



# New z/OSMF Software Management Capabilities (and user experience)

Greg Daynes  
IBM  
gdaynes@us.ibm.com

Thursday, August 15, 2013: 11:00 AM-12:00 PM  
Session 14249



# Trademarks

**The following are trademarks of the International Business Machines Corporation in the United States and/or other countries.**

IBM*	ServerPac*	* Registered trademarks of IBM Corporation
IBM (logo)	WebSphere*	
RACF*	z/OS*	

**The following are trademarks or registered trademarks of other companies.**

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Firefox is a trademark of Mozilla Foundation

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license there from.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Internet Explorer is a trademark of Microsoft Corp

InfiniBand is a trademark and service mark of the InfiniBand Trade Association.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency, which is now part of the Office of Government Commerce.

\* All other products may be trademarks or registered trademarks of their respective companies.

## Notes:

Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

IBM hardware products are manufactured from new parts, or new and serviceable used parts. Regardless, our warranty terms apply.

All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.

All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.

See url <http://www.ibm.com/legal/copytrade.shtml> for a list of IBM trademarks.

# Agenda

- **Brief Overview of Software Deployment**
- **Recent Enhancements to Software Deployment**
  - **Support for unmounted z/OS UNIX file system data sets**
  - **Support for deployment configuration copy**
  - **Support for granular control over which users can view and modify deployment task artifacts**
- **New Enhancement NOW Available!!!**
  - **Software Management**
- **Summary**
- **Software Management Usage at SAS**
- **Backup**

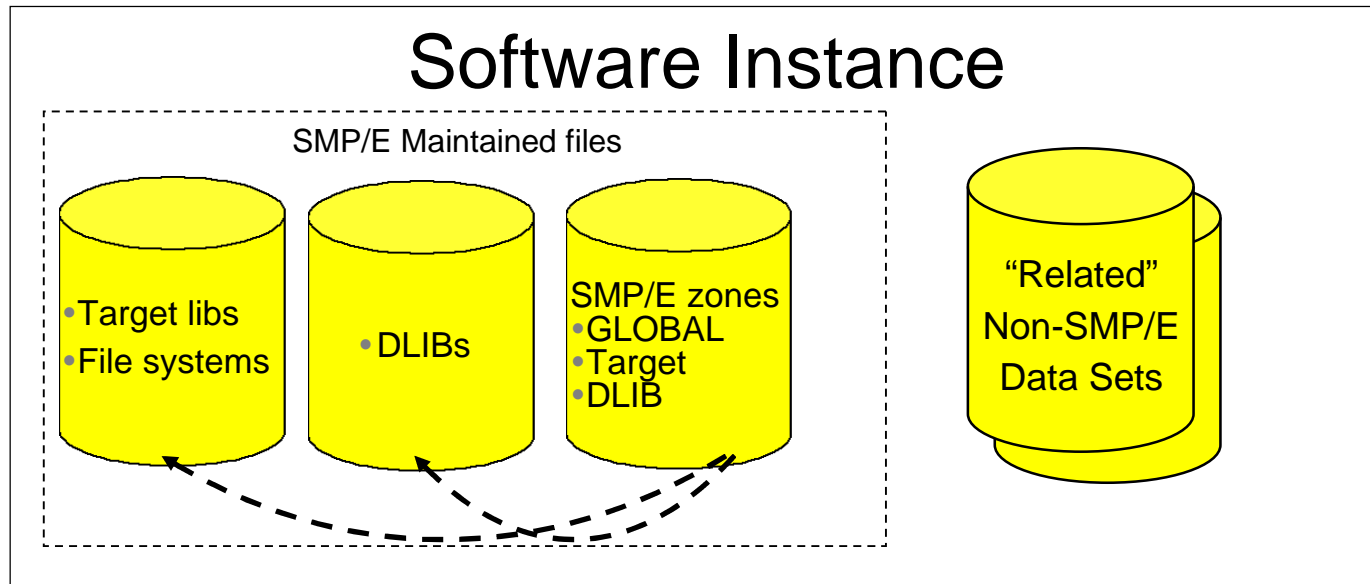
# Agenda

- ➔ **Brief Overview of Software Deployment**
  - **Recent Enhancements to Software Deployment**
    - Support for unmounted z/OS UNIX file system data sets
    - Support for deployment configuration copy
    - Support for granular control over which users can view and modify deployment task artifacts
  - **New Enhancement NOW Available!!!**
    - Software Management
  - Summary
  - Software Management Usage at SAS
  - Backup

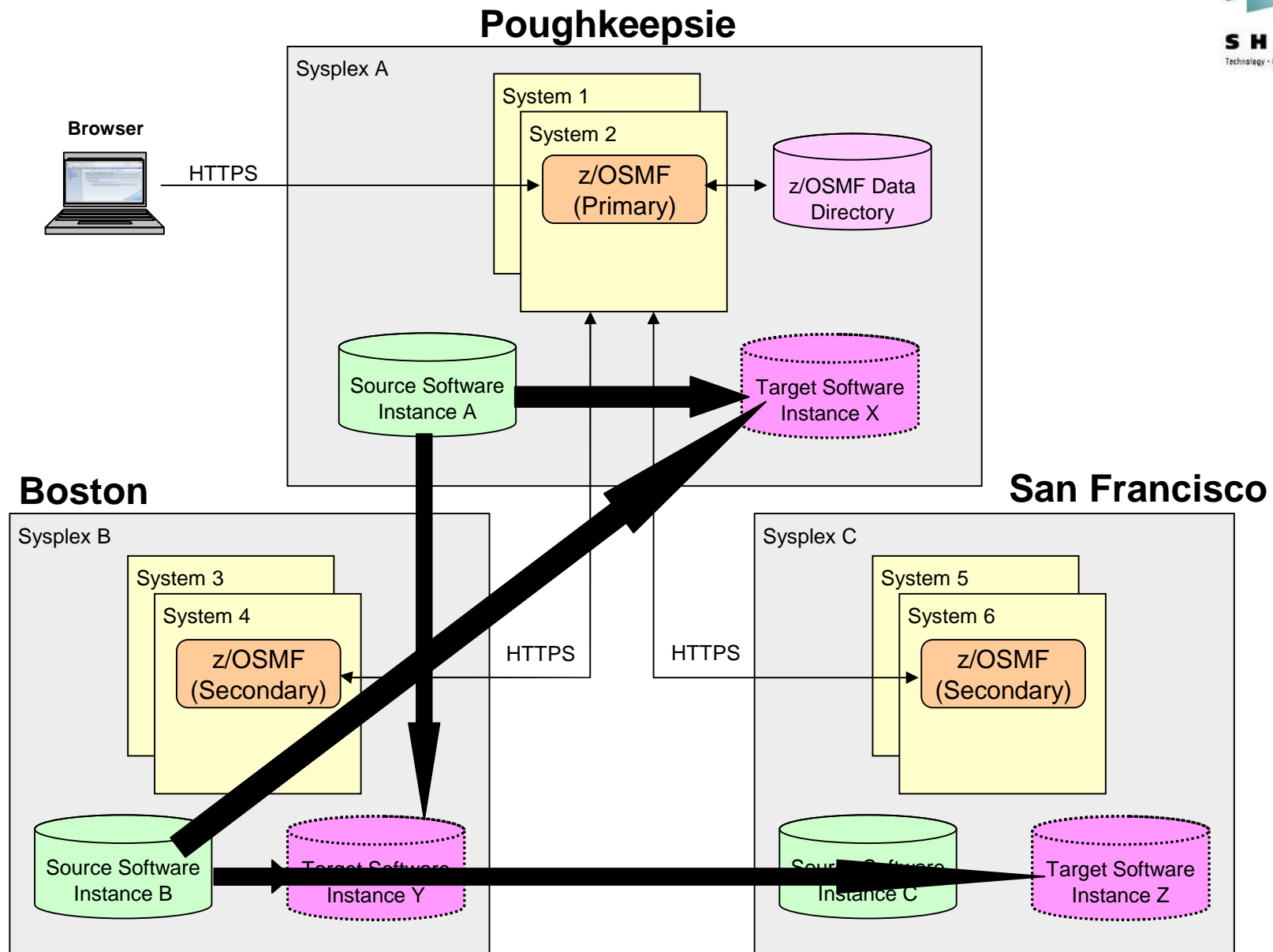
# Software Deployment

- z/OSMF V1.13 introduced a Software Deployment function
  - Web-based application
  - User interaction is via a browser on a workstation
  - z/OSMF and Software Deployment will be active on one system in a sysplex, allowing access to shared DASD
    - Locally, either on a single system or system-to-system within a sysplex
    - Remotely, system-to-system across a network and multiple sysplexes
  - Introduced a concept of a software instance

