



Business and IT Optimization - Enhancing Service Management Visibility, Control and Automation

Dr. Matt Ellis, Vice President
Service Availability and Performance
Management, IBM Software Group

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IBM System z Service Management focuses on addressing customers today and future requirements

1. Reduce costs, manage risk and improve service with enhanced **Visibility, Control and Automation**
2. Enhance Business Resilience capability for your current environment with **Business Service Management and Cloud and IT Optimization**
3. Taking advantage of Dynamic Infrastructure **Business and IT Asset Management** to save money and resources



Integrated service management evolving to support new technologies



VISIBILITY

See and understand your business in real-time



CONTROL

Transform and adopt while limiting risk



AUTOMATION

Achieve greater efficiency & quality by standardizing best practices

Business Services & Assets



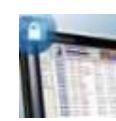
Transitioning to Smarter, flexible infrastructures



Converging Digital & Physical Assets



Leveraging Mobile & Web Endpoints



Addressing data growth, threats, & compliance

Business Service Management capabilities provide integrated, hierarchical solution across System z

Collaboration across your Enterprise

Automate
System/Workload Automation

Automation Developer



Business Impact Assessment
TBSM and NetCool/OMNibus

Enterprise Architect



Application Performance Management
Analyze, Diagnosis and Fix
OMEGAMON and TADz

System Programmer



Application Performance Monitoring
Discover and Monitor
ITM, ITCAM, OMEGAMON, TADDM

Computer Operations



Redesigned System z monitoring provides simplified problem determination and reduced resource usage



OMEGAMON V5.1 Product Family

- **Simplify monitoring** with ability to view enterprise summary of multiple sysplexes and subsystems
 - Save 50 to 75% of time needed to find problems
- **Decrease resource usage** by taking advantage of zIIP specialty processor
 - Up to 73% of CICS SLA processing off-loaded
- **Improve availability** with new 'Find' command to easily locate hung users and connections over entire cicsplex
 - Reduce fix times from 90 minutes to 2 minutes



Reduce system and application outages with increased productivity

Based on System, Performance and Beta testing

Fiserv supports major growth on existing infrastructure with IBM DB2 solution and OMEGAMON

Business Challenges:

- Global provider of Information Management for financial institutions
- Anticipate clients needs & implement appropriate services & technology solutions

IBM Solution:

- Tivoli OMEGAMON XE for DB2 on z/OS
- IBM DB2 for z/OS

Business Benefits:

- Supports major growth on existing footprint with minimal infrastructure support costs
- Enables five-nines availability to customers
- Enables Fiserv to demonstrate SLA-compliance

Industry: Professional Services

Profile: Fiserv is online innovator and wants to drive customer experiences to make online bill payment easier. Fiserv has automated processes in place that utilizes OMEGAMON for DB2 Performance Monitor to monitor and provide analysis to maximize performance and enhance profitability.



“We use OMEGAMON and the batch reporting extensively,” reports Fiserv DB2 Engineer.

“OMEGAMON is the backbone of our DB2 monitoring”

Bank of Russia: OMEGAMON enabled smooth migration for consolidation of MQ workloads onto System z



Business Challenge:

- Variety of local payment processing systems running on more than 200 distributed servers in 74 data centers across 11 time zones
- Significant challenges in terms of operational efficiency, technical support, and security.

Software Solution:

- WebSphere MQ, WebSphere MQ for z/OS
- OMEGAMON for z/VM to ensure performance & capacity

Business Results:

- **Consolidation of payment processing has reduced costs by 95 percent, saving US\$400 million per year.**
- **Staff workload has been reduced by 85 percent**

Business Resilience and high availability on System z with GDPS

Communications, automation, and monitoring components of GDPS continuous availability solution



Business Value

Ensure resiliency and availability of critical business operations with recovery time objective of less than one minute

GDPS Support

Maintain business operations with improved disaster recovery, maintenance, and system outage with active synchronization to external site



- IBM NetView for z/OS V6.1
- Tivoli System Automation for z/OS V3

FIDUCIA banks: System automation to increase availability System z



Business Challenge:

- Improve availability in their mainframe environment by adding a system automation solution
- Reducing the risk that unplanned outages could threaten availability

