

# **z/OS Management Facility (z/OSMF) Overview Session: 9734**

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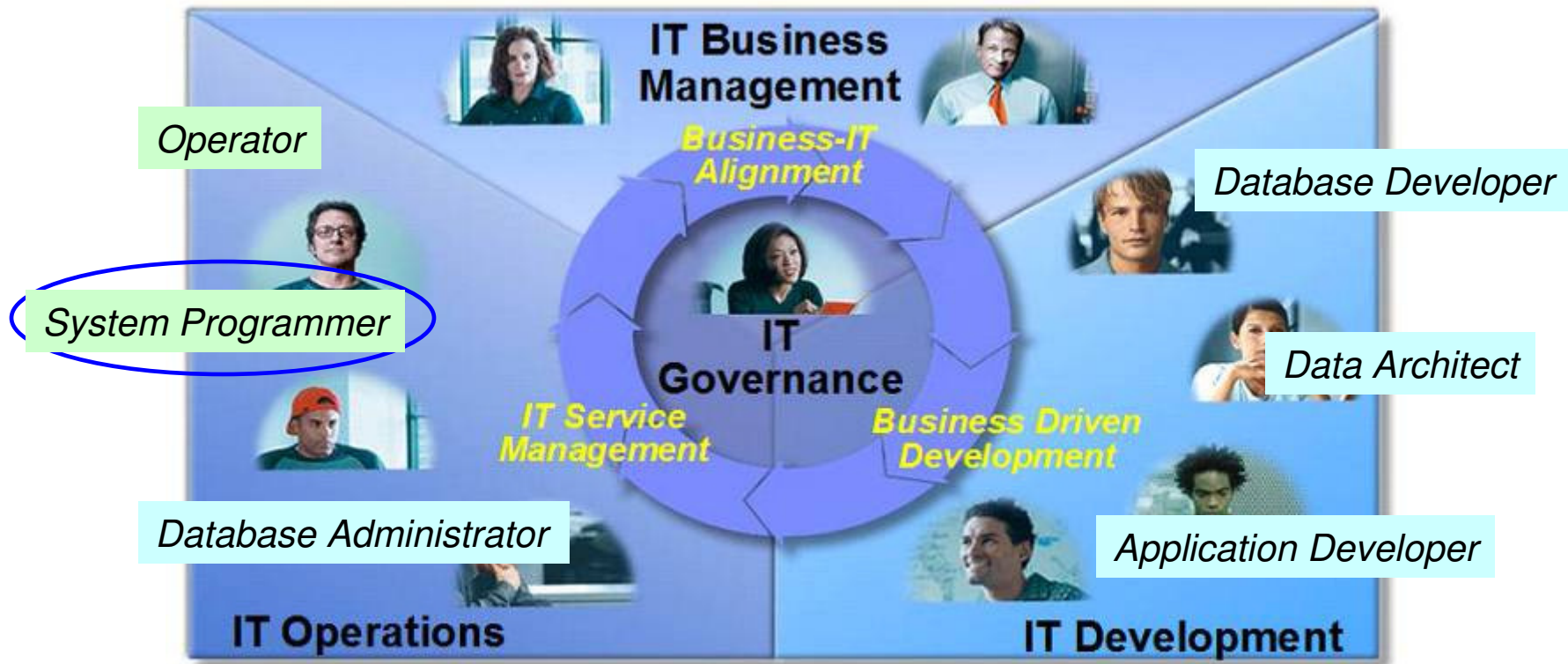
STSM, z/OS Systems Management and  
Simplification

# Agenda

- **z/OSMF Overview**
- **z/OSMF V1.12 Functions**
  - **Incident Log**
  - **Configuration Assistant for the z/OS Communications Server**
  - **WLM Policy Editor (z/OSMF V1.12)**
  - **Resource Monitoring ( z/OSMF V1.12)**
  - **Administration**
- **What's coming next in V1R13? - preview**
- **Summary**

# IT Organizational Domains

- ✓ Need for simplification of tasks
- ✓ Modernization and integration of tools



- ✓ Within each domain to enhance productivity
- ✓ Across domains to enhance collaboration

# ***Focus Areas for Simplification***

## ***Problem Determination and Analysis***

- Monitoring health; identifying real and potential problems
- Analyzing and resolving problems

## ***Configuration***

- Adding or changing system components; enabling new features; defining and updating policies that affect system behavior.

## ***Simplify and modernize the System Programmer User Experience***

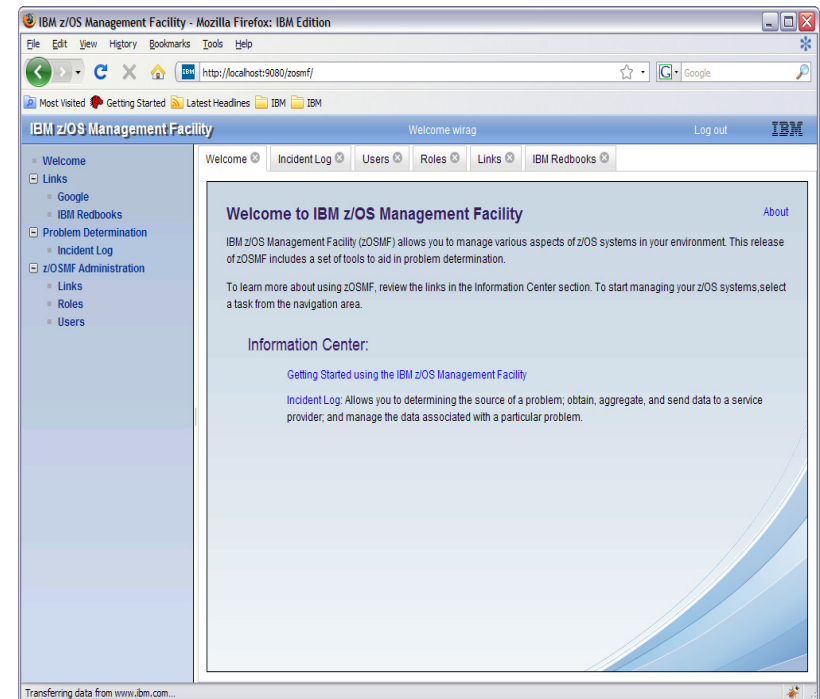
Deliver solutions in a task-oriented browser-based user interface with integrated user assistance

## ***Information***

Finding the information needed to use z/OS

# IBM z/OS Management Facility

- The IBM z/OS Management Facility is a zero priced new product for z/OS that provides support for a modern, Web-browser based management console for z/OS.
- First release is z/OSMF 1.11, introduced with z/OS 1.11
- Helps system programmers to more easily manage and administer a mainframe system by simplifying day to day operations and administration of a z/OS system.
- More than just a graphical user interface, the z/OS Management Facility is intelligent, addressing the needs of a diversified skilled workforce and maximizing their productivity.



# Focus on System Programming



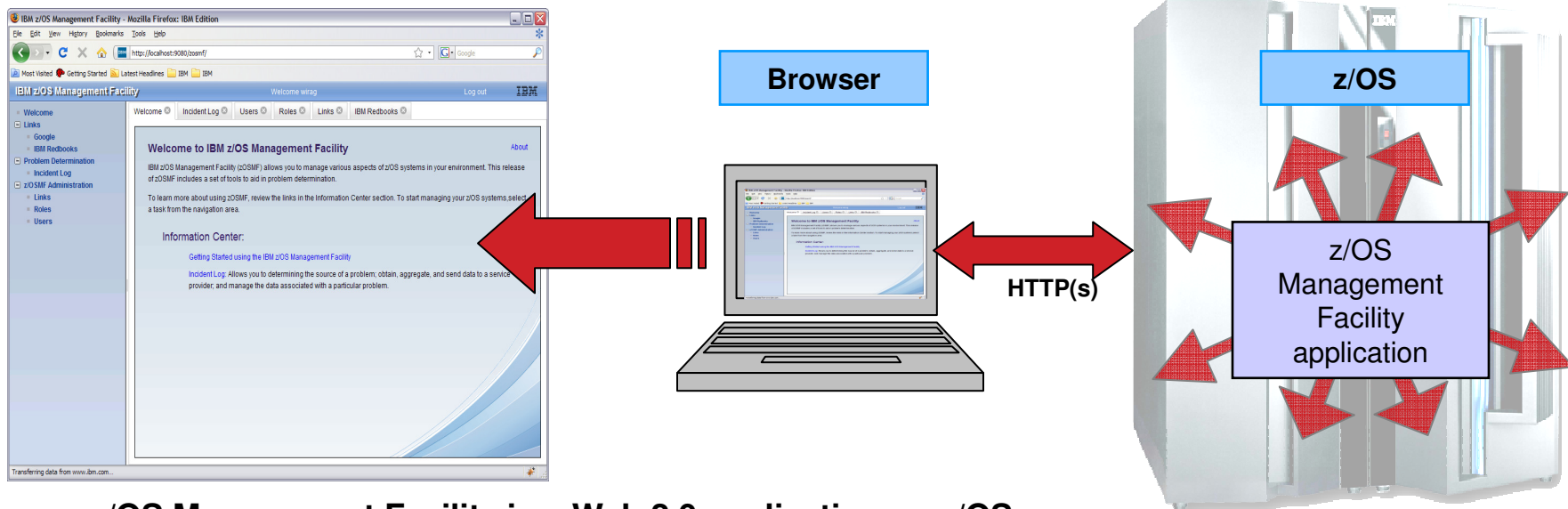
- **Address the needs for a mixed skilled workforce.**
- **Make System Programmers who are new to the mainframe productive more quickly by:**
  - **Providing a modern browser-based user interface that is more familiar to those new to the platform**
  - **Automating tasks, thus reducing the learning curve**
  - **Embedding active user assistance in the UI (e.g., wizards that guide users through tasks, interactive troubleshooting aids).**
- **Make experienced System Programmers more productive by:**
  - **Making functions easier**
  - **z/OS Management Facility is optional for those who prefer traditional interfaces**





# IBM z/OS Management Facility

## *z/OS application, browser access*

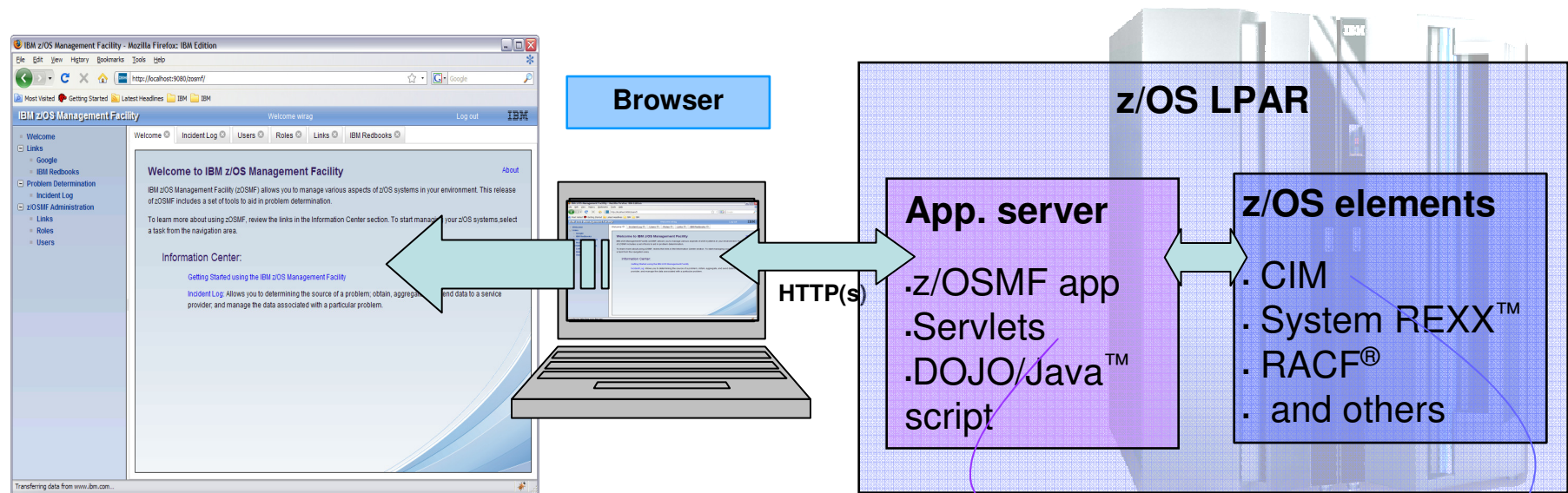


- **z/OS Management Facility is a Web 2.0 application on z/OS**
  - **Manages z/OS from z/OS**
  - **Browser communicates with z/OS MF via secure connection, anywhere, anytime**
  - **z/OSMF V1R11 is supported on z/OS V1R10 w/maint, z/OSV1R11, and above**
  - **z/OSMF V1R12 is supported on z/OS V1R12**
  - **z/OSMF V1R13 is to be supported on z/OS V1R13\***

\* Statements regarding IBM future direction and intent are subject to change or withdrawal, and represents goals and objectives only.

# IBM z/OS Management Facility

## *Industry standards*



### z/OS Management Facility is based on industry standards

- Java and Dojo - Dojo is an Open Source DHTML toolkit written in JavaScript. Dojo allows you to build dynamic capabilities into web pages and any other environment supporting JavaScript.
- Parts of z/OS Management Facility, such as Incident Log (R11) and WLM Policy Editor (R12)\* use JAVA and CIM
- z/OSMF communicates with z/OS security server and other z/OS components as needed by the plug-ins

Java apps  
and Java-  
based CIM  
client  
eligible for  
zAAP

z/OS  
CIM server  
eligible for  
zIIP  
(R11 and up  
only)



# Guest view

## Login



IBM z/OS Management Facility Welcome guest IBM

User ID  
Password or pass phrase  
Log in

Welcome

IBM Internal Use Only

Welcome to IBM z/OS Management Facility [About](#)

IBM z/OS Management Facility (z/OSMF) allows you to manage various aspects of a z/OS system through a Web browser interface. By streamlining some traditional tasks and automating others, z/OSMF can help to simplify some areas of system management and reduce the level of expertise needed for managing a system.

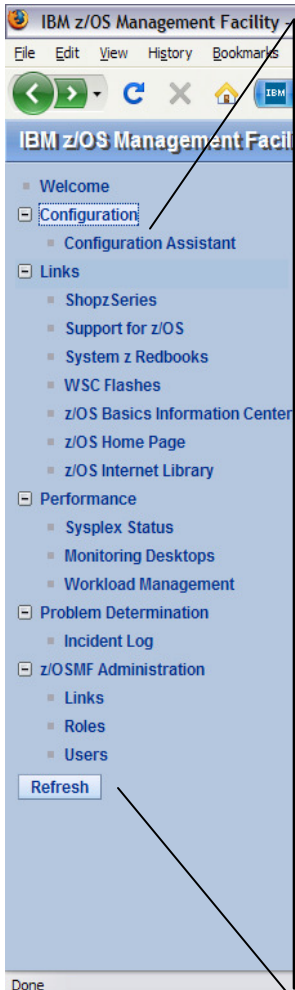
Log in to utilize and learn more about z/OSMF.

Unauthorized access to this system is prohibited IBM

- Secure connection from browser to z/OSMF host
- To log in you will need a z/OS userID that has been defined and enabled to for z/OSMF (and the WebSphere® runtime environment)
  - Guidance is provided.

# IBM z/OS Management Facility – V1R12

## *Welcome page*



**Configuration category**

- Configuration Assistant for z/OS Communication Server application
- Simplified configuration and setup of TCP/IP policy-based networking functions

**Links category**

- Links to resources - provides common launch point for accessing resources beyond z/OSMF

**Performance category (R12)**

- Resource Monitoring: **Sysplex status and Monitoring desktops**
- The z/OSMF Resource Monitoring application provides integrated performance monitoring of z/OS sysplexes in the customer's environment
- Workload Manager Policy Editor** application
- Facilitate the creation and editing of WLM service definitions, installation of WLM service definitions, and activation of WLM service policies

**Problem Determination category**

- Incident Log** application
- The Incident Log provides a consolidated list of SVC Dump related problems, along with details and diagnostic data captured with each incident. It also facilitates sending the data for further diagnostics.

**z/OSMF Administration category**

- z/OSMF authorization services for administrator: add users, define roles, dynamically add links to non-z/OSMF resources.

