



# From the community to a product - Red Hat Enterprise Linux

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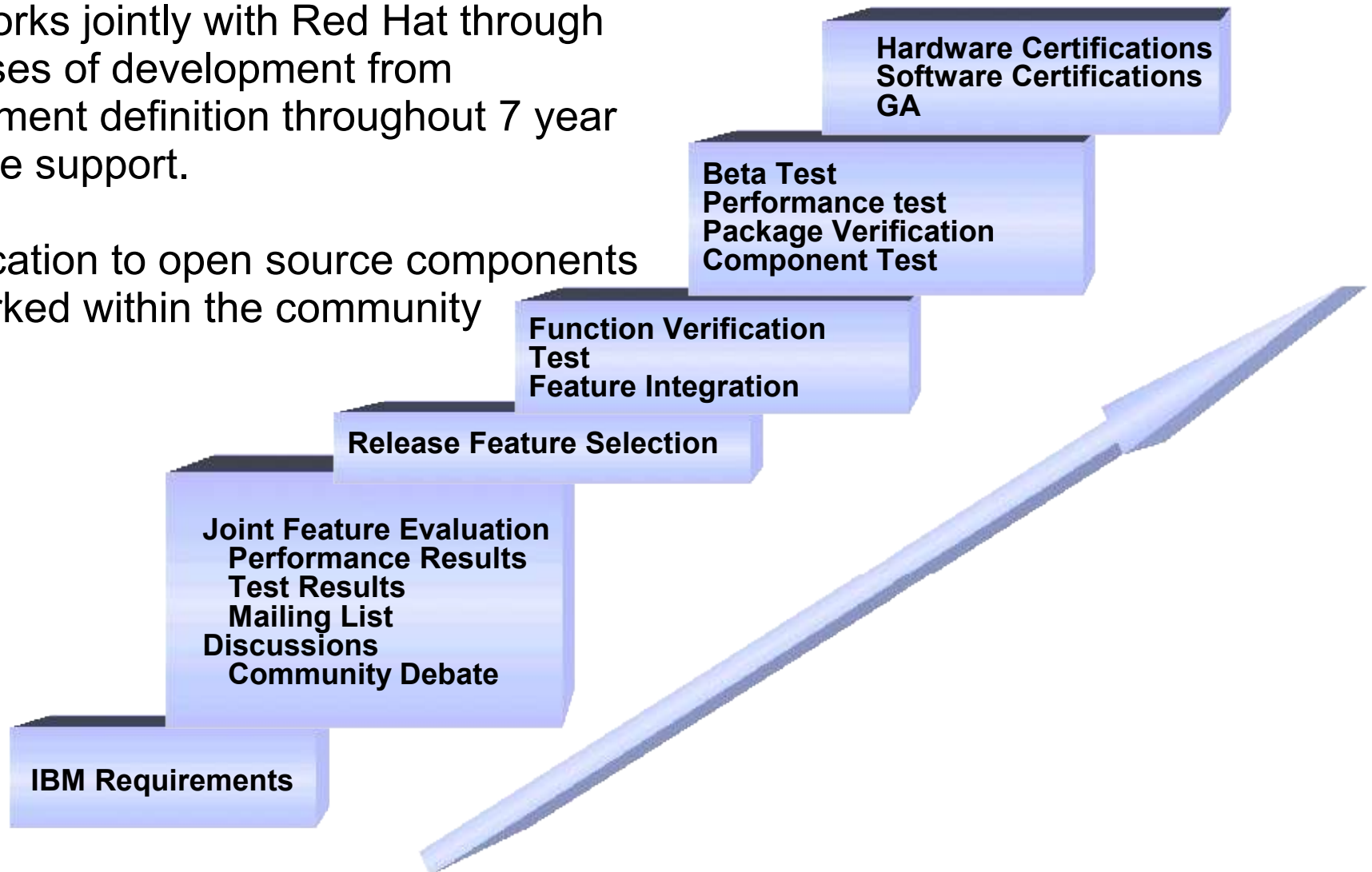
# IBM – RH Strategic FIT

- **Commitment to customer choice** - Industry standard Intel architectures (Intel x86, X86-64, AMD 64 & Itanium2)
- **Enterprise Market Competencies** - Strong Unix/Linux expertise for enterprise customer
- **Rate of Innovation** - Joint development efforts in the Open Source community provide rapid technology innovation
- **Breadth of Market Coverage** - Sales through various channels
- **Services focused business** – Key to solution selling approach



# Engineer-to-Engineer development relationship

- IBM works jointly with Red Hat through all phases of development from requirement definition throughout 7 year life cycle support.
- Modification to open source components are worked within the community

