40 Jahre VSE

40 YEARS

IBM eServer zSeries
Im Zeichen von On Demand Business

Martina Koederitz
VP zSeries Sales EMEA

ON DEMAND BUSINESS™

Agenda

- **Bringing together** business and IT

- **Delivering value** with zSeries for the on demand business

- **Getting there** – leveraging your most capable asset: the mainframe

- **Bringing it all together** across IBM

- **Summary and wrap up**

The Ongoing Challenges

Business

- Respond to new business challenges and emerging opportunities

- Protecting privacy and corporate assets

- Increased need for business process integration

- New regulations and compliance issues

- Need to improve ROI, reduce total costs

Technology

- Reduce complexity, control costs and speed ROI

- Optimize server and IT resource utilization

- Deliver 24x7 infrastructure availability for continuous business operations

- Provide flexibility for growth

- Seamless integration of heterogeneous resources

- Ensure service level agreements attained across the infrastructure

It is increasingly critical to *simplify* IT infrastructure and management…

…and better *align* the environment to business priorities

On Demand Operating Environment
Aligning Technology to Support the Heart of Your Business

An on demand operating environment is an integrated infrastructure aligned to business goals and processes, that allows a company to resiliently and securely optimize its operations to meet the needs of the business at any moment in time.

SOA, models, standards

Business driven development

Integration

Infrastructure management

ON DEMAND BUSINESS™
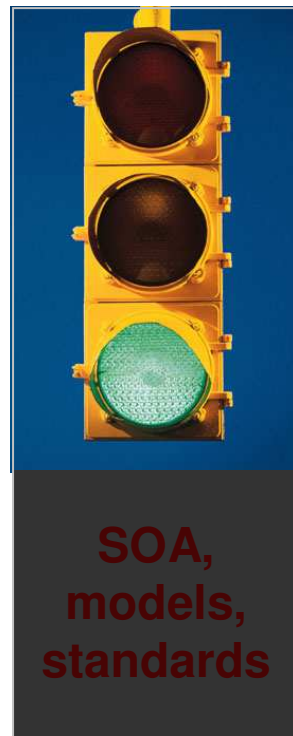
The On Demand Operating Environment
*Think of it as a **Global Fabric***

Where everything enterprise-wide becomes:

- Reusable, connected and integrated…
- Resilient and highly secure…
- Scaleable and responsive...
- Simplified and optimized…
- Virtualized and cheaper to run…
- Unified and flexible to support the business model

All Managed by Business Priorities

Open Standards

Grid

Virtualization

Integration

Autonomic

ON DEMAND BUSINESS™
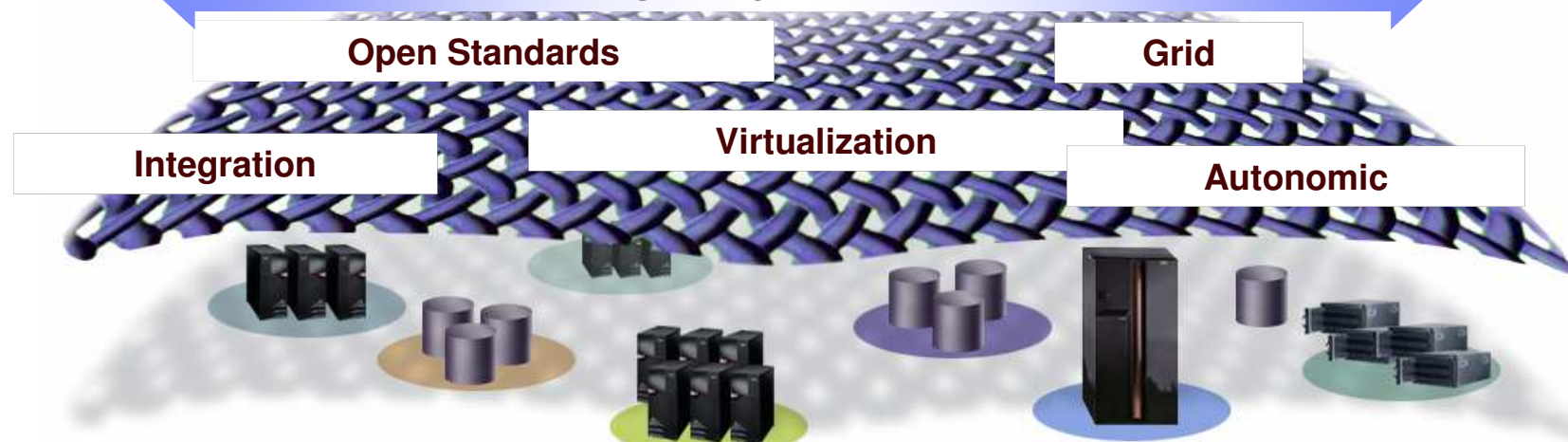
Enhance Your Global Fabric by Leveraging Your Most Capable Asset: Your Mainframe

