

# The new and improved z/OSMF 2.1....

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**Session 14230**

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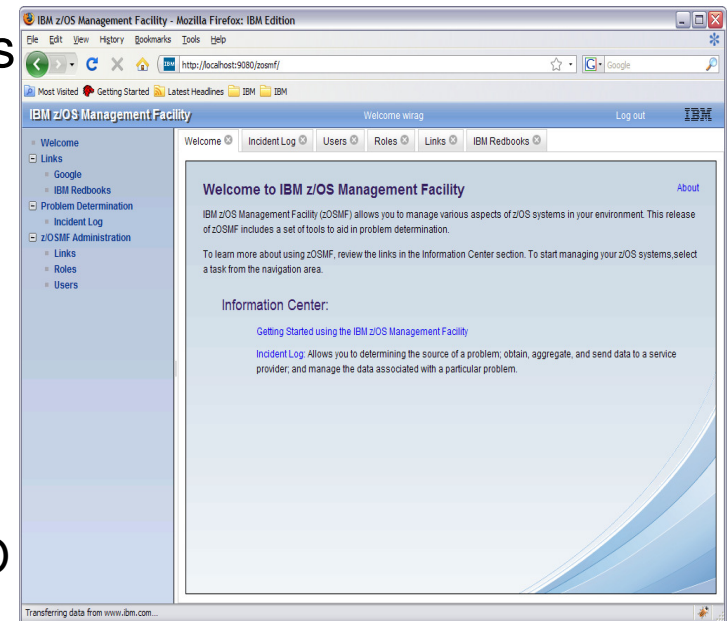
# Agenda

- What is z/OSMF?
- How does z/OSMF fit in my environment?
- What's new in z/OSMF 2.1
  - z/OSMF package
  - z/OSMF workflow
- z/OSMF Functions and benefits?
  - Configuration Assistant for the z/OS Communications Server (z/OSMF 1.11)
  - Capacity Provisioning( z/OSMF V1.13)
  - Resource Monitoring ( z/OSMF V1.12)
  - WLM Policy Editor (z/OSMF V1.12)
  - Incident Log (z/OSMF 1.11)
  - Software management( z/OSMF V1.13)
  - ISPF – classic ( z/OSMF V1.13)
  - Programmatic interfaces (z/OSMF 1.13)
- Summary

# What is z/OSMF?



- z/OSMF is a new product for z/OS customers and provides a modern browser based interface to managing the z/OS system.
- z/OSMF 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.
- IBM z/OS Management facility (z/OSMF) delivers on IBM's strategy for mainframe simplification and modernization
- z/OSMF 1.11 was the first release, delivered with z/OS 1.11
- z/OSMF has a zero price for z/OS customers
- z/OSMF has it's own product number
  - Product ID for z/OSMF 2.1 is **5610-A01**
    - z/OSMF 1.13 PID is 5655-S28
  - Service & Subscription ID is 5655-S29
- Both PIDs must be ordered
- It can be ordered in a serverpac with z/OS
  - Or as its own product serverpac
    - Can also be ordered as a separate CBPDO



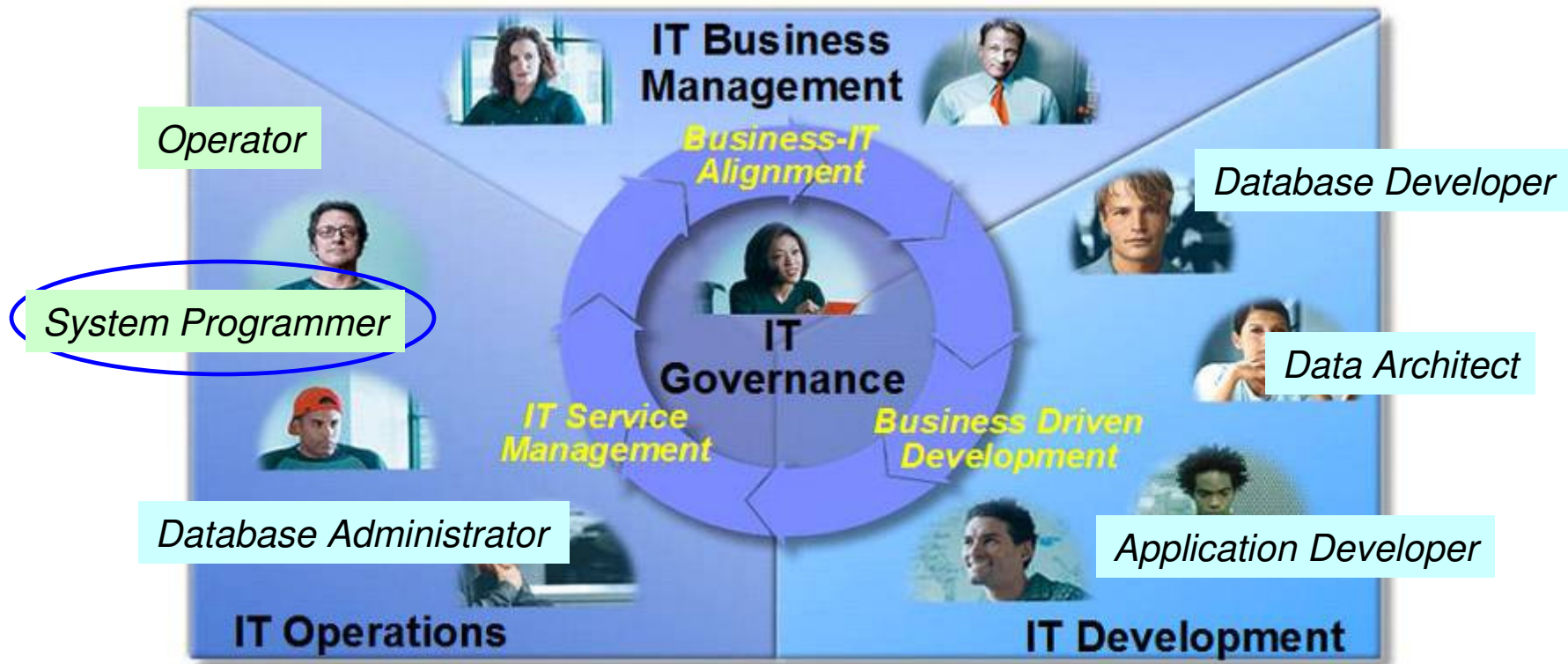
# Why z/OSMF?



- z/OSMF is more than just a graphical user interface; it is intelligent, addressing the needs of a diversified skilled workforce and maximizing their productivity.
- z/OSMF improves productivity, reduces errors and simplifies tasks
- z/OSMF makes 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
  - Reducing the learning curve with embeded active user assistance in the UI (e.g., wizards that guide users through tasks, online help)
- z/OSMF helps *experienced* System Programmers become more productive by:
  - Making functions easier and less error prone
  - Reduce time to perform some tasks
- z/OS Management Facility is optional for those who prefer traditional interfaces

# Where does z/OSMF fit in your enterprise?

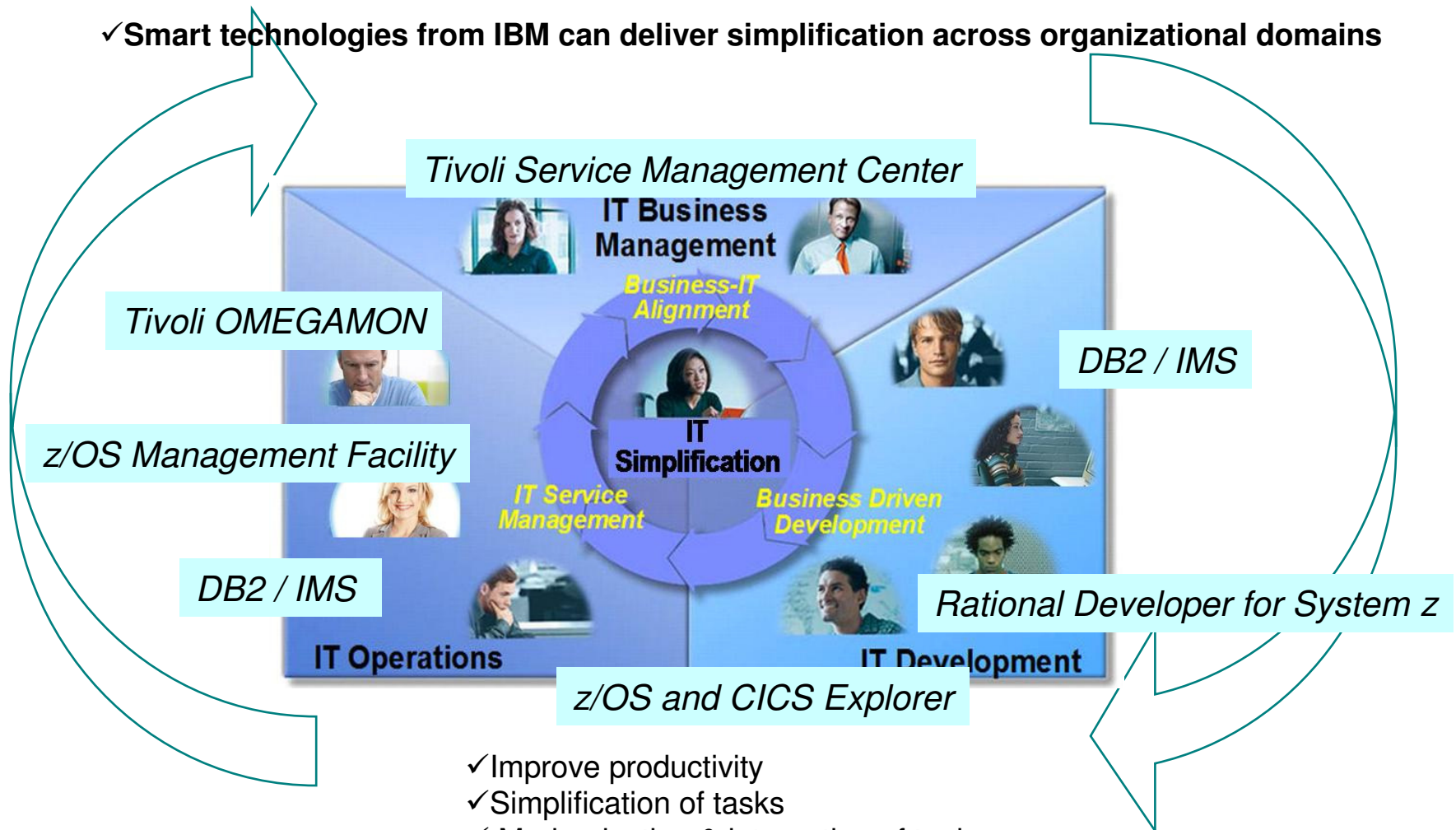
- ✓ Need for simplification of tasks
- ✓ Modernization and integration of tools



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

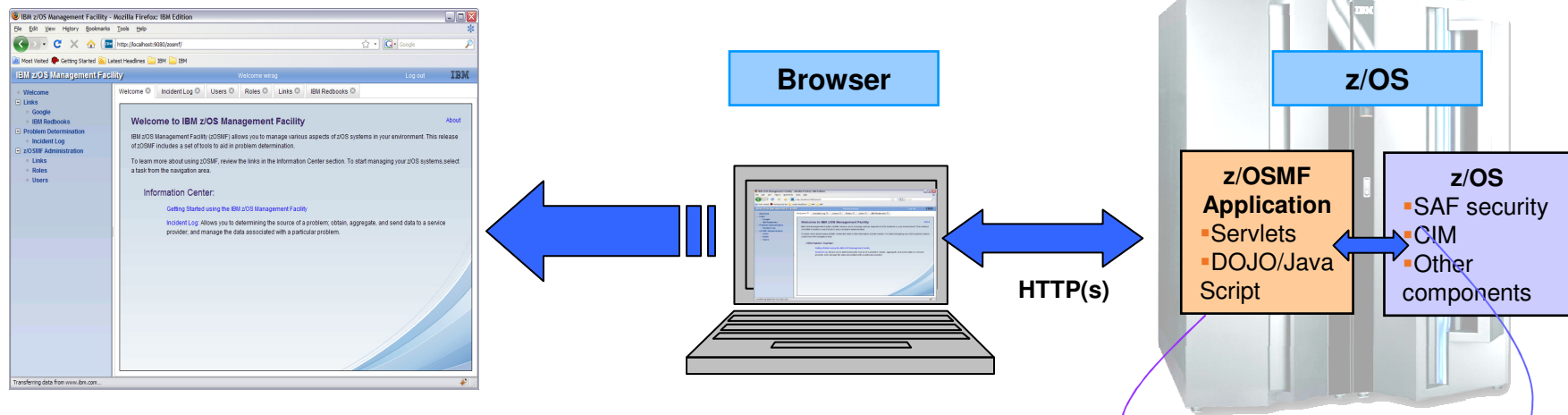
# Where does z/OSMF fit in your enterprise?

