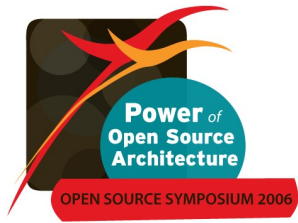# Lowering TCO with
# JBoss Enterprise Middleware

## The Open Source Platform for SOA

## Harish Pillay
## hpillay@redhat.com
Manager, Partner Development
Red Hat

# Agenda

- JBoss & Red Hat

- Why SOA is not just a Fad

- JEMS Overview
  - The Open Source Platform for SOA

- JBoss Business Model Overview

- JBoss Subscription
  - Technical Support
  - JBoss Operations Network
  - Certified Software
  - Business Value Comparison

- JBoss Consulting & Training

# Red Hat Acquisition

- Open source leaders Red Hat and JBoss join to drive down the cost of developing and deploying web-enabled applications

- The combined company will provide enterprise customers with the low cost on-ramp to Service Oriented Architectures (SOA)
  - JBoss is the leader in open source Middleware for SOA
  - Red Hat and JBoss will provide open source solutions from application development through deployment
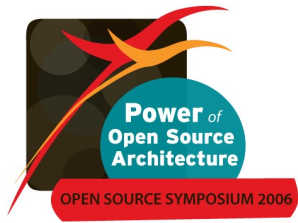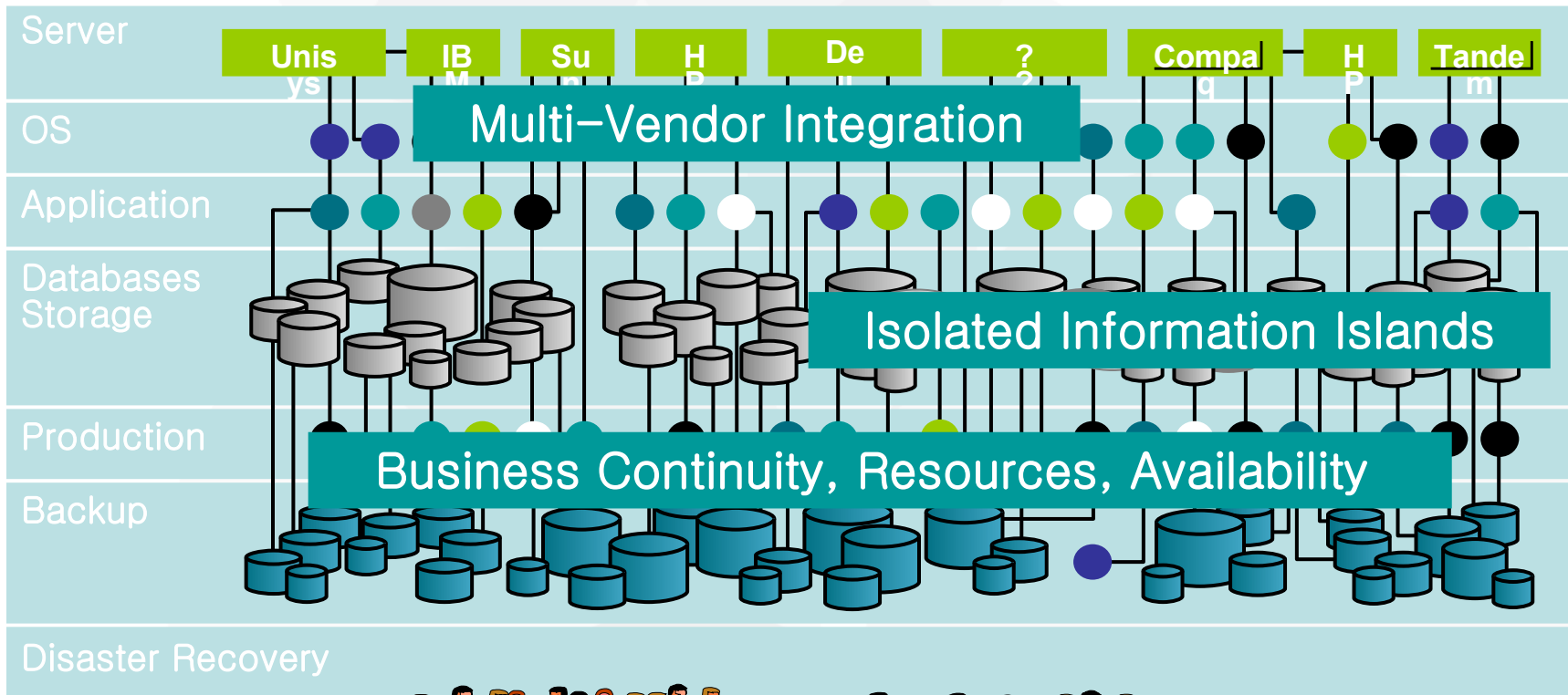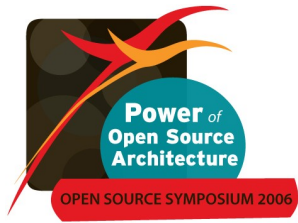
# Red Hat Acquisition



- JBoss will continue to provide and support software on all key Operating System platforms:
  - Red Hat Enterprise Linux
  - SuSe Linux
  - Sun Solaris
  - HP-UX
  - Microsoft Windows
  - AIX
  - Etc.

