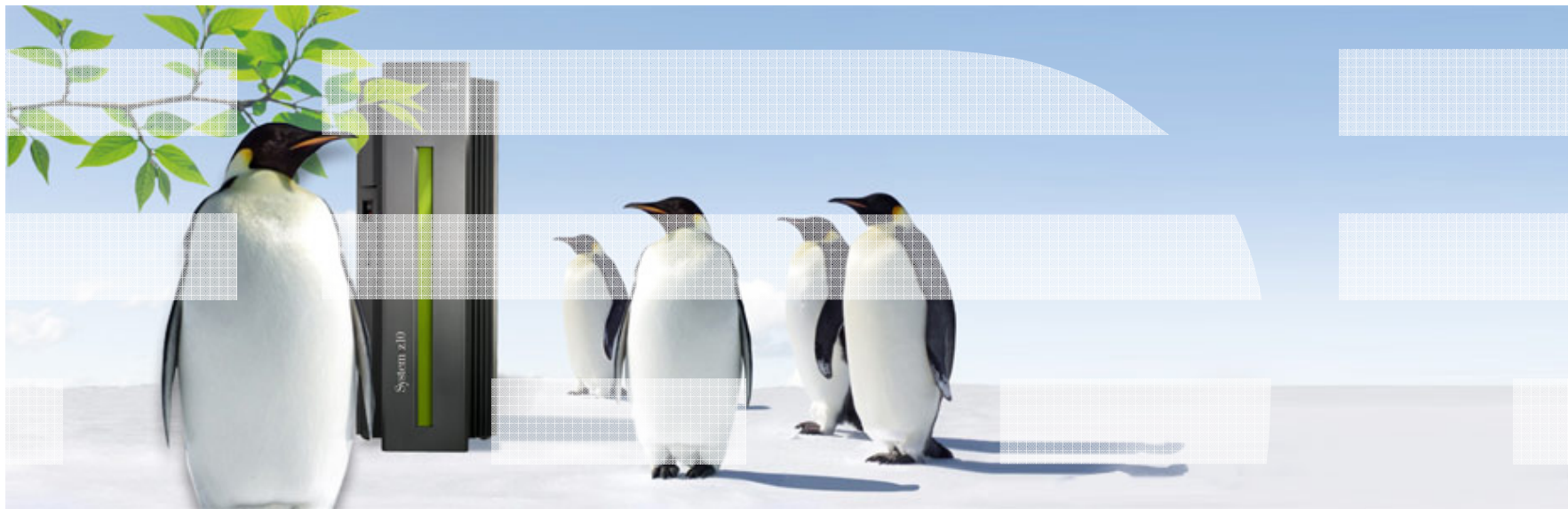


Bill Reeder
zEnterprise WW Sales Leader IT Optimization
and Cloud
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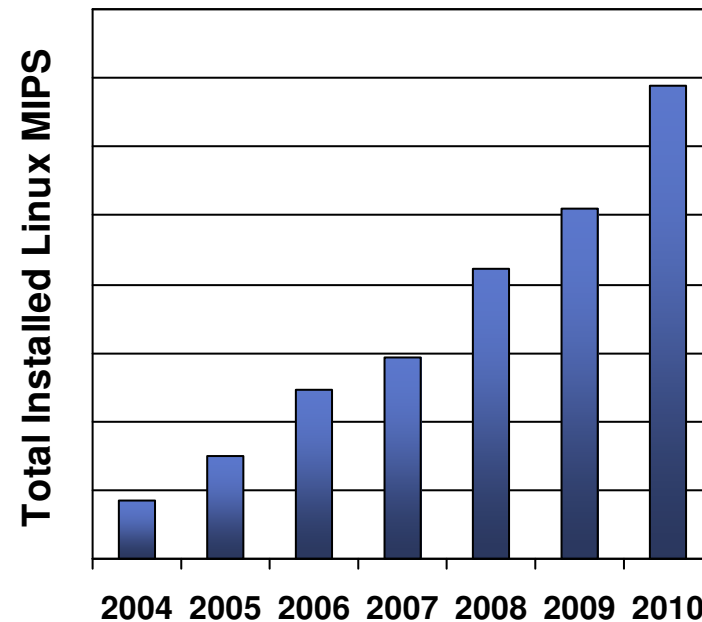
Oracle Projects for Linux on zEnterprise

It's all about Workloads: Cloud consolidation, smart analytics and optimization



- The momentum continues:
 - Shipped IFL volumes increased 34% from 4Q09 to 4Q10
 - Installed IFL MIPS increased 35% from 4Q09 to 4Q10
- Linux is 19% of YE 2010 System z customer install base (MIPS)
 - YE 2009: 16% of install base
- Linux revenue grew 34% YTY in 4Q10
- 80% of the top 100 System z clients are running Linux on the mainframe
- More than 3,000 applications are available for Linux on System z
- Virtualization gold standard with z/VM

Installed Linux MIPS



* Based on YE 2004 to YE 2010

System z is proving to reduce operating costs, particularly those related to systems management, energy consumption, floor space, storage, and networking costs.

- System z sales revenues in 4Q 2010 grew 69% year over year, best in the last decade!