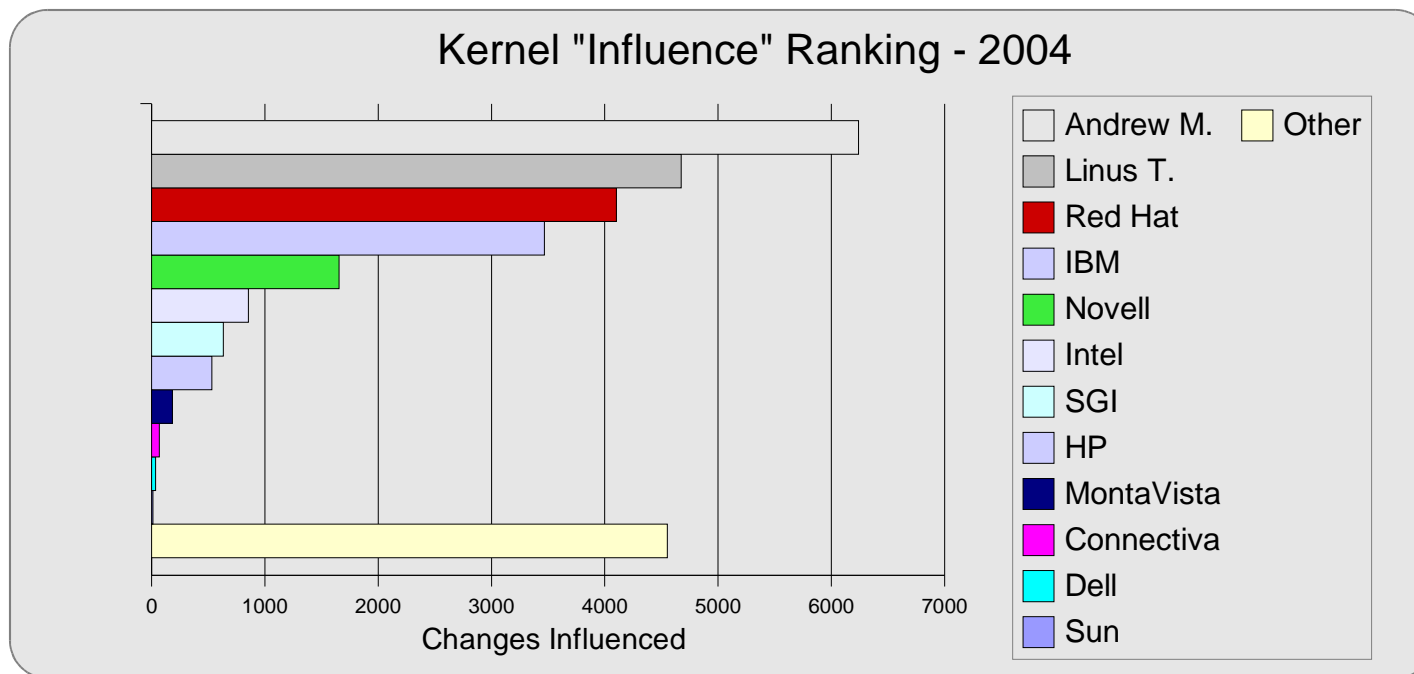


# Certified and Compatible IBM xSeries on RHEL4

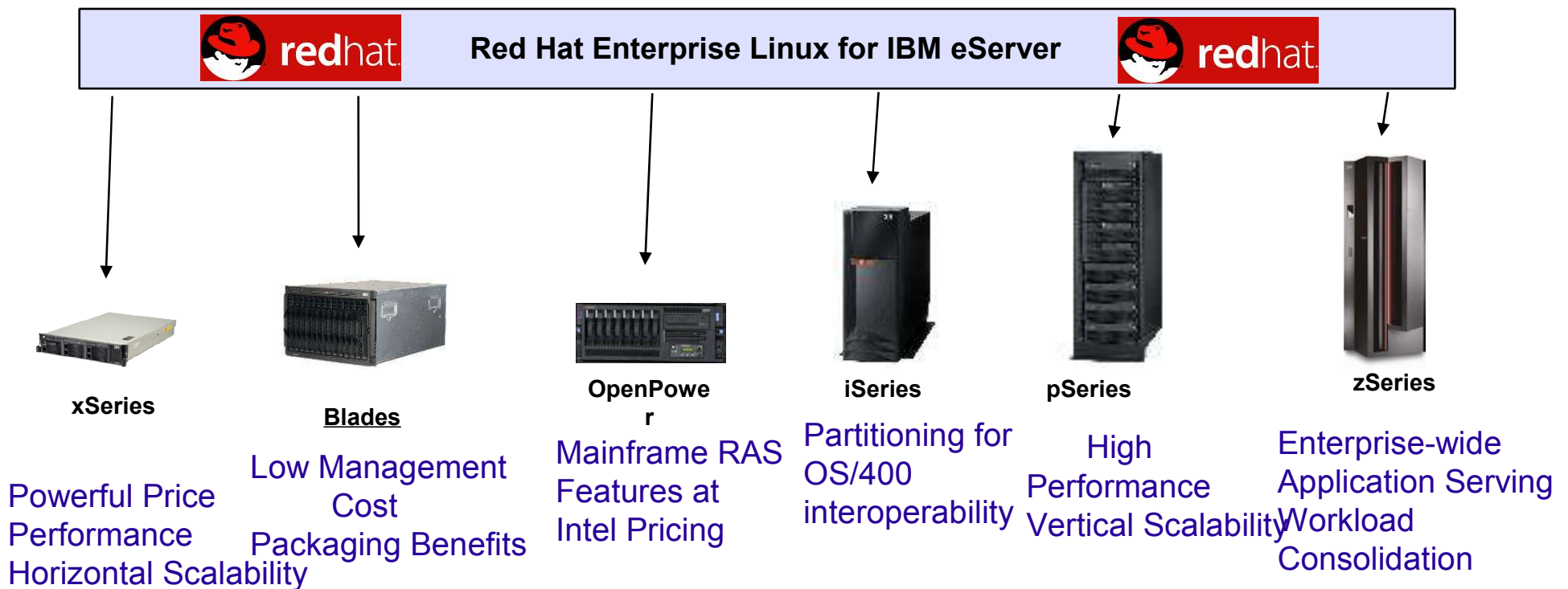
|    | <u>Vendor</u> | <u>Make</u> | <u>Model</u> | <u>Status</u>          |
|----|---------------|-------------|--------------|------------------------|
| 1  | IBM           | BladeCenter | HS20 (8832)  | Certified (Supported)  |
| 2  | IBM           | BladeCenter | HS40 (8839)  | Certified (Supported)  |
| 3  | IBM           | xSeries 226 |              | Certified (Supported)  |
| 4  | IBM           | xSeries 236 |              | Certified (Supported)  |
| 5  | IBM           | xSeries 346 |              | Certified (Supported)  |
| 6  | IBM           | xSeries 206 |              | Certified (Supported)  |
| 7  | IBM           | xSeries 366 |              | Compatible (Supported) |
| 8  | IBM           | xSeries 336 |              | Certified (Supported)  |
| 9  | IBM           | BladeCenter | HS20 (8843)  | Certified (Supported)  |
| 10 | IBM           | BladeCenter | LS20 (8850)  | Certified (Supported)  |
| 11 | IBM           | xSeries 306 |              | Certified (Supported)  |
| 12 | IBM           | xSeries 255 |              | Certified (Supported)  |
| 13 | IBM           | e326        |              | Certified (Supported)  |
| 14 | IBM           | xSeries 445 |              | Certified (Supported)  |

# IBM® :Leading the Community

- **The strength of Linux is based on having a large, vigorous, development community**
  - **Not overpowered by a single commercial entity**
- **Red Hat & IBM are the leading commercial engineering contributors**
  - **Top 2 Linux Support & Technologist**
  - **Question? Is Vendor Support Important?**
- **Code analysis demonstrates the 2 companies' commitment:**

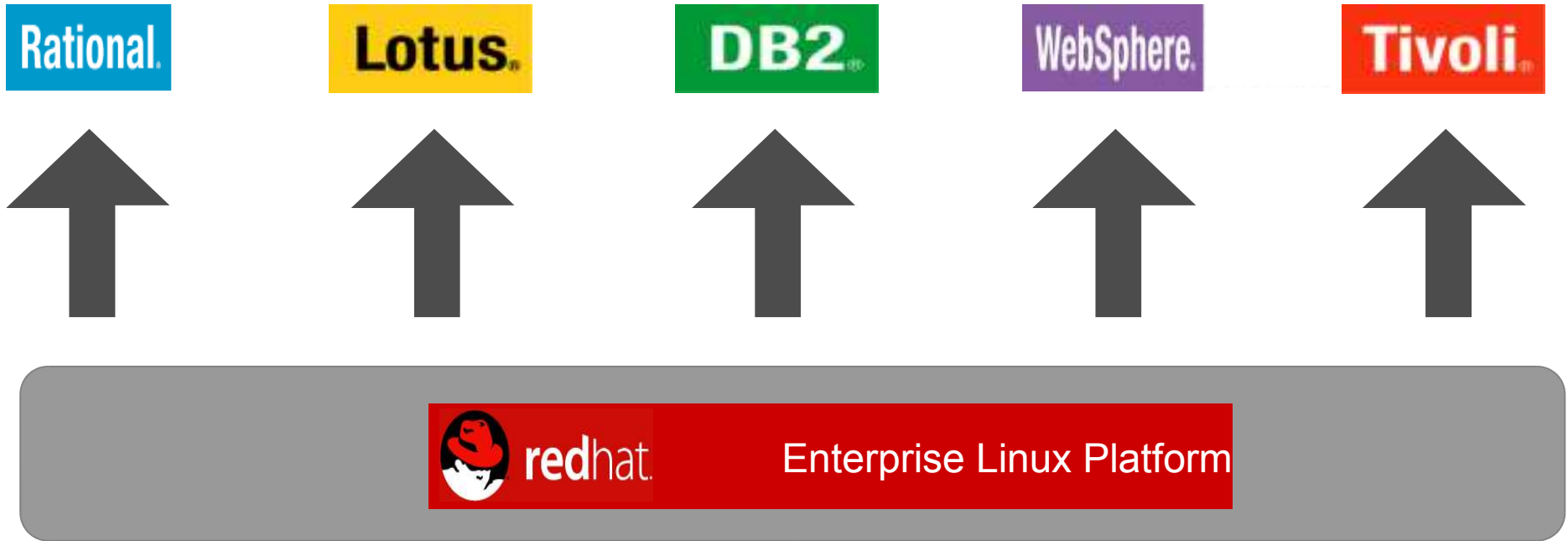


# Take your pick.. the same single Red Hat Linux code base works on all eServer Platforms



**Software? There are over 250 IBM applications available on Red Hat Enterprise Linux.**

# Complimentary Software Offerings



# IBM - Red Hat Reference Customers

119 listings on IBM internal customer reference site!!!

- Audi AG
- eGain
- Energy Management Services Ltd
- Estonian Motor Vehicle Registration Center
- General USA Life Reassurance Company
- IBM – 300mm Semiconductor Facility
- University of North Carolina - Chapel Hill
- Instituto Nacional de Estadística
- Korea Institute of Science and Technology
- Mark's Work Wearhouse
- Metro AG
- Pure Fishing
- Translational Genomics Research Institute
- University of Florida





# Important URL's for you to Know

- IBM Online Training Site: [www.redhatpartners.com/ibm](http://www.redhatpartners.com/ibm)
- Red Hat/IBM SunDown Page: <http://www.redhat.com/sundown/>
- Enabling IBM/RH ISV info:
  - [http://www.redhat.com/en\\_us/USA/home/company/news/prarchive/2005/press\\_ibm\\_redhat\\_emerging.html](http://www.redhat.com/en_us/USA/home/company/news/prarchive/2005/press_ibm_redhat_emerging.html)
- IBM/RH Secure Linux Announcement:
  - [http://www.redhat.com/en\\_us/USA/home/company/news/prarchive/2005/no.html](http://www.redhat.com/en_us/USA/home/company/news/prarchive/2005/no.html)
- RHEL 4 Overview on IBM W3 intranet: <http://w3.linux.ibm.com/ldp/rhelresources.php>
- Red Hat Page on www.ibm.com: [http://www-1.ibm.com/linux/va\\_4010.shtml](http://www-1.ibm.com/linux/va_4010.shtml)
- Benchmarks: Available from your Red Hat Representative
- White Papers: Robert Francis Group Whitepaper. Linux vs Solaris 10
  - On IBM site: [http://www-1.ibm.com/linux/va\\_4070.shtml](http://www-1.ibm.com/linux/va_4070.shtml)
  - On Red Hat site: <http://www.redhat.com/solutions/info/whitepapers/>
- Case Studies: <http://www-306.ibm.com/software/success>

