

z/OS Management Facility (z/OSMF) 1.12 Overview

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IBM Corp.

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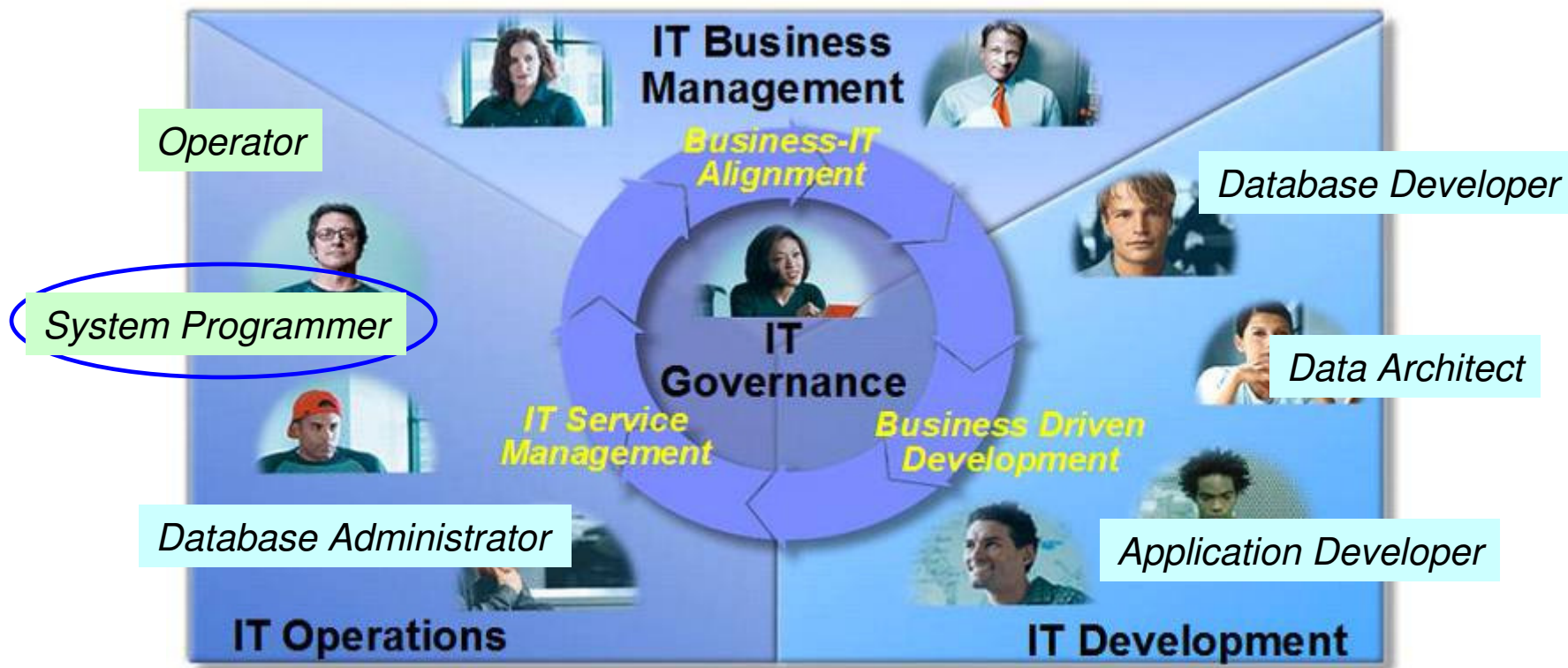
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Agenda

- **z/OSMF Overview**
- **z/OSMF 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
- **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

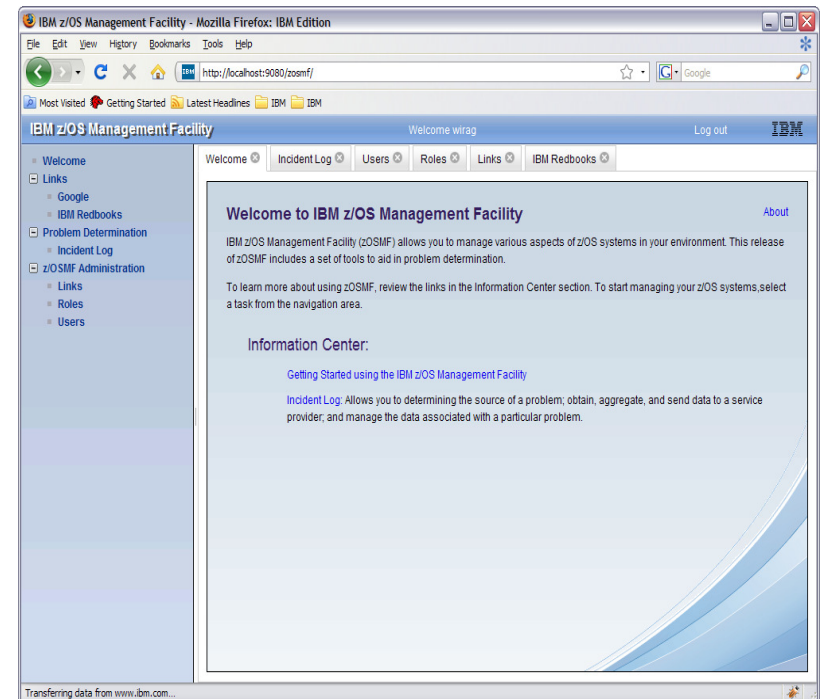
Focus Areas for Simplification



<p>System Determination and Analysis</p> <ul style="list-style-type: none"> Run Time Diagnostics Predictive Failure Analysis z/OSMF Auto-IPL Auto Reply CA Reclaim 	<p>Configuration</p> <ul style="list-style-type: none"> Capacity Provisioning z/OSMF IBM Health Checker CF Sizer
<p>Simplify and modernize the Programmer User Experience</p> <p>Deliver solutions in a task-oriented browser user interface with integrated user assistance</p>	
<p>Education</p> <p>Finding the information needed to use z/OS</p>	
<p>Installation</p> <ul style="list-style-type: none"> ShopzSeries acquisition Electronic Delivery Migration Health Checks Programmatic Processing of Fix Categories SMP/E Internet Service Retrieval 	

IBM z/OS Management Facility

- The IBM z/OS Management Facility is a 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.
 - Automated tasks can help reduce the learning curve and improve productivity.
 - Embedded active user assistance (such as wizards) guides you through tasks and helps provide simplified operations.



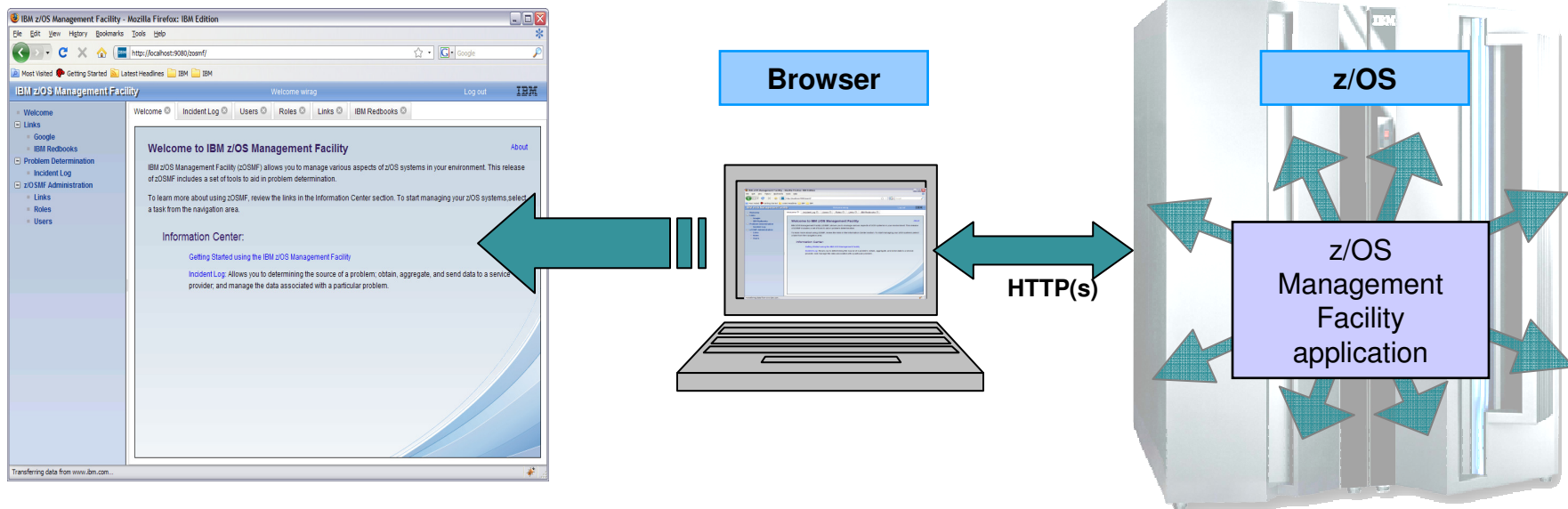
Focus on System Programming

- **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

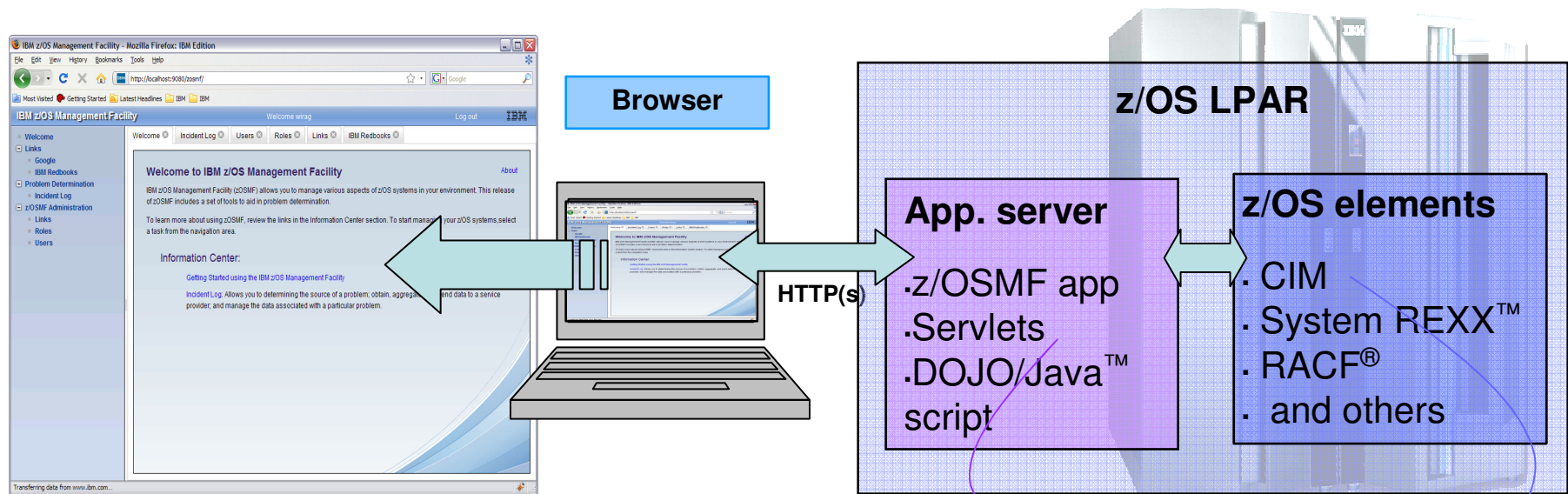
z/OS application, browser access



- **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 z/OS V1R12
 - z/OSMF V1R12 is to be supported on z/OS V1R12

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

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.

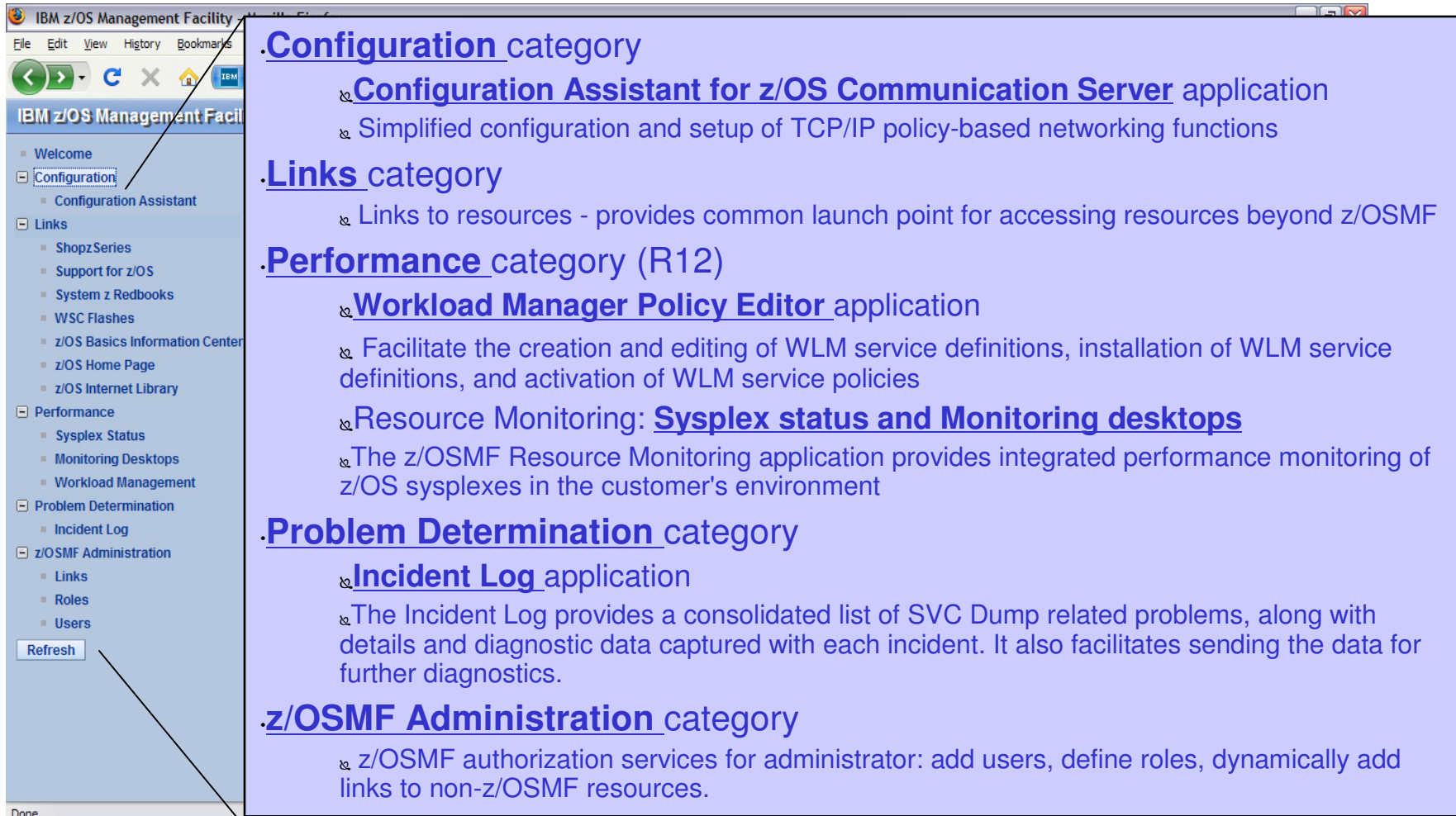
Log in to utilize and learn more about z/OSMF.