# Problem:
# Controlling the Costly Infrastructure Mess



**Growing Complexity**

**Multi-Vendor Integration**

**Isolated Information Islands**

**Business Continuity, Resources, Availability**

Server | Unisys | IBM | Sun | HP | Dell | ?? | Compaq | HP | Tandem

OS

Application

Databases Storage

Production

Backup

Disaster Recovery

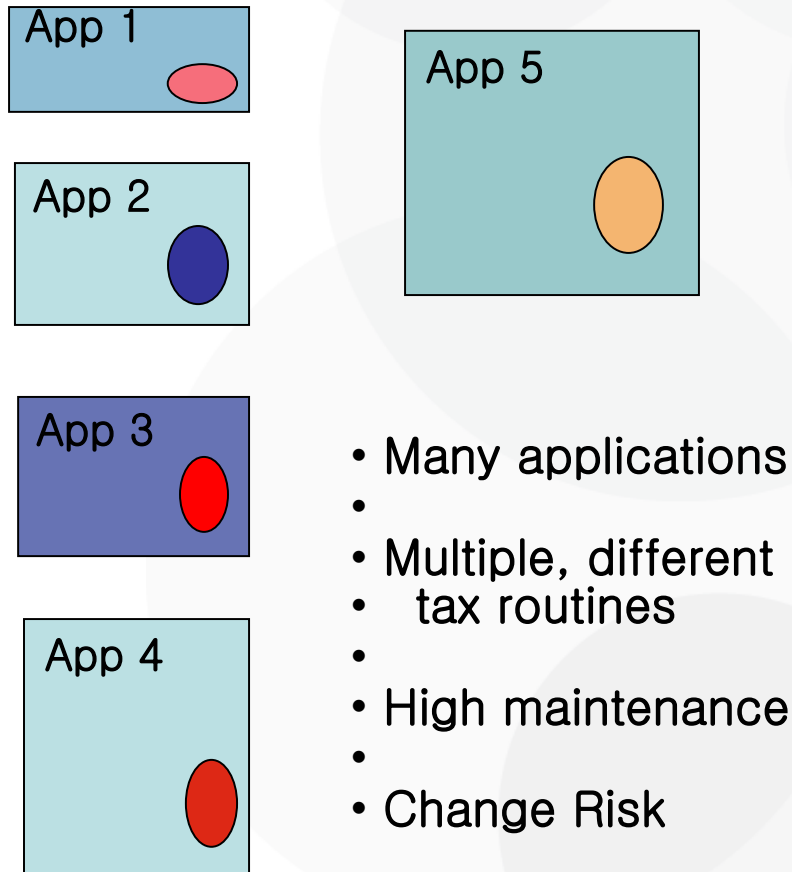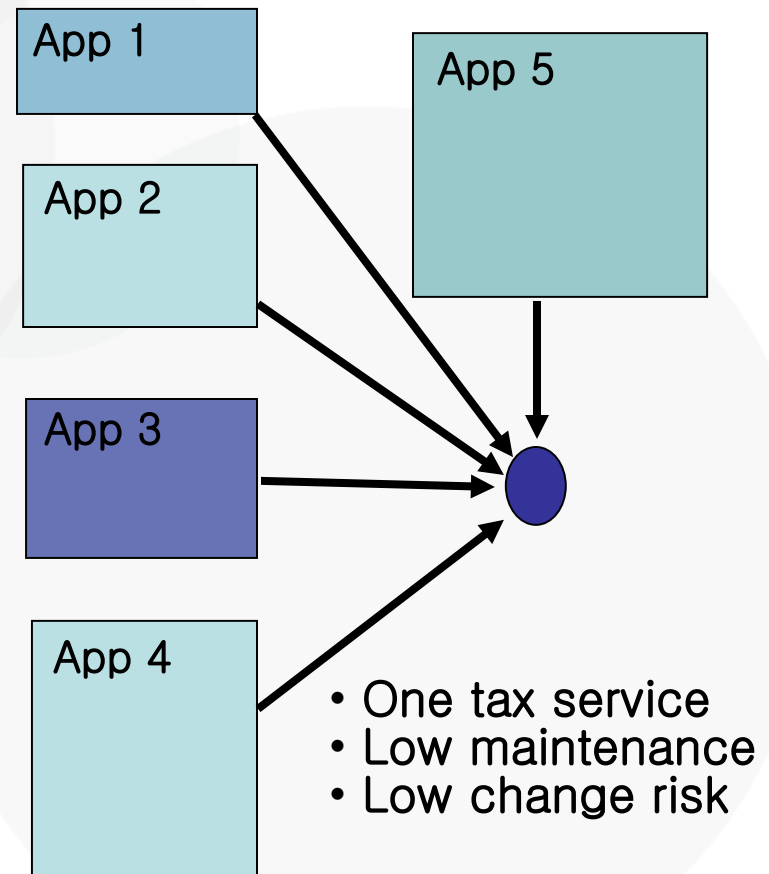**Escalating Cost of Infrastructure and Shortage of Skilled People**

# What is SOA?

- Service Oriented Architecture (SOA) is an approach for building distributed systems that deliver application functionality as loosely-coupled services

- SOA:
  - Provides standard way to represent and interact with application functionality
  - Leverages open standards
  - Enables reuse of services
  - Creates new applications from existing components
  - Integrates applications outside the enterprise
  - Focuses on application assembly

- Services are Reusable, Discoverable, Autonomous, Stateless, Loosely Coupled, and share a Formal Contract that abstracts underlying logic

# SOA in Action – Tax Calculation

## Traditional Architecture

App 1

App 2

App 3

App 4

App 5

- Many applications
- 
- Multiple, different
    tax routines
- 
- High maintenance
- 
- Change Risk

## Service Oriented Architecture

App 1

App 2

App 3

App 4

App 5

- One tax service
- Low maintenance
- Low change risk
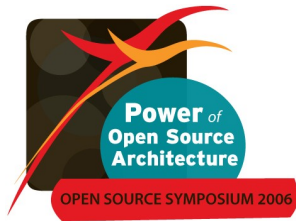
# Customer SOA Drivers
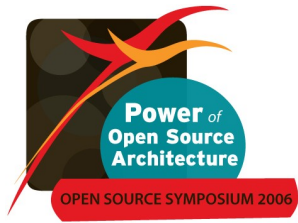
- IT Complexity and Rising Costs
  - High cost associated with maintenance of complex IT infrastructures
  - Duplication of IT expenses and efforts: need reusable components

- Lack of Agility
  - IT infrastructure impedes responsiveness and competitive advantage
  - High risk and high cost to change

- Improve Business Performance
  - Customer satisfaction
  - Competitive differentiation
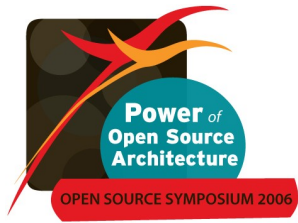  - Value chain execution (e.g. upsell)

# Software of the Future

| Traditional Applications | Service Oriented Architecture |
|---|---|
| Designed to last | Designed to change |
| Tightly coupled | Loosely coupled, agile and adaptive |
| Integrated silos | Composed of Services |
| Code-oriented | Process-oriented |
| Long development cycle | Interactive and iterative development |
| Cost-centered | Business-centered |
| Middleware makes it work | Architecture makes it work |
| Favors homogeneous technology | Favors heterogeneous technology |

# The Problem with Proprietary Platforms

- High cost of entry
  - Harder to prove initial ROI and gain executive support
  - Often are forced to purchase middleware infrastructure in addition to SOA tools

- High cost of exit
  - Monolithic "super-platforms" contradict nature of SOA (vendor lock-in)
  - Drive brand strategies with lock-in and control points
  - Not focused on best-of-breed nor customer satisfaction