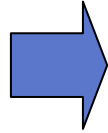


- Share gain 13 pts YTY, MIPS grew 58%
- Shipped nearly 500 zEnterprise Systems since July 2010 launch
- Added 60+ new customers in 2010, 24 in the fourth quarter alone

- Positive results continue in 1Q 2011 revenue up 41% year over year, MIPS up 34%.

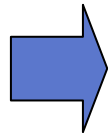
Source: IBM 1Q'11 Earnings Report

- System z recognized as leader by Analysts: IDC and Gartner



- IDC's Worldwide Server Tracker 4Q10 \$250K+ indicates IBM was the leader at 37% revenue share, growth up 69% and share gain of 9 points Source: IDC WW Server Tracker Results 4Q'10 and FY 2010
- Gartner WW Server Tracker indicates System z held #1 position at 43.9% share up 9.1 pts by revenue growth of +15% YTY in a market that was down -9% Source: Gartner WW Server Tracker Results 4Q'10 and FY 2010

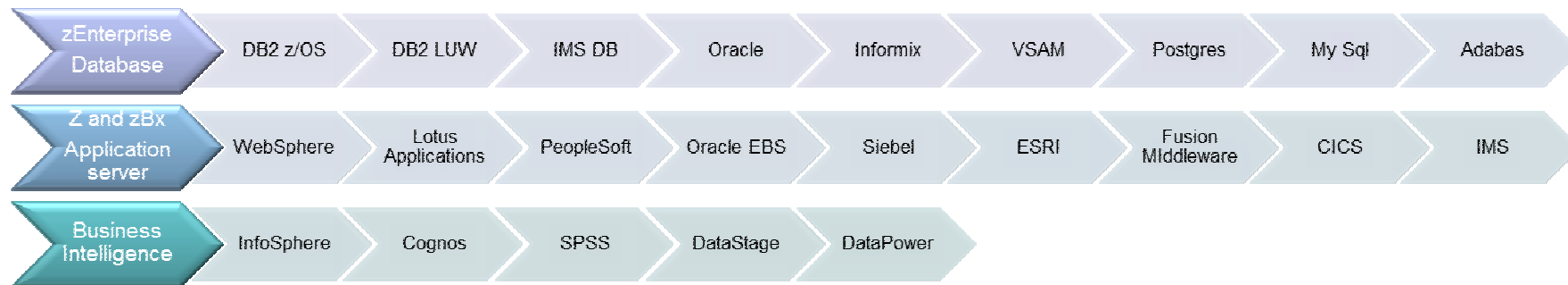
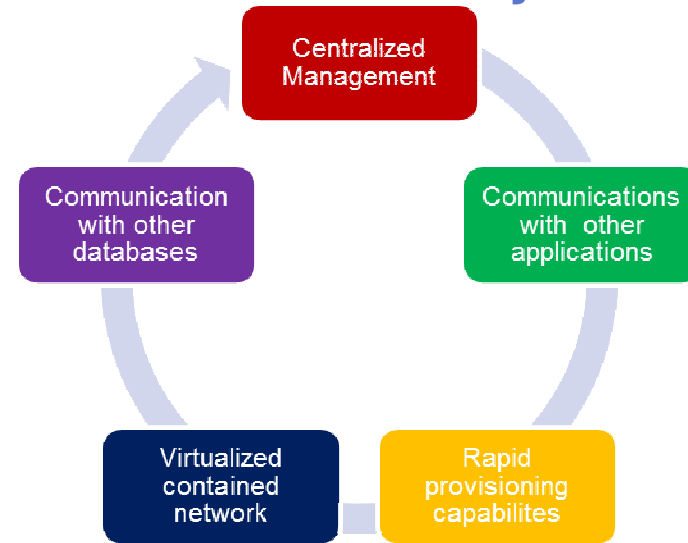
- The *alleged* mainframe skills gap is being successfully addressed.



- There are now 814 schools (60% outside the U.S.) involved in the [IBM Academic Initiative for System z](#), and just under 33,000 students have gone through the program

zEnterprise Solutions Can Support and Integrate Data Like No Other Platform, Providing a Foundation for Other Analytic and Application Capability