- As our customers understand the IT requirements for on demand they cite a strong synergy to zSeries capabilities

- IBM's vision is to leverage zSeries leadership capabilities around:

  ► *Resource Virtualization*

  ► *Business Resiliency and Security*

  ► *Intelligent Workload Management*

  ► *Business Integration*

ON DEMAND BUSINESS™

The Mainframe Charter
Delivering new on demand capabilities

It is our plan to continue

Innovation

- **Provide leadership in innovation to enhance the use of IBM eServer zSeries to support increasingly integrated and flexible business processes for the on demand business.**

- **Maintain zSeries' position as a benchmark for flexible, efficient, and responsive platforms for highly complex, integrated environments running a wide range of mission-critical workloads.**

- **Improve the autonomic and self-managing capabilities of the zSeries while working to simplify user processes and system administration tasks.**

Value

- **Enhance the value proposition and lower the cost of computing of zSeries solutions in a way that is compelling, clear, and consistent.**

- **Extend the on demand characteristics of zSeries servers, highlighting its strengths as an environment for usage-based computing.**

- **Increase the ability to account for allocation and use of zSeries resources in an on-demand environment.**

Community

- **Support programs designed to foster vitality in the zSeries community, helping to promote a strong application portfolio and world-class support services.**

- **Provide the skills and expertise to assist customers in designing, developing, and deploying on demand solutions built on a foundation whose cornerstone is zSeries.**

- **Leverage key open standards and common structures to enhance the use of zSeries in large, heterogeneous environments.**

These principles help guide IBM's investment priorities in zSeries systems today and far into the future, and demonstrate IBM's commitment to provide value to its zSeries customers.

