



Çözümler Zirvesi 2013

Geleceği Şekillendiren Teknolojiler

ERP Ortamlarınız için IBM Altyapıları

Özlem Koç

SAP Çözümleri Uzmanı

ozlem@tr.ibm.com

IBM and SAP® have worked in tandem to deliver solutions to the market for over 40 years. As trusted, long standing partners IBM and SAP have collaborated to develop integrated, proven, top-to-bottom, end-to-end joint solutions ..



A perfect match for smarter businesses



*"The SAP application portfolio is open to **capitalize on the reliability and scalability of a heterogeneous POWER and x86 infrastructure**. IBM's NGP will enable our clients to tune their server and storage infrastructures, matching the various SAP workloads onto an NGP optimized system. It promises to be **a new way of simplifying the deployment and management of enterprise applications**."*

*Sethu M, Deputy CTO,
Head of Product Architecture and Technology Strategy*

How IBM Complements SAP Solutions

Strategy, Business and IT Consulting

- Corporate strategy
- Business process Reengineering
- Implementation Services
- IT Management Consulting

Applications



- SAP Business Suite
- SAP Business All-in-One
- SAP Business byDesign
- SAP SAP Business One
- SAP Analytics Solutions
- SAP Mobility Solutions

Infrastructure Services

- Plan & Design
- Build & Implement
- Operate & Run
- Implementation Services
- Sourcing Services

Middleware

Information Management Human Collaboration Interaction Software Development Systems Management Transactions & Messaging Business-Intelligence Governance, Risk, Compliance



