



## IBM Service Management Suite for z/OS – SPARTA-RTP

May 5, 2015 Joe Winterton

Release Manager, IBM Systems Group

## Agenda Service Management Suite for z/OS

- Introduction
- IBM Service Management Suite for z/OS
- Automation
- Network Management
- Performance Monitoring
- Asset Discovery
- Value through integration
- What's new
- Summary

# Rapid growth of next generation technologies supported seamlessly on zEnterprise



System z scaling model and security to manage and optimize both



- Business Transactions
- Quality of Service
- Command & Control
- Facts and data "source of truth"
- z/OS

- Mobile and Social
- Dynamic
- Interactions and Collaboration
- Insight, trends, analytics
- Linux on System z

## Mainframe customers require ability to quickly correlate and fix problems across applications



**Islands of monitoring and automation** lead to potentially more outages and higher costs

- Low automation degree
- Problems crossing monitors hard to diagnose due to lack of correlation or drill down
- Higher education, installation and maintenance costs
- Less flexible sysprog and operations specialists

### **Customer challenges**

- Performance number values what is good versus bad
- How to find correct thresholds
- Problems detected in time versus flooded with exceptions
- Identify problems before they cause an outage
- Quickly finding root cause



## Lack of automation can increase costs and risks



- Many shops only automate IPL, messages, and shutdown
- Recovery automated only for single resources without dependencies
- Complex recovery or moves done by operators leads to higher effort and recovery time
- Operators not alerted about monitor or automation exceptions
- Performance problems not solved by automation

# High automation degree can decrease costs and risks





- Complex recovery or moves done by automation – fast and reliably
- Operators alerted about monitor or automation exceptions
- Pro-active automation using monitoring can resolve performance problems before they cause outages
- Operators and SMEs can solve problems faster by using automation to manage applications





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## IBM Service Management Suite for z/OS combines monitoring and automation for integrated capability







- OMEGAMON and System Automation work together to provide simplified operations and reduced risk
- Exploit Tivoli Asset Discovery to better understand application usage and save license charges and address audits



# Service Management Suite for z/OS V1.2

- ✓ Provides comprehensive service management capabilities for IBM zEnterprise
- Simple Pricing metric (One Time Charge PID) to deploy infrastructure and middleware solutions as needed



- Single offering that contains capabilities to manage z/OS and all key subsystems
- High Availability & Automated Operations to improve Service Levels and reduce system downtime
- Ability to visualize and automate your mainframe environment as a single system
- Eliminates boundaries between system and application components



- Network & Performance Management to increase efficiency of resources and personnel
- Tools tightly integrated providing pro-active automation, which helps on problem resolution even before an alarm goes off





# Service Management Suite for z/OS V1.2



## HIGHLIGHTS

- <u>Increased efficiency</u> Enhanced OMEGAMON functions with OM Performance Management Suite V5.3 updates (e.g. 3270 UI Near Term Historical capability).
- <u>Improved time to value</u> Improvement customer experience with a 80% decrease in time of System Automation base installation and configuration.
- <u>Reduced risk of application downtime</u> with pro-active automation enhancements (out of the box policy-based management of looping address spaces to help SMEs execute various recovery actions without the need for programming.)
- <u>Increased visibility and improved application availability</u> Support of ITM pure events helps System Administrators to get situations reported immediately for selected automation resources to allow for corresponsive actions.
- <u>Pro-active outage prevention through analytics</u> New Monitoring and Automation integration capabilities enable customers to pro-actively avoid outages through predictive insights analytics and zAware hardware automation support
- <u>Improved SME productivity</u> Multiple users are able to customize and browse an automation policy while a configuration built process runs in parallel.

Service Mgmt Integration Dashboard Strategy





### **IEM's** zSystems Service Management Dashboards (Beta - now)







# Using and adopting IBM Design Thinking Principles

- Stated project objective
- Targeted personas
- Followed Design Thinking Principles
  - -User Interviews and Key Insights
  - -Hills
  - -Sponsored Users
- Wireframes/Demo

# SOD for zSystems Service Mgmt Dashboards



### • IBM Service Management Suite for z/OS

– IBM intends to release a new version of Service Management Suite for z/OS with a new customizable user interface. The offering will help IT users simplify the automation and monitoring of heterogeneous and complex workloads from one operations console.