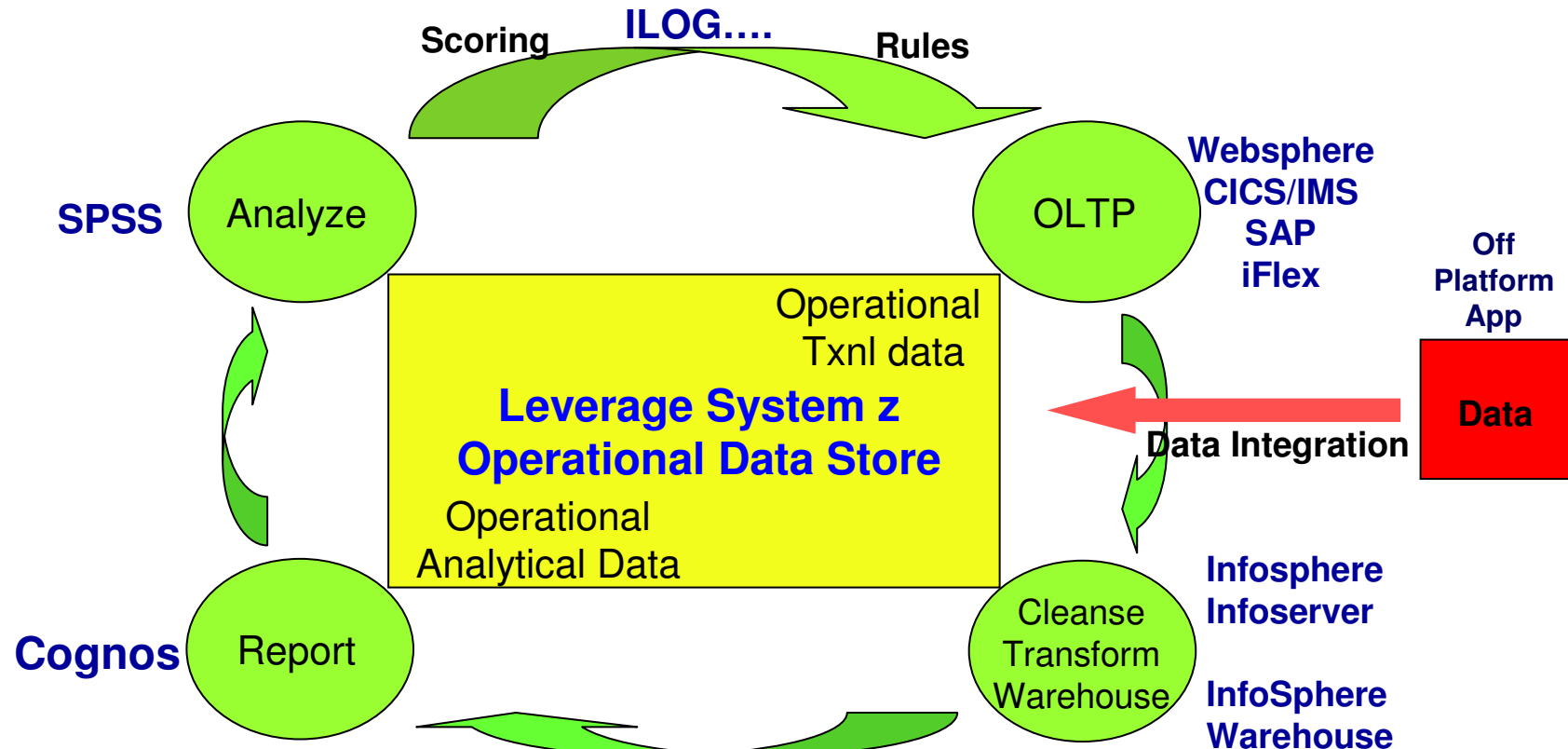
- The only platform that can run nine commercial databases, supported at the same time
- Better align and synchronize data, for data integrity. Use the internal architecture to consolidate database communications
- Leverage internal networking between databases and applications
- Centralize management across entire enterprise



- Consolidation of databases
- Tighter integration of data to applications
- Business intelligence close to the data

System z Platform Direction: From Data hub to Analytics hub

- Exploit Industry Trends that play to the strengths of System z
 - Data Consolidation and creation of “Enterprise Database of Record”
 - BI/Analytics application consolidation and creation of enterprise single version of truth
 - Operational Business Intelligence with z QOS requirements
 - Operational trxs integrated with predictive analytics to provide additional insight
 - Superior end/end analytics life cycle integration
 - Analytics as a service in an internal or external cloud
- Leverage z Enterprise architecture, accelerators, multi-workload integration (zOS/zLinux)

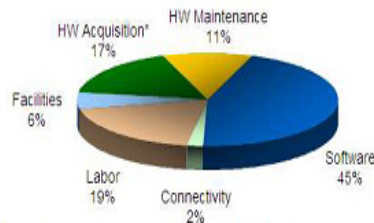


- The zEnterprise is *binary compatible* with previous generations of System z
- Oracle certifies OS level only – not to hardware or hardware virtualization
 - *Any hardware running certified OS level implicitly supported*

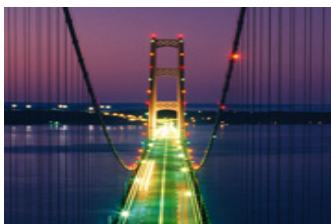
- *Oracle Database 11g Release 2 Linux supported distributions minimum levels certified, later service levels are also supported:*
 - *SLES10 SP3 and SLES11 SP1*
 - *Red Hat 5.4*



Reduce costs on a bigger scale



- **Significant savings derived from reductions in server footprints, simplified infrastructure, lower software costs and a flexible and simplified infrastructure which is easy to manage.**
- **Consume less power and floor space**
- **Save on software license fees.**
 - Consolidating from 86 servers to a single IFL could potentially reduce licensing costs by as much as 97 percent.
- **Minimize hardware needed for business continuance and disaster recovery**



More flexibility, minimize lead time for new projects

- **Consolidating Oracle and Linux environments to a single ELS server offers significant advantages in terms of flexibility.**
- **Rapid provisioning reduces lead time for new IT projects, helping to increase business agility.**

General questions

- Are you using more than 10 Oracle DB x86 servers?
- Is your department considering or complying with mandates to use open source software to help lower software licensing costs?
- Are you having difficulty meeting peak time demand and SLAs?
- Do you need higher levels of uptime for your customers?
- Would you like to increase the productivity of your IT staff and enable them to manage even more server images?
- Would you like to take advantage of many reliability and systems management best practices that do not exist on distributed systems platforms?