# Focus on Problem Determination

- **Pain Points**
  - Need to troubleshoot a live system, recover from the failure.
  - Need to reduce risk to the business, reduce risk of re-occurrence.
  - Complexity of performing the task (number of steps, jargon).
  - Data collection very time-consuming
  - Significant skill level needed to analyze problems, interact with IBM and ISVs to obtain additional diagnostic info (setting SLIP traps, traces, etc.)
- **Focus on Problem Determination capability - Incident Log:**
  - Troubleshoot your system easier, faster
  - The incident log and underlying z/OS diagnostic data gathering greatly improves the tasks related to:
    - Identifying system-detected problems (related to SVC dumps taken by the system)
    - Collecting diagnostic materials related to a problem and sending materials to IBM or another company's support area
    - Tell the system to take the next dump for a previously-recognized problem

# z/OSMF Problem Determination – Incident Log

## *Details*



- **Auto-capture basic diagnostic materials, triggered when the dump is written to a data set, managed via PARMLIB member**
  - **Initial focus is on Abend and user initiated SVC dumps**
  - Improved FFDC for system-detected problems
  - Diagnostic data “snapshots” for transient data: Snapshots of 30 min Operlog or Syslog, 1 hr Logrec detail, and 4-hour Logrec summary
    - **Incident Log will support the creation of diagnostic log snapshots based on the SYSLOG and LOGREC data sets, as well as the OPERLOG and LOGREC sysplex log streams**
  - Allow doc to be tersed and FTP'd to IBM (or ISV) without having to keep track of where logs are archived via easy to use interface
  - Simplify informing DAE to take the next dump for the incident's symptom string
- **Functions include:**
  - Display list of incidents (Filter/ sort/ configure/ delete)
  - Display properties – view list of diagnostic data, logs
  - Set properties: associate problem number and tracking id (R11), new fields and more customization capabilities (R12)
  - Send diagnostic data via FTP: Manage FTP jobs status and define FTP Profiles (firewall) (R11), support for encrypted and parallel FTP (R12)
  - Send additional user-defined diagnostic data
  - Enhance scope of diagnostic log snapshots created (R12)
  - Allow next dump

# Incident Log – Summary Information

IBM z/OS Management Facility - Mozilla Firefox: IBM Edition

File Edit View History Bookmarks Tools Help

https://mysystemz:32208/zosmf/ IBM w3

Most Visited Rochesters Popular Li... dogear this O'Reilly - Safari Books ... Books 24x7 Home - zMF Agile Proj... z/OSMF Exploiters Wik... getAbstract IBM

**IBM z/OS Management Facility** Welcome zmaadm Log out IBM

Welcome Incident Log

Incident Log

Many fields, set tracking IDs

Select incident, get popup with actions

Add comments

Incident Type Filter	Description Filter	Problem Number Filter	Tracking ID Filter	Notes Filter	R F
<input type="checkbox"/>	PID=SCPX1,ISSUER=BPXMIPCE 3,REASON=00080005		XR-8265745	Screen team analyzing	V
<input type="checkbox"/>	PID=SCPX1,ISSUER=BPXMIPCE 3,REASON=04130007				V
<input type="checkbox"/>	ABEND S00C3 COMPON=WEBSPHERE Z/OS, IE BB0000TP	12345,001,001	8562(12)	Received ++APAR	V
<input type="checkbox"/>	ABE BSPPHRE Z/OS, 5N0200,ISSUER=BBORADMP,ABEND		DB: 5868,Scr: XR-125	Application problem	V
<input type="checkbox"/>	ABE 5N0200,ISSUER=BBORLEXT,ABEND (AME NOT KNOWN)				V
<input type="checkbox"/>	ABE X,COMPID=SCPX1,ISSUER=BPXMIPCE =S0EC3,REASON=04130007				V
<input type="checkbox"/>	ABE L,COMPID=SCPX1,ISSUER=BPXMIPCE ,REASON=00080005				V
<input type="checkbox"/>	ABEND S00C4 COMPON=WEBSPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORFRR,ABEND IN BB00SRBF				V
<input type="checkbox"/>	ABEND S00C1 COMPON=ZTT TC=ZTTABND ISSUER=ZTTVDUMP - ABEND FOR PDWB 1				V

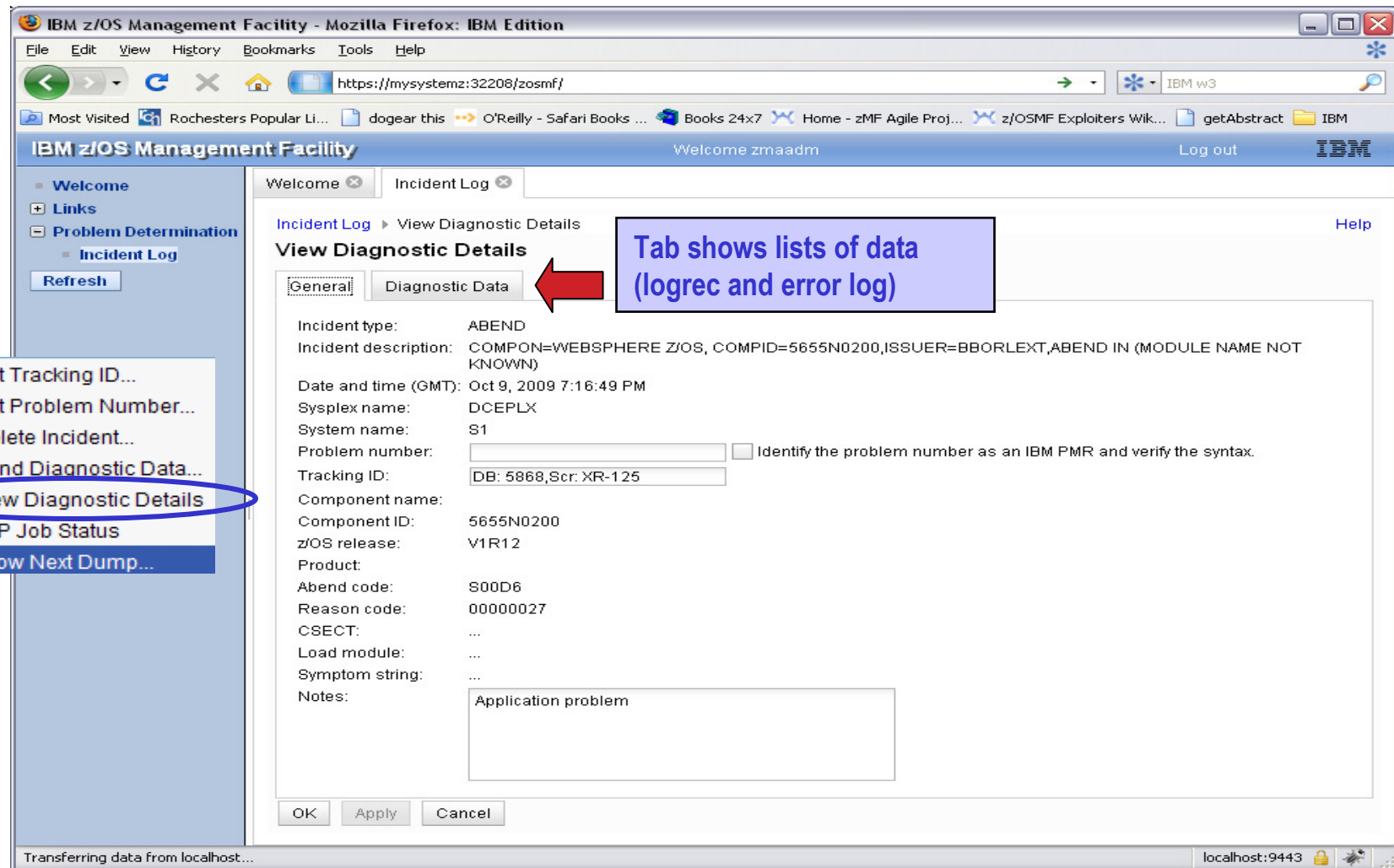
Total: 8, Filtered: 8, Selected: 0

Refresh Last refresh: Jan 21, 2010 5:25:52 PM local time (Jan 21, 2010 11:25:52 PM GMT)

Transferring data from localhost... localhost:9443



# Incident Log – Incident Details

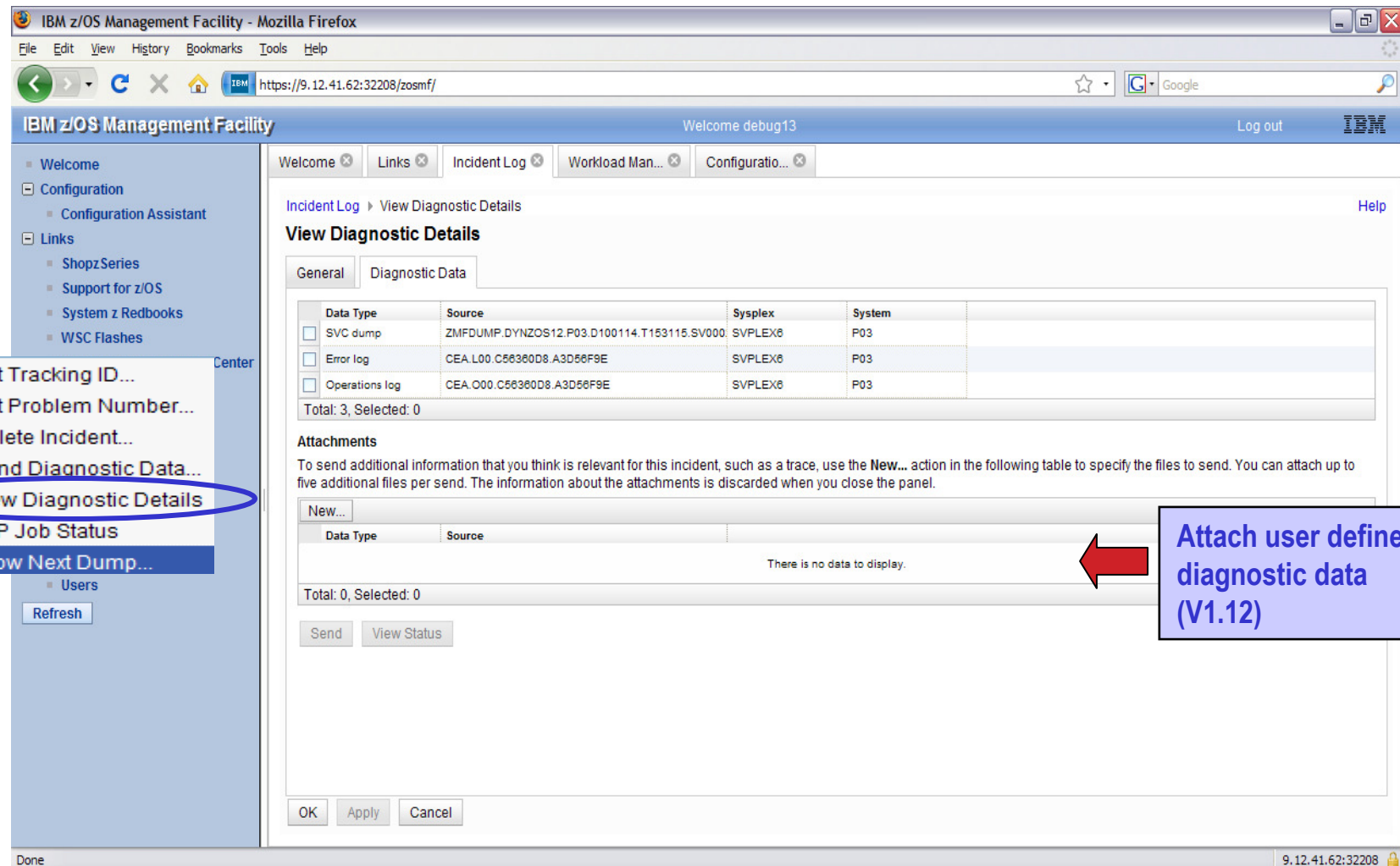


The screenshot shows the IBM z/OS Management Facility web interface in Mozilla Firefox. The browser address bar shows <https://mysystemz:32208/zosmf/>. The page title is "IBM z/OS Management Facility". The left sidebar contains a navigation menu with the following items: Welcome, Links, Problem Determination, Incident Log, Refresh, Set Tracking ID..., Set Problem Number..., Delete Incident..., Send Diagnostic Data..., View Diagnostic Details (highlighted with a blue oval), FTP Job Status, and Allow Next Dump... The main content area shows the "Incident Log" tab selected, displaying "View Diagnostic Details". A red arrow points to the "Diagnostic Data" tab, with a callout box stating "Tab shows lists of data (logrec and error log)". The "General" tab is currently active, showing the following incident details:

- Incident type: ABEND
- Incident description: COMPON=WEBSPPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)
- Date and time (GMT): Oct 9, 2009 7:16:49 PM
- Sysplex name: DCEPLX
- System name: S1
- Problem number:
- Tracking ID:
- Component name:
- Component ID: 5655N0200
- z/OS release: V1R12
- Product:
- Abend code: S00D6
- Reason code: 00000027
- CSECT: ...
- Load module: ...
- Symptom string: ...
- Notes:

At the bottom of the page, there are buttons for OK, Apply, and Cancel. The status bar at the bottom indicates "Transferring data from localhost..." and "localhost:9443".

# Incident Log – Diagnostic Data



IBM z/OS Management Facility - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://9.12.41.62:32208/zosmf/

IBM z/OS Management Facility Welcome debug13 Log out IBM

Incident Log View Diagnostic Details

**View Diagnostic Details**

General Diagnostic Data

Data Type	Source	Sysplex	System
<input type="checkbox"/> SVC dump	ZMFDUMP.DYNZOS12.P03.D100114.T153115.SV000	SVPLEX0	P03
<input type="checkbox"/> Error log	CEA.L00.C66360D8.A3D56F9E	SVPLEX0	P03
<input type="checkbox"/> Operations log	CEA.O00.C66360D8.A3D56F9E	SVPLEX0	P03

Total: 3, Selected: 0

**Attachments**

To send additional information that you think is relevant for this incident, such as a trace, use the **New...** action in the following table to specify the files to send. You can attach up to five additional files per send. The information about the attachments is discarded when you close the panel.

New...

Data Type	Source
There is no data to display.	

Total: 0, Selected: 0

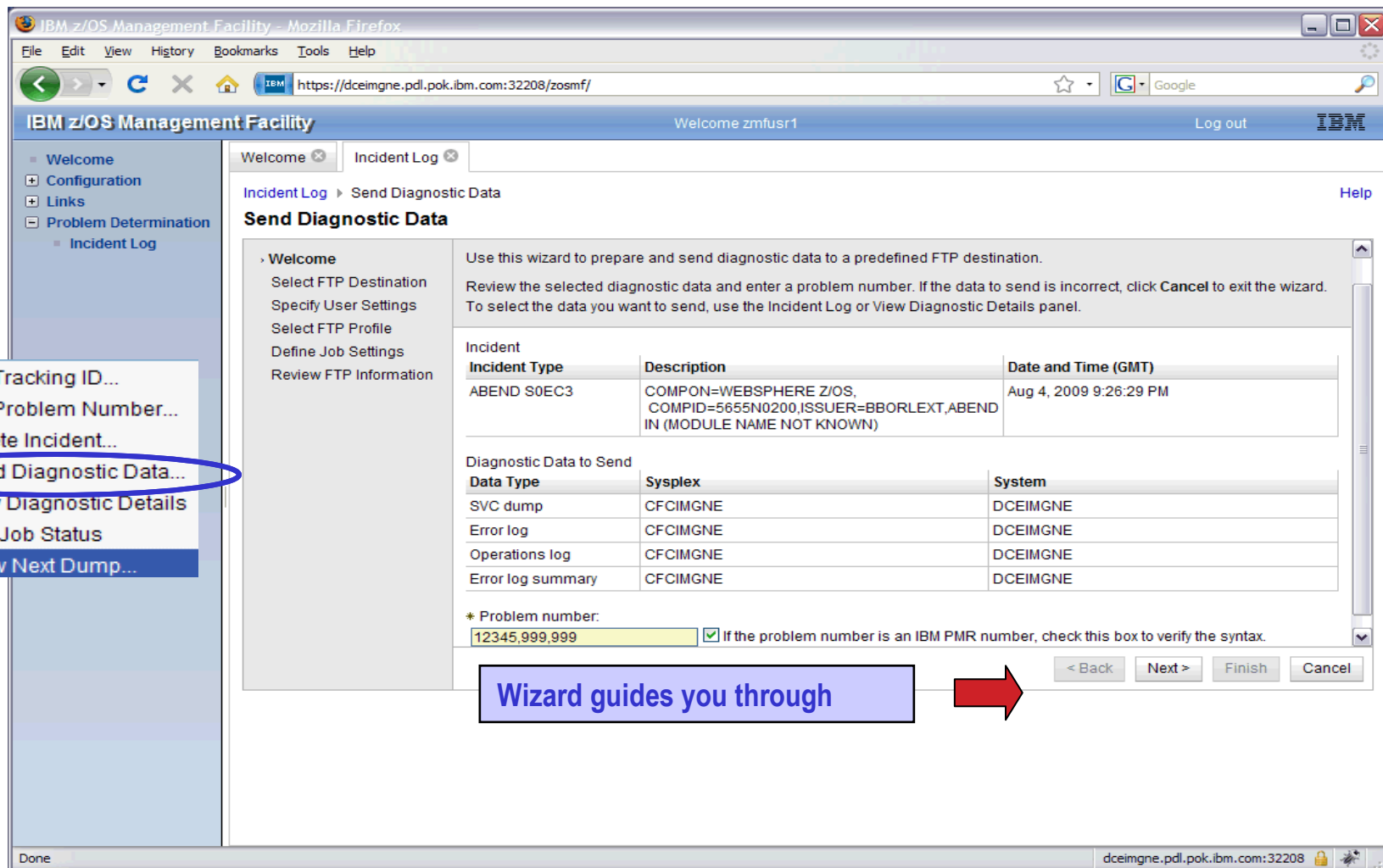
Send View Status

OK Apply Cancel

Set Tracking ID...  
Set Problem Number...  
Delete Incident...  
Send Diagnostic Data...  
**View Diagnostic Details**  
FTP Job Status  
Allow Next Dump...

