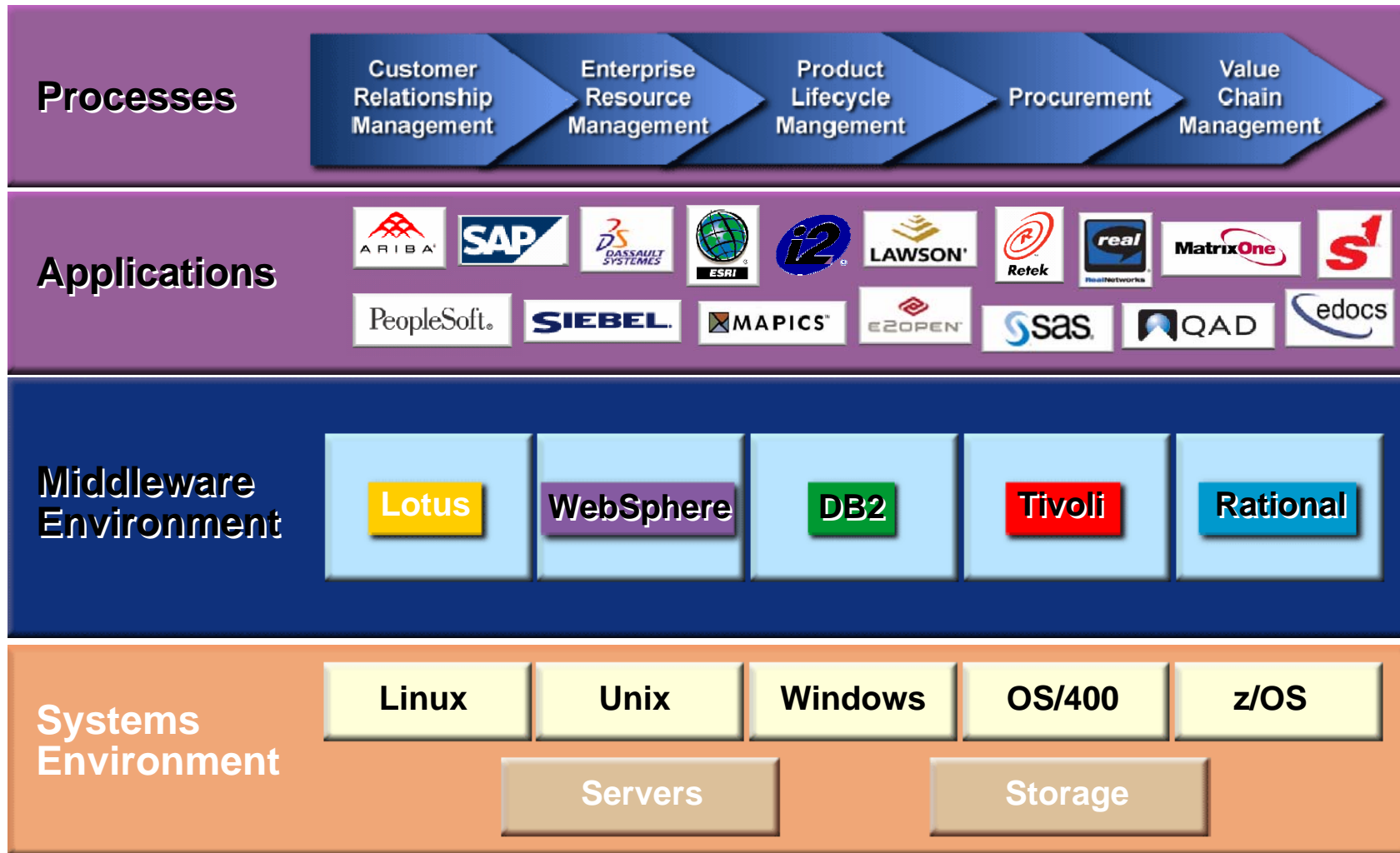
**IBM is #1 commercial investor in Linux**