Infrastructure

Linux



Windows



AIX



IBM i



z/OS

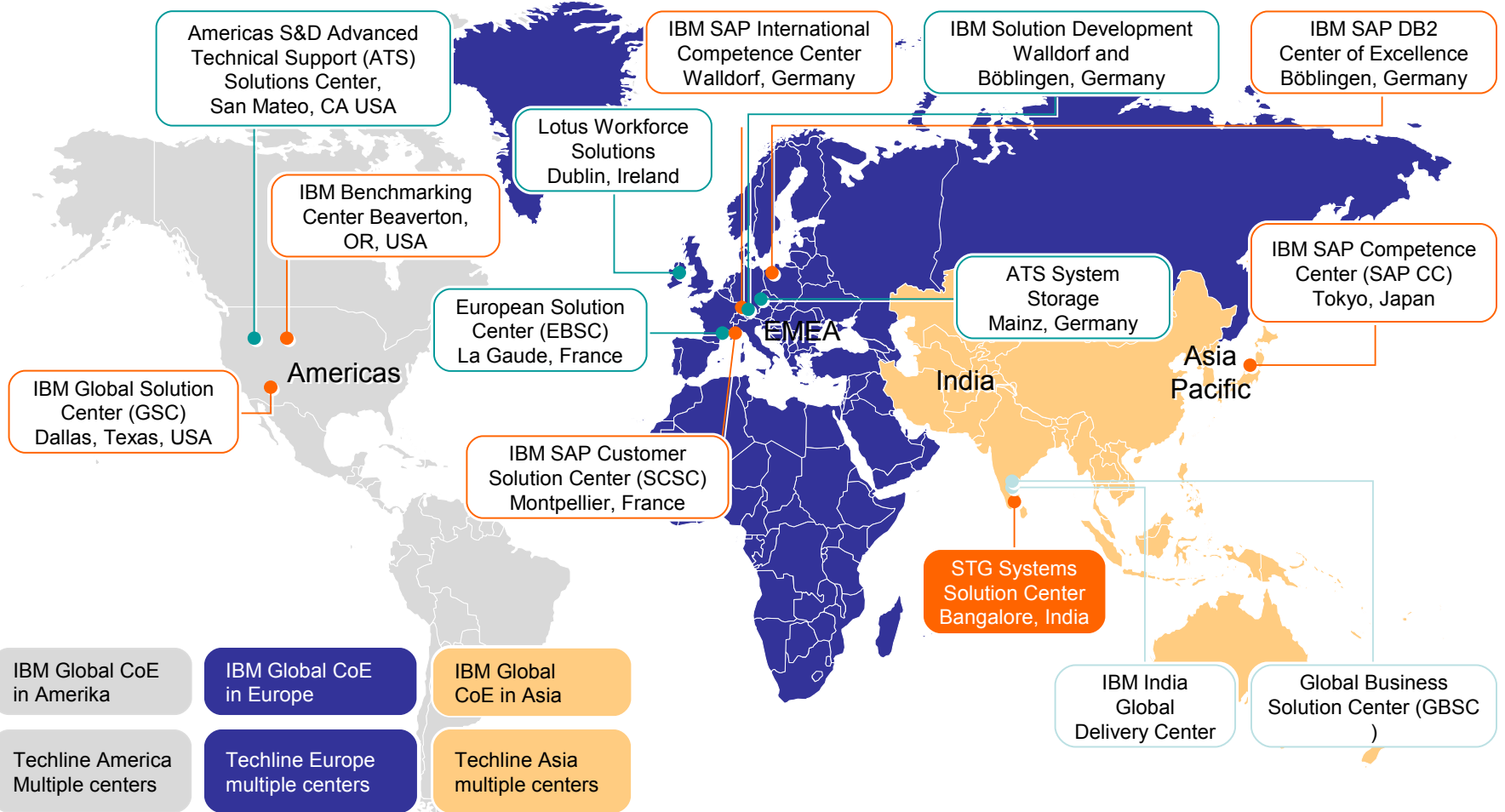


Storage



Servers and Storage

A Global Team of more than 26.000 IBM Employees develops and supports Solutions for and with SAP



IBM SAP International Competence Center (ISICC)

Provide technical pre-sales solution support for SAP applications and technology with IBM hardware and software platforms.



- On-Site Resources
 - IBM hardware and software brand experts
 - Technology managers
 - Solutions sales
 - Project managers
- SAP Sizing Expertise
 - Creation and ownership of worldwide sizing tools and processes
 - Support the IBM Techline resources
- Technology
 - IBM and SAP projects
 - Benchmarking/Sizing tests
 - Redbooks and whitepapers
 - Tools
- Technical Sales Support
 - IBM Technical Sales
 - Business Partners
- Executive briefings
- Third level support when necessary

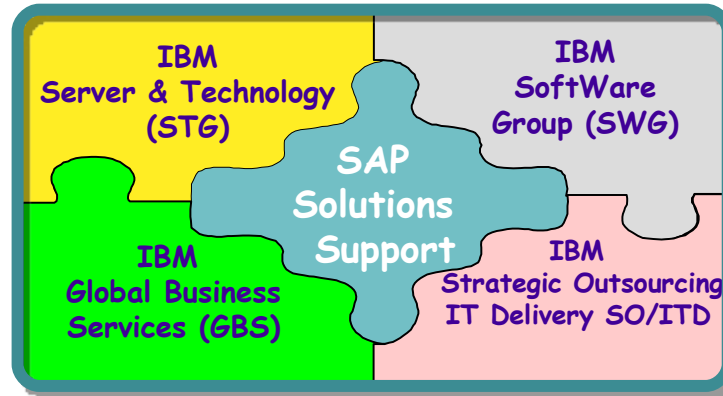
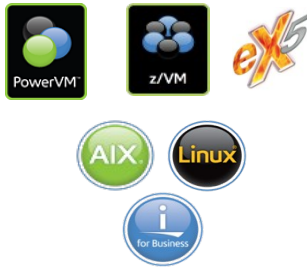
Founded by IBM and SAP in 1993, located at the SAP headquarters in Walldorf, Germany