✓ Smart technologies from IBM can deliver simplification across organizational domains



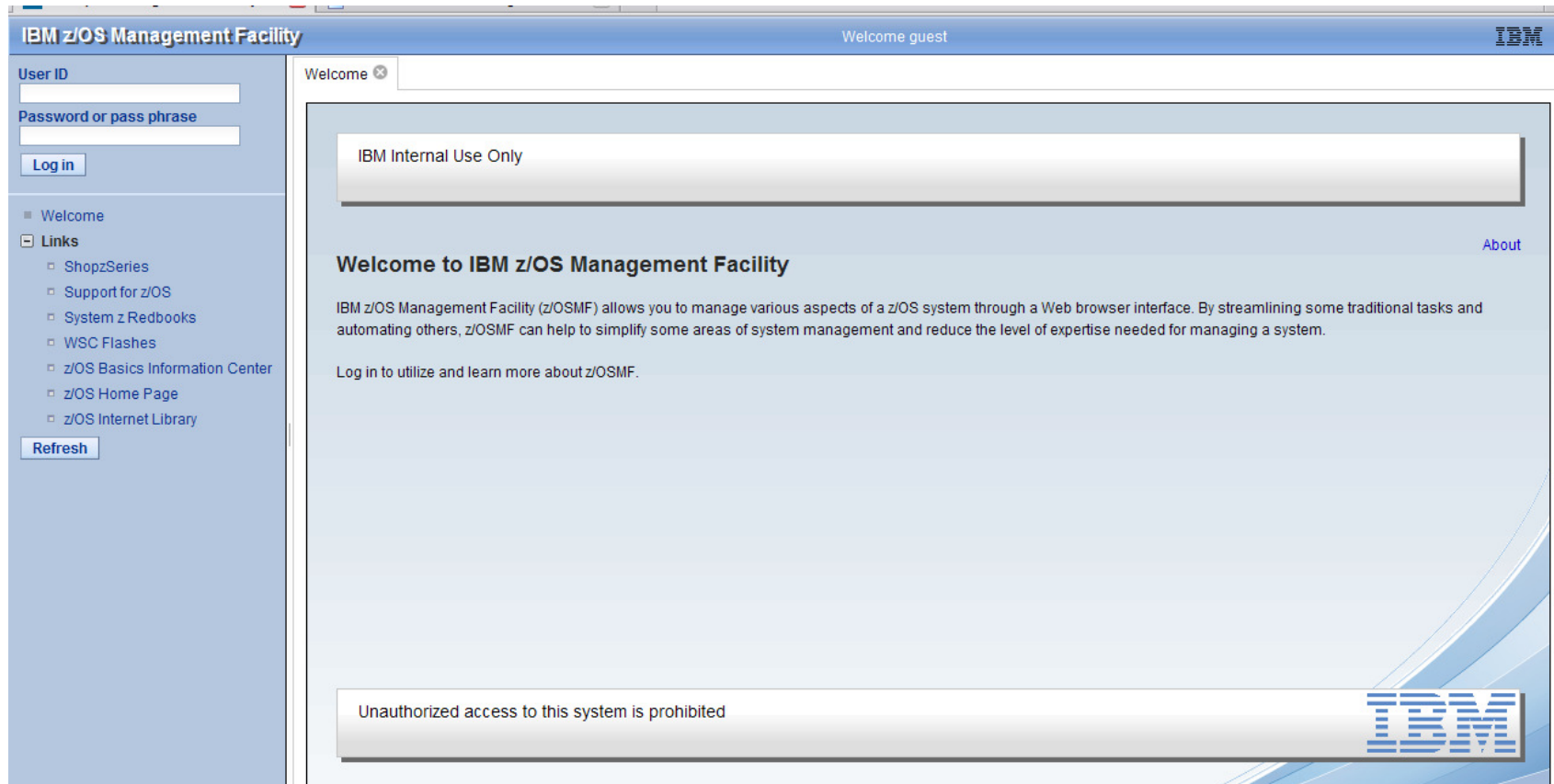
- ✓ Improve productivity
- ✓ Simplification of tasks
- ✓ Modernization & integration of tools
- ✓ Enhance collaboration

# How does z/OSMF fit in the z/OS environment?



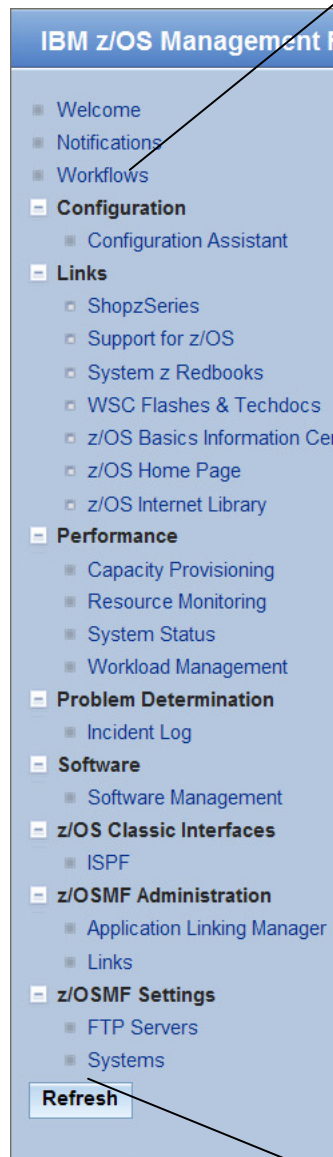
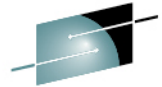
- z/OS Management Facility is a Web 2.0 application on z/OS
- z/OSMF manages z/OS from z/OS, no client install required
- Browser communicates with z/OSMF via secure connection,
  - Connect from anywhere, anytime, no 3270 emulator required!
  - z/OSMF V1R12 is supported on z/OS V1R12
  - z/OSMF V1R13 is supported on z/OS V1R13
  - z/OSMF V2R1 is planned to be supported on z/OS V2R1\*
- z/OSMF uses industry standard technology like DOJO, JavaScript, JAVA
  - JAVA eligible for offload to specialty engine
- z/OSMF communicates with security server on z/OS and other components as needed

# z/OSMF Welcome page



- 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.

# z/OSMF 2.1



## • Notifications and Workflow \*(R2.1)

### • 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

- Capacity Provisioning (updated) manage connections to CPMs, view reports for domain status, active configuration and active policy.
- Resource Monitoring, System Status - provide integrated performance monitoring of customer's enterprise
- 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 : provide a consolidated list of SVC Dump related problems, along with details and diagnostic data captured with each incident; facilitate sending the data for further diagnostics.

### • Software category (updated)

- **Management:** deployment of installed software simpler and safer, manage service levels and product levels

### • z/OS classic Interface category

- **ISPF Task** integrate existing ISPF into z/OSMF to enable tasks from single interface and ability to launch to ISPF functions directly

### • z/OSMF Administration category

- z/OSMF authorization services for administrator:- dynamically add links to non-z/OSMF resources; application linking manager(R13)

### • z/OSMF Settings category (New!)

- Manage FTP destinations and systems

## z/OSMF V2.1\*

- z/OSMF is planned to be rebased on the WebSphere Application Server for z/OS V8.5 Liberty profile
  - This is expected to provide significant reductions in the resource requirements for z/OSMF
    - The WASOEM FMID is no longer required and the requirement for separate configuration of the runtime is eliminated.
    - Result is reduced footprint size, reduced memory requirement and reduced CPU requirement
  - z/OSMF setup is simplified
    - Reduced steps to configure z/OSMF
  - Applying service is easier
  - Faster startup of application

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## z/OSMF V2.1 Workflows\*

- A new z/OSMF Workflow Application is planned.
- This application is designed to allow exploiters to provide configuration assistance for functional setup tasks to simplify z/OS configuration.
- Workflows will provide a guided flow through steps to accomplish a task
  - XML metadata file contains steps and details
  - Steps may be manual or invoke wizards
    - Wizards to update and submit jobs, execute shell scripts and REXX execs
  - Steps may define dependency on other steps
  - Steps go through various stages until complete
    - May be skipped or overridden
  - History maintained of all activities in the workflow task
- This application will route tasks among a number of defined users or people assigned to specific roles, such as "system programmer" and "security administrator," to complete setup tasks.
- z/OSMF user can be notified of assigned steps via Notification task

# Workflows



- Welcome
- Notifications (4)
- Workflows
- Configuration
- Links
- Performance
- Problem Determination
- Software
- z/OS Classic Interfaces
- z/OSMF Administration
- z/OSMF Settings

Refresh

Welcome x Notification... x Workflows x

Help

## Workflows

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

☒
☐
Actions ▼

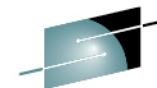
Search

Workflow Name Filter	Description Filter	Version Filter	Vendor Filter	Owner Filter	System Filter	Percent Complete
<input type="checkbox"/> This workflow provides the steps for z/OS setup necessary for each plug-in that is to be configured.	This workflow provides the steps for z/OS setup necessary for each plug-in that is to be configured.	1.0	IBM	zosmfad	PLEX1.SY1 (SY1_003)	0%
<input type="checkbox"/> Susans test- Workflow_0	z/OS setup for each z/OSMF plug-in.	1.0	IBM	zosmfad	PLEX1.SY1 (SY1_003)	0%
<input type="checkbox"/> z/OS setup for each z/OSMF plug-in. - Workflow_0	z/OS setup for each z/OSMF plug-in.	1.0 SID=1.23 (3/28/12)	IBM	zosmfad	PLEX1.SY1 (SY1_005)	0%
<input type="checkbox"/> testing -service	z/OS setup for each z/OSMF plug-in.	1.0 SID=1.23 (3/28/12)	IBM	zosmfad	PLEX1.SY1 (SY1_005)	0%
<input type="checkbox"/> rpd10 workflow items	z/OS setup for each z/OSMF plug-in.	1.0 SID=1.24 (4/4/12)	IBM	zosmfad	PLEX1.SY1 (SY1_005)	0%
<input type="checkbox"/> april 24, 2012 z/OS setup for each z/OSMF plug-in. - Workflow_1	z/OS setup for each z/OSMF plug-in.	1.0 SID=1.24 (4/4/12)	IBM	zosmfad	PLEX1.SY1 (SY1_005)	0%
<input type="checkbox"/> Sample workflow with variable prompting - Workflow_1	Sample workflow with variable prompting	1.0	IBM	zosmfad	PLEX1.SY1 (SY1_00D)	100%
<input type="checkbox"/> Test Workflow for Variables - Workflow_date	Test Workflow for Variables	13.0	DrewCo.	zosmfad	PLEX1.SY1 (SY1_00D)	0%
<input type="checkbox"/> Sample workflow with variable prompting - Workflow_0	Sample workflow with variable prompting	1.0	IBM	ibmuser	PLEX1.SY1 (SY1_00D)	0%
<input type="checkbox"/> Test Workflow for Variables - Workflow_boolean	Test Workflow for Variables	13.0	DrewCo.	zosmfad	PLEX1.SY1 (SY1_00D)	0%

Total: 42, Selected: 0

Refresh Last refresh: Jul 23, 2013 9:53:42 AM local time (Jul 23, 2013 1:53:42 PM GMT)

# z/OSMF configuration - Workflow example



SHARE

IBM z/OS Management Facility

Welcome zosmfad

Log out

IBM.

Welcome

Workflows

Workflows

This workflow provides the steps for z/OS setup necessary for each plug-in that is to b - Workflow\_0

Help

This workflow provides the steps for z/OS setup necessary for each plug-in that is to b - Workflow\_0

Description:

This workflow provides the steps for z/OS setup necessary for each plug-in that is to be configured.

Owner:

zosmfad

System:

SY1\_003

Percent complete:

0%

Steps complete:

0 of 44

Notes | History

Assigned

Notes, history

Workflow Steps

State of steps

Workflow steps

State Filter	No. Filter	Title Filter	Owner Filter	Skill Category Filter	Assignees Filter
Ready	1	z/OS configuration for z/OSMF plug-ins	zosmfad	varies	zosmfad
In Progress	2	z/OS configuration for ISPF Classic Interface			
In Progress	3	System prerequisite setup for z/OSMF Configuration Assistant.			
Ready	3.1	Move existing backing store files to z/OSMF.	zosmfad	Security Administrator	zosmfad
In Progress	4	System prerequisite setup for Common Information Model (CIM) setup			
In Progress	5	System prerequisite setup for z/OSMF Workload Management Plug-in			
Not Ready	5.1	Configure Common Information Model (CIM)	zosmfad		zosmfad
Ready	5.2	Setup Workload Management Security for CIM	zosmfad		zosmfad
In Progress	6	System prerequisite setup for z/OSMF Capacity Provisioning Plug-in			
In Progress	7	System prerequisite setup for z/OSMF Resource Monitoring Plug-in			
In Progress	8	Setup for z/OSMF Incident Log. Plug-in			

Total: 59, Selected: 0

Return to Workflows

Refresh

Last refresh: Apr 4, 2013 2:05:29 PM local time (Apr 4, 2013 6:05:29 PM GMT)

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# z/OSMF Workflow JCL wizard



Welcome zosmfad Log out **IBM**

Welcome x Workflows x

Workflows > workflow\_sample\_wizards.xml > 2. Define RACF group using JCL job Help

### Properties for Workflow Step 2. Define RACF group using JCL job

General Details Notes **Perform** Status

- ✓ Input Variables
  - ✓ started
  - ✓ General
- ✓ Review Instructions
- ✓ Create Job Reference
- ✓ Review JCL
- ➔ **Submit and Save JCL**

#### Submit and Save JCL

Select whether to submit the JCL or save it, and then click **Finish**.

☒ Submit JCL

☒ Save JCL

☐ z/OS UNIX file. Specify the full path, including the file name:

☒ \* z/OS data set. Specify an existing data set, including the member name if applicable:

Volume serial (if the data set is not cataloged):

☐ Overwrite the file or member if it exists already.

Wizard steps

# Workflow History



Welcome zosmfad Log out **IBM.**

Welcome x Workflows x

Workflows ▶ workflow\_sample\_wizards.xml ▶ History Help

History for workflow\_sample\_wizards.xml

Actions ▼  Search

<input type="radio"/>	Date and Time (GMT) <a href="#">Filter</a>	Action <a href="#">Filter</a>	Messages <a href="#">[More   Less]</a> <a href="#">Filter</a>	User ID <a href="#">Filter</a>	Comments <a href="#">[More   Less]</a> <a href="#">Filter</a>	IP Address <a href="#">Filter</a>
<input type="radio"/>	Nov 16, 2012 3:15:42 AM	Workflow Created	IZUMWF0020I: The workflow name is set to "workflow_sample_wizards.xml" . IZUMWF0021I: The workflow owner is set to <a href="#">[More]</a>	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:26:35 AM	Submitted	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Submitted" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:26:36 AM	Step Completed	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Complete" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:27:54 AM	Submitted	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Submitted" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:27:55 AM	Step Completed	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Complete" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:28:49 AM	Submitted	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Submitted" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:28:50 AM	Step Completed	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Complete" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:29:01 AM	Step Completed	IZUMWF0026I: Step "Define RACF user ID manually" has changed to state "Complete" . IZUMWF0026I: Step "Verify user and group" <a href="#">[More]</a>	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:29:15 AM	Submitted	IZUMWF0026I: Step "Verify user and group creation by running a REXX exec" has changed to state "Submitted" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Nov 21, 2012 3:29:15 AM	Step Completed	IZUMWF0026I: Step "Verify user and group creation by running a REXX exec" has changed to state "Complete" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Dec 18, 2012 6:56:53 AM	Submitted	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Submitted" .	zosmfad		0:0:0:0:0:0:1
<input type="radio"/>	Dec 18, 2012 6:56:54 AM	Step Completed	IZUMWF0026I: Step "Define RACF group using JCL job" has changed to state "Complete" .	zosmfad		0:0:0:0:0:0:1

Total: 53, Selected: 0

[Refresh](#) Last refresh: Jan 27, 2013 7:25:13 PM local time (Jan 27, 2013 11:25:13 AM GMT)

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# Notifications

- Welcome
- Notifications (4)**
- Workflows
- Configuration
- Links
- Performance
- Problem Determination
- Software
- z/OS Classic Interfaces
- z/OSMF Administration
- z/OSMF Settings

Refresh

Welcome x Notification... x

Notification sent when step is assigned or when a step is ready after the dependency is satisfied

Help

Notifications (4)

☒ ☐ Actions ▼

Description Filter	Task Filter	Recipients Filter	Time Filter	
<input type="checkbox"/> The prerequisite steps are completed for step "Verify that the user and group are created using a REXX exec" in workflow "Sample demonstrating variable substitution and the use of a wizard. - Workflow_3". This step is now ready to be performed.	Workflows	ibmuser	Jul 23, 2013 3:16:19 AM	
<input type="checkbox"/> The prerequisite steps are completed for step "Verify that the user and group are created using a REXX exec" in workflow "Sample demonstrating variable substitution and the use of a wizard. - Workflow_3". This step is now ready to be performed.	Workflows	ibmuser	Jul 23, 2013 3:08:41 AM	
<input type="checkbox"/> The prerequisite steps are completed for step "Verify the UID of the user using a shell script" in workflow "Sample demonstrating variable substitution and the use of a wizard. - Workflow_3". This step is now ready to be performed.	Workflows	ibmuser	Jul 23, 2013 2:51:24 AM	
<input type="checkbox"/> One or more steps in workflow "Sample demonstrating sub-steps and dependencies - Workflow_1" have been assigned to you.	Workflows	zosmfad, ibmuser	Jul 23, 2013 2:21:12 AM	

Total: 4, Selected: 0

Refresh

Last refresh: Jul 23, 2013 9:49:19 AM local time (Jul 23, 2013 1:49:19 PM GMT)

# Configuration Assistant for z/OS Communication Server



- A GUI for the z/OS Communications Server Policy Agent – it simplifies the configuration and setup of TCP/IP policy-based networking functions.
- Supports the following technologies
  - 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)
- Available with z/OSMF (starting with z/OSMF V1R11 and z/OS V1R11)
  - Also available as a Microsoft® Windows® Web download (since z/OS V1.7)
    - Statement of Direction: z/OS R13 is planned to be the last release for the web download tool. Strategy is to provide it only with z/OSMF
- 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
  - Users can also import configuration text files in cases where users have already defined policies and would like to begin using the Configuration Assistant with z/OSMF
- With V2R1\*, Windows download will no longer be provided, users must migrate to z/OSMF
  - This function is planned to be redesigned for new and improved web user experience and performance
  - New function provided in support of V2R1 z/OS Communications Server Policy-Based Networking\*
    - *AT-TLS support of TLS V1.2*
    - *Policy-based Routing (PBR) support for IPv6*

# Configuration Assistant z/OSMF V2R1 Welcome Panel



IBM z/OS Management Facility

Welcome user1

Log out IBM.