ON DEMAND BUSINESS™

Innovation: IBM eServer z890

- **Processor -- 2086 Model A04**
  - ►1 flexible model
  - ►64-bit z/Architecture
  - ►Up to 5 PUs (in single book)
    - ►up to 4 PUs characterizable
  - ►CMOS9S-SOI Technology
  - ►SuperScalar
  - ►Crypto assist for DES and SHA in every PU
  - ►Capacity Upgrade on Demand
  - ►On/Off Capacity on Demand
    - –For CPs, IFL, ICF, zAAP
  - ►Capacity Backup (CBU)
  - ►Customer Initiated Upgrade (CIU)
  - ►Air cooled
  - ►Up to 30 LPs active
  - ►Optional ETR attachment
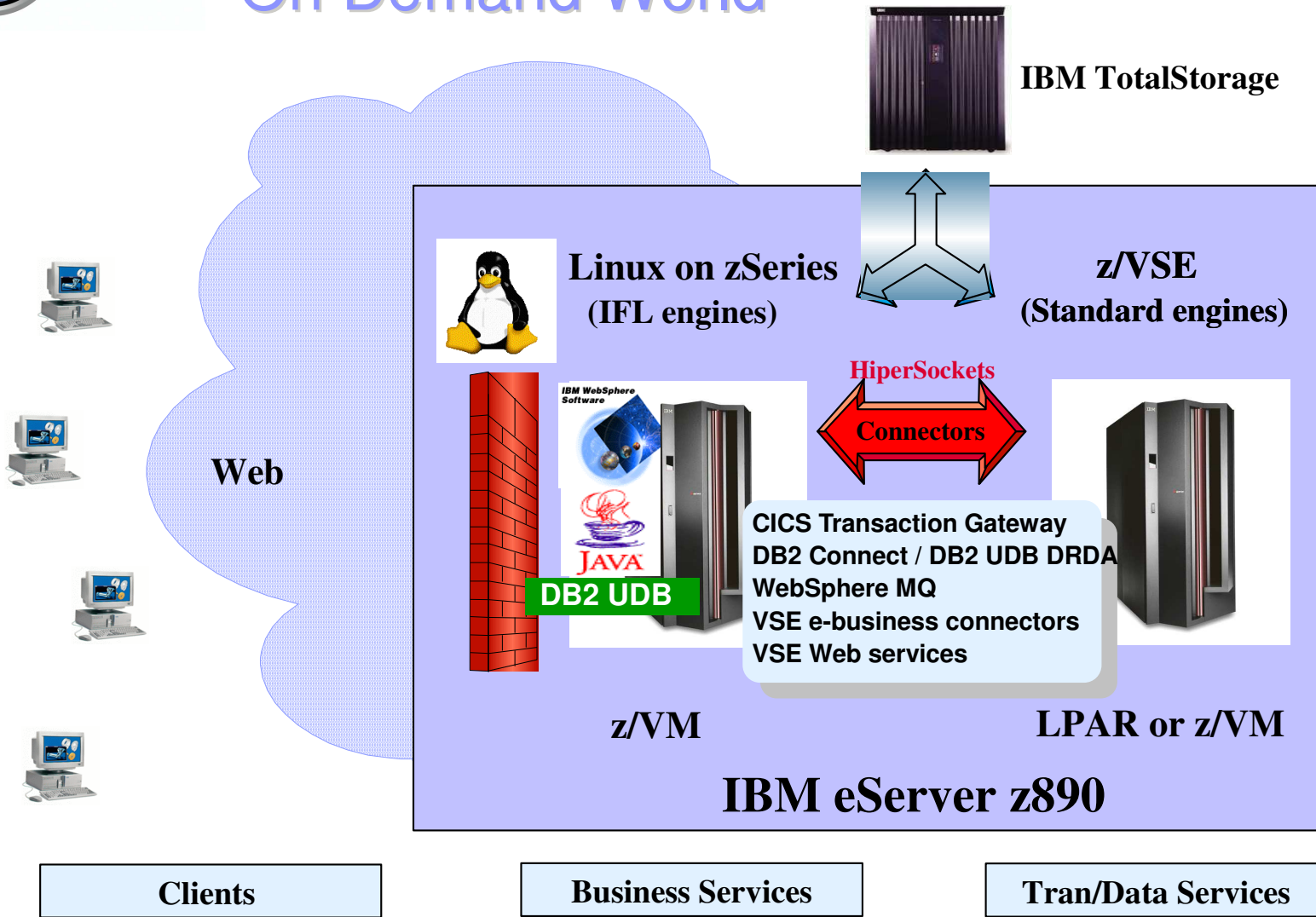- **Memory**
  - ►Maximum system memory 32 GB
    - –Minimum system memory 8 GB
  - ►Card sizes 8, 16, 32 GB

ON DEMAND BUSINESS™

z/VSE with Linux and z/VM join the On Demand World

IBM TotalStorage

Linux on zSeries
(IFL engines)

z/VSE
(Standard engines)

HiperSockets

Connectors

Web

IBM WebSphere Software

JAVA

DB2 UDB

CICS Transaction Gateway
DB2 Connect / DB2 UDB DRDA
WebSphere MQ
VSE e-business connectors
VSE Web services

z/VM

LPAR or z/VM

IBM eServer z890

| **Clients** | **Business Services** | **Tran/Data Services** |

ON DEMAND BUSINESS™

Extending zSeries Business Resiliency Strengths
Creating a "Secure Vault[1]" for Heterogeneous Environments

Today's Capabilities

- Up to 99.999% availability[2] across all zSeries resources to avoid planned and unplanned outages

- Minimizes interruption through intelligent management of system resources based on business priorities

- Enables End-to-end integrity of zSeries data with capability to secure at granular user level

Future Vision*

Become the "secure vault" across the enterprise.

- Become the "world's most resilient enterprise" through zSeries autonomic management based on business policy support for heterogeneous assets and resources.

- Become the enterprise trust authority through integration of zSeries Security leadership with the ODOE.

Extension of on demand value*

- Provide capability to monitor business functions and identify appropriate recovery actions.

- Extend zSeries resiliency into heterogeneous environments through utilization of common interfaces.

- Position zSeries to lead in managing heterogeneous assets and resources.

Note 2: Based on Parallel Sysplex implementation

Initial Focus*

- Enable asset and resource associations to be mapped by business function.

- Extend GDPS to heterogeneous environments and single site environments.

- Extend zSeries ability to provide seamless integration of Security through utilization of open technologies.

Note 1: Secure Vault represents the role and ability of zSeries to provide a highly resilient and security-rich enterprise-wide environment for enterprise data and transactions.