Unauthorized access to this system is prohibited IBM

- 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)

- & **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
- & 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

.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 24-hour Logrec summary
 - Incident Log will also 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

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"/>	COMPON=WEBSPHERE Z/OS, IE BBOOOUTP	12345,001,001	8562(12)	Received ++APAR	V
<input type="checkbox"/>	ABEND S00C4 5N0200,ISSUER=BBORADMP,ABEND IE BBOOOUTP				V
<input type="checkbox"/>	ABEND S00C4 :BSPHERE Z/OS, 5N0200,ISSUER=BBORLEXT,ABEND (NAME NOT KNOWN)		DB: 5868,Scr: XR-125	Application problem	V
<input type="checkbox"/>	ABEND S00C4 X,COMPID=SCPX1,ISSUER=BPXMIPCE =S0EC3,REASON=04130007				V
<input type="checkbox"/>	ABEND S00C4 FTP Job Status COMPID=SCPX1,ISSUER=BPXMIPCE REASON=00080005				V
<input type="checkbox"/>	ABEND S00C4 COMPON=WEBSPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORFRR,ABEND IN BBOOSRBF				V
<input type="checkbox"/>	ABEND S00C1 COMPON=ZTT TC=ZTTABND ISSUER=ZTTVDUMP - ABEND FOR PDWB 1				V

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

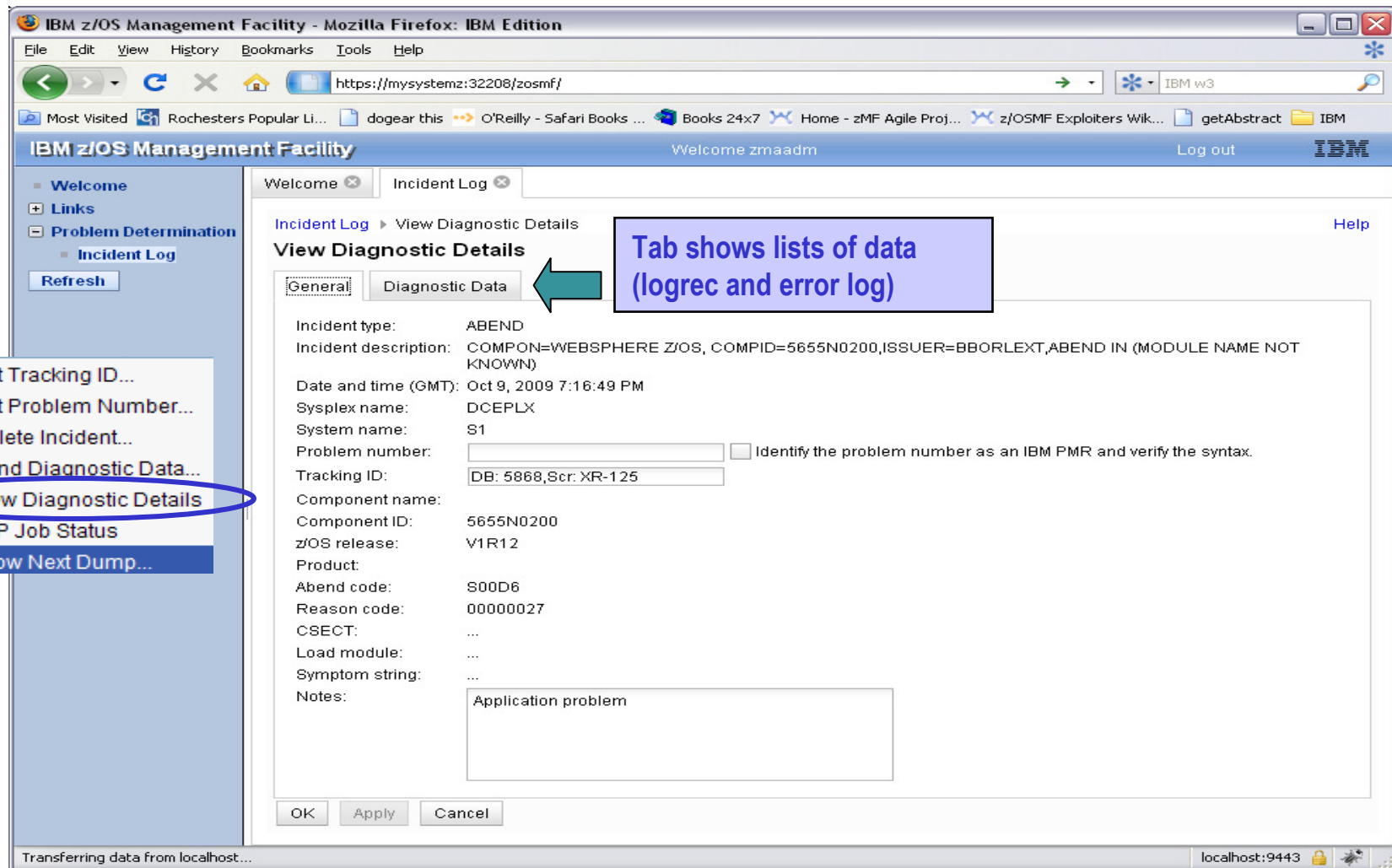
Add comments

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



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

File Edit View History Bookmarks Tools Help

https://mysystemz:32208/zosmf/

Most Visited | Rochester's 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

Incident Log

Incident Log > View Diagnostic Details

View Diagnostic Details

General Diagnostic Data

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: Identify the problem number as an IBM PMR and verify the syntax.
 Tracking ID:
 Component name:
 Component ID: 5655N0200
 z/OS release: V1R12
 Product:
 Abend code: S00D6
 Reason code: 00000027
 CSECT: ...
 Load module: ...
 Symptom string: ...
 Notes:

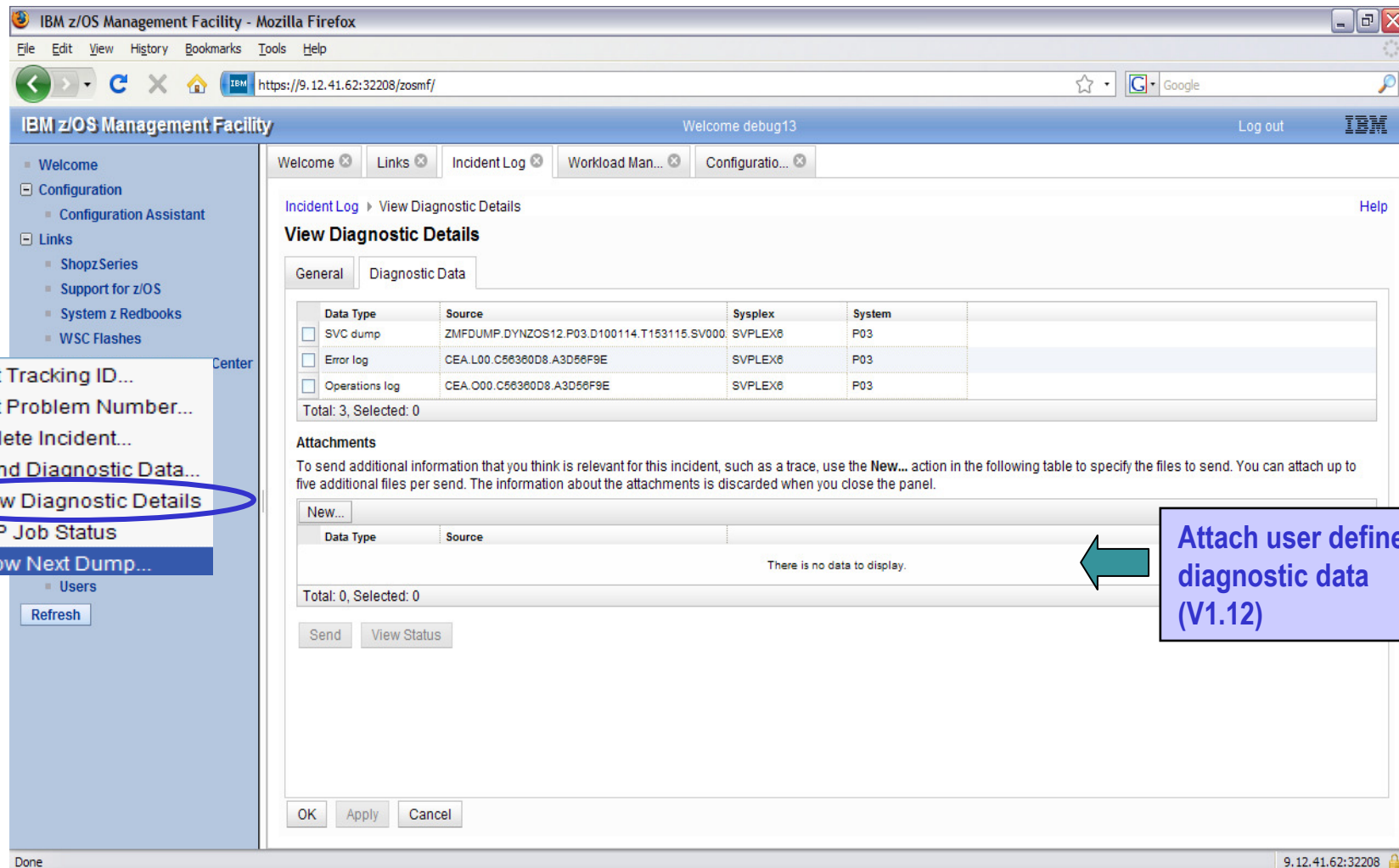
OK Apply Cancel

Transferring data from localhost... localhost:9443

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

Tab shows lists of data (logrec and error log)

Incident Log – Diagnostic Data



The screenshot shows the IBM z/OS Management Facility web interface in Mozilla Firefox. The browser address bar shows the URL `https://9.12.41.62:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "debug13".

The left sidebar contains a navigation menu with the following items:

- Welcome
- Configuration
 - Configuration Assistant
- Links
 - ShopzSeries
 - Support for z/OS
 - System z Redbooks
 - WSC Flashes
- Center
 - Set Tracking ID...
 - Set Problem Number...
 - Delete Incident...
 - Send Diagnostic Data...
 - View Diagnostic Details** (highlighted with a blue oval)
 - FTP Job Status
 - Allow Next Dump...
 - Users

The main content area shows the "Incident Log" tab selected, with the sub-tab "View Diagnostic Details". Below this, there are two tabs: "General" and "Diagnostic Data". The "Diagnostic Data" tab is active, displaying a table of diagnostic data:

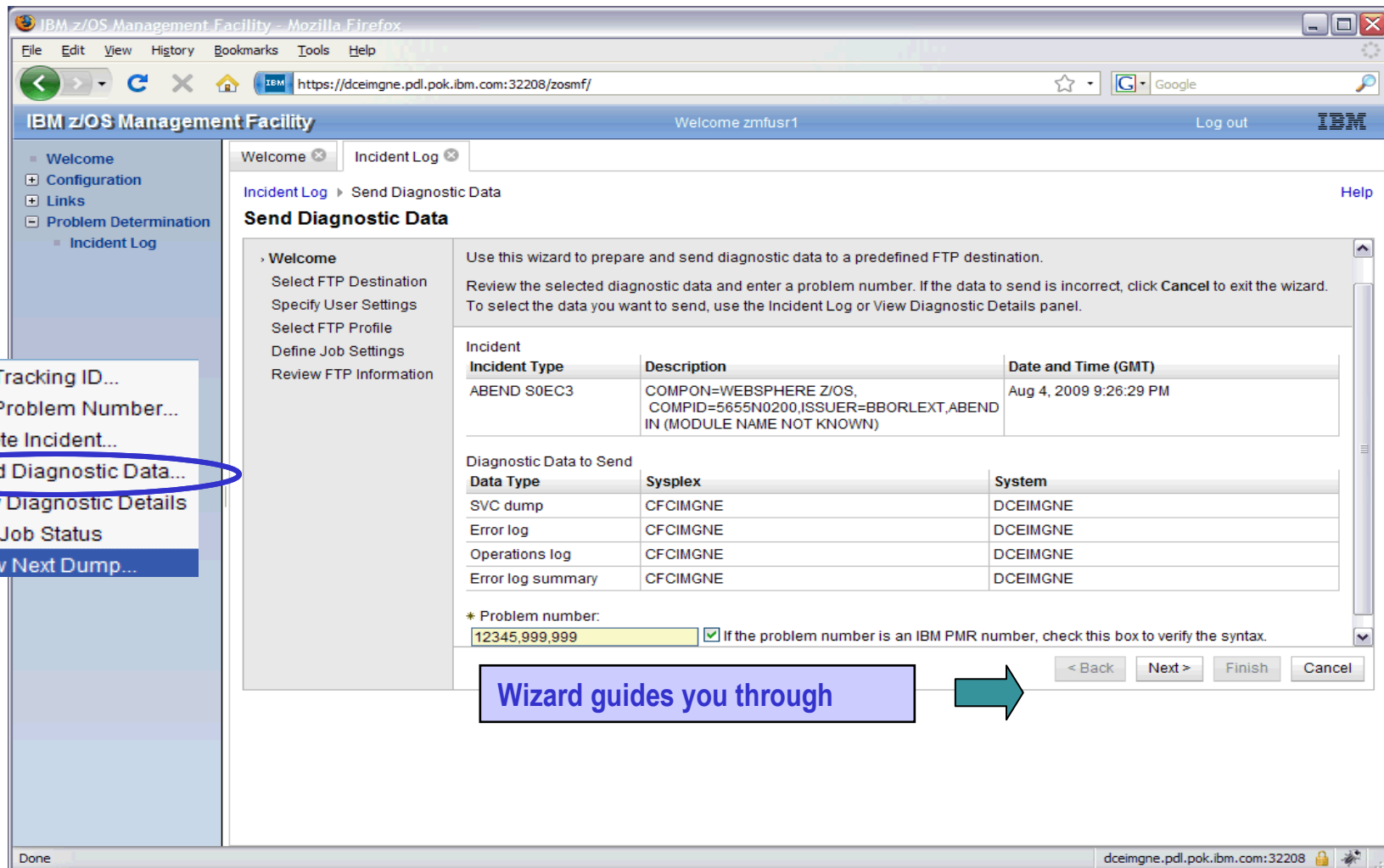
Data Type	Source	Sysplex	System
<input type="checkbox"/> SVC dump	ZMFDUMP.DYNZOS12.P03.D100114.T153115.SV000	SVPLEX0	P03
<input type="checkbox"/> Error log	CEA.L00.C68360D8.A3D56F9E	SVPLEX0	P03
<input type="checkbox"/> Operations log	CEA.O00.C68360D8.A3D56F9E	SVPLEX0	P03

Below the table, it says "Total: 3, Selected: 0".

