IBM System z Technology Summit

Increasing availability and productivity with redesigned OMEGAMON® monitoring and analytics

Presenter Name

Title

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IBM System z Service Management continues providing customers improved business flexibility

Key Takeaways

1. IBM recognized leader in Application Performance Management for monitoring, managing and optimizing IT infrastructure - *Gartner 2011 MQ*

2. IBM continues to provide new Service Management visibility, control and automation capability based on high priority customer requirements - *agile transparent development*

3. Redesigned OMEGAMON provides significant customer value to reduce costs and decrease risks - *R&D investment and strategy*

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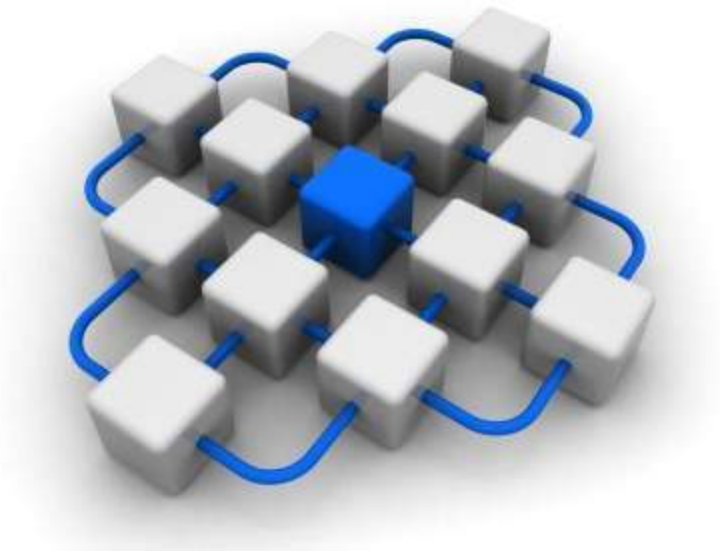
Application Performance Management a key component of Mainframe Service Management

Application performance management (APM) refers to discipline within service management focused on monitoring and managing of performance and service availability .

- End-user experience **monitoring**
- Application and Services **sub-system monitoring**
- Application runtime architecture **discovery**, **modeling and display**
- User-defined transaction **profiling**
- Application performance **analytics**



Much more than just basic z monitoring!

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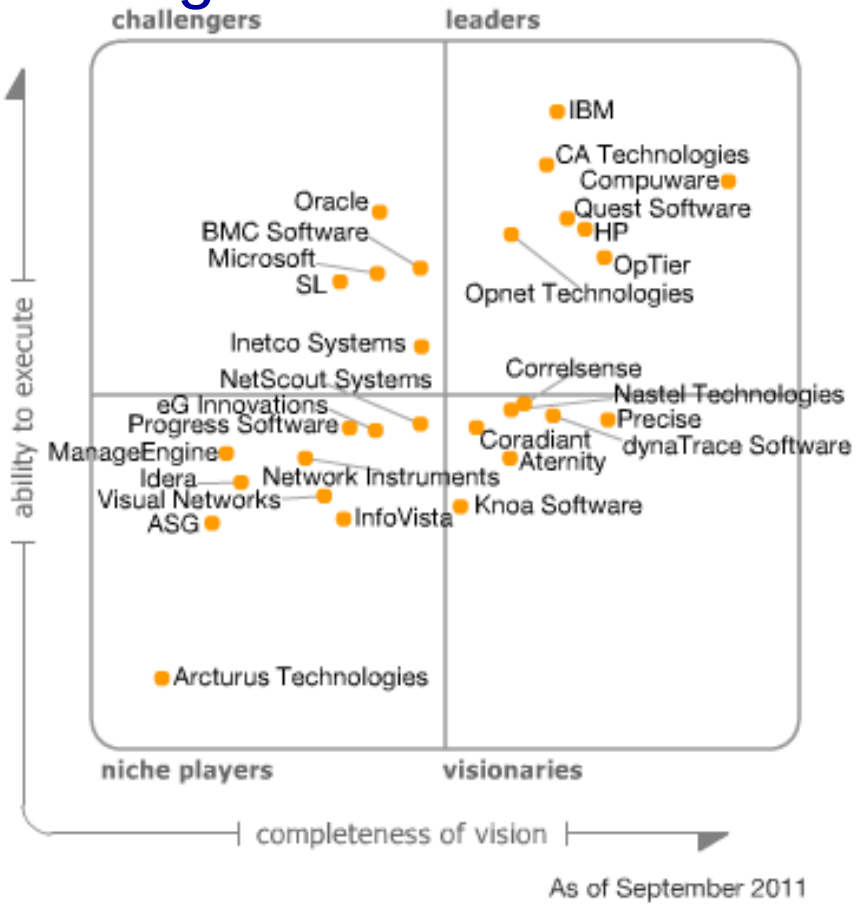
Gartner has recognized IBM as a leader in Application Performance Monitoring

Magic Quadrant for Application Performance Monitoring

Will Cappelli, Jonah Kowall

September 19, 2011



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Business Leaders are looking at IT to drive business agility and flexibility across their Enterprise

VISIBILITY

CONTROL

AUTOMATION

React with agility to diverse IT landscape

Execute with reduced risk & cost

Achieve desired business outcomes

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Increased Business Agility with improved IT visibility now available with redesigned OMEGAMON family

Modernized and strengthened OMEGAMON product line for reduced resource usage and faster problem resolution

Increased Availability

- Enhanced 3270 User Interface for SMEs
- Built-in Problem Solving Scenarios

Improved Productivity

- Faster Configuration/Maintenance
- zEnterprise monitoring across z196/114 and zBX

Reduced Resources and Costs

- Usage of zIIP specialty servers
- Simplified OMEGAMON architecture

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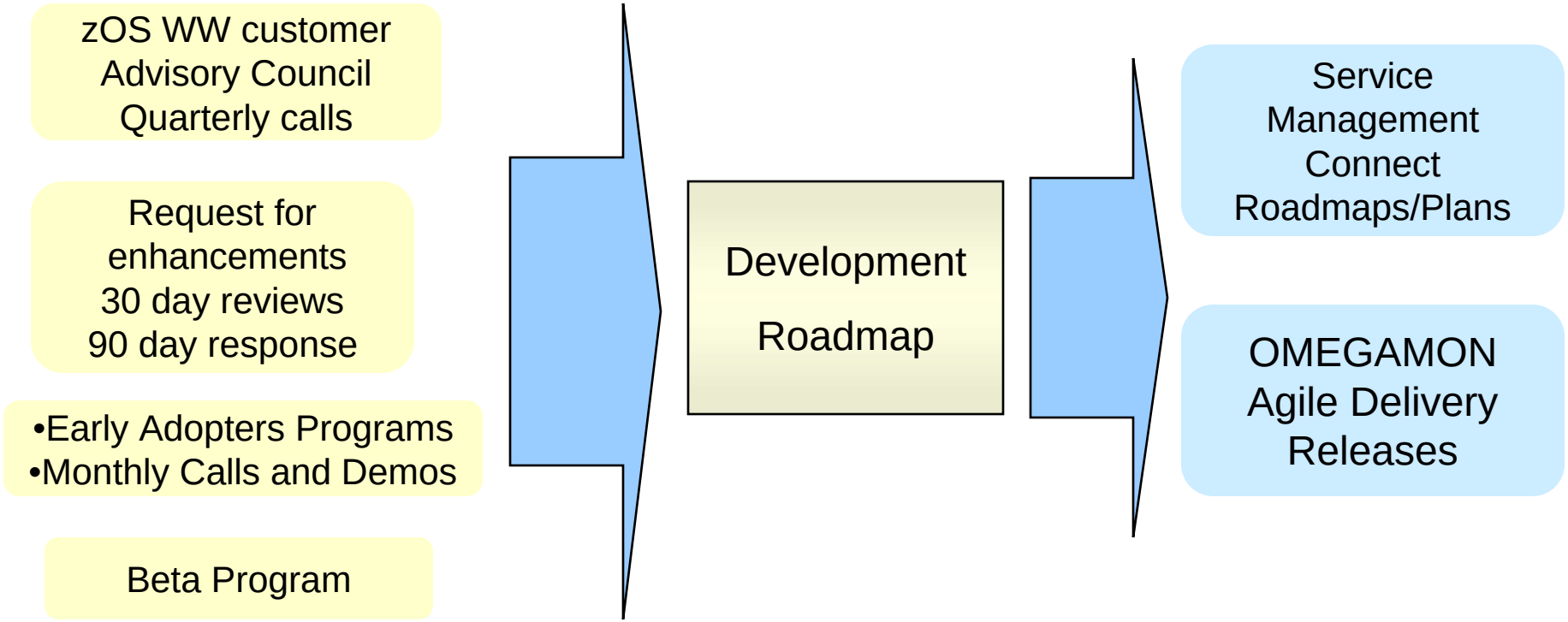
Redesigned OMEGAMON capability driven by high priority customer requirements