- Friction-filled Partner Networks
  - SOA platform vendors are also ISV's, conflict of interest translates to weaker integration
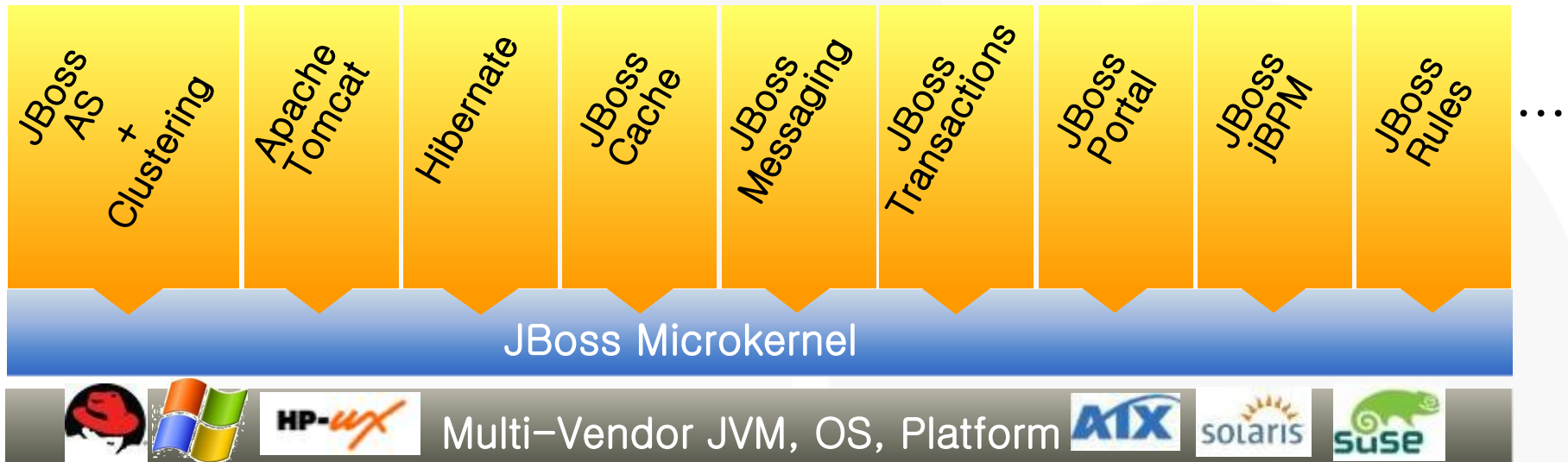
# JBoss SOA Vision

- JEMS will be the leading mass market, *interoperable* Open Source Platform for SOA

- Simply the Better Choice
  - *Software Model*: Professional Open Source enables a greater degree of openness, flexibility and ease of consumption

  - *Partner Ecosystem*: attractive and safe for ISV's, SI's, and end-users

  - *JEMS Platform*: modular, interoperable, focused on simplicity & power

# JBoss Enterprise Middleware Suite

## The Open-Source Platform for SOA

**Applications, Web Services, and Business Processes**

JBoss AS + Clustering | Apache Tomcat | Hibernate | JBoss Cache | JBoss Messaging | JBoss Transactions | JBoss Portal | JBoss jBPM | JBoss Rules | ...

**JBoss Microkernel**

**Multi-Vendor JVM, OS, Platform**

- Suite of market-leading products for enhancing business agility
- Modular Suite enables standardizing on JEMS at your own pace
- Simplicity decreases time to develop and deploy new business solutions

*Power of Open Source Architecture — OPEN SOURCE SYMPOSIUM 2006*
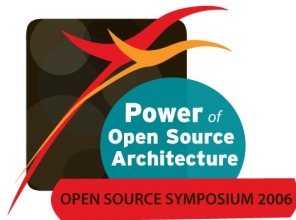
# How JBoss Helps Customers

- Reduce Enterprise Middleware costs by 50-80%
  - Zero ($0) license fees
  - Refocus savings on differentiating your business

- Increase Control via Open Source
  - access to code reduces need for support cases
  - speeds solution time to market

- Mitigate Risk / Avoid Vendor Lock-in
  - Start new projects – no longer cost prohibitive
  - Avoid shelf-ware; Amortize costs over life of project
  - 100% Pure Java – easily swap platforms
  - Use with other middleware (e.g. Hibernate & WebSphere)

- Provide Industry Leading Technical Support
  - Unique expert support model
  - JBoss customer satisfaction consistently higher then BEA, IBM and Oracle
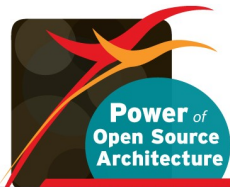
# JBoss Customers

| Financial | Travel | Gov | Telecom | Media/Entertainment | Insurance |
|-----------|--------|-----|---------|---------------------|-----------|
| AMERITRADE | Sabre Holdings | National Security Agency | Wire One communications | ESPN | MetLife |
| BARCLAYS | travelocity | NASA | Virgin mobile | bodog.com | AMERICAN FAMILY INSURANCE — All your protection under one roof |
| Bank of America | Continental Airlines | Department of the Navy | SIEMENS | SONY | |
| European Bank for Reconstruction and Development | ORBITZ | | comcast | Nintendo | Mutual of Omaha |
| citistreet | Best Western | U.S. ARMY | | COLUMBIA HOUSE | AVIVA |
| AMERIQUEST MORTGAGE COMPANY | La Quinta Inn / La Quinta INN & SUITES | Department of the Air Force | XO | ACNielsen betfair | AIG |

#1 Market Share
- 37% of respondents use JBoss AS in their enterprise (BZ Research, December 2005)
- "Leader" in Gartner's Enterprise Application Server Magic Quadrant 2 years running
- Over 10 Million Downloads for all of JEMS components

Power of Open Source Architecture

# Survey of CIOs on OSS Adoption

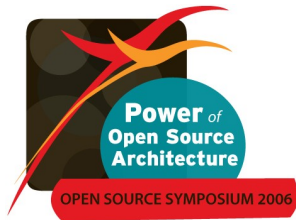**Chart 13: Likely Open Source Adoption Beyond the Operating System Layer**
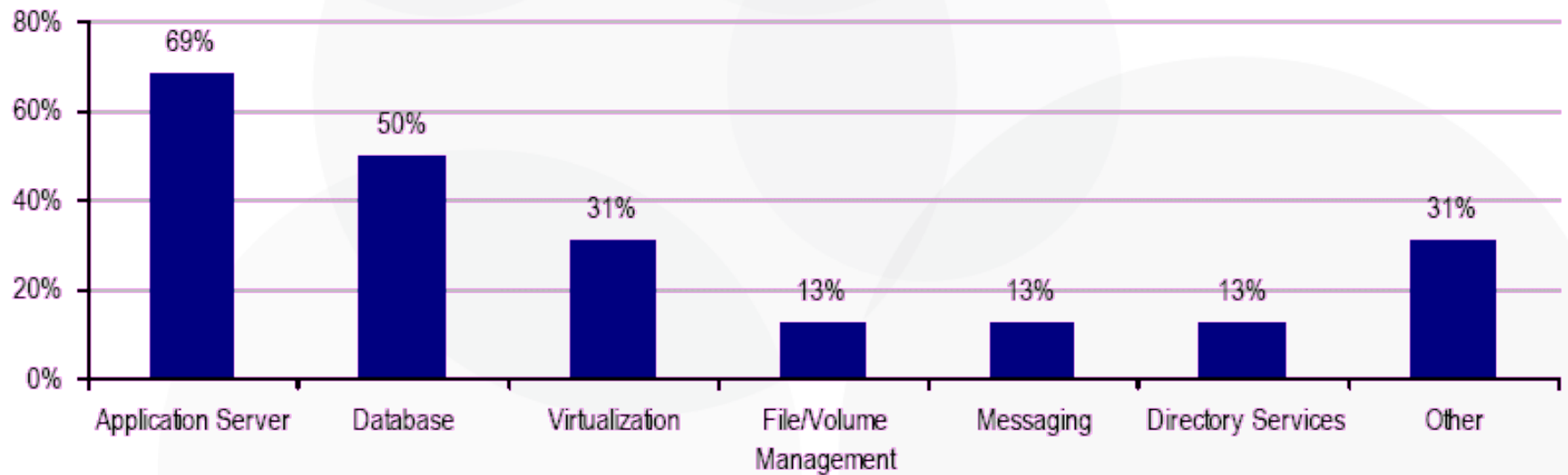