Welcome x Configuration... x

Welcome to V2R1 Configuration Assistant for z/OS Communications Server

Use this task to create and manage configuration for z/OS Communications Server policy-based networking functions.

Select a backing store for configuration:

DianeBS\_ATTLS\_FF Open

Learn more about Configuration Assistant:

What's New

Getting Started

Migrating to z/OSMF

Application Setup Tasks

Tutorials

FAQs

See what is new in this release.

First time users can learn about Configuration Assistant.

Migrate backing stores from Windows to z/OSMF.

Workflows to guide the setup of required applications.

Link to tutorials.

Link to Frequently Asked Questions.

Help

IBM z/OS Management Facility

Welcome user1

Log out IBM.

Welcome x Configuration... x

Configuration Assistant (Home) > IPSec

Help

V2R1 Current Backing Store = DianeBS\_ATTLS\_FF

Select a perspective: IPSec Tools

Systems Traffic Descriptors Security Levels Address Groups Requirement Maps Reusable Rules

Actions

	Name	Type	Status	Release	Description
<input type="radio"/>	\$AA	Image	Complete	V2R1	
<input type="radio"/>	A	Stack	Complete	V2R1	
<input type="radio"/>	AAA	Stack	Incomplete	V2R1	
<input type="radio"/>	ATTLS	Stack	Incomplete	V2R1	Imported from Policy Data
<input type="radio"/>	TCPCS	Stack	Complete	V2R1	
<input type="radio"/>	A12	Image	Complete	V1R12	
<input type="radio"/>	A12	Stack	Incomplete	V1R12	
<input type="radio"/>	A13	Image	Complete	V1R13	
<input type="radio"/>	A13	Stack	Incomplete	V1R13	
<input type="radio"/>	IMAGE1	Image	Complete	V2R1	

Total: 19, Selected: 0

Home Save

Main Panel

# z/OSMF Configuration Assistant for z/OS CS

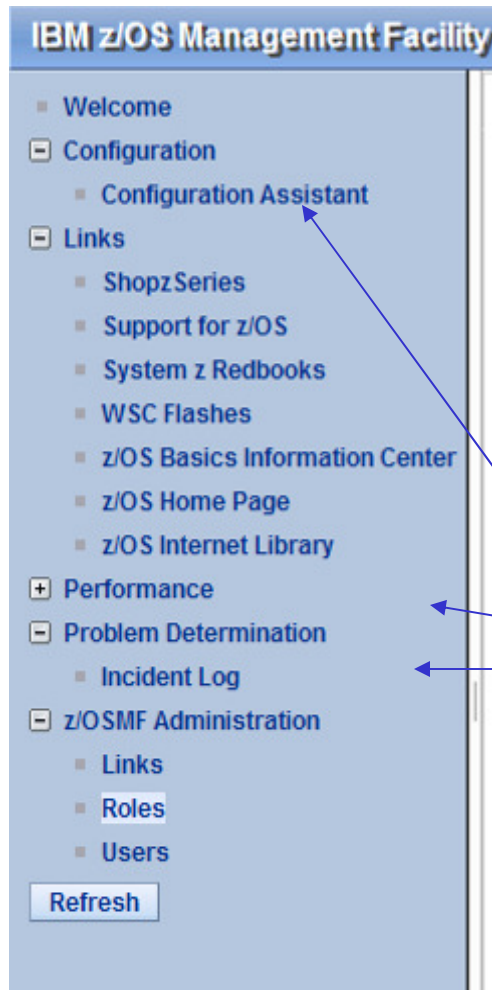
## Benefits



	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>Hours (or even days for initial setup)</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>As little as 30 minutes</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>Hours (or even days for initial setup)</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>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.**

# z/OSMF 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.
- Ability to add non-z/OSMF launch points and links to the left hand side navigation tree under any category. (V1.12)

# Capacity Provisioning

- 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.
- The Capacity Provisioning Control Center (CPCC) is the user front end to *administer* Capacity Provisioning policies
  - Available as a separate Windows-based stand-alone client.
- Initially part of the functionality was integrated into z/OSMF V1.13 to ease the monitoring of CP status for different domains.
  - manage connections to CPMs
  - view reports for domain status, active configuration and active policy.
- With APAR PM74519 the z/OSMF Capacity Provisioning application is enhanced to allow you to create, edit, and activate domain configurations and capacity provisioning policies.
  - With these new functions z/OSMF Capacity Provisioning supports all the functions available in the Microsoft Windows-based Capacity Provisioning Control Center (CPCC).
- z/OSMF 2.1 supports all the latest enhancements in Capacity provisioning feature.

# z/OSMF Capacity Provisioning Function

Manage CIM connections to access a Provisioning Managers

**Provisioning Manager**

The Provisioning Manager is the component of Capacity Provisioning that controls the domain based on the active policy. Connections describe how to connect to a Provisioning Manager. The connections table shows connection definitions.

Host Address	Protocol	Port
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
<input type="checkbox"/> Same system as z/OSMF		
<input type="checkbox"/> cpmprod.ibm.com	HTTPS	5989
<input type="checkbox"/> cpmtest.ibm.com	HTTP	5988

View detailed status about a domain

Quick switch between reports for same domain

Provisioning Manager > Domain Status

## Domain Status for Domain GUI2

This page shows information about the current state of the Provisioning Manager and the domain that it manages. All timestamps below are shown in GMT.

Domain name: GUI2  
Start time: Feb 1, 2011 8:42:53 AM  
Processing mode: Autonomic  
Processing mode activation time: Nov 15, 2010 9:23:12 AM  
Configuration name: TC067#1  
Configuration activation time: Jan 25, 2011 10:45:11 AM  
Policy name: TC057#1T  
Policy activation time: Jan 21, 2011 4:14:49 PM

View information about the active configuration for a domain

Drill down to CPC or system

Provisioning Manager > Active Configuration

## Active Configuration for Domain GUI2

This page shows information about the active domain configuration and the status of its CPCs and z/OS systems.

Active configuration: TC067#1 Status: ☒ Enabled

CPCs Systems

CPC name	Correlation status	Record ID	Active MSU	Active zAAPs	Active zIIPs	Enabled	Enabled default
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
<input type="radio"/> R35	Matched	34937149	1140	2	1	<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
<input type="radio"/> ECL2	Matched	34937149				<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled

View information about the active policy for a domain

Drill down to policy element

Provisioning Manager > Active Policy

## Active Policy for Domain GUI2

This page shows information about the active policy. All timestamps below are shown in GMT.

Active policy: TC057#1T Status: ☒ Enabled

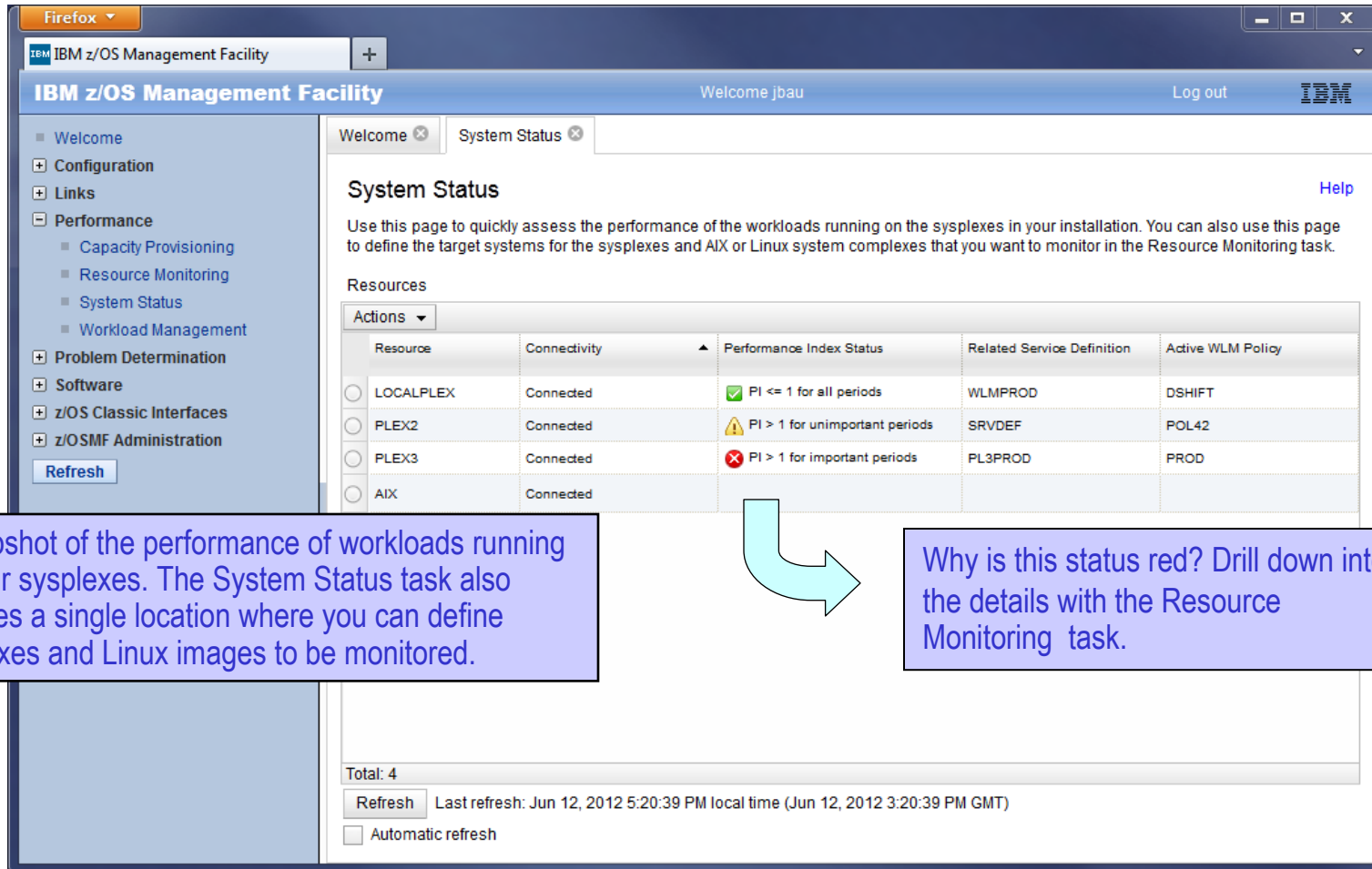
Type	Name	Current status	Details
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
<input type="radio"/> Policy	TC057#1T	<input checked="" type="checkbox"/> Enabled	
<input type="radio"/> Logical processor scope			
<input type="radio"/> Processor limit	PLEX1.SYS1		CP limit: Max. possible; zAAP limit: 0
<input type="radio"/> Max. provisioning scope			
<input type="radio"/> Processor limit	CPC1		MSU limit: 0; zAAP limit: 0; zIIP limit: 0

# z/OSMF Resource Monitoring



- The z/OSMF Resource Monitoring application provides integrated performance monitoring in the customer's environment
- Supports 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.
- With z/OS V1.13 and z/OSMF V1.13, RMF has new CIM-based performance data gatherers for Linux on System z, Linux on System x, and AIX systems to provide a consistent monitoring solution for zEnterprise ensembles.
- **With z/OS 2.1 support has been added for windows 2008 server**
- There are two z/OSMF tasks: *Resource Monitoring and System Status*
  - Resource Monitoring task:
    - Monitor most of the metrics supported by the Resource Measurement Facility (RMF™) Monitor III, create and save custom views of the metrics easily, and display real-time performance data as bar charts. Predefined views provided for a quick start. Advanced filtering features for focused monitoring
  - System Status task:
    - Quickly Assess the performance of the workloads running on the z/OS sysplexes in your environment. The System 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.

# Resource Monitoring : System Status



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

System Status [Help](#)

Use this page to quickly assess the performance of the workloads running on the sysplexes in your installation. You can also use this page to define the target systems for the sysplexes and AIX or Linux system complexes that you want to monitor in the Resource Monitoring task.