Software Solution:

- Tivoli System Automation for z/OS provides policy based automation capabilities
- NetView automated operations so that System z can run almost completely unattended

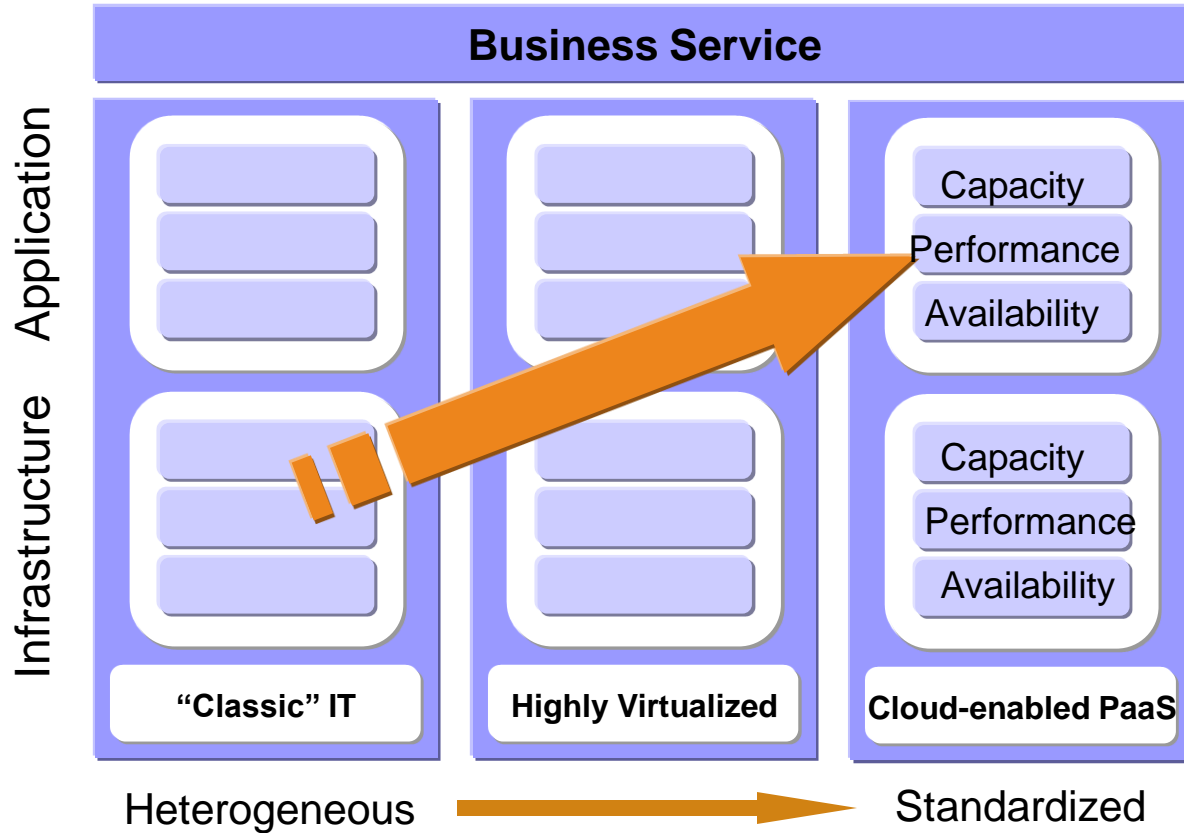
Business Results

- *Helps to ensure high availability in case of faults or outages*
- *Centralizes system administration and message management*
- *Enables smooth integration with other Tivoli products*

"The IBM system automation solution helps us deliver the high-availability services our customers expect." FIDUCIA IT AG