Source: UBS

- Survey of 55 CIOs in Fortune 1000 across:
  - Financial Services, Construction, Retail, Consumer, Healthcare, Energy, Manufacturing, Materials, and Transportation

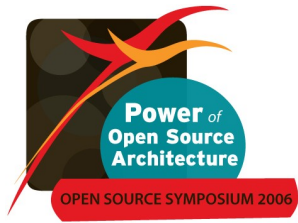*Reference: UBS CIO Pulse (Sep 6, 2005): A Quarterly Snapshot of IT Trends*

# JBoss Open Source Business Model

- **Complete Transparency**
  - Access to source code reduces support cases
  - See exact product development & release cycle status in real-time (http://jira.jboss.com)
  - Report bugs and request features and track their progress

- **Employ project leaders & elite coders full-time**
  - Define product roadmaps
  - Control write permissions to source code
  - Ensure patches on previous versions

- **Software Evolves & Stabilizes Faster**
  - 100,000+ registered developers see & critique our code
  - Valuable feedback on features, flaws, weaknesses, & security concerns

- **JBoss succeeds only when you succeed**
  - Don't "dump LTUs & run" with high up-front license fees and maintenance required for updates & upgrades
  - We must deliver value ABOVE AND BEYOND free software
  - We earn your business every year with outstanding subscription services
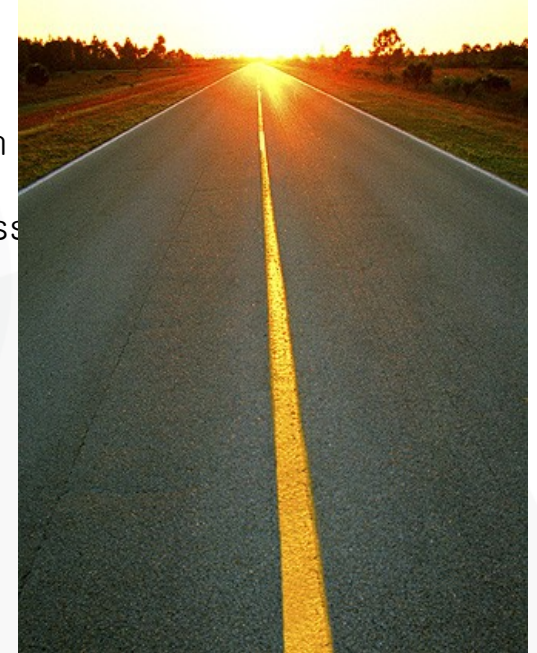
# JBoss Subscription Components

Technical Support

JBoss Operations Network

Certified Software

# The Challenge

"*Lack of support is the number one concern when it comes to using open source software in the enterprise.*"

Source: Forrester Research, Inc.

# JBoss Technical Support Advantages

- All of our Professional Support Engineers are *J2EE experts* and most are JBoss Committers

- Our Core Development Team are targeted at providing support & training services for *25%* of their time

- This allows JBoss to offer a *unique* support service capability:
  - During Development
    - Developer Assist
    - Like adding a bench of subject matter experts to your development organization

  - In Production
    - Fast, high quality response
    - Fast bug-fix and patch turnaround

  - Throughout Application Lifecycle
    - Ability to commit to rolling fixes into future versions of the product

Develop > Certify > Deploy

Support & Manage

# JBoss Technical Support

| | Silver | Gold | Platinum |
|---|---|---|---|
| Support Times (customer timezone) | 9am–5pm Mon–Fri | 9am–5pm Mon–Fri | 24 x 7 x 365 |
| Response Times (based on Severity 1/2) | 2 business days | 4 business hours | 2 hours |

- Support provided on a global basis
  - "8 x 5" means 9am to 5pm local time

- Contact options
  - JBoss Customer Support Portal
  - 24 hour call center
  - Email

# JBoss Customer Support Portal

- Knowledge Module
  - Integrated search
  - Rated content
  - Certified solutions
  - Premium content

- Download Module
  - Latest certified JEMS software
  - Binary patches
  - Audit trail

- Registration Module
  - Registration of IT assets
  - Automated delivery of notifications
  - Knowledge subscriptions