Resources

Actions ▾

Resource	Connectivity	Performance Index Status	Related Service Definition	Active WLM Policy
<input type="radio"/> LOCALPLEX	Connected	✓ PI ≤ 1 for all periods	WLMPROD	DSHIFT
<input type="radio"/> PLEX2	Connected	⚠ PI > 1 for unimportant periods	SRVDEF	POL42
<input type="radio"/> PLEX3	Connected	✗ PI > 1 for important periods	PL3PROD	PROD
<input type="radio"/> AIX	Connected			

Total: 4

Last refresh: Jun 12, 2012 5:20:39 PM local time (Jun 12, 2012 3:20:39 PM GMT)

☐ Automatic refresh

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

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

# Resource Monitoring: Monitoring Dashboards



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

■ Welcome  
 + Configuration  
 + Links  
 + Performance  
   ■ Capacity Provisioning  
   ■ **Resource Monitoring**  
   ■ System Status  
   ■ Workload Management  
 + Problem Determination  
 + Software  
 + z/OS Classic Interfaces  
 + z/OSMF Administration  
 + z/OSMF Settings

Refresh

Welcome x Resource Mon... x

**Resource Monitoring**

Dashboards

**Dashboards**

☒ ☐ Actions ▼

Name

Filter

- ☐ Common Storage Activity
- ☐ Coupling Facility Overview
- ☐ Execution Velocity
- ☐ General Activity
- ☐ Overall Image Activity
- ☐ Performance Index
- ☐ Response Time
- ☐ Using & Delays
- ☒ XCF Activity

Click to open the dashboard

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

Total: 9, Selected: 0

Refresh Last refresh: Jan 23, 2013 4:19:25 PM local time (Jan 23, 2013 5:00:00 PM local time)

**Resource Monitoring**

Dashboards XCF Activity Response Time General Activity Coupling Facility Overview

XCF Activity (Running)

Start Pause Save Actions ▼

Groups

Group	Signal Type	Value
SYSWLM	.LOCALPLEX.SYSplex signals sent by XCF group	400
	.LOCALPLEX.SYSplex signals received by XCF group	400
BOEZMF1	.LOCALPLEX.SYSplex signals sent by XCF group	400
	.LOCALPLEX.SYSplex signals received by XCF group	379
ISTXCF	.LOCALPLEX.SYSplex signals sent by XCF group	313
	.LOCALPLEX.SYSplex signals received by XCF group	299

Members

Member	Signal Type	Value
SYSWLM*ALL	.LOCALPLEX.SYSplex signals sent by XCF group and member	400
	.LOCALPLEX.SYSplex signals received by XCF group and member	400
BOEZMF1*ALL	.LOCALPLEX.SYSplex signals sent by XCF group and member	400
	.LOCALPLEX.SYSplex signals received by XCF group and member	379
ISTXCF*ALL	.LOCALPLEX.SYSplex signals sent by XCF group and member	313
	.LOCALPLEX.SYSplex signals received by XCF group and member	299

Systems (Outbound)

System	Signal Type	Value
ZMF2:ZMF5-SA4028	.LOCALPLEX.SYSplex signals sent by XCF systems and transport class	42
ZMF2:ZMF1-SA4028	.LOCALPLEX.SYSplex signals sent by XCF systems and transport class	42
ZMF2:ZMF3-SA4028	.LOCALPLEX.SYSplex signals sent by XCF systems and transport class	41
ZMF5:ZMF1-SA4028	.LOCALPLEX.SYSplex signals sent by XCF systems and transport class	41

Systems (Inbound)

System	Signal Type	Value
ZMF3:ZMF5	.LOCALPLEX.SYSplex signals received by XCF systems	66
ZMF3:ZMF2	.LOCALPLEX.SYSplex signals received by XCF systems	62
ZMF2:ZMF1	.LOCALPLEX.SYSplex signals received by XCF systems	62
ZMF3:ZMF1	.LOCALPLEX.SYSplex signals received by XCF systems	61
ZMF1:ZMF4	.LOCALPLEX.SYSplex signals received by XCF systems	01
ZMF5:ZMF2	.LOCALPLEX.SYSplex signals received by XCF systems	60

# z/OSMF Resource Monitoring

## 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

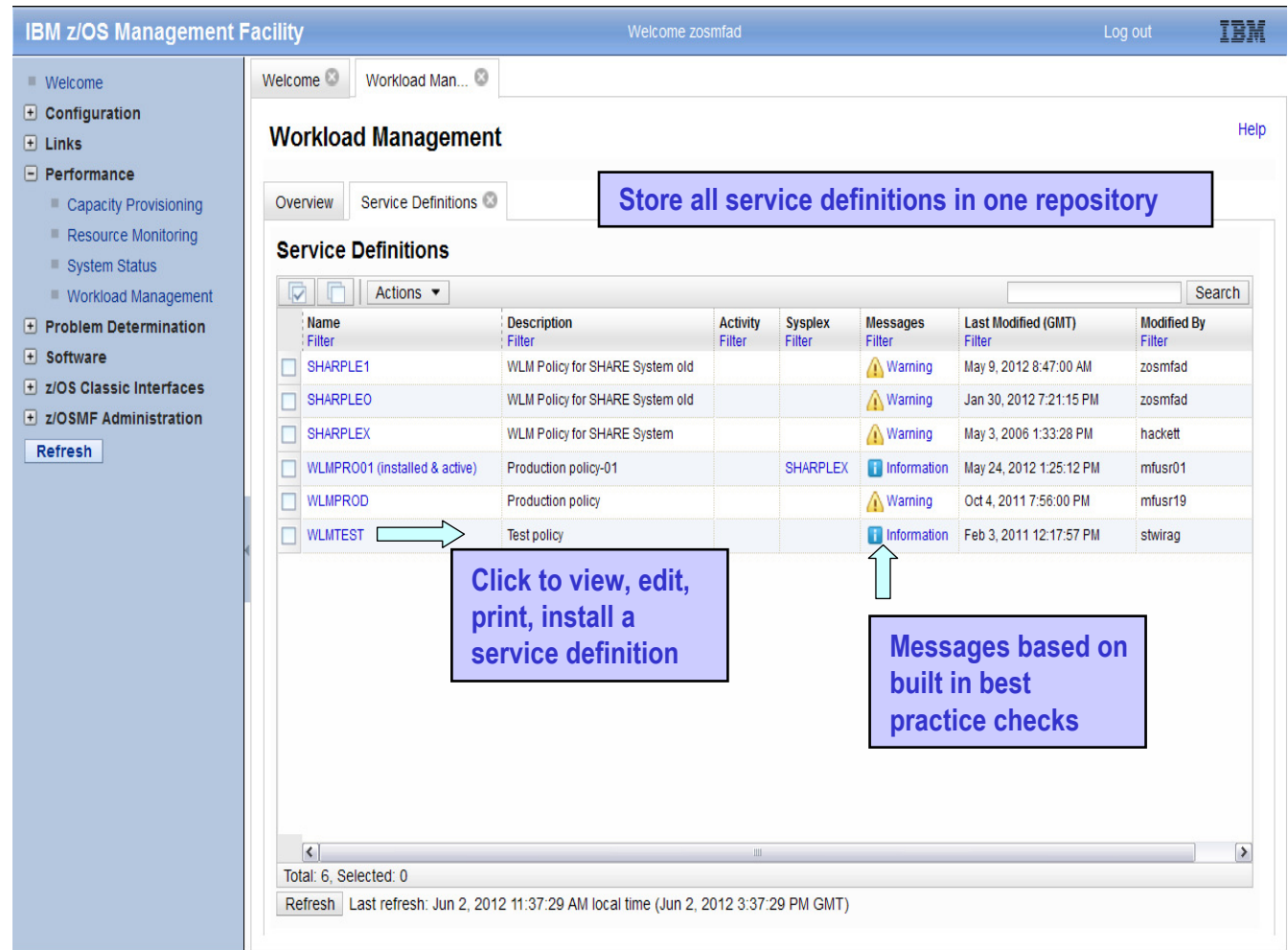
Complete your sessions evaluation online at [SHARE.org/BostonEval](https://SHARE.org/BostonEval)

Session **14230**



# z/OSMF Workload Management

- WLM Policy Editor available on the z/OS Management Facility provides
  - All the same functions as in the 'as is' 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
  - Enables you to manage WLM service definitions



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

**Workload Management** Help

Overview Service Definitions **Store all service definitions in one repository**

**Service Definitions**

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)	Modified By
SHARPLE1	WLM Policy for SHARE System old			Warning	May 9, 2012 8:47:00 AM	zosmfad
SHARPLE0	WLM Policy for SHARE System old			Warning	Jan 30, 2012 7:21:15 PM	zosmfad
SHARPLEX	WLM Policy for SHARE System			Warning	May 3, 2006 1:33:28 PM	hackett
WLMPRO01 (installed & active)	Production policy-01		SHARPLEX	Information	May 24, 2012 1:25:12 PM	mfusr01
WLMPROD	Production policy			Warning	Oct 4, 2011 7:56:00 PM	mfusr19
WLMTST	Test policy			Information	Feb 3, 2011 12:17:57 PM	stwirag

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

**Messages based on built in best practice checks**

Total: 6, Selected: 0  
Refresh Last refresh: Jun 2, 2012 11:37:29 AM local time (Jun 2, 2012 3:37:29 PM GMT)

# z/OSMF Workload Management (V1.12)

## functions



- 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
- Different authorization levels for viewing, modifying and installing service definition

The screenshot shows the z/OSMF Workload Management interface. The top navigation bar includes 'Facility', 'Welcome zosmfad', 'Log out', and the IBM logo. Below this, there are tabs for 'Welcome' and 'Workload Man...'. The main section is titled 'Workload Management' with a 'Help' link. Underneath, there are tabs for 'Overview' and 'Service Definitions'. The 'Service Definitions' tab is active, displaying a table of service definitions. A context menu is open over the table, showing various actions like 'Modify Service Definition', 'View Service Definition', 'View Messages', 'View History', 'Print Preview', 'Install and Activate...', 'Copy...', 'Delete...', 'Export', 'View WLM Status', 'New...', 'Import', 'Select All', 'Deselect All', 'Configure Columns...', 'Hide Filter Row', 'Clear Filters', 'Modify Sort...', 'Clear Sorts', and 'Clear Search'. The table has columns for 'Name', 'Sysplex', 'Messages', 'Last Modified (GMT)', and 'Modified By'. The data rows show various service definitions with their respective statuses and modification dates.

Name	Sysplex	Messages	Last Modified (GMT)	Modified By
SHARPLE	Filter	Warning	May 9, 2012 8:47:00 AM	zosmfad
SHARPLE		Warning	Jan 30, 2012 7:21:15 PM	zosmfad
SHARPLE		Warning	May 3, 2006 1:33:28 PM	hackett
WLMPROD	SHARPLEX	Information	May 24, 2012 1:25:12 PM	mfusr01
WLMPROD		Warning	Oct 4, 2011 7:56:00 PM	mfusr19
WLMTEST		Information	Feb 3, 2011 12:17:57 PM	stwirag

AM local time (Jun 2, 2012 3:37:29 PM GMT)

# z/OSMF WLM Policy Editor

## 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

# z/OSMF Incident Log



- Focus on Problem data management
  - Identifying system-detected problems - Abend and user initiated SVC dumps
  - Providing a consolidated view of all system detected problems in a sysplex and management of incidents
  - Improved FFDC for system-detected problems
- Reduced time and skill required to collect and send diagnostic data for analysis
  - Collect and manage diagnostic data “snapshots” via Auto-capture of basic diagnostic materials, triggered when the dump is written to a data set, managed via PARMLIB member
    - Snapshots of 30 min Operlog or Syslog, 1 hr Logrec detail, and 4-hour Logrec summary
    - 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
- Manage incidents with z/OSMF Incident log application:
  - Manage the list of incidents across the sysplex (Filter/ sort/ configure/ delete)
  - Display properties – view incident details and list of diagnostic data, logs
  - Set properties: associate problem number and tracking id , add notes
  - Send diagnostic data via FTP: Manage FTP jobs status and define FTP Profiles (firewall), support for encrypted and parallel FTP to IBM
  - Send additional user-defined diagnostic data
  - Allow next dump with simplified informing to DAE to take the next dump for the incident's symptom string



**SHARE**  
in Boston

# Incident Log – Incident Details

IBM z/OS Management Facility

Welcome zosmfad

Log out

Incident Log

Incident Log > View Diagnostic Details

**View Diagnostic Details**

General Diagnostic Data

Incident type: ABEND

Incident description: COMPON=WEBSPPHRE Z/OS, COMPID=5655N0200,ISSUER=BBORADMP,ABEND IN PC ROUTINE BBOOOUTP

Date and time (GMT): Jan 17, 2013 2:54:15 AM

Sysplex name: SHARPLEX

System name: S1

Problem number:  ☐ Identify the problem number as an IBM Pity

Tracking ID:

Component name:

Component ID: 5655N0200

z/OS release: V1R13

Product:

Abend code: S0EC3

Reason code: 04130007

CSECT: BBOOOUTP

Load module: BBOOPCRT

Symptom string: MOD/BBOOPCRT CSECT/BBOOOUTP PIDS/5655N0200 AB/S0EC3 REXN/B SUB1/SR#OUTBOUND#PC#ROUTINE

APAR search terms: BBOOOUTP ABENDEC3 RSN04130007 5655N0200

APAR release of z/OS: R780

Notes:

OK Apply Cancel

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

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.C56360D8.A3D56F9E	SVPLEX0	P03
<input type="checkbox"/> Operations log	CEA.Q00.C56360D8.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.	