Customer driven capability with new transparent development methodology driven by Agile processes



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High Priority OMEGAMON customer capabilities focused on helping decrease costs and reduce risks

Redesigned OMEGAMON Enhanced 3270 User Interface addresses customer requirement to make mainframes more efficient and effective

Customer-Driven Focus Areas for Improvement

- **Simplify** — Eliminate complexity and frustration
- **Standardize** — Align with existing IBM 3270 Applications
- **Integrate** — Move from silo monitoring towards composite views
- **Minimize** — Reduce footprint, install, configuration, and CPU
- **Modernize** — Make the 3270 Interface ‘Best of breed” – SME focused Problem Solving Scenarios
- **Customize** — Personalize User Interface
- **Support** — Reduce customer calls/PMRs through simplification

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OMEGAMON for z/OS provides SMEs with faster problem determination and availability management

First two products being released are OMEGAMON for z/OS and CICS

- Ability to view Enterprise Summary of multiple sysplexes
- Navigate directly to other OMEGAMON v5.1 monitors
- New CEC and CPU top consumers views
- Incorporated Health Checks from Tivoli z Management Console.
- Easy navigation from sysplex to lpar to address space

Command and Control from Enhanced 3270 User Interface

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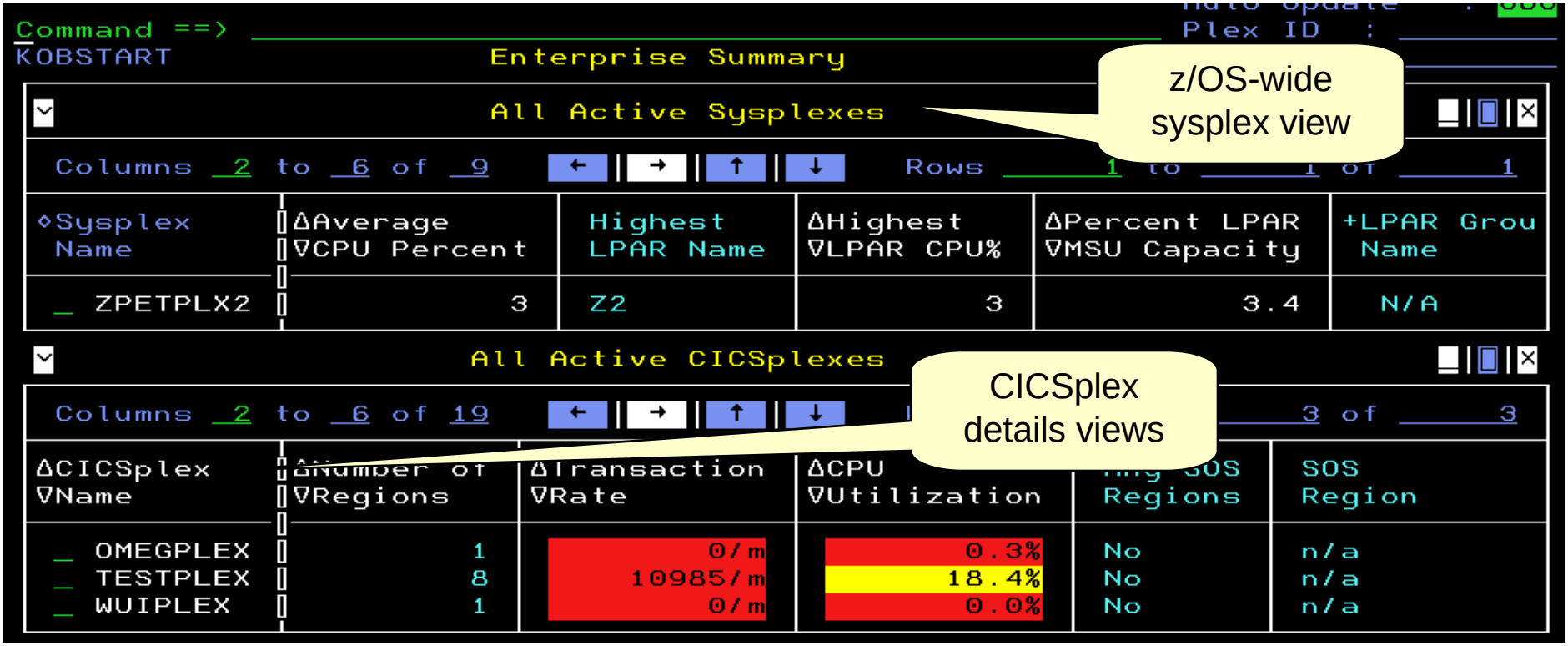
Enhanced 3270 User Interface creates Enterprise wide view of information across multiple sysplex's

- Understand transactions across entire Enterprise
- Color coding to provide ability to find and resolve problems quickly