Designing SAP Infrastructures

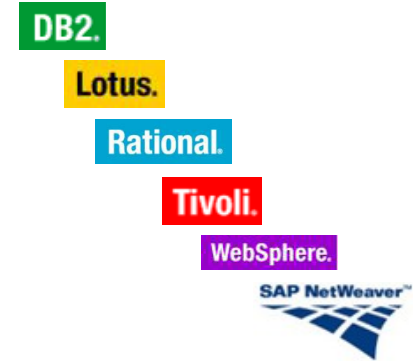
IBM **e**server



IBM Virtualization Solutions



SAP Infrastructure Solution Team

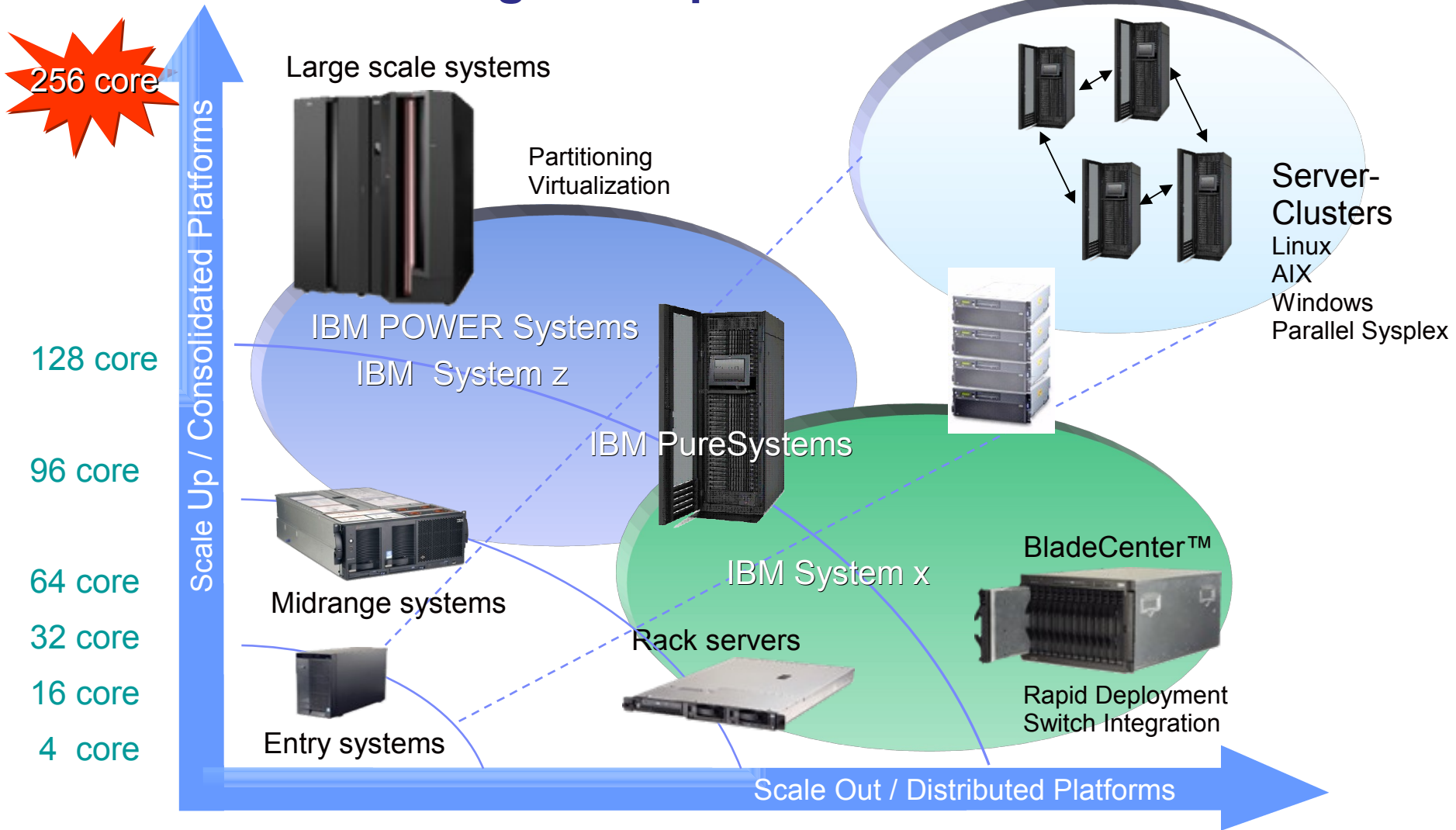


What determines a customer's choice for a specific platform?