### IBM Service Management Suite for z/OS (Beta)

 Service Management Suite for z/OS will create custom dashboards with suite product integrations, allowing for enterprise level visibility and controls for automation and monitoring



# Project Objective:

 Deliver a compelling single point of control for modernized service management to help clients mitigate the issue of ongoing skill losses

 Enable clients to quickly diagnose problems and restore service faster by providing assistance and guidance to fixing the problem.

![](_page_16_Picture_0.jpeg)

# It is all about User needs

![](_page_16_Picture_2.jpeg)

![](_page_16_Picture_3.jpeg)

Joe Winterton @Joe\_Winterton · Feb 24 Ux session happening now #ibminterconnect #mainframe #omegamon

....

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# **Personas - Primary**

![](_page_17_Picture_2.jpeg)

![](_page_17_Picture_3.jpeg)

![](_page_17_Picture_4.jpeg)

#### Description

- Encompasses the group of L2 operators
- Monitors events and tickets to identify problems that might be impacting users of applications or anything else in the IT infrastructure
- She will attempt to resolve problems as fast as possible
- Does some problem analysis and fixing, but hands difficult problems off to the appropriate person
- Uses runbooks procedures or routes problems to the right person if problem is beyond her scope

### End Goals

- Don't miss any critical status event
- Keep the number of critical errors at a minimum
- Solve problems by executing the necessary actions according to runbook procedures
- Know when to hand off problems to the administrator or an applicationspecific SME
- Handle the daily requests in an efficient and timely manner
- When starting or stopping an application, she wants to know the effect on related applications

![](_page_17_Picture_18.jpeg)

Josh Junior Operations Analyst

#### Description

- Encompasses the group of L2 operators
- Monitors events and tickets to identify problems that might be impacting users of applications or anything else in the IT infrastructure
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# **Personas - Secondary**

![](_page_18_Picture_1.jpeg)

![](_page_18_Picture_2.jpeg)

Experience

![](_page_18_Picture_3.jpeg)

#### Description

- Senior system programmer and automation administrator at NTB
- Designs, sets up and maintains the automation policy
- Besides doing this policy related work, he is an automation expert and therefore often analyzes and fixes problems that cannot be solved by operators
- Creates custom solutions by extending the capabilities of the product (e.g. writes small scripts for alerting, integration with GDPS, monitoring or job scheduling, or exploiting sysplex automation capabilities)

#### End Goals

- Keep the systems running with the desired set of applications and features
- Increase the degree of automation and avoid manual and time intensive tasks
- Respond quickly to the business needs and add new workloads to the automation
- Find the problem cause and fix problems as quickly as possible
- Ensure that common problems don't occur again
- Make an operator's life easier

![](_page_18_Picture_16.jpeg)

### Jim Subject Matter Expert

• Expert in particular domain: Database Administrator, MQ Admin, CICS System Programmer, MVS Systems Programmer

• Skilled in the areas of expertise.

• Handles any complex problems that operator can not directly solve.

• Helps in the automation and creation of runbooks for the resolution to common problems by operations analyst team without his assistance.

As an IT Operations manager, I am able to easily identify on my mobile in the exception events and automation status for a resource in my z Systems infrastructure and allowing me to identify what component is the problem

- 1.Doug the IT Operations manager is in meetings most of the day. Since the number of users of the online banking application have significantly increased after a recent acquisition, Doug needs to be able to access at any time the system health of the z Systems infrastructure.
- 2.During a meeting, Doug glances at his mobile device and sees that a critical event has been issued.
- 3.He selects the event and is navigated to the LPAR Overview page. He scans the list of LPARs and sees that LPAR EXT1MVS has an evaluated status of critical.
- 4.He selects LPAR EXT1MVS and sees that the percent of ECSA in use has exceeded its threshold.
- 5.He launches his IM application on his mobile device and chats with Jim the SME to make sure he is actively working on it and if he needs any assistance.

## It is a new World – Where is Doug? His mobile is there with him

![](_page_20_Picture_1.jpeg)

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## Design Thinking User Process

![](_page_21_Picture_1.jpeg)

- Product Management, Architects and UX create draft hills
- Conducted user research via client interviews
- Gleaned key insights from each client interview
  –Empathy Mapping and Affinity Diagram
- Updated draft hills based on common insights from user interviews
- Recruited sponsored users and started playbacks
- Iterative designing and prototyping with regular design, review and feedback sessions with internal stakeholders and sponsored users.