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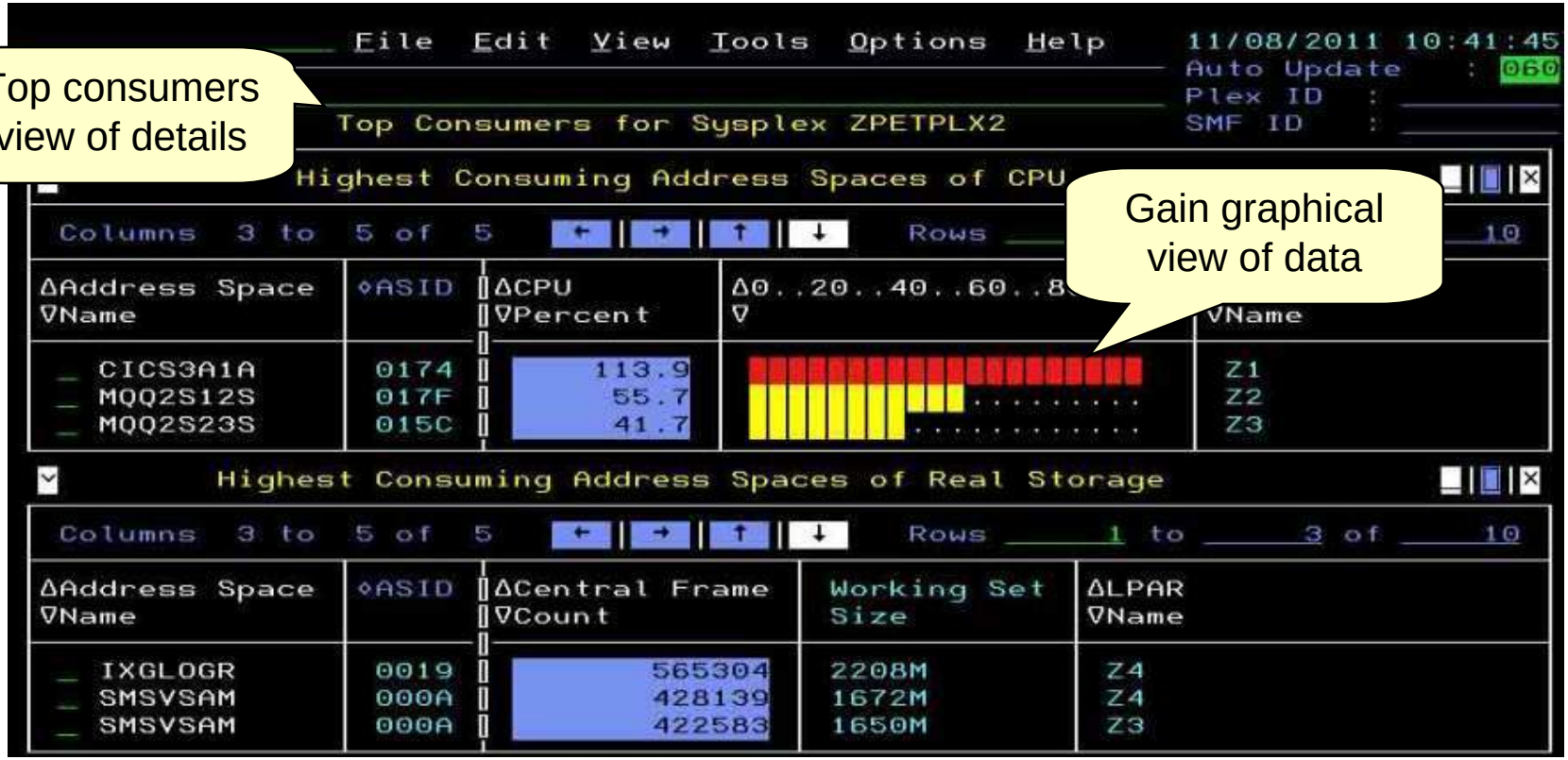
Customer prioritized Problem Solving scenarios built into Enhanced 3270 User Interface

- Easy to see and find critical system and sub-system information
- Single screen focused on customer defined problems
- Screen content based on high priority problems



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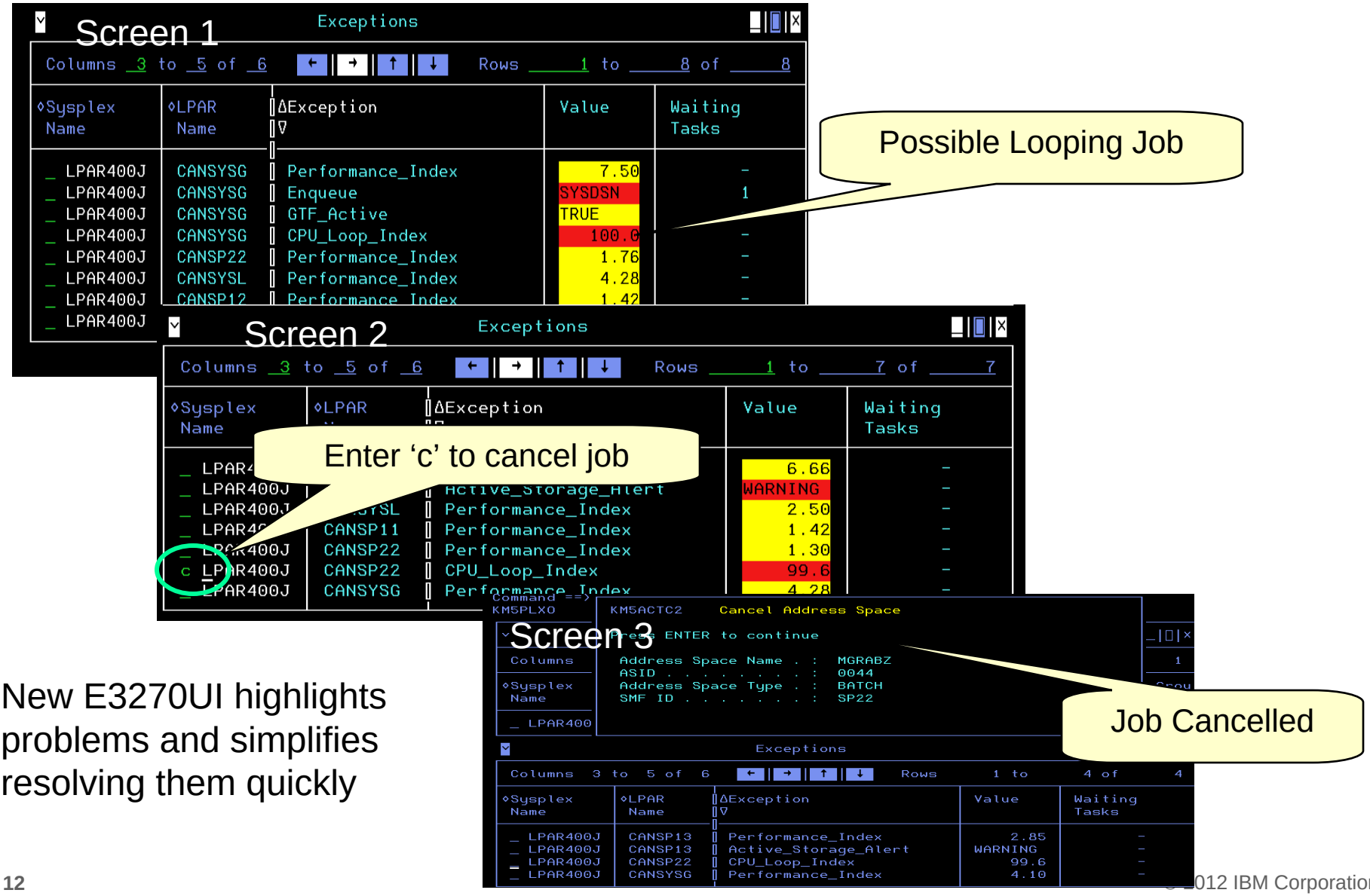
Example of quickly finding and fixing z/OS Problem



New E3270UI highlights problems and simplifies resolving them quickly

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OMEGAMON for CICS provides improved visibility and opportunity to reduce resource usage

- Manage by using service level analysis of transactions based on response times – new to e3270ui
- Take advantage of using a zIIP specialty processor to decrease resource usage
- Leverage CPSM (Computerized Portfolio Management Services) data for configuration and control
- New ‘Find’ command to easily locate hung users and programs connections over entire cicsplex.
- Easy navigation from cicsplex to region to resource