# Software Instance



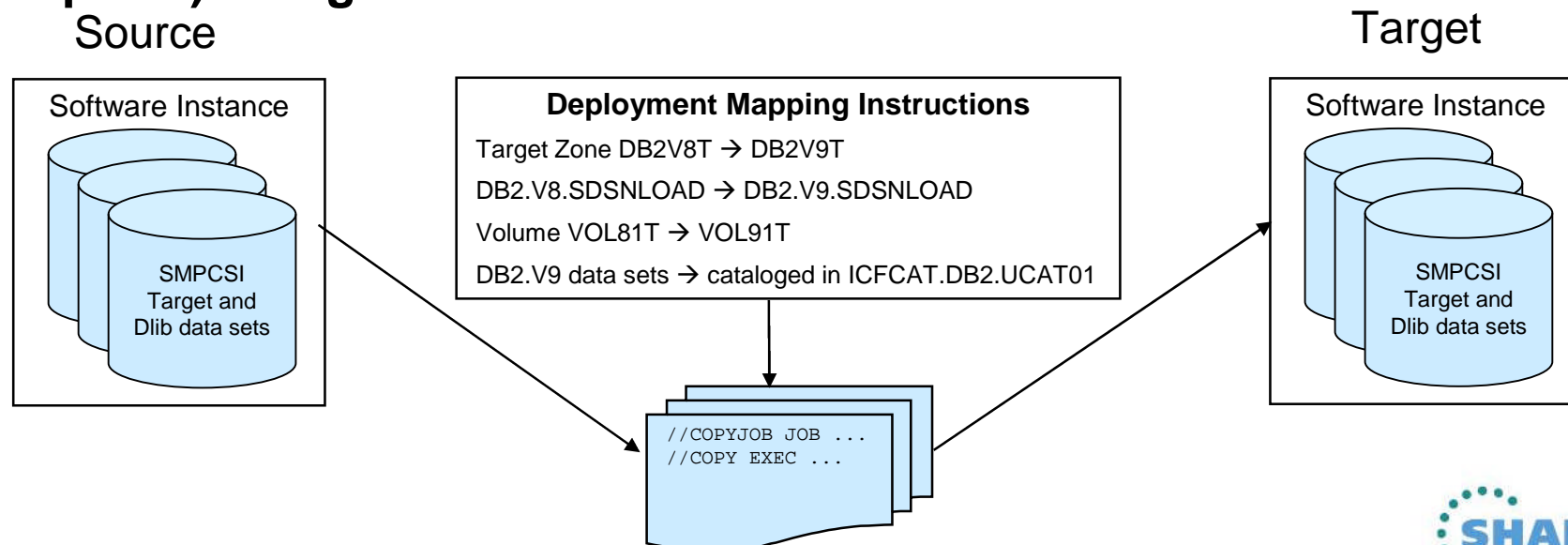
- For Software Deployment, the primary purpose of a software instance was to identify the data sets to be deployed
  - Used to describe the SMP/E Global zone and target zone(s) that will be analyzed to identify the data sets to copy.
    - DLIB data sets and the DLIB zone are optional
  - Can also include non-SMP/E managed data sets
    - Other runtime libraries
    - Configuration files and operational data sets
    - Non-SMP/E maintained ISV or user libraries
    - Non-SMP/E maintained zFS or HFS filesystems



**Software instances can be viewed or deployed throughout your enterprise**

# Basic Deployment Operation Flow

1. Identify a Source Software Instance.
2. Check for missing requisites and possible regressions.
3. Select the deployment objective.
4. Create a Deployment that describes where the source data sets will be copied.
5. Generate Deployment Jobs.
6. Execute generated Jobs to copy the source and create (or replace) a target Software Instance.





# z/OSMF Software Deployment Summary

- **The z/OS Software Deployment function of z/OSMF will provide rigor in the deployment of any SMP/E installed software.**
- **It will ensure:**
  - ALL affected parts are copied
  - The zone(s) is carried forward with the software
- **It will help to ensure:**
  - Cross system requisites are satisfied (coexistence and preconditioning)
  - Cross product requisites (on the same system) are satisfied
  - Software fixes are not regressed
- **Can be used to create a clone for subsequent installation or execution.**
- **Software Deployment will save user specified information and allow for reuse**
  - Subsequent deployment operations of the same source will require little or no user input.
- **Local and Remote deployments are supported**

# Agenda

- Brief Overview of Software Deployment
- ➔ **Recent Enhancements to Software Deployment**
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- New Enhancement NOW Available!!!
  - Software Management
- Summary
- Software Management Usage at SAS
- Backup

# Agenda

- Brief Overview of Software Deployment
- Recent Enhancements to Software Deployment
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- ➔ **New Enhancement NOW Available!!!**
  - **Software Management**
- Summary
- Software Management Usage at SAS
- Backup

# Software Management

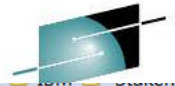
- IBM introduced a Software Management task that extends the Software Deployment task to provide additional actions on software instances.
  - z/OSMF PTFs UK79887, UK83841, UK83825, UK83828, UK83833, UK83836, UK83842, and UK83852
    - These PTFs provide additional new function beyond Software Management
    - See <http://www-03.ibm.com/systems/z/os/zos/zosmf/enhancements.html> for more information
    - Installation requires reconfiguration of z/OSMF
  - Requisite z/OS SMP/E PTF UO01422

# z/OSMF V1.13 Software Management ...



- **In addition to deploying a software instance, the Software Management task will:**
  - Allow inspection of a software instance to view the product, feature, and FMID content;
  - View the physical data sets that compose a software instance; and
  - Perform actions to analyze and report on software instances and installed products.
    - Identify software products that are approaching, or have reached, end of service support.
    - Validate the SMP/E structure and content of a software instance is correct.
    - Identify missing HIPER and PE fixes, and fixes associated with one or more fix categories
    - 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.

# z/OSMF V1.13 Software Management ...



IBM z/OS Management

New/Renamed Software Management selection

mfdev6

- Welcome
- + Configuration
- + Links
- + Performance
- + Problem Determination
- **Software**
  - **Software Management**
- + z/OS Classic Interfaces
- + z/OSMF Administration
- + z/OSMF Settings

Refresh

## Welcome to IBM z/OS Management Facility

IBM® z/OS® Management Facility (z/OSMF) provides a framework for managing various aspects interface. By streamlining some traditional tasks and automating others, z/OSMF can help to simplify management.

To learn more about z/OSMF, visit the links in the Learn More section.

To start managing your z/OS systems, select a task from the navigation area.

### Learn More:

[What's New](#)

[z/OSMF tasks at a glance](#)

[Getting started with z/OSMF](#)

**You see a list of objects in your software inventory.  
You can click on a link to view details those objects**

Welcome

[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 date and time data. Indicate whether to display or suppress information messages.

The Software Management task, previously named the Deployment task, contains the software deployment functions along with additional software management functions. The Software Management task helps you streamline the software management process by providing a centralized location that you can use to manage your z/OS software.

Select Software Instances to view details about software instances

[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 date and time data. Indicate whether to display or suppress information messages.




You will see a list of software instances already defined

Software Management

## Software Instances

Actions ▾

Name	System	Messages	Description	Activity	Global Zone CSI	Target
Filter	Filter	Filter	Filter		Filter	
<input type="checkbox"/> MASTER_SMPEV3.6_WITH_PTF S	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product with PTFs.		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMF
<input type="checkbox"/> MASTER_SMPEV3.6_WITHOUT_PTF S	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product without any PTFs.		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMF
<input type="checkbox"/> MASTER_ZOSV1.12	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains z/OS V1R12 at RSU1105.		ZOSMF.SWDEPLOY.GLOBAL.CS	TGTZ
<input type="checkbox"/> DEMO_SMPEV3.6_WITH_PTF S	LOCAL	 IZUD809I	Completed demo software instance, of SMP/E V3.6 with PTFs.		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMF
<input type="checkbox"/> MASTER_zOS_R13_w/Other_Product	LOCAL		z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management		SMLAB01.GLOBAL.CSI	COB PLI41

Total: 5, Selected: 0

Refresh

Last refresh: Jan 11, 2013 9:31:58 AM

Close

You can scroll right

You will now see information on the target zones defined in the software instance, and any "category" associated with the software instance.

Software Management

### Software Instances

Actions | Match: All filters

Name	System	Target Zones	Categories	Product, Feature, and FMID Information Retrieved (Local)
Contains "Master"	Filter			Filter
<input type="checkbox"/> MASTER_SMPEV3.6_WITH_PTFS	LOCAL	TSMP36P		Jan 14, 2013 10:51:58 AM
<input type="checkbox"/> MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL	TSMP36		Jan 9, 2013 4:13:16 PM
<input type="checkbox"/> MASTER_ZOSV1.12	LOCAL	TGTZ12		Jan 9, 2013 4:13:39 PM
<input type="checkbox"/> MASTER_zOS_R13_w/Other_Product	LOCAL	COB320T, DT910T, PLI410T, Z1130T		Jan 9, 2013 5:39:55 PM

You can scroll right, again

You will see information on who created the software instance, when it was last modified, and by whom.