Underneath the table is the "Attachments" section, which includes a "New..." button and a table for adding attachments. The table is currently empty, with the text "There is no data to display." below it. A blue callout box with an arrow points to this area, containing the text "Attach user defined diagnostic data (V1.12)".

At the bottom of the page, there are buttons for "OK", "Apply", and "Cancel". The status bar at the bottom right shows the IP address "9.12.41.62:32208" and a lock icon.

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

Welcome Incident Log

Incident Log > Send Diagnostic Data Help

Send Diagnostic Data

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

Select FTP Destination
Specify User Settings
Select FTP Profile
Define Job Settings
Review FTP Information

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

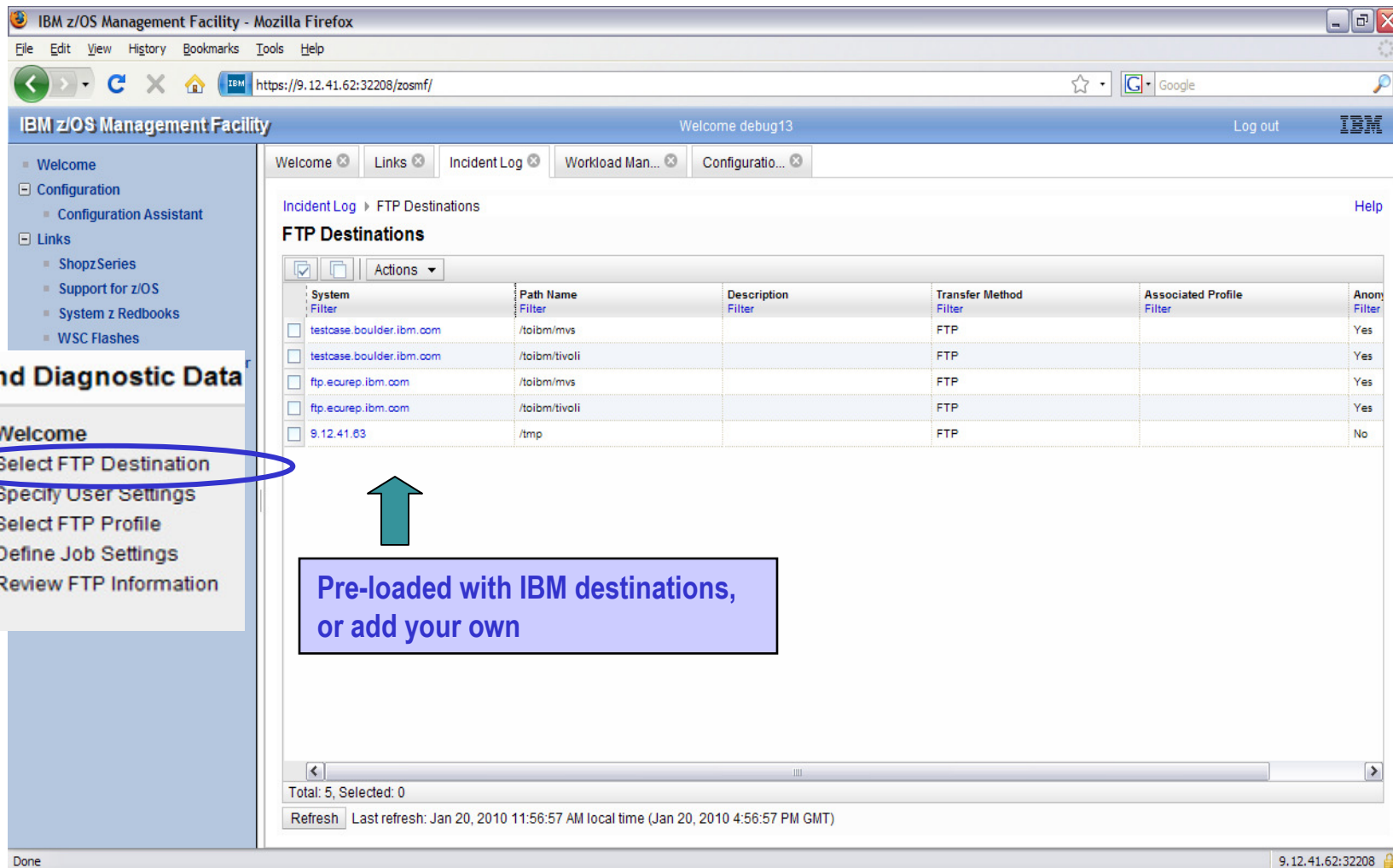
Data Type	Sysplex	System
SVC dump	CFCIMGNE	DCEIMGNE
Error log	CFCIMGNE	DCEIMGNE
Operations log	CFCIMGNE	DCEIMGNE
Error log summary	CFCIMGNE	DCEIMGNE

* 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

Incident log - Destinations



IBM z/OS Management Facility - Mozilla Firefox

https://9.12.41.62:32208/zosmf/

Welcome debug13

Log out

Incident Log > FTP Destinations

FTP Destinations

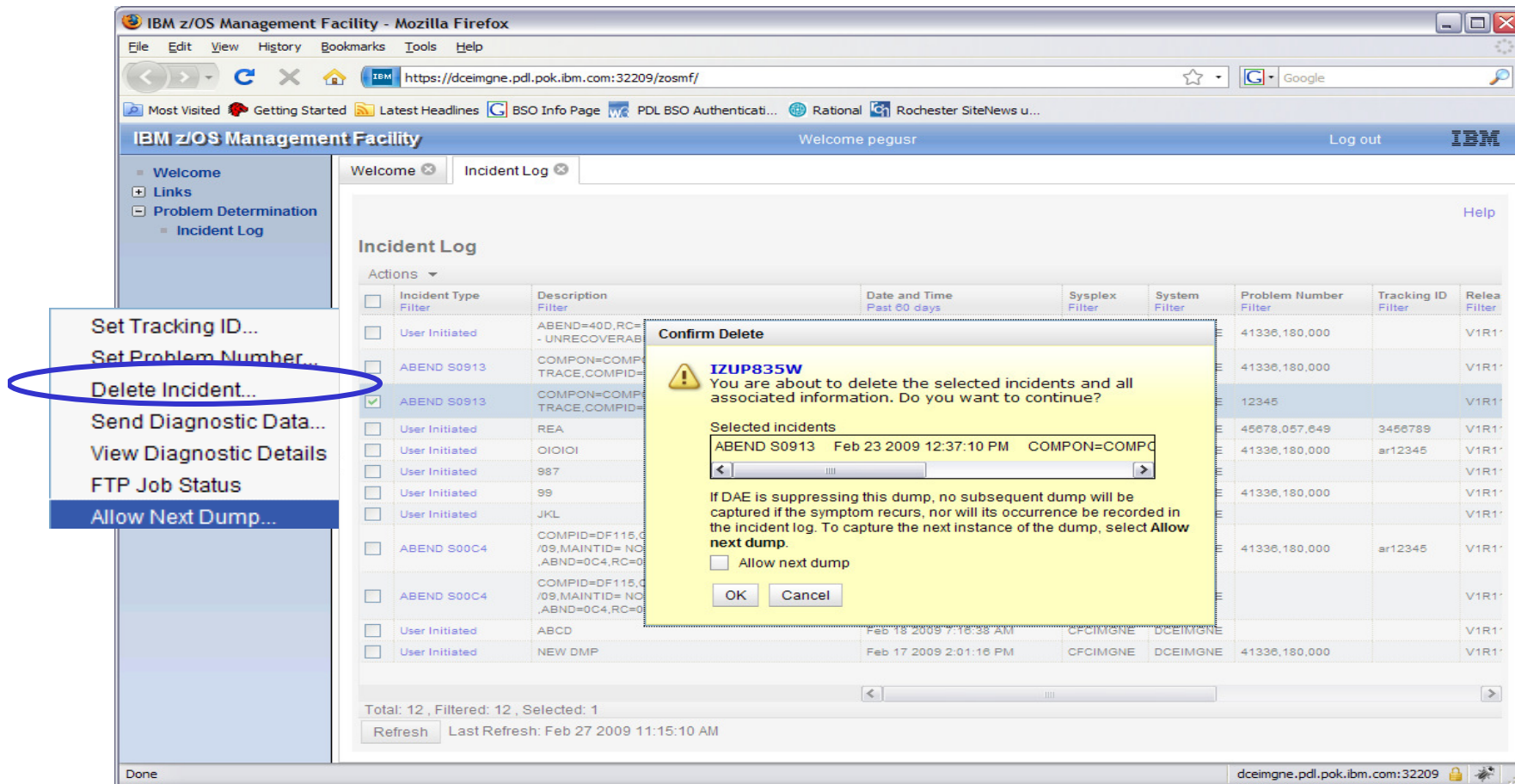
System Filter	Path Name Filter	Description Filter	Transfer Method Filter	Associated Profile Filter	Anony Filter
<input type="checkbox"/> testcase.boulder.ibm.com	/toibm/mvs		FTP		Yes
<input type="checkbox"/> testcase.boulder.ibm.com	/toibm/tivoli		FTP		Yes
<input type="checkbox"/> ftp.ecurep.ibm.com	/toibm/mvs		FTP		Yes
<input type="checkbox"/> ftp.ecurep.ibm.com	/toibm/tivoli		FTP		Yes
<input type="checkbox"/> 9.12.41.63	/tmp		FTP		No

Total: 5, Selected: 0

Refresh Last refresh: Jan 20, 2010 11:56:57 AM local time (Jan 20, 2010 4:56:57 PM GMT)

Done 9.12.41.62:32208

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" and it includes a "Welcome pegusr" message and a "Log out" link. The main content area displays an "Incident Log" table with columns for Incident Type, Description, Date and Time, Sysplex, System, Problem Number, Tracking ID, and Release. One incident, "ABEND S0913", is selected. A "Confirm Delete" dialog box is overlaid on the table, asking for confirmation to delete the selected incidents and associated information. The dialog also includes a checkbox for "Allow next dump" and "OK" and "Cancel" buttons. On the left side of the interface, a vertical menu contains several options, with "Delete Incident..." circled in blue.

Incident Log Table Data:

Incident Type	Description	Date and Time	Sysplex	System	Problem Number	Tracking ID	Release
User Initiated	ABEND=40D, RC= - UNRECOVERAB				41336,180,000		V1R1
ABEND S0913	COMPON=COMP TRACE, COMPID=				41336,180,000		V1R1
ABEND S0913	COMPON=COMP TRACE, COMPID=				12345		V1R1
User Initiated	REA				45678,057,649	3456789	V1R1
User Initiated	OIOIOI				41336,180,000	ar12345	V1R1
User Initiated	987				41336,180,000		V1R1
User Initiated	99				41336,180,000		V1R1
User Initiated	JKL				41336,180,000		V1R1
ABEND S00C4	COMPID=DF115, C /09, MAINTID= NO ,ABND=0C4, RC=0				41336,180,000	ar12345	V1R1
ABEND S00C4	COMPID=DF115, C /09, MAINTID= NO ,ABND=0C4, RC=0						V1R1
User Initiated	ABCD	Feb 18 2009 7:18:38 AM	CFCIMGNE	DCEIMGNE			V1R1
User Initiated	NEW DMP	Feb 17 2009 2:01:16 PM	CFCIMGNE	DCEIMGNE	41336,180,000		V1R1

Confirm Delete Dialog:

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

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. Up to 5-6 minutes	Display in 1 click. Greatly reduced skill required As little as 5 seconds
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 Up to 15 minutes	Make the update happen in 3 mouse clicks As little as 10 seconds
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. Up to 20 minutes Up to 30 minutes for sysplex components	Send the material in 8 clicks: <ul style="list-style-type: none"> • Select the incident materials • Specify the FTP destination information • Send the material • Check whether the information was FTP'd successfully As little as 30 seconds

“So easy, even a marketing professional can use it!” – Gita Grube Berg, IBM System z Marketing

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**

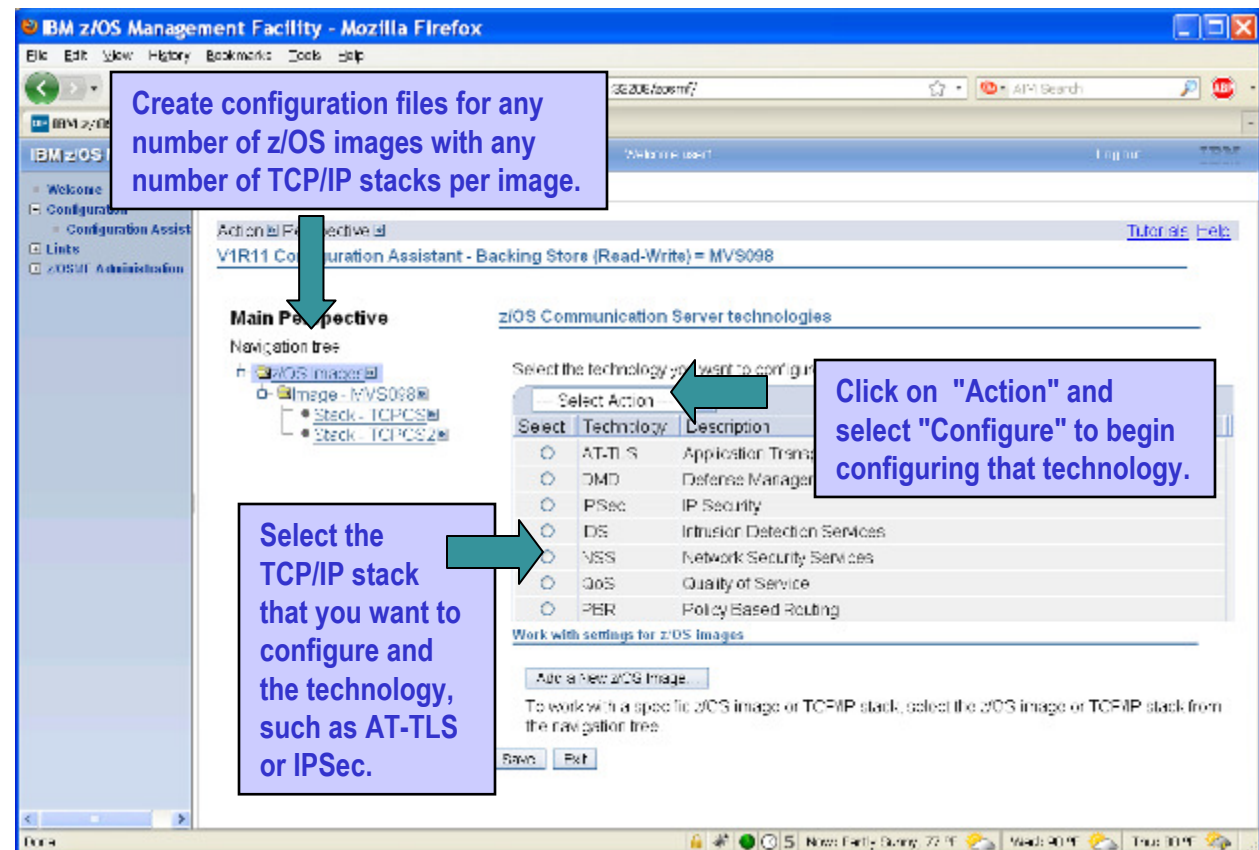
- A GUI for the z/OS Communications Server Policy Agent - simplifies the configuration and setup of the following TCP/IP policy-based networking functions:
 - Application Transparent TLS (AT-TLS)
 - IP Security (IPSec) including filters and VPNs
 - Network Security Server(NSS)
 - Intrusion Detection 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
 - Planned for 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.