CIOs:

- What are you planning to do to reduce rising Oracle licensing costs?
- Are you aware that server consolidation can significantly reduce both hardware and software licensing costs?
- Can you support business needs for rapid change?
- How much cost and time does your organization spend on manual processes?
- Are you concerned about data centre growth in terms of space and power consumption?
- Are you currently able to leverage a single source of data and the business insight derived from that data?

Architects:

- Would you like to eliminate some network communication handoffs between systems, which can allow to transaction performance improvements, simplified integration, and ease of system support and administration?
- Do you need a stable and reliable infrastructure that gives developers the creativity to explore new ideas?
- Are you being asked to explore open source computing models to reduce costs, yet are concerned about security, availability and reliability?
- Do you need an economical, reliable platform to deliver the ability to meet unpredictable peaks or growth within the business without required elongated procurement cycles?
- Would you like a more simplified and efficient hardware solution deployment, one that delivers on and off capacity on demand over the web?

Developers / IT Managers:

- Are you able to deliver everything the business asks for on time & in budget?
- Do you have to write custom code to connect processes internally or externally?

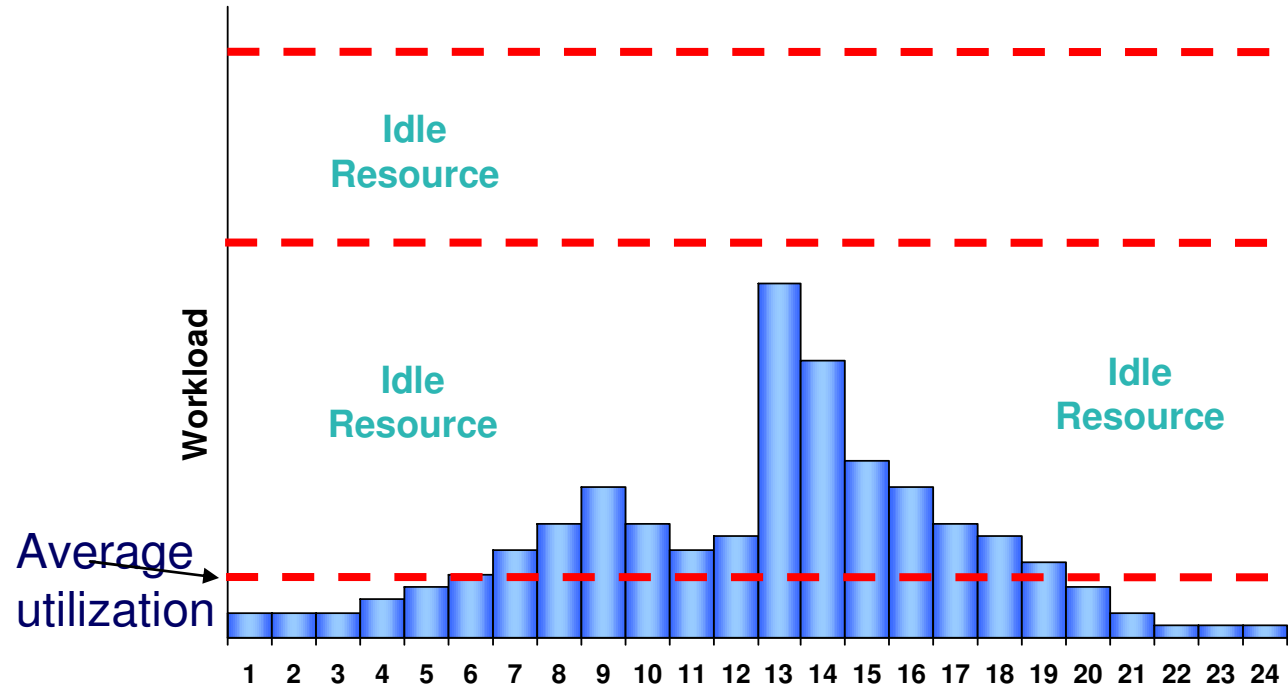
Utilization of Distributed Servers

Provision for expected growth

Provision capacity for peak workload

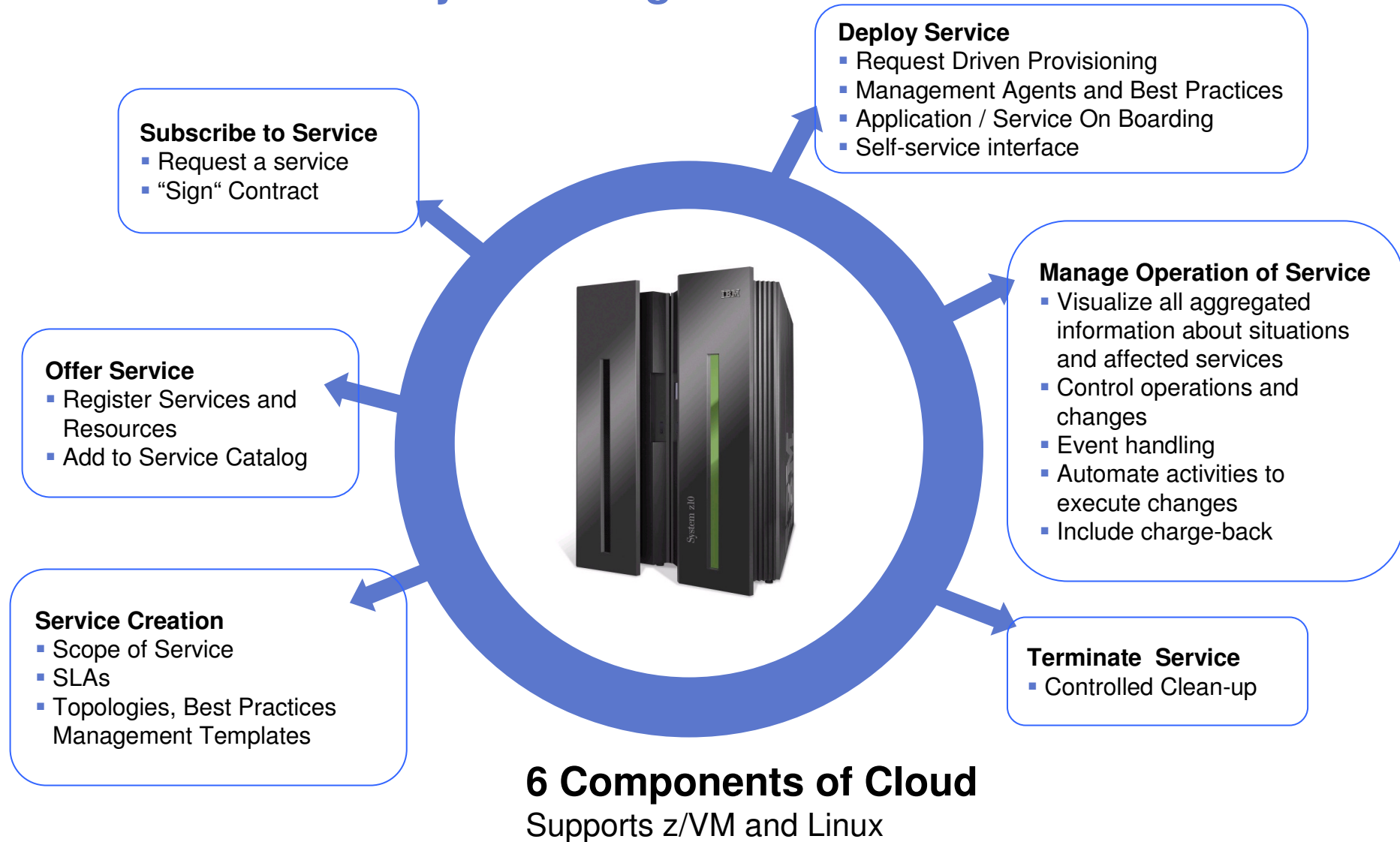


Server dedicated to one application



- ▶ Typical utilization of Windows Servers 5 – 10%
- ▶ Typical utilization of UNIX Servers 10 – 20%
- ▶ Typical utilization of System z Servers 85 – 100%

Cloud Service Lifecycle Management



Another Workload for System z: Announcing Oracle E-Business Suite on Linux for System z

- Enterprise Resource Planning
- Financials, HR, Project Management
- Supply Chain Management
- Manufacturing
- Technology (Oracle)
- CRM
- Procurement
- Asset Lifecycle Management
- Product Lifecycle Management



Cross industry solution with highest traction in:

- Financials Services
- Mfg (auto parts, packaging, electrical controls, engines, materials, mining)
- High Tech (both products and design companies , semiconductors)
- Asset Based Industries (like E&C, Utilities, Oil & Gas services)
- Telecommunications
- Travel & Transport
- Public Sector (Federal Agencies & Counties) etc..

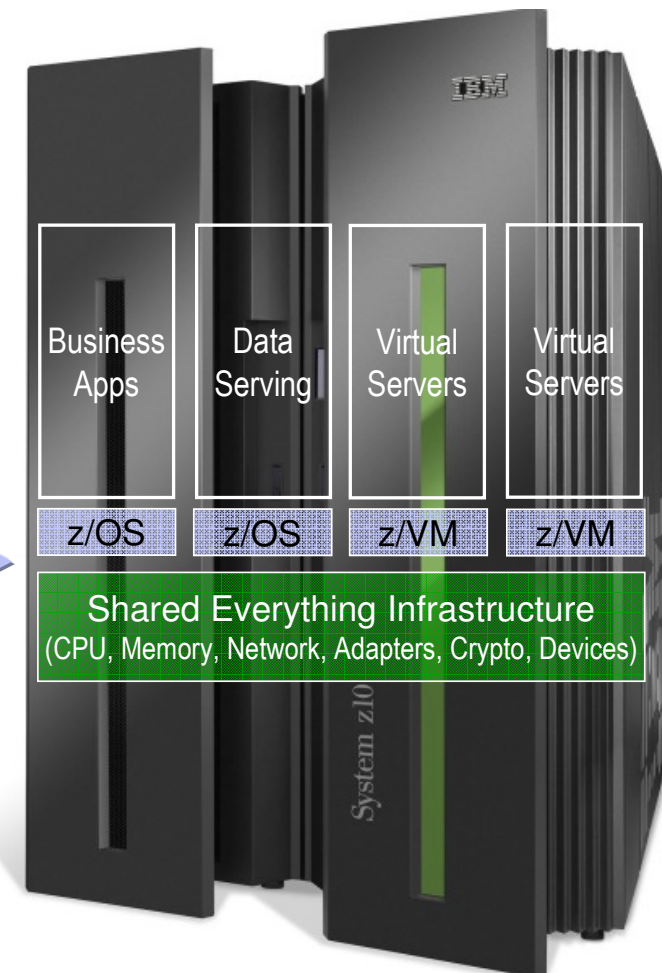
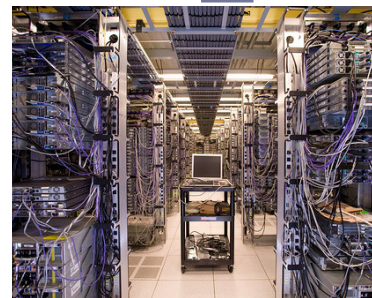
IBM System z IT Optimization and Consolidation