Attach user defined  
diagnostic data  
(V1.12)

# Incident Log – Send Diagnostic Data



IBM z/OS Management Facility - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://dceimgne.pdl.pok.ibm.com:32208/zosmf/

IBM z/OS Management Facility Welcome zmfusr1 Log out IBM

Incident Log

Incident Log > Send Diagnostic Data

## Send Diagnostic Data

Use this wizard to prepare and send diagnostic data to a predefined FTP destination.

Review the selected diagnostic data and enter a problem number. If the data to send is incorrect, click **Cancel** to exit the wizard. To select the data you want to send, use the Incident Log or View Diagnostic Details panel.

Incident	Description	Date and Time (GMT)
ABEND S0EC3	COMPON=WEBSPPHRE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Aug 4, 2009 9:26:29 PM

Data Type	Sysplex	System
SVC dump	CFCIMGNE	DCEIMGNE
Error log	CFCIMGNE	DCEIMGNE
Operations log	CFCIMGNE	DCEIMGNE
Error log summary	CFCIMGNE	DCEIMGNE

\* Problem number: 12345,999,999 ☒ If the problem number is an IBM PMR number, check this box to verify the syntax.

< Back Next > Finish Cancel

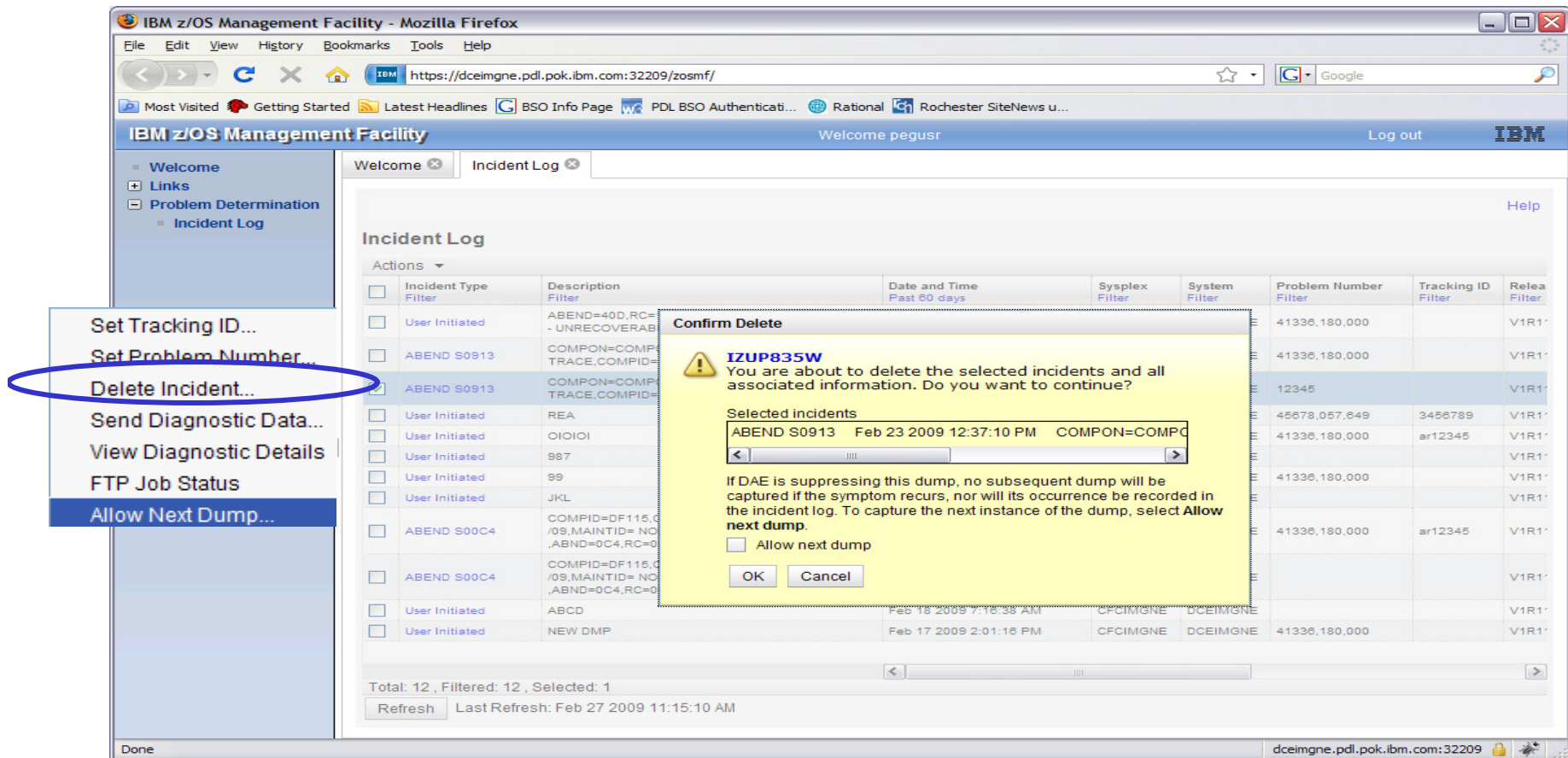
Done dceimgne.pdl.pok.ibm.com:32208

Set Tracking ID...  
Set Problem Number...  
Delete Incident...  
**Send Diagnostic Data...**  
View Diagnostic Details  
FTP Job Status  
Allow Next Dump...

Wizard guides you through



# Incident Log – Delete Incident



The screenshot shows the IBM z/OS Management Facility web interface in Mozilla Firefox. The browser address bar shows the URL: <https://dceimgne.pdl.pok.ibm.com:32209/zosmf/>. The page title is "IBM z/OS Management Facility". The left sidebar contains a navigation menu with the following items: Welcome, Links, Problem Determination, and Incident Log. The main content area is titled "Incident Log" and displays a table of incidents. A "Confirm Delete" dialog box is overlaid on the table, asking for confirmation to delete the selected incidents and all associated information. The dialog box includes a warning icon and the text: "IZUP835W You are about to delete the selected incidents and all associated information. Do you want to continue?". Below this, it lists the "Selected incidents" as "ABEND S0913 Feb 23 2009 12:37:10 PM COMPON=COMP". It also provides instructions: "If DAE is suppressing this dump, no subsequent dump will be captured if the symptom recurs, nor will its occurrence be recorded in the incident log. To capture the next instance of the dump, select Allow next dump." and includes "OK" and "Cancel" buttons. The incident table has columns: Incident Type, Description, Date and Time, Sysplex, System, Problem Number, Tracking ID, and Release. The table shows several incidents, including "ABEND S0913" and "ABEND S00C4". A blue oval highlights the "Delete Incident..." option in the left sidebar. At the bottom of the page, there is a status bar showing "Total: 12, Filtered: 12, Selected: 1" and a "Refresh" button.

IBM z/OS Management Facility - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://dceimgne.pdl.pok.ibm.com:32209/zosmf/

Most Visited Getting Started Latest Headlines BSO Info Page PDL BSO Authenticati... Rational Rochester SiteNews u...

IBM z/OS Management Facility Welcome pegusr Log out IBM

Incident Log

Actions

Set Tracking ID...  
Set Problem Number...  
**Delete Incident...**  
Send Diagnostic Data...  
View Diagnostic Details  
FTP Job Status  
Allow Next Dump...

**Confirm Delete**

**IZUP835W**  
You are about to delete the selected incidents and all associated information. Do you want to continue?

Selected incidents  
ABEND S0913 Feb 23 2009 12:37:10 PM COMPON=COMP

If DAE is suppressing this dump, no subsequent dump will be captured if the symptom recurs, nor will its occurrence be recorded in the incident log. To capture the next instance of the dump, select **Allow next dump**.

☐ Allow next dump

OK Cancel

Incident Log Table:

Incident Type	Description	Date and Time	Sysplex	System	Problem Number	Tracking ID	Release
<input type="checkbox"/> Incident Type Filter		Past 60 days	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> User Initiated	ABEND=40D,RC=...				41336,180,000		V1R1
<input type="checkbox"/> ABEND S0913	COMPON=COMP...				41336,180,000		V1R1
<input checked="" type="checkbox"/> ABEND S0913	COMPON=COMP...				12345		V1R1
<input type="checkbox"/> User Initiated	REA				45678,057,649	3456789	V1R1
<input type="checkbox"/> User Initiated	OIOIOI				41336,180,000	ar12345	V1R1
<input type="checkbox"/> User Initiated	987				41336,180,000		V1R1
<input type="checkbox"/> User Initiated	99				41336,180,000		V1R1
<input type="checkbox"/> User Initiated	JKL				41336,180,000	ar12345	V1R1
<input type="checkbox"/> ABEND S00C4	COMPID=DF115,C...				41336,180,000		V1R1
<input type="checkbox"/> ABEND S00C4	COMPID=DF115,C...				41336,180,000		V1R1
<input type="checkbox"/> User Initiated	ABCD	Feb 18 2009 7:18:38 AM	CFCIMGNE	DCEIMGNE			V1R1
<input type="checkbox"/> User Initiated	NEW DMP	Feb 17 2009 2:01:16 PM	CFCIMGNE	DCEIMGNE	41336,180,000		V1R1

Total: 12, Filtered: 12, Selected: 1

Refresh Last Refresh: Feb 27 2009 11:15:10 AM

Done

dceimgne.pdl.pok.ibm.com:32209

# z/OSMF Problem Determination – Incident log

## *Benefits*



	Without z/OSMF Incident Log **	With z/OSMF Incident Log **
Recognizing a system-detected (dumped) problem occurred	Requires 5 to 7 manual steps, plus skill on effective use of IPCS to extract data from each of the dumps.  <b>Up to 5-6 minutes</b>	Display in 1 click. Greatly reduced skill required  <b>As little as 5 seconds</b>
Allow new dump to be taken for the same symptom	Requires 7 to 12 manual steps, plus skill on effective use of IPCS to locate the dump data set, obtain the symptom string, get into the IPCS DAE display, locate the matching symptom string (could be non-trivial) and indicate TakeNext on the IPCS display <b>Up to 15 minutes</b>	Make the update happen in 3 mouse clicks  <b>As little as 10 seconds</b>
Collecting and sending diagnostic data	Requires 7 to 15 manual steps, plus skill to locate the right log files, build and run jobs, rename the output datasets, and use an FTP job to send the different data sets to the target destination.  <b>Up to 20 minutes</b> <b>Up to 30 minutes for sysplex components</b>	Send the material in 8 clicks: <ul style="list-style-type: none"> <li>•Select the incident materials</li> <li>•Specify the FTP destination information</li> <li>•Send the material</li> <li>•Check whether the information was FTP'd successfully</li> </ul> <b>As little as 30 seconds</b>

\*\* Based on IBM laboratory results, your results may vary



# Focus on Configuration

- **Pain Points**
  - Configuration task is highly fragmented
    - Multiple tools, limited integration between tools
  - User interfaces not intuitive for new system programmers
  - Syntax is complicated and error-prone
  - Regression of dynamic changes not reflected in system control files
  - Difficult to assess impact of configuration changes
- **Initial focus on Configuration Assistant for the z/OS Comm. Server**
  - A GUI for the z/OS Communications Server Policy Agent - simplifies the configuration and setup of the following TCP/IP policy-based networking functions:
    - Application Transparent TLS (AT-TLS)
    - IP Security (IPSec) including filters and VPNs
    - Network Security Server(NSS)
    - Intrusion Detection Services (IDS)
    - Policy-based Routing (PBR)
    - Quality of Service (QoS)

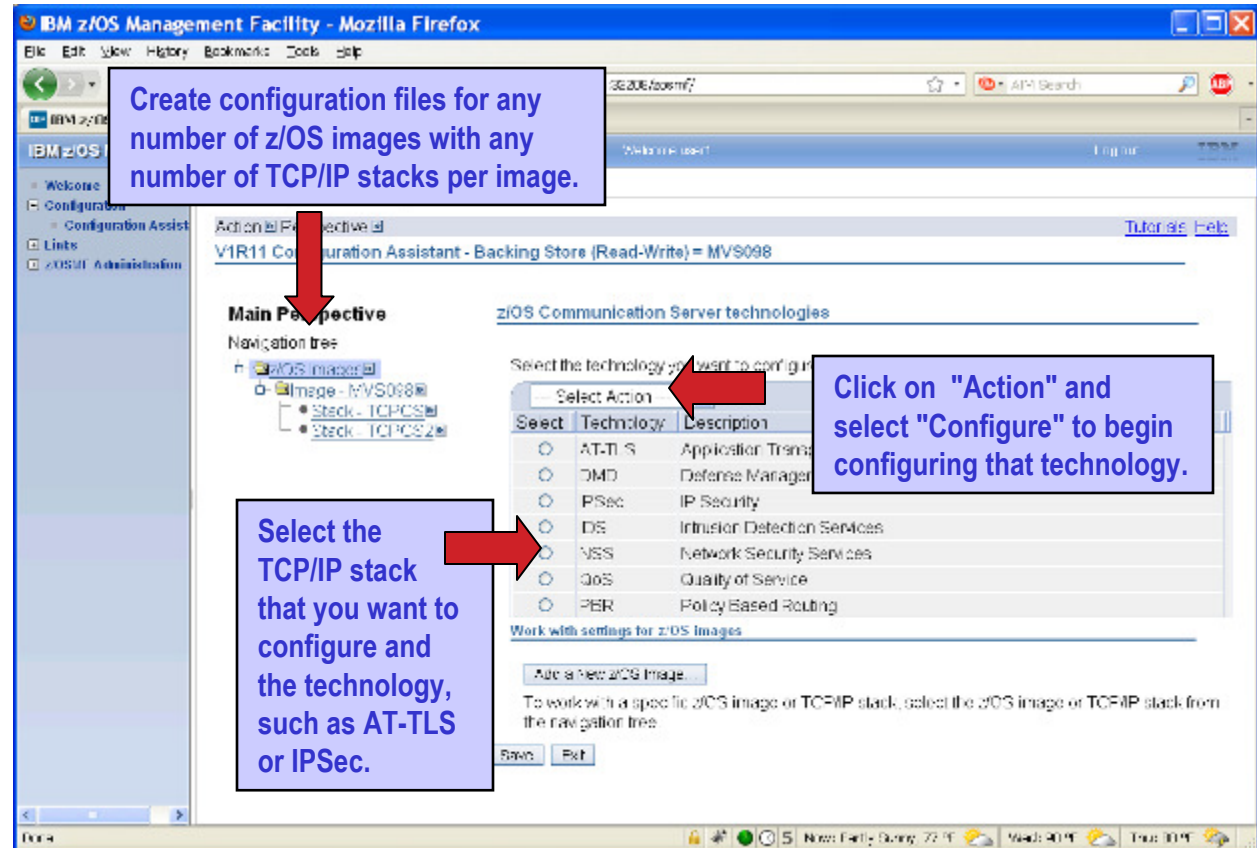
# Configuration Assistant for z/OS Comm. Server

- A GUI for the z/OS Communications Server Policy Agent - simplifies the configuration and setup of TCP/IP policy-based networking functions.
- Available as a Microsoft® Windows® Web download (since z/OS V1.7)
  - Still available as a Windows download, but strategy is to provide it only with z/OSMF
  - All functions available with Windows are also provided with z/OSMF
- Available with z/OSMF (starting with z/OSMF V1R11 and z/OS V1R11)
  - Configuration files can now be saved to local disk storage that is accessible to your z/OS system where the Configuration Assistant is running so FTP (from Windows) is not required
  - Can also import configuration text files in cases where users have already defined policies and would like to begin using the Configuration Assistant
  - Delivered in z/OSMF R12:
    - Support the configuration of IKE version 2.
    - Support the configuration of new cryptographic algorithms for IPsec and IKE.
    - Support the configuration of FIPS 140 cryptographic mode for IKE.
    - Support the configuration of certificate trust chains and certificate revocation lists.

# Configuration Assistant for z/OS Comm. Server

- **Configuration Assistant for the z/OS Comm. Server is available on the z/OS Management Facility**

- All the same function as in the Web-download tool, but now on z/OS
- No need to FTP network configuration files!
- Requires z/OS V1.11 and later



Create configuration files for any number of z/OS images with any number of TCP/IP stacks per image.

Click on "Action" and select "Configure" to begin configuring that technology.

Select the TCP/IP stack that you want to configure and the technology, such as AT-TLS or IPsec.