# Why Red Hat

# Red Hat

- Headquarters: Raleigh, NC
  - Founded 1993
    - (IPO 1999 [NASDAQ: RHAT])
- Operates in 16 countries
  - 27 Offices worldwide
  - Engineering in:
    - Raleigh, NC
    - Westford, MA
    - Mountain View, CA
    - Toronto, Canada
- Year ended 28 February 2005
  - Revenue: \$197 million



# Why Red Hat – Top Ten Reasons

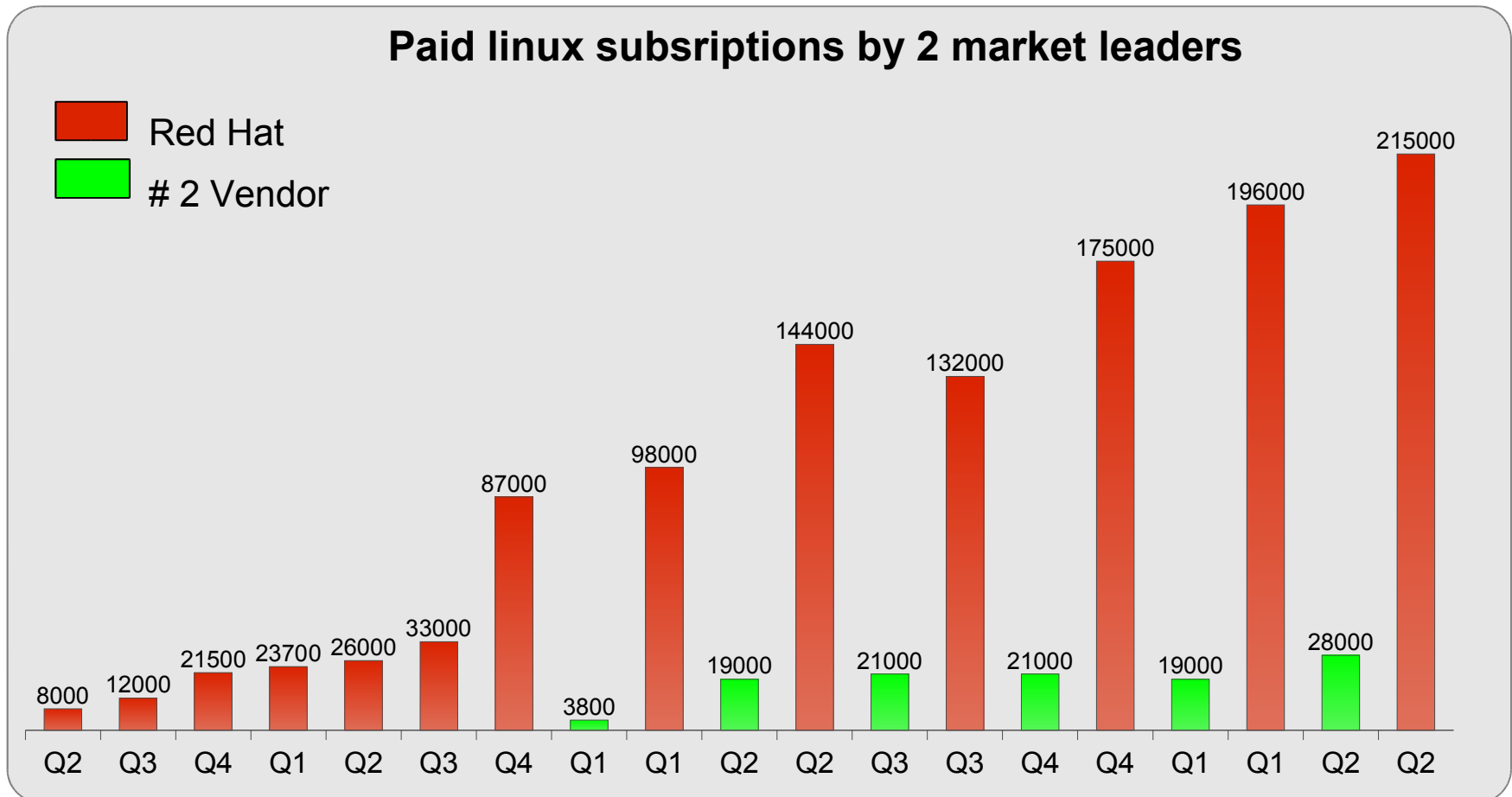
- Leading provider of Linux Services – 80%+ share (IDC)
- Fastest growing customer base
- More supported ISV applications (1800+)
- More certified hardware (750+)
- #1 commercial contributor to Linux
- Linux is our only business
- Provide unlimited telephone support
- Most experience in Linux support
- “Best Value Provider” - 2005 CIO Survey
- Complementary with IBM software offerings

# What Does Red Hat Do?

- **From an engineering standpoint:**
  - Works with the community, partners, and customers
  - Develops/incorporates new features
  - Integrates open source packages, new features, drivers, bug fixes, & security updates
  - Tests, certifies, productizes, and supports the result
  
- **From a business standpoint:**
  - Engineers and sustains the platform
  - Provides services—training, consulting, support
  - But leverages the open source development model

# Why Red Hat – Top Ten Reasons

- Leading provider of Linux Services – 80%+ share (IDC)
- Fastest growing customer base



# Who's Using Red Hat Enterprise Linux?

- **Financial** services and banks, including:
  - ABN Amro, HVB, LVM, Consors, Axa, DrKW, PLUS Finanz, Central Bank of India, Morgan Stanley, Standard Chartered Bank, HSBC, UBS, CSFB, Euronext Liffe, BPU, BNP, Societe General, Rabobank
- **Telco** companies including:
  - BT, Deutsche Telekom, FT, Orange, Sprint, Talkline, TDC, Telefonica, Telia Sonera
- **Online** service providers including:
  - Yahoo!, Amazon.com, AOL, Orbitz
- **Manufacturing** and **Consumer** Brand leaders including:
  - Dell, Fiat, VW, Villeroy & Boch, Renault, Toyota, BMW, Audi



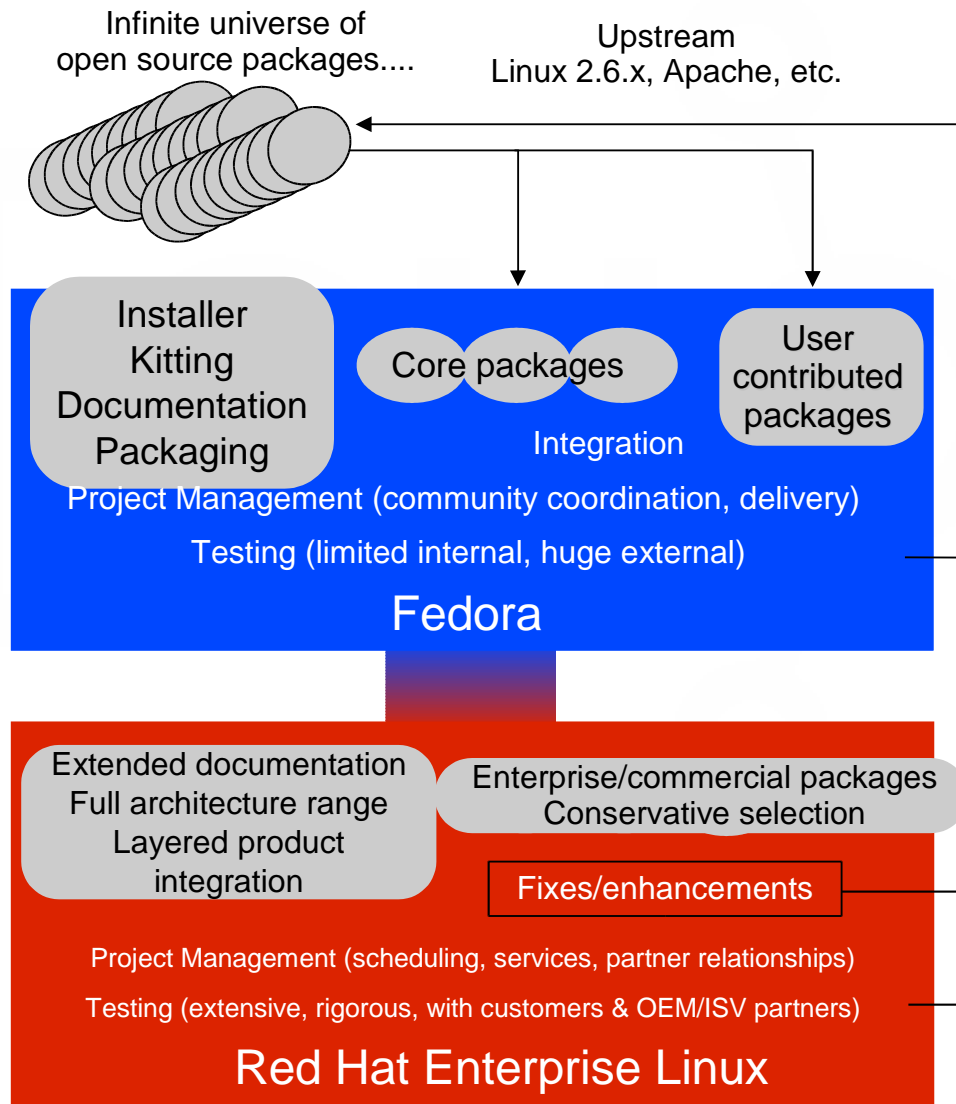
***65% of the Fortune 500 are Red Hat customers***