“The Cloud” forces evolution in Operations Management

Shared Infrastructure drives increased focus on Performance & Capacity



60%

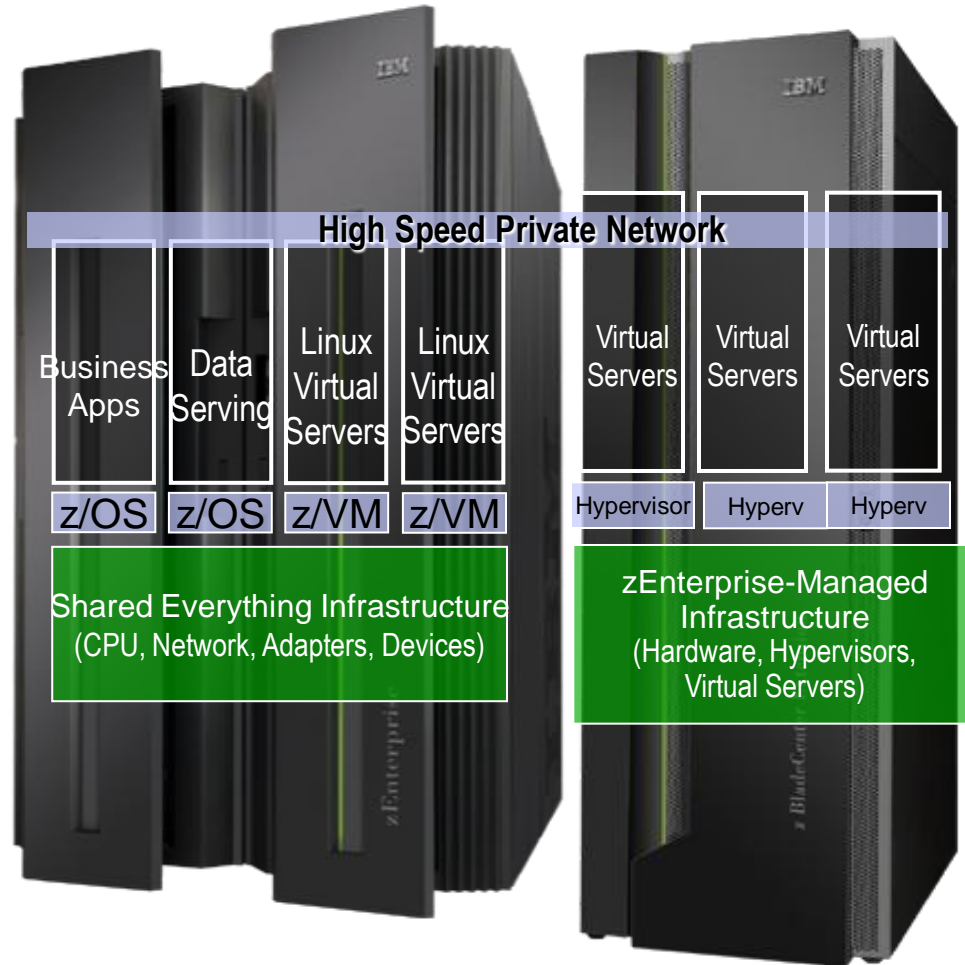
of CIOs plan to use cloud up from 33% two years ago

...the majority being hybrid clouds

System z platform good for Private and Hybrid cloud

Move to Dynamic Infrastructure with IBM zEnterprise™ Cloud Starter Edition

- Consolidate zEnterprise IFLs 60% faster at 33% lower price
- Increase energy savings up to 75% ⁽¹⁾
- Spend 70% less on acquisition costs ⁽²⁾
- Boost staff productivity 70% ⁽³⁾ compared to distributed
- Incorporate IBM POWER® and System x for workload optimization
- Monitor and manage with OMEGAMON and Tivoli Provisioning Manager (TPM)



11 (1) Based on zEnterprise comparison to virtualized x86 alternative
 (2) Based on three-year acquisition costs for large-scale, enterprise-class workloads
 (3) Based on life-cycle management testing of large-scale virtual server environment conducted by IBM

Significant System z costs savings with IT asset discovery and management capability

- Software license cost optimization

- Discover where applications are being used across Enterprise
- Rationalize which applications/products are no longer required

- System z hardware and software savings

- Decrease product license fees based on usage
- Understand usage trends for planning and upgrades
- Safely move workloads across LPARs, knowing who is using what applications

- z Software upgrade savings

- Optimize products in Enterprise License Agreement (ELA)