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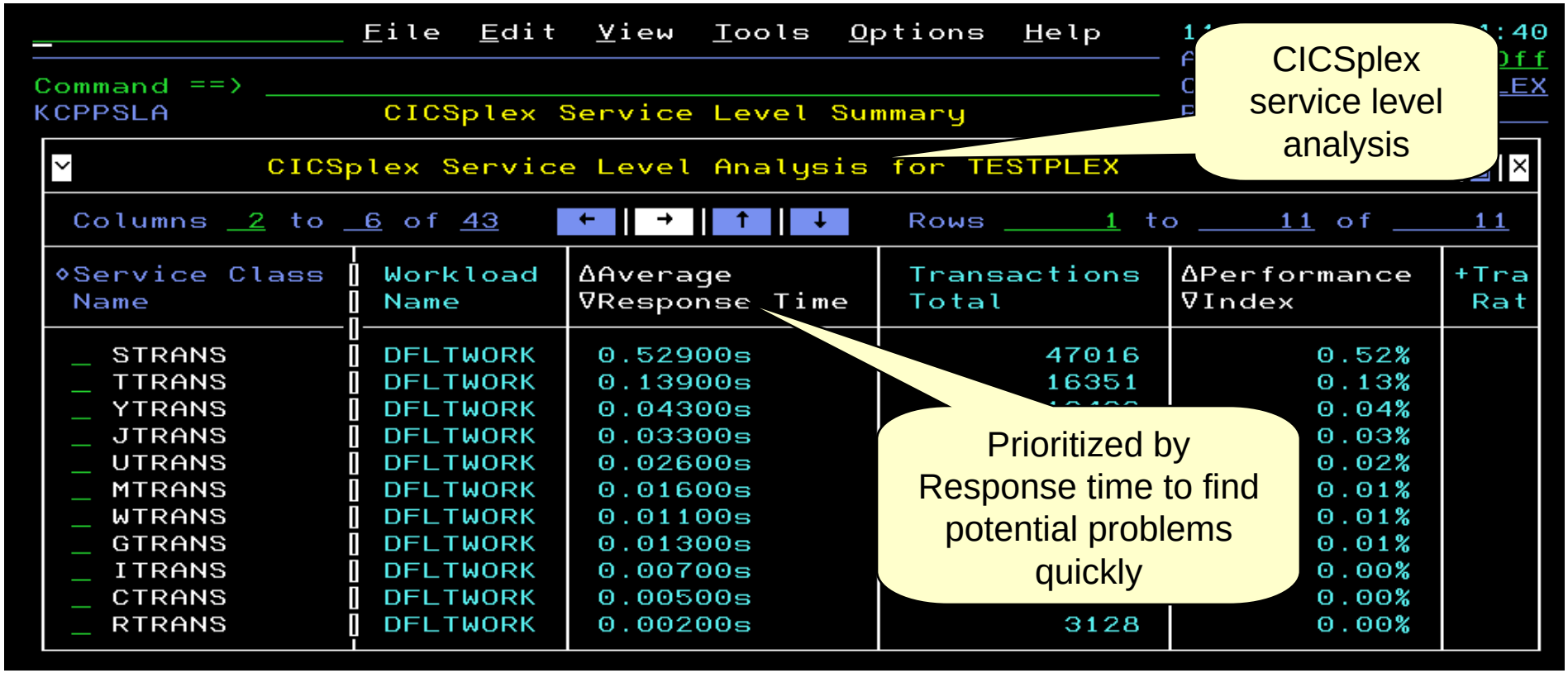
Visibility across entire CICS environment with new OMEGAMON for CICS Enhanced 3270 User I/F

Ability to monitor and understand current activity based on SLAs and KPIs



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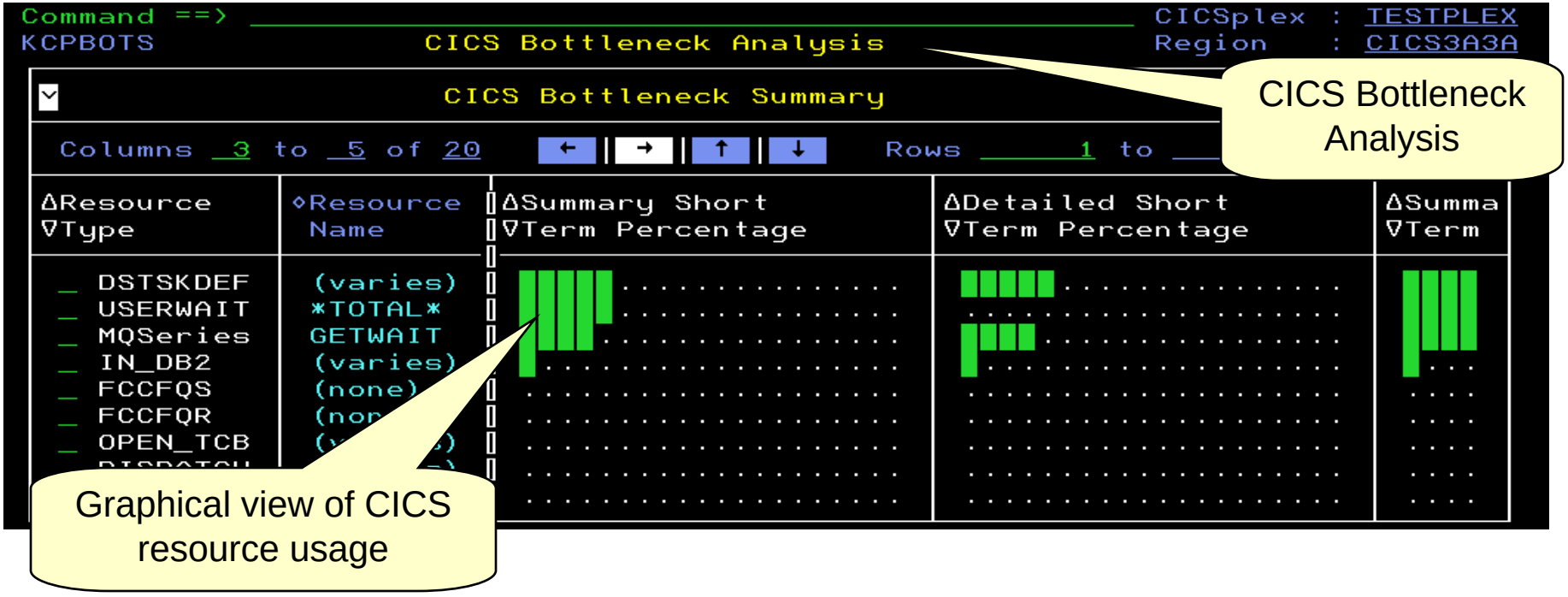
New OMEGAMON for CICS Bottleneck Analysis can improve overall system performance and availability

- *Assess Resource Usage by resource types*
- *Find, analysis and fix problems quickly*