# Enterprise Linux vs. Fedora

|                             | Red Hat Enterprise Linux               | Fedora Project                  | Retail                |  |
|-----------------------------|--|---------------------------------|-----------------------|--|
| <b>Release frequency</b>    | 12-18 months                           | 4-6 months                      | 6 months              |  |
| <b>Product lifetime</b>     | 7 years from release                   | 2-3 months (after next release) | 6 months from release |  |
| <b>ISV certification</b>    | More than 1,800 supported applications | None                            | Few, not guaranteed   |  |
| <b>API/Interfaces</b>       | Standardized                           | Not standardized                | Not standardized      |  |
| <b>Support duration</b>     | 7+ years                               | none                            | 30-60 days            |  |
| <b>Support level</b>        | Production/developer                   | none                            | Installation only     |  |
| <b>Support availability</b> | 24x7 or 12x5                           | none                            | M-F business hours    |  |
| <b>Response</b>             | 1 hour for Priority 1                  | none                            | One business day      |  |
|                             |  |                                 |                       |  |



# Product Development Overview



- Fedora is a fundamental part of the development of Red Hat Enterprise Linux
- The whole is greater than the sum of the parts due to a fully integrated testing processes
- Close participation in upstream development minimizes patch differences & leverages upstream testing
- Fedora & RHEL packages are 'owned' by the same engineer
- Red Hat is able to influence high-end feature adoption by community
- RHEL package sets tailored to market (AS, ES, WS...)



# The best Linux minds in the world teaming to build a world class product



2002

Joint development of  
RHEL 2.1 for IBM eServer  
Red Hat Sr. Product Mgr  
for IBM tech partnership  
put in place

2003

Joint development of  
RHEL 3 for IBM eServer  
Red Hat doubles FTE's on IBM  
joint development work

2004

Joint development of  
RHEL 4 for IBM eServer  
IBM LTC (Linux Tech Ctr)  
Personnel placed at RH HQ

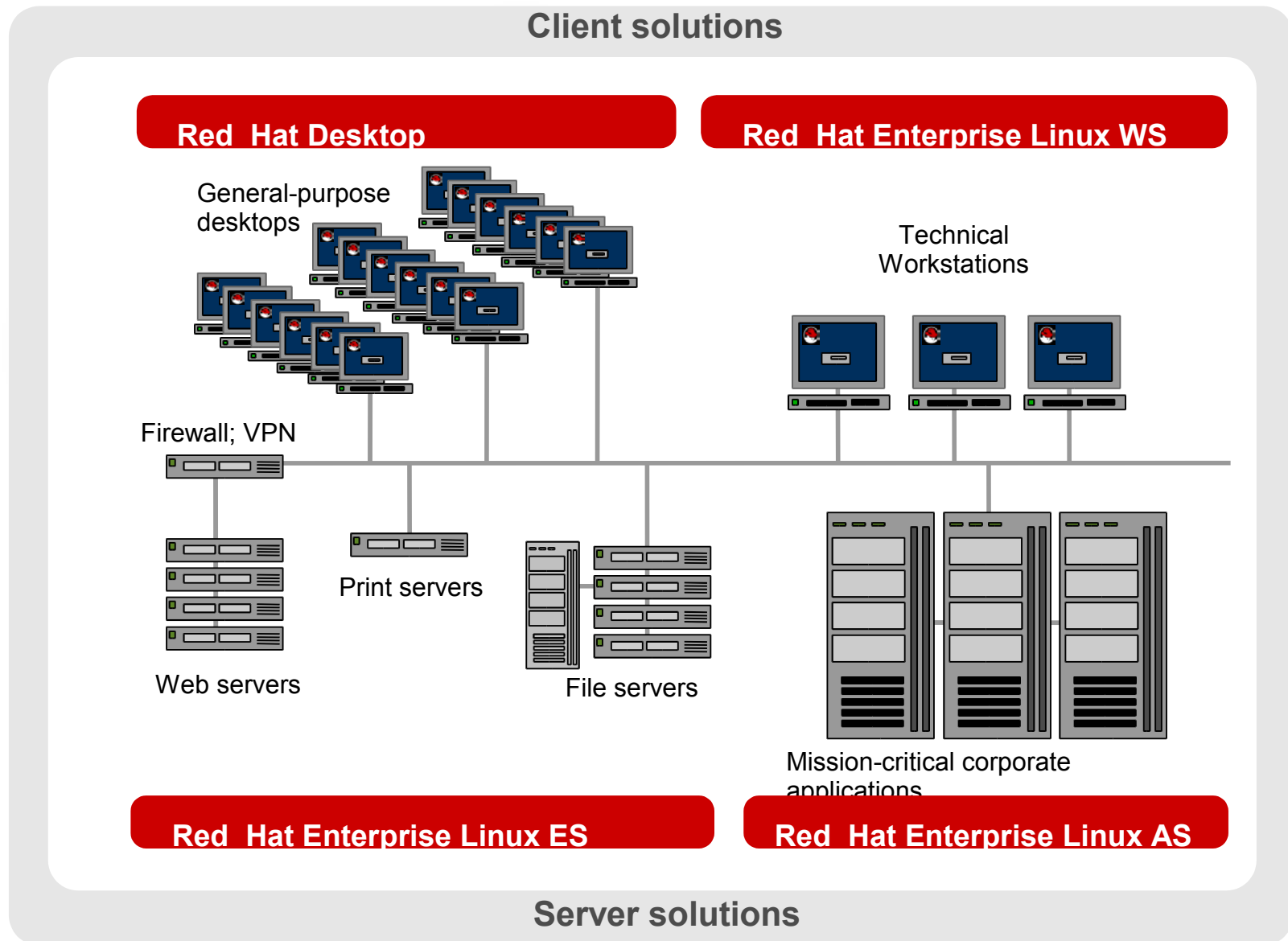
2005

Joint development of  
RHEL 5 for IBM eServer  
IBM Technical Director for  
Red Hat put in place

IBM and Red Hat people also work together on Open Source Standards Boards:

- Open Source Development Lab (OSDL)
- Linux Standards Base (LSB)
- Power.org
- Open Source Projects (Eclipse, tab tools, etc)

# Red Hat Enterprise Linux deployment



# Enterprise Linux v.4 Product Family

|   | Max CPUs | Max Mem | Target WorkLoad   | Architectures   |
|---|----------|---------|---|---|
| <b>Red Hat Enterprise Linux AS (Advanced Server)</b>  | -        | -       | Large servers; Database; corporate apps                     | IBM Systems z-Series and s390, Intel® x86, EMT64T, Itanium®2, AMD64 & IBM POWER |
| <b>Red Hat Enterprise Linux ES (Entry/Mid Server)</b> | 2        | 16GB    | Entry-mid servers; file/print; web; email                   | Intel® x86, EMT64T, Itanium®2, AMD64  |
| <b>Red Hat Enterprise Linux WS (Workstation)</b>      | 2        | -       | Technical workstation; CAD/CAM apps; HPC; power user        | Intel® x86, EMT64T, Itanium®2, AMD64  |
| <b>Red Hat Desktop</b>                                | 1        | 4GB     | Standard corporate productivity desktop; volume deployments | Intel® x86, EMT64T,AMD64  |

# Kernel

- Goals:
  - Stability – Performance – Scalability – Maintainability.
  - Software & hardware features required by customers and ISVs & OEMs.
- Red Hat Enterprise Linux v.4 is built on a Linux 2.6.9 kernel.
  - Red Hat Enterprise Linux v.3 used a Linux 2.4 kernel with numerous Linux 2.6 features incorporated.
  - Moving to a full Linux 2.6 core provides features that have matured during 2004, for example:
    - New block I/O system increases storage scalability (e.g., 16TB on x86).
    - Specialized RHEL3 features have been accepted upstream and further enhanced for wider applicability in RHEL4.
    - Many 2.6 kernel algorithms provide higher performance than 2.4.
  - Fedora has provided extensive testing of new capabilities.
  - All architectures built from a common source RPM (as with RHEL3).
    - Uniform feature set and maintenance/support.