Smarter Physical Infrastructure with Business Asset and Facilities Management

Smarter Planet



Transportation Assets



Facilities



Production Equipment



Infrastructure Communications



- Enterprise Asset Management (EAM)
 - Critical application for asset intensive industries
- EAM on System z
 - **Fit-for-purpose platform** with distinct advantages for accounts > 100 users
 - **Significant advantage** vs multiple Intel servers in distributed environment



Government agency modernizing for cost avoidance and investment protection with z/Linux Maximo

Business Challenge:

- US Government agency wanted asset management solution for physical assets (e.g. vehicles, equipment)
- Needed to deploy environment to support 5000 users

IBM Solution:

Software

- IBM Maximo Asset Management for System z
- Oracle DB for Linux on System z
- Red Hat Enterprise Linux R10

Servers

- System z10 Server with 28 IFLs

Business Benefit:

- Leveraged unused processors on System z
- **Deploy in 1/3 time** of x86 servers and no additional energy costs
- **Saved \$1 million** in Software license charges on System z
- **Included Disaster Recovery** on System z, where it would double x86 costs

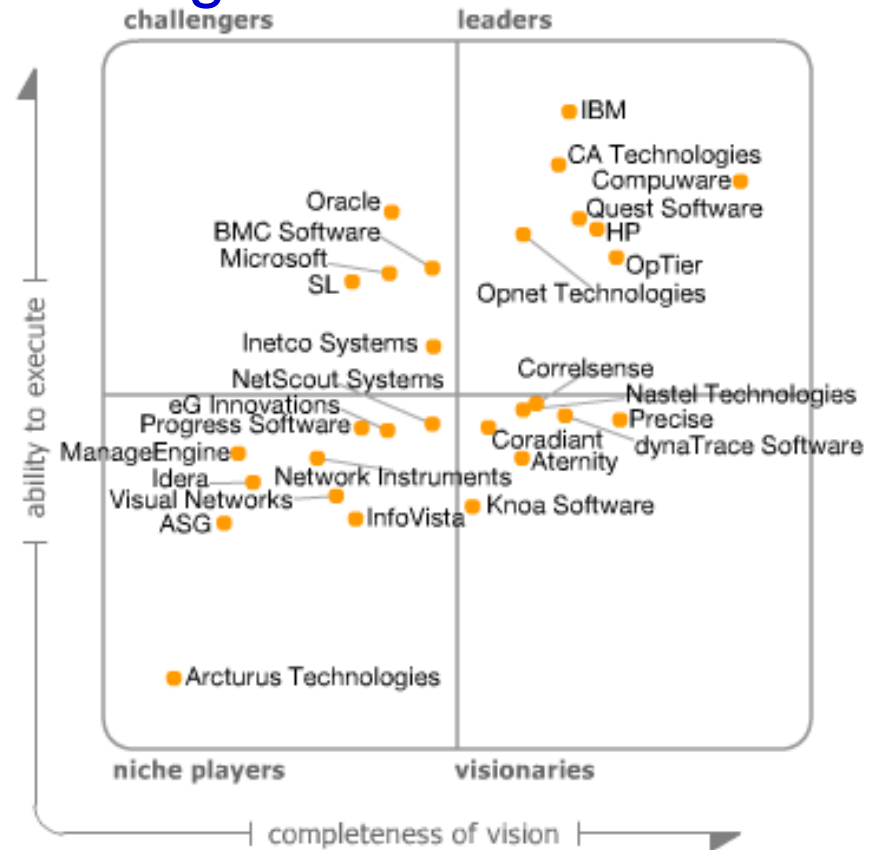


Gartner has recognized IBM as a leader in Application Performance Monitoring

Magic Quadrant for Application Performance Monitoring

Will Cappelli, Jonah Kowall

September 19, 2011



As of September 2011

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IBM Visibility Control Automation recognized as industry leading approach to Service Management on System z

VISIBILITY



See your business services

CONTROL



Manage service risk and compliance

AUTOMATION



Optimize business service delivery

- #1 Overall in Systems / Network Management
- #1 in Overall Performance and Availability Mgt.
- #1 Performance Management
- #1 Event Automation
- #1 Network Management
- #1 Output Management
- #1 Archiving
- #1 Identity and Access Management
- #1 Security and Vulnerability Management
- #1 Enterprise Asset Management

IDC Market Share rankings