Software Management ▶ Software Instances

### Software Instances

Actions ▼ Match: All filters

Name	System	Product, Feature, and FMID Information Retrieved (Local)	Last Modified (Local)	Modified By	Created (Local)	Created By
Contains "Master"	Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> MASTER_SMPEV3.6_WITH_PTFS	LOCAL	Jan 14, 2013 10:51:58 AM	Jun 29, 2012 5:16:51 PM	MFUSR20	Jun 29, 2012 1:32:26 PM	MFUSR14
<input type="checkbox"/> MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL	Jan 9, 2013 4:13:16 PM	Jun 29, 2012 5:18:24 PM	MFUSR20	Jun 29, 2012 1:34:31 PM	MFUSR14
<input type="checkbox"/> MASTER_ZOSV1.12	LOCAL	Jan 9, 2013 4:13:39 PM	Jun 29, 2012 5:11:00 PM	MFUSR20	Jun 29, 2012 1:36:53 PM	MFUSR14
<input type="checkbox"/> MASTER_zOS_R13_w/Other_Product	LOCAL	Jan 9, 2013 5:39:55 PM	Jan 9, 2013 5:39:53 PM	GDAYNES	Jan 7, 2013 1:51:35 PM	GDAYNES

You can perform Actions on selected software instances

**Software Instances**

Actions ▾

Name	System	Messages	Description	Activity	Global Zone CSI	Target
Filter	Filter	Filter	Filter		Filter	
<input type="checkbox"/> MASTER_SMPEV3.6_WITH_PTF S	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product with PTFs.		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMF
<input type="checkbox"/> MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product without any PTFs.		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMF
<input type="checkbox"/> MASTER_ZOSV1.12	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains z/OS V1R12 at RSU1105.		ZOSMF.SWDEPLOY.GLOBAL.CS	TGTZ
<input type="checkbox"/> DEMO_SMPEV3.6_WITH_PTFS	LOCAL	IZUD809I	Completed demo software instance, of SMP/E V3.6 with PTFs.		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMF
<input type="checkbox"/> MASTER_zOS_R13_w/Other_Product	LOCAL		z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management		SMLAB01.GLOBAL.CSI	COB: PLI41

Total: 5, Selected: 0

Last refresh: Jan 11, 2013 9:31:58 AM

Welcome x Software Man... x

Software Management > Software Instances

### Software Instances

Actions when a single Instance is selected

Actions Match: All filters

Name	Activity	Global Filter
MAST	ZOS	
MAST	ZOS	
MAST	ZOS	
MAST	SML	

- View > Properties: Products, Features, and FMIDs Data Sets
- View > End of Service: Software Instance Validation, Missing Critical Service, Missing FIXCAT SYSMODs, SYSMOD Search, Software Instance Comparison...
- Modify
- Open Deployments
- Copy...
- Remove...
- Retrieve Product, Feature, and FMID Information
- Maintenance Reports
- Add...
- Show Hidden Maintenance Reports
- Select All
- Deselect All
- Configure Columns...
- Modify Filters...
- Hide Filter Row
- Clear Filters
- Modify Sort...
- Clear Sorts

**Actions that are not valid (and therefore not operational) are grayed out and not selectable.**

Software Management ▶ Software Instances

## Software Instances

Actions when multiple instances are selected

The screenshot shows the 'Software Management' interface with a table of software instances. The 'Actions' menu is open, displaying a list of actions. The 'View' action is selected, and its sub-menu is also open, showing options like 'Properties', 'Products, Features, and FMIDs', and 'Data Sets'. The 'End of Service' sub-menu is also open, showing options like 'Software Instance Validation' and 'Missing Critical Service'. The 'Remove...' and 'Retrieve Product, Feature, and FMID Information' actions are grayed out. The table below the menu shows several instances with columns for Name, Activity, and Global Filter.

Name	Activity	Global Filter
MAST	ZOS	Filter
MAST	ZOS	
MAST	ZOS	
MAST	SML	

**Let's look at each  
of the capabilities  
in more detail**

Welcome x Software Man... x

Software Management ▶ Software Instances

### Software Instances

Viewing Software Instance Properties is identical to existing Software Deployment capabilities

Actions ▼ Match: All filters

Name	Activity	Global Filter
<input type="checkbox"/> MAST		ZOS
<input type="checkbox"/> MAST		ZOS
<input type="checkbox"/> MAST		ZOS
<input checked="" type="checkbox"/> MAST		SML

View ▶ Properties  
Products, Features, and FMIDs  
Data Sets

Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product with PTFs.

Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product without any PTFs.

Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains z/OS V1R12 at RSU1105.

z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management Lab



Multiple tabs are available to view details of this specific software instance. You can see the description, what SMP/E zones are defined, as well as any non-SMP/E managed data sets

Software

## View MASTER\_zOS\_R13\_w/Other\_Product

General SMP/E Zones Non-SMP/E Managed Data Sets

Name:

MASTER\_zOS\_R13\_w/Other\_Product

Description: (maximum 256 characters, currently 0 characters)

z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management Lab

Categories:

There is no data to display.

Action Summary

Action	Date and Time (Local)	User
Modified	Jan 9, 2013 5:39:53 PM	GDAYNES
Created	Jan 7, 2013 1:51:35 PM	GDAYNES
Locked		

Close

The SMP/E Zones tab shows a list of GLOBAL zone CSI data sets and which is used for this software instance, as well as what SMP/E target zones are defined.

Software Management > View SMP/E Zones

### View MASTER\_ZONE Other\_Product

General SMP/E Zones Non-SMP/E Managed Data Sets

#### Global Zones

CSI Data Set	System	Description	Activity	Last Modified (Local)	Modified By	L
<input type="radio"/> ZOSMF.SWDEPLOY.GLOBAL.CSI	LOCAL	Master GLOBAL CSI for Software Deployment Lab		Jan 5, 2012 10:32:12 AM	MFUSR01	
<input checked="" type="radio"/> SMLAB01.GLOBAL.CSI	LOCAL	Global zone data set fro the z/OSMF Software Management Lab		Jan 2, 2013 10:34:49 AM	MFUSR01	

Total: 2, Selected: 1

#### Target Zones:

COB320T  
DT910T  
PLI410T  
Z1130T

Close

The non-SMP/E Managed Data Set tab shows a list of user defined data sets associated with this software instance. They will be included in a software deployment of this instance.

Software Management ▶ Software Instances ▶ View Software Instance

## View MASTER\_zOS\_R13\_w/...\_Product

General

SMP/E Zones

Non-SMP/E Managed Data Sets

### Data Sets

Actions ▼

Name	Volume
<a href="#">Filter</a>	<a href="#">Filter</a>
SYS1.PARMLIB	SHAR03
SYS1.PROCLIB	SHAR03

**Software Instances**

You can view the Products, Features, and FMIDs that comprise one or more software instances

Actions ▼ Match: All filters

Name	Activity	Global Zone CSI	Target
Starts		Filter	
MASTI	Source Software Instance for the	ZOSMESWDEPLOYGLOBAL.CS.TSMP36	

View  
Modify  
Open Deployments  
Copy...

Properties  
Products, Features, and FMIDs  
Data Sets

The View Products, Features, and FMIDs Action will produce similar information to the SMP/E Planning Migration Assistant Products Applied report, or SMP/E List commands. However, this action:

- Will display additional information, not available through SMP/E
- Can be performed against multiple software instances at the same time
- Can be performed against software instances throughout your enterprise
- Will enable you to:
  - Sort and filter the results to hone in on what you are looking for
  - Click on a link to find additional information on the product
  - Perform “drill down” actions on selected objects

You can use this information to identify which products need to be ordered for a future upgrade, to determine if you have the prerequisites installed for a specific function, and to provide evidence of what is installed to an auditor, procurement team, or operations staff.