IBM z/OS Management Facility - Mozilla Firefox

Configuration Assistant - Backing Store (Read-Write) = MVS008

Main Perspective

Navigation tree

- Image - MVS008
  - Stack - TCP/IP2

Select the technology you want to configure

Select Action

Select	Technology	Description
<input type="radio"/>	AT-TLS	Application Transport Security
<input type="radio"/>	DMD	Defense Manager
<input type="radio"/>	IPsec	IP Security
<input type="radio"/>	IDS	Intrusion Detection Services
<input type="radio"/>	NIS	Network Security Services
<input type="radio"/>	QoS	Quality of Service
<input type="radio"/>	PBR	Policy Based Routing

Work with settings for z/OS images

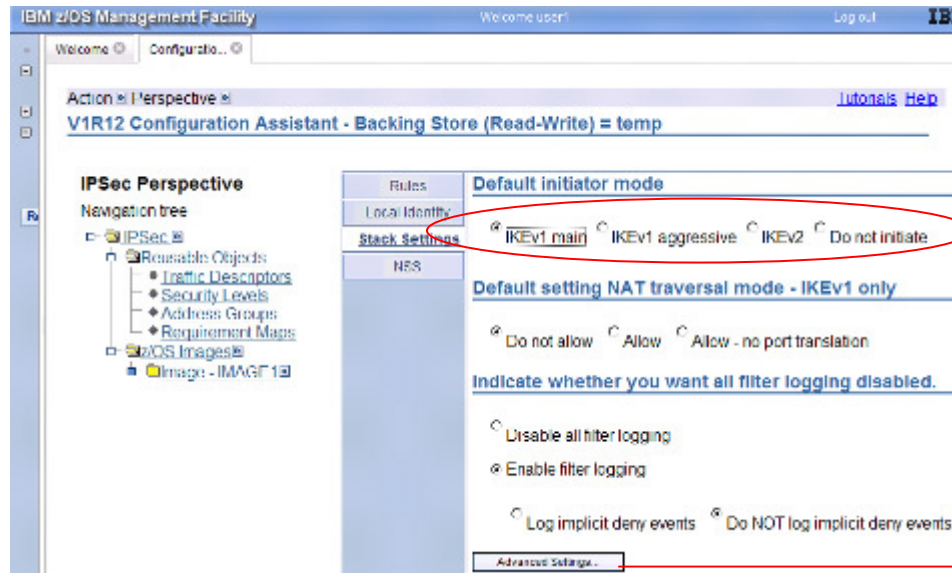
Add a new z/OS image

To work with a specific z/OS image or TCP/IP stack, select the z/OS image or TCP/IP stack from the navigation tree

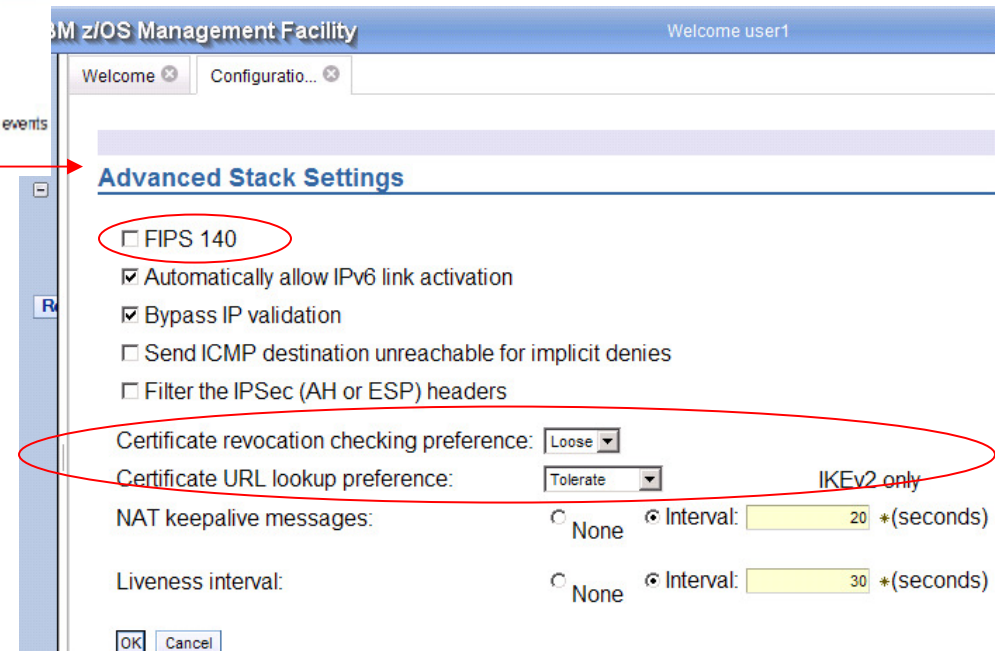
Save Exit

# Configuration Assistant for z/OS Comm. Server

## *Support for IKEv2*



- Support for FIPS 140
- Support for IKEv2
- Support for certificate revocation lists.



# z/OSMF Configuration Assistant for z/OS CS

## Benefits



	Without Configuration Assistant** With Policy Agent only	With Configuration Assistant** in z/OSMF GUI for Policy Agent
Filter unwanted network traffic from your z/OS system	<ul style="list-style-type: none"> <li>• Learn how to set up IP filters</li> <li>• Review the IP Configuration Guide                             <ul style="list-style-type: none"> <li>• Configure the Policy Agent application</li> <li>• Create configuration policy for IP Filter rules</li> <li>• Configure default filter rules in the TCP/IP profile</li> <li>• Configure the TRMD application</li> <li>• Configure the Syslogd application</li> </ul> </li> </ul> <p><b>Hours (or even days for initial setup)</b></p>	<ul style="list-style-type: none"> <li>• Configuration Assistant guidance                             <ul style="list-style-type: none"> <li>• Go to IP Security Perspective</li> <li>• Add a connectivity rule for an IP Filter</li> <li>• Use Application Setup Tasks to assist with the configuration and setup of the required applications</li> <li>• The Configuration Assistant will generate and help you deploy the configuration files to your z/OS system</li> </ul> </li> </ul> <p><b>As little as 30 minutes</b></p>
Secure your TN3270 server connections with SSL	<ul style="list-style-type: none"> <li>• Manual process</li> <li>• Review the IP Configuration Guide                             <ul style="list-style-type: none"> <li>• Configure the Policy Agent application</li> <li>• Configure TTLS in the TCP/IP profile</li> <li>• Configure the Syslogd application</li> <li>• Create configuration policy for AT-TLS for your TN3270 Server</li> </ul> </li> </ul> <p><b>Hours (or even days for initial setup)</b></p>	<ul style="list-style-type: none"> <li>• Configuration Assistant guidance                             <ul style="list-style-type: none"> <li>• Go to AT-TLS Perspective</li> <li>• Select the AT-TLS rule for the TN3270 server and enable</li> <li>• Use Application Setup Tasks to assist with the configuration and setup of the required applications</li> <li>• The Configuration Assistant will generate and help you deploy the configuration files to your z/OS system</li> </ul> </li> </ul> <p><b>As little as 30 minutes</b></p>

**Get started faster! The Config. Assistant takes the rules and best practices found in various configuration publications and puts them under a single, simple user interface, saving you much time and effort.**

\*\* Based on IBM laboratory results, your results may vary



# Focus on Configuration/ Performance

- **Pain Points**

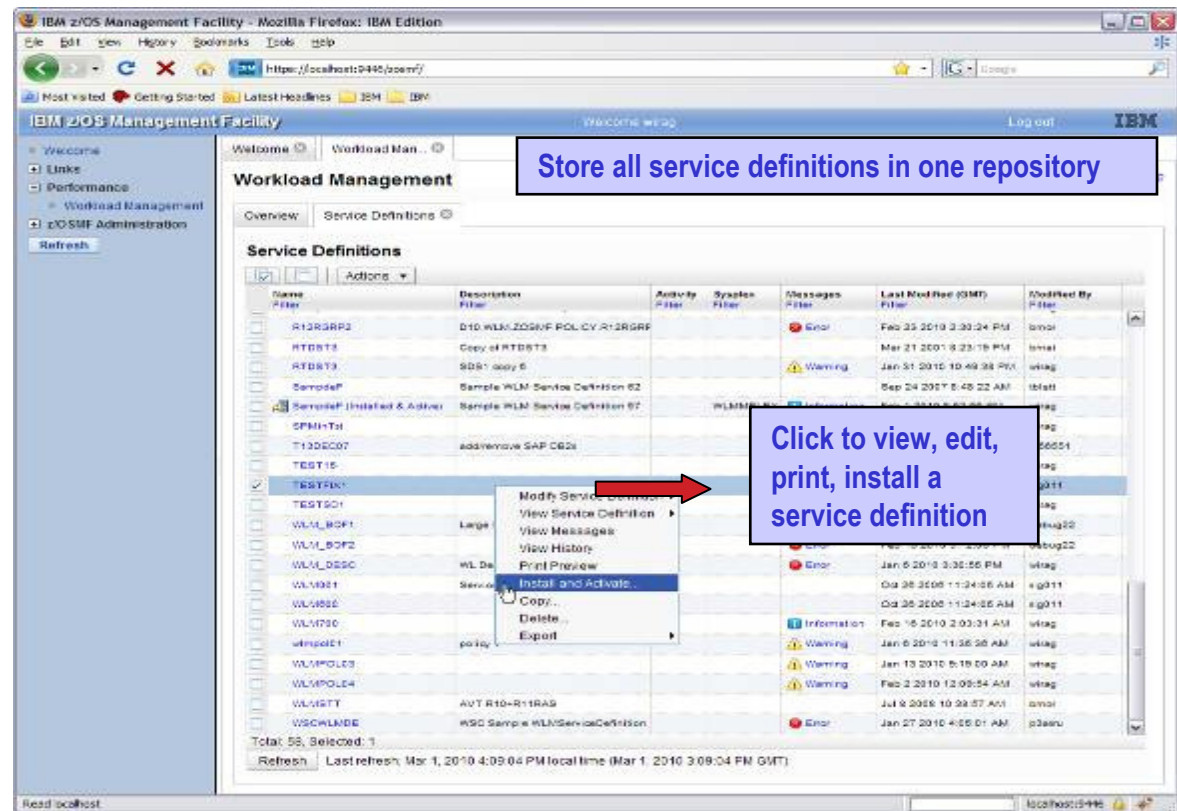
- **Work competes for resources, serialized by locks and latches**
  - Low important work may hold a resource and high important work may have to wait for it
  - Incorrect WLM classification of system work can lead to serious system problems and even outages
- **WLM Administrative Application provides little support to review and optimize service definitions**
  - It is difficult to see the relationship of policy elements and to compare them
  - Recommendations and best-practices for the specification and optimization of service definitions are scattered over several manuals and have to be applied without tool support
  - User has to walk through drill-down and interim panels to create/change policy elements

- **Initial focus on WLM Policy Editor**

- **Delivered with z/OSMF V1.12**
- **Application which enables you to manage WLM service definitions**
  - Integrates repository to store service definitions
  - Import and export of service definitions in XML format
  - Printing of service definitions
  - Creation, editing, reviewing of service definitions in tabular format
  - Direct navigation between policy elements during editing/viewing of service definitions
  - Best-practice checking for service definitions
  - Supports the installation of service definitions and the activation of service policies
  - Displays WLM status of systems in sysplex

# z/OSMF Workload Management (V1.12)

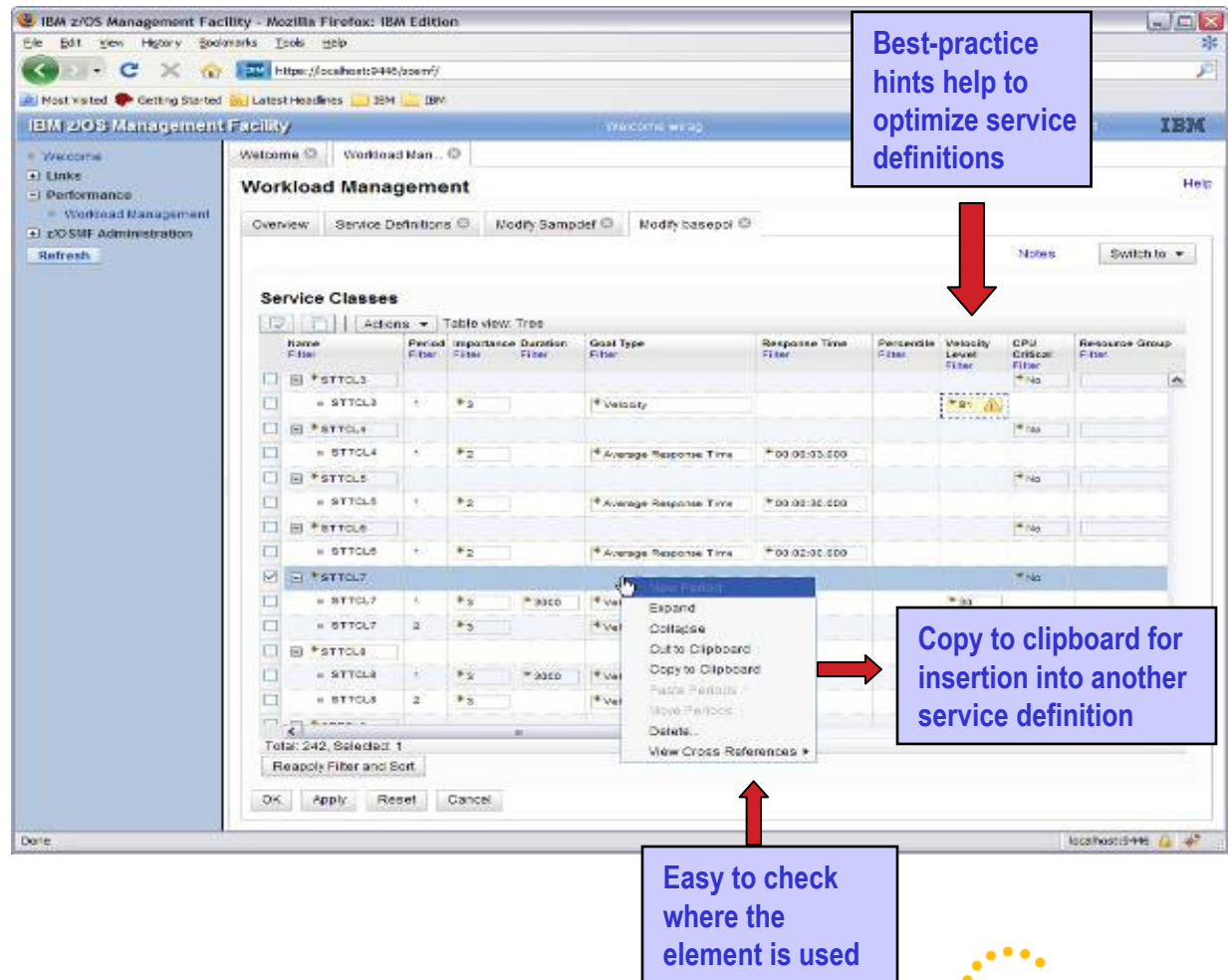
- WLM Policy Editor is available on the z/OS Management Facility
  - All the same function as in the Web-download tool and many new features
  - Direct access to the WLM Couple Data Set to install/extract service definitions. No need to FTP WLM policy files!
  - Activation of service policies and monitoring of the WLM status in the sysplex
- Requires z/OSMF V1.12 and z/OS V1.12



# z/OSMF Workload Management (V1.12)

## *Editing service definitions*

- Simplified creation, modification and review of service definitions
  - Policy elements are presented in tables
  - Tables can be edited, filtered, and sorted
  - Best-practice hints are displayed automatically
  - Several service definitions can be opened simultaneously
  - Cut, Copy, Paste of policy elements between service definitions



Best-practice hints help to optimize service definitions

Copy to clipboard for insertion into another service definition

Easy to check where the element is used

Name Filter	Period Filter	Importance Filter	Duration Filter	Goal Type Filter	Response Time Filter	Percentage Filter	Velocity Level Filter	CPU Critical Filter	Resource Group Filter
STTCL3	1	2		Velocity			2	No	
STTCL4	1	2		Average Response Time	00 00:03:000			No	
STTCL5	1	2		Average Response Time	00 00:30:000			No	
STTCL6	1	2		Average Response Time	00 02:00:000			No	
STTCL7	1	3	3000	Vel				No	
STTCL7	2	5		Vel				No	
STTCL8	1	2	3000	Vel				No	
STTCL8	2	5		Vel				No	