*All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

08. März 2005

ON DEMAND BUSINESS™

Extending zSeries Workload Management Strengths
"Intelligent Business Director" for Heterogeneous Environments

Today's Capabilities

- Autonomic management of diverse workloads and system resources based on business policies and workload performance objectives.

- Intelligent management of resources to enable resource utilization levels of up to 80% and potentially higher

- World Class virtualization capabilities, backed by over 35 years of experience.

Future Vision*

- Become the intelligent business director for the enterprise by leveraging the most resilient host environment for mission critical autonomic management functions.

- Leverage end-to-end integration on the platform to provide an optimal environment for hosting virtualized mission critical application services.

Extension of on demand value*

- Provide capability to monitor and manage resources as part of a heterogeneous environment and identify appropriate actions.

- Provide dynamic infrastructure provisioning for applications.

Initial Focus*

- Enable zSeries to participate in the end-to-end management of resources in a heterogeneous environment.

08. März 2005

ON DEMAND BUSINESS™

Extending zSeries Business Integration Strengths
"Flexible Business Integrator" for Heterogeneous Environments

Today's Capabilities

- An Industry leader in allowing seamless integration of assets across a zSeries mixed workload environment.

- An Industry leader for mission critical data and transaction processing environment

- Deep hardware, software and middleware stack integration and optimization.

Extension of on demand value*

- Extend tooling to consistently map business requirements to infrastructure implementation and operations

- Leverage ODOE to manage applications across platforms in a consistent manner
  – optimized for zSeries

- Position zSeries as a critical component of the enterprise service bus by exploiting the integration and management capabilities of the platform

Future Vision*

Provide a Hub for Mission Critical Applications and Data by strengthening the integration capabilities of the platform and enabling tighter integration across the enterprise.

Enable end-to-end modeling, deployment, and operations of applications

- Represent Software and OS resources in a consistent and integrated manner that more directly supports business objectives.

Initial Focus*

- Enable zSeries subsystems for Web services capabilities that support SOA

- Further platform integration of WebSphere Application Server and WebSphere Business Integration

08. März 2005

ON DEMAND BUSINESS™

Value: zSeries delivers unique Value to the On Demand Business

- The value of your IT goes beyond TCA
  - ▶ **Intelligent workload management capabilities can help optimize IT resources**
  - ▶ **World class operational resiliency and security help lower the cost of downtime and avoid damage to your reputation.**

- Complexity in today's mixed platform environments make it hard to gauge their true ROI
  - ▶ **Unique measurement capabilities help accurately identify the cost of operations to its end users**

- On demand IT infrastructure is becoming more flexible and responsive. So should its' cost.
  - ▶ **zSeries provides variable hardware and software pricing metrics to better align costs with resources consumed.**
  - ▶ **Additional ISVs like CA, BMC and LEVANTA have recently announced various highly flexible pricing metrics.**

Cost of People vs. Spending on New Systems

Server spending (USM$) ■   Cost of mgmt. ■

Source: IDC
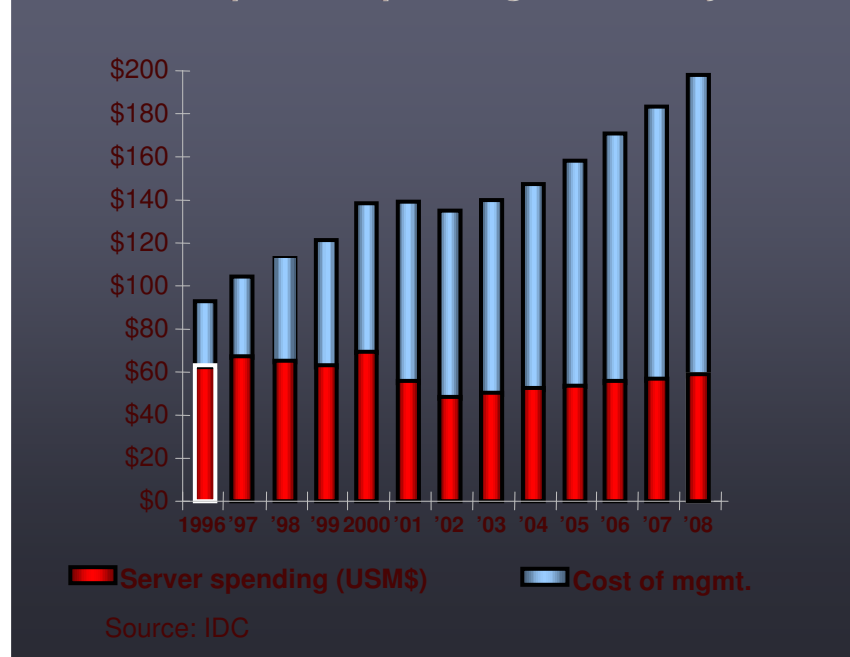
zSeries plans to continue to deliver industry-paced price performance