- Customer preference for **system hardware**
„I want a System x for 250 SAP ERP users“
- Customer preference for **operating system**
Customer has an enterprise UNIX OS strategy e.g. AIX
- **Installed** system landscape
Customer has an IBM System i and wants to keep it
- **Skills** to operate SAP infrastructure
Customer has a person who knows a specific DB well and wants to use those skills
- **Availability of SAP components** on the proposed platform
SAP Product Availability Matrix (PAM) to be considered
- Ability of platform to fulfill **business requirements**
Availability, Security, special SAP solutions (BWA, ...)
- **Usage scenario** for planned HW
System z for a single SAP Development or Education environment ?
- **Budget constraints**



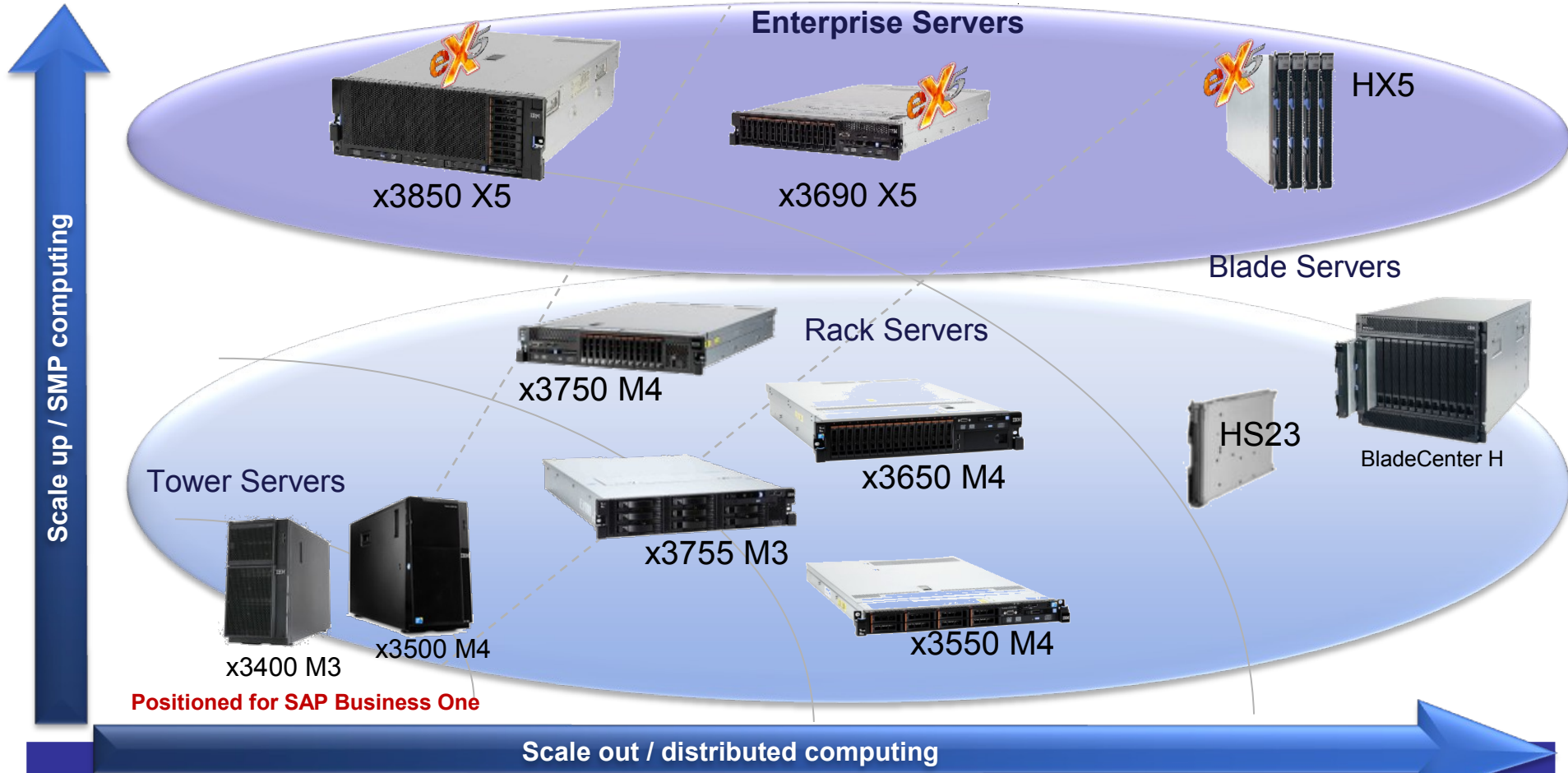
IBM servers scale higher – up and out !