The products, features and FMIDs are listed in a tree table

Software Management > Software Instances > View Products, Features, and FMIDs

### View Products, Features, and FMIDs

Products, Features, and FMIDs by Software Instance

Actions Table view: Tree

Software Instance / Product / Feature / FMID Filter	System Filter	Messages Filter	Product, Feature, and FMID Information Retrieved (Local) Filter	Release Filter	Product ID Filter	Vendor Filter
<input type="checkbox"/> MASTER_SMPEV3.6_WITH_PTFS	LOCAL		Jan 14, 2013 10:51:58 AM			
<input type="checkbox"/> System Modification Program Extended for z/OS				03.06.00	5655-G44	IBM
<input type="checkbox"/> SMP/E V3 Base						
<input type="checkbox"/> HBCNC00						
<input type="checkbox"/> HBCND0B						
<input type="checkbox"/> HMP1J00						
<input type="checkbox"/> MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL		Jan 9, 2013 4:13:16 PM			
<input type="checkbox"/> System Modification Program Extended for z/OS				03.06.00	5655-G44	IBM
<input type="checkbox"/> SMP/E V3 Base						
<input type="checkbox"/> HBCNC00						
<input type="checkbox"/> HBCND0B						
<input type="checkbox"/> HMP1J00						
<input type="checkbox"/> MASTER_ZOSV1.12	LOCAL		Jan 9, 2013 4:13:39 PM			

**Note: Software Management shows installed products, to see whether the products are actually used you will need other tools such as Tivoli Asset Discovery for z/OS (TADz)**

You can scroll right

Total: 1784, Selected: 0

Refresh

Last refresh: Jan 14, 2013 5:00:54 PM

Close

# The General Availability date, End of Service dates, and Additional Product Information are not available in batch SMP/E reports

Software Management > Software Instances > View Products, Features, and FMIDs

Help

## View Products, Features, and FMIDs

Products, Features, and FMIDs by Software Instance

Table view: Tree

Software Instance / Product / Feature / FMID	System	General Availability	End of Service	Additional Product Information	Product Information File Version	FMID Description	FMID Target Zones
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
MASTER_SMPEV3.6_WITH_PTFS	LOCAL						
System Modification Program Extended for z/OS		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>	Jan 5, 2013		
SMP/E V3 Base							
HBCNC00							TSMP36P
HBCND0B							TSMP36P
HMP1J00							TSMP36P
MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL						
System Modification Program Extended for z/OS		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>	Jan 5, 2013		
SMP/E V3 Base							
HBCNC00						SMP/E Planning and Migration Assistant Software Info Base	TSMP36

You can click the Additional Product Information link and view the IBM Sales Manual description of the product in another tab of your browser session

You can scroll right, again

Total: 1784, Selected: 0

Refresh Last refresh: Jan 14, 2013 5:00:54 PM

Close

Offering Information

IBM Sales Manual

Feedback

## 5655-G44 IBM System Modification Program Extended (SMP/E) for z/OS V3.6

IBM United States Sales Manual  
Revised: July 12, 2011.

Related links

- Subscribe to IBM

### Table of contents

- Product Life Cycle Dates
- Program Number
- Abstract
- Product Positioning
- Highlights
- Description
- Technical Description
- Planning Information
- Security, Auditability, and Control

### Product Life Cycle Dates

Program Number	VRM	Announced	Available	Marketing Withdrawn	Service Discontinued
5655-G44	3.06.0	2011/07/12	2011/09/30	-	-
5655-G44	3.05.0	2008/08/05	2008/09/26	-	-
5655-G44	3.04.0	2005/07/26	2005/09/30	2008/09/26	2010/09/30
5655-G44	3.03.0	2004/08/10	2004/09/24	2005/09/30	2007/09/30
5655-G44	3.02.0	2003/05/13	2003/05/30	2004/09/24	2007/09/30
5655-G44	3.01.0	2001/09/11	2001/10/26	2003/05/30	2007/03/31

**Scrolling right again shows FMID description and the target zones where the FMID is installed. As with all z/OSMF tables, you can specify the order in which the columns appear (or if any are hidden)**

Software Management

## View Products, Features, and FMIDs

Products, Features, and FMIDs by Software Instance

Actions ▼ Table view: Tree

Software Instance / Product / Feature / FMID Filter	System Filter	Product Information File Version Filter	FMID Description Filter	FMID Target Zones Filter
<input type="checkbox"/> <input type="checkbox"/> MASTER_zOS_R13_w/Other_Product	LOCAL			
<input type="checkbox"/> <input type="checkbox"/> Enterprise COBOL for z/OS and OS/390		Jan 5, 2013		
<input type="checkbox"/> <input type="checkbox"/> COBOL Alt Function				
<input type="checkbox"/> <input type="checkbox"/> H26L320			IBM ENTERPRISE COBOL FOR Z/OS AND OS/390 BASE	COB320T
<input type="checkbox"/> <input type="checkbox"/> J26L32H			IBM ENTERPRISE COBOL FOR Z/OS AND OS/390 HFS	COB320T
<input type="checkbox"/> <input type="checkbox"/> J26L321			IBM ENTERPRISE COBOL FOR Z/OS AND OS/390 ENU	COB320T
<input type="checkbox"/> <input type="checkbox"/> J26L322			IBM ENTERPRISE COBOL FOR Z/OS AND OS/390 JPN	COB320T
<input type="checkbox"/> <input type="checkbox"/> Cobol Alt Function JPN				
<input type="checkbox"/> <input type="checkbox"/> H26L320			IBM ENTERPRISE COBOL FOR Z/OS AND OS/390 BASE	COB320T

Total: 286, Selected: 0



### View Products, Features, and FMIDs

Products, Features, and FMIDs by Software Instance

Actions		Table view: Tree		
Messages Filter	Product, Feature, and FMID Information Retrieved (Local) Filter	Release Filter	Product ID Filter	
		Jul 24, 2013 3:29:17 PM		

- View
- Retrieve Product, Feature, and FMID Information
- Maintenance Reports
- Expand
- Collapse
- Show Hidden Maintenance Reports
- Retrieve End of Service Information...
- Select All
- Deselect All
- Configure Columns...
- Modify Filters...
- Hide Filter Row
- Clear Filters
- Modify Sort...
- Clear Sorts
- Export Table Data
- Print Table Data
- Expand All
- Collapse All
- Switch to Non-Tree View

- Current View
- All Data

z/OSMF V2.1 added the ability to export or print the View Products, Features, and FMIDs for a software instance. You can export/print the current view or all data

Total: 14

Refresh Last refresh: Jul 24, 2013 5:11

Close

**View Products, Features, and FMIDs**

Products, Features, and FMIDs by Software Instance

Actions | Table view: Tree

Property	Messages	Product, Feature, and FMID Information Retrieved (Local)	Release	Product ID
		Filter	Filter	Filter
		Jan 9, 2013 5:39:55 PM		

By selecting a software instance, you can then “drill down” in that software instance and perform an Action, such as view data sets. This capability is not available outside a software deployment today!

You can use the View Data Sets page in the Software Management task to identify all the data sets included in the software instance. The data sets included in the software instance are divided into two groups

- SMP/E managed – A SMP/E managed data set is dynamically discovered based on definitions in the target (and optionally DLIB) zones.
- non-SMP/E managed - A non-SMP/E managed data set was user specified when the software instance was defined or modified.

You can use this information to determine what will be deployed during a deployment, to identify which data sets will be affected if a product is updated or removed, and to determine whether the data sets conform to your installation's policies for naming conventions, placements, and so on.

**Software Management dynamically analyzes the GLOBAL, target and distribution zones to determine the list of data sets that make up the software instance. The list is limited to those data sets (DDDEFs) that can possibly be updated using SMP/E commands and any non-SMP/E managed data sets that were defined.**

The screenshot shows a software management interface with a table of data sets. A dialog box is overlaid on the table, displaying a progress indicator at 1% and a 'Cancel' button. A yellow callout box points to the dialog box with the text: 'Pop-up window with a progress indicator to alert you that this might take a few minutes, and allow you to cancel'.

Software Instance / Product / Feature / FMID	System	Messages	Product, Feature, and FMID Information Retrieved (Local)	Release	Product ID	Vendor	General Av
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
[-] MASTER_zOS_R13_w/Other_Product	LOCAL		Jan 9, 2013 5:39:55 PM				
[-] Enterprise COBOL for z/OS and OS/390				03.02.00	5655-G53	IBM	Sep 27, 2002
[-] COBOL Alt Func							
[-] H26L320							
[-] J26L32H							
[-] J26L321							
[-] J26L322							
[-] Cobol Alt Function JPN							
[-] H26L320							
[-] J26L32H							

Total: 286, Selected: 286

Refresh Last refresh: Jan 14, 2013 11:02:51 AM

Close

# Data sets are displayed in ISPF Data Set List (3.4) like format showing the data sets and its attributes.

Software Management > Software Inst... > View Data Sets

## View Data Sets

Selected software instance: MASTER\_zOS\_R13\_w/Other\_Product on sys

SMP/E Managed Data Sets    Non-SMP/E Managed Data Sets

Actions ▼

Data Set Name	Messages	Zone Names	Volumes	Data Set Type	RECFM	LRECL	BLKSIZE	Tracks	% Used	Extents
<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>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
ABJ.H09F210.AABJCLST		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	7	100	1
ABJ.H09F210.AABJLCP		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	57	100	1
ABJ.H09F210.AABJMLIB		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	1	100	1
ABJ.H09F210.AABJMOD1		Z1130D, Z1130T	SHAR02	PDS	U		32760	13	100	1
ABJ.H09F210.AABJPLIB		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	11	100	1
ABJ.H09F210.AABJSAM1		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	10	100	1
ABJ.H09F210.AABJSAM2		Z1130D, Z1130T	SHAR02	PDS	VB	1028	27998	32	100	1
ABJ.H09F210.AABJSLIB		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	3	100	1
ABJ.H09F210.AABJTLIB		Z1130D, Z1130T	SHAR02	PDS	FB	80	27920	1	100	1
ABJ.H09F210.SABJCLST		Z1130T	SHAR01	PDS	FB	80	27920	7	100	1
ABJ.H09F210.SABJLCP		Z1130T	SHAR01	PDS	FB	80	27920	57	100	1
ABJ.H09F210.SABJMLIB		Z1130T	SHAR01	PDS	FB	80	27920	1	100	1
ABJ.H09F210.SABJMOD1		Z1130T	SHAR01	PDS	U		32760	17	100	1
ABJ.H09F210.SABJPLIB		Z1130T	SHAR01	PDS	FB	80	27920	11	100	1
ABJ.H09F210.SABJSAM1		Z1130T	SHAR01	PDS	FB	80	27920	10	100	1
ABJ.H09F210.SABJSAM2		Z1130T	SHAR01	PDS	VB	1028	27998	32	100	1
Total: 1173										