Community: Ecosystem enables & supports On Demand Business

zSeries Technical Support

Provides world class pre and post sales technical support covering architecture, installation, maintenance and critical situations. Over 1700 IT professionals and over 20 centers world wide.

Value Net of Partners

Teaming to create a "value net" of approximately 1500 BPs, ISVs and SIs ready to enable zSeries on demand solutions; delivering services and value-add offerings, leveraging reference architectures, and providing new flexible pricing models.

Reference Architectures

Live Banking Demonstration, Financial Markets Architecture with other Industry Blueprints to follow: Govt, Insurance, Industrial…

Academia

Increase external zSeries skills with renewed focus on IBM Scholars zSeries Program targeting 20,000 new zSeries trained people in market by 2010.

Open Standards

IBM and zSeries support open standards such as XML, JAVA and Linux . IBM Invests $1B in Linux and deploys solutions like zAAPs for Java that enable on demand value

IBM Global Services

180,000 professionals in more than 160 countries help clients integrate information technology with business value, and all aspects of zSeries on demand
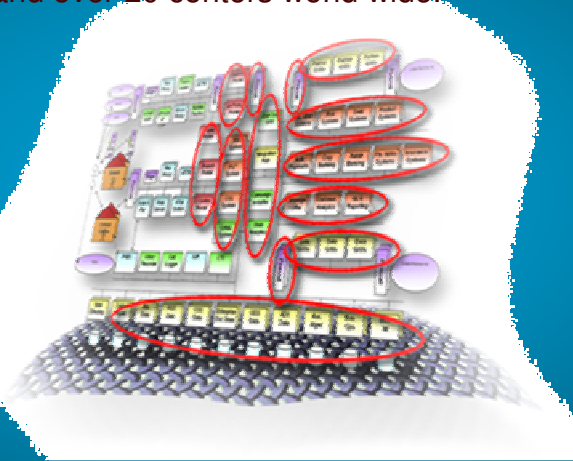
New zSeries Community Ecosystem Web Portal…
www.ibm.com/servers/eserver/zseries/about/charter/community.html

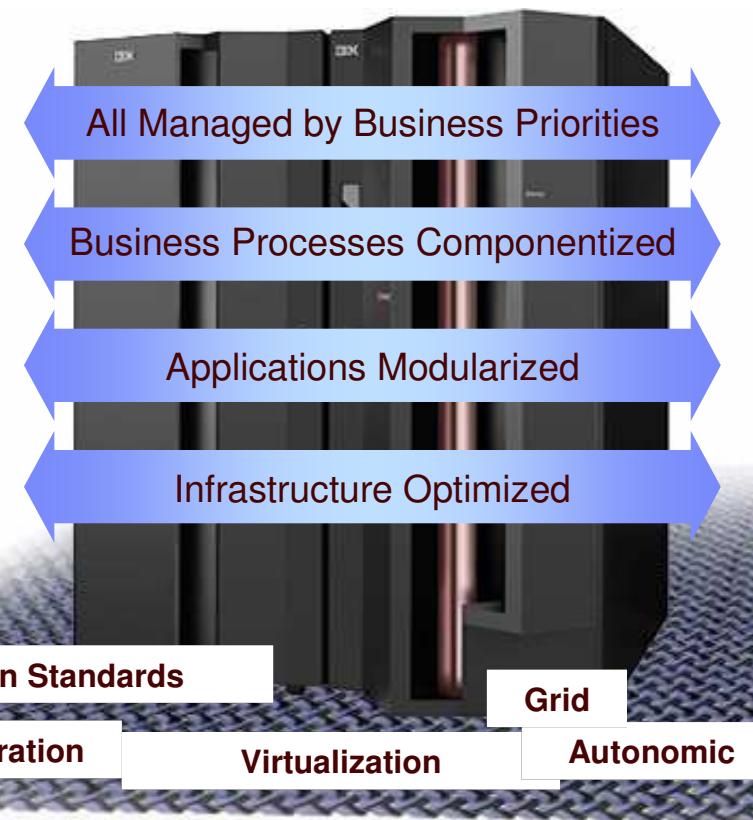**ON DEMAND BUSINESS™**

zSeries Enables a Higher Grade of Fabric

■ Extending zSeries strengths…

- Resource Virtualization
- Business Resiliency & Security
- Intelligent Workload Management
- Business Integration