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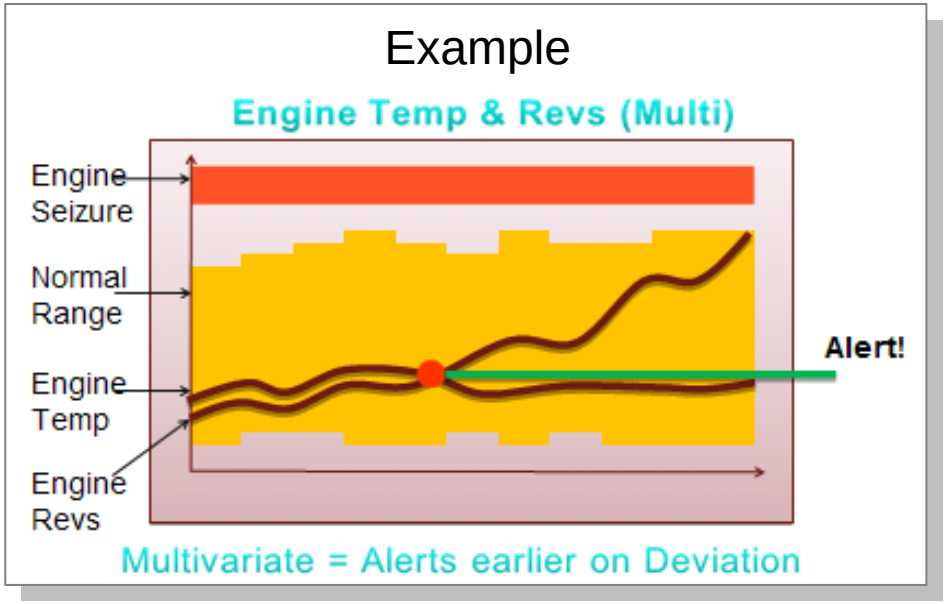
OMEGAMON Problem Solving Scenarios designed to help SMEs avoid service outages and track KPIs

- Identify anomalous KPI behaviour independent of thresholds.
- Exploit multi-domain analysis to identify complex interactions and enable composite KPIs
- View near real time streaming analytics to identify complex interactions and subtle emerging problems across domains

- Warn users in advance of service impact, deterioration or outage.
- Focus on usefulness of results, not on individual algorithms.



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Enhanced Configuration and Maintenance capability with Self-Describing Agents

- **Eliminate monitoring outages caused by ITM Server recycles**
  - Product upgrades/maintenance requires agent or RTEMS recycles only (No HTEMS or TEPS recycles)

- **Eliminate maintenance upgrade errors:**
  - Applies to new installs, staged upgrades, and maintenance
  - Crosschecks and validates version with installed data and framework
  - Avoids inconsistent application data in ITM framework layers
  - Pushes application data from the agent to upper layers at agent startup
- **Self-describing framework extensible to new layers (ex: TIP, E3270)**
- **Eliminates application data DVDs and CDs:**
  - No extra distributed installs or upgrades for mainframe-centric customers

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Customer Driven improvements with Installation and Configuration enhancements for Parmgen

- Removal of ICAT as the primary way to Install and Configure
- Install without need of a distributed server
- Walks you through steps to complete configuration and customize a profile
- Automatically updates hundreds of configuration artifacts according to profile, including Auto-discovery of system values

single reference book for upgrade guidance

"I like using the Parmgen approach better than CICAT/ICAT. I find it much easier to make things repeatable...
I like the fact that Parmgen does not overwrite my running members"
Typical quotes from early adopters program

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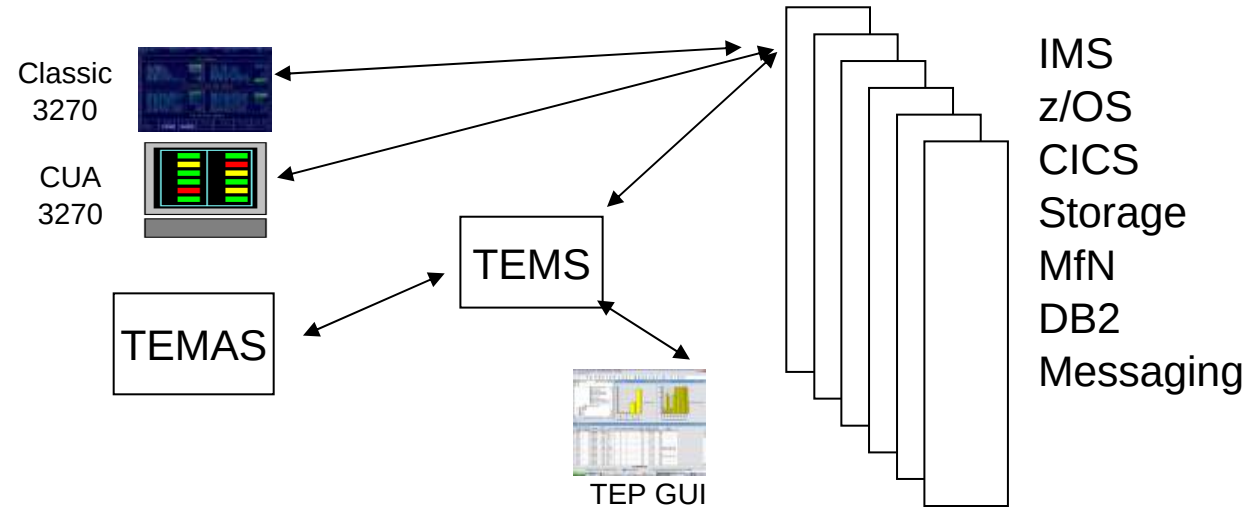
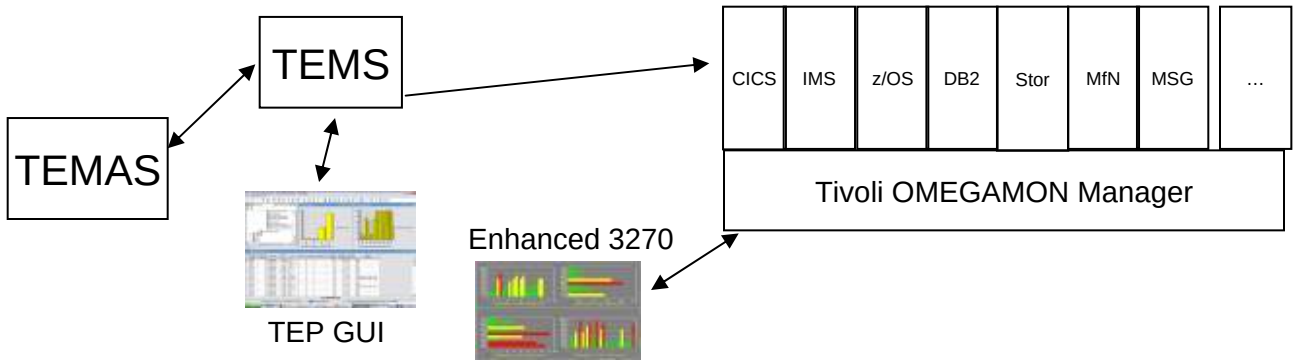
Redesigned OMEGAMON moving to simplified architecture allowing for decreased resource utilization