Close

You can use filters to identify conforming/non-conforming

1. Data set names
2. Data set placement, possibly based on data set type
3. Data sets with more than one extent

### View Data Sets

Selected software instance: MASTER\_zOS\_R13\_w/Other\_Product on system LOCAL

SMP/E Managed Data Sets Non-SMP/E Managed Data Sets

Actions ▾

Data Set Name	Messages	Zo
Filter	Filter	Filter
ABJ.H09F210.AABJCLST		Z11
ABJ.H09F210.AABJLCP		Z11
ABJ.H09F210.AABJMLIB		Z11
ABJ.H09F210.AABJMOD1		Z11
ABJ.H09F210.AABJPLIB		Z11
ABJ.H09F210.AABJSAM1		Z11
ABJ.H09F210.AABJSAM2		Z11
ABJ.H09F210.AABJSLIB		Z11
ABJ.H09F210.AABJTLIB		Z11
ABJ.H09F210.SABJCLST		Z11
ABJ.H09F210.SABJLCP		Z11
ABJ.H09F210.SABJMLIB		Z11
ABJ.H09F210.SABJMOD1		Z11
ABJ.H09F210.SABJPLIB		Z11
ABJ.H09F210.SABJSAM1		Z11
ABJ.H09F210.SABJSAM2		Z1130T
Total: 1173		

#### Modify Filters

Match:   Match case

Columns: Filters

- ▾ Volumes
- Data Set Type
- RECFM
- LRECL
- BLKSIZE
- Tracks
- % Used
- ▾ Extents

Condition:  Value:

For example, you can set a filter on the Extents column to easily identify data sets with more than one extent

LRECL	BLKSIZE	Tracks	% Used	Extents
Filter	Filter	Filter	Filter	Filter
80	27920	7	100	1
80	27920	57	100	1
80	27920	1	100	1
	32760	13	100	1
80	27920	11	100	1
80	27920	10	100	1
1028	27998	32	100	1
80	27920	3	100	1
80	27920	1	100	1
80	27920	7	100	1
80	27920	57	100	1
80	27920	1	100	1
	32760	17	100	1
80	27920	11	100	1
80	27920	10	100	1
1028	27998	32	100	1

Close

**With the filter set, you can easily see the 10 (out of 1173) data sets that have secondary extents. You could further filter the Volumes column to identify those data sets with secondary extents that reside on the SYSRES.**

SMP/E Managed Data Sets

Non-SMP/E Managed Data Sets

Actions ▼ Match: All filters

Data Set Name	Messages	Zone Names	Volumes	Data Set Type	RECFM	LRECL	BLKSIZE	Tracks	% Used	Extents
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Greater than 1
CEE.SCEERUN2		Z1130T	SHAR01	PDSE	U		32760	23877	90	2
SMLAB01.SMPPTS		COB320D, COB320T, DT910D, DT910T, GLOBAL, PLI410D, PLI410T, Z1130D, Z1130T	SHAR02	PDSE	FB	80	32720	71902	63	2
SYS1.AIEALNKE		Z1130D, Z1130T	SHAR03	PDSE	U		32760	2974	90	2
SYS1.ANFSLIBE		Z1130D, Z1130T	SHAR03	PDSE	U		32760	254	90	2
SYS1.SHASLNKE		Z1130T	SHAR01	PDSE	U		32760	94	89	2
SYS1.SIEALNKE		Z1130T	SHAR01	PDSE	U		32760	3135	90	2
SYS1.SIEAMIGE		Z1130T	SHAR01	PDSE	U		32760	4	72	2
TCPIP.AEZAMODS		Z1130D, Z1130T	SHAR03	PDSE	U		32760	3364	90	2
TCPIP.SEZALOAD		Z1130T	SHAR01	PDSE	U		32760	2740	90	2
TIVOLI.TKANMODP		Z1130T	SHAR01	PDSE	U		32760	277	89	2

Total: 1173, Filtered: 10

Close

The Non-SMP/E Managed Data Sets tab shows the data set attributes (unlike the View Properties tab).

Software Management > Software Instances > View Products, Features, and FMIDs > View Data Sets

## View Data Sets

Selected software instance: MASTER\_zOS\_... product on system LOCAL

SMP/E Managed Data Sets Non-SMP/E Managed Data Sets

Actions ▼

Data Set Name	Messages	Volumes	Data Set Type	RECFM	LRECL	BLKSIZE	Tracks	% Used	Extents
<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>	<a href="#">Filter</a>	<a href="#">Filter</a>
SYS1.PARMLIB		SHAR03	PDS	FB	80	27920	1	100	1
SYS1.PROCLIB		SHAR03	PDS	FB	80	27920	1	100	1

Total: 2

Close

### View Data Sets

Selected software instance: Z/OS\_V2R1\_ServerPac on system CPAC

SMP/E Managed Data Sets Non-SMP/E Managed Data Sets

Actions ▾

- Configure Columns...
- Modify Filters...
- Hide Filter Row
- Clear Filters
- Modify Sort...
- Clear Sorts
- Export Table Data ▶
- Print Table Data ▶

	Messages Filter	Zone Names Filter	Volumes Filter	Data Set Type Filter	RECFM Filter
		BAD210, BAT210	C90ESD	PDS	FB
		BAD210, BAT210	C90ESD	PDS	VB
		BAD210, BAT210	C90ESD	PDS	VB
		BAD210, BAT210	C90ESD	PDS	FB
		BAD210, BAT210	C90ESD	PDS	FB
		BAD210, BAT210	C90ESD	PDS	U
AOP.AAOPPENU					FB
AOP.AAOPPJPN					FB
AOP.SAOPEXEC		BAT210	C90EST	PDS	FB
AOP.SAOPMENU		BAT210	C90EST	PDS	FB
AOP.SAOPMJPN		BAT210	C90EST	PDS	FB
AOP.SAOPPENU		BAT210	C90EST	PDS	FB
AOP.SAOPJPN		BAT210	C90EST	PDS	FB
Total: 1239					

z/OSMF V2.1 added the ability to export or print the SMP/E or Non-SMP/E Managed Data Sets data



**Software Instances**

Actions Match: All filters

Name	Description	Activity	Global Zone CSI	Target
Contai	Filter		Filter	
<input checked="" type="checkbox"/> MASTI S	Source software instance for the z/OS SMP Software Deployment Lab. This instance contains the		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMPI
<input checked="" type="checkbox"/> MASTI _PTFS			ZOSMF.SWDEPLOY.GLOBAL.CS	TSMPI
<input checked="" type="checkbox"/> MASTI			ZOSMF.SWDEPLOY.GLOBAL.CS	TGTZ1
<input checked="" type="checkbox"/> M	Lab. This instance contains z/OS V1R12 at RSU1105.			DB3; 1410

View  
Modify  
Open Deployments  
Copy...  
Remove...  
Retrieve Product, Feature, and FMID Information  
Maintenance Reports  
Add...  
Show Hidden Maintenance Reports  
Select All  
Deselect All  
Configure Columns...  
Modify Filters...

End of Service  
Software Instance Validation  
Missing Critical Service  
Missing FIXCAT SYSMODs  
SYSMOD Search  
Software Instance Comparison...

You can select the End of Service Report

You can generate reports about the selected software instances. The End of Service report helps you determine if any of the products contained in your software instances are approaching or have reached their announced end of service support date.