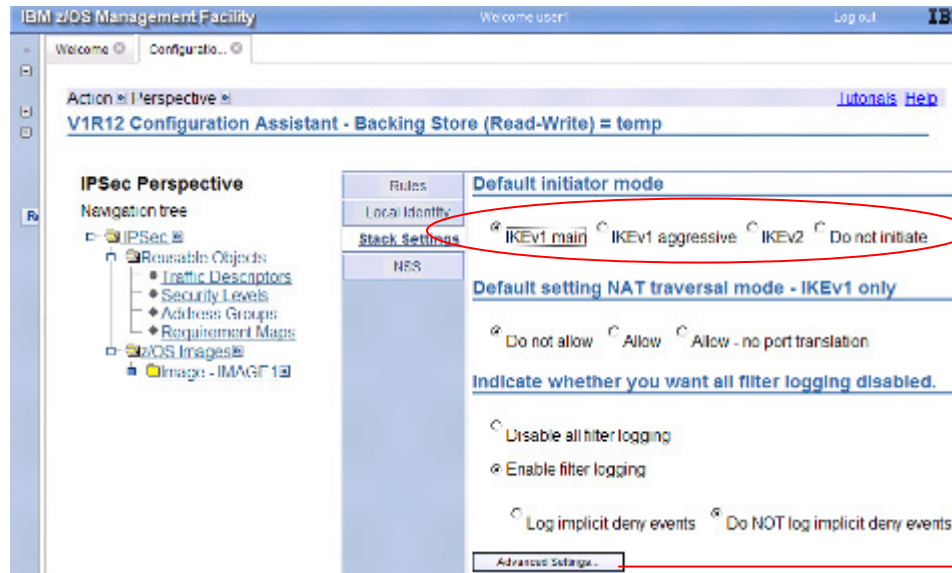
Configuration Assistant for z/OS Comm. Server

- 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

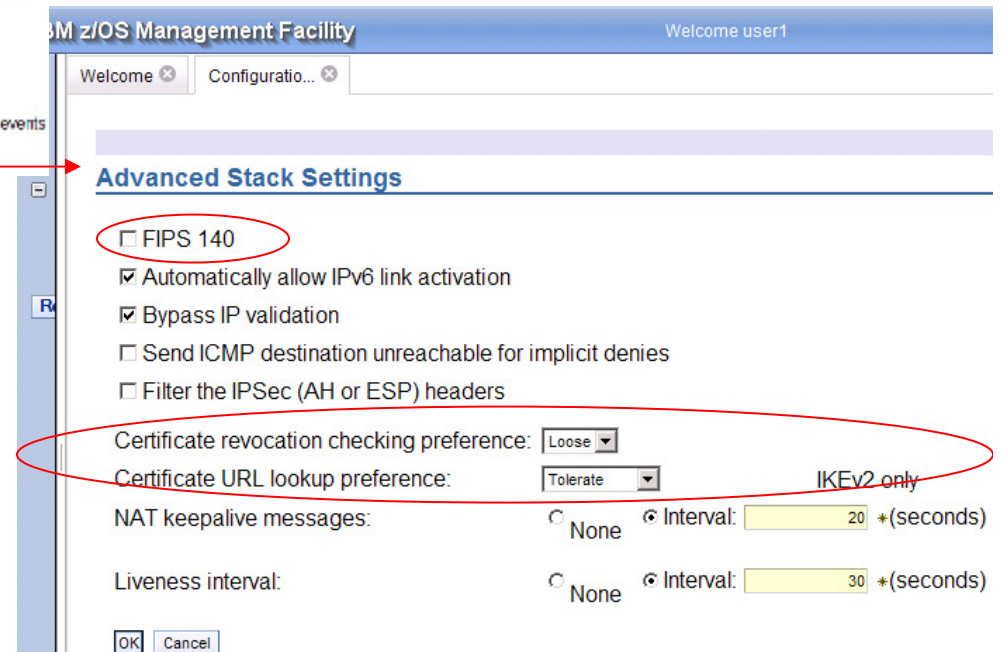


Configuration Assistant for z/OS Comm. Server

Support for IKEv2 (planned for V1.12)*



- 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"> • Learn how to set up IP filters • Review the IP Configuration Guide <ul style="list-style-type: none"> • Configure the Policy Agent application • Create configuration policy for IP Filter rules • Configure default filter rules in the TCP/IP profile • Configure the TRMD application • Configure the Syslogd application <p>Hours (or even days for initial setup)</p>	<ul style="list-style-type: none"> • Configuration Assistant guidance <ul style="list-style-type: none"> • Go to IP Security Perspective • Add a connectivity rule for an IP Filter • Use Application Setup Tasks to assist with the configuration and setup of the required applications • The Configuration Assistant will generate and help you deploy the configuration files to your z/OS system <p>As little as 30 minutes</p>
Secure your TN3270 server connections with SSL	<ul style="list-style-type: none"> • Manual process • Review the IP Configuration Guide <ul style="list-style-type: none"> • Configure the Policy Agent application • Configure TTLS in the TCP/IP profile • Configure the Syslogd application • Create configuration policy for AT-TLS for your TN3270 Server <p>Hours (or even days for initial setup)</p>	<ul style="list-style-type: none"> • Configuration Assistant guidance <ul style="list-style-type: none"> • Go to AT-TLS Perspective • Select the AT-TLS rule for the TN3270 server and enable • Use Application Setup Tasks to assist with the configuration and setup of the required applications • The Configuration Assistant will generate and help you deploy the configuration files to your z/OS system <p>As little as 30 minutes</p>

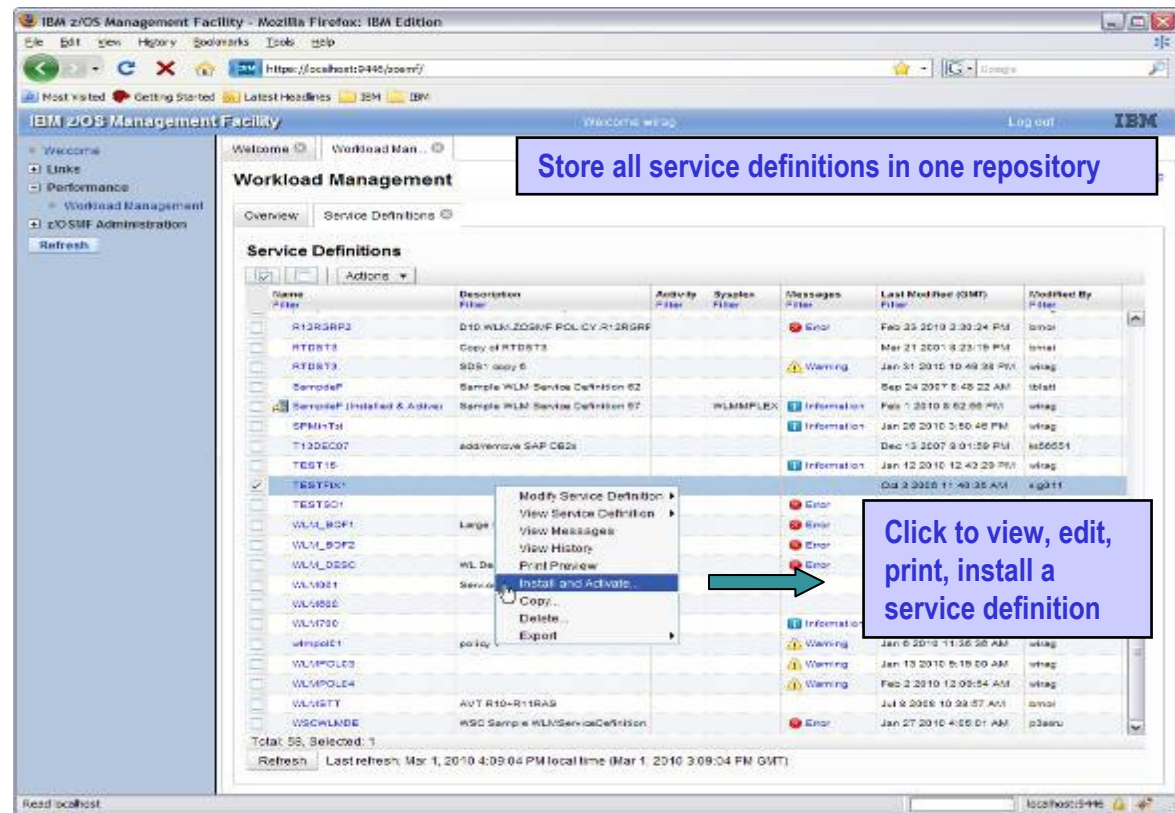
Get started faster! The Config. Assistant takes the rules and best practices found in various configuration publications and puts them under a single, simple user interface, saving you much time and effort.

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**
 - Planned to be integrated into 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**



The screenshot displays the IBM z/OS Management Facility Workload Management interface. A table titled "Service Definitions" lists various services with columns for Name, Description, Active Filter, System Filter, Messages, Last Modified (GMT), and Modified By. A context menu is open over the "TESTFK1" row, with the "Install and Activate..." option highlighted. A green arrow points from this menu to a callout box. Another callout box is positioned above the table.

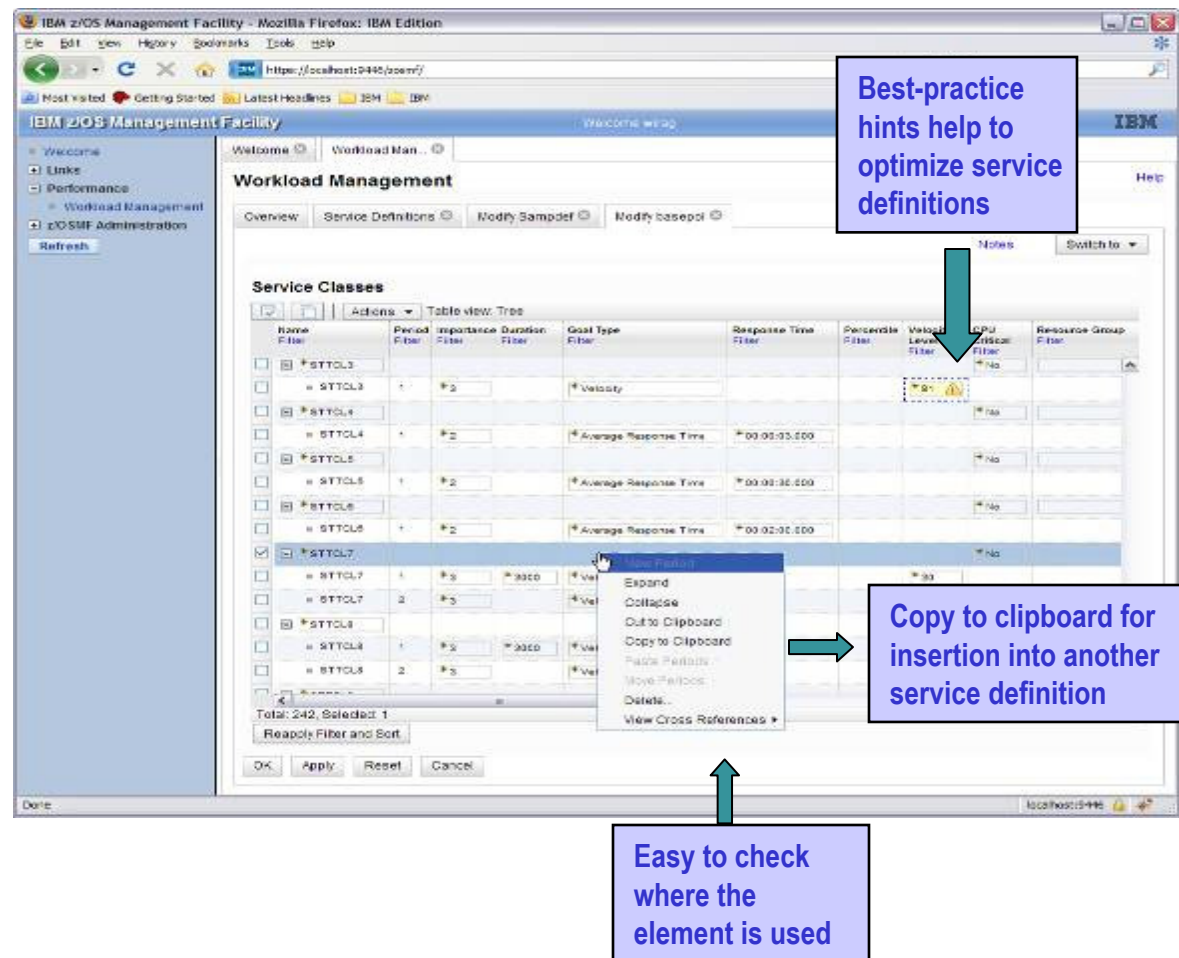
Store all service definitions in one repository