Current OMEGAMON Architecture



Multiple Address Spaces and User Interfaces across each OMEGAMON

Enhanced OMEGAMON Architecture



Single Manager and SME User Interface across OMEGAMON family

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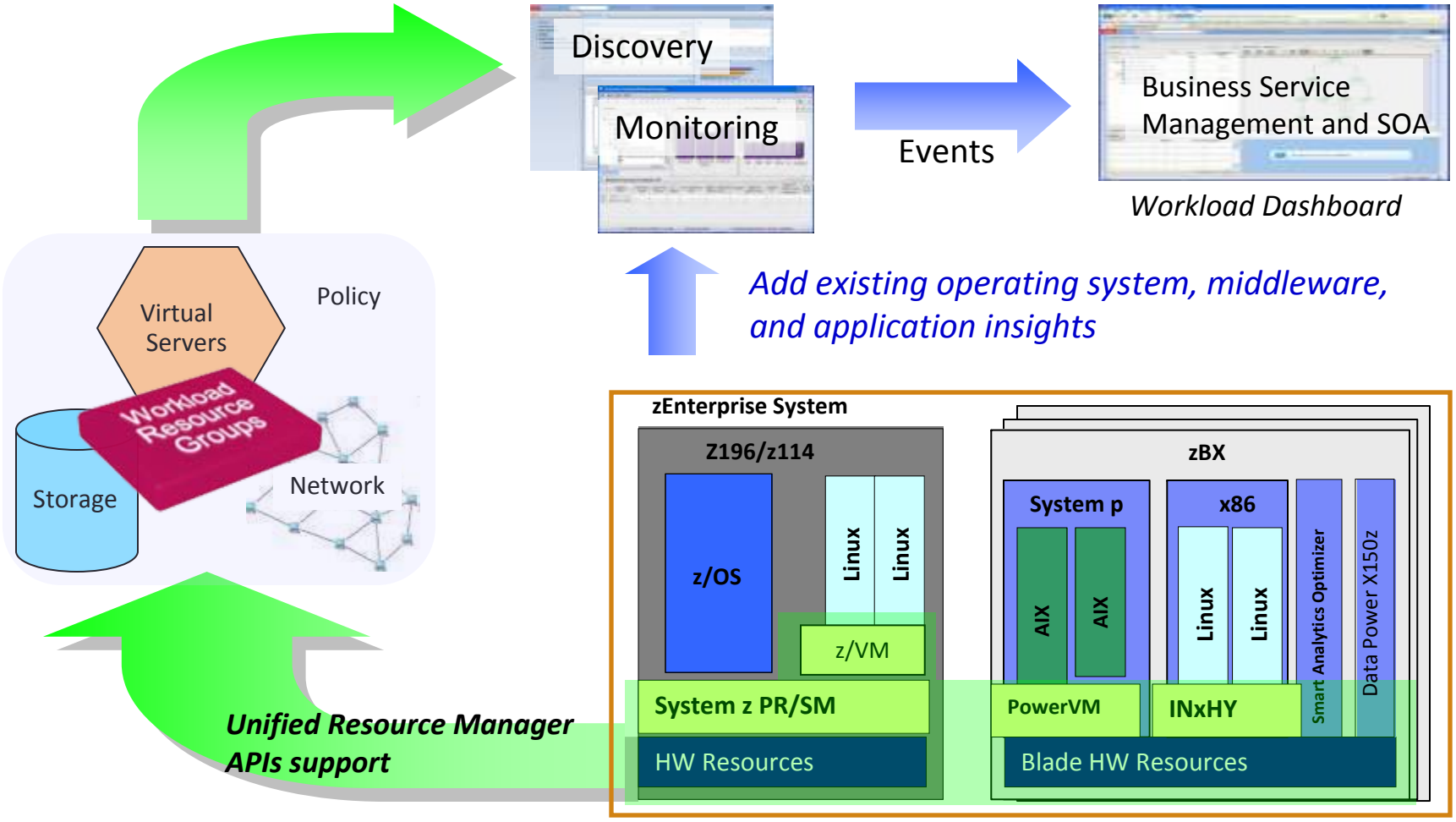
zEnterprise visibility support to allow for discovery and monitoring across all components

Workload Resource Groups include information across z196/z114 and zBX



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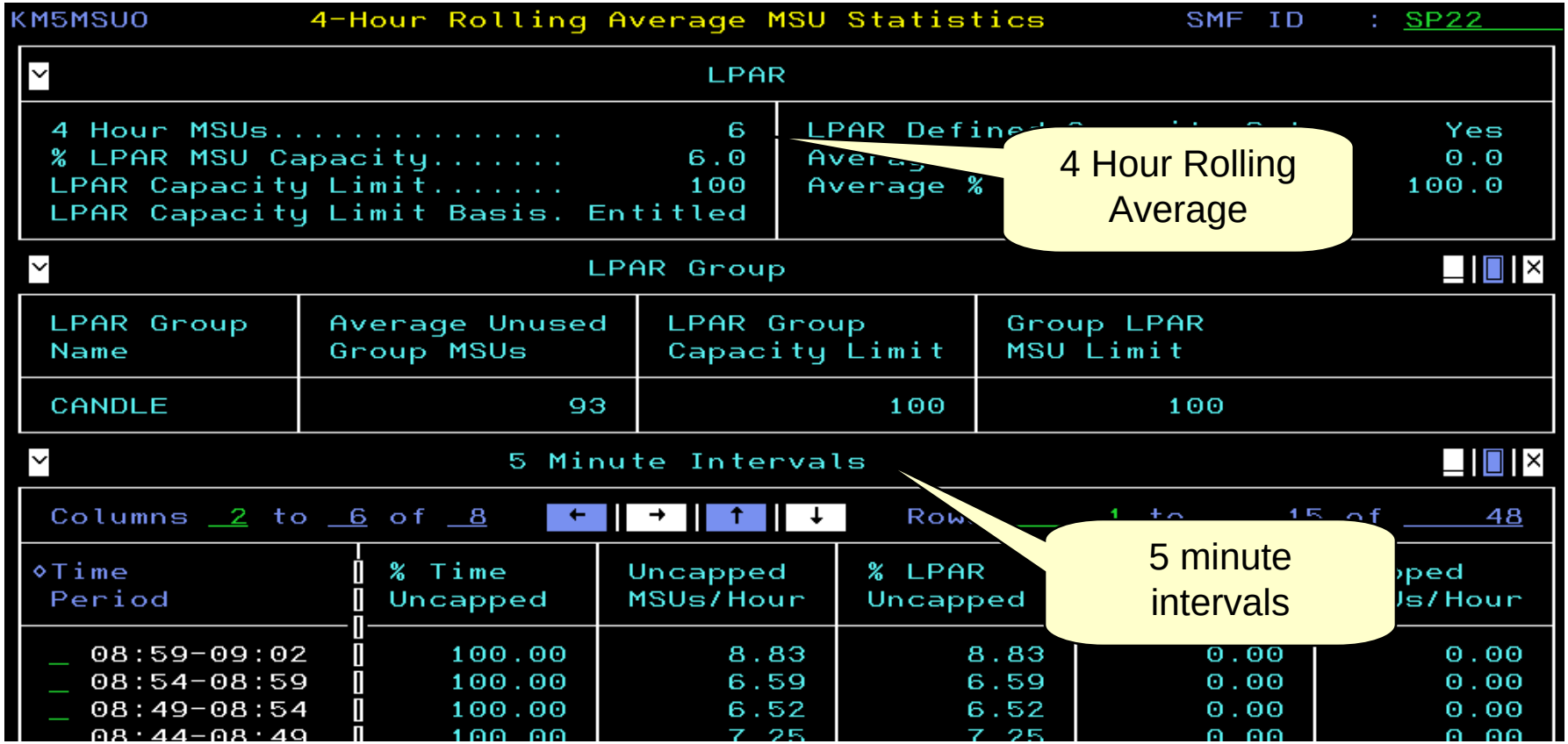
New Problem Determination and Management allows Operations and SMEs to see what is happening sooner