This action:

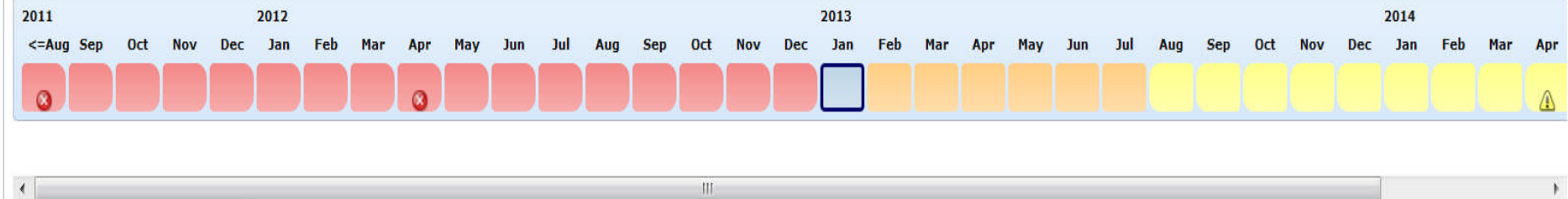
- Will display additional information, not available through SMP/E
- Can be performed against multiple software instances at the same time
- Can be performed against software instances throughout your enterprise

## Maintenance Reports

End of Service x

Timeline

View Legend



Scrollable timeline

The timeline contains 36 bars, which represent the following months:

- **Past Months.** Seventeen bars represent the months that occurred before the current month.
- **Current Month.** One bar represents the month in which the current date occurs.
- **Near Future Months.** Six bars represent the months that will occur within six months after the current month.
- **Distant Future Months.** Twelve bars represent the months that will occur more than six months after the current month.

If the end of service date for a product occurs within the months included in the timeline, a status icon is displayed for that product indicating

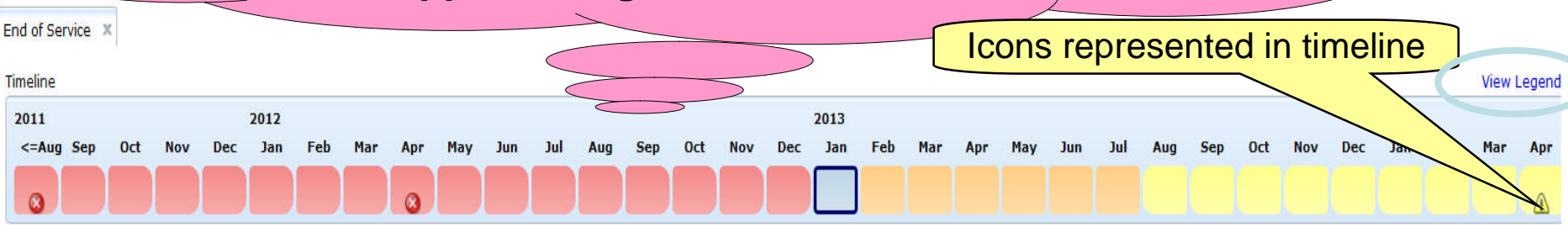
- The end of service date has passed.
- The end of service date equals the current date or will occur within six months of the current date.
- The end of service date will occur more than six months after the current date.

**Note: Products were added to this software instance to show products that have already passed or are approaching their end of service date**

Icons represented in timeline

View Legend

Legend to describe calendar colors and icons



Retrieve End of Service Information

Key	Description
	End of service date passed
	End of service date within six months
	End of service date more than six months away
	Past months
	Current month
	Near future months
	Distant future months

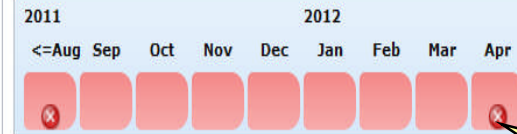
Product / Software Instance	Release	Product ID	End of Service	Additional Product Information	Product Information File Version
Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53	Oct 3, 2005	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53</a>	Jan 5, 2013
Debug Tool V9	09.01.00	5655-U27	Apr 30, 2012	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-U27">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-U27</a>	Jan 5, 2013
Enterprise PL/I V4	04.01.00	5655-W67	Apr 30, 2014	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67</a>	Jan 5, 2013
z/OS	01.13.00	5694-A01	Sep 30, 2011	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01</a>	Jan 5, 2013
AFP FONT COLLECTION FOR S/390	02.01.01	5648-B33	Oct 27, 2000	<a href="http://www-01.ibm.com/common/ssi/cgi-">http://www-01.ibm.com/common/ssi/cgi-</a>	Jan 5, 2013

**IBM does not encourage you to run products beyond their end of service date. In fact you can use this function to assist in your planning to complete your upgrade prior to products reaching their end of service date.**

### Maintenance Reports

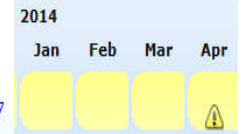
End of Service x

Timeline



Product: Debug Tool V9  
 End of service: Apr 30, 2012  
 Release: 09.01.00  
 Product ID: 5655-U27  
 Vendor: IBM  
 Announcement: <http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&subtype=sm&appname=ShopzSeries&htmlfid=897/ENUS5655-U27>

View Legend



Retrieve End of Service Information

Hover over an icon to view the flyover help that is available showing product information

Software Instances by Product

Actions Table view: Tree

Product / Software Instance	Release	Product ID	Messages	Vendor	General Availability	End of Service	Additional Product Information	Product Information File Version
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;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53</a>	Jan 5, 2013
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;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-U27">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-U27</a>	Jan 5, 2013
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;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67</a>	Jan 5, 2013
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;appname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5694-A01</a>	Jan 5, 2013
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;appname=ShopzSeries&amp;htmlfid=897/ENUS5648-B33">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5648-B33</a>	Jan 5, 2013

Total: 50, Selected: 0

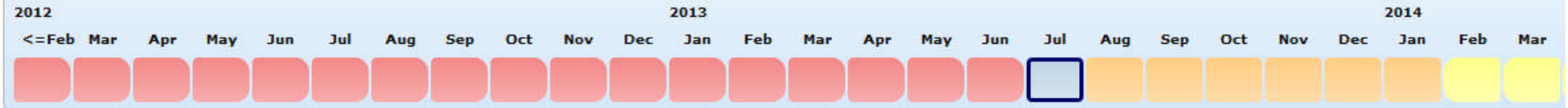
Refresh Last refresh: Jan 9, 2013 4:18:49 PM

Close Hide

### Maintenance Reports

End of Service x

Timeline



Retrieve End of Service Information...

Software Instances by Product

Table view: Tree

Prod Filter	View	Product ID Filter	Messages Filter	Vendor Filter	General Availability Filter	End of Service Filter	Additional Filter
	Retrieve Product, Feature, and FMID Information Maintenance Reports						
z	Expand	5650-ZOS	IZUD810I	IBM			
IB	Collapse	5655-M23		IBM	Jul 9, 2010	Not Announced	<a href="http://www-bin/ssialias?appname=SI">http://www-bin/ssialias?appname=SI</a>
z	Retrieve End of Service Information...						
	Select All	5610-A01	IZUD810I	IBM			
	Deselect All						
	Configure Columns...						
	Modify Filters...						
	Hide Filter Row						
	Clear Filters						
	Modify Sort...						
	Clear Sorts						
	Export Table Data						
	Print Table Data						
	Expand All						
	Collapse All						
	Switch to Non-Tree View						

Total: 6, Refresh Close

z/OSMF V2.1 added the ability to export or print the software instances by product information

**Select Product Information File**

A product information file contains information about one or more products, such as the product announce date, general availability date, and end of service date. Use the **Retrieve** contents of a product information file into z/OSMF.

## Product Information Files

File	Description	Version	Activity	HTTP Proxy	Last Retrieved (Local)	Retrieved By
<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="checkbox"/> <a href="http://public.dhe.ibm.com/services/zosmf/JSONs/IBMPProductEOS.txt">http://public.dhe.ibm.com/services/zosmf/JSONs/IBMPProductEOS.txt</a>	This product information file contains details about IBM System z® software.					
<input type="checkbox"/> <a href="#">D10.SLEODSFILE.D120301</a>	Retrieve form a data set.	Mar 1, 2012			Aug 23, 2012 11:15:09 PM	DEBUG41
<input type="checkbox"/> <a href="http://9.17.248.112/services/zosmf/JSONs/IBMPProductEOS.txt">http://9.17.248.112/services/zosmf/JSONs/IBMPProductEOS.txt</a>	Retrieve from URL.					

You can use the Select Product Information File page to select the product information file from which to retrieve information for your products. You can also use this page to add, modify, view, and remove product information files. By default, the product information file that IBM supplies for System z software is provided.