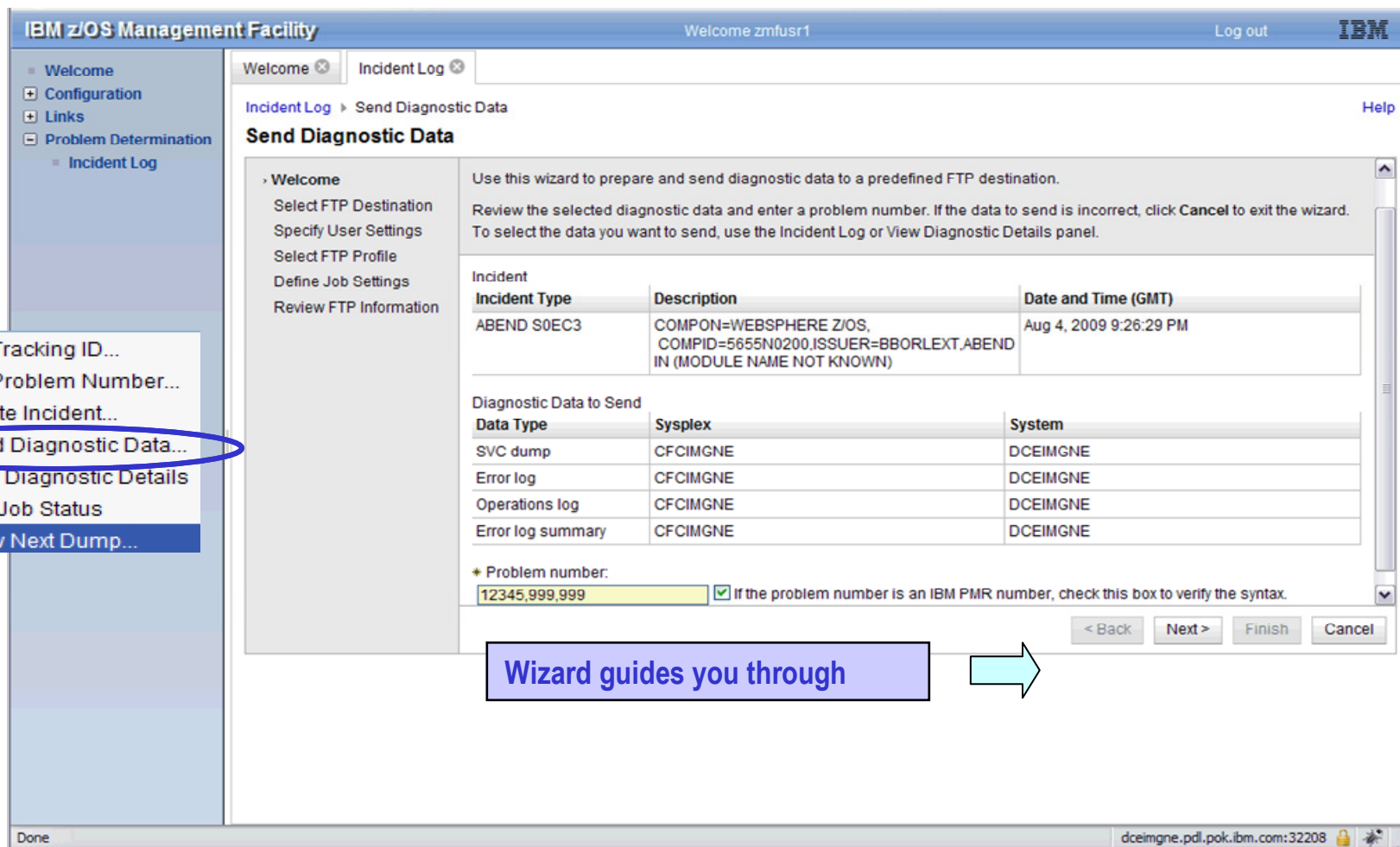
Total: 0, Selected: 0

Send View Status

OK Apply Cancel

- View logs directly
- **8 char HLQ support for log snapshots**
- Delete incidents via GUI or batch CEATOOL

# Incident Log – Send Diagnostic Data



**IBM z/OS Management Facility** Welcome zmfusr1 Log out IBM

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


Wizard guides you through



# 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"> <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> As little as 30 seconds
Viewing diagnostic datasets within context	<ul style="list-style-type: none"> <li>•Context switch to ISPF green screen interface, login if necessary, manual input of dataset name.</li> <li>•Up to 1 minute</li> </ul>	<ul style="list-style-type: none"> <li>•2 clicks to open diagnostic dataset</li> <li>•As little as 7 seconds</li> </ul> 

# Software Management



**The z/OSMF Software Management application** (was previously called Software Deployment) extends the Software Deployment task to provide additional actions on instances of SMP/E installed software. available on z/OS V1.13 with the PTF for APAR PM73833.

## The Software Management task supports

- deploying a software instance,
- inspection of a software instance to view the product, feature and FMID content, and view the physical data sets that compose a software instance.
- actions to analyze and report on software instances and products within instances to:
  - Identify software products that are approaching, or have reached, end of service support, thus helping customers with upgrade and migration planning.
  - Identify missing HIPER and PE fixes, and fixes associated with one or more fix categories to help customers assess the risks and stability of installed software and ensure hardware and software requisites are installed.
  - Validate the SMP/E structure and content of a software instance is correct by cross-check SMP/E inventory information with catalog entries, volume residency and data set content.
  - Determine if individual fixes are installed and in which software instances.
  - Compare the service and functional content of two software instances to aid in debugging or migration planning.

# Software Management



Welcome mfsur01 Log out IBM.

Welcome x Software Man... x

Help

### Software Management

Use this task to view details about your software inventory, including related products, features, FMIDs, data sets, deployments, and SYSMODS. [Learn more...](#)

<a href="#">Software Instances</a>	Define your software to z/OSMF; deploy software; generate reports about your software.
<a href="#">Products</a>	View a consolidated list of the products included in each software instance.
<a href="#">Deployments</a>	Deploy a software instance, and manage existing deployments.
<a href="#">Categories</a>	Create new categories for your software instances and deployments, and manage existing categories.
<a href="#">Settings</a>	Select the time zone in which to display data.

Welcome zosmfad Log out IBM.

Welcome x Software Man... x

Software Management > Products

Help

This table lists the products that are installed in at least one software instance where the product information was retrieved. To ensure that this list reflects the latest SMP/E information, use the **Retrieve Product, Feature, and FMID Information** action provided in the Software Instances view. [Learn more...](#)

Switch To: ▼

Product	Release	Product ID	Messages	Vendor	General Availability	End of Service	Additional Product Information
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> System Modification Program Extended for z/OS	03.06.00	5655-G44		IBM	Sep 30, 2011	✓ Not Announced	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5655-G44">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5655-G44</a>
<input type="checkbox"/> z/OS	01.12.00	5694-A01		IBM	Sep 24, 2010	✓ Not Announced	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01</a>
<input type="checkbox"/> Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53		IBM	Sep 27, 2002	✗ Oct 3, 2005	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53</a>
<input type="checkbox"/> Debug Tool V9	09.01.00	5655-U27		IBM	Sep 26, 2008	✗ Apr 30, 2012	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5697-P10">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5697-P10</a>
<input type="checkbox"/> Enterprise PL/I V4	04.01.00	5655-W67		IBM	Sep 24, 2010	⚠ Apr 30, 2014	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67</a>
<input type="checkbox"/> z/OS	01.13.00	5694-A01		IBM	Sep 30, 2011	✓ Not Announced	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01</a>
<input type="checkbox"/> AFP FONT COLLECTION FOR S/390	02.01.01	5648-B33		IBM	Oct 27, 2000	✓ Not Announced	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5648-B33">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;apname=ShopzSeries&amp;htmlfid=897/ENUS5648-B33</a>

Total: 27, Selected: 0

Refresh Last refresh: Jan 29, 2013 10:10:49 PM

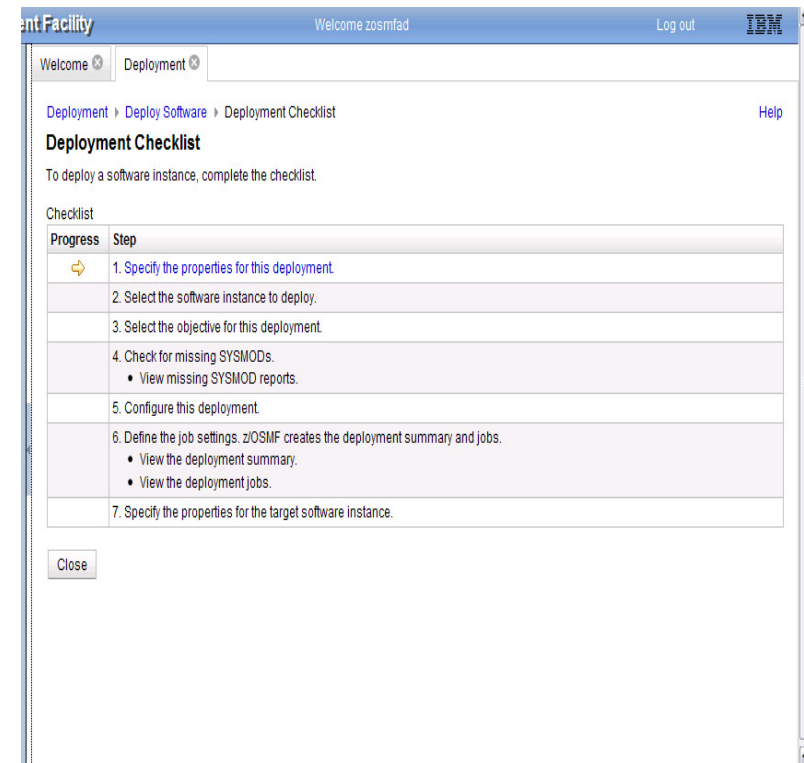
Close

## Products view

# Software Deployment

- Software Deployment makes 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.
- 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 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 (including the SMP/E CSI inventory )
  - Validate the configuration against the target system, Summarize the deployment actions
  - Generate jobs to perform the cloning
- 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

- **Software Deployment uses a checklist approach to guide you through all the steps of a deployment.**



Deployment Facility Welcome zosmfad Log out IBM

Welcome Deployment

Deployment > Deploy Software > Deployment Checklist Help

**Deployment Checklist**

To deploy a software instance, complete the checklist.

Progress	Step
1	1. Specify the properties for this deployment.
2	2. Select the software instance to deploy.
3	3. Select the objective for this deployment.
4	4. Check for missing SYSMODs. <ul style="list-style-type: none"> <li>• View missing SYSMOD reports.</li> </ul>
5	5. Configure this deployment.
6	6. Define the job settings. z/OSMF creates the deployment summary and jobs. <ul style="list-style-type: none"> <li>• View the deployment summary.</li> <li>• View the deployment jobs.</li> </ul>
7	7. Specify the properties for the target software instance.

Close

# z/OSMF and ISPF (R13)

## Work with existing interfaces

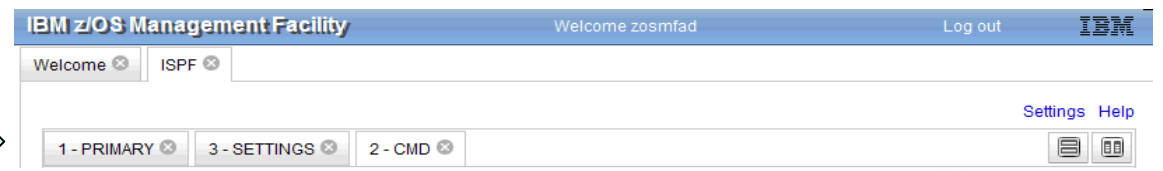
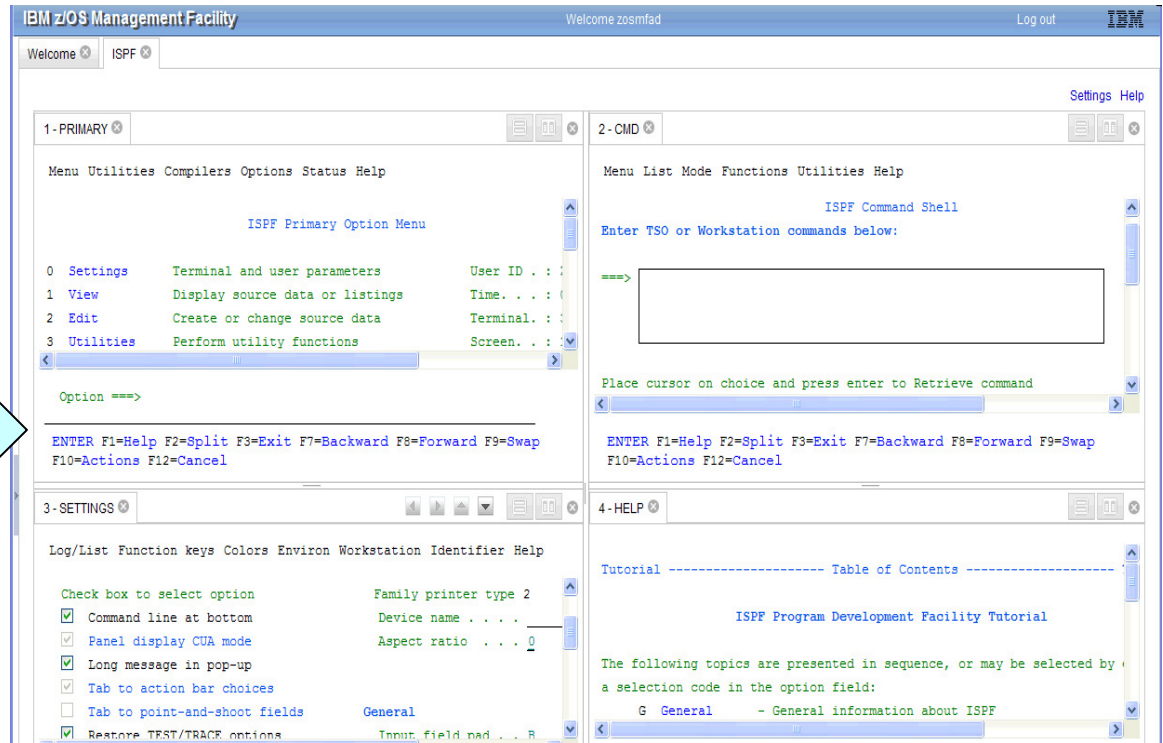


- Enables system programmer to perform tasks from one interface.
- Makes ISPF applications URL Web-accessible for linking and launching from other applications

- Up to 4 panes
  - Panes can be sized. Each pane can have multiple ISPF sessions, tabs can be moved between panes
  - Shows ISPF Menu bar, Command line, Function keys

- Multiple logins with profile sharing enabled

- Also available in tabbed format



## z/OSMF and ISPF (R13)

### Additional screens

**z/OSMF ISPF User Settings**

When defining the user settings, color selections will take effect with the next z/OSMF ISPF page refresh. All other settings require you to log out and log in again.

Logon procedure: CEANN  
 Region size: 2048 pages  
 Account number: ACCTNO  
 User group: USRGROUP  
 Profile sharing: On  
 Screensize: rows: 204 columns: 160  
 Code page: United States (1047, 697)  
 Language: English

Map colors from z/OS ISPF to z/OSMF ISPF.

z/OS ISPF colors:	z/OSMF ISPF colors:
Sample blue text	Sample blue text
Sample red text	Sample red text
Sample pink text	Sample pink text
Sample green text	Sample green text
Sample turquoise text	Sample turquoise text
Sample yellow text	Sample yellow text
Sample white text	Sample black text

☒ Show settings dialog with every logon.