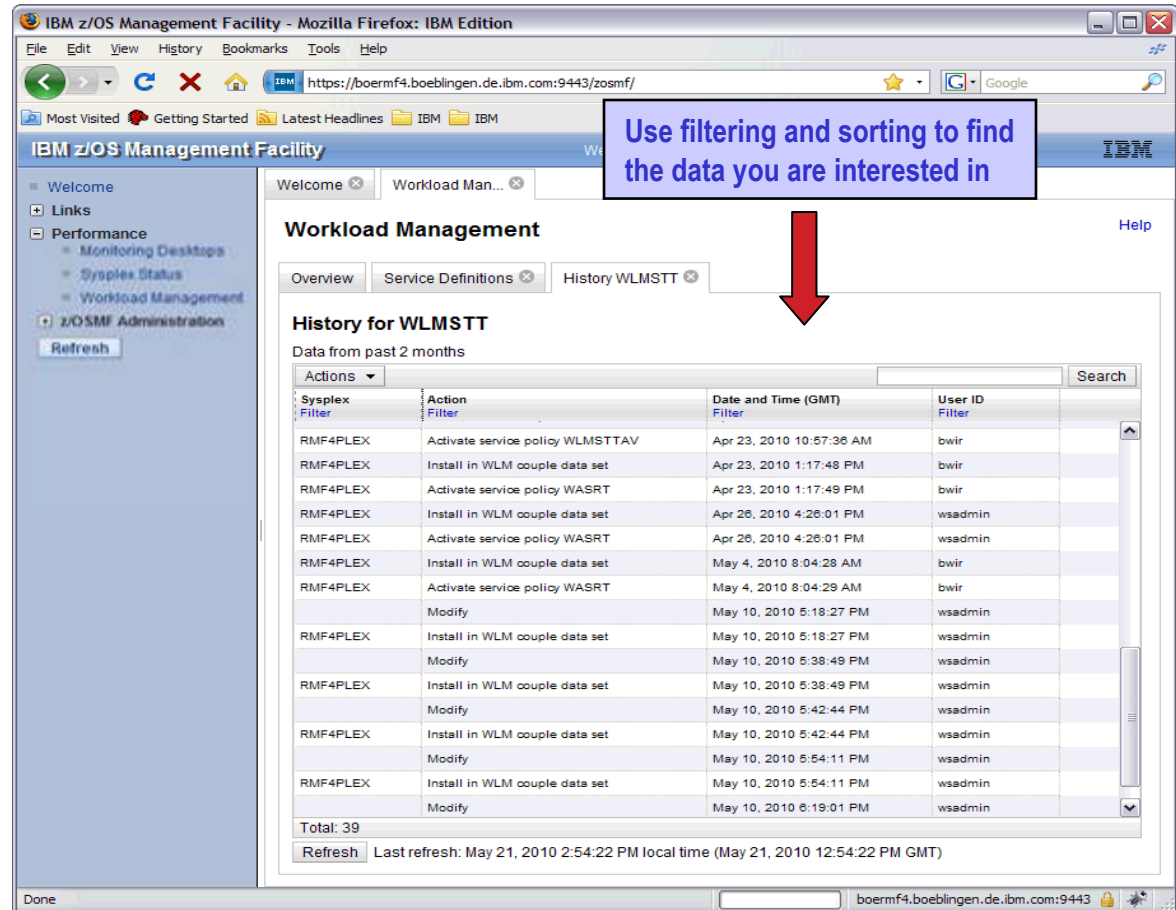
Total: 242, Selected: 1  
Reapply Filter and Sort

OK Apply Reset Cancel

# z/OSMF Workload Management (V1R12)

## *Service Definition History*

- A history is provided for each service definition
  - Lists the activities performed on the service definition
  - Contains edit, install, activate, import, export activities
  - Displays timestamp and user
  - The user can customize how long the history is kept



Use filtering and sorting to find the data you are interested in

**Workload Management**

Overview | Service Definitions | History WLMSTT

**History for WLMSTT**  
Data from past 2 months

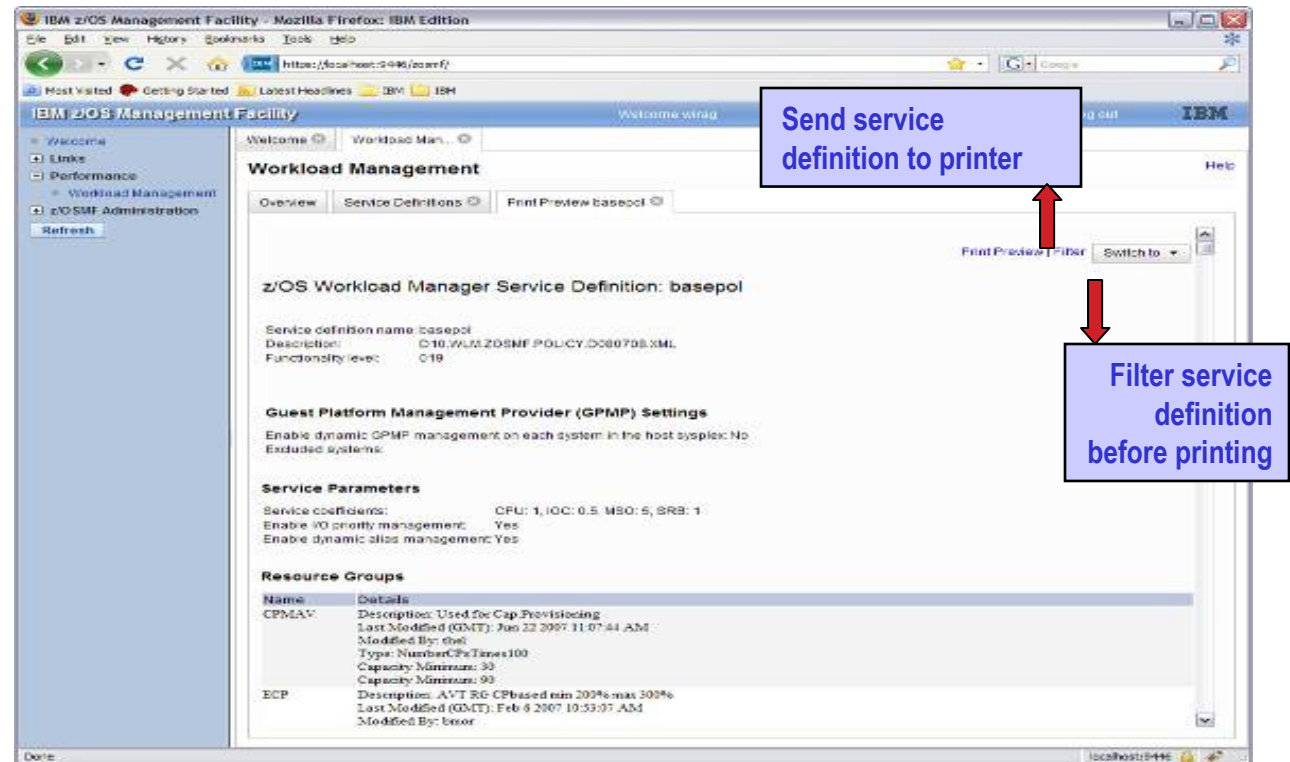
Sysplex	Action	Date and Time (GMT)	User ID
RMF4PLEX	Activate service policy WLMSTTAV	Apr 23, 2010 10:57:36 AM	bwir
RMF4PLEX	Install in WLM couple data set	Apr 23, 2010 1:17:48 PM	bwir
RMF4PLEX	Activate service policy WASRT	Apr 23, 2010 1:17:49 PM	bwir
RMF4PLEX	Install in WLM couple data set	Apr 26, 2010 4:26:01 PM	wsadmin
RMF4PLEX	Activate service policy WASRT	Apr 26, 2010 4:26:01 PM	wsadmin
RMF4PLEX	Install in WLM couple data set	May 4, 2010 8:04:28 AM	bwir
RMF4PLEX	Activate service policy WASRT	May 4, 2010 8:04:29 AM	bwir
	Modify	May 10, 2010 5:18:27 PM	wsadmin
RMF4PLEX	Install in WLM couple data set	May 10, 2010 5:18:27 PM	wsadmin
	Modify	May 10, 2010 5:38:49 PM	wsadmin
RMF4PLEX	Install in WLM couple data set	May 10, 2010 5:38:49 PM	wsadmin
	Modify	May 10, 2010 5:42:44 PM	wsadmin
RMF4PLEX	Install in WLM couple data set	May 10, 2010 5:42:44 PM	wsadmin
	Modify	May 10, 2010 5:54:11 PM	wsadmin
RMF4PLEX	Install in WLM couple data set	May 10, 2010 5:54:11 PM	wsadmin
	Modify	May 10, 2010 6:19:01 PM	wsadmin

Total: 39  
Refresh Last refresh: May 21, 2010 2:54:22 PM local time (May 21, 2010 12:54:22 PM GMT)

# z/OSMF Workload Management (V1R12)

## *Printing Service Definitions*

- **Print Preview function provides**
  - An clearly formatted overview of the service definition
  - filter service definition elements
  - apply service policies
- **Hints, warnings can also be printed**

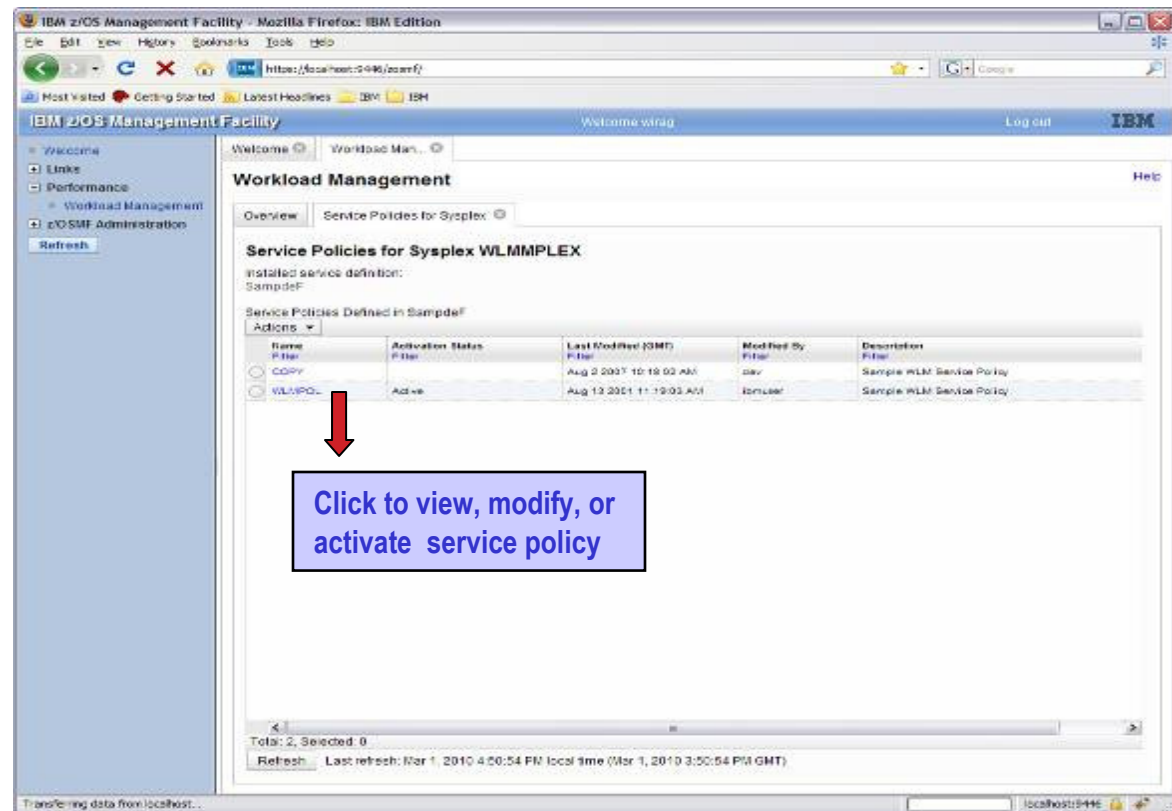




# z/OSMF Workload Management (V1R12)

## *Manage Service Policies*

- The Manage Service Policies panel displays the state of the service policies in the installed service definition
  - View or print the service policies of the installed service definition
  - Activate a service policy of the installed service definition

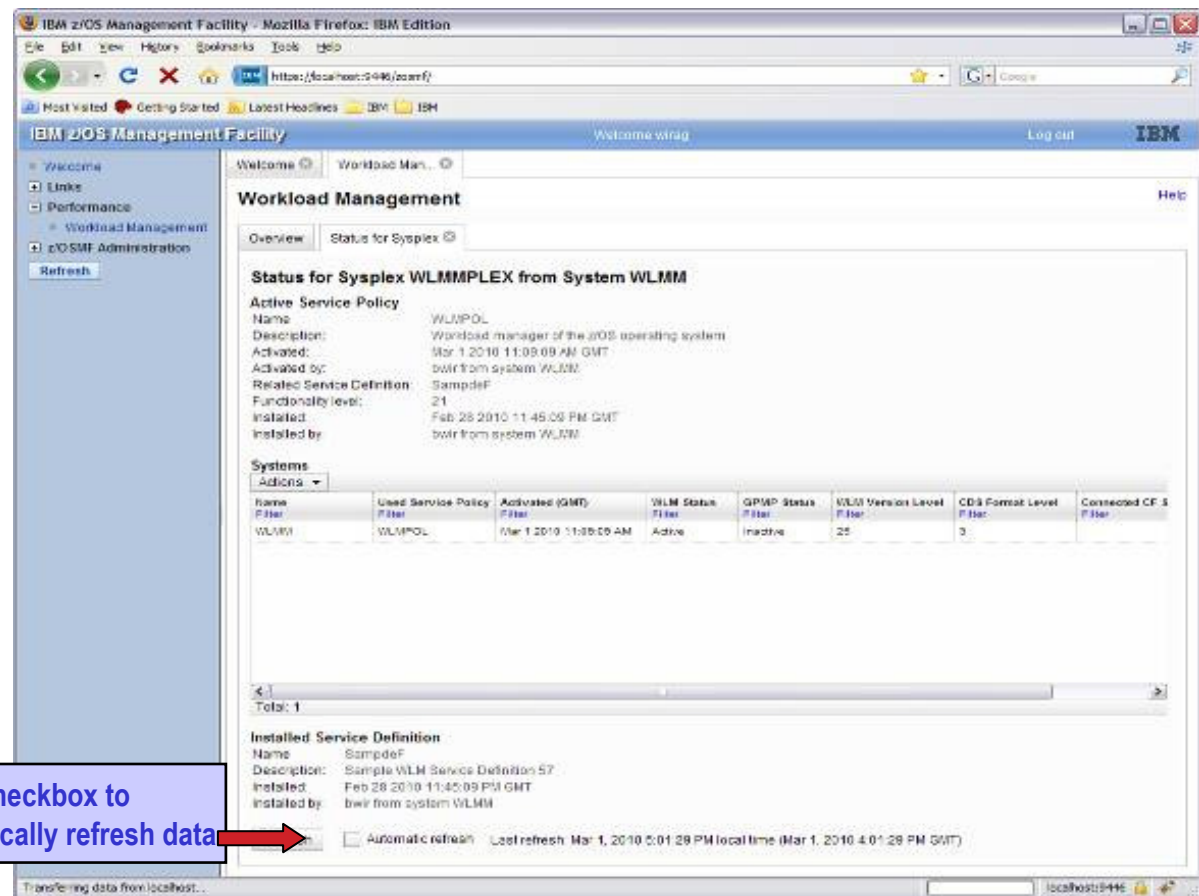


# z/OSMF Workload Management (V1R12)

## *View Sysplex Status*

- The View Sysplex Status task displays

- The active service policy
- The WLM status on the systems in the sysplex
- The installed service definition
- The Sysplex Status panel comprises the information provided by the MVS console command D WLM, SYSTEMS



**Workload Management**

Overview | Status for Sysplex

**Status for Sysplex WLMMPLEX from System WLM**

**Active Service Policy**

Name: WLMPLD  
 Description: Workload manager of the z/OS operating system  
 Activated: Mar 1 2010 11:09:09 AM GMT  
 Activated by: bwr from system WLMPLD  
 Related Service Definition: SampleF  
 Functionality level: 21  
 Installed: Feb 28 2010 11:45:09 PM GMT  
 Installed by: bwr from system WLMPLD

**Systems**

Name	Used Service Policy	Activated (GMT)	WLM Status	GPMP Status	WLM Version Level	CD3 Format Level	Connected CF 3
WLMPLD	WLMPLD	Mar 1 2010 11:09:09 AM	Active	Inactive	25	3	

Total: 1

**Installed Service Definition**

Name: SampleF  
 Description: Sample WLM Service Definition 57  
 Installed: Feb 28 2010 11:45:09 PM GMT  
 Installed by: bwr from system WLMPLD

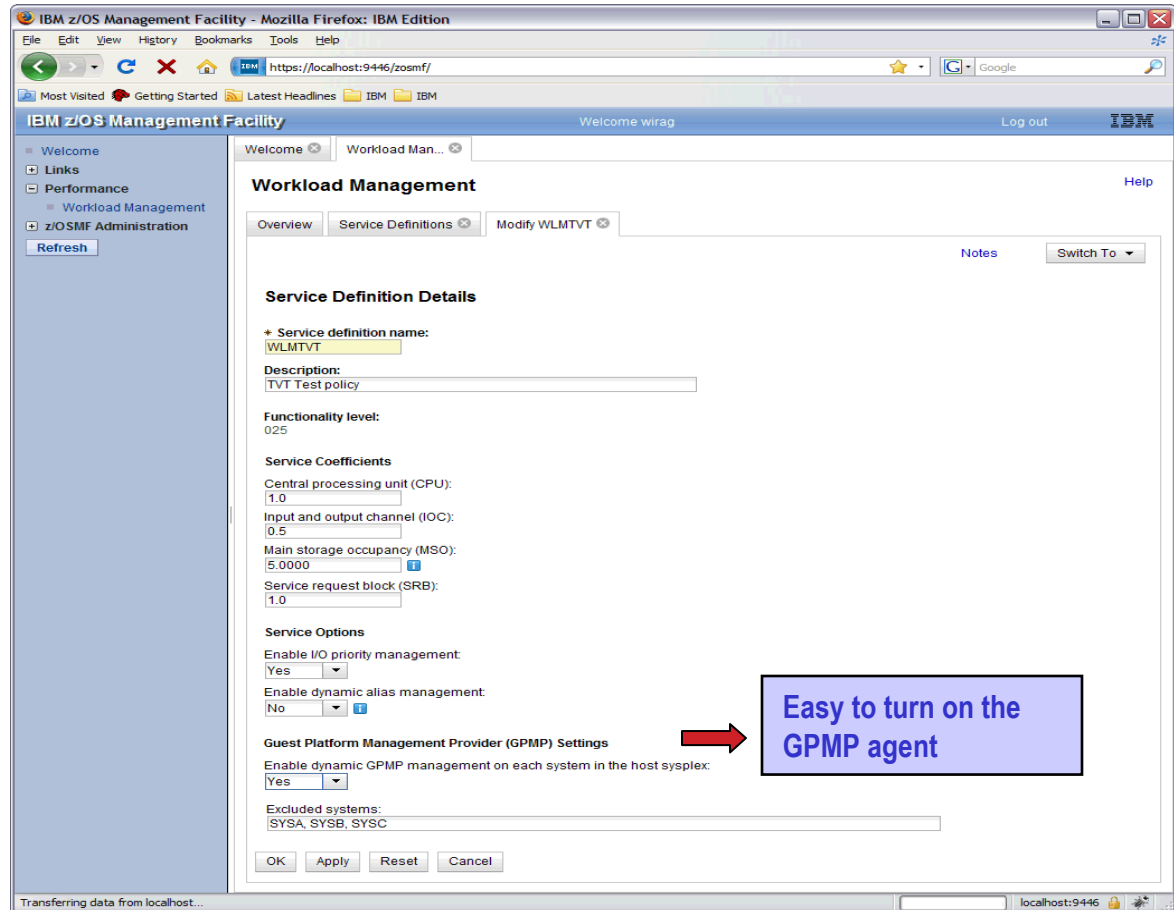
☐ Automatic refresh Last refresh: Mar 1, 2010 5:01:29 PM local time (Mar 1, 2010 4:01:29 PM GMT)

Transferring data from localhost...