Total: 3, Selected: 0

 Last refresh: Sep 7, 2012 3:57:30 PM local time (Sep 7, 2012 7:57:30 PM GMT)

Welcome x Software Man... x

Software Management > Software Instances > Maintenance Reports

## Maintenance Reports

SYSMOD Search x 
  Missing FIXCAT SYSMODs x 
  Missing Critical... 
  Software Instance Comparison x 
  Software Instance Va

Review the list of critical service and determine which service are... your installation. Use SMP/E to apply the resolving service to th

Actions ▼ Table view: Tree

Soft	View	OD /	System	HOLDDATA	Target Zones	Resolving	Re
Miss	Maintenance Reports	End of Service		Received (GMT)	Filter	SYSMODs	SY
Filter	Expand	Software Instance Validation		er		Received in	GL
	Collapse	Missing FIXCAT SYSMODs				Global Zone	Filter
	Select All	SYSMOD Search		January 16, 2012			
	Deselect All	Software Instance Comparison...		23:46			
		LOCAL		January 16, 2012			

Close Hide

You can select Software Instance Validation

The Software Instance Validation report helps you verify that the software libraries that are associated with a software instance exist and contain the appropriate parts. When you generate the Software Instance Validation report, z/OSMF compares the entries in the SMP/E zones for the software instance to the content of the currently accessible DASD volumes, and reports any discrepancies as errors.

This action:

- Will display additional information, not available through batch SMP/E
- Can be performed against software instances throughout your enterprise

### Maintenance Reports

SYSMOD Search x Missing FIXCAT SYSMODs x Missing Critical Service x Software Instance Comparison x Software Instance Validation x

Review the list of critical service and determine which service are critical for your installation. Use SMP/E to apply the resolving service to the corresponding target zone.

Actions Table view: Tree

Software Instance / FMID / Held SYSMOD / Missing APAR	System	HOLDDATA Received (GMT)	Target Zones	Resolving SYSMODs Received in Global Zone	Resolving SYSMODs Not in Global Zone	Hold Class
Filter	Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> + MASTER_SMPEV3.6_WITHOUT_PTF						
<input type="checkbox"/> + MASTER_ZOSV1.12						
<input checked="" type="checkbox"/> + MASTER_zOS_R13_w/Other_Product						

Validating software instance "MASTER\_zOS\_R13\_w/Other\_Product". This request might take several minutes to complete.

11%

Cancel

Progress indicator, you can cancel the request

Total: 149, Selected: 61

Refresh Last refresh: Jan 14, 2013 6:35:54 PM

Close Hide



**Note: Errors were introduced in the software instance to show errors. The kinds of validation errors that are identified include DDDEFs pointing to the wrong data sets, file systems not mounted, or ...**

Maintenan

SYSMOD Search x Missing FIXCAT SYSMODs x Missing Critical Service x Software Software Instance Validation x Software Instance Vali

Selected software instance: MASTER\_zOS\_R13\_w/Other\_Product on system LOCAL  
Date validated: Jan 14, 2013 7:06:54 PM (Local)

Errors

Message ID	Message Text	Data Set
<input type="checkbox"/> GIM70564E	LMOD ABJDBG was not found in data set DT910.SABJMOD1 on volume SHAR01 from DDDEF entry SABJMOD1 in TARGET zone DT910T.	DT910.SA
<input type="checkbox"/> GIM70565E	A ALIAS for LMOD CNMNETV was not found in data set NETVIEW.SCNMLPA1 on volume SHAR01 from DDDEF entry SCNMLPA1 in TARGET zone Z1130T. The ALIAS is CNMNETV.	NETVIEW.SCNMLPA1
<input type="checkbox"/> GIM70562E	SAMP IBMZCPLG was not found in data set PLI410.SIBMZPRC on volume SHAR01 from DDDEF entry SIBMZPRC in TARGET zone PLI410T. The FMID for IBMZCPLG is H270410 and the RMID is H270410.	PLI410.SIBMZ
<input type="checkbox"/> GIM70567E	A LINK for HFS CDSLMO08 was not found in directory /sharelab /SMLAB01/usr/lpp/ocsf/IBM/ from DDDEF entry SCDSHFS in TARGET zone Z1130T. The FMID is HCRY740 and the RMID is HCRY740. The LINK is ../lpp/ocsf_baseivp.	SMLAB01.ROOT
<input type="checkbox"/> GIM70567E	A SYMLINK for HFS CDSLMO37 was not found in directory /sharelab /SMLAB01/usr/lpp/ocsf/IBM/ from DDDEF entry SCDSHFS in TARGET zone Z1130T. The FMID is JCRY741 and the RMID is JCRY741. The SYMLINK is ../lpp/ocsf_baseivp.	SMLAB01.ROOT
<input type="checkbox"/> GIM70563E	A ALIAS for DATA IRRSPIMH was not found in data set SYS1.SIEAHDR.H on volume SHAR01 from DDDEF entry SIEAHDR in TARGET zone Z1130T. The FMID is HBB7780 and the RMID is HBB7780. The ALIAS is IRRSPIM.	SYS1.SIEAHDR.H

Total: 6, Selected: 0

Close Hide

Find: Next Previous Highlight all Match case

**Load module missing from its target library**

**A load module alias is missing from its target library**

**An SMP/E SAMP element is missing from its target library**

**A z/OS UNIX LINK was not found in mounted file systems**

**A z/OS UNIX SYMLINK was not found in mounted file systems**

**An alias of an SMP/E DATA element is missing from its target library**

**If no errors discovered text "There is no data to display" will be displayed within table**

### Maintenance Reports

Selected software instance: MASTER\_zOS\_R13\_w/Other\_Product on system LOCAL  
Date validated: Jan 14, 2013 7:06:54 PM (Local)

#### Errors

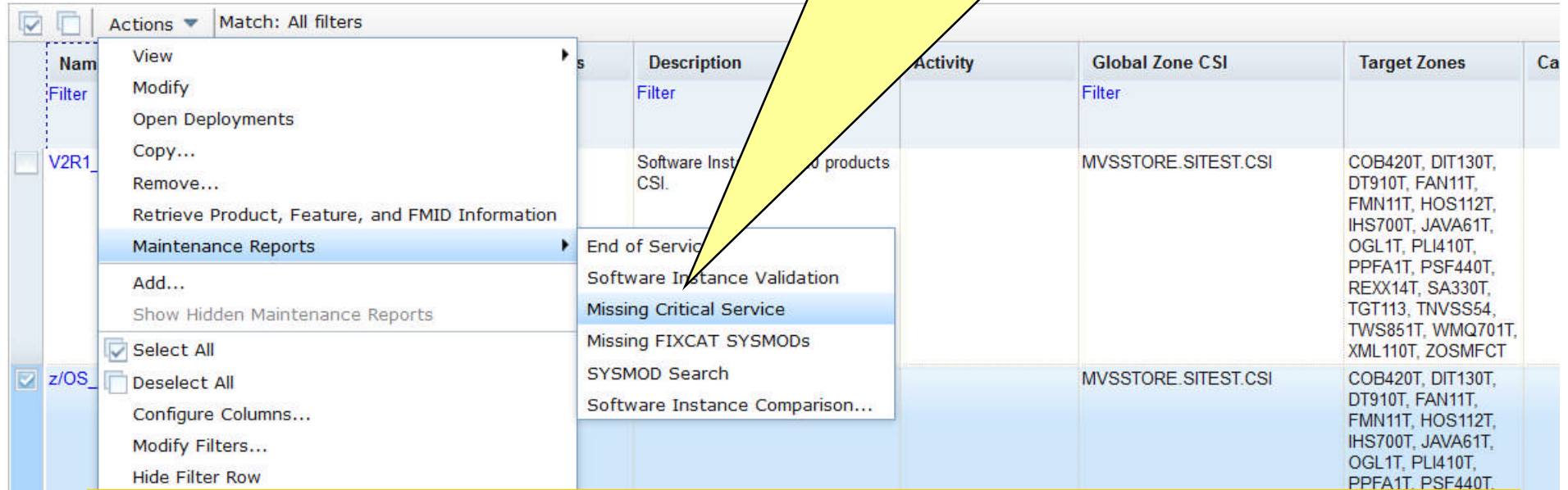
Me	Revalidate	Data Set Name
<input type="checkbox"/>	Revalidate	Filter
<input type="checkbox"/>	Configure Columns... as not found in data set DT910.SABJMOD1 on om DDDEF entry SABJMOD1 in TARGET zone	DT910.SABJMOD1
<input type="checkbox"/>	Modify Filters...	
<input type="checkbox"/>	Hide Filter Row CNMNETV was not found in data set PA1 on volume SHAR01 from DDDEF entry ARGET zone Z1130T. The ALIAS is CNMNETV.	NETVIEW.SCNMLPA1
<input type="checkbox"/>	Clear Filters	
<input type="checkbox"/>	Modify Sort... was not found in data set PLI410.SIBMZPRC on om DDDEF entry SIBMZPRC in TARGET zone l for IBMZCPLG is H270410 and the RMID is	PLI410.SIBMZPRC
<input type="checkbox"/>	Clear Sorts	
<input type="checkbox"/>	Export Table Data in directory /sharelab entry SCDSHFS in 740 and the RMID is	SMLAB01.ROOT
<input type="checkbox"/>	Print Table Data	All Data
<input type="checkbox"/>	GIM70567E A SYMLINK for HFS CDSI M027 /SMLAB01/usr/lpp/ocs TARGET zone Z1130T. JCRY741. The SYMLIN	
<input type="checkbox"/>	GIM70563E A ALIAS for DATA IRRSPIMH was not found in data set SYS1.SIEAHDR.H on volume SHAR01 from DDDEF entry SIEAHDR in TARGET zone Z1130T. The FMID is HBB7780 and the RMID is HBB7780. The ALIAS is IRRSPIM.	

z/OSMF V2.1 added the ability to export or print the validation errors

Total: 6, Selected: 0

Close Hide

## Software Instances



The screenshot shows the 'Software Instances' table with a context menu open over the 'Missing Critical Service' option. A yellow callout box points to this option with the text 'Select Missing Critical Service'. The table has columns for Name, Description, Activity, Global Zone CSI, Target Zones, and Ca. The 'Missing Critical Service' option is highlighted in the context menu.