- Case Management Module
  - Open, track, close support cases
  - Context-sensitive support recommendations
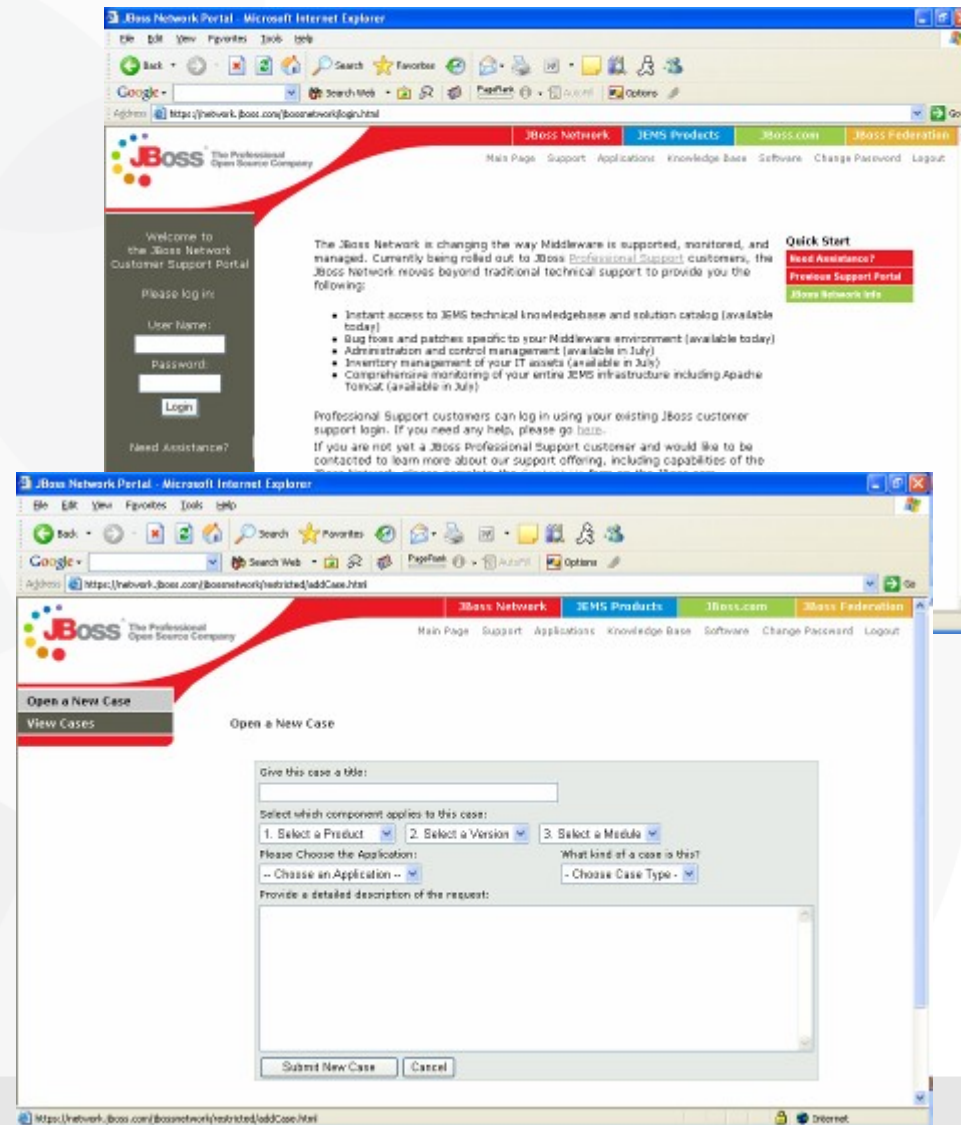
# Superior Customer Support Satisfaction
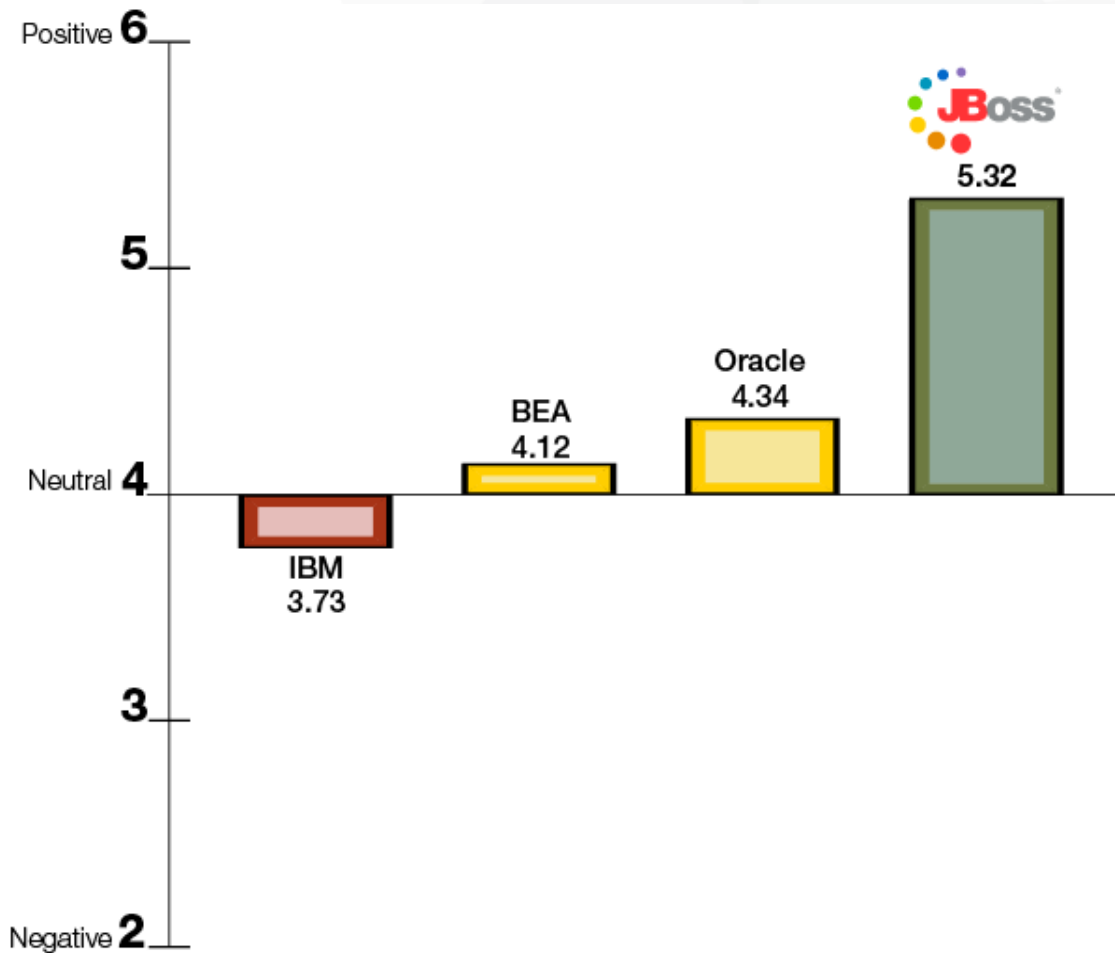


## Summary of Questions
- Understanding needs
- Meeting SLAs
- Professional service
- Knowledge transfer
- Support pricing/value
- Product knowledge
  - JBoss and other
- Multi-channel access
- Access to key staff
- Customer loyalty