OK Apply Cancel Help

Welcome ISPF

TSO Messages

```

ENTER DATA SET NAME -
IMUSER.BCD.TRACE
--RECFM=LRECL=BLRSIZE=DSORG
FB 80 4160 **
--VOLUMES--
PAGE08
TIME=10:14:12 AM. CPU=00:00:00 SERVICE=6827 SESSION=00:00:42 JANUARY 19, 2011
ENTER DATA SET NAME -
  
```

OK Attention Clear Help

ENTER F1=Help F2=Split F3=Exit F4=Backward F5=Forward F6=Swap F10=Actions  
 F11=Cancel

Welcome ISPF

1-SDSF

Display Filter View Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES LINE 1-19 (81)

NP	JOBNAME	JobID	Owner	Pty	Queue	C Pos	S&F	ASys	Status
---	ZOSMFAD	TS000077	ZOSMFAD	15	EXECUTION		SY1	SY1	
---	ZOSMFAD	TS000081	ZOSMFAD	15	EXECUTION		SY1	SY1	
---	SYSLOG	STC00002	*MASTER*	15	EXECUTION		SY1	SY1	
---	VTAM44	STC00007	*****	15	EXECUTION		SY1	SY1	ARMELEN
---	XCFTRMON	STC00008	IMUSER	15	EXECUTION		SY1	SY1	
---	GRSSTMON	STC00011	*****	15	EXECUTION		SY1	SY1	
---	ZFS	STC00015	DFS	15	EXECUTION		SY1	SY1	
---	INIT	STC00020	IMUSER	15	EXECUTION		SY1	SY1	
---	INIT	STC00021	IMUSER	15	EXECUTION		SY1	SY1	
---	INIT	STC00022	IMUSER	15	EXECUTION		SY1	SY1	
---	TCAS	STC00023	IMUSER	15	EXECUTION		SY1	SY1	
---	BPZAS	STC00026	IMUSER	15	EXECUTION		SY1	SY1	
---	BPZAS	STC00028	IMUSER	15	EXECUTION		SY1	SY1	
---	RESOLVER	STC00040	TCPIPMS	15	EXECUTION		SY1	SY1	
---	TCPIP	STC00041	TCPIP	15	EXECUTION		SY1	SY1	ARMELEN
---	BNS001	STC00046	WSCH01	15	EXECUTION		SY1	SY1	ARMELEN

COMMAND INPUT ==> SCROLL ==>

ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=IFIND F6=BOOK F7=UP F8=DOWN  
 F11=RIGHT F12=RETRIEVE

- Customize settings
- TSO messages have priority and pop up
- Example: SDSF status

# New programmatic interface for z/OSMF

- z/OSMF R13 introduces a new REST API (HTTP(s)) interface to z/OS for submitting and accessing batch job information.
  - Enhancements in service stream in R13
    - Submit jobs from Unix file or MVS dataset
  - **Additional enhancements in V2R1**
    - **Support for JCL symbolics, use correlator instead of jobname/jobid, asynchronous notification on job completion**
- z/OSMF R13 enables Cross application linkage and context sensitive launching between z/OSMF applications and also between z/OSMF applications and external applications
  - Via programmatic interface and GUI interface

# Recent R13 application linking exploitation



With APAR PM74508 and APAR PM74517

- The z/OSMF Resource Monitoring application is linked to the z/OSMF Workload Management application in context, and the z/OSMF Workload Management application is linked to the z/OSMF Resource Monitoring application.
- The System Status task is linked to the Workload Management task such that the active service definition, active service policy, or WLM status can be opened and viewed. The Workload Management task is linked to Resource Monitoring dashboards such that while viewing the active service definition or service policy, resource monitoring dashboards with performance metrics for service classes, workloads, and report classes can be opened and viewed.

# View performance of Active policy

IBM z/OS Management Facility

Welcome zosmfad

Log out IBM

Welcome x System Status x Resource Mon... x Workload Man... x

Workload Management

Help

Overview WLM Status x

WLM Status for Sysplex SHARPLEX from System S1

Active Service Policy (View performance of active policy)

Name: SHAREPOL

Description: SHARE Base Policy

Activated: Jul 16, 2012 2:18:22 PM GMT

Activated by: stevem from system S1

Related service definition: SHARPLEX

Functionality level: 8

Installed: Jul 16, 2012 2:18:12 PM GMT

Installed by: stevem from system S1

Systems (View performance of systems)

Actions

Name	Used Service Policy	Activated (GMT)	WLM Status
Filter	Filter	Filter	Filter
S1	SHAREPOL	Jul 16, 2012 2:18:22 PM	Active

Total: 1

Installed Service Definition

Name: SHARPLEX

Description: WLM Policy for Share Systems

Installed: Jul 16, 2012 2:18:12 PM GMT

Installed by: stevem from system S1

Refresh

☐ Automatic refresh

Last refresh: Feb 5, 2013 11:45:29 PM local time

IBM z/OS Management Facility

Welcome zosmfad

Log out IBM

Welcome x System Status x Resource Mon... x Workload Man... x

Resource Monitoring

Help

Dashboards WLM Service Class - LOCALPLEX x

WLM Service Class - LOCALPLEX (Running)

Start Pause Save Actions

Performance Index

CICSTX.1	0.5
OMVS.1	0.5

LOCALPLEX.SYSPLX performance index by WLM service class period

02/05/2013 23:47:00 - 02/05/2013 23:48:00 (1/1)

Execution Velocity

OMVS.1	50
DDF.2	N/A
SHRDB2.1	80
DSVMPP.1	15

LOCALPLEX.SYSPLX execution velocity by WLM service class period

02/05/2013 23:47:00 - 02/05/2013 23:48:00 (1/1)

Response Time

DSWXTX.1	N/A
DDF.1	N/A
WEBFAST.2	N/A
WEBFAST.1	0.1

LOCALPLEX.SYSPLX response time by WLM service class period

02/05/2013 23:47:00 - 02/05/2013 23:48:00 (1/1)

Percentile Response Time


CICSTX.1	80
WEBFAST3.1	N/A
WEBFAST3.2	90
WEBFAST3.1	N/A
WEBFAST3.1	90

LOCALPLEX.SYSPLX percentile achieving response time goal by WLM service class period

02/05/2013 23:47:00 - 02/05/2013 23:48:00 (1/1)

44 Complete your sessions evaluation online at [SHARE.org/BostonEval](http://SHARE.org/BostonEval)

Session 14230



# View active service definition



Welcome x System Status x Resource Mon... x Workload Man... x

## System Status

Use this page to quickly assess the performance of the workloads running on the sysplexes in your installation. You can also use this page to define the target systems for the sysplexes and AIX or Linux system c that you want to monitor in the Resource Monitoring task.

Resources

Actions ▼					
Resource	System Type	Connectivity	Performance Index Status	Related Service Definition	Active WLM Policy
Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> LOCALPLEX	z/OS	Connected	✓ PI <= 1 for all periods	SHARPLEX	SHAREPOL

Total: 1, Selected: 0

Last refresh: Feb 6, 2013 12:14:10 AM local ti

☒ Automatic refresh

Welcome x System Status x Resource Mon... x Workload Man... x

### Workload Management

Overview WLM Status x View SHARPLEX x

This service definition is installed and policy SHAREPOL is active [Notes](#) [Switch To ▼](#)

#### Service Definition Details

**Service definition name:**  
SHARPLEX

**Description:**  
WLM Policy for Share Systems

**Functionality level:**  
008

**Service Coefficients**

Central processing unit (CPU):  
1.0

Input and output channel (IOC):  
0.1

Main storage occupancy (MSO):  
0.0000

Service request block (SRB):  
1.0

**Service Options**

Enable I/O priority management:  
No

Enable dynamic alias management:  
Yes

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

Enable dynamic GPMP management on each system in the host sysplex:  
No

Excluded systems:  
N/A

## Additional details on usage

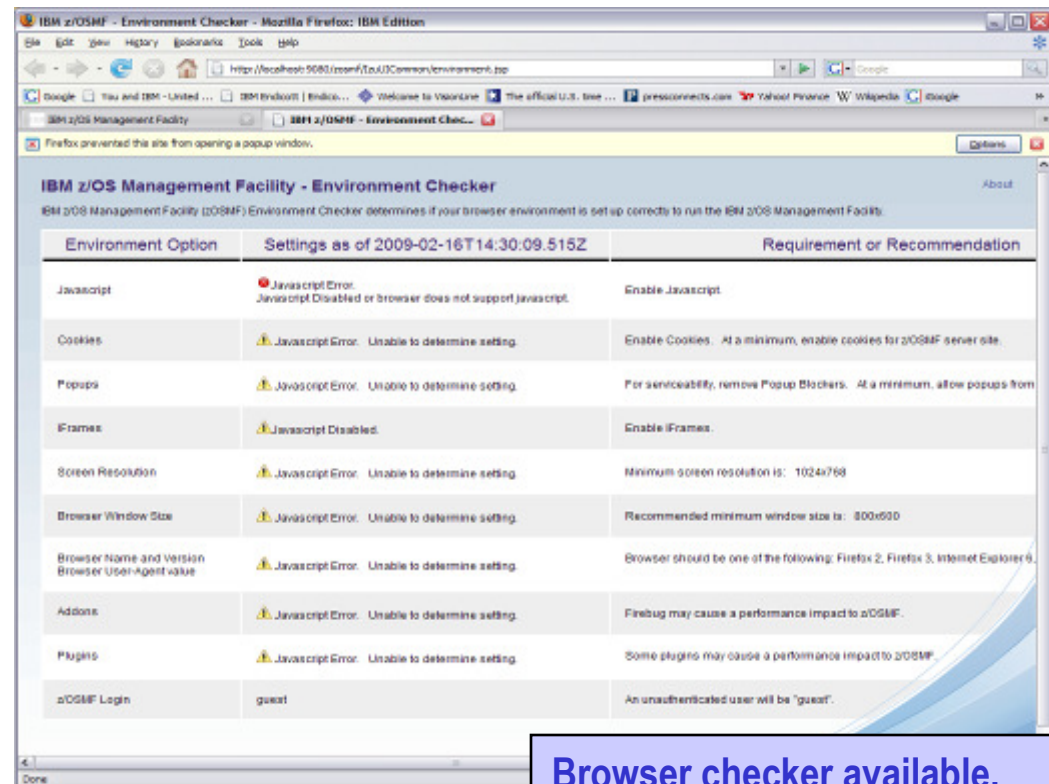
- z/OSMF operating environment
  - One instance of z/OSMF can manage only one local system or sysplex
  - Multiple users may log into the same instance of z/OSMF from different workstations/browsers
  - From one client system, user can manage additional sysplexes by opening new browser windows (or tabs) 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 1.12 requires z/OS 1.12
- z/OSMF 1.13 requires z/OS 1.13
- z/OSMF 2.1 will require
  - z/OS 2.1
  - JAVA V7 64 bit SR3
- Client machine
  - Windows with Mozilla Firefox and Internet Explorer® 7
  - See Supported browser web page from the z/OSMF home page for latest information

z/OSMF Home page

<http://www-03.ibm.com/systems/z/os/zos/zosmf/>



**Browser checker available.**  
Your browser connects to the z/OS Management Facility and checks the browser settings

# Statement Of Directions z/OSMF 2.1

- IBM intends to add z/OSMF function to support presentation services for other applications. A new set of programming interfaces is designed to allow TSO/E based applications to be imported into z/OSMF and supported within the z/OSMF user interface, while providing the capability to exploit graphical user interfaces supported by the client browsers.
  - IBM intends to provide additional REST programming interfaces in z/OSMF V2.1. These new RESTful interfaces are designed to provide access to z/OS data sets and files, with authorization control and serialization. This new function is intended to make it much easier to access data stored on z/OS from other platforms, such as from distributed servers or browser-based applications.
  - IBM intends to provide support for secure FTP (SFTP) in the Incident Log application in z/OSMF V2.1.
  - IBM intends to use the z/OSMF Workflow function to provide simplified instructions for installation of z/OSMF plug-ins.
- 
- IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

## 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, 23, 25 and 27:**
  - [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 User's Guide**      SA38-0652
- **IBM z/OS Management Facility License Information** GC52-1263
- **IBM z/OS Management Facility Information center**

## 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.
- z/OSMF 2.1 is rebased on the Websphere Application Server 8.5 for z/OS Liberty profile
  - This provides reduced resource requirements, improved configuration and faster startup.
- z/OSMF 2.1 introduces the new Workflow and notification function that is planned to provide the infrastructure needed to further automate the flow of management tasks to people in the appropriate roles, improving the quality and efficiency of management.

# Backup

## What our clients are saying.....

*"The z/OS Management Facility initiative has been expanded with a number of new functions available with z/OS V1.13. This product shows great promise of being a great help for the younger z/OS system programmers, who may not have many years of experience with the platform. "*

*Bertil Andersson, Senior Enterprise IT Architect, Svenska Handelsbanken*

*"The IBM z/OS Management Facility is the most important new facility since the Workload Manager and Parallel Sysplex. Every z/OS staff should be planning for their z/OSMF implementation now. This is a 'must have' for the system programmers of tomorrow (or even today). "*

*Cheryl Watson, Watson and Walker Inc.*

*See more testimonials on the z/OSMF web page*

**<http://www-03.ibm.com/systems/z/os/zos/zosmf/>**

## What our clients are saying.....

***“We are using z/OSMF primarily for Workload Management (WLM) and z/OS Communication Server purposes. The WLM component is amazing. It simplifies the maintenance of the WLM policy and makes it much easier to review and update. It also alerts us to warnings and errors in our policy. The Configuration Assistant is being utilized for z/OS Communication Server AT-TLS and IPSec configuration. We are also using Incident Log, which seamlessly retrieves error data and sends it to IBM for analysis. This function has greatly simplified the daily work of a system programmer. “***

*‘Large Government Customer’*

## What our customers are saying.....

***My z/OSMF migration from V1R11 to V1R13 went very smoothly! Of all the new features in V1R13, I was particularly interested in the new software Deployment capability for cloning and deploying software. I found it easy to use and especially liked that it supports any SMP/E installed product. I plan to use it with our ISV products. 'Information Technology and Marketing Services'***

***We are using z/OSMF 1.12 and the Incident Log function is very efficient. After entering the PMR number, the diagnostic data were sent in just a few clicks!***  
*'Large equipment manufacturing'*

***“Being relatively new to the Systems Programming role, IBM’s z/OS Management Facility (z/OSMF) has helped my role as a Systems Programmer, by providing a web browser based tool that brings together some routine day-to-day operations and administration of z/OS systems into one simple to use web interface. Using z/OSMF has helped me to become more productive in my new role as a Systems Programmer.”*** *Government Agency (Europe)*

# Summary

- 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

- **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
- **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
- **z/OSMF interface:**
  - Designed to allow you to add links programmatically to the z/OSMF Navigation tree
- **Continued enhancements to Incident Log and Configuration Assistant for Communication server.**

## Summary – z/OSMF V1.13 highlights



- **A new software management capability to simplify management and cloning of installed software**
- **A new Capacity Provisioning Manager application is designed to support easier managing of z/OS Capacity Provisioning Manager (CPM)**
- **ISPF in the web as a z/OSMF Classic interface**
- **Application Linking and context sensitive launching enablement between z/OSMF applications and also between z/OSMF applications and external applications**
- **RESTful APIs for z/OS job management**
- **Improved z/OSMF authorization with SAF mode**
- **Ongoing enhancements to existing functions**

## The new z/OSMF 2.1

- z/OSMF 2.1 is rebased on the Websphere Application Server 8.5 for z/OS Liberty profile
  - This provides reduced resource requirements, improved configuration and faster startup.
- z/OSMF 2.1 introduces the new Workflow and notification function that is planned to provide the infrastructure needed to further automate the flow of management tasks to people in the appropriate roles, improving the quality and efficiency of management.