Monitor over time to identify and fix potential problems



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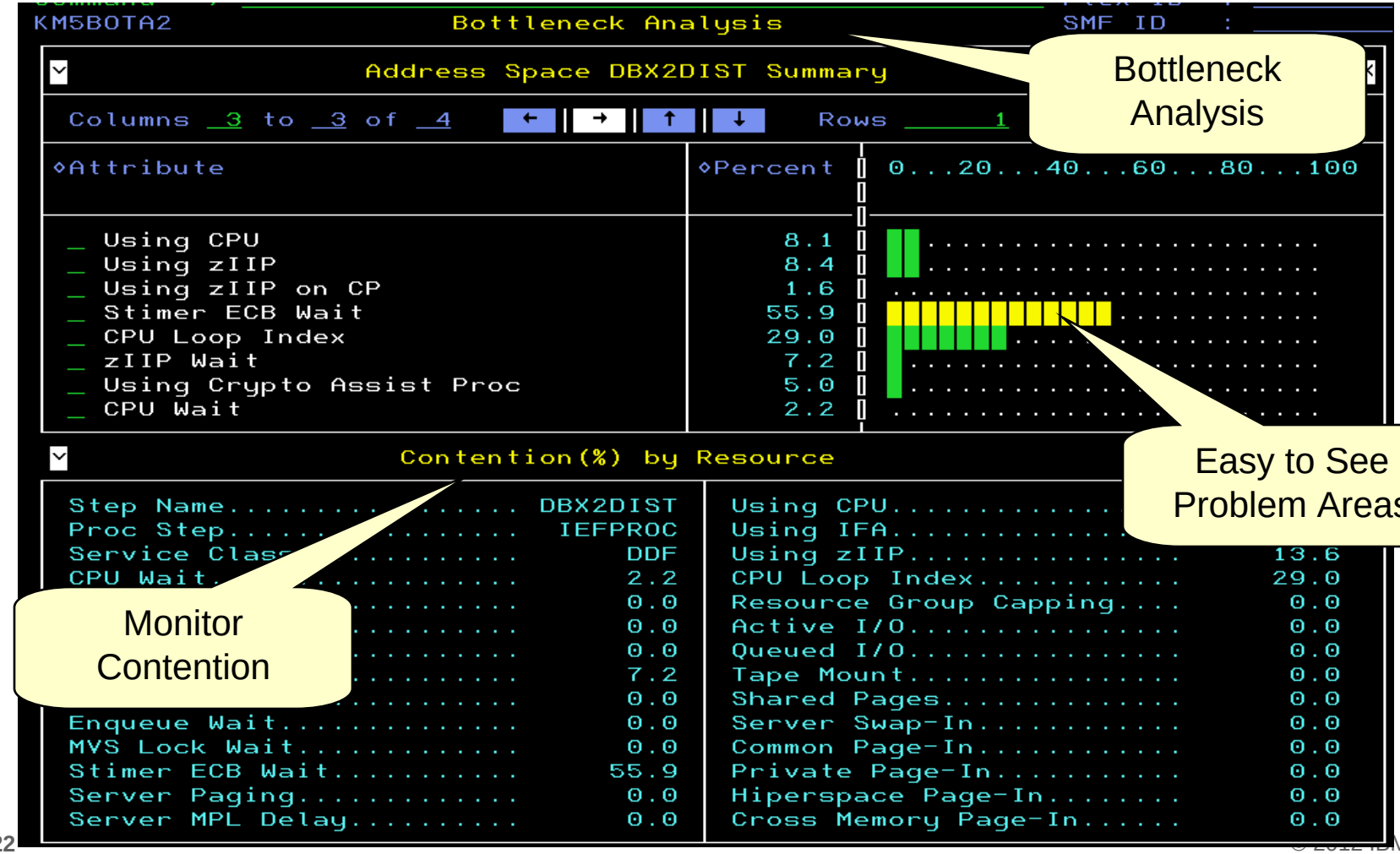
Bottleneck analysis provides visibility to potential problems before they become outages

Quickly find out where resource contentions and shortage exist



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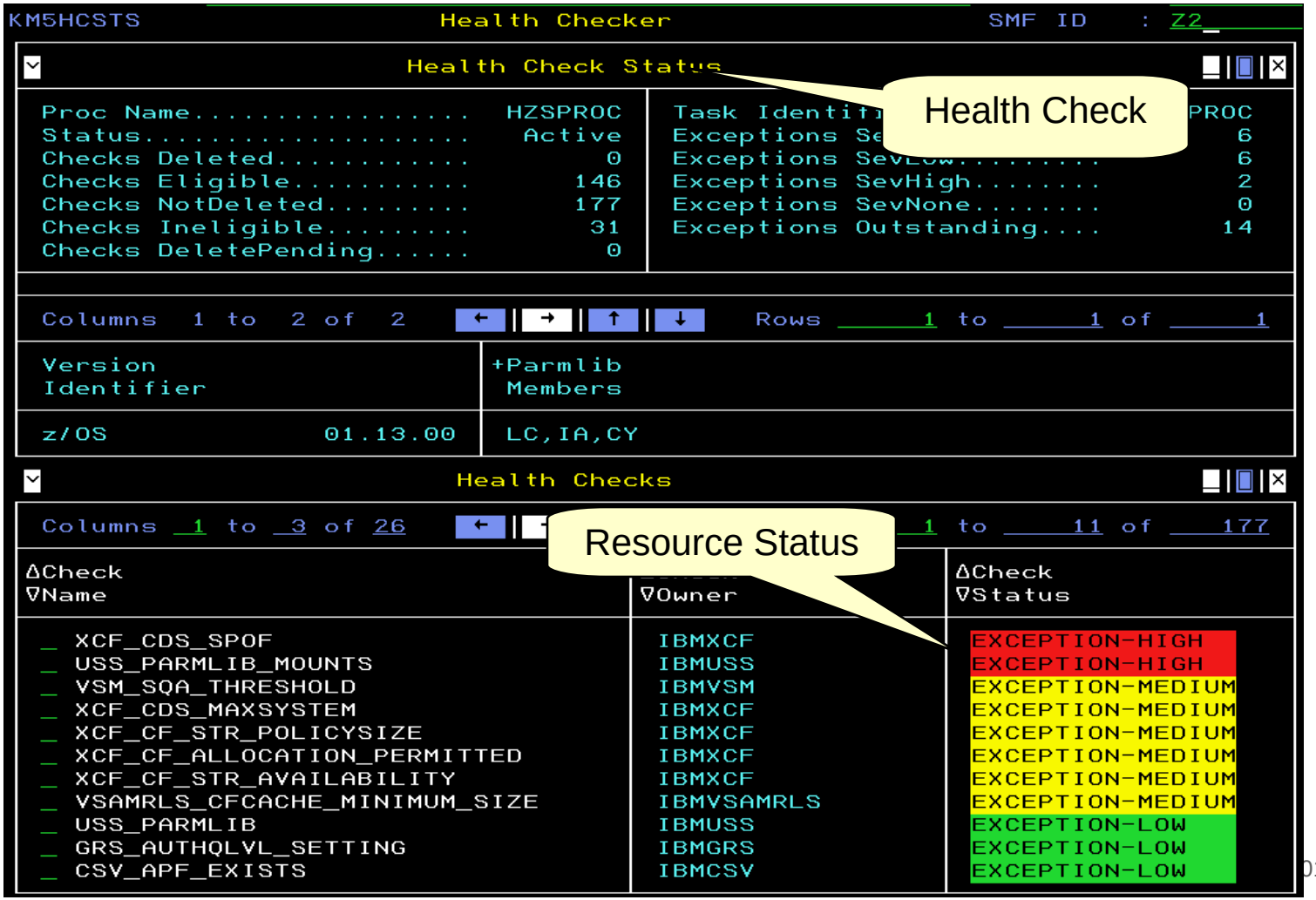
OMEGAMON Healthcheck analysis assists in finding and fixing problems quickly and efficiently