IBM System x

Scale out and Scale up options for SAP

A perfect match with the System x and Blade Center portfolio



eX5 Systems

Enterprise X Architecture 5th Generation Systems for a Smarter Planet

Ideal for:



- Mission Critical SAP Application Servers
- SAP Database servers
- Virtualized SAP workloads
- SAP In-memory workloads
- Large B1 Hosting



76,900 (40C) SAPS
140,720 (80C) SAPS



57,330 (32C) SAPS



37,370 (20C) SAPS

System x3850 X5

Consolidation, virtualization of SAP systems, and SAP database workloads being migrated off proprietary hardware are demanding more addressability

BladeCenter HX5

Demand for minimum footprint in small but powerful datacenters as well as integrated networking infrastructure has increased the growth of the blade form factor to build integrated SAP solutions

System x3690 X5

Powerful and scalable system allows some workloads to migrate onto 2 socket design that delivers enterprise computing in a dense package which is specially enabled for large SAP B1 servers or consolidation / hosting of SAP B1 solutions

POWER up your SAP



Workload-Optimizing Systems



AIX® - The Future of UNIX

Total Integration with IBM i

Scalable Linux® ready for x86
Consolidation



Virtualization without Limits

- ✓ Drive over 90% utilization
- ✓ Dynamically scale per demand



Intelligent Energy Optimization

- ✓ 70-90% energy cost reduction
- ✓ EnergyScale™ technologies



Resiliency without Downtime

- ✓ Roadmap to continuous availability
- ✓ High availability systems & scaling



Management with Automation

- ✓ VMControl to manage virtualization
- ✓ Automation to reduce task time

... Consolidation with Exponential ROI

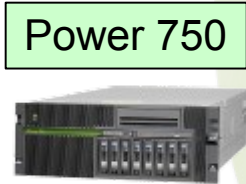
Traditional Power Systems Family

- Over 7.800 customers use IBM Power Systems w/ AIX to run their SAP Business applications.
- Total of about 18.000 SAP DB-Server installs

Power Express
710,720,730



Power 740
Express



Power 750

Power 770



Power 780



Power 795



First POWER7+
Based systems
(ann. 10/12)



PS Blades

IBM Systems Software

...And New Members 2012

All ready to run



Business Suite



Power 710/730



Power 720/740



Power 750



Power 770



Power 780



Power 795



PS Blades

PowerLinux
7R1 / 7R2



IBM PureFlex
System



p460



p260



p24L



IBM AIX® - most popular Unix for SAP



Go Green & Save

- Workload Partitions
- Live Application Mobility
- Partition Mobility
- Workload Partitions Manager for AIX



Manage Growth, Complexity & Risk

- Workload Partitions
- AIX Security Expert
- Role Based Access Control
- Encrypting Filesystem
- Binary Compatibility Guarantee*

*Details at ibm.com/systems/p/os/aix/compatibility



Realize Innovation

- Workload Partitions
- Live Application Mobility
- Concurrent Kernel Updates
- Continuous Availability features

Why IBM i for SAP ?