# z/OSMF V1R13 Product Package

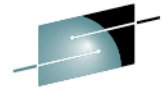
- The IBM z/OS Management Facility is a separate licensed program product comprised of
  - z/OS Management Facility (5655-S28)
  - z/OS Management Facility Subscription and Support (5655-S29)
- ***z/OSMF V1r13 contains the following FMID#***
  - ***HBBN700 (IBM WebSphere Application Server OEM Edition for z/OS v7.0)***
    - **COMPID 5655I3512 - WEBS APP SVR OEM**
  - HSMA130 - IBM z/OS Management Facility
    - COMPID 5655S28SM - zOSMF Core
    - COMPID 5655S28RJ - zOSMF RestJobs
  - HSMA131 - IBM z/OS Management Facility – ISPF
    - COMPID 5655S2801 - zOSMF ISPF
  - HSMA132 - IBM z/OS Management Facility – RM
    - COMPID 5655S2802 - zOSMF RM
  - HSMA133 - IBM z/OS Management Facility – WLM
    - COMPID 5655S2803 - zOSMF WLM
  - HSMA134 - IBM z/OS Management Facility – Deplymnt Mgr
    - COMPID 5655S2804 - zOSMF Core
  - HSMA135 - IBM z/OS Management Facility - Incident Log
    - COMPID 5655S2805 - zOSMF PD Incident Log
  - HSMA136 - IBM z/OS Management Facility – Capacity Prov
    - COMPID 5655S2806 - zOSMF Capacity Provisioning
  - HSMA13A - IBM z/OS Management Facility - Config Assist
    - COMPID 5655S28CA – Comm server Config ASST
  - HSMA13F - IBM z/OS Management Facility - DFSMS
    - COMPID 5655S28DF z/OSMF Storage manager

## Other enhancements to z/OSMF 1.13



- Support for Internet Explorer 9 and Mozilla Firefox ESR 10
- The z/OSMF Incident Log application allows you to modify its default JCL to meet the needs of your organization (APAR PM74518)
- The z/OSMF ISPF application is enhanced to get the completion status of long running commands, without any user intervention (APAR PM74507 )
- With APAR PM74502 on z/OSMF V1R13, the Systems and FTP Servers tasks are available under z/OSMF Settings.
  - The Systems task allows you to define the settings required for z/OSMF to access other systems in your installation and to define the HTTP proxy settings for z/OSMF to use when establishing an HTTPS connection to another system.
  - The FTP Servers task allows you to define the settings required for z/OSMF to access the FTP servers that are running on internal or external systems and to define the settings for z/OSMF to use when transferring files between systems.
- Usability: Additional filter capabilities are designed to improve ease of use for the user. The z/OSMF table filtering support has been enhanced to allow for AND/OR filtering as well as case sensitive filtering for more granular filtering capabilities (APAR PM74502)

# Configuration Assistant for z/OS Comm. Server z/OSMF V1R13



SHARE

IBM z/OS Management Facility

Welcome zosmfad Log out IBM

■ Welcome  
■ Configuration  
  ■ Configuration Assistant  
■ Links  
■ Performance  
■ Problem Determination  
■ Software  
■ z/OS Classic Interfaces  
■ z/OSMF Administration  
■ z/OSMF Settings

Refresh

Welcome x Configuratio... x

Action Perspective

V1R13 Configuration Assistant

SaveData

Tutorials Help

**Main Perspective**

Navigation tree

- z/OS Images
  - Image - IMAGE1
  - Image - STACK01

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

Select the technology you want to configure and click Configure.

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

Select	Technology	Description
<input type="radio"/>	AT-TLS	Application Transparent - Transport Layer Security
<input type="radio"/>	DMD	Defense Manager Daemon
<input type="radio"/>	IPSec	IP Security
<input type="radio"/>	IDS	Intrusion Detection Services
<input type="radio"/>	NSS	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

# Config. Assist. for z/OS Communications Server

- 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.
- Updates for z/OSMF R13
  - Retrieving TCP/IP profile information from active TCP/IP stacks, enabling it to import lists of IP addresses that are available for policy configuration.
  - Allowing a single instance of the Configuration Assistant to be used to configure both z/OS V1.12 and z/OS V1.13 Communications Server. This is intended to allow you to configure systems in a mixed-release environment from a single instance of the Configuration Assistant running under z/OSMF.
  - Allowing a policy rule to be defined once for multiple stacks, to permit more efficient policy configuration for multiple systems without having to individually define every policy rule for every stack.
  - z/OS Communications Server intrusion detection services (IDS) technology is enhanced to add support for IPv6 traffic and also additional attack types, including Enterprise Extender, data hiding, and out of sequence packet denial of service attacks.
- New in z/OSMF V2.1
  - New function provided in support of V2R1 z/OS Communications Server Policy-Based Networking\*
    - AT-TLS support of TLS V1.2
    - Policy-based Routing (PBR) support for IPv6

## Incident Log - *updates for z/OSMF 1.13*

- FTP destination and Firewall Proxy settings shared with Software deployment
    - Saved under new Settings Category, FTP servers task (new)
    - Can be updated during the wizard and can be locked for update
  - The name of file being transmitted is also included in the message when FTP job is submitted
  - Support the PDUU included with z/OS as of R13
  - Use of [ftp.data](#) when using PDUU
  - Use of system temp dataset for working with Unix files also – compressing before sending
  - Retain search string added in the View Diagnostic Details
  
  - Migrated dataset handling
    - In the past, working with migrated diagnostic data sets could be lengthy resulting in timeouts; now z/OSMF can process migrated data sets with improved handling
    - z/OSMF APAR - PM46302
    - z/OS CEA APAR – OA37149
  
  - Managing deletion of incidents –
    - CEATool OA38812 , UA65835
    - Delete multiple incidents at a time that satisfy criteria
    - Deletes the diagnostic data that is associated with the incidents that will be deleted. That is: error log, error log summary, operations log, the entry for the dump in the sysplex dump directory and optionally, the SVC dump dataset.
    - The utility deletes only inactive incidents that are not associated with a problem number or tracking ID.
  
  - Editing JCL for sending data
    - APAR PM74518
    - The z/OSMF Incident Log application will allow for customization of the generated JCL to help you develop an appropriate job stream customized for your environment.
    - This is implemented via an 'Edit JCL' option in the Send Diagnostic Data wizard.
- Note:** This is an advanced function and not recommended for general users.

# Software Installation

- z/OSMF V1.13 ordered in a z/OS ServerPac
  - Provides default customization via ServerPac provided customization job
    - Provided for Full System Replace installation path
    - Software Upgrade jobs and documentation provided but may need changes based on your existing environment
  - Can also use the WebSphere Application Server OEM Edition Configuration Guide and z/OSMF Configuration Guide
    - Product configuration scripts to setup, if defaults are not viable
- z/OSMF V1.13 ordered in a CBPDO
  - Use Program Directory to get started
  - Use the WebSphere Application Server OEM Edition Configuration Guide and z/OSMF Configuration Guide
    - Product configuration scripts to setup

# 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
  - Serialization of the editing of the active service definition
  - 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 editing without losing the context
  - Cut, Copy, Paste of policy elements between service definitions

IBM z/OS Management Facility

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Workload Management

Overview Service Definitions Modify WLMR01

Service Classes

Name	Period	Importance	Duration	Goal Type	Response Time Goal (hh:mm:ss.mtt)	Percentile Goal	Velocity Goal	CPU Critical	Resource Group	Workload	Description
AK1								No		STC	Vel
AK1	1	1		Velocity			92	No		STC	RT 8
AK2								No		STC	Vel 6
AK3								No		BATCH	defa
DB2BP4								No		BATCH	DB2
DB2BP5								No		BATCH	DB2
DB2BP6								No		BATCH	DB2
DISC								No		BATCH	Disc
ECP								No	ECP	BATCH	MEC
ELPAR								No	ELPAR	BATCH	MEC
ELPMAX								No	ELPMAX	BATCH	HIGH
ELPMIN								No	ELPMIN	BATCH	LOW
JBERHIGH								No		BATCH	OA1

Total: 49, Selected: 1

Apply Filter and Sort

OK Apply Reset

Expand

Collapse

New Period

Cut to Clipboard

Copy to Clipboard

Paste Periods

Move Periods

Delete...

View Cross References

View Messages

View Presence of Selected

Best-practice hints help to optimize service definitions

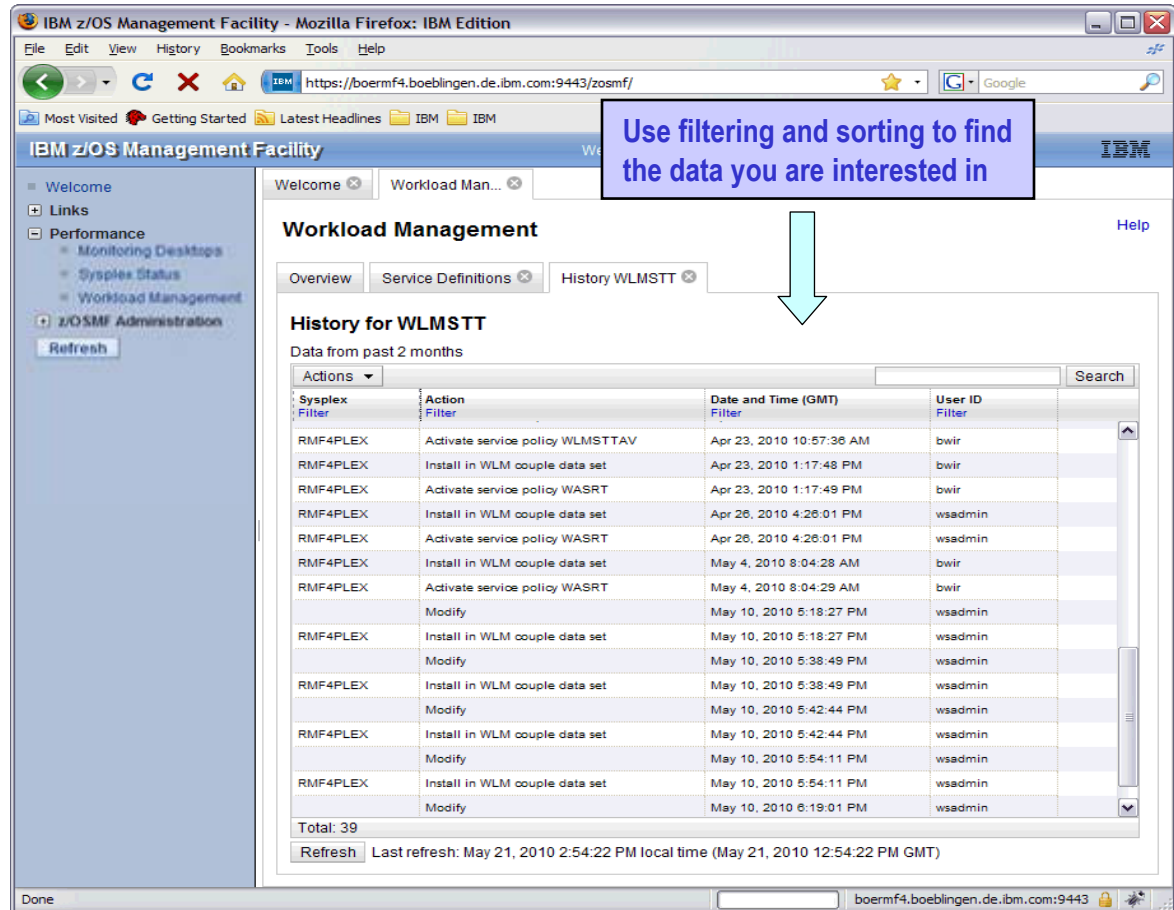
Copy to clipboard for insertion into another service definition

Easy to check where the element is used

# 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

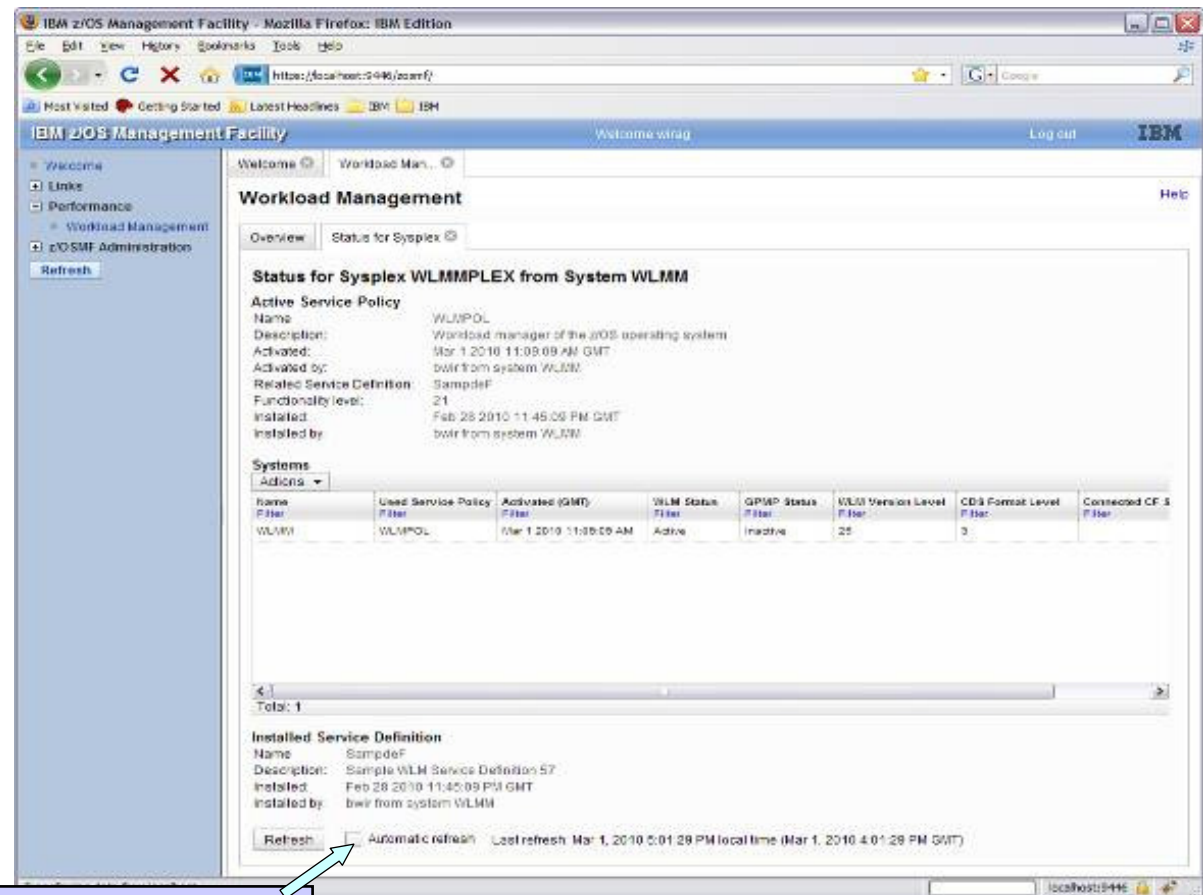
Total: 39

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)