# z/OSMF Workload Management

*Can send basic data to the zEnterprise server*

- **Integration with the new IBM zEnterprise server**
  - Unified Resource Manager (Monitors Dashboard) can monitor heterogeneous workloads.
- **New agent in z/OS R12 will feed data to Unified Resource Manager.**
  - System resource utilization, system delays, paging delays
- **Unified Resource Manager will link distributed workload with z/OS workload**
  - Ex: AIX Application Serving Blade front end to DB2 z/OS backend
  - End to end monitoring



IBM z/OS Management Facility - Mozilla Firefox: IBM Edition

https://localhost:9446/zosmf/

IBM z/OS Management Facility

Welcome wirag Log out IBM

Workload Management

Overview Service Definitions Modify WLMVT

Notes Switch To

**Service Definition Details**

Service definition name: WLMVT

Description: TVT Test policy

Functionality level: 025

**Service Coefficients**

Central processing unit (CPU): 1.0

Input and output channel (IOC): 0.5

Main storage occupancy (MSO): 5.0000

Service request block (SRB): 1.0

**Service Options**

Enable I/O priority management: Yes

Enable dynamic alias management: No

**Guest Platform Management Provider (GPMP) Settings**

Enable dynamic GPMP management on each system in the host sysplex: Yes

Excluded systems: SYSA, SYSB, SYSC

OK Apply Reset Cancel

Transferring data from localhost...

localhost:9446

Easy to turn on the GPMP agent

# **z/OSMF Workload Management**

## *Summary*

- **Simplified creation and editing of WLM service definitions**
  - The elements of a service definition are displayed in tabular form
  - Service definition elements are created or edited directly in tables
  - The creation and editing of WLM service definitions is supported by best practice checks
  - Direct navigation between policy elements during editing/viewing of service definitions
  - Serialization of the editing of the active service definition
- **Simplified handling via integrated repository for WLM service definitions**
  - WLM service definitions are stored in a repository integrated in the z/OSMF file system
  - WLM service definitions can be exported to the local workstation or a host data set as well as imported from a file on the local workstation or a host dataset
  - WLM service definitions can be printed using the print menu of the web browser
- **Installation of WLM service definitions and activation of WLM service policies**
- **Monitoring of the WLM status of a sysplex and the systems in a sysplex**
  - WLM status report is automatically updated if the WLM status on the systems changes
- **Allow opening multiple tabs to enable users to perform tasks simultaneously**
  - **Simplified migration:** Policy elements can be copied from one service definition to another
  - **Simplified operation:** A user can start to edit a service definition, interrupt the editing to activate a service policy, and then continue with the editing without losing the context

# z/OSMF WLM Policy Editor (V1.12)

## Benefits



	Without WLM Policy Editor** using ISPF WLM Application	With WLM Policy Editor** in z/OSMF
Optimization of a service definition based on best-practices	Read through WLM-related manuals and identify best-practices. Print out the service definition and investigate it with respect to proposed best-practices. If required, modify the policy elements correspondingly.  <b>Hours (or days when done initially)</b>	Check the best-practice hints the GUI displays for policy elements. If required, modify the policy elements correspondingly.  <b>Minutes (or hours when done initially)</b>
Review of service definitions for daily changes, migration, consolidation	To get an overview of a service definition you have to print it to a data set, download the data set, and print it out or feed it into the Service Definition Formatter tool to filter and sort policy elements. <b>5-10 minutes until review can start</b>	Open a service definition from the service definition repository. Navigate through it using links. Filter and sort policy elements in the tables.  <b>Seconds until review can start</b>
Transfer policy elements from a test service definition to a production service definition	Print out the test service definition and update the production service definition by typing in the changes.  <b>Up to several minutes per policy element</b>	Open the test and production service definition simultaneously and copy over the changed policy elements via copy&paste operations.  <b>Seconds per policy element</b>

\*\* Based on IBM laboratory results, your results may vary

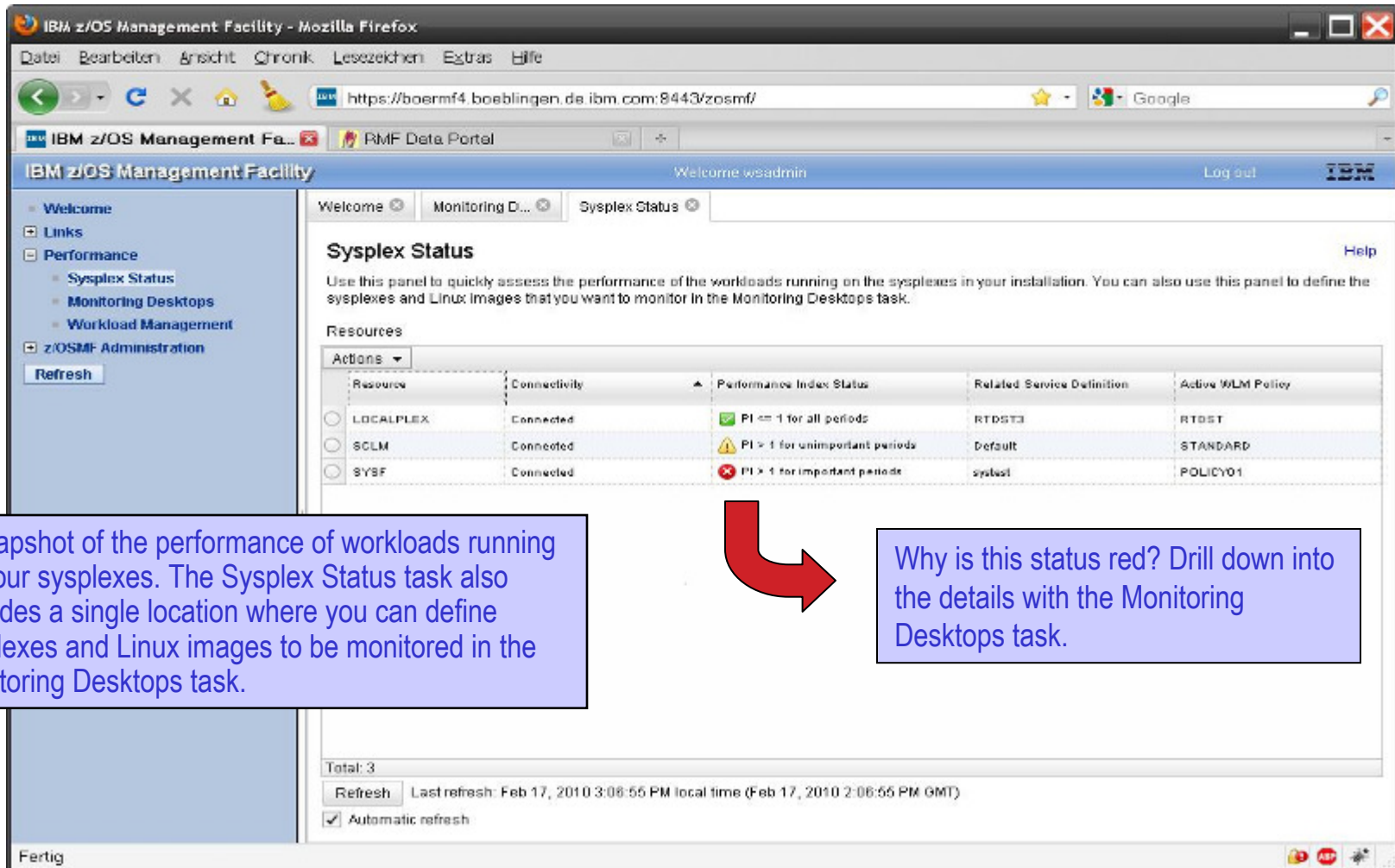
# Resource Monitoring features



- The z/OSMF Resource Monitoring application provides integrated performance monitoring in the customer's environment
- Supports z/OS z/OS sysplexes and Linux® images (System z® and Intel®) in your installation
  - Requires the RMF z/OS Data server (DDS) on each sysplex being monitored and the Linux data gatherer (rmfpms) running on the Linux image that is being monitored.
- There are two z/OSMF tasks: *Monitoring Desktops* and *Sysplex Status*
  - Monitoring Desktops task:
    - Monitor most of the metrics supported by the Resource Measurement Facility (RMF™) Monitor III, create and save custom views of the metrics, and display real-time performance data as bar charts. Predefined views provided for a quick start. Advanced filtering features for focused monitoring
  - Sysplex Status task:
    - Quickly Assess the performance of the workloads running on the z/OS sysplexes in your environment. The Sysplex Status task also provides a single location where you can define the z/OS sysplexes and Linux images to be monitored in the Monitoring Desktops task.
- If you plan to use the tasks from the Resource Monitoring plug-in, it is recommended that you enable the optional priced feature, Resource Measurement Facility (RMF), on one of the systems in your enterprise. For information about enabling features, see z/OS Planning for Installation, GA22-7504.



# Resource Monitoring : Sysplex Status



IBM z/OS Management Facility - Mozilla Firefox

https://boermf4.boeblingen.de.ibm.com:8443/zosmf/

IBM z/OS Management Facility | Welcome wsadmin | Log out

**Sysplex Status** [Help](#)

Use this panel to quickly assess the performance of the workloads running on the sysplexes in your installation. You can also use this panel to define the sysplexes and Linux images that you want to monitor in the Monitoring Desktops task.

Resources

Resource	Connectivity	Performance Index Status	Related Service Definition	Active WLM Policy
LOCALPLEX	Connected	PI ≤ 1 for all periods	RTDST3	RTDST
SCLM	Connected	PI > 1 for unimportant periods	Default	STANDARD
SYSF	Connected	PI > 1 for important periods	sysfsl	POLICY01

Total: 3

Refresh Last refresh: Feb 17, 2010 3:06:55 PM local time (Feb 17, 2010 2:06:55 PM GMT)

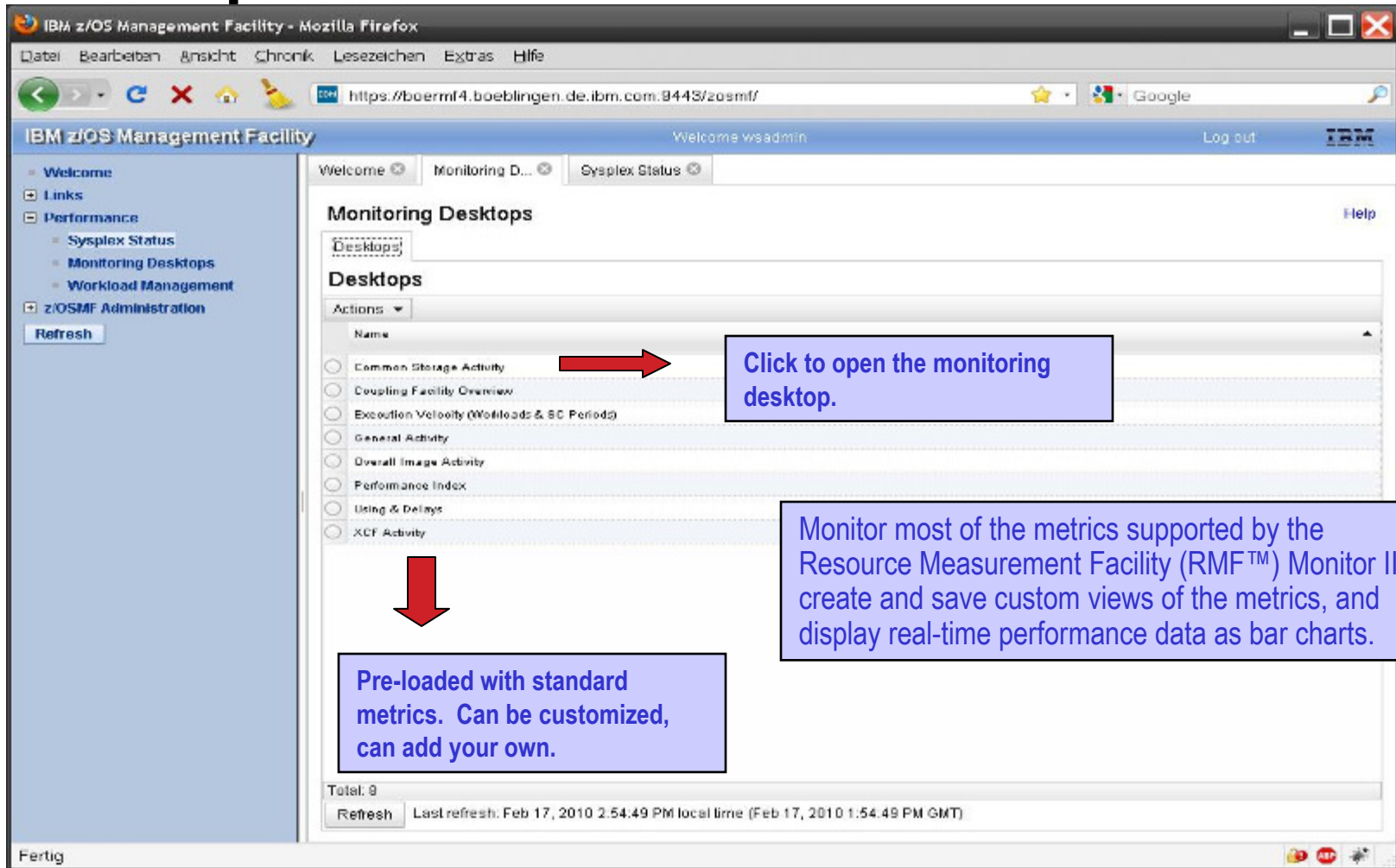
☒ Automatic refresh

Fertig

A snapshot of the performance of workloads running on your sysplexes. The Sysplex Status task also provides a single location where you can define sysplexes and Linux images to be monitored in the Monitoring Desktops task.

Why is this status red? Drill down into the details with the Monitoring Desktops task.