Click to view, edit, print, install a service definition

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

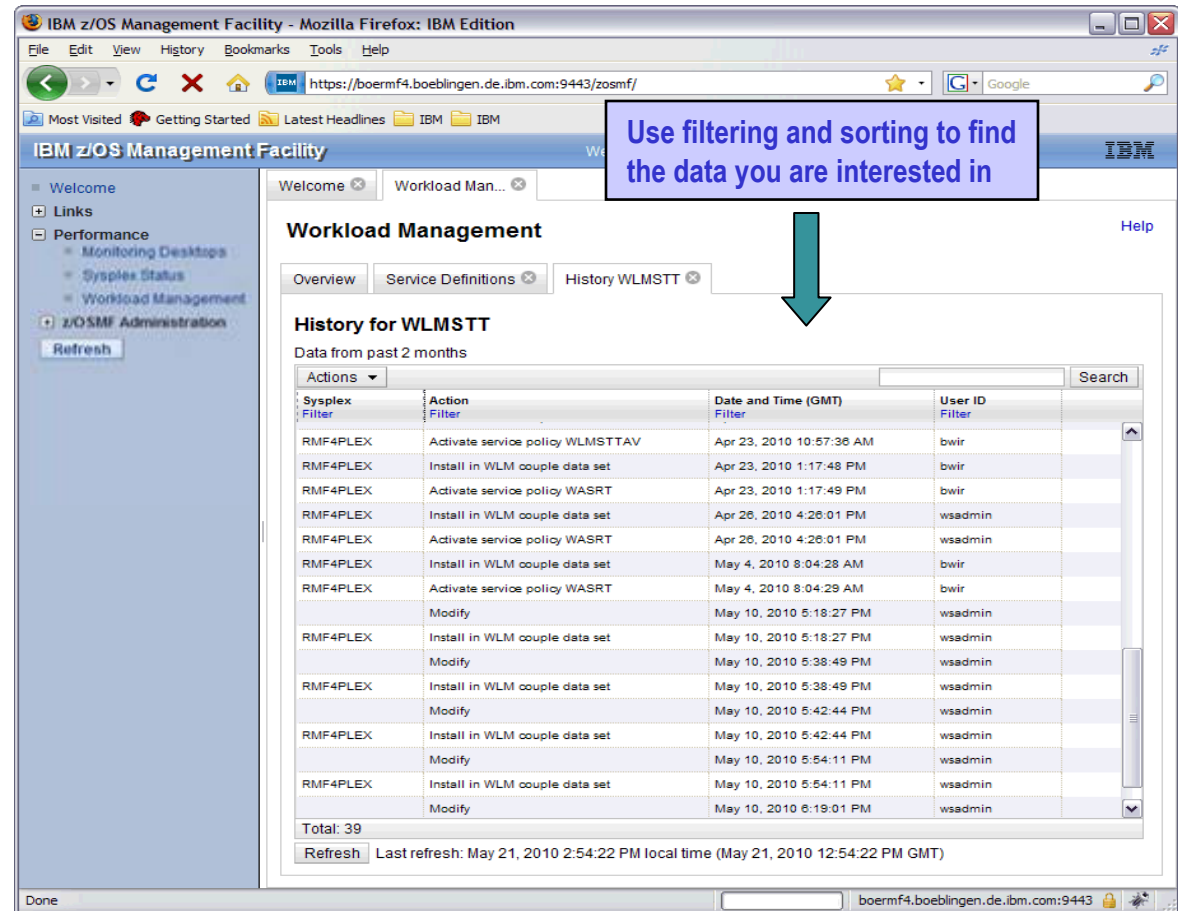
Easy to check where the element is used

Home Filter	Period Filter	Importance Filter	Duration Filter	Goal Type Filter	Response Time Filter	Percentage Filter	Velocity Level Filter	CPU Riscos Filter	Resource Group Filter
<input type="checkbox"/> STTCL3	1	2		Velocity			3	No	
<input type="checkbox"/> STTCL4	1	2		Average Response Time	00:02:03.500			No	
<input type="checkbox"/> STTCL5	1	2		Average Response Time	00:02:35.500			No	
<input type="checkbox"/> STTCL6	1	2		Average Response Time	00:02:01.500			No	
<input checked="" type="checkbox"/> STTCL7	1	3	3000	Val				No	
<input type="checkbox"/> STTCL7	2	3		Val				No	
<input type="checkbox"/> STTCL8	1	2	3000	Val				No	
<input type="checkbox"/> STTCL8	2	3		Val				No	

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



The screenshot shows the IBM z/OS Management Facility interface in Mozilla Firefox. The 'Workload Management' section is active, and the 'History WLMSTT' tab is selected. A callout box with a blue border and white text says 'Use filtering and sorting to find the data you are interested in' with a green arrow pointing to the table below.

History for WLMSTT
Data from past 2 months

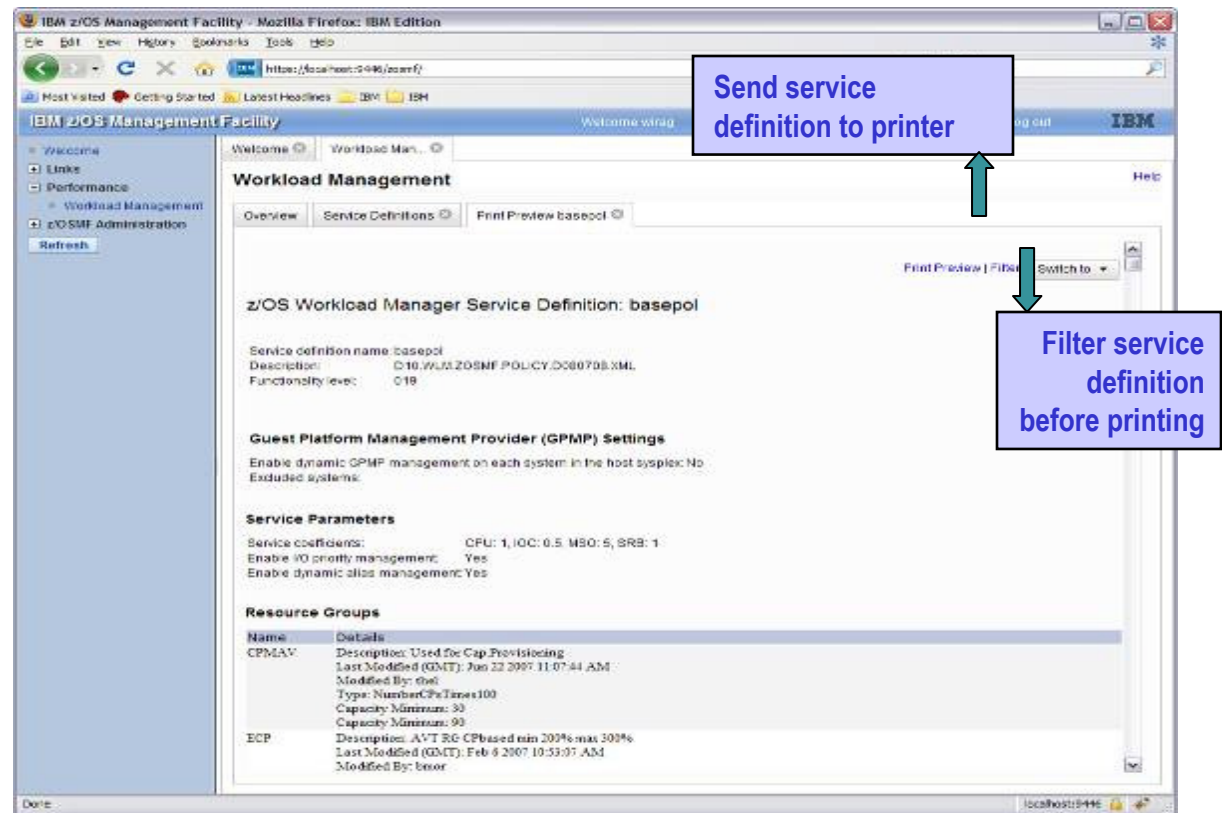
Actions	Sysplex	Action	Date and Time (GMT)	User ID
Filter	Filter	Filter	Filter	Filter
	RMF4PLEX	Activate service policy WLMSTTAV	Apr 23, 2010 10:57:36 AM	bwir
	RMF4PLEX	Install in WLM couple data set	Apr 23, 2010 1:17:48 PM	bwir
	RMF4PLEX	Activate service policy WASRT	Apr 23, 2010 1:17:49 PM	bwir
	RMF4PLEX	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



The screenshot shows the IBM z/OSMF Workload Management interface in a Mozilla Firefox browser. The main content area displays the 'Print Preview' for a service definition named 'basepol'. The interface includes a navigation pane on the left with options like 'Welcome', 'Links', 'Performance', 'Workload Management', and 'z/OSMF Administration'. The main content area has tabs for 'Overview', 'Service Definitions', and 'Print Preview basepol'. The 'Print Preview' tab is active, showing details for the 'z/OS Workload Manager Service Definition: basepol'. The details include the service definition name, description, functionality level, and sections for 'Guest Platform Management Provider (GPMP) Settings', 'Service Parameters', and 'Resource Groups'. A 'Print Preview | Filter' button is visible, with a callout box pointing to it that says 'Filter service definition before printing'. Another callout box points to the 'Print Preview | Filter' button with the text 'Send service definition to printer'.

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

The screenshot shows the IBM z/OSMF Workload Management interface. The main content area displays 'Service Policies for Sysplex WLMMPLEX' with an installed service definition of 'SampleF'. Below this, a table lists 'Service Policies Defined in SampleF'.

Name	Activation Status	Last Modified (GMT)	Modified By	Description
COPY	In Use	Aug 2 2007 10:19:02 AM	dar	Sample WLM Service Policy
WLMPO...	Active	Aug 13 2007 11:19:03 AM	ibmuser	Sample WLM Service Policy

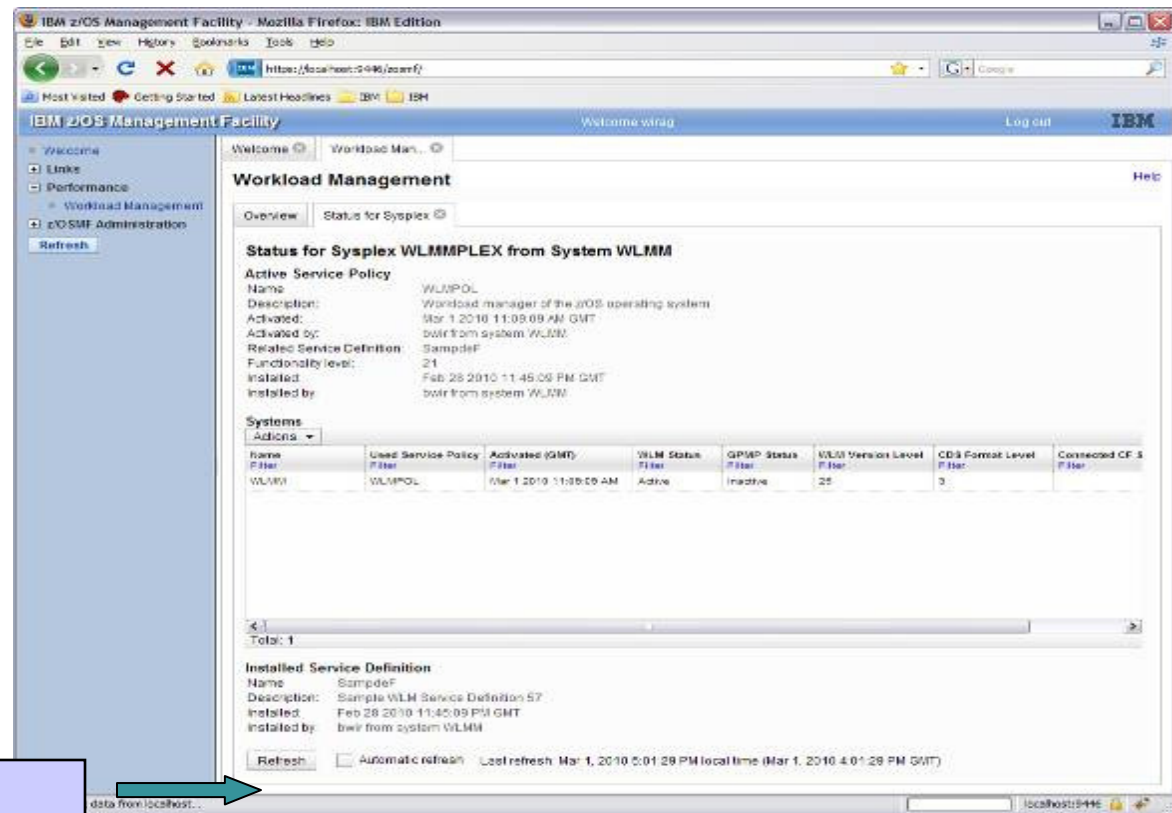
A blue arrow points to the 'WLMPO...' row, which is highlighted. A callout box below the arrow contains the text: 'Click to view, modify, or activate service policy'.