# Enterprise Linux v.4 as of Update 1

- June 9, 2005
- Dual core support for AMD64 Opteron and Intel EM64T ICH7 systems.
- Support for ICH7, including Glenwood and Lakeport chipsets.
- Improved disk dump capability (including SATA and megaraid support).
- Updated Intel IA32 Execution Layer for the Itanium2 architecture.
- Updated Intel Centrino ipw2100/ipw2200 wireless drivers and firmware.
- Driver updates including ata\_piix, bonding, e1000, e100, ibmveth, libata, lpfc, megaraid\_mbox, megaraid\_mm,
- sata\_nv, sata\_promise, sata\_sil, sata\_sis, sata\_svw, sata\_via, sata\_vsc, and tg3
- Many platform hardware support updates and bug fixes.
- Security updates, bug fixes, and feature enhancements to numerous system packages.

# Enterprise Linux 4 Performance and Scalability

|   | Version 4 Enhancement  | Benefit   |
|---|--|---|
| 1 | Native 2.6 kernel  | A consolidation of features below and those in Red Hat Enterprise Linux v.3       |
| 2 | New block I/O subsystem  | Better performance for applications that write large files such as databases      |
| 3 | Hyperthreading and multicore scheduler                               | Boosts performance of threaded applications, particularly with Java               |
| 4 | Virtual memory enhancements  | Improves performance of workloads that depend heavily on memory, e.g. databases   |
| 5 | Non-Uniform Memory Architecture (NUMA) support                       | Reduced latency and resource contention in larger systems with partitioned memory |
| 6 | Many kernel algorithm improvements (I/O elevators, read copy update) | Improves general system performance   |

For 32 bit and 64 bit workloads

# More Performance and Scalability in v.4

|    | Version 4 Enhancement                           | Benefit   |
|----|---|---|
| 7  | Ext3 enhancements (block reservation)           | Better performance for applications that write large files such as databases  |
| 8  | LVM2  | Better manageability – can grow a filesystem while it is online               |
| 9  | Max. supported filesystem size increased to 8TB | Important development for customers with large databases                      |
| 10 | NFS v4  | Better performance and security for clients that access data over the network |

Version 4 benefits all applications – whether disk I/O, network I/O, or compute bound



# Why Red Hat – Top Ten Reasons

- More supported ISV applications (1800+)
- More certified hardware (750+)

**1800+**  
certified  
applications



[http://www.redhat.com/apps/isv\\_catalog/results.html?vendor\\_id=1001&ven\\_name=IBM-White%20Plains](http://www.redhat.com/apps/isv_catalog/results.html?vendor_id=1001&ven_name=IBM-White%20Plains)

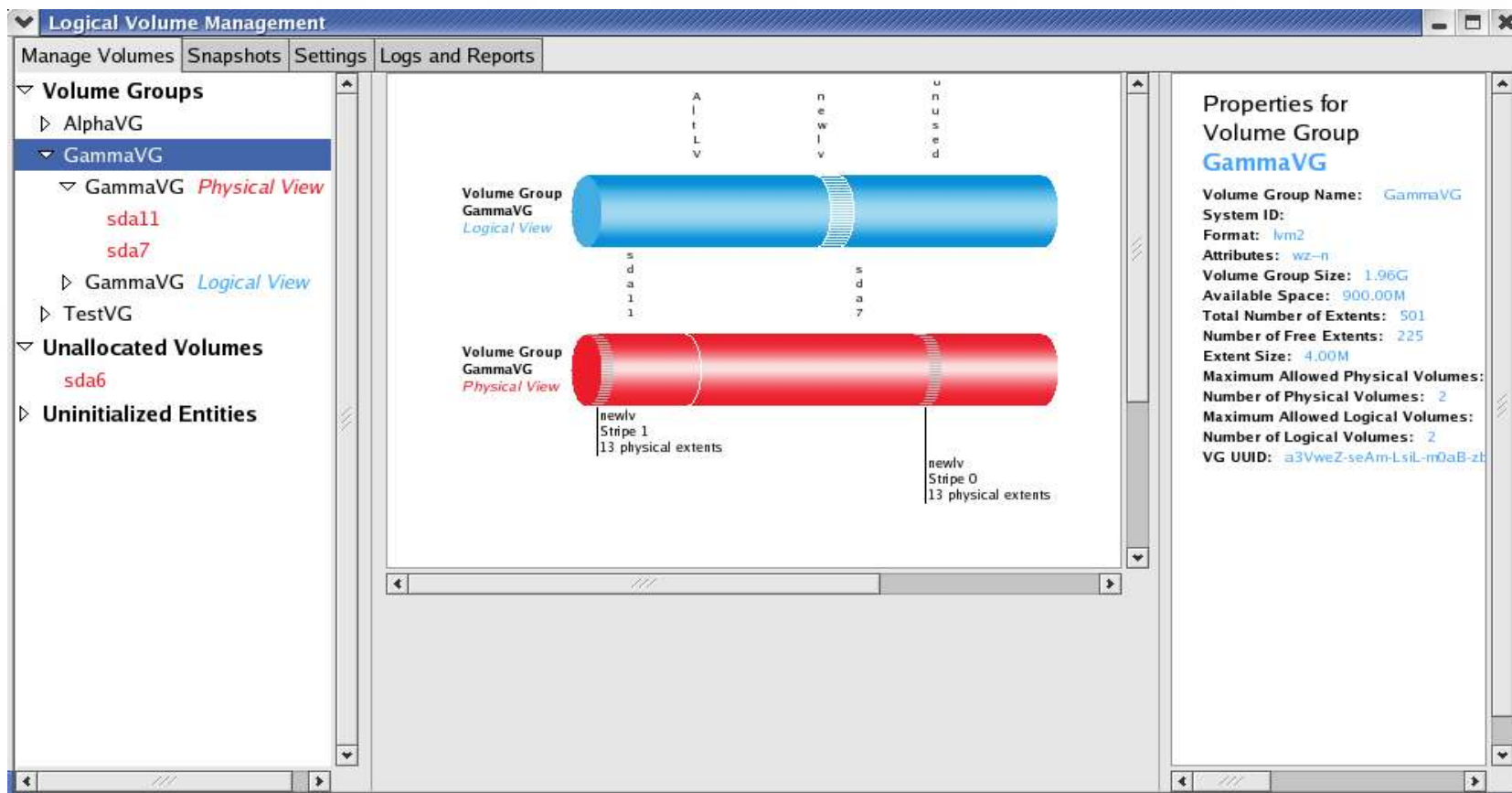
**750+**  
certified  
hardware  
systems



<http://www-03.ibm.com/servers/eserver/serverproven/compat/us/index.html>

# Storage: Logical Volume Management (LVM2)

- LVM2 provides significantly improved GUI-based storage management capabilities
  - Goal to provide consistent, easy to understand, administrator interface



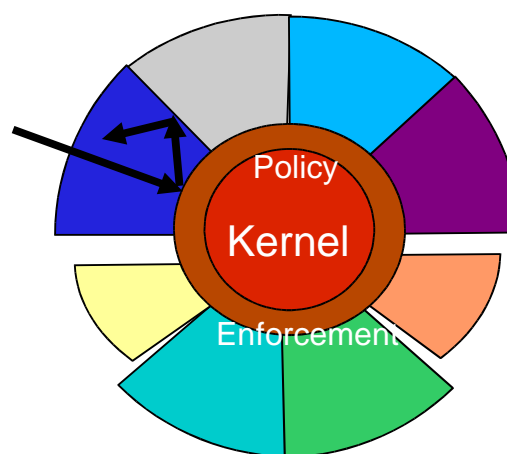
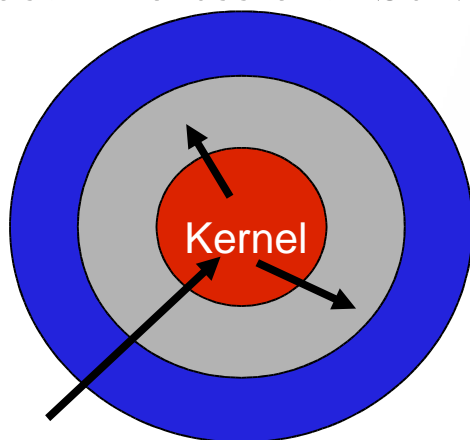
The screenshot displays the Logical Volume Management (LVM2) GUI. The window title is "Logical Volume Management". The interface is divided into several sections:

- Left Panel (Volume Groups):**
  - Volume Groups
    - AlphaVG
    - GammaVG** (selected)
      - GammaVG *Physical View*
        - sda11
        - sda7
      - GammaVG *Logical View*
    - TestVG
    - Unallocated Volumes
      - sda6
    - Uninitialized Entities

- Center Panel (Physical and Logical Views):**
- Physical View:** Shows two physical volumes (PVs) as cylinders. The top one is blue and labeled "Volume Group GammaVG Logical View". The bottom one is red and labeled "Volume Group GammaVG Physical View". Above the cylinders, the text "All new unused" is displayed vertically. Below the cylinders, labels indicate "sda11" and "sda7" for the physical volumes, and "newlv Stripe 1" and "newlv Stripe 0" for the logical volumes, each with "13 physical extents".
- Right Panel (Properties for Volume Group GammaVG):**
- Volume Group Name: GammaVG
- System ID:
- Format: lvm2
- Attributes: wz-n
- Volume Group Size: 1.96G
- Available Space: 900.00M
- Total Number of Extents: 501
- Number of Free Extents: 225
- Extent Size: 4.00M
- Maximum Allowed Physical Volumes:
- Number of Physical Volumes: 2
- Maximum Allowed Logical Volumes:
- Number of Logical Volumes: 2
- VG UUID: a3VweZ-seAm-LsIL-m0aB-zt

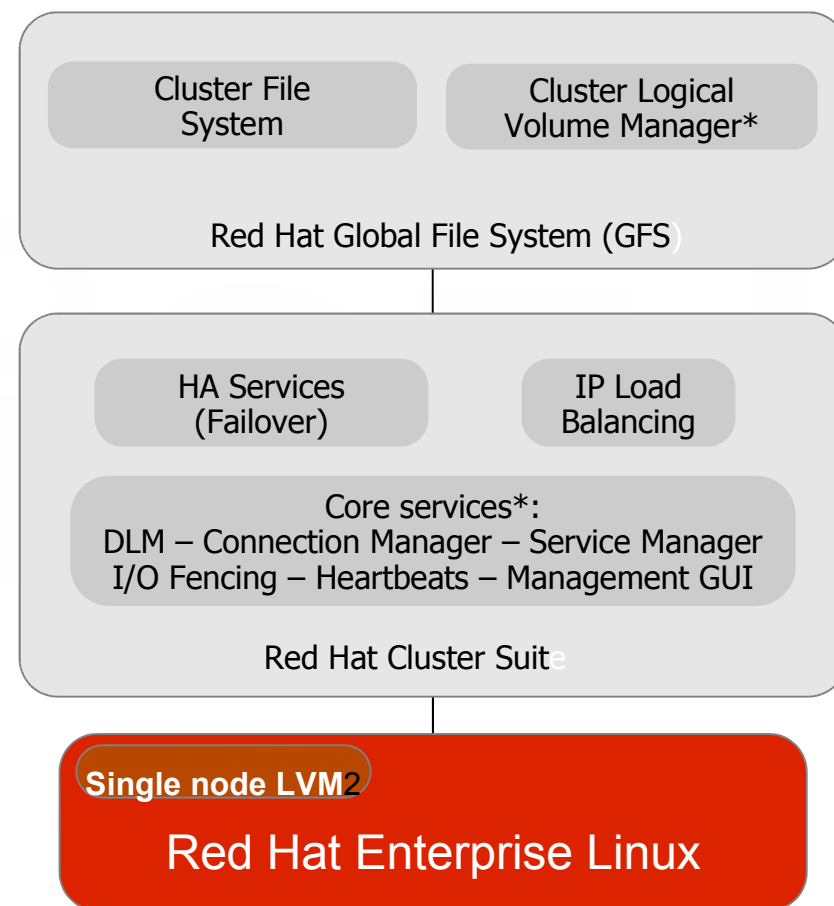
# Security Enhanced Linux (SELinux)

- Integrated into standard RHEL versions – full ISV support
- Flexible Mandatory Access Control system for Linux
- Capabilities analagous to commercial secure operating systems (e.g. Trusted Solaris, Trusted Irix)
- Optional targeted policy in core product secures key network-facing services with minimal system impact
- Support for strict (government/military application) and custom policies through Red Hat Global Professional Services



# Red Hat Clustering Architecture

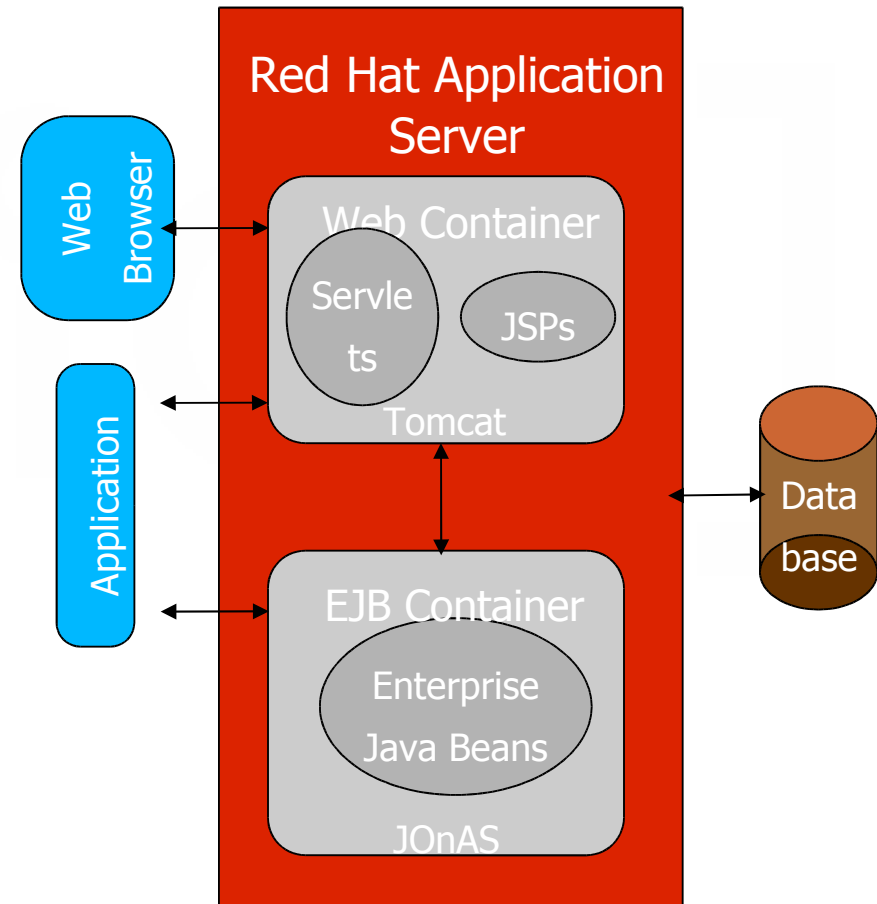
- Red Hat Cluster Suite provides
  - Application failover
  - Improves application availability
  - Included with GFS
  - Core services for enterprise cluster configurations\*
- Red Hat Global File System (GFS)
  - Cluster-wide concurrent read-write file system
  - Improves cluster availability, scalability and performance
  - Includes Cluster Logical Volume Manager (CLVM)\*



\* These features will be available with launch of Cluster Suite v4 and GFS 6.1 – availability concurrent with RHEL4 Update 1

# Red Hat Application Server

- **Designed to seamlessly interoperate with components of industry-leading, full-featured Java application frameworks**
  - **Standards compliant: Engineered and tested with partners products. E.G. BEA, IBM and Oracle**
  - **Scalable support and management: Tested & certified with Red Hat Enterprise Linux Products.**
- **Based on leading open source technologies:**
  - Apache (Apache, Tomcat, Struts, etc)
  - ObjectWeb (JOnAS, Jope, C-JDBC, etc.)
  - Eclipse (Core IDE, J2EE tools, Lombok plug-in)