Survey of existing JBoss Customers, on a scale of 1 (Completely Disagree) to 7 (Completely Agree)
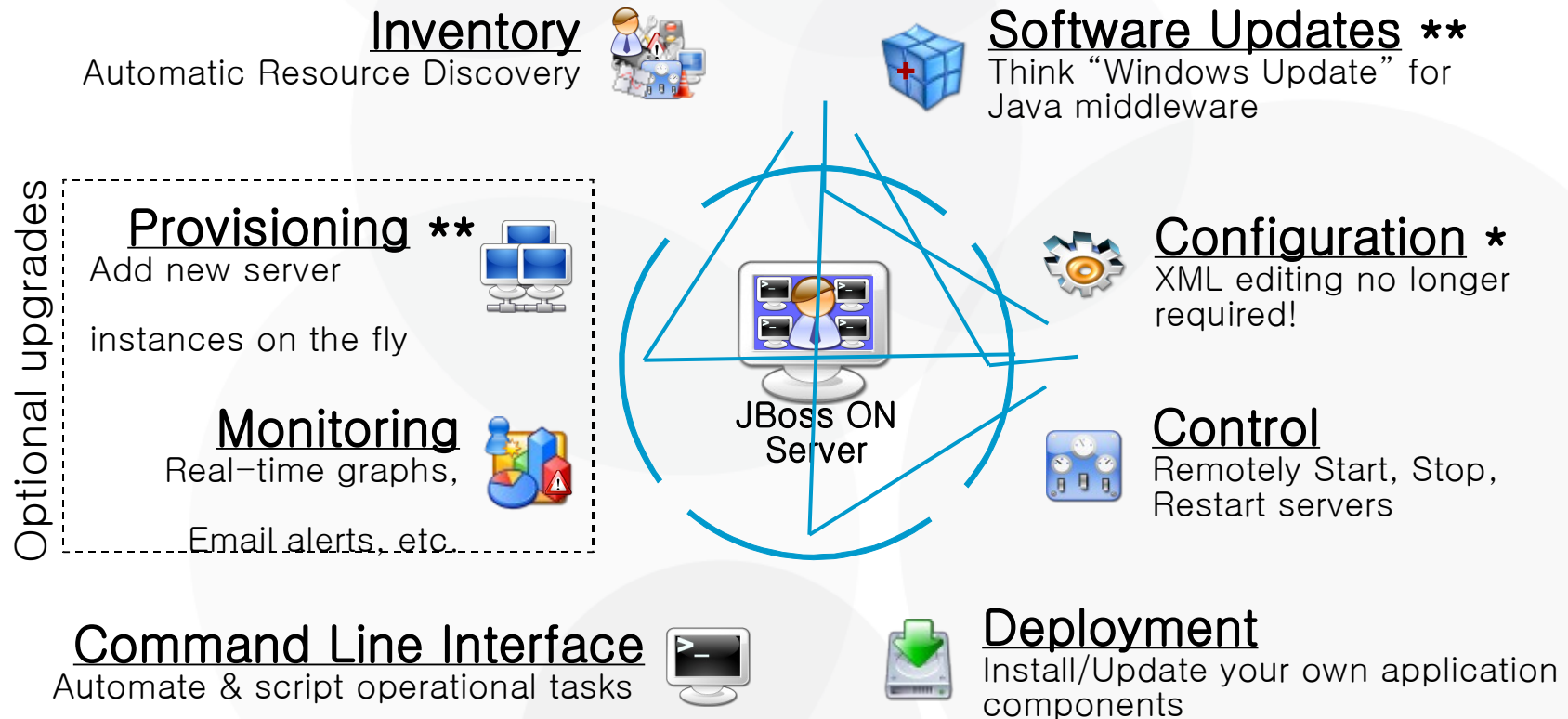
See http://www.jboss.com/pdf/customer_satisfaction.pdf
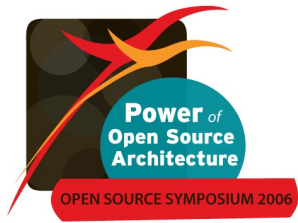
# JBoss Subscription Components

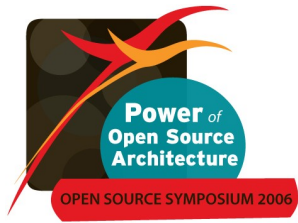Technical Support

JBoss Operations Network

Certified Software

# JBoss Operations Network

## Inventory
Automatic Resource Discovery

## Software Updates **
Think "Windows Update" for Java middleware

Optional upgrades

## Provisioning **
Add new server

instances on the fly

## Monitoring
Real-time graphs,

Email alerts, etc

## Configuration *
XML editing no longer required!

JBoss ON Server

## Control
Remotely Start, Stop, Restart servers

## Command Line Interface
Automate & script operational tasks

## Deployment
Install/Update your own application components

* Currently partially implemented
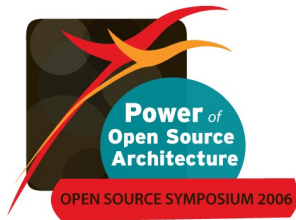** Available later in 2006

# JBoss Subscription Components

Technical Support
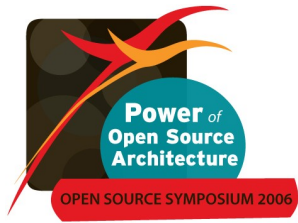
JBoss Operations Network

Certified Software

# Certified JEMS Software

- Certified JEMS releases
  - Download securely from JBoss.com
  - Production-ready versions only
  - Warranted to be virus-checked, etc.
  - Open Source Assurance Program

- Certified upgrades and patches
  - Binary updates immediately available to all subscribers
  - All updates are aggregated into next G.A. release
    - Updates released to OSS community as source code

- Solution Certification
  - Certification Kit
    - Compatibility testing, performance snapshot, interoperability etc…
  - Certification Service
    - Your application certified to run on JBossAS
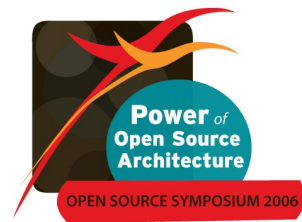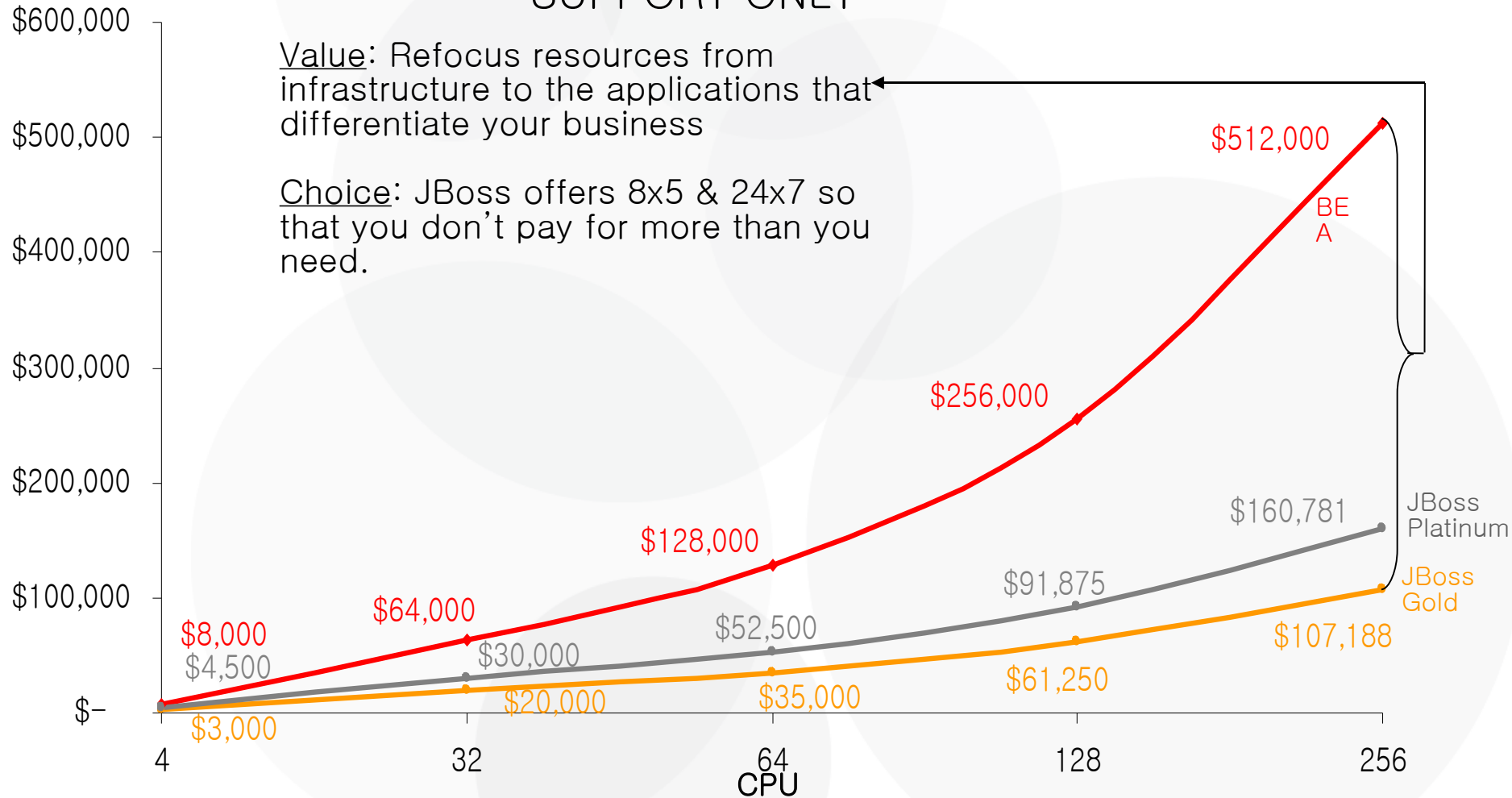
# JBoss Subscription Components