■ To become your…

- Secure Vault* and Enterprise Trust Authority
- Flexible Business Integrator
- Intelligent Business Director

■ To deliver unique Value for the On Demand Business

All Managed by Business Priorities

Business Processes Componentized

Applications Modularized

Infrastructure Optimized

Open Standards

Grid

Integration

Virtualization

Autonomic

* See glossary in back of presentation

Trademarks

The following are trademarks of the International Business Machines Corporation in the United States and/or other countries.

BladeCenter
CICS*
DB2*
e-business logo*
Enterprise Storage Server*
FICON
GDPS*
Geographically Dispersed Parallel Sysplex
HyperSwap
IBM*
IBM eServer

IBM logo*
IMS
iSeries
NetView*
On demand business logo
Parallel Sysplex*
Performance Toolkit for VM
pSeries*
RACF*
ServerProven*

Sysplex Timer*
Tivoli*
TotalStorage*
Virtualization Engine
VSE/ESA
WebSphere*
z/Architecture
z/OS*
z/VM*
zSeries*

  * Registered trademarks of IBM Corporation

The following are trademarks or registered trademarks of other companies.

 Intel is a registered trademark of Intel Corporation in the United States, other countries, or both.

 Java and all Java-related trademarks and logos are trademarks of Sun Microsystems, Inc., in the United States and other countries.

 Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

 UNIX is a registered trademark of The Open Group in the United States and other countries.

 Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation in the United States, other countries or both.

 SET and Secure Electronic Transaction are trademarks owned by SET Secure Electronic Transaction LLC.

 * All other products may be trademarks or registered trademarks of their respective companies.

Notes:

Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

IBM hardware products are manufactured from new parts, or new and serviceable used parts. Regardless, our warranty terms apply.

All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.

All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.

Glossary of Terms

- On Demand Business: **A company whose business processes—integrated end-to-end across the company and with key partners, suppliers and customers—can respond with flexibility and speed to any customer demand, market opportunity or external threat. An on demand business has four key attributes: it is responsive, variable, focused and resilient.**

- On Demand Operating Environment: **An integrated infrastructure, aligned to business goals and processes, that allows a company to resiliently and securely optimize its operations to meet the needs of an on demand business at any moment in time. The on demand operating environment has four essential characteristics: it is integrated, open, virtualized and autonomic.**

- Business Driven Development**: An integrated development platform that increases the effectiveness and efficiency of development teams. Creating a consistent integrated approach to the design, development and deployment of applications, creating a set of callable services, to increase productivity and efficiency of development teams and to accelerate implementation time of new business applications**

- Integration**: Creating an integrated IT environment that is aligned with the business processes connecting people, processes and information, using a reliable foundation, to flexibly and efficiently support changing business objectives.**

- Infrastructure Management**: Discipline of managing and optimizing operational processes and IT services based on business policies by automatically sensing and responding to changes.**

- Global Fabric: **An analogy describing the On Demand Operating Environment infrastructure and the open standards approach to effectively weave today's disparate IT resources together in a common way to enable optimized resource sharing, integration and end-to-end heterogeneous infrastructure management.**

- Secure Vault: **Represents the role and ability of zSeries to provide a highly resilient and security-rich enterprise-wide environment for enterprise data and transactions**

- Enterprise Trust Authority: **A server environment that provides end-to-end security discipline for a collection of heterogeneous resources that make up an enterprise infrastructure. For example, hosting data for a business in such a way that it can be physically secure, accessible only by applications and users with authorized access, is recoverable and resilient across failures, maintains data integrity and ensures that the data is accessible to applications on any other types of servers that may require direct access**

- Intelligent Business Director**: The ability to intelligently and autonomically manage heterogeneous assets and resources across the enterprise according to business policy and objectives.**

- Ecosystem: **IBM and its extended relationships with IBM Business Partners (ISV's, SI's, BP, Resellers), Open Standard/Industry Groups and Academia. The ecosystem also defines and stresses the key inter-relationships within IBM (STG, BSC, ITS, SWG, Research etc,) to deliver end-to-end solution value.**