## 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
  - WLM status report is automatically updated if the WLM status on the systems changes



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

https://localhost:2446/zosmf/

IBM z/OS Management Facility

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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: built from system WLMPLD  
Related Service Definition: SampleDF  
Functionality level: 21  
Installed: Feb 28 2010 11:45:09 PM GMT  
Installed by: built from system WLMPLD

Systems

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

Total: 1

Installed Service Definition

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

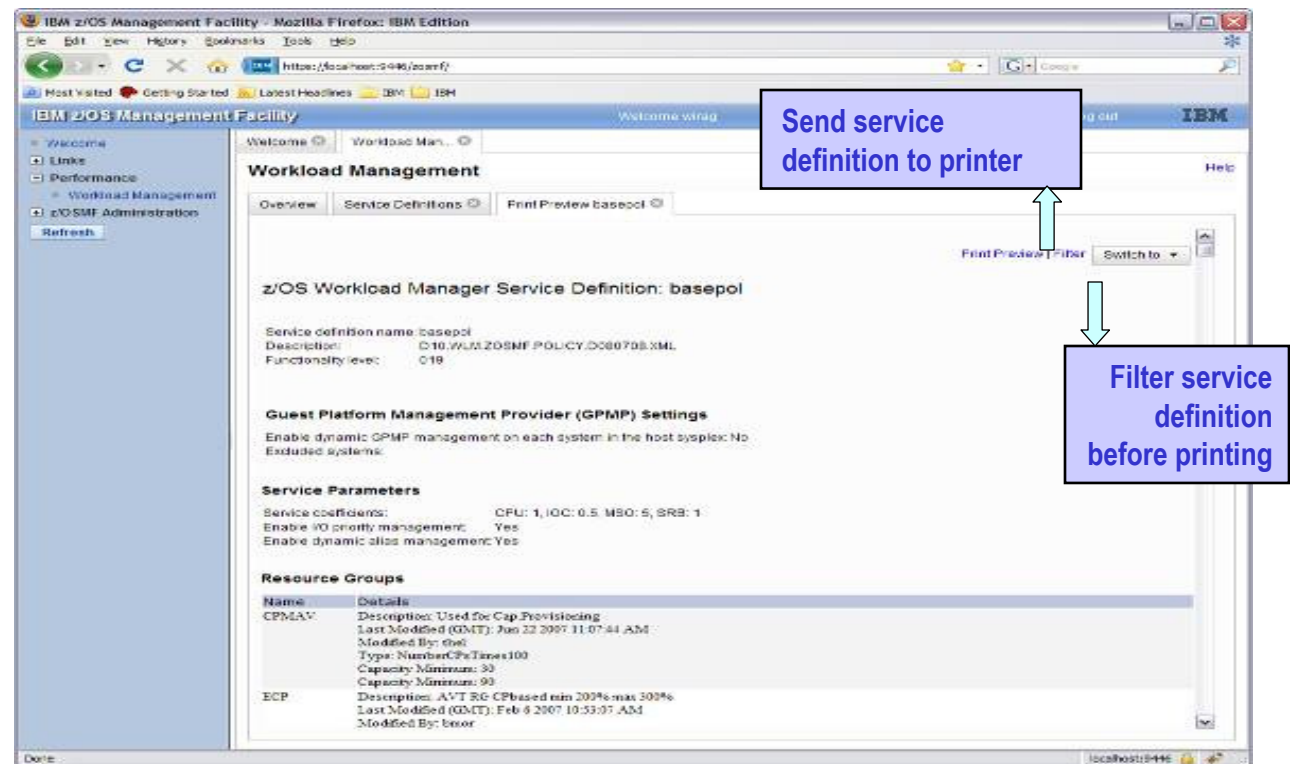
Refresh Automatic refresh Last refresh: Mar 1, 2010 5:01:29 PM local time (Mar 1, 2010 4:01:29 PM GMT)

Check checkbox to automatically refresh data

# z/OSMF Workload Management (V1R12)

## *Printing Service Definitions*

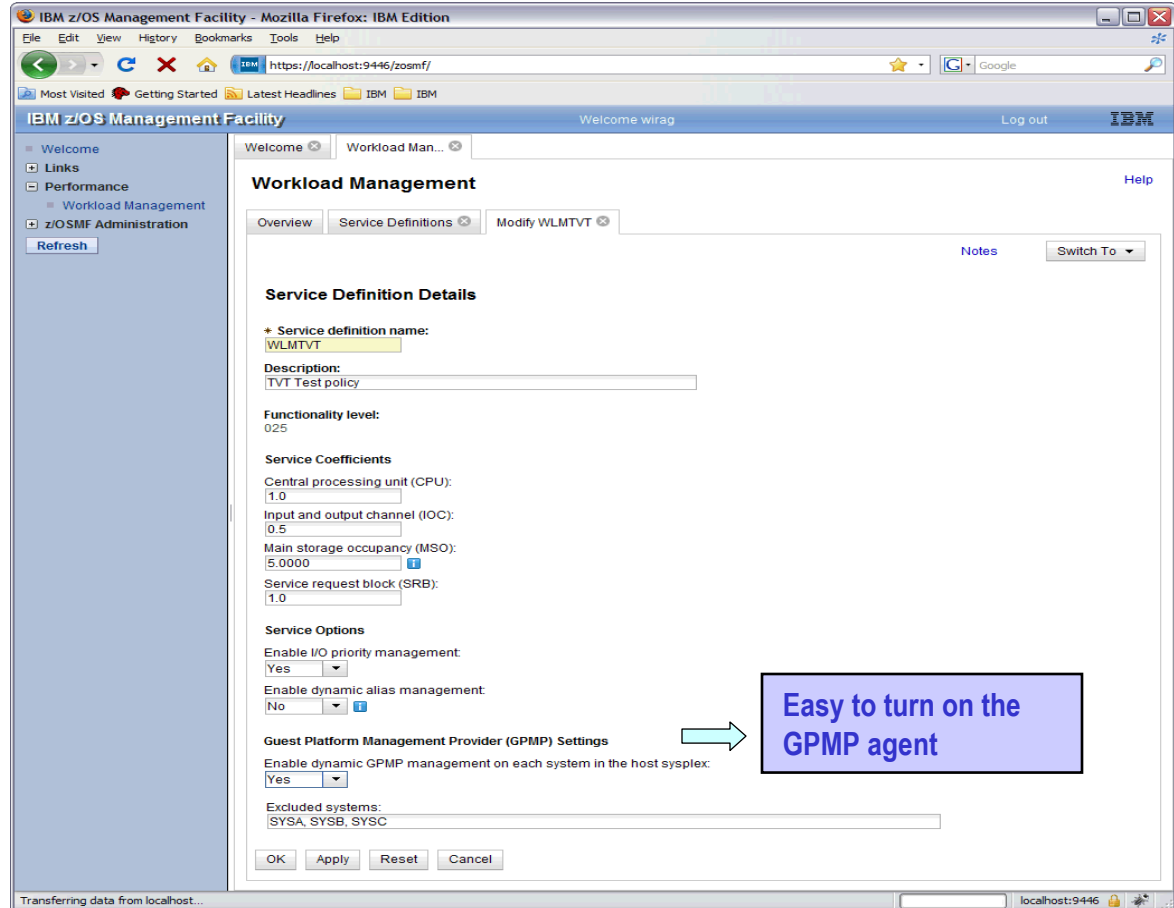
- **Print Preview** function provides
  - A clearly formatted overview of the service definition
  - filter service definition elements
  - apply service policies
- Hints, warnings can also be printed



# 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

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Workload Management

Overview Service Definitions Modify WLMTVT

Notes Switch To

**Service Definition Details**

Service definition name: WLMTVT

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: SYSAS, SYSB, SYSC

OK Apply Reset Cancel

Transferring data from localhost...

localhost:9446

Easy to turn on the GPMP agent

# z/OSMF Workload Management

## Updates for z/OSMF R13



- Separate authorization levels for
  - Viewing of service definitions, service policies, and WLM status
  - Installation and activation of service policies
  - Modification of service definitions
- Settings of a user are persisted between sessions
  - Sorting/filtering/configuration of (tree)-table columns
  - Recently used data set names during import/export of service definitions
  - Selections in Print Preview Filter dialog
  - Selections in Export to Local Workstation dialog

Properties for z/OSMF User

Role:  
z/OSMF User

Description (maximum 100 characters):  
User can perform any tasks that are not defined as z/OSMF administration tasks.

Tasks:

- ☒ Links
- ☒ Performance
  - ☒ Workload Management - invoke Workload Management and view service definitions, service policies, and WLM status
  - ☐ Workload Management Install - install and activate service definitions
  - ☐ Workload Management Modify - modify service definitions
- ☐ z/OSMF Administration

Users with this role:  
No users

Filter Formatted Service Definition

Display:

- ☐ All
- ☒ Selection

Selection:

- ☒ Service parameters
- ☒ Resource groups
- ☒ Workloads
- ☒ Service policies
- ☒ Report classes
- ☒ Classification groups
- ☒ Classifications
- ☐ Application environments
- ☐ Resources
- ☐ Scheduling environments
- ☒ Notes
- ☐ Messages

Do you want to include the description and modification details for the service definition elements?

- ☐ Yes
- ☒ No

OK Cancel Help

# Dashboards – add a metric

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Have integrated z/OS and Linux metrics monitoring in one view

Add Metric

Select or type the name of the metric group, the container for the metric. Then, select the resource and metric to be monitored.

★ Add to metric group:

★ Selected resource: S1,\*,STORAGE

★ Selected metric: *Make selection on Metric tab*

Resource Metric Filter Work Scope

Available resources:

- LOCALPLEX,SYSPLEX
- S1,MVS\_IMAGE
- S1,\*,I/O\_SUBSYSTEM
- S1,\*,PROCESSOR
- S1,\*,STORAGE**
- S1,\*,ENQUEUE
- S1,\*,OPERATOR
- S1,\*,SW\_SUBSYSTEMS
- ,3A236,CPC
- [?],SYSPLEX

Filter Pattern

Available resource names:

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

Copy >>

Resource name filter pattern: SCLM\*

Sorting

Sort by: Value descending

Filters

Lower threshold: Upper threshold: to

# z/OSMF Capacity Provisioning (R13)

## Benefits

	<b>Without</b> Capacity Provisioning in z/OSMF**	<b>With</b> Capacity Provisioning in z/OSMF**
View active CP policy and compare with data provided by RMF and WLM	Start stand-alone Windows-based client (CPCC) for Capacity Provisioning, connect to CPM and display active configuration report. Open z/OSMF in a browser and inspect RMF and WLM data.  5 – 10 minutes until all tasks are completed	Use integrated z/OSMF GUI to work with CP, RMF and WLM and compare data provided by each exploiter.  2 – 3 minutes until all tasks are completed
Operating person needs to reuse existing connection	Connection information like hostname, protocol and port needs to be manually gathered from primary person. Available domains must be known.  Up to 5 minutes	Usage of shared connection repository in z/OSMF. List of available domains is retrieved from server and shown to user.  No extra time to be spent
Installation of the capacity provisioning UI application**	Install Windows client (CPCC) on workstation.  Hard to install on managed clients, 20 minutes otherwise	Centrally managed z/OSMF application available to all authorized users.  No extra time to be spent

The z/OSMF Capacity Provisioning task requires the base feature z/OS Capacity Provisioning

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

## z/OSMF Software Deployment (R13)

### Benefits

Task	Without z/OSMF Software Deployment	With z/OSMF Software Deployment
Identify missing requisite PTFs on instances that will share resources with the deployed software.	<ul style="list-style-type: none"> <li>manually create and run SMP/E jobs to identify missing required service on other instances.</li> <li>Analyze smpe report output manually</li> <li>Missing coexistence PTFs can cause sysplex wide outages which require fallback to prior levels.</li> <li>Deep smpe skills required</li> </ul>	<ul style="list-style-type: none"> <li>2 wizard steps in the deployment checklist to generate the complete report</li> <li>Supports cross-system checking.</li> <li>Fewer skills, simpler</li> </ul>
Identify regressed software on the prior level instance and Identify required actions from PTF HOLDs.	<ul style="list-style-type: none"> <li>manually create and run SMP/E job to compare source with prior instance.</li> <li>Can not be done if source and prior instance are on different systems.</li> <li>Manually identify the delta and required actions</li> <li>No SMP/E report capability to compare source with the prior instance available.</li> <li>Ignoring actions or regressing service on the target system causes problems to occur.</li> </ul>	<ul style="list-style-type: none"> <li>3 wizard steps in the deployment checklist to generate the complete report</li> <li>Supports cross-system checking.</li> <li>Few minutes (can be combined with previous action)</li> </ul>
Identify complete content of software to be deployed.	<ul style="list-style-type: none"> <li>manually analyze SMP/E inventory to identify the correct content to deploy.</li> <li>More typical is to deploy entire volumes or data sets by prefix. This requires strict volume and data set name conventions, which contribute to user errors. For example: <ul style="list-style-type: none"> <li>Copy PDSE without UNIX file system (was common with WAS V6)</li> <li>Copy one data set without another causing partial APAR fixes.</li> <li>Renaming a data set causes it to not be copied.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Automatically use specified SMP/E inventory to identify all of the data sets that compose the source to be deployed.</li> </ul>

## z/OSMF Software Deployment (R13)

### Benefits

Task	With <b>out</b> z/OSMF Software Deployment	With z/OSMF Software Deployment
Modify the target software layout (data set names, location, and catalog).	Manual: <ul style="list-style-type: none"> <li>• Define target system datasets, volumes and catalogs.</li> <li>• ensure the desired catalogs will be updated and new HLQs are identified</li> <li>• Best-guess for volume free space and required space for target data sets.</li> <li>• Mistakes typically require cleanup and deployment jobs to be rerun.</li> <li>• Hours</li> </ul>	Automated checklist and wizard will; <ul style="list-style-type: none"> <li>• Analyze target system catalogs to identify which will be updated for the target data sets, accounting for new, deleted, and replaced data sets.</li> <li>• Calculate volume free space and ensure target data sets will fit. Account for data sets added, deleted, replaced.</li> <li>• Ensure no existing data sets are accidentally clobbered.</li> <li>• Few minutes</li> </ul>
Create deployment jobs.	<ul style="list-style-type: none"> <li>• Create jobs from scratch or copy IBM supplied samples. Manual and error prone.</li> <li>• Easily allows users to mistakenly deploy subsets of software.</li> <li>• Inhibits exploiting new technologies, like zFS.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete and accurate jobs are automatically created that always deploy complete software instances.</li> <li>• Supports current technologies.</li> </ul>
View the planned target system updates before running the jobs.	<ul style="list-style-type: none"> <li>• If done at all, manually compare source with the target system.</li> </ul>	<ul style="list-style-type: none"> <li>• Automatically generate reports to summarize the changes to the target system before making those changes.</li> <li>• Save reports for later audit or problem determination.</li> </ul>