**Linux provides a common interface for applications and middleware across a wide range of hardware platforms**

# Strategy: Middleware



# IBM Middleware Platform





# Industry's Largest Software for Linux Portfolio

Open Standards-based

- WebSphere for Linux



- DB2 & Informix for Linux



- Lotus for Linux



- Tivoli for Linux



- Rational for Linux **Rational.** software



# Dynamic and Scalable Web Servers



## WebSphere Application Server

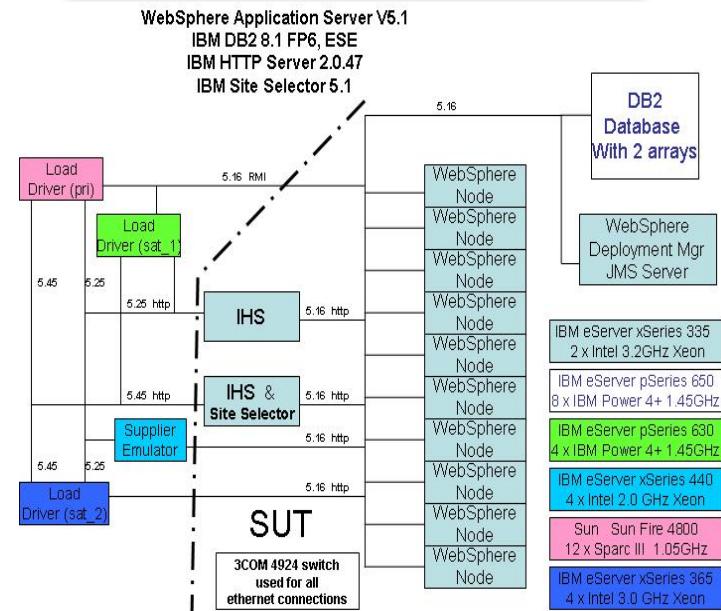
- J2EE web app server
- Base for WebSphere Portal

## Linux Case Study

- Wimbledon Lawn Tennis Website

## Linux Benchmark

- SPECjAppServer2004
- 10,000 concurrent clients
- 1,300 transactions / second





## End to End Systems Management

- Automate high availability and failover for Linux servers
- Monitor, isolate and diagnose problems in Linux environments
- Secure Linux and integrate identity infrastructures
- Protect, store and recover critical business data on Linux



Linux Case Studies:

**Honeywell**



Directory consolidation & integration using Tivoli Directory Solutions

Clustered web hosting using Tivoli Systems Automation

# Large and Scalable Databases



## DB2 ICE



- Scales horizontally from 2 to 1,000 nodes

## DB2 “Stinger”

- Technology preview of upcoming release of DB2
- Exploits Linux 2.6 kernel
- Native 64-bit editions optimized for all major Linux platforms



## Linux Case Study

- E\*TRADE analyze customer trends with DB2 ICE



## Linux Benchmarks

- TPC-C Price/Performance Benchmark Leader
- TPC-H 100GB & 300GB Performance Benchmark Leader