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



Status for Sysplex WLMMPLEX from System WLMM

Active Service Policy

Name: WLMPOL
 Description: Workload manager of the z/OS operating system
 Activated: Mar 1 2010 11:08:09 AM GMT
 Activated by: bwl from system WLMM
 Related Service Definition: Sampdef
 Functionality level: 21
 Installed: Feb 28 2010 11:45:09 PM GMT
 Installed by: bwl from system WLMM

Systems

Name	Used Service Policy	Activated (GMT)	WLM Status	QPSD Status	WES Version Level	CDS Format Level	Connected CF 3
WLMM	WLMPOL	Mar 1 2010 11:08:09 AM	Active	Inactive	25	3	

Total: 1

Installed Service Definition

Name: Sampdef
 Description: Sample WLM Service Definition 57
 Installed: Feb 28 2010 11:45:09 PM GMT
 Installed by: bwl from system WLMM

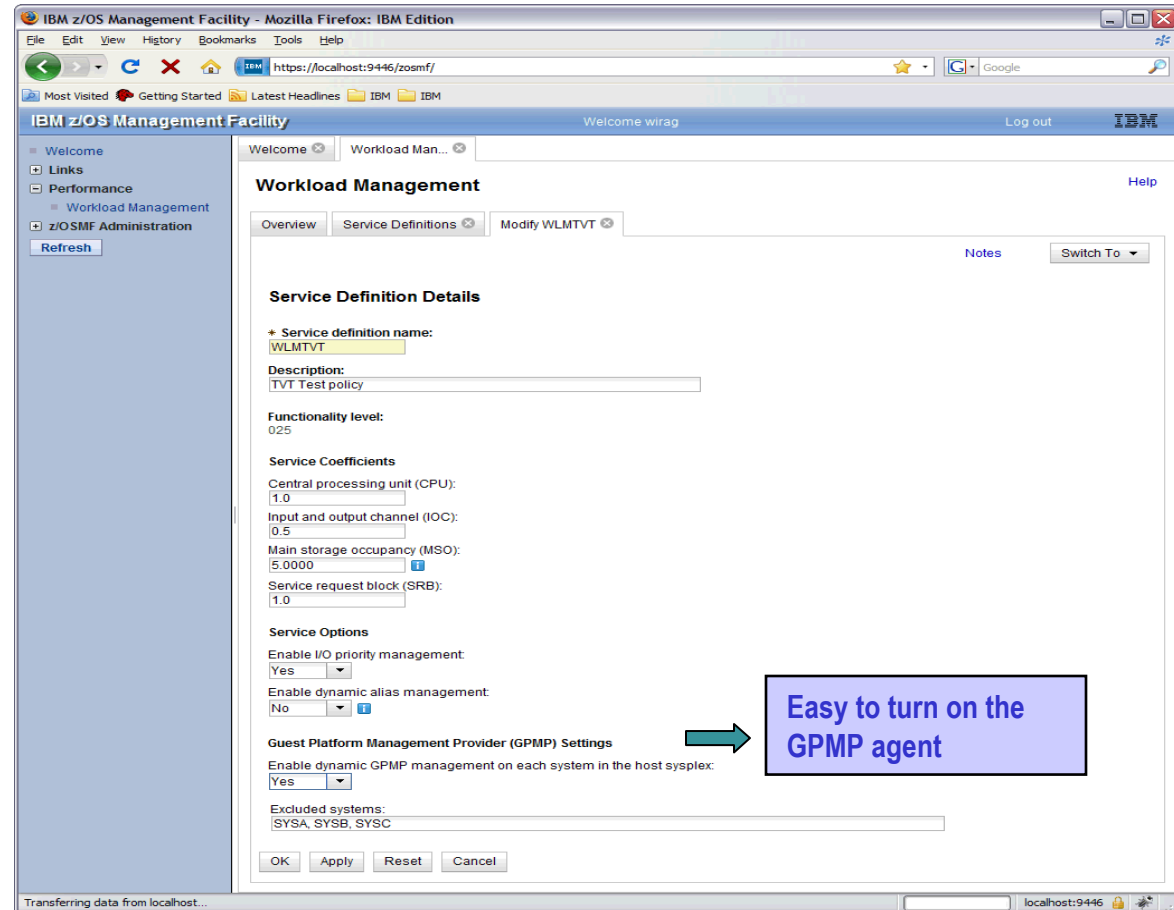
Refresh Automatic refresh Last refresh: Mar 1, 2010 5:01:29 PM local time (Mar 1, 2010 4:01:29 PM GMT)

Check checkbox to automatically refresh data

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



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 WLM Administrative 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. Hours (or days when done initially)	Check the best-practice hints the GUI displays for policy elements. If required, modify the policy elements correspondingly. Minutes (or hours when done initially)
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. 5-10 minutes until review can start	Open a service definition from the service definition repository. Navigate through it using links. Filter and sort policy elements in the tables. Seconds until review can start
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. Up to several minutes per policy element	Open the test and production service definition simultaneously and copy over the changed policy elements via copy&paste operations. Seconds per policy element

** 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.
 - **Sysplex Status task:**

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.

z/OSMF Resource Monitoring (V1.12)

Benefits



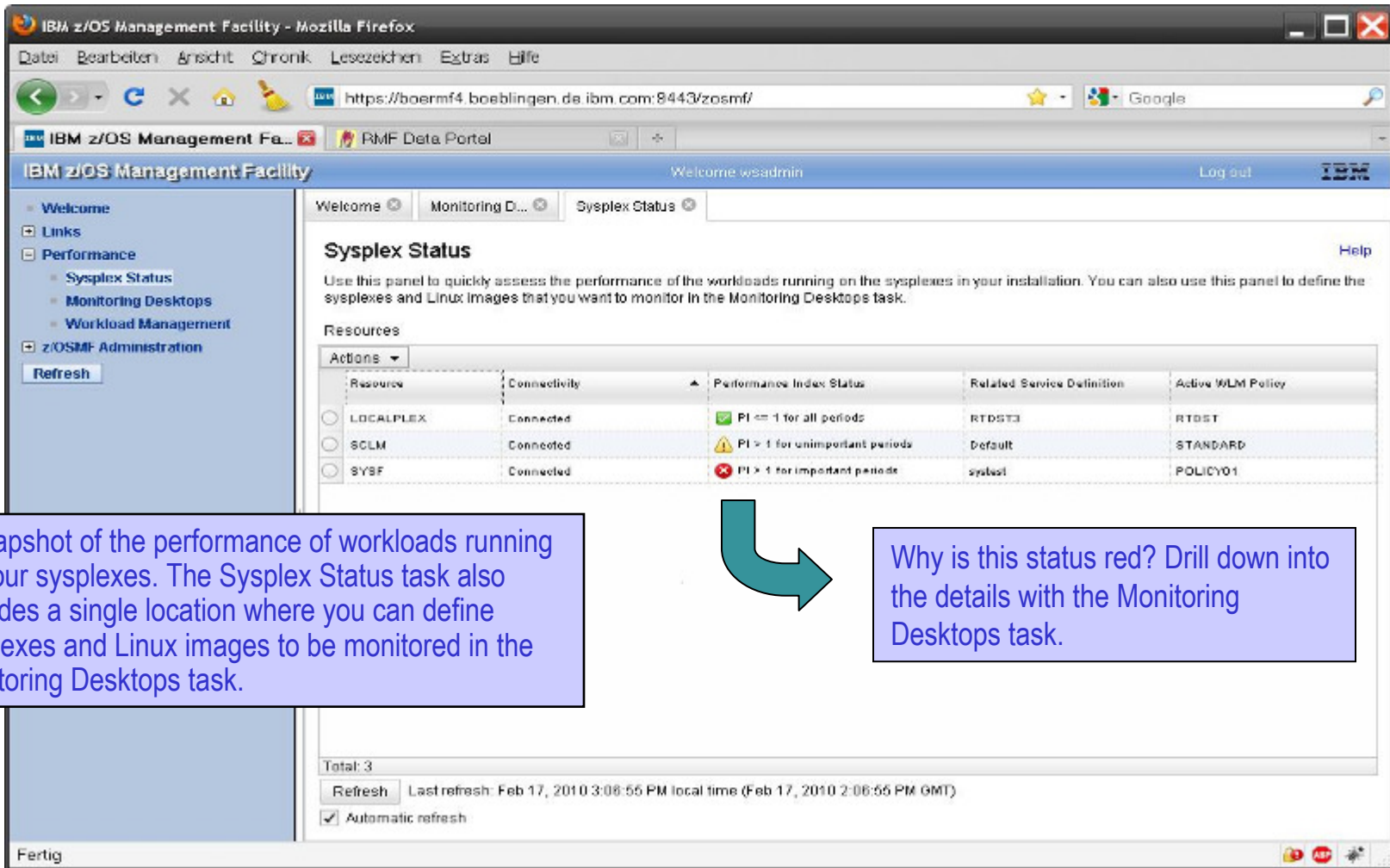
	Without z/OSMF Resource Monitoring (using RMF ISPF Monitor III Reporter)	With z/OSMF Resource Monitoring
Checking the performance status for several sysplexes	<p>You need a Monitor III Reporter session on each sysplex, and manually consolidate data from different reports. (Monitoring of Linux resources has to be done with other tools)</p> <p>Up to 15 minutes to look up each sysplex and high degree of skill needed to interpret reports</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>Just seconds to see the health of all your sysplexes (and Linux images)</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>A long time, depending on data required and correlations needed. In some cases, generating reports is not possible.</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>About 5 minutes to set up a custom monitoring desktop, 3 key clicks to view real-time statistics</p>

Resource Monitoring application - benefits

- Integrated monitoring from a single point of control
- Support for z/OS and Linux
- Quick assessment of the health (Sysplex Status task)
- Drill-down into resource attributes and metrics (Monitoring Desktop task)
- Predefined set of desktops for a quick start
- Flexibility through customizable user defined desktops
- Advanced filtering features for focused monitoring

Convenient, easy-to-use, flexible and customizable !

Resource Monitoring : Sysplex Status



The screenshot shows the IBM z/OS Management Facility Sysplex Status page. The page title is "Sysplex Status" and it includes a "Help" link. Below the title is a descriptive paragraph: "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." Below this is a table with the following columns: "Resource", "Connectivity", "Performance Index Status", "Related Service Definition", and "Active WLM Policy". The table contains three rows: LOCALPLEX, SCLM, and SYSP. The SYSP row has a red status icon and the text "PI > 1 for important periods". Below the table is a "Total: 3" summary, a "Refresh" button, and a "Last refresh" timestamp: "Feb 17, 2010 3:06:55 PM local time (Feb 17, 2010 2:06:55 PM GMT)". There is also a checked "Automatic refresh" checkbox. A left sidebar contains navigation links like "Welcome", "Links", "Performance", "Monitoring Desktops", and "Workload Management".

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
SYSP	Connected	PI > 1 for important periods	sysplex	POLICY01

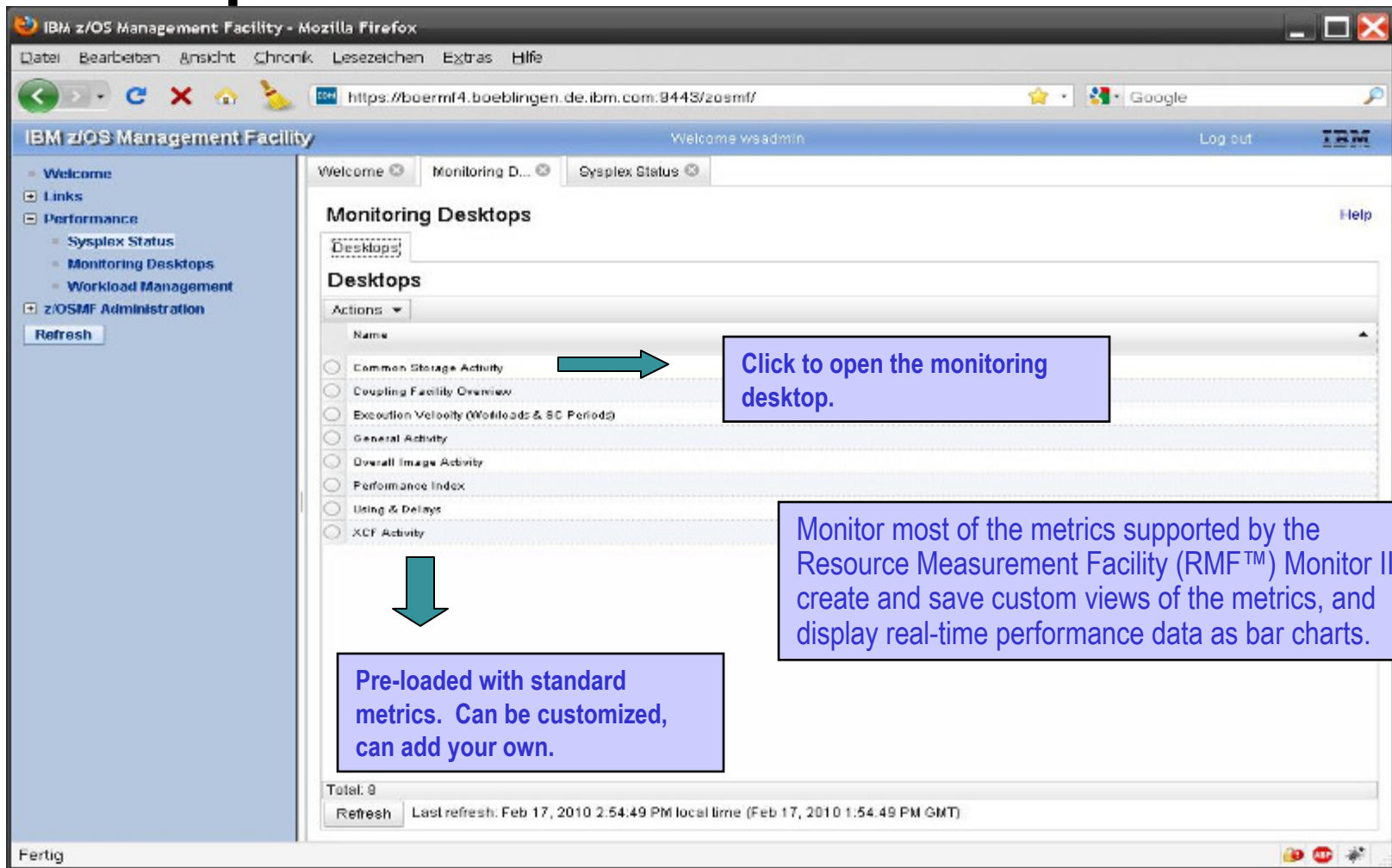
Total: 3
Refresh Last refresh: Feb 17, 2010 3:06:55 PM local time (Feb 17, 2010 2:06:55 PM GMT)
 Automatic refresh

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
<input type="radio"/> Common Storage Activity
<input type="radio"/> Coupling Facility Overview
<input type="radio"/> Execution Velocity (Workloads & SC Periods)
<input type="radio"/> General Activity
<input type="radio"/> Overall Image Activity
<input type="radio"/> Performance Index
<input type="radio"/> Utling & Delays
<input type="radio"/> XCF Activity