# JBoss AS vs. WebLogic Server

## SUPPORT ONLY

Value: Refocus resources from infrastructure to the applications that differentiate your business

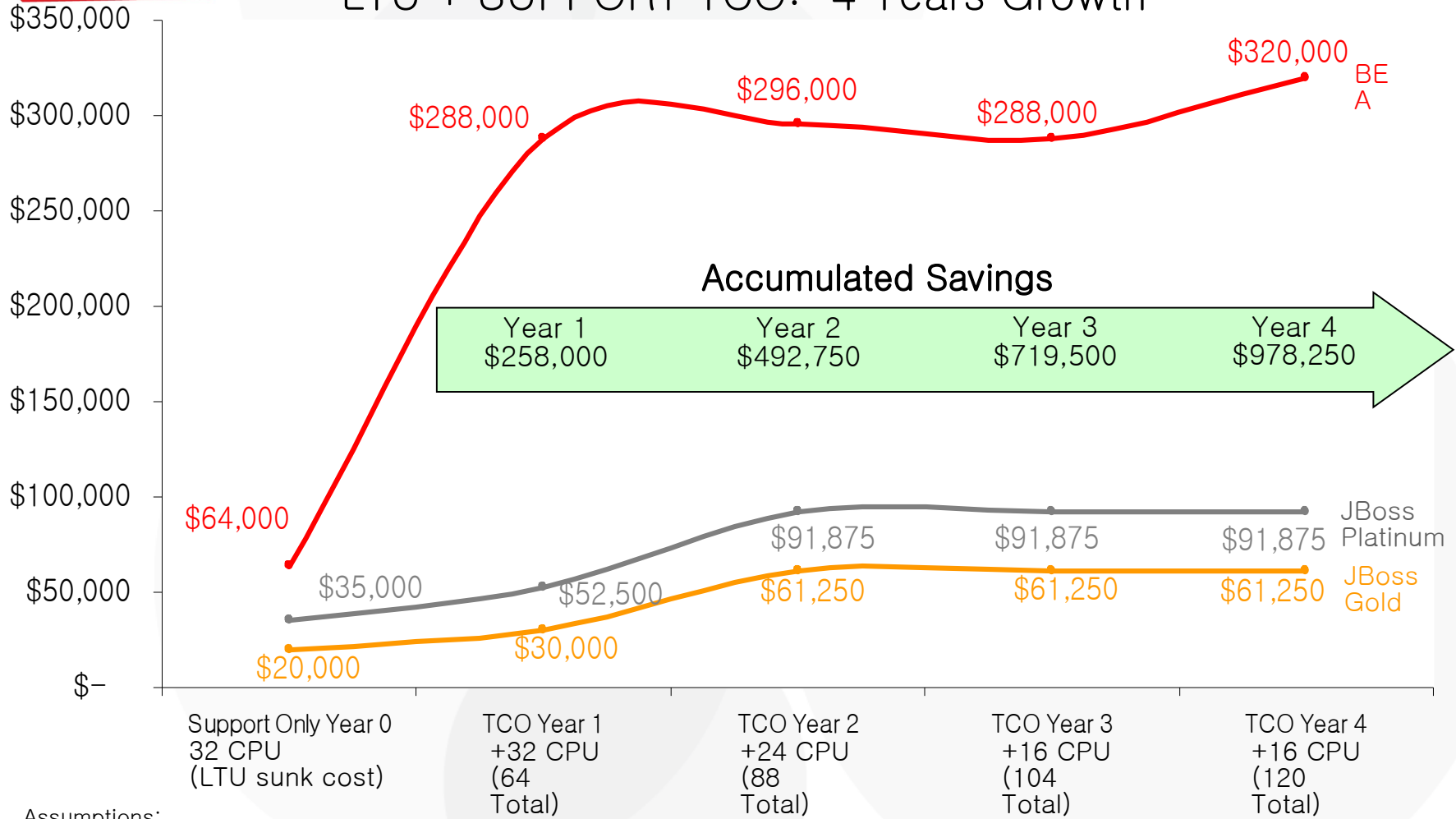Choice: JBoss offers 8x5 & 24x7 so that you don't pay for more than you need.



$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$-

$512,000 — BEA

$256,000

$128,000

$64,000

$8,000
$4,500

$30,000

$52,500

$91,875

$160,781 — JBoss Platinum

$107,188 — JBoss Gold

$3,000

$20,000

$35,000

$61,250

4    32    64    128    256

CPU

Assumptions:
• BEA WebLogic Server LTU price = $10,000/CPU
• Annual support & maintenance = 20% of list LTU price
• 24x7/ 1 hour SLA