IBM i 7.1

DB2 for IBM i

IBM Power7 Technology

**PowerVM™ Virtualization
Engine**

PowerHA™ Availability

Solutions

IBM Systems Director



Formerly named:



**AS/400
OS/400**

IBM i is a powerful, easy-to-use and cost-effective IT platform for SAP customers.

IBM i is optimized for SAP and can simplify SAP solution landscapes, while requiring just a small IT staff.

DB2 for IBM i is embedded into the IBM i OS, and Optimized for SAP solutions. It is designed and tuned for extreme DB performance, esp. for Business Analytics tasks, like SAP BW / BI

IBM Power7 processors provides leading technology for SAP Solutions, with superior scalability and performance per core, socket, and system (as proven in SAP BI Benchmark), along with extreme power efficiency

Power System Software maximizes the SAP user value:

PowerVM provides leading virtualization without limits.

PowerHA offers extreme resiliency without downtime.

The **IBM Systems Director** is IBM's strategic system management tool for cross platform datacenter mgmt

Key Benefits of Running SAP Applications on IBM System z

Integration	DB2 optimized for SAP. Capability to handle huge volumes of data
Availability	Reliability and maximum availability, allowing maintenance of hardware and software components with zero downtime
Scalability	Flexibility and near-linear scalability, permitting dynamic system changes
Security	Highest level of security for sensitive, business-critical data
Efficiency	Reduced infrastructure complexity through consolidation, automation and virtualization



IBM System z[®] delivers extreme business value through industry leading security, availability, scalability, virtualization, and management capabilities

Delivering the value of expert integrated systems

PureFlex

Infrastructure

Integrated and optimized infrastructure with flexibility

Runs your choice of applications and middleware



Apr '12

- Delivering IT infrastructure services

PureApplication

Application Platform

Integrated and optimized application platform

Built on IBM middleware to accelerate deployment of your choice of applications



Apr '12

- Delivering application platform services

PureData

Data Platform

Integrated and optimized data platform

Delivers high performance data services to transactional and analytics applications



New

Oct '12

- New PureSystem with models optimized exclusively for data workloads

PureSystems

- Integration by Design
- Built-In Expertise
- Simplified Experience

IBM PureFlex – Integration with IBM Software Products for SAP

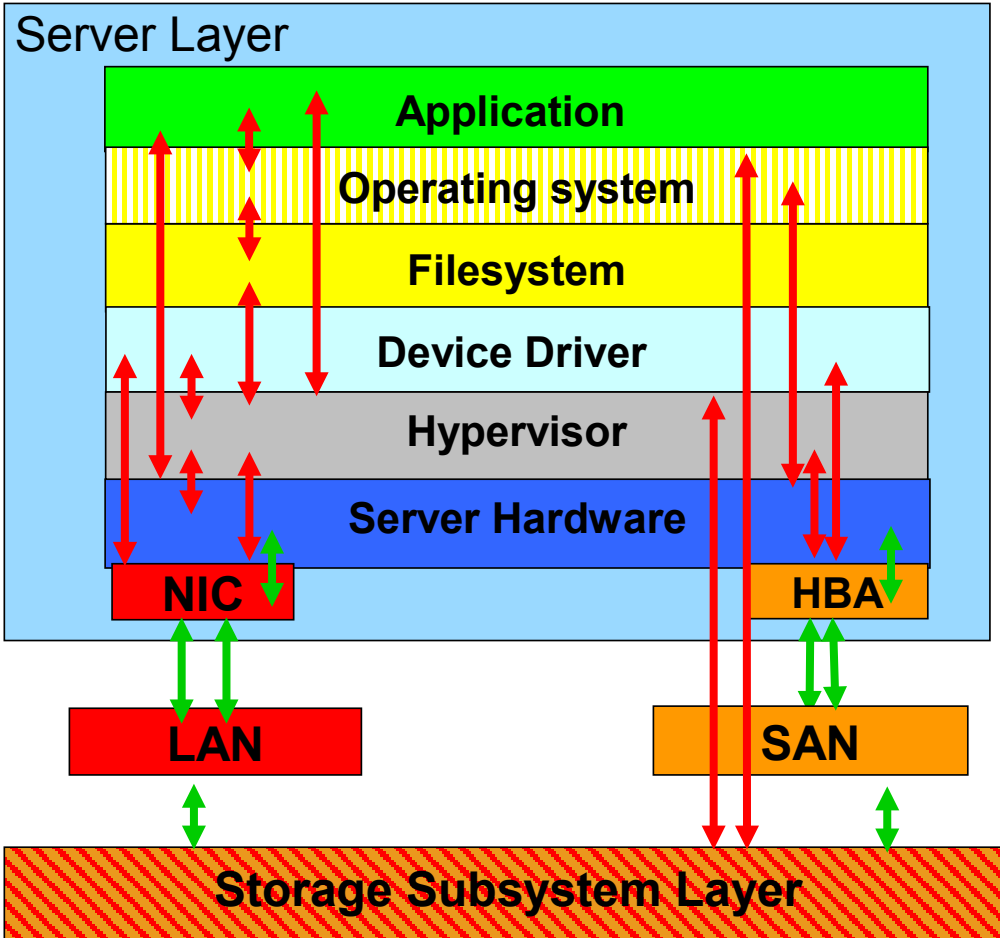
Complete Integrated SAP IT Landscape - in one physical box