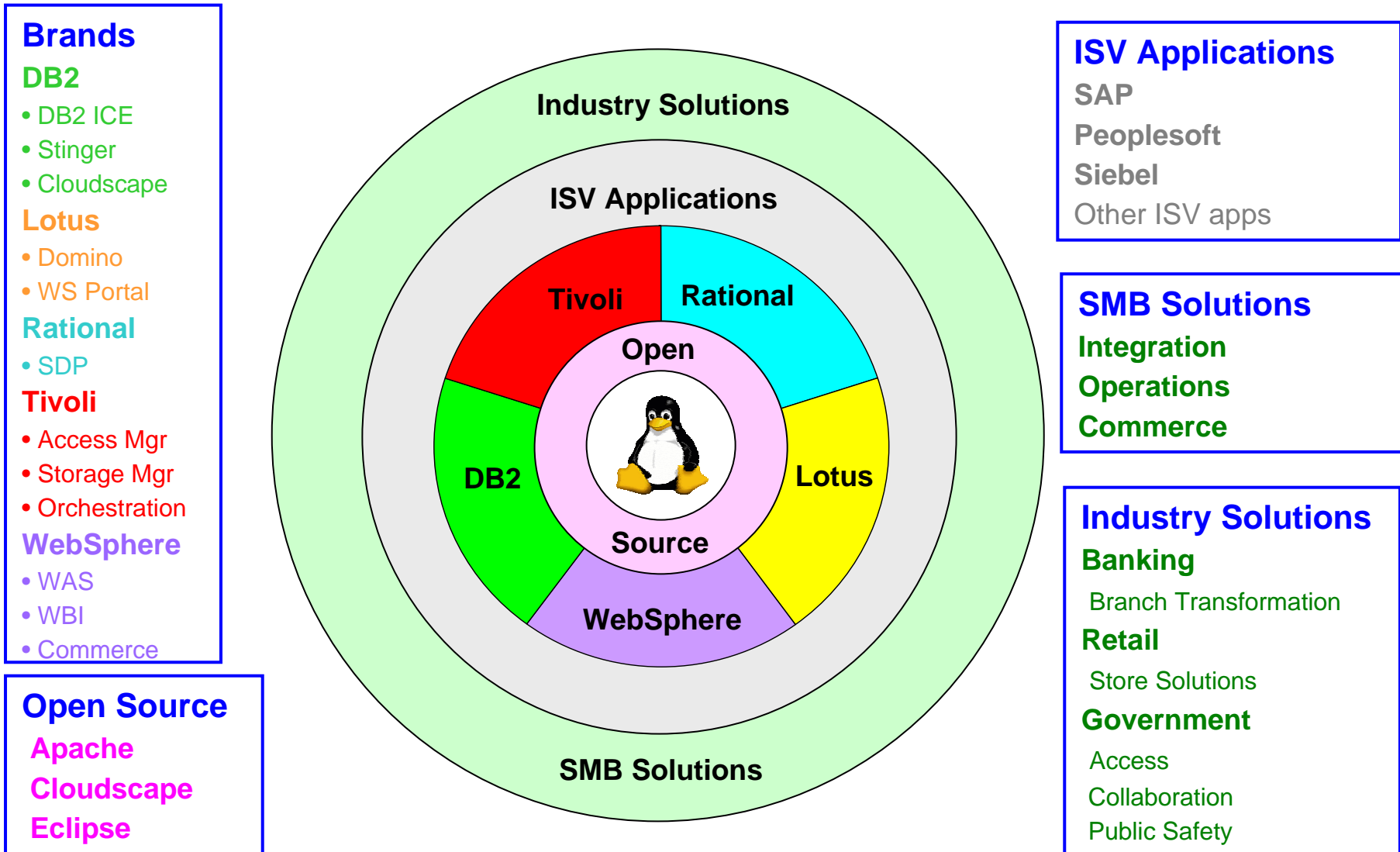


# The New Linux Frontier

- **IBM Client Strategy builds on Workplace Client Technology**
  - Builds on Eclipse 3.0 Rich Client Platform
- **Workplace Client includes platform support for Linux**
  - Extends TCO and manageability benefits to Linux client
  - Enables ISVs to deliver multi-platform client applications
- **Lotus Workplace 2.0 products will be available on Linux**
  - Lotus Workplace Messaging / Lotus Workplace Documents



# Linux Optimized IBM Software Solutions





# Customers want Industry Solutions: IBM Retail Platform for Linux



- Legacy application servers
- Data warehouse/ data marts
- Web application servers

Enterprise Tier 1



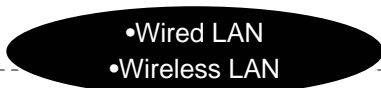
- Internet
- VPNs
- Leased lines

In-store Servers Tier 2

IBM Retail Platform for Linux



- POS controllers
- Legacy ISP / Store servers
- Web application servers



- Wired LAN
- Wireless LAN

User touchpoints Tier 3



- POS terminals
- Kiosks
- End User Device
- Mobile devices



... over 4,500 Linux-enabled ISV Applications



... IBM is working with over 33,000 developers

## Silver bullets – IBM internal use of Linux

### ■ Transforming IBM's intranet

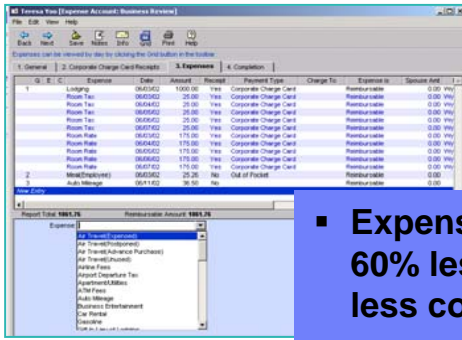
- 2,500+ xSeries servers and zSeries images running Linux
- Virus scanning, file and print servers, Web servers, application development servers, portals, search engines...
- Lower TCO, increased availability and performance



### ■ 300mm chip Fab plant, East Fishkill NY

- Linux chosen for manufacturing after 3-month test vs Windows
- Reliability, remote operations, lower costs...