# Red Hat Network Components

## ■ Service Modules

- Update
- Management
- Provisioning
- Monitoring

- Architectures
- Hosted
- Satellite

## ■ Add-On Components

- Proxy Server



# Training

- **Architect – RHCA**
  - Master-level technical leadership for Linux and open source architecture
  - Design, plan, deploy and manage Linux systems across the enterprise from datacenter to desktop
  
- **Engineer – RHCE**
  - Set up and configure Linux servers, network services, network security, diagnostics, troubleshooting
  - The standard Linux certification
  
- **Technician – RHCT**
  - Install and configure new Linux systems, host security, attach to corporate network
  - Entry-level Linux certification



# Red Hat Global Learning Services

- Global availability
  - 40 cities in North America,
  - 90 cities worldwide
- Course delivery via:
  - Open enrollment
  - On-site training
  - eLearning
- More than 100,000 people trained
  - Systems administration
  - Networking
  - Security
  - Application development
  - Kernels
- Industry-leading performance-based certifications.
- 30,000+ RHCE exams taken since inception (Jan 1999)
- Free automated self-service pre-assessment on [redhat.com](http://redhat.com)



**redhat.**  
CERTIFIED  
ENGINEER

---

13,400  
certified



**redhat.**  
CERTIFIED  
TECHNICIAN

---

6,800  
certified





# De-mystify the Red Hat Subscription

# Red Hat Subscription Scenario

Customer purchases Red Hat Linux Subscription for a 2 cpu x86 server.

What a Customer orders:

What the Customer gets:

What they Pay:

**# 1** IBM Remote Technical Support Level 1, 2, 3 IBM Linux Support (Preload) or IBM Linux Supportline (IGS) \$\$\$\$ /yr

+

**# 2** Red Hat Enterprise Subscription \$\$\$/yr  O/S SW bits, Quarterly Updates, maintenance, errata via RHN. Red Hat L3 backup to IBM L3

The Linux Supportline contract can auto renew but the Red Hat Subscription “entitlement” needs to be renewed at the end of the subscription term.

# Red Hat Annual Subscription Model

## ■ One price covers everything:

- **Red Hat Linux Technology**

- Product & Documentation

- **Certifications**

- **A wide choice of certified hardware and software**
- Over 1800 certified applications, over 700 certified systems

- **Maintenance**

- **Red Hat Network delivers new features, bug fixes and security updates**

- **Upgrades & Maintenance**

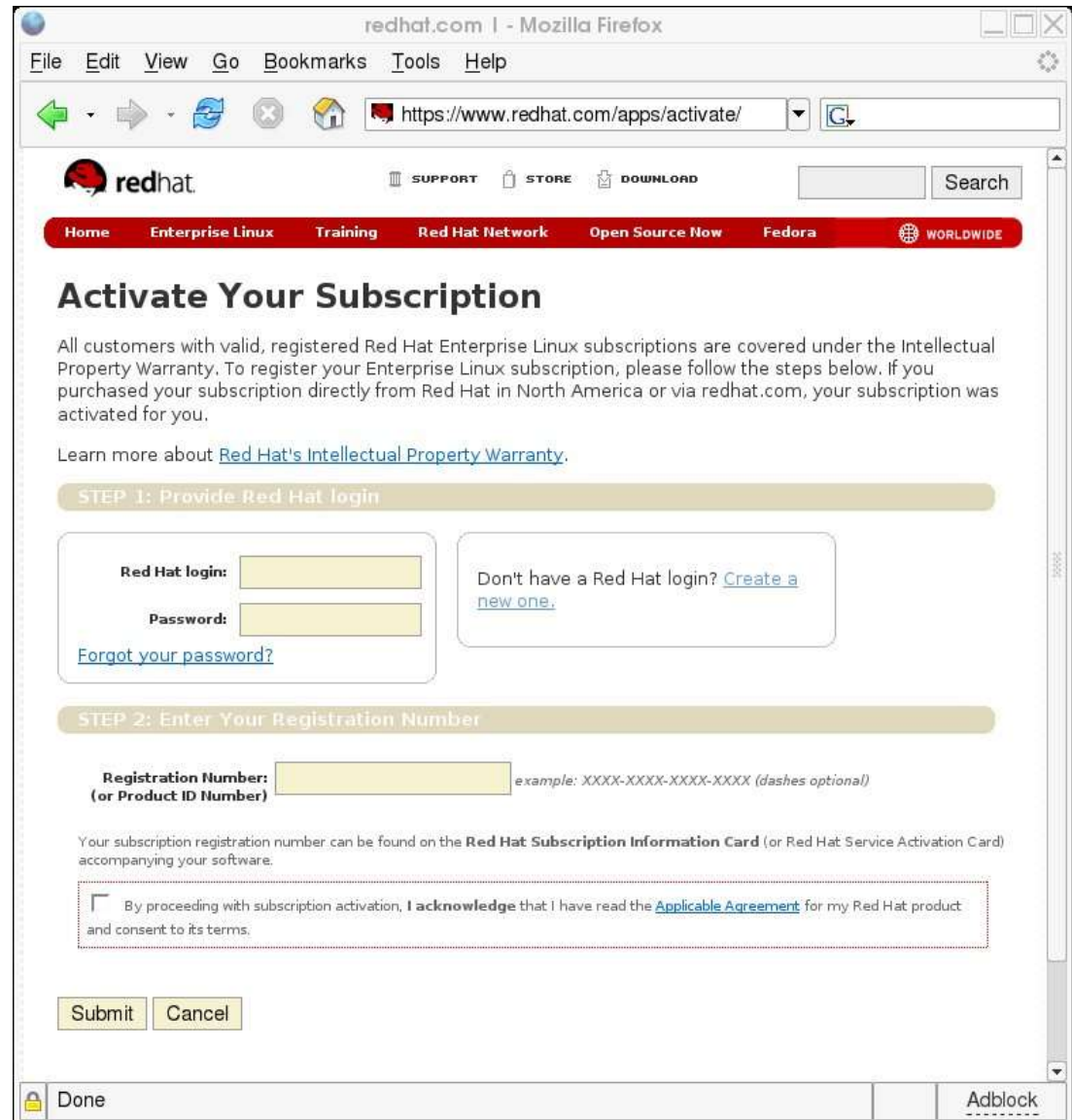
- Customers get new releases at no extra charge
- Delivered via Red Hat Network
- New releases, updates and errata (e.g. security & bug fixes)

- **Technical Support**

- Up to 24x7 with 1 hour response & unlimited calls, 100% RHCE staff



1. IBM ships RHEL to customer.
2. Customer gets CD with a registration card.
3. The registration card has a 16 digit alphanumeric registration number.
3. Customer activates registration at <http://www.redhat.com/activate>.



The screenshot shows a Mozilla Firefox browser window displaying the Red Hat website's subscription activation page. The browser's address bar shows the URL <https://www.redhat.com/apps/activate/>. The page features the Red Hat logo and navigation links for SUPPORT, STORE, and DOWNLOAD. A red navigation bar contains links for Home, Enterprise Linux, Training, Red Hat Network, Open Source Now, Fedora, and a WORLDWIDE icon. The main heading is "Activate Your Subscription". Below this, there is a paragraph explaining the activation process and a link to "Learn more about Red Hat's Intellectual Property Warranty." The page is divided into two steps: "STEP 1: Provide Red Hat login" and "STEP 2: Enter Your Registration Number". Step 1 includes input fields for "Red Hat login:" and "Password:", a "Forgot your password?" link, and a "Create a new one." link. Step 2 includes a "Registration Number: (or Product ID Number)" input field with an example "XXXX-XXXX-XXXX-XXXX (dashes optional)". Below the input fields, there is a checkbox for acknowledging the terms and conditions, and "Submit" and "Cancel" buttons. The browser's status bar at the bottom shows "Done" and "Adblock".