Helping Clients Save Money, Reduce Complexity, Improve Service

- Consolidate 3x or more* servers per core than virtualized x86 offerings: spend less on software, energy, floor space and disaster recovery
- Manage more server images with fewer people
- Exploit extensive z/VM facilities for life cycle management: provisioning, automation, monitoring, workload management, capacity planning, security, charge back, patching, backup, recovery, more...
- Deploy new servers and applications faster: in seconds instead of hours or days

“From every perspective, running applications under Linux on System z makes sense for our organization. Performance, reliability, disaster recovery, server provisioning and cost efficiency have all seen dramatic improvements – helping us deliver better service and value to our members across the state.”

– Ted Mansk, Dir. of Infrastructure Engineering and Databases at Blue Cross Blue Shield of Minnesota



IBM zEnterprise System – Best-in-class Systems and Software Technologies

A system of systems that unifies IT for predictable service delivery



Unified management for a smarter system:
zEnterprise Unified Resource Manager

- Part of the IBM System Director family, provides platform, hardware and workload management
- Unifies management of resources, extending IBM System z® qualities of service across the infrastructure

The world's fastest server:
IBM zEnterprise™ 196

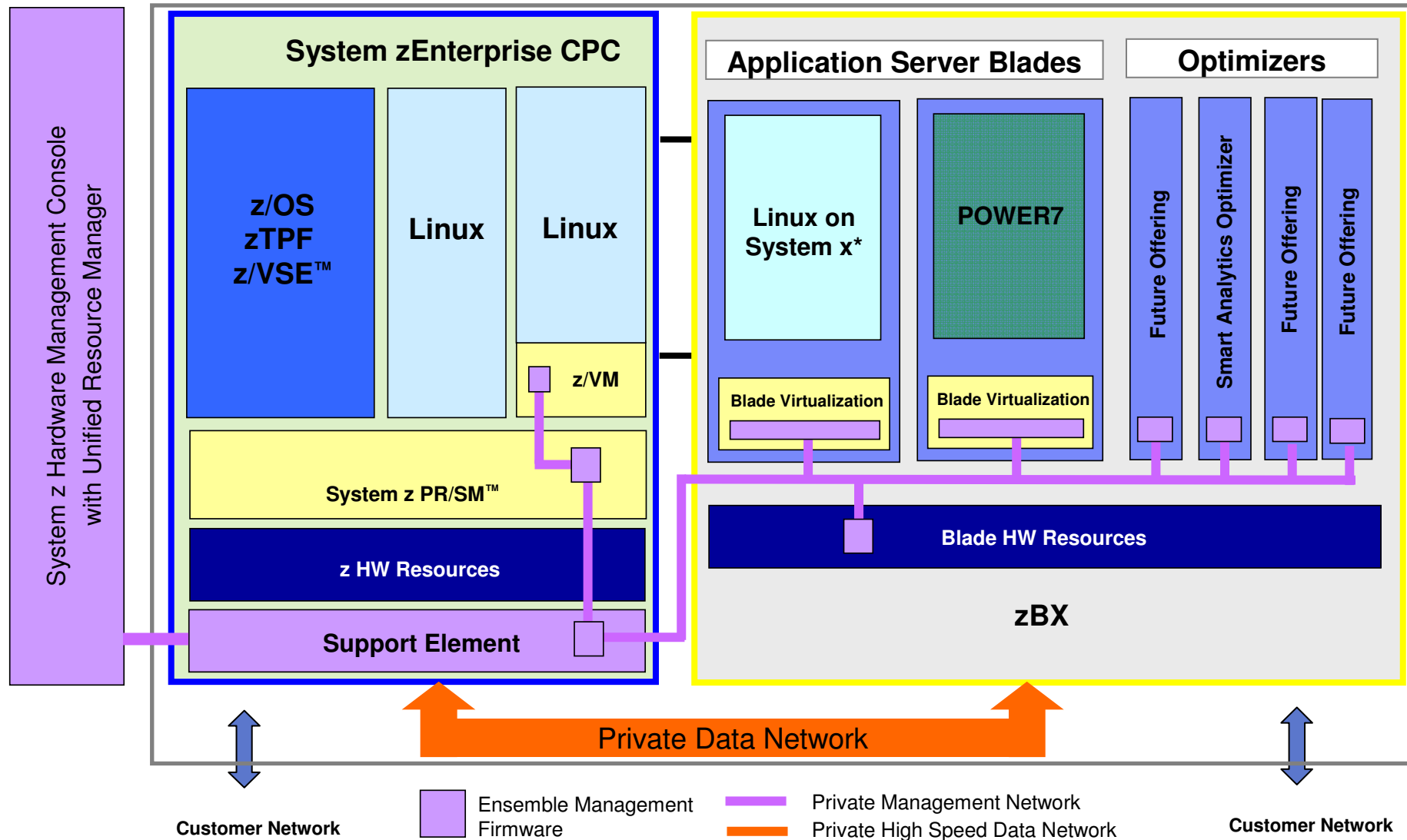
- Ideal for large scale data and transaction serving and mission critical applications
- Most efficient platform for Large-scale Linux consolidation
- Leveraging a large portfolio of z/OS and Linux on System z applications
- Capable of massive scale up, over 50 Billion Instructions per Second (BIPS)