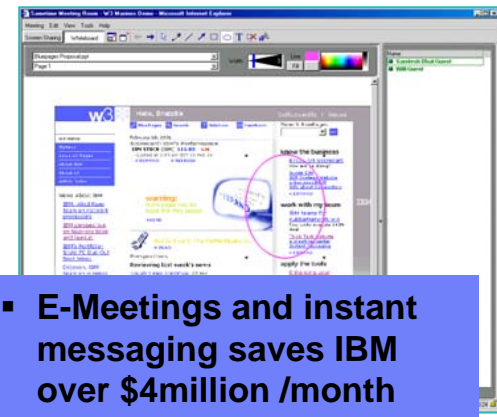
# An Example: On Demand in IBM and \$avings



- Expense reports take 60% less time, 80% less cost



- Consolidating news sources saved in excess of \$2 million



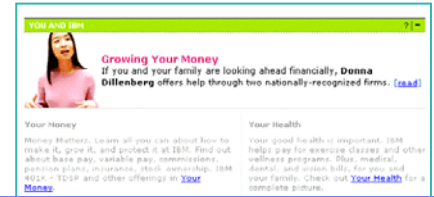
- E-Meetings and instant messaging saves IBM over \$4million /month



- Worldjams, jukeboxes, personalized news, discussion forums



- People finder - over one million hits a day
  - 64% of employees use it at least once a week
  - 50+ applications use the same directory



- HR portal
  - 90% satisfaction rate
  - Over 90% employees registered health benefits here last year, saving IBM over \$1 million



- IBM realized over \$400 million in cost avoidance in 2002 with over 40% of classes moved online



## Silver bullets – Key weaknesses of our competitors

### ■ **Oracle on Linux**

- Converting their Oracle on UNIX installed base to Linux
- Oracle's weakness is cost – question the cost of Oracle licenses

### ■ **Microsoft against Linux**

- Using their “Get the Facts” campaign on TCO and Security
- Microsoft's weaknesses are lock-in – promote openness and choice and lack of support for heterogeneous IT systems

### ■ **Open Source middleware on Linux**

- MySQL, JBOSS, Jonas are all being considered by customers
- OSS weaknesses are support, ISVs, and enterprise-readiness

# Silver Bullets - IBM Linux Integration Center

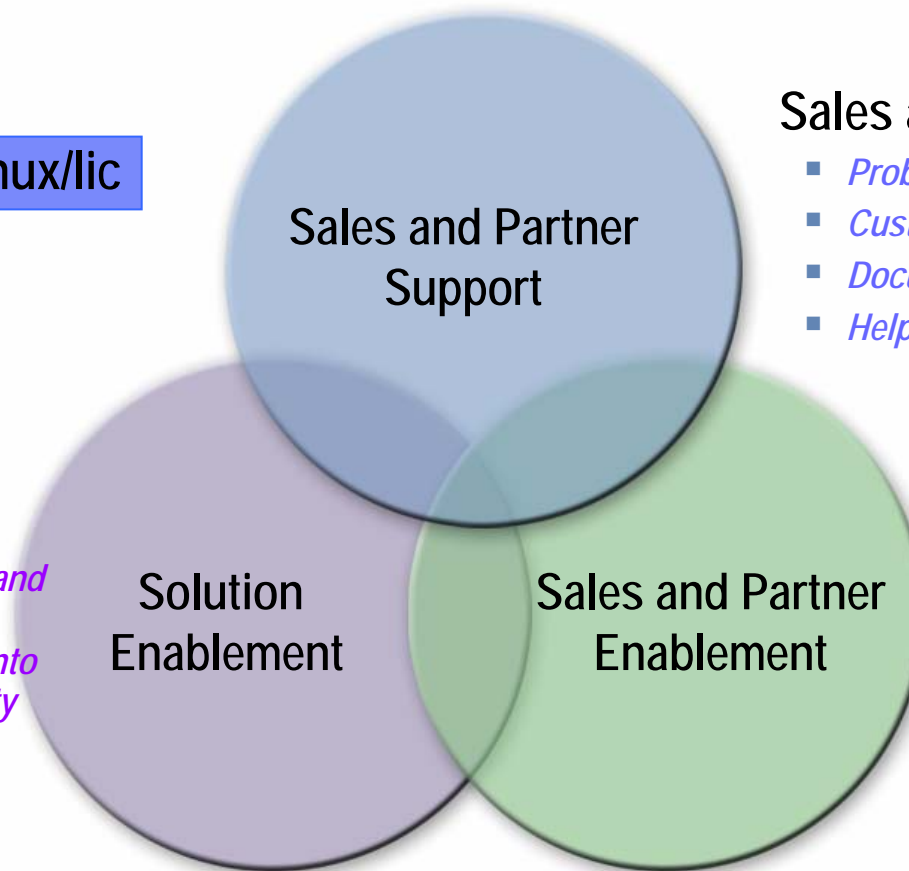
To assist the IBM sales team convert qualified Linux-based IBM middleware leads into revenue.

In so doing, our drive is to help the IBM sales team respond to customer opportunities and help deliver integrated proposals to IBM customers.