- **Open, customizable interfaces to tune & integrate for what you need**
- **Easier administration & management.** Same tools, processes, needed knowledge across all types of servers.
- **Savings – Time & Cost**
- **Scalability** – w/IBM/RH scale up, scale out on same O/S
- **Better Performance, Security, Scalability, Support**

**The world's 2 largest Linux providers as a single team giving you more options, more capabilities, more peace-of-mind than anyone else.**



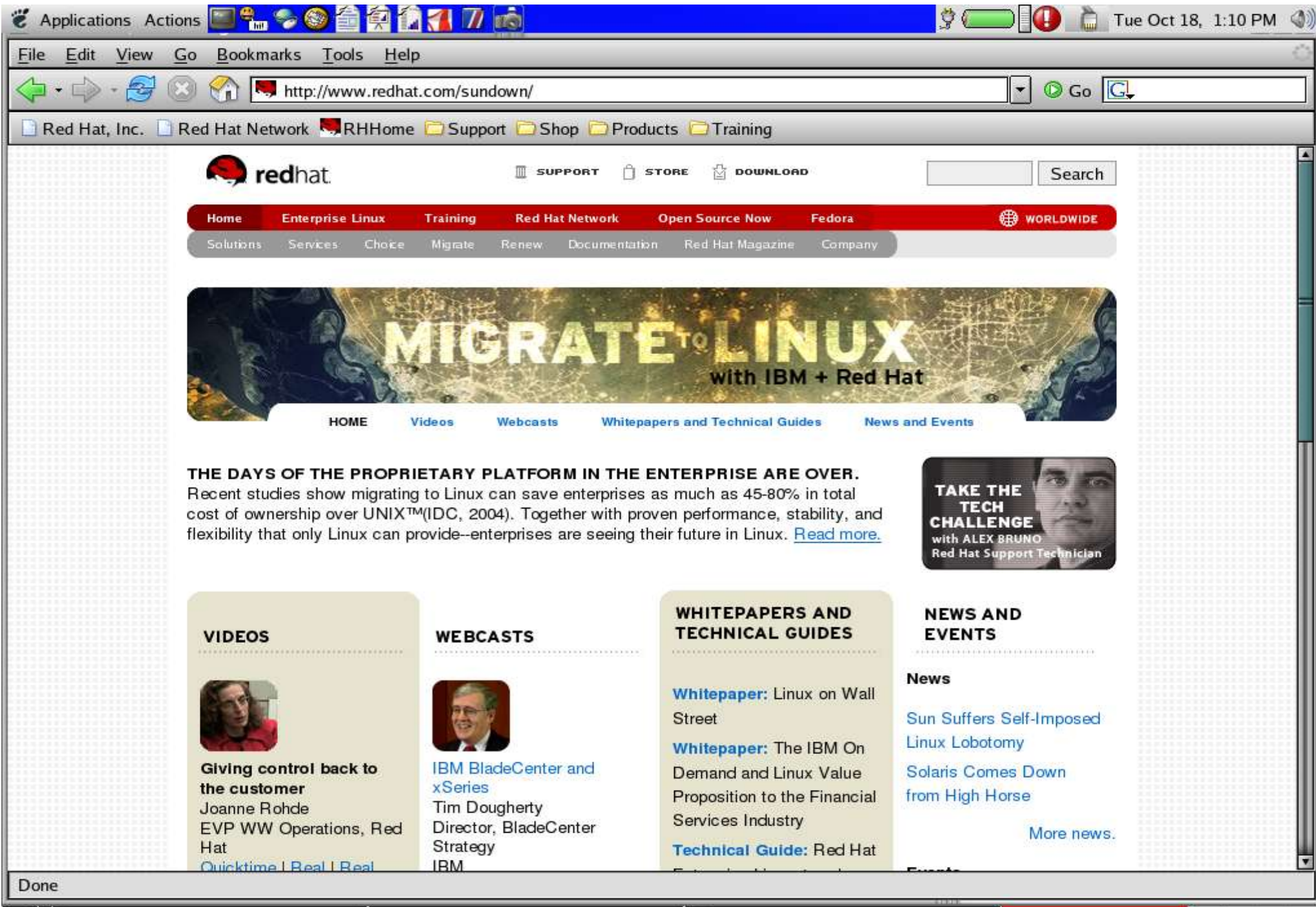
# Migrating from Unix to Linux



# Red Hat Resources

- **Migration Center**
  - <http://www.redhat.com/migrate/>
- **UNIX to Linux migration**
  - <http://www.redhat.com/solutions/business/utol/>
- **Red Hat consulting**
  - <http://www.redhat.com/services/>
- **Red Hat training**
  - <http://www.redhat.com/training/solutions/>
- **Red Hat and open source**
  - <http://www.redhat.com/opensourcenow>

# Sundown resources



Applications Actions Tue Oct 18, 1:10 PM

File Edit View Go Bookmarks Tools Help

http://www.redhat.com/sundown/

Red Hat, Inc. Red Hat Network RHHome Support Shop Products Training

redhat SUPPORT STORE DOWNLOAD Search

Home Enterprise Linux Training Red Hat Network Open Source Now Fedora WORLDWIDE

Solutions Services Choice Migrate Renew Documentation Red Hat Magazine Company


## MIGRATE to LINUX with IBM + Red Hat

HOME Videos Webcasts Whitepapers and Technical Guides News and Events


**THE DAYS OF THE PROPRIETARY PLATFORM IN THE ENTERPRISE ARE OVER.**  
Recent studies show migrating to Linux can save enterprises as much as 45-80% in total cost of ownership over UNIX™(IDC, 2004). Together with proven performance, stability, and flexibility that only Linux can provide—enterprises are seeing their future in Linux. [Read more.](#)

**TAKE THE TECH CHALLENGE**  
with ALEX BRUNO  
Red Hat Support Technician

### VIDEOS

  
**Giving control back to the customer**  
Joanne Rohde  
EVP WW Operations, Red Hat  
[Quicktime](#) | [Real](#) | [Real](#)

### WEBCASTS

  
**IBM BladeCenter and xSeries**  
Tim Dougherty  
Director, BladeCenter Strategy  
IBM

### WHITEPAPERS AND TECHNICAL GUIDES

**Whitepaper:** Linux on Wall Street

**Whitepaper:** The IBM On Demand and Linux Value Proposition to the Financial Services Industry

**Technical Guide:** Red Hat

### NEWS AND EVENTS

**News**

[Sun Suffers Self-Imposed Linux Lobotomy](#)

[Solaris Comes Down from High Horse](#)

[More news.](#)

Done



# New Resources for Customers Considering Migration

<http://www.ibm.com/servers/eserver/migration/>



The screenshot shows the IBM eServer Migration website. At the top, there is a navigation bar with the IBM logo, "North America [change]", "Terms of use", and a search bar. Below the navigation bar, there are links for "Home", "Products", "Services & solutions", "Support & downloads", and "My account". The main content area is titled "Migration" and features a large banner with the text "Can I simplify my environment?" and a photo of a man looking at a laptop. To the left of the banner is a sidebar with a "Migration" menu containing links like "What are the pros and cons", "What can I expect along the way", "Case studies", "Webinar series", "Migrate from HP", "Migrate from Sun Solaris", and "Migrate from Dell". Below the banner, there is a paragraph of text about migration decisions. The page is divided into several sections: "Start with the right questions" with a link to "Migration pros and cons", "Migration Webinar series" with a link to "Roadmaps from HP & Sun", "What the analysts say" with links to IDC, BusinessWeek, and IForrester reports, and "Migratory patterns" with links to "Migrate from HP", "Migrate from Sun Solaris", and "Migrate from Dell". On the right side, there are sections for "We're here to help" with an "E-mail us" link and phone number, and "Buyback offer" with a "Learn more" link.

IBM eServer >

## Migration

**Migration**

- What are the pros and cons
- What can I expect along the way
- Case studies
- Webinar series
- Migrate from HP
- Migrate from Sun Solaris
- Migrate from Dell

Can I simplify my environment?

**We're here to help**

Easy ways to get the answers you need.

[E-mail us](#)

or call us at  
1-800-IBM-XXXX  
ext. XXXX

The decision to migrate is about more than choosing one hardware vendor over another. Intertwined with that central question are others that are just as important: What is it about my current environment that isn't working? What specific improvements do I need this migration to achieve? Where do I see my organization in three years?

**Start with the right questions**

[→ Migration pros and cons](#)

A realistic look at the benefits and potential challenges of migration.

[→ What can I expect?](#)

How long will the migration process take? When will it start to pay for itself?

**Migration Webinar series**

While each individual migration is unique, IBM migration experts have seen migrations from every conceivable angle.

- [→ Roadmaps from HP & Sun](#)
- [→ Real challenges, real successes](#)
- [→ Technical issues](#)

**What the analysts say**

- [IDC: Server Migration 2004: Understanding Platform and Workload Impacts \(00KB\)](#)
- [BusinessWeek: Goodbye to the Chip of the Future? \(00KB\)](#)
- [IForrester: IT Trends 2004: Server Systems \(175KB\)](#)

**Migratory patterns**

Tell us where you're starting from, and we'll help you think about a migration roadmap.

- [→ Migrate from HP](#)
- [→ Migrate from Sun Solaris](#)
- [→ Migrate from Dell](#)

**What the analysts say**

[IDC: Server Migration 2004 - Understanding Platform and Workload Impacts](#)

**Buyback offer**

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[→ Learn more](#)