Scale out to trillion of instructions per second:
zEnterprise BladeCenter® Extension (zBX)

- Selected IBM POWER7™ blades and IBM System x® Blades* for tens of thousands of AIX® and Linux applications
- High performance optimizers and appliances to accelerate time to insight and reduce cost
- Dedicated high performance private network

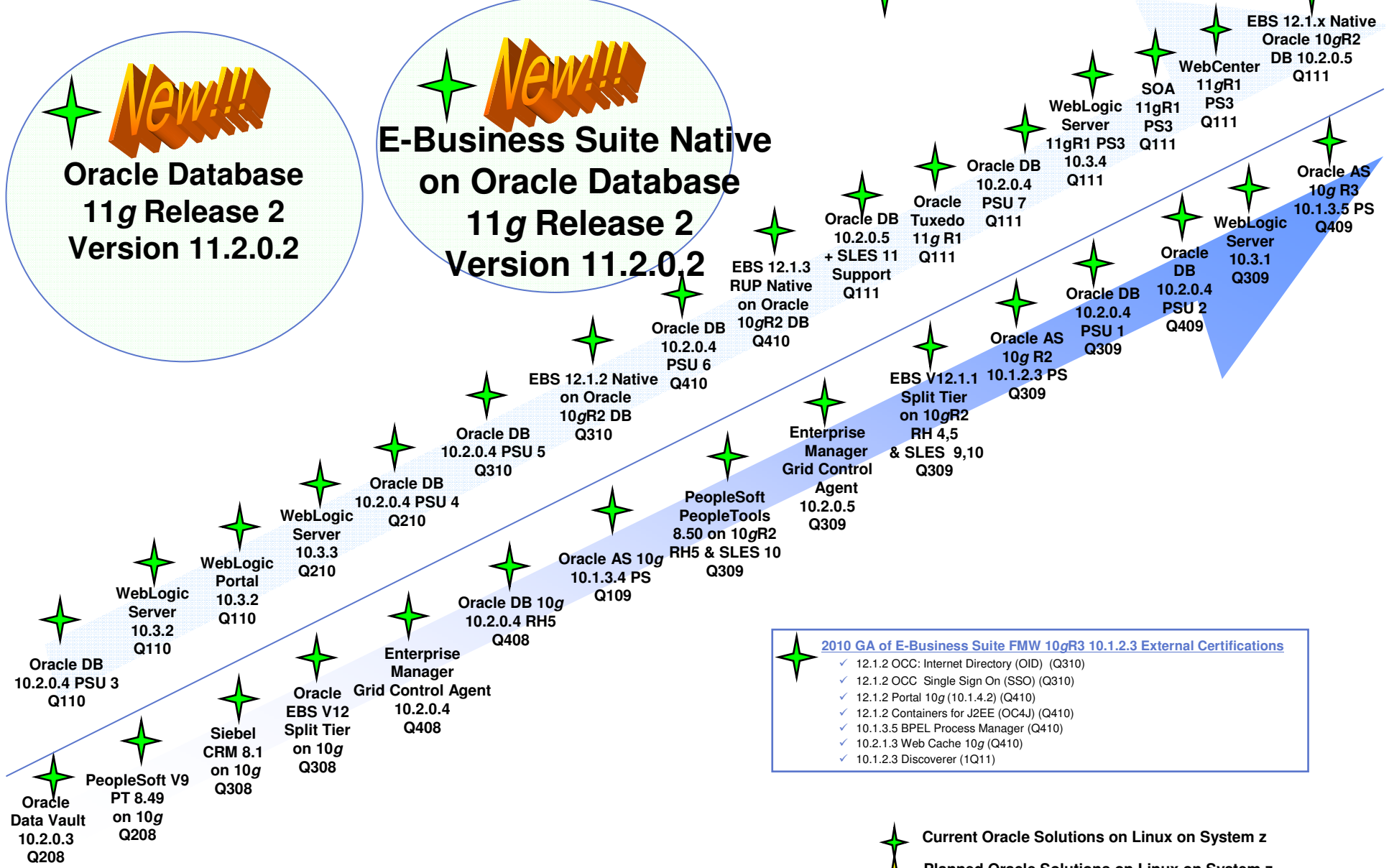
zEnterprise with a System z Blade Extension (zBX)



*All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice. Any reliance on these Statements of General Direction is at the relying party's sole risk and will not create liability or obligation for IBM.