Regularly monitor key IT resources and usage



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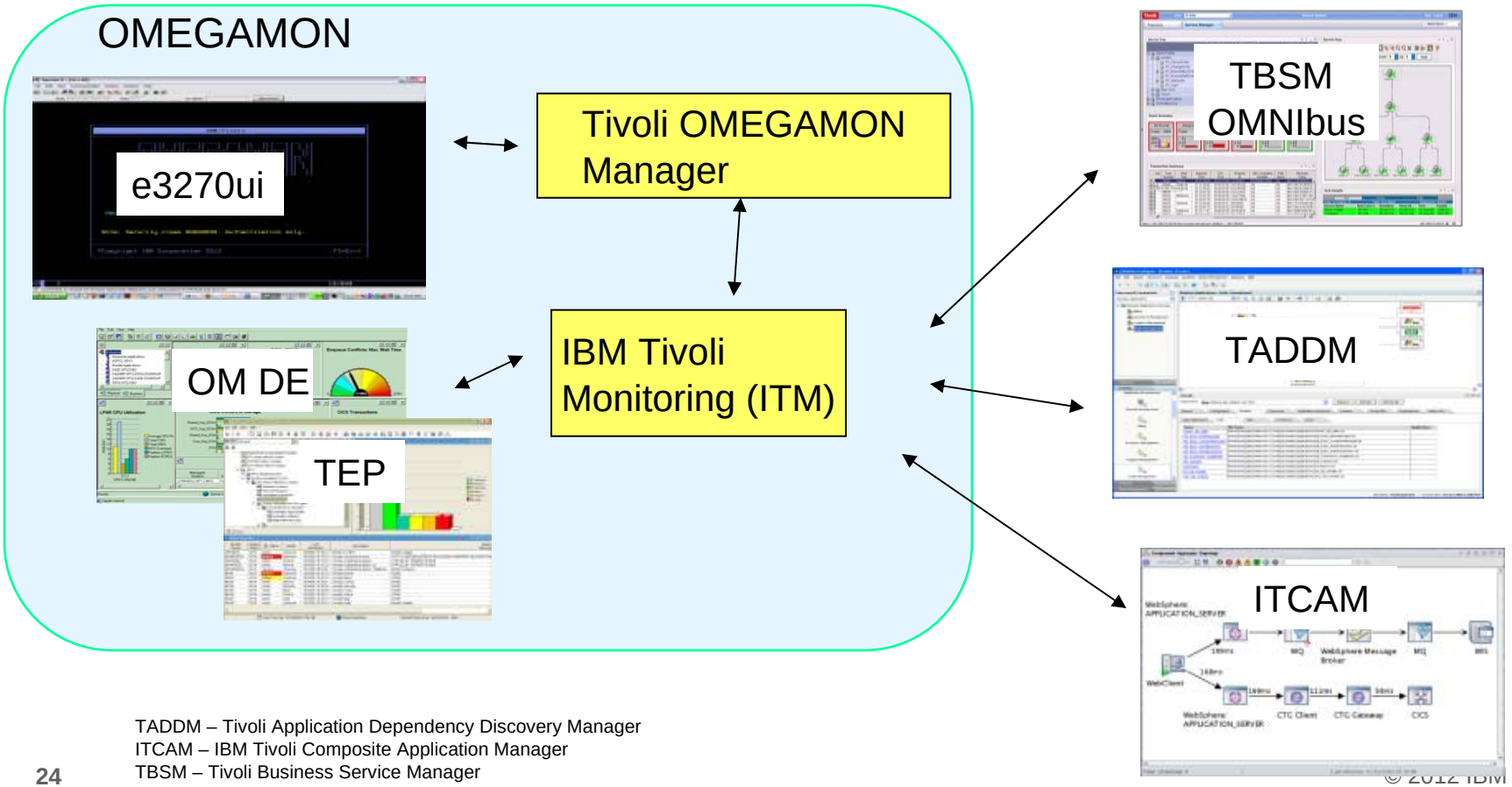
OMEGAMON integrates within a total System z Business Service Management solution

OMEGAMON XE Portfolio provides performance and availability management for events and data consumed by a complete set of Tivoli products on System z



TADDM – Tivoli Application Dependency Discovery Manager
ITCAM – IBM Tivoli Composite Application Manager
TBSM – Tivoli Business Service Manager

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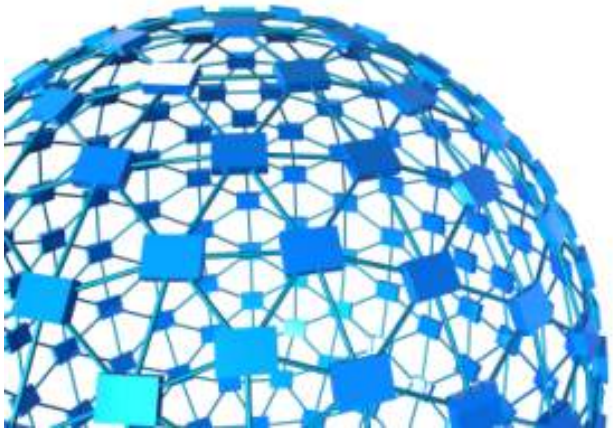
Optimize performance and availability of z/OS platform with OMEGAMON for z/OS Management Suite

- Bringing forward an integrated System z view for virtualized, network infrastructure
  - Manage based on key performance indicators (KPIs)
- Increasing Operations staff control of total System z environment with single view of:
  - Network, both SNA and IP
  - System z Storage
  - Operating System



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IBM System z Service Management continues providing customers improved business flexibility

Key Takeaways

1. IBM recognized leader in Application Performance Management with Visibility, Control and Automation for high quality Service Management

2. Redesigned OMEGAMON family reduces resource usage while providing better visibility and problem management

3. Enhanced 3270 User Interface provides faster and more effective monitoring and problem management capability across multiple products and sysplexs

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Learn more about OMEGAMON and IBM's entire Tivoli System z portfolio at upcoming Pulse Conference

Pulse 2012
Optimizing the World's Infrastructure

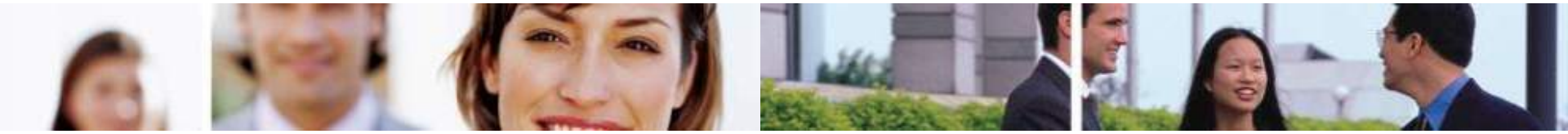
Location:
MGM Grand Hotel

Register at:

http://www-01.ibm.com/software/tivoli/pulse/

Receive Tivoli for System z information updates on a regular basis:

- *IBM Software Newsletter*



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