Hosting and Management of a complete IT Landscape:

- SAP Production of
 - ERP
 - CRM
 - BW
 - Business Objects Solutions
 - Adobe Document Services
- SAP Development / Test
- Communication: Lotus Domino
- Data Management: Tivoli Storage Manager
- User Interface: Websphere Portal
- Testing: Rational Performance Tester

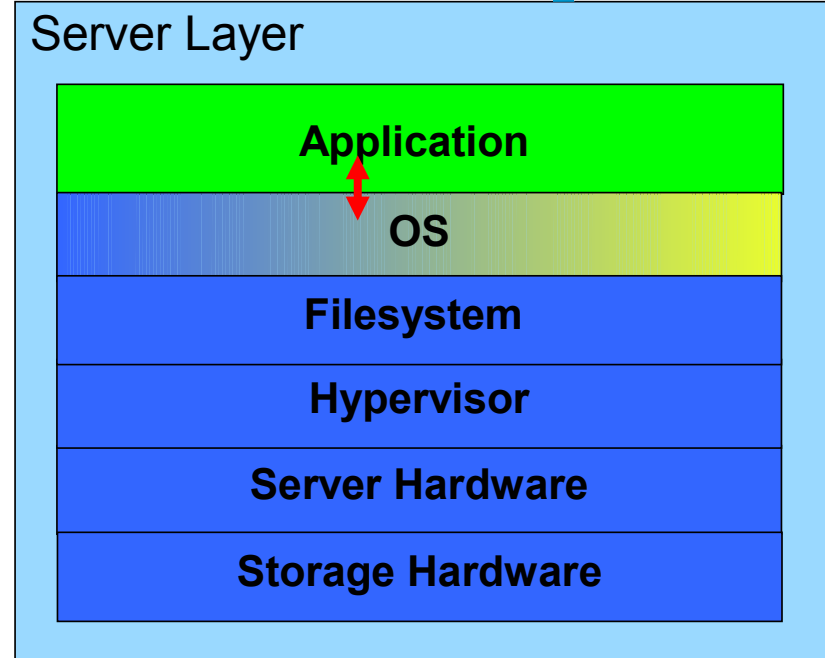


Individual/customized infrastructure



9 IT Vendors involved
17 Compatibilities

v/s. IBM PureSystems



2-3 IT vendors involved
much lesser compatibilities

.. leads to less complexity,
faster deployment and cost
benefits

IBM Systems family for SAP Business Suite enterprises

- IBM System x

- ✓ The *flexible* platform
- ✓ > 25000 SAP installations
- ✓ ~ 10000 customers

- IBM Pure Systems

- ✓ The Data Center in a Box
- ✓ Integrates Intel + POWER
- ✓ Central HW/SW/App Mgmt