Total: 9

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

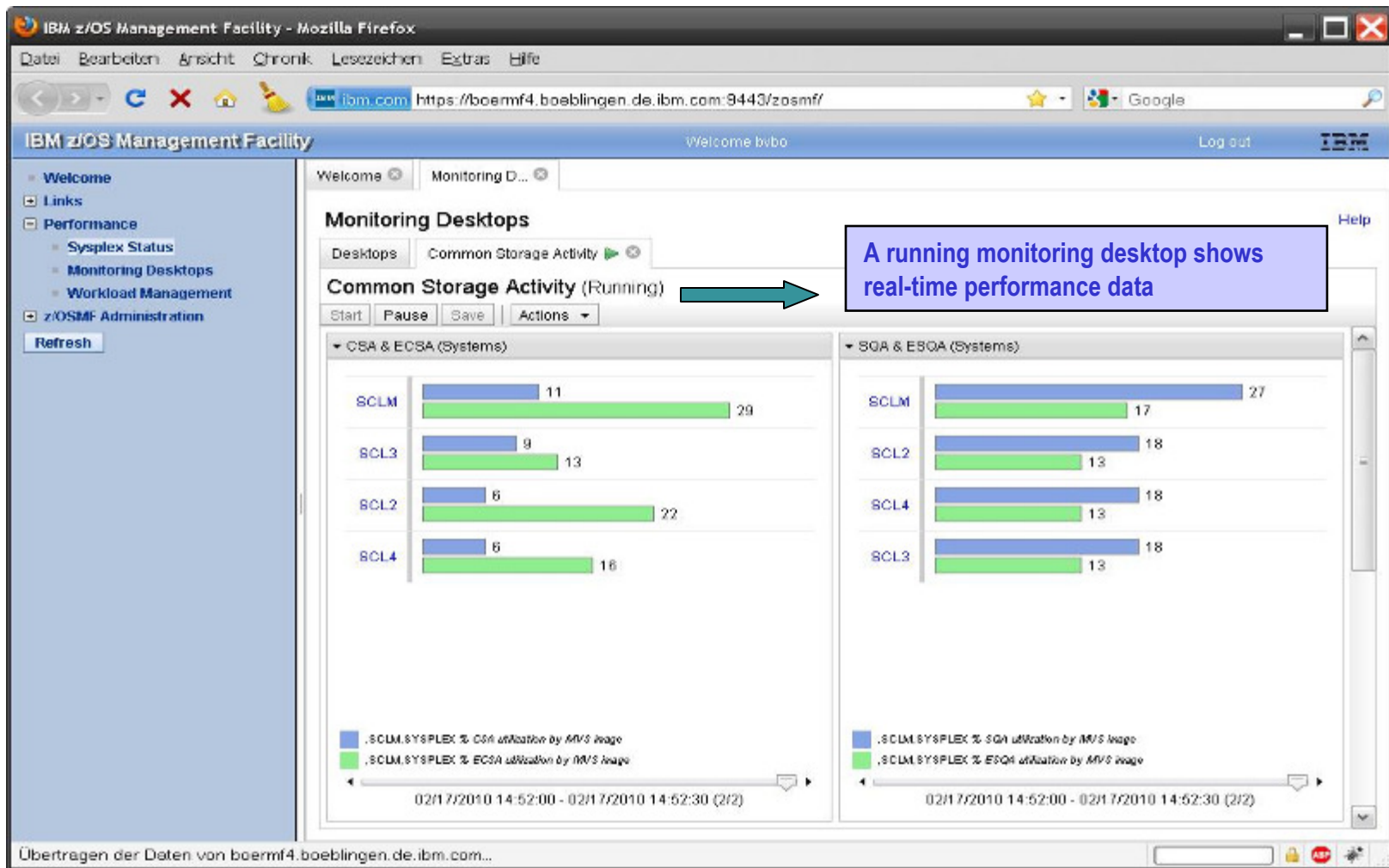
Fertig

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



Add Metric

→ Add to metric group:

→ Selected resource:

→ Selected metric:

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
- D6AAD,CPC
- SYSP,SYSPLEX
- *,SYSPLEX

Filter Pattern

Available resource names:

- SCLM*MASTER*
- SCLMAU
- SCLMALLOCAS
- SCLMALX
- SCLMALX1
- SCLMAMAD
- SCLMANTAS000
- SCLMANTMAIN
- SCLMADDC

Resource name filter pattern:

Copy >>

Sorting

Sort by:

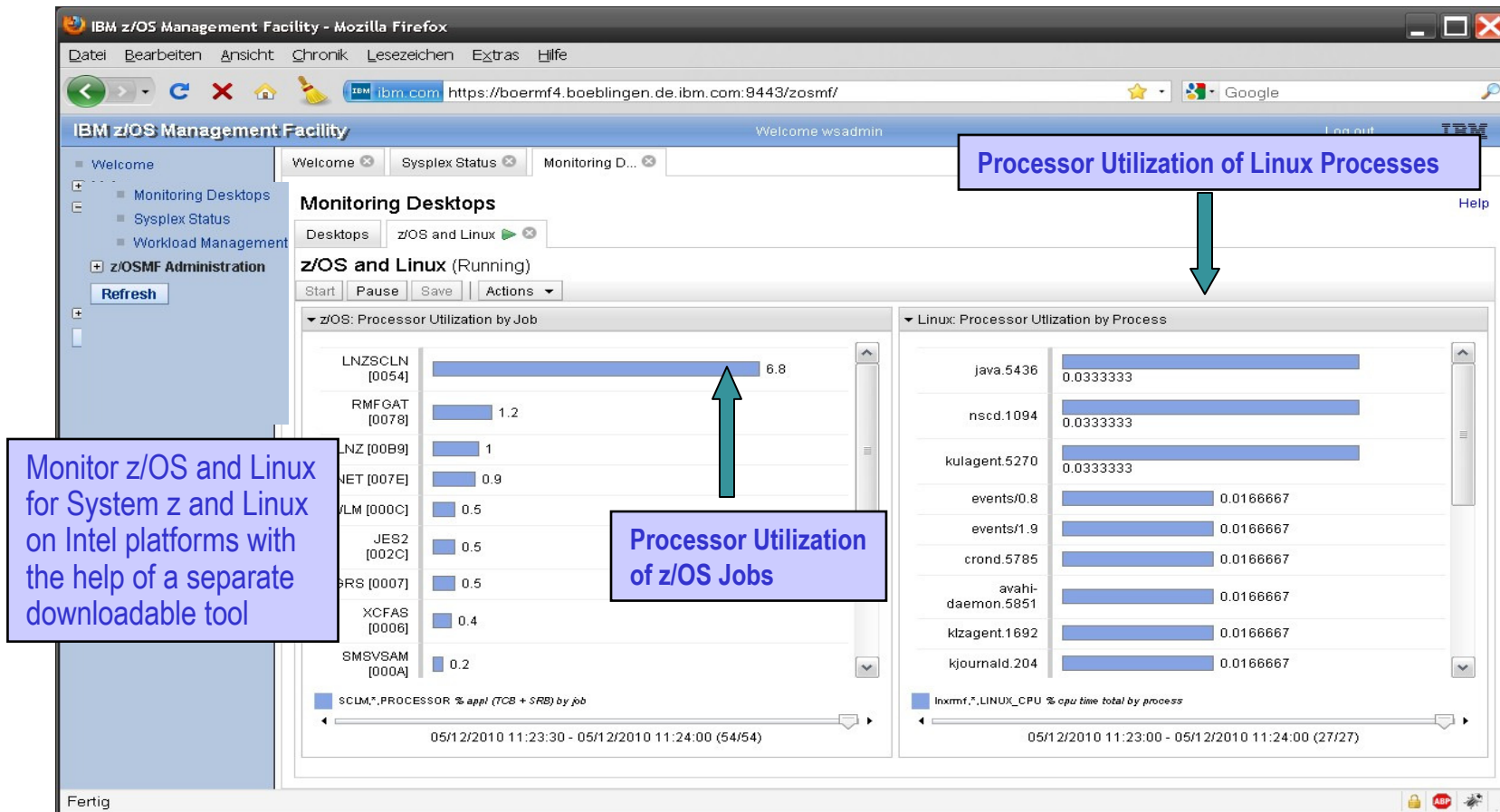
Filters

Lower threshold: to Upper threshold:

Add to Desktop Cancel

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

Integrated z/OS and Linux Monitoring



Linux Monitoring

- **To monitor your Linux images, download and install a free tool (rmfpms) from the RMF web site**
 - <http://www.ibm.com/servers/eserver/zseries/zos/rmf/product/rmfhtmls/pmweb>
 - The tool is provided on „as is“ basis and is not an officially supported product
- **rmfpms is available for**
 - **Linux for System z**
 - Kernel 2.4 – 64 bit
 - Kernel 2.6 – 64 bit
 - **Intel Linux**
 - Kernel 2.4
 - Kernel 2.6
- **z/OSMF connects to the Linux systems where rmfpms is running and collects the performance data**

Focus on z/OSMF Administration

- **z/OSMF Authorization – defining users and roles**
 - 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 user must have a valid userid on the z/OS system
 - 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*
- **Adding Links**
 - Allows the administrator to dynamically add links to non-z/OSMF resources, e.g. ISV products, commonly used installation Web sites

z/OSMF Administration: Authorizing a user



IBM z/OS Management Facility - Mozilla Firefox

File Edit View History Bookmarks Tools Help

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

IBM z/OS Management Facility Welcome zmfadm1 Log out IBM

z/OSMF Administration

- Links
- Roles
- Users

Users

Use this panel to define new users and to modify or remove existing users.

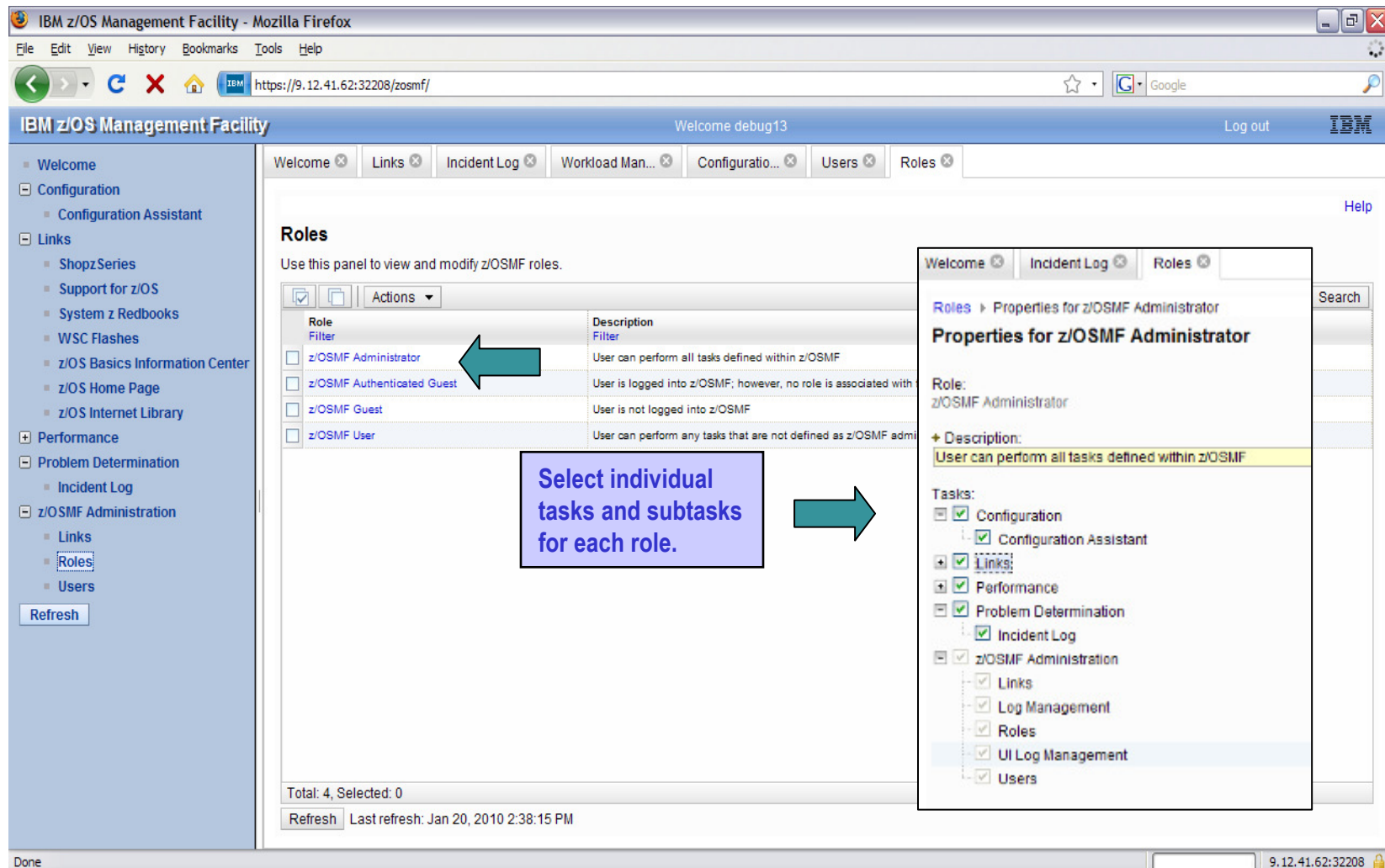
Actions [Search]

Name	Role
z/OSMF Administrator & CIM User	z/OSMF Administrator
z/OSMF User & CIM	z/OSMF User
Will MC	z/OSMF User
zOSMF admin 1	z/OSMF Administrator
zOSMF admin 2	z/OSMF Administrator
zOSMF admin 3	z/OSMF Administrator
zOSMF user 1	z/OSMF User
zOSMF user 2	z/OSMF User
<input type="checkbox"/> zmfusr3	zOSMF user 3

Total: 9 , Selected: 0

Refresh Last Refresh: Feb 25 2009 10:10:50 AM

z/OSMF Administration: Defining a role



IBM z/OS Management Facility - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://9.12.41.62:32208/zosmf/

Welcome debug13 Log out IBM

Welcome x Links x Incident Log x Workload Man... x Configuratio... x Users x Roles x

Roles

Use this panel to view and modify z/OSMF roles.

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

Total: 4, Selected: 0

Refresh Last refresh: Jan 20, 2010 2:38:15 PM

Properties for z/OSMF Administrator

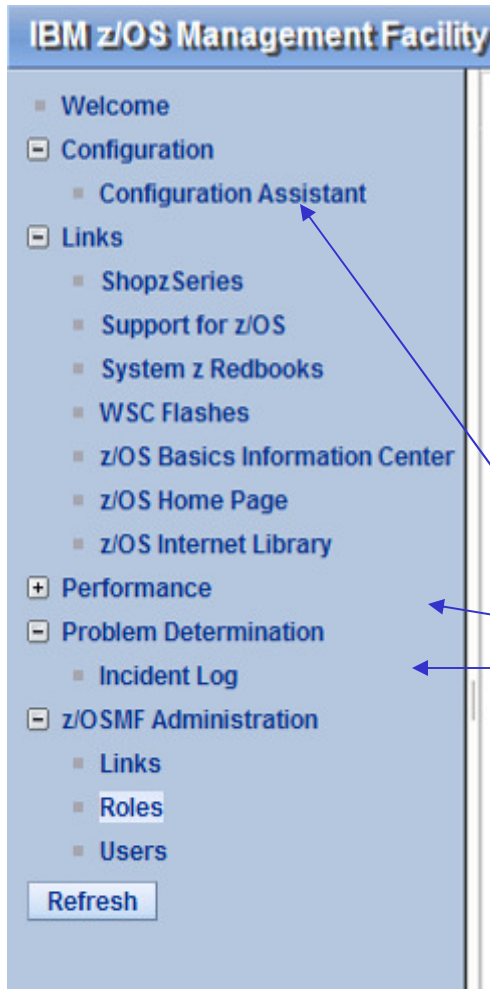
Role: z/OSMF Administrator

Description: User can perform all tasks defined within z/OSMF

Tasks:

- Configuration
 - Configuration Assistant
- Links
- Performance
- Problem Determination
 - Incident Log
- z/OSMF Administration
 - Links
 - Log Management
 - Roles
 - UI Log Management
- Users

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. (planned for V1.12)

z/OSMF Administration: Adding a link



The screenshot shows the 'New Link' form in the IBM z/OSMF Administration interface. The form includes fields for Name, URL, and Category, and a table for roles authorized to use the link. Annotations highlight key areas: 'Define the link' points to the Name and URL fields; 'Where it goes (on the nav bar) planned for V1.12' points to the Category dropdown; 'Select who can see it' points to the roles table. A large callout box asks for team sharing information and application navigation.