# Resource Monitoring: Monitoring Desktops



IBM z/OS Management Facility - Mozilla Firefox

https://boermf4.boeblingen.de.ibm.com:9443/zosmf/

IBM z/OS Management Facility

Welcome wsadmin

Log out

Monitoring Desktops

Desktops

Actions

Name

- ☐ Common Storage Activity
- ☐ Coupling Facility Overview
- ☐ Execution Velocity (Workloads & SC Periods)
- ☐ General Activity
- ☐ Overall Image Activity
- ☐ Performance Index
- ☐ Timing & Delays
- ☐ XCF Activity

Total: 9

Refresh Last refresh: Feb 17, 2010 2:54:49 PM local time (Feb 17, 2010 1:54:49 PM GMT)

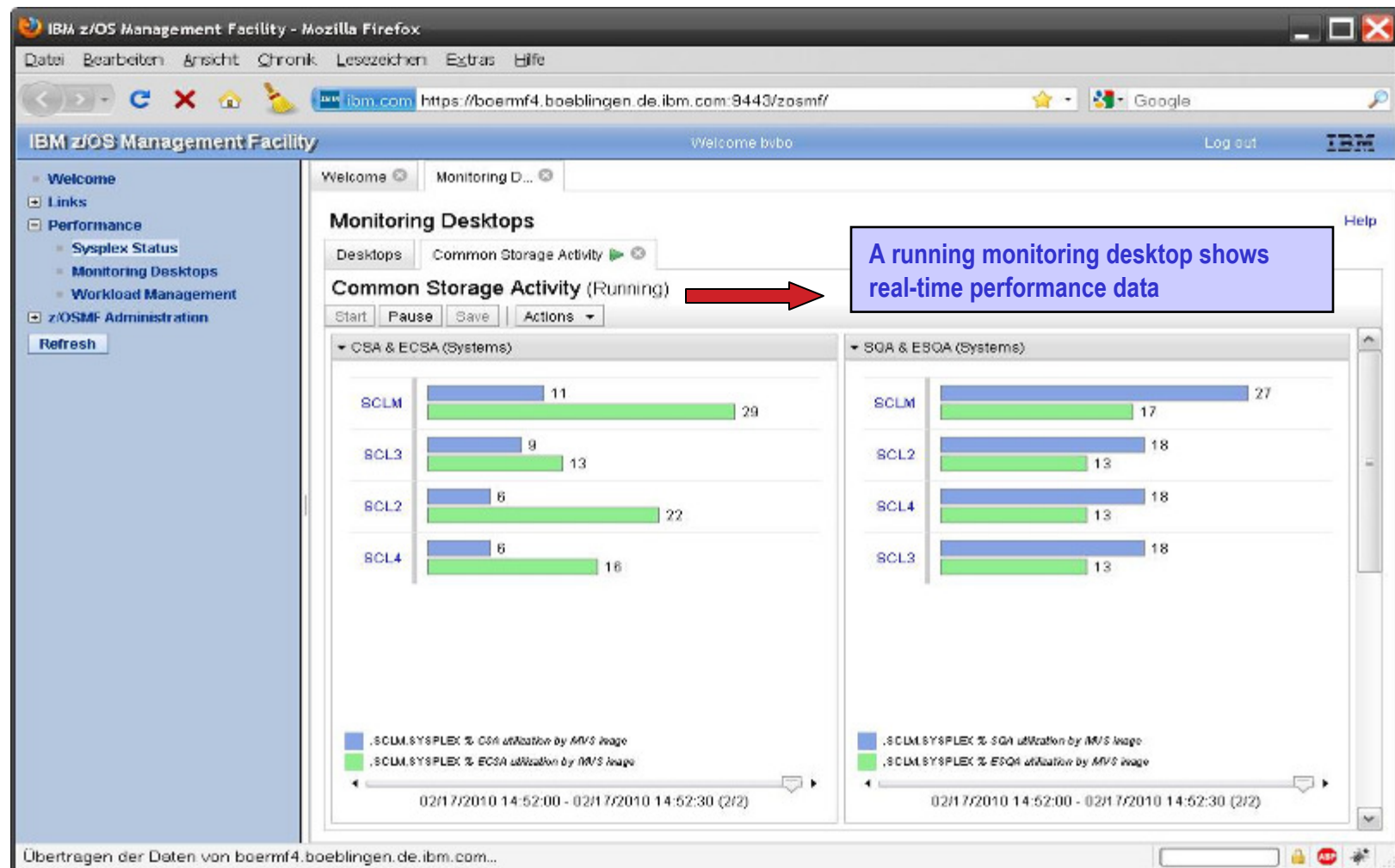
Fertig

Click to open the monitoring desktop.

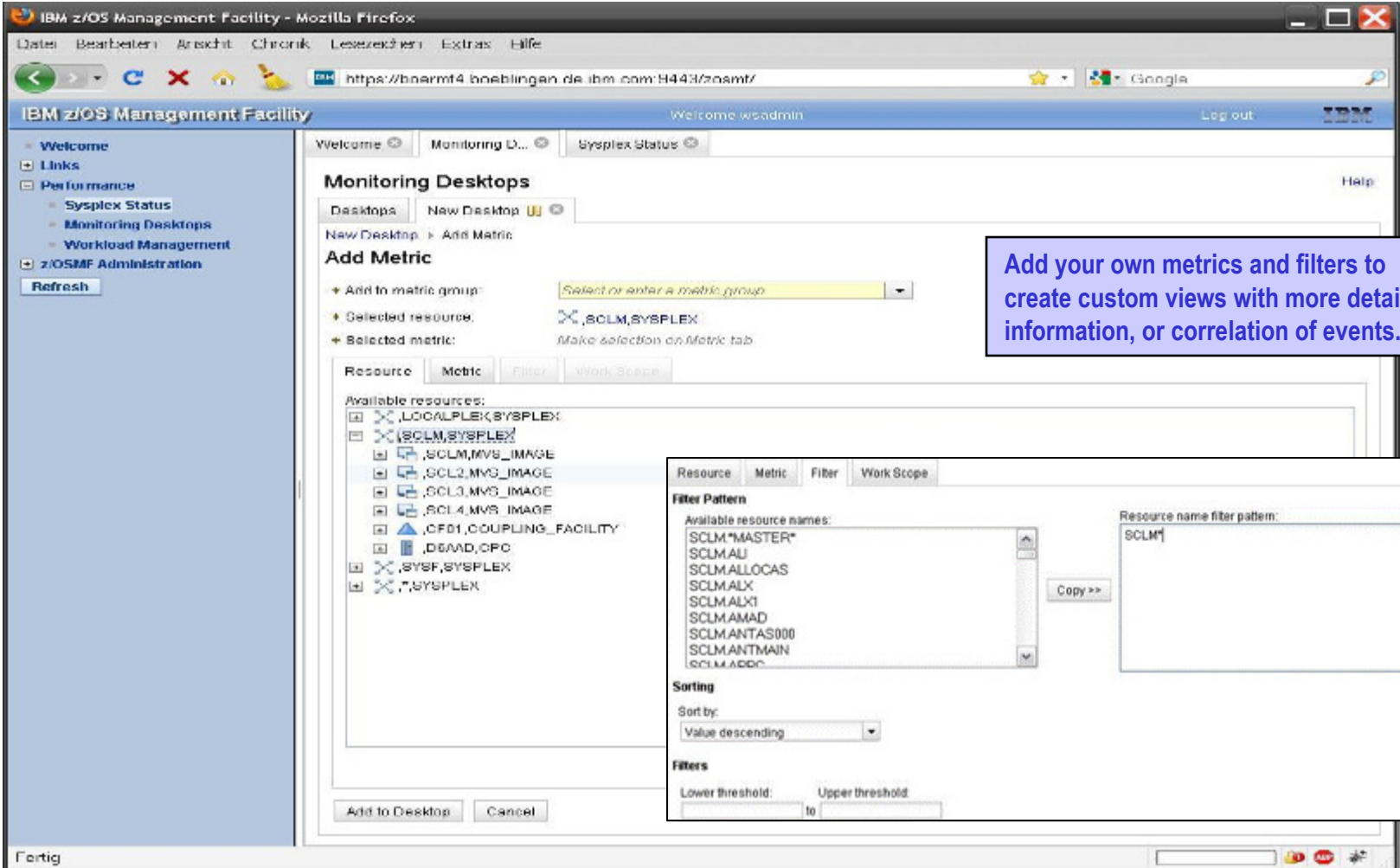
Monitor most of the metrics supported by the Resource Measurement Facility (RMF™) Monitor III, create and save custom views of the metrics, and display real-time performance data as bar charts.

Pre-loaded with standard metrics. Can be customized, can add your own.

# Monitoring Desktops - example



# Monitoring Desktops – add a metric



IBM z/OS Management Facility - Mozilla Firefox

https://boermf4.boeblingen.de.ibm.com:8443/zosmf/

IBM z/OS Management Facility

Welcome woadmin

Log out

Monitoring Desktops

Desktops New Desktop

New Desktop > Add Metric

**Add Metric**

Add to metric group: Select or enter a metric group

Selected resource: SCLM,SYSPLEX

Selected metric: Make selection on Metric tab

Resource Metric Filter Work Scope

Available resources:

- LOCALPLEX,SYSPLEX
- SCLM,SYSPLEX
- SCLM,MVS\_IMAGE
- SCL2,MVS\_IMAGE
- SCL3,MVS\_IMAGE
- SCL4,MVS\_IMAGE
- CFD1,COUPLING\_FACILITY
- D5AAD,CPC
- SYSP,SYSPLEX
- SYSPLEX

Filter Pattern

Available resource names:

- SCLM\*MASTER\*
- SCLMAU
- SCLMALOCAS
- SCLMALX
- SCLMALX1
- SCLMAMAD
- SCLMANTAS000
- SCLMANTMAIN
- SCLMADDC

Resource name filter pattern: SCLM\*

Copy >>

Sorting

Sort by: Value descending

Filters

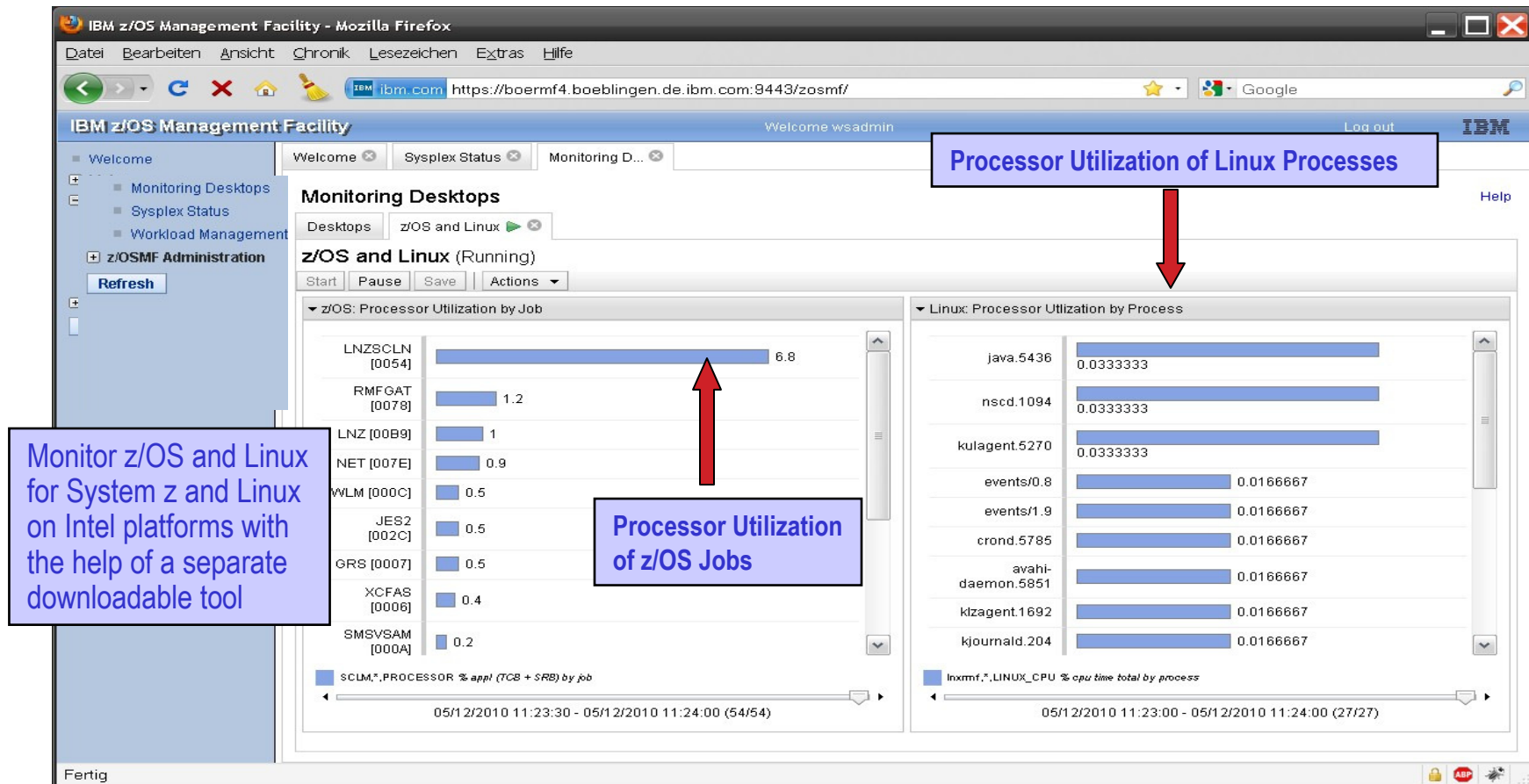
Lower threshold: to Upper threshold:

Add to Desktop Cancel

Fertig

Add your own metrics and filters to create custom views with more detailed information, or correlation of events.

# Integrated z/OS and Linux Monitoring





# z/OSMF Resource Monitoring (V1.12)

## *Benefits*

	<b>Without z/OSMF Resource Monitoring (using RMF ISPF Monitor III Reporter)</b>	<b>With z/OSMF Resource Monitoring</b>
Checking the performance status for several sysplexes	<p>You need a Monitor III Reporter session on each sysplex, and manually consolidate data from different reports. (Monitoring of Linux resources has to be done with other tools)</p> <p><b>Up to 15 minutes to look up each sysplex and high degree of skill needed to interpret reports</b></p>	<p>Cross-sysplex performance monitoring from a single point of control with a quick red-yellow-green health indicator for your systems on a single panel. (Linux monitoring features are fully integrated.)</p> <p><b>Just seconds to see the health of all your sysplexes (and Linux images)</b></p>
Explore & compare the processor usage of specifics jobs	<p>Tabular reports are a fixed layout and can be viewed only one at a time with limited ability to customize and filter the data presentation. You have to manually consolidate data from different reports</p> <p><b>A long time, depending on data required and correlations needed. In some cases, generating reports is not possible.</b></p>	<p>The monitoring desktops are fully customizable. Specific metrics of selected resources can be added to a desktop and are presented as charts. Multiple desktops can be started in parallel in different tabs. Advanced filtering features allow you to conduct more sophisticated performance analysis.</p> <p><b>About 5 minutes to set up a custom monitoring desktop, 3 key clicks to view real-time statistics</b></p>

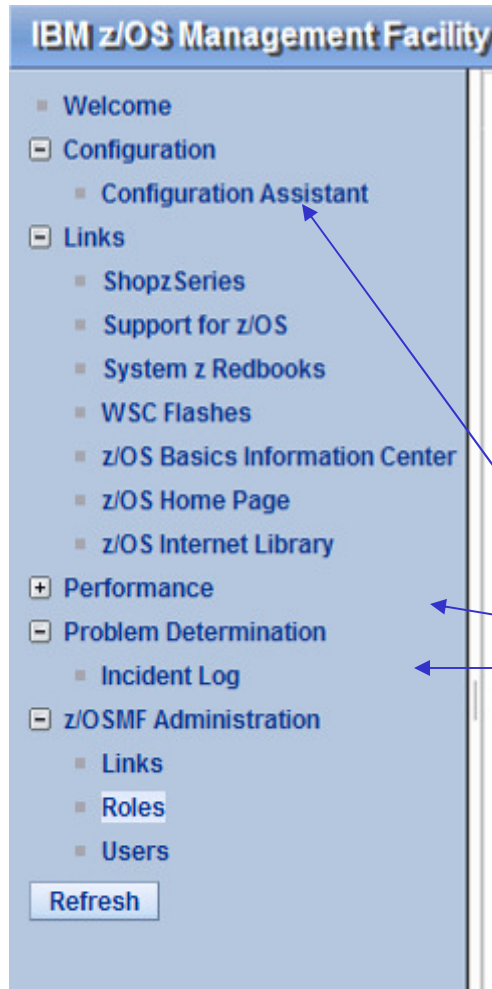
\*\* Based on IBM laboratory results, your results may vary