- IBM POWER – AIX / Linux

- ✓ The *performance* platform
- ✓ > 27000 SAP installations
- ✓ ~ 11000 customers



- IBM POWER – IBM i

- ✓ The *integrated* platform
- ✓ ~ 3500 SAP installations
- ✓ ~ 1400 customers

- IBM System z

- ✓ The *mission critical* platform
- ✓ ~ 1200 SAP installations
- ✓ ~ 400 customers

- IBM Storage

- ✓ *Optimized storage systems*
- ✓ *Suited for SAP*

Status: March 2012, estimated,
total of 65000 SAP BS/A1 customers

IBM Storage Portfolio

General Purpose Platforms



XIV



DS8000



V7000



DS3000
DS5000



Tape Libraries

A choice of storage architectures each fit for a particular need

Storage Optimizers



SVC



“Easy Tier” with SSD



ProtecTIER

Storage technology enhancements that have capabilities for specific workloads

Integrated Solutions



IA
Information Archive



SoNAS
Scale Out NAS



VDA
VTL

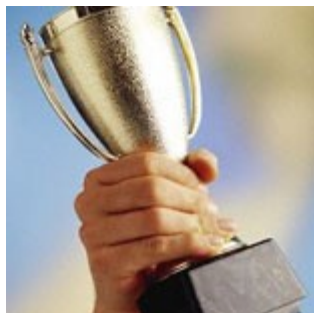


N series
NAS

Integrated HW and SW solutions, tuned for specific workloads

IBM DB2 - Database Champion for SAP Customers

COLGATE - PALMOLIVE



COCA COLA



... if you were to come up to me and ask me would we do this again, migrate to DB2, the answer would be a clear yes.

- *Jim Capraro, VP GIT Colgate-Palmolive*

...We are beta testing DB2 version 10 right now and the compression has gotten better again, we are going to see another 20% increase..- *Tom DeJueas, IT Team Manager ,CCBCC*

Building Blocks for the IBM SAP HANA Smart Appliance

IBM System x3690 X5



IBM System x3950 X5



Configurations:

2 x E7-2870 Processors
128 – 256 GB DDR 3 (8 or 16 x 16 GB)
10 x 200 GB 1.8" MLC SSD

GPFS

Systems Director (Agent)
Novell SLES for SAP Applications
SAP HANA Software Stack

Configurations:

2 to 8 x E7-8870 Processors
256 GB to 1 TB DDR 3 (8 to 32 x 16 GB)
1 to 2 x 1.2 TB ioDrive2 FusionIO
8 to 16 x 900 GB 10k SAS

GPFS

Systems Director (Agent)
Novell SLES for SAP Applications
SAP HANA Software Stack

No storage. Near line storage !!!

IBM and SAP

Case studies

Resource library

Solutions

News

Events

Related links

- Jobs at IBM
- IBM PartnerWorld

IBM and SAP

IBM Cloud Solutions for SAP Clients

Better business responsiveness with cloud computing

→ Learn more



Why IBM and SAP

For over 40 years, IBM and SAP have consistently delivered superior ROI through thousands of successful implementations. Our global business and technology solutions can help you innovate, adapt and compete.

What we offer

Solutions by business application

- IBM Systems and Services for SAP HANA
- IBM Cloud Solutions for SAP Clients
- IBM Mobility solutions for SAP Clients
- SAP Line of Business

Solutions by industry

- Aerospace and defense
- Automotive
- Banking
- Chemicals and petroleum
- Consumer products
- Electronics
- Energy and utilities

Solutions by IBM offering type Services

- IBM Global Services and SAP
- IBM Global Financing and SAP

Hardware

- IBM Systems and SAP

We're here to help

Questions? Contact an IBM-SAP specialist.

E-mail IBM

Interviews with more than 1,700 CEOs worldwide!



Study insights can help leaders create more impactful connections with their employees, customers and partners

Çözümler Zirvesi 2013

Geleceęi Şekillendiren Teknolojiler

Teşekkürler
Thank you