New!!!
Oracle Database 11g Release 2 Version 11.2.0.2

New!!!
E-Business Suite Native on Oracle Database 11g Release 2 Version 11.2.0.2



- 2010 GA of E-Business Suite FMW 10gR3 10.1.2.3 External Certifications**
- ✓ 12.1.2 OCC: Internet Directory (OID) (Q310)
 - ✓ 12.1.2 OCC Single Sign On (SSO) (Q310)
 - ✓ 12.1.2 Portal 10g (10.1.4.2) (Q410)
 - ✓ 12.1.2 Containers for J2EE (OC4J) (Q410)
 - ✓ 10.1.3.5 BPEL Process Manager (Q410)
 - ✓ 10.2.1.3 Web Cache 10g (Q410)
 - ✓ 10.1.2.3 Discoverer (1Q11)

★ Current Oracle Solutions on Linux on System z
 ★ Planned Oracle Solutions on Linux on System z

- "IDC analysts said the 69.1 percent revenue growth for IBM's System z models was the fastest they had ever recorded for IBM mainframes." *eWeek*
- "It is clear that IBM is investing to make sure that System z sees growth in 2011, and that new sales will include both return customers and net-new ones." *Jean Bozman, IDC*
- "IBM's zEnterprise refresh is the right product at the right time to capitalize on renewed mainframe demand." *Greg Richardson and Stuart Williams, Technology Business Research*
- "The zEnterprise System is more than IBM's next generation mainframe. The new architecture employed in this heterogeneous server ecosystem creates a new disruptive paradigm that can simplify data center operations, improve productivity and responsiveness, lower costs, eliminate duplicate databases and reduce risk." *Cal Braunstein, Robert Frances Group*
- "...with zBX extensions, zEnterprise promises to deliver state-of-the-art cloud-like capabilities for those who are open-minded in applying mainframe technology." *Rich Partridge, Ideas International*
- "IBM ... has taken an unfashionable platform and built a successful skills program for it directly targeting a great economic opportunity - a likely career in financial services. IBM has invested heavily, and is getting a return on its investment. Younger cooler platforms could learn a lot from IBM's mainframe developer relations efforts." *James Governor, RedMonk*
- "The alleged mainframe skills gap purported by other research analyst firms is being successfully addressed." *Joe Clabby, Clabby Analytics*

Oracle Documentation

- Database Client Quick Installation Guide for IBM: Linux on System z -E18190
- Database Quick Installation Guide for IBM: Linux on System z -E18182
- Oracle® Database Release Notes 11g Release 2 (11.2) for Linux - E16778-09
- Grid Infrastructure for Linux -E17212- 11
- Oracle® Real Application Clusters Installation Guide – E17214

My Oracle Support Notes

- 1306465.1 - Getting Started - 11gR2 Grid Infrastructure, ASM and DB (IBM: Linux on System z)
- 1290644.1 - Requirements for Installing Oracle 11gR2 on SLES11 on IBM: Linux on System z (s390x)
- 1306889.1 - Requirements for Installing Oracle 11gR2 on RHEL 5 on IBM: Linux on System z (s390x)
- 1308859.1 - Requirements for Installing Oracle 11gR2 RDBMS on SLES 10 SP3 on IBM: Linux on System z (s390x)
- 1086769.1 - Ensure you have prerequisite rpms to install Oracle Database and AS10g(midtier) on IBM: Linux on System z (s390x)
- 169706.1 - Oracle Database on Unix AIX,HP-UX,Linux,Mac OS X,Solaris,Tru64 Unix Operating Systems Installation and Configuration Requirements Quick Reference (8.0.5 to 11.2)



IBM

IBM System z Data sheets:

[IBM System z Solution Edition for Enterprise Linux](#)

[Enterprise Linux Server](#)

[IBM zEnterprise System](#)

[Linux on System z](#)

[z/VM virtualization and Linux on IBM zEnterprise System](#)

IBM Offerings:

[Financing](#)

Client Case Studies For Oracle On Linux For System Z Servers:

[Transzap](#)

[Bank of New Zealand](#)

Clabby Analytics Whitepapers:

[ELCOT](#)

[KMD](#)

Other Client Studies:

[Dundee](#)

Ziff Davis Enterprise Whitepaper:

[Scaling Your Oracle E-Business Suite with IBM System z and Linux](#)

Presentations:

[System z SIG Presentations](#)

[NEW System z eBook and Video: Oracle on IBM zEnterprise System](#)

- Click here [System z eBook and Video](#) to download, unzip and save to your desktop:
- The self extracting .exe will place an IBM System z icon on the desktop for easy future access

Oracle Solutions on System z Server Data Sheets:

[FAQ Running Oracle Database 11g Release 2 on Linux on IBM System z Servers](#)

[Oracle and System z FAQ](#)

- [Link is also available on Oracle website](#)

[IBM System z running Linux Oracle Database and Middleware Solutions](#)

[Oracle E-Business Suite on Linux for IBM System zEnterprise](#)

[Siebel on Oracle on Linux for IBM System z Servers](#)

[Siebel on DB2 z/OS on IBM System z Servers](#)

[PeopleSoft on Oracle on Linux for IBM System z Servers](#)

[PeopleSoft on DB2 z/OS on IBM System z Servers](#)

Oracle Solutions on System z Redbooks:

[Experiences with Oracle Solutions on Linux for IBM System z](#)

Questions?



THANK YOU !!!