[w3.ibm.com/linux/lic](http://w3.ibm.com/linux/lic)

## Solutions Enablement

- *IT Architecture*
- *ISV support*
- *Partner support*
- *Solution validation and Tuning*
- *Drive key features into the Linux community*



## Sales and Partner Support

- *Problem determination and resolution*
- *Customer Pilots*
- *Document best practices*
- *Help Identify opportunity*

## Sales and Partner Enablement

- *Collateral*
- *SW Certification Matrix*
- *Labs and workshops*

# Programs & Resources

## 2005 Linux & SGB customer events highlights

- LinuxWorld
  - AG
    - Boston: February 14-17, 2005
    - San Francisco: August 8-11, 2005
  - EMEA
    - London, England: October 5-6, 2005
    - Frankfurt, Germany: November 15-17, 2005
  - AP
    - Tokyo, Japan: June 1-3, 2005
    - Beijing, China: August 24-26, 2005
- GlobusWorld, February 14-17
- Supercomputing 2005, November
- Other Events
  - IBM Global Events Calendar - <https://w3-9001.ibm.com/events/calendar.nsf/allgeosbydate?openview>

## Sales Resources

- Systems Sales Kit - [w3.ibm.com/linux/systems/sales](http://w3.ibm.com/linux/systems/sales)
- Business Partners - [w3.linux.ibm.com/linux/sales/valuenets.shtml](http://w3.linux.ibm.com/linux/sales/valuenets.shtml)
- Client - [w3.linux.ibm.com/linux/sales/desktop.shtml](http://w3.linux.ibm.com/linux/sales/desktop.shtml)
- Emerging countries - [w3.linux.ibm.com/linux/sales/emerging.shtml](http://w3.linux.ibm.com/linux/sales/emerging.shtml)
- ISVs - [w3.linux.ibm.com/linux/sales/applications.shtml](http://w3.linux.ibm.com/linux/sales/applications.shtml)
- Infrastructure Simplification -  
[w3.linux.ibm.com/linux/sales/simplification.shtml](http://w3.linux.ibm.com/linux/sales/simplification.shtml)
- Infrastructure Solutions - [w3.ibm.com/linux/infrastructure](http://w3.ibm.com/linux/infrastructure)
- Industry Linux Sales Guides now available on industry SectorNets -  
<http://w3.linux.ibm.com/linux/sales/sector/index.shtml>
- Linux Centers of Competency – Demos available -  
<http://w3.boeblingen.de.ibm.com/tmcc/linuxcoc/linuxcoc.html>

## Groups that can help you close business

- WW Linux Sales Team – [w3.linux.ibm.com/linux/sales/index.shtml](http://w3.linux.ibm.com/linux/sales/index.shtml)
  - Contact – Carol Stafford (WW) - [cstaffor@us.ibm.com](mailto:cstaffor@us.ibm.com)
- Geo Linux Impact teams
  - Contact – Laura Scott (AG) - [lkscott@us.ibm.com](mailto:lkscott@us.ibm.com), Joerg Ludwig (EMEA) - [haludwi@de.ibm.com](mailto:haludwi@de.ibm.com), Shintaroh Nezuka (AP) – [nezuka@jp.ibm.com](mailto:nezuka@jp.ibm.com).
- LTC - <http://ltc.linux.ibm.com>
- Linux SW - <http://www-306.ibm.com/software/os/linux/software/>
  - Contact Chris Bahr (WW) – [cbahr@us.ibm.com](mailto:cbahr@us.ibm.com), Dave DiCarlo (Americas) - [dave\\_dicarlo@us.ibm.com](mailto:dave_dicarlo@us.ibm.com), Frank Zaengle (EMEA) - [zae@de.ibm.com](mailto:zae@de.ibm.com), Ivan Kladnig (AP) – [ikladnig@au1.ibm.com](mailto:ikladnig@au1.ibm.com).
- Linux Integration Centers - [w3.ibm.com/linux/lic](http://w3.ibm.com/linux/lic)

धन्यवाद

Hindi

תודה רבה

Hebrew

Спасибо

Russian

Gracias

Spanish

Grazie

Italian

Obrigado

Portuguese

شكراً

Arabic

多謝

Traditional Chinese

Thank You

English

Merci

French

Danke

German

감사합니다

감사합니다

감사합니다

Korean

감사합니다

감사합니다

감사합니다

多谢

Simplified Chinese

The End

நன்றி

Tamil

ขอบคุณ

Thai

ありがとうございました

Japanese



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