Define the link

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

Select who can see it

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

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.

Migration & Coexistence Considerations

- **For z/OSMF V1.11 customers - In a mixed sysplex with some systems below z/OS V1R10:**
 - z/OSMF V1R11 must be installed and run on z/OS V1R10 or above
 - Incident Log: z/OS V1R9 system's SVC dumps will be reflected, but with some property values missing
- **Configuration Assistant is only supported on z/OSMF V1R11 and above, running on a z/OS V1R11 or later system.**
- **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



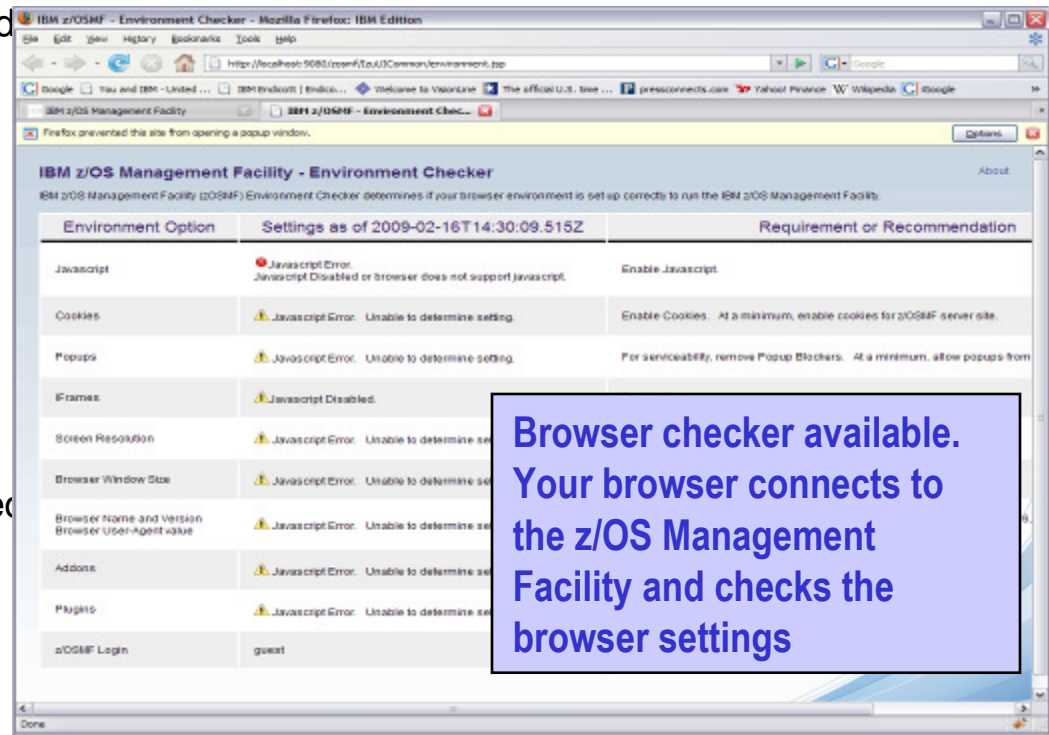
Migration & Coexistence Considerations

- **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 fall back 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.

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 (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



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 planned to support 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

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
- **Program Directory for z/OS Management Facility** GI11-2886
- **IBM z/OS Management Facility User's 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

SHARE sessions on z/OSMF



Session Number	Day	Time	Room	Session Title
7787	Tues, Aug 3	4:30 pm	303	Managing your workload with z/OSMF
7505	Tues, Aug 3	6:00 pm	313	Roundtable Discussion: z/OS Simplification and Consumability
7548	Wed, Aug 4	9:30 am	207	z/OSMF Overview
7551	Wed, Aug 4	11:00 am	207	z/OSMF Implementation and Configuration
7554	Wed, Aug 4	12:15 pm	207	z/OSMF Roundtable
7405	Wed, Aug 4	3:00 pm	313	z/OS Problem Determination Update (includes z/OSMF Incident Log)
7506	Wed Aug 4	6:00 pm	311	Roundtable: Shaping the Future of z/OS System Programmer Tasks Discussion

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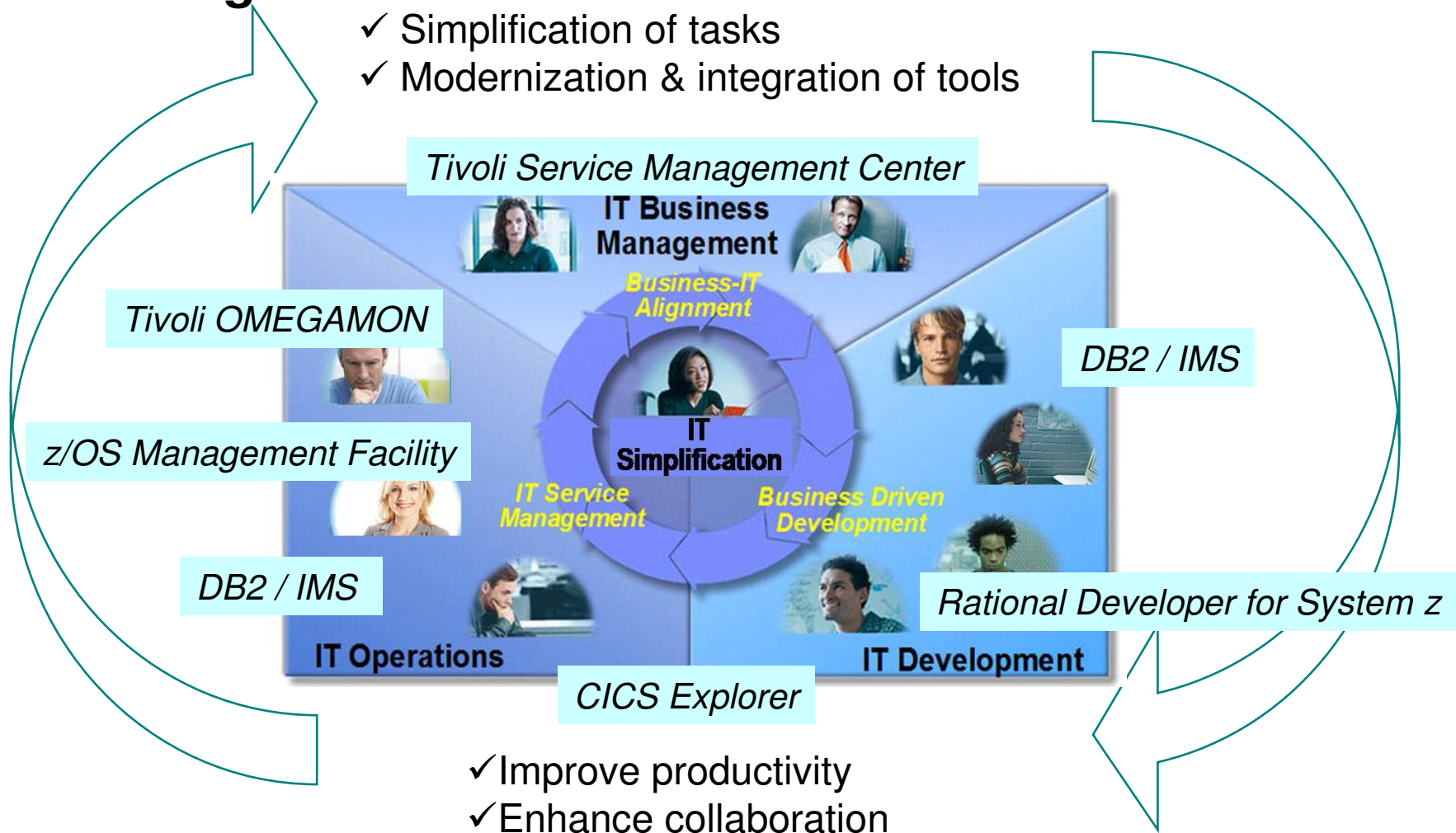
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BACKUP

Smart technologies from IBM can deliver simplification across organizational domains

- ✓ Simplification of tasks
- ✓ Modernization & integration of tools



- ✓ Improve productivity
- ✓ Enhance collaboration

z/OS Management Facility

Focus areas for simplification



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

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

Configuration Assistant for z/OS Comm. Server

Simplified AT-TLS Dialog (z/OS V1.11)



- **Simplified AT-TLS dialog**

- Define AT-TLS from the application level
- Added a list of well-known applications with predefined rules
- Simple “click” to enable
- Rules can be modified or copied and modified

- AT-TLS supports new SSL and TLS (TLS V1.1) settings. (R11)

The screenshot shows the IBM z/OS Management Facility Configuration Assistant interface. The main window displays the 'AT-TLS Perspective' with a navigation tree on the left and configuration options on the right. The 'Connectivity Rules' section is active, showing a table of rules and a 'Modify Rule' dialog box.

AT-TLS Perspective

Navigation tree:

- AT-TLS
 - Reusable Objects
 - Traffic Descriptors
 - Security Levels
 - Address Groups
 - Requirement Maps
 - z/OS Images
 - Incomplete Image - MVS
 - Stack - TCPCS
 - Stack - TCPCS2

Configuration Assistant for the z/OS Comm. Server



New Predefined Default AT-TLS Rules (R12)

- **NEW! Predefined, default AT-TLS rules** for key IBM middleware and function, such as:
 - JES
 - DB2
 - IMS
 - NSS
- Helpful when TLS security is required!
- Can be modified if needed, as easy as open, cut, copy, paste!

The screenshot shows the IBM z/OS Management Facility Configuration Assistant interface. The left pane displays a navigation tree with 'AT-TLS' selected. A callout box points to the 'Stack - STACKA' entry in the tree, stating: 'New easy config for : •JES •DB2 •IMS •NSS'. The main pane shows the 'AT-TLS Perspective' with a 'Stack Disabled' status and an 'Enable AT-TLS' button. Below this, the 'Connectivity Rules' section is visible, including a table of predefined rules.

Status	Rule Name	Application / Requirement Map	Key Ring
Disabled	Default_DB2-Requester	DB2-Requester	tlsKeyring
Disabled	Default_DB2-Server	DB2-Server	tlsKeyring
Disabled	Default_IMS-Connect	IMS-Connect	tlsKeyring
Disabled	Default_JES-Client	JES-Client	tlsKeyring
Disabled	Default_JES-Server	JES-Server	tlsKeyring

Configuration Assistant for z/OS Comm. Server

Simplified IPsec



- **Simplified IPsec Requirement Map (V1R11)**

- Simplified panel to show more clearly that a requirement map was a Traffic Descriptor and a Security Level
- New “advanced wizard” to allow for easier panel navigation

- **Support for more cryptographic algorithms (for V1.12)**

IBM z/OS Management Facility Welcome user1 Log out

Welcome Configuration...

Tutorials Help

New Requirement Map

A requirement map is an object that maps each IP traffic type (traffic descriptor) to a specific level of security (security level).

To add a new mapping to the requirement map:

1. Click Add Row in the action menu or use an existing row.
2. Select a traffic descriptor from the list
3. Select a security level from the list

*Name: ProtectFTP

Description:

Mappings table

Select	Traffic Descriptor	Security Level
<input type="radio"/>	FTP-Client	Select a security level
<input type="radio"/>	Select a traffic descriptor	Select a security level
<input type="radio"/>	All_other_traffic	Select a security level

Traffic Descriptors... Security Levels...

OK Cancel

Select a security level

- Permit
- Deny
- IPSec_Bronze
- IPSec_Gold
- IPSec_Silver
- Suite-B-GCM-128
- Suite-B-GCM-256
- Suite-B-GMAC-128
- Suite-B-GMAC-256
- VPN-A
- VPN-R

Configuration Assistant for z/OS Comm. Server

Application setup tasks (V1.11)



- “Application Setup” task guides users in the creation of configuration files and started procedures
- Provides step-by-step for each policy perspective to deploy the applications required for that function
- There are both image-level and stack-level setup tasks.

IBM z/OS Management Facility Welcome user1

Welcome x Configuratio... x

Application Setup Tasks for Image MVS1

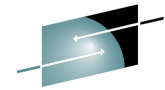
This panel contains tasks to enable Application Transparent - Transport Layer Security for z/OS image MVS1.

Steps: - Select the task and click **Task Details** from the Actions menu.
- Follow the instructions on the panel.
- As you finish each task, change its status to **Complete**.

List of setup tasks

Select	Task name	Last completion date ^	Status ^	Comment
<input type="radio"/>	Installation Location Setup		Incomplete ▾	
<input type="radio"/>	Policy Agent - RACF Directives		Incomplete ▾	
<input type="radio"/>	Policy Agent - RACF Directives for Policy D		Incomplete ▾	
<input type="radio"/>	Syslogd - RACF Directives		Incomplete ▾	
<input type="radio"/>	Policy Agent Configuration - Image MVS1		Incomplete ▾	
<input type="radio"/>	Syslogd - Configuration		Incomplete ▾	
<input type="radio"/>	Syslogd - Start Procedure		Incomplete ▾	
<input type="radio"/>	Policy Agent - TCPIP Sample Profile		Incomplete ▾	
<input type="radio"/>	AT-TLS - TCPIP Sample Profile		Incomplete ▾	

Configuration Assistant for z/OS Comm. Server



Application setup tasks – setting the base location for definition files (SHARE)

- Base locations specify a z/OS UNIX® file directory or a PDS(E) library for storing the policy-related definitions that are created by the Configuration Assistant.
- There are both image-level and stack-level base locations.
- This example uses a PDS library.

The screenshot shows the IBM z/OS Management Facility Configuration Assistant interface. The left sidebar contains a navigation menu with the following items: Welcome, Configuration (expanded), Configuration Assistant (selected), Links, and z/OSMF Administration. A Refresh button is located below the menu. The main content area is titled 'Installation Location Setup' and contains the following fields and options:

- Base location:
- Stack names will be appended as needed. See help for details.
- Host code page:
- Select installation method:
 - Save to disk
 - FTP
- FTP login information:
 - Host name:
 - Port number:
 - User ID:
 - Password:
 - Use SSL
- Data transfer mode:
 - Default
 - Passive
 - Active