# Focus on z/OSMF Administration

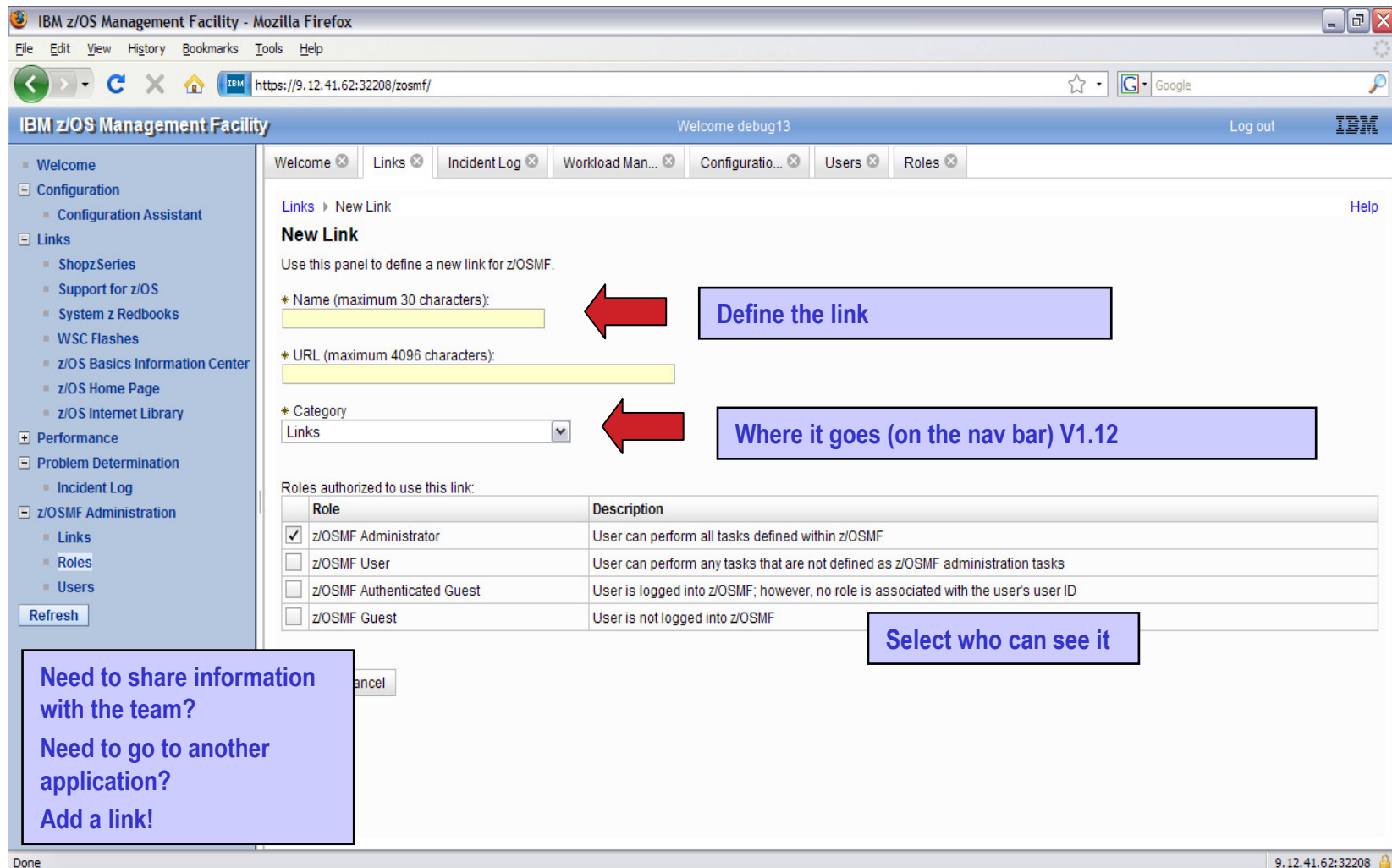
- **z/OSMF Authorization – defining users and roles**
  - The z/OSMF user must have a valid userid on the z/OS system
  - The z/OSMF administrator must authorize the user to z/OSMF and assign a role in order for the user to start working with z/OSMF tasks
  - The security administrator must authorize the user to the required z/OS stack for the z/OSMF tasks
    - *Scripts are provided to perform the end-end authorization*
  - Plan to Introduce SAF mode in z/OSMF1.13 to have tighter integration with z/OS security management
    - Resource names associated with all z/OSMF tasks and links.
    - Resource class profiles control authorization to z/OSMF managed resources.
    - Use of SAF groups to represent z/OSMF roles
    - Users connected to SAF groups to be authorized
  - Option to stay with existing Repository mode or switch to SAF mode at any time
- **Adding Links**
  - Allows the administrator to dynamically add links to non-z/OSMF resources, e.g. ISV products, commonly used installation Web sites

# Focus on Links



- This category contains the pre-defined links provided by IBM as well as any new links added by the z/OSMF administrator
- The links are available to all users of z/OSMF
- Administrator can define which roles have access to each of the defined links.
- The IBM pre-defined links are accessible to all users, including guests, by default.
- Also, a new interface enables you to add non-z/OSMF launch points and links to the left hand side navigation tree. (V1.12)

# z/OSMF Administration: Adding a link



IBM z/OS Management Facility - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://9.12.41.62:32208/zosmf/

IBM z/OS Management Facility Welcome debug13 Log out IBM

Links > New Link Help

**New Link**

Use this panel to define a new link for z/OSMF.

\* Name (maximum 30 characters):

\* URL (maximum 4096 characters):

\* Category  
Links

Roles authorized to use this link:

Role	Description
<input checked="" type="checkbox"/> z/OSMF Administrator	User can perform all tasks defined within z/OSMF
<input type="checkbox"/> z/OSMF User	User can perform any tasks that are not defined as z/OSMF administration tasks
<input type="checkbox"/> z/OSMF Authenticated Guest	User is logged into z/OSMF; however, no role is associated with the user's user ID
<input type="checkbox"/> z/OSMF Guest	User is not logged into z/OSMF

Cancel

Need to share information with the team?  
Need to go to another application?  
Add a link!

Define the link

Where it goes (on the nav bar) V1.12

Select who can see it

Done 9.12.41.62:32208

# Software Deployment (planned for z/OSMF V1.13)

- **Software Deployment is a new task that will make cloning of installed software simpler and safer**
  - Replaces manual and error prone procedures with a user friendly application, and
  - Codifies IBM recommended best practices for software deployment.
- **Software deployment key functions include**
  - Verify cross system and cross product software requisites are satisfied.
  - Verify software fixes are not regressed.
  - Clone ALL parts of the software
  - Clone the inventory (SMP/E CSI) along with the software
- **Scope of software managed**
  - All SMP/E installed software, IBM or non-IBM
    - Service upgrades for all of the above (via complete replacement)
- **Software Deployment will clone software**
  - Locally, either on a single system or system-to-system within a sysplex
  - Remotely, system-to-system across a network and multiple sysplexes

# **DASD Management** (planned for z/OSMF V1.13)

- **The first phase in simplifying SMS storage management focuses on the task of adding storage capacity to an SMS Pool storage group through a single user interface.**
- **Today, the storage administrator must determine when a storage group is near its capacity, identify how much storage to add, and what volumes to add. Once determined, multiple steps across various user interfaces are required to make the added capacity available to SMS:**
  - ISMF to add volume entries to the storage group definition (update SCDS)
  - ICKDSF to initialize volumes
  - Operator command to vary volumes online
  - ISMF to activate the updated SCDS
- **The z/OSMF DASD Management task is designed to help the storage administrator by streamlining the process of adding volumes to SMS pool storage groups, and is intended to allow you to perform storage group management tasks from within the application, reducing several manually intensive steps involving multiple applications to a single GUI.**

# Capacity Provisioning (planned V1.13 for z/OSMF )



- The Capacity Provisioning Control Center (CPCC) is the user front end to *administer* Capacity Provisioning policies
- Capacity Provisioning Control Center is available as a separate Windows-based stand-alone client.
- Part of the functionality is planned to be integrated into z/OSMF V1.13 which will ease the monitoring of CP status for different domains.
- The z/OSMF Capacity Provisioning task will simplify the work of a z/OS CP administrator and provides functionality to
  - manage connections to CPMs
  - view reports for domain status, active configuration and active policy.
- Capacity Provisioning is designed to simplify the management of temporary capacity. The scope of z/OS Capacity Provisioning is to address capacity requirements for relatively short term workload fluctuations for which On/Off Capacity on Demand is applicable. It is not a replacement for the Capacity Management process.



# Application Linking (planned V1.13 for z/OSMF)

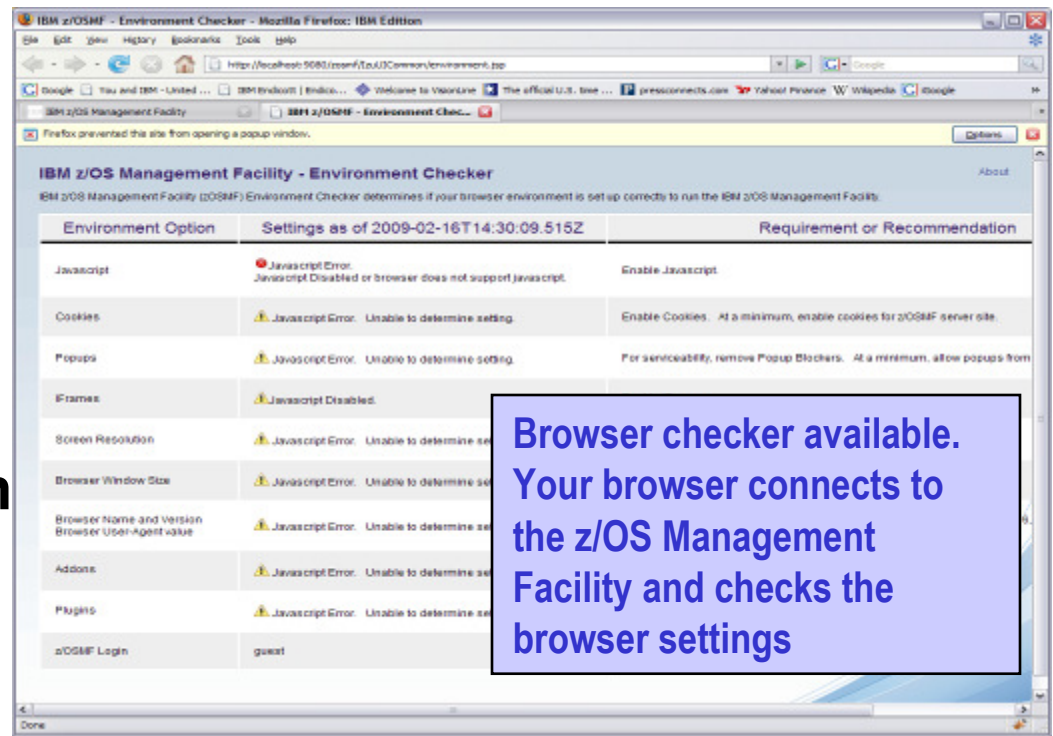
- Objective
- Provide a more seamless experience for system programmers as they work with different tools and tasks on the z/OS system.
- This is accomplished by enabling Cross application linkage and context sensitive launching between z/OSMF applications and also between z/OSMF applications and external applications
  - Context sensitive launching or linking with z/OSMF applications may be within z/OSMF, for example, one task may want to launch to the other in context.
  - It can also be from external consoles or applications into z/OSMF, for example, from an ISV app to z/OSMF or vice versa.

# Additional details on usage

- **z/OSMF V1R11 and R12 operating environment**
  - One instance of z/OSMF can manage only one local system or sysplex
  - Multiple users may log into the same instance of z/OSMF from different workstations/browsers
    - Expectation is to support up to 15 concurrent users
  - From one client system, user can manage additional sysplexes by opening new browser windows (or tabs) and logging into the z/OSMF instance installed on those sysplexes (one browser per system/sysplex).
  - Only one active instance of z/OSMF is supported within a sysplex at any point in time.
    - Additional instance may be created e.g for test or service update or backup, but it should not be actively managing the systems at the same time (e.g. working on the same incident concurrently from 2 separate instances of z/OSMF) or using the same data repository.
- **z/OSMF can coexist with other ISV products**
  - For example, all setup instructions are provided for RACF, but z/OSMF will operate with other security products with equivalent instructions

# Prerequisites

- **z/OSMF V1R11**
  - Requires z/OS z/OS V1R10 w/maint., or z/OS V1.11
    - z/OSMF V1.11 also supported on z/OS V1R12 and z/OS V1R13 (but upgrade to z/OSMF V1R12 recommended)
    - The Configuration Assistant for z/OS Communications Server portion of z/OS Management Facility requires z/OS V1.11 or later.
  - Browser
    - Windows XP® operating system
    - Mozilla Firefox 3.0.6 (recommended)
    - Mozilla Firefox 2
    - Internet Explorer® 7
    - Internet Explorer 6
- **z/OSMF V1R12**
  - Requires z/OS R12
  - Browser
    - Windows XP, Windows Vista, and Windows 7
    - Mozilla Firefox 3.0
    - Mozilla Firefox 3.5 (recommended)
    - Internet Explorer® 7
    - Internet Explorer 8
  - **Support added for Win**
    - 32bit version of FF3.5 and IE8
    - Requires PM27082
- Firefox 3.6 also found to work
  - Ignore message IZUG809W



# Summary

- The IBM z/OS Management Facility is a new product for z/OS customers that provides support for a modern, Web-browser based management console for z/OS.
- z/OSMF delivers solutions in a task oriented user interface. The initial functions in z/OSMF 1.11 include:
  - **Configuration Assistant for z/OS Communication Server**
    - Simplified configuration and setup of TCP/IP policy-based networking functions
  - **Incident Log**
    - The Incident Log provides a consolidated list of SVC Dump related problems, along with details and diagnostic data captured with each incident. It also facilitates sending the data for further diagnostics
  - **Links**
    - Links to resources - provides common launch point for accessing resources beyond z/OSMF
  - **z/OSMF Administration**
    - z/OSMF authorization services for administrator: add users, define roles, dynamically add links to non-z/OSMF resources

# Summary – z/OSMF V1.12 Enhancements (1 of 2)

- **z/OSMF Incident Log:**
  - Encrypt incident files
  - Break dumps into multiple data sets that can be sent via FTP in parallel
  - Specify additional data sets to send to a vendor
  - Add free-form comments to incidents and FTP destinations in new sortable fields
  - Create of diagnostic log snapshots based on SYSLOG and LOGREC data sets
    - In addition to OPERLOG and LOGREC log streams
  - All intended to help you manage problem data more easily
- **z/OSMF Configuration Assistant for z/OS Communications Server supports configuration for**
  - IKEv2
  - Certificate trust chains and certificate revocation lists
  - New cryptographic algorithms for IPSec and IKE.
  - FIPS 140 cryptographic mode for IPSec and IKE
  - ...and Enforce RFC4301 compliance for IPSec filter rules



# Summary – z/OSMF V1.12 Enhancements (2 of 2)



- **New z/OSMF interface:**
  - Designed to allow you to add links programmatically to the z/OSMF Navigation tree
- **New WLM policy editor:**
  - Create, edit, and install WLM service definitions
  - Activate WLM service policies
  - Monitor of the WLM status of a sysplex and the systems in a sysplex
- **New Resource Monitoring:**
  - provides integrated performance monitoring in the customer's environment
  - Supports z/OS z/OS sysplexes and Linux® images (System z® and Intel®) in your installation
  - Integrated monitoring from a single point of control
  - Drill-down into resource attributes and metrics

# Summary – z/OSMF V1.13 highlights



- **A new software deployment capability to simplify cloning and software deployment tasks**
- **Storage management support to define new storage volumes**
- **A new Capacity Provisioning Manager application is designed to support easier monitoring of z/OS Capacity Provisioning Manager (CPM) status**
- **Application Linking and context sensitive launching enablement between z/OSMF applications and also between z/OSMF applications and external applications**
- **Improved z/OSMF authorization with SAF mode**

## Additional information

- **z/OS Management Facility website**
  - <http://ibm.com/systems/z/os/zos/zosmf/>
- **IBM z/OS Management Facility education modules in IBM Education Assistant**
  - <http://publib.boulder.ibm.com/infocenter/ieduasst/stgv1r0/index.jsp>
  - Scroll down to z/OS Management Facility
- **z/OS Hot Topics, Issue 21 and 23:**
  - [http://ibm.com/systems/z/os/zos/bkserv/hot\\_topics.html](http://ibm.com/systems/z/os/zos/bkserv/hot_topics.html)
- **Program Directory for z/OS Management Facility**      GI11-2886
- **IBM z/OS Management Facility Configuration Guide**      SA38-0652
- **IBM WebSphere Application Server OEM Edition**  
**for z/OS Configuration Guide, Version 7.0**      GA32-0631
- **IBM z/OS Management Facility License Information** GC52-1263

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# BACKUP

## z/OSMF packaging

### z/OSMF V1R11 is comprised of:

- PID# 5655-S28
- S/S PID# 5655-S29
- FMID# HSMA110
- *FMID# HBBN700 (IBM WebSphere Application Server OEM Edition for z/OS v7.0)*
  - COMPID 5655I3512 - WEBS APP SVR OEM
- HSMA110 FMID Description: IBM z/OS Management Facility
  - COMPID 5655S28SM – z/OSMF Core
  - COMPID 5655S2805 – z/OSMF Incident Log
  - COMPID 5655S28CA –Config Assist



## z/OSMF V1.12 product

The IBM z/OS Management Facility is a separate licensed program product

- & z/OS Management Facility (5655-S28)
- & z/OS Management Facility Subscription and Support (5655-S29)

FMID	COMPID	Component Name	RETAIN Release
HSMA120	5655S28SM	z/OSMF Core	120
HSMA122	5655S2802	z/OSMF RMF	122
HSMA123	5655S2803	z/OSMF WLM	123
HSMA125	5655S2805	z/OSMF Incident Log	125
HSMA12A	5655S28CA	CONFIG ASSIST	12A
HBBN700	5655I3512	WEBS APP SRV OEM	700

# Migration & Coexistence Considerations

- **z/OSMF 1.12 requires z/OS 1.12**
- **Migration:**
  - **If you have a z/OSMF 1.11 system and want to migrate to z/OSMF 1.12 on a z/OS 1.12 system, there is script support for doing that.**
    - Requires that z/OSMF 1.11 be at the PTF UK52956/APAR PK97274 level prior to migration
    - Use izumigrate.sh, to migrate the R11 configuration file to the R12 format, see the z/OSMF Configuration Guide
    - Run the setup steps via izusetup.sh to enable the R12 level of applications
    - After that you can use the –add option to add the new applications added in z/OSMF 1.12
- **Coexistence applies to lower-level systems which coexist (share resources) with latest z/OS systems.**
  - **If you require the capability to switch from z/OS Management Facility V1.12.0 to a lower level system (z/OS Management Facility V1.11.0 on a z/OS 1.10 or later system), and retain the use of the data repository from z/OS Management Facility V1.12.0, you require APAR PM09519 on the system with z/OS Management Facility V1.11.0**
  - **Also require CEA APAR on the lower level z/OS systems V1R10 and V1R11) OA32285**
    - **If this is \*not\* installed, under certain circumstances, some datasets will not be deleted when the rest of the incident is deleted.**