![](_page_22_Picture_0.jpeg)

![](_page_22_Picture_1.jpeg)

# **Conducted User Interviews**

# What are your sites local problems?

- -3 banking customers
- -2 Insurance customers
- –2 manufacturing customers
- -1 Government customers

![](_page_23_Picture_0.jpeg)

![](_page_23_Picture_1.jpeg)

# Looking for a few more

# Direct feedback often on product

# • Hills - Wireframes

• Beta/Hosted Beta – all can join

![](_page_24_Picture_0.jpeg)

![](_page_24_Picture_1.jpeg)

# Demo zSMS Web UI

## Beta/Hosted Beta - zSMS

![](_page_25_Picture_1.jpeg)

# Customizable Dashboards for IBM Service Management Suite for z/OS V.Next announced - Looking for Beta participants

WiltrudRebmann | Feb 18 | Visits (573) 📴 1 - You like this - Unlike

With the next release of Service Management Suite for z/OS IBM intends to deliver a **new web based DASHboard** user interface. The offering will enable users to automate and monitor heterogeneous workloads from one operations console. Customizable DASHboards will introduce a new level of service management integration with improved transparency and control of your z Systems workload.

![](_page_25_Figure_5.jpeg)

See here here for the announcement letter.

A first glance with a demo will be possible next week at **InterConnect 2015** in Las Vegas, at **z Systems Sessions and Activities** un der **Cloud and Smarter Infrastructure: Monitoring your z/OS Environment**.

Additional information and more details will be discussed during AOTC 2015 (Automated Operations Technical Conference).

The development team is looking for customers and business partners who are interested in participating in an Early Access Program and later possibly in a Beta Program for the IBM Service Management Suite for z/OS (SMSz), including the new web based DASHboard user interface.

This program is a way for participants to follow along as new product enhancements are developed. You will be able to validate new product enhancements that could be of value to you and influence the development teams to improve the product and its features to meet your needs. You have the chance to get in direct contact and discussion with development team members.

The development team value feedback from product users as they develop new releases. We understand that participants have many demands on their time, so there is no minimum time commitment. There are several ways to participate including web conferences, web-based discussion forums, and playing with Beta code available for download and installation in your test environment.

You are welcome to participate as time allows. Participation requires to sign an IBM nondisclosure agreement.

For more information please contact Uwe Gramm (Product Manager SMSz) at <u>gramm@de.ibm.com</u> or Wiltrud Rebmann (Release Manager SMSz) at <u>rebmann@de.ibm.com</u>.

## Got a z System Performance issue? - Could LOG errors quickly tell you the reason?

JoeWinterton | Feb 12 | Visits (745) 📴 - Like

Now you can use IBM SmartCloud Analytics – Log Analysis and OMEGAMON Performance Management Suite agents working together under Tivoli Enterprise Portal. This is a very powerful tool to help you find issues impacting your performance very quickly.. Check this link for details http://www.ibm.com/support/docview.wss?uid=swg21696831

Tags: omegamon logs analytics zos log sca-la

### Use Enhanced HOLDDATA for z/OS to keep up with HIPER and PE

### maintenance.

JohnArnesen | Feb 11 | Visits (445) 🔛 1 - Like

Hello Everyone, This is John Arnesen with NetView and System Automation for z/OS level 2 support. We have seen instances where a customer issue can be avoided by keeping up with HIPER and/or PE maintenance. Customers have asked how they can keep current with HIPER's and PE's. The answer is a SMP/E function called Enhanced Holddata that lists all the Hiper and PE maint for z/OS products. Customers can request this data and it is also shipped with all ESO's, Corrective Service orders and PDOs. Here... [More]

### IBM Service Management Suite for z/OS V.next - Early Access and Beta Program Announcement

WiltrudRebmann | Feb 10 | Visits (528) 📴 1 – Like

The OMEGAMON, System Automation for z/OS (SA z/OS), NetView and Tivoli Asset Discovery for z/OS (TADz) development teams are looking for customers and business partners who are interested in participating in an Early Access Program and later possibly in a Beta Program for the IBM Service Management Suite for z/OS (SMSz). Initial foc us is on the Early Access Program with design discussions, participation in the Beta Program (with code download and installation) can be decided later. This program is a way for participants to follow... [More]

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8+1

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## Thank You