• JBoss AS – Gold = 8x5/ 4 hour SLA
• JBoss AS – Platinum = 24x7/ 2 hour SLA

# JBoss AS vs. WebLogic Server
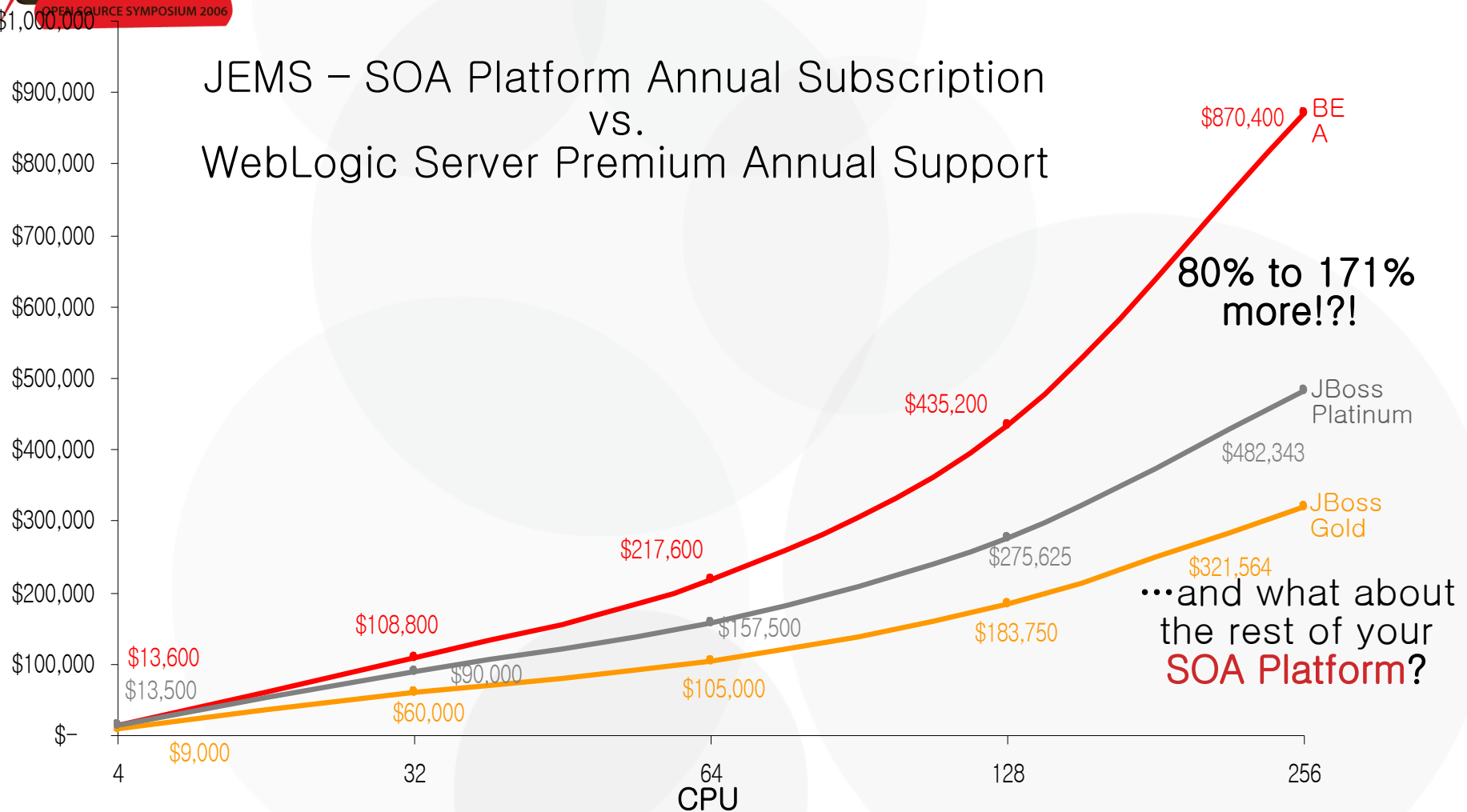
## LTU + SUPPORT TCO: 4 Years Growth

# Superior Value



JEMS – SOA Platform Annual Subscription
vs.
WebLogic Server Premium Annual Support

**80% to 171% more!?!**

$870,400 — BEA

$435,200

$217,600

$108,800

$13,600

$13,500

$90,000

$60,000

$9,000

$157,500

$105,000

$275,625

$183,750

$482,343 — JBoss Platinum

$321,564 — JBoss Gold

···and what about the rest of your **SOA Platform**?

CPU

4    32    64    128    256

$1,000,000
$900,000
$800,000
$700,000
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$–

Assumptions:
• BEA WebLogic Server Premium LTU price = $10,000/CPU
• Annual support & maintenance = 20% of list LTU price
• 24x7/ 1 hour SLA

• JEMS – Gold = 8x5/ 4 hour SLA
• JEMS – Platinum = 24x7/ 2 hour SLA

Power of Open Source Architecture
OPEN SOURCE SYMPOSIUM 2006
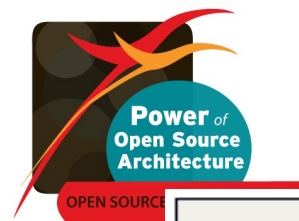
# JBoss Consulting Services

| JBoss Consulting Service | Duration | Pricing Model |
|---|---|---|
| **Proof of Concept** | | |
| Proof of Concept | Varies | Custom Quote |
| **Migration** | | |
| Assessment | 4-5 days | Fixed |
| Education/Enablement | 4-5 days | Fixed |
| Implementation | Varies | Custom Quote |
| **Rapid Solution** | | |
| Application Server Bundle | 20 days | Fixed |
| Application Server Certification | 3-5 days | Fixed |
| Hibernate/ EJB 3.0 | 3-5 days | Fixed |
| Performance Tuning & Optimization | 3-5 days | Fixed |
| Security Lockdown | 3-5 days | Fixed |
| Clustering and High Availability | 3-5 days | Fixed |
| Java EE Architecture & Design | 3-5 days | Fixed |
| **Enterprise Architect** | | |
| Part-time | 2 days/mo | Fixed |
| Dedicated | Full-time | Fixed |
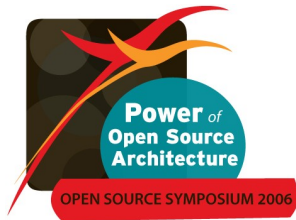
# JBoss Training Services



- Public Training
  - Training courses held at major cities around the world

- Professional Certification
  - Requires completion of training courses + certification exam
  - Ensures consistent and quality service delivery

- Onsite training classes available

- JCredits – pre-paid with built-in discounts
  - Convenient and flexible way to manage your training and consulting requirements
  - Discounts available for JBoss Subscription customers

- Available from Red Hat and Certified Partners

# Why JBoss for SOA?



✓ Better Software
- Peer Review
- Accelerated Software Evolution
- Extended QA through OSS Community
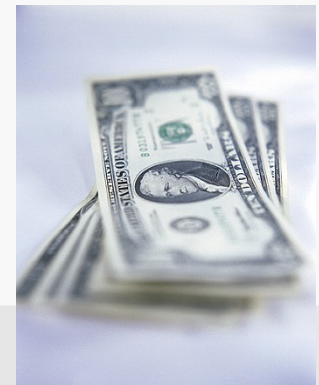
✓ Better Service
- Incentives
- Transparency
- Experts Up-Front

✓ • Better Value
- Zero License Fees
- Freedom from Vendor Lock-in
- Elimination of Linear Costs

# Questions?

Questions? Harish Pillay, hpillay@redhat.com