Name	Description	Activity	Global Zone CSI	Target Zones	Ca
V2R1	Software Inst... products		MVSSTORE.SITEST.CSI	COB420T, DIT130T, DT910T, FAN11T, FMN11T, HOS112T, IHS700T, JAVA61T, OGL1T, PLI410T, PPFA1T, PSF440T, REXX14T, SA330T, TGT113, TNVSS54, TWS851T, WMQ701T, XML110T, ZOSMFCT	
z/OS			MVSSTORE.SITEST.CSI	COB420T, DIT130T, DT910T, FAN11T, FMN11T, HOS112T, IHS700T, JAVA61T, OGL1T, PLI410T, PPFA1T, PSF440T	

The Missing Critical Fix report helps you determine if any unresolved PE PTFs, HIPERs, or other exception SYSMODs identified by ERROR HOLDDATA are contained in your software instances, and helps you identify the SYSMODs that will resolve those exceptions.

While similar to REPORT ERRSYSMODS, this action:

- Can be performed against multiple software instances at the same time
- Can be performed against software instances throughout your enterprise

Total: 2

Refresh

Close

# Similar to REPORT ERRSYSMODS Output displayed in tree table format

Welcome x Software Man...

Software Management > Software Instances > Maintenance Reports

## Maintenance Reports

Missing Critical Service x

Review the list of critical service and determine which service are critical for your installation. Use SMP/E to apply the resolving service to the corresponding target zone.

Actions Table view: Tree

Software Instance / FMID / Held SYSMOD / Missing APAR <a href="#">Filter</a>	System <a href="#">Filter</a>	HOLDDATA Received (GMT) <a href="#">Filter</a>	Target Zones <a href="#">Filter</a>	Resolving SYSMODs Received in Global Zone <a href="#">Filter</a>	Resolving SYSMODs Not in Global Zone <a href="#">Filter</a>	Hold Class <a href="#">Filter</a>	Hold Symptom <a href="#">Filter</a>	FMID Description <a href="#">Filter</a>
<input type="checkbox"/> z/OS_Lab_SWI	P01	March 27, 2012 11:24:23						
<input type="checkbox"/> H0GI400								OSA/SF
<input type="checkbox"/> H0GI400								
<input type="checkbox"/> AA38381			TGT113		UA63960	HIPER	FUL	
<input type="checkbox"/> UA62211								
<input type="checkbox"/> AA38381			TGT113		UA63960	PE		
<input type="checkbox"/> HADRB10								Debug Tool Base
<input type="checkbox"/> HADRB10								
<input type="checkbox"/> AM54307			FMN11T	UK75928		HIPER	FUL	
<input type="checkbox"/> HBB7780								BCP Base
<input type="checkbox"/> HBB7780								
<input type="checkbox"/> AA32240			TGT113			HIPER	FUL	
<input type="checkbox"/> AA36875			TGT113			HIPER	PRF	
<input type="checkbox"/> AA36969			TGT113		UA64112	HIPER	IPL,PRF,SYSPLEXS	
<input type="checkbox"/> AA37064								

Total: 192, Selected: 0

Refresh Last refresh: Sep 7, 2012 4:16:35 PM

Close Hide

### Maintenance Reports

Missing Critical Service x

Review the list of critical service and determine which service are critical for your installation. Use SMP/E to apply the resolving service to th

Actions ▾
Table view: Tree

	DD / Missing	System Filter	HOLDDATA Received (GMT) Filter	Target Zones Filter	Resolving SYSMO Received in Global Zone Filter
<input type="checkbox"/>	CPAC		July 16, 2013 15:16:37		
<input type="checkbox"/>				BAT210	UA69493
<input type="checkbox"/>				BAT210	UA69651
<input type="checkbox"/>				BAT210	UA69523
<input type="checkbox"/>				BAT210	
<input type="checkbox"/>				BAT210	

Total: 49

Refresh

Close

z/OSMF V2.1 added the ability to export or print the missing critical fixes data

## Software Instances

Actions Match: All filters

View  
Filter  
Modify  
Open Deployments  
Copy...  
Remove...  
Retrieve Product, Feature, and FMID Information  
Maintenance Reports  
Add...  
Show Hidden Maintenance Reports  
Select All  
Deselect All  
Configure Columns...  
Modify Filters...  
Hide Filter Row

End of Service  
Software Instance Validation  
Missing Critical Service  
Missing FIXCAT SYSMODs  
SYSMOD Search  
Software Instance Comparison...

Name	Description	Activity	Global Zone CSI	Target Zones	Ca
V2R1	Software Instance Products CSI.		MVSSTORE.SITEST.CSI	COB420T, DIT130T, DT910T, FAN11T, FMN11T, HOS112T, IHS700T, JAVA61T, OGL1T, PLI410T, PPFA1T, PSF440T, REXX14T, SA330T, TGT113, TNVSS54, TWS851T, WMQ701T, XML110T, ZOSMFCT	
z/OS			MVSSTORE.SITEST.CSI	COB420T, DIT130T, DT910T, FAN11T, FMN11T, HOS112T, IHS700T, JAVA61T, OGL1T, PLI410T, PPFA1T, PSF440T, REXX14T, SA330T	

Select Missing FIXCAT SYSMODs

The Missing FIXCAT SYSMODs reports helps you identify any unsatisfied hardware or software requisites that are required for a specific category of software fixes.

While similar to REPORT MISSINGFIX, this action:

- Can be performed against multiple software instances at the same time
- Can be performed against software instances throughout your enterprise

Total: 2

Refresh

Close

# Similar to REPORT MISSINGFIX Output displayed in tree table format

Welcome x Software Man...

Software Management > Software Instances > Maintenance Reports

## Maintenance Reports

Missing FIXCAT SYSMODs x

Review the list of fix categories and determine which APARs are critical for your installation. Use SMP/E to apply the resolving SYSMODs to the corresponding target zone.

Actions Table view: Tree

Software Instance / Fix Category / FMID / Missing APAR <a href="#">Filter</a>	System <a href="#">Filter</a>	HOLDDATA Received (GMT) <a href="#">Filter</a>	Target Zones <a href="#">Filter</a>	Resolving SYSMODs Received in Global Zone <a href="#">Filter</a>	Resolving SYSMODs Not in Global Zone <a href="#">Filter</a>	FMID Description <a href="#">Filter</a>
<input type="checkbox"/> z/OS_Lab_SWI	P01	March 27, 2012 11:24:23				
<input type="checkbox"/> IBM.Device.Disk.DS8000-2107						
<input type="checkbox"/> HDZ1D10						Data Facility System Managed Storage Base & ENU
<input type="checkbox"/> AA34857			TGT113		UA63957	
<input type="checkbox"/> AA36163			TGT113	UA62970		
<input type="checkbox"/> AA36164			TGT113	UA62987		
<input type="checkbox"/> AA36166			TGT113	UA63014		
<input type="checkbox"/> AA36863			TGT113		UA63852	
<input type="checkbox"/> AA37597			TGT113		UA64681	
<input type="checkbox"/> AA37891			TGT113		UA64297	
<input type="checkbox"/> AA38031			TGT113		UA64478	
<input type="checkbox"/> AA38077			TGT113		UA63299	
<input type="checkbox"/> AA38119			TGT113		UA63900	
<input type="checkbox"/> AA38239						

Total: 272, Selected: 0

Refresh

Last refresh: Sep 7, 2012 4:29:49 PM

Close

Hide

# Similar to REPORT MISSINGFIX Output displayed in non-tree table format

Welcome x Software Man... x

Software Management ▶ Software Instances ▶ Maintenance Reports

## Maintenance Reports

Missing FIXCAT SYSMODs x

Review the list of fix categories and determine which APARs are critical for your installation. Use SMP/E to apply the resolving SYSMODs to the corresponding target zone.

Actions ▼ | Table view: Non-tree

Software Instance / Fix Category / FMID / Missing APAR <a href="#">Filter</a>	System <a href="#">Filter</a>	HOLDDATA Received (GMT) <a href="#">Filter</a>	Target Zones <a href="#">Filter</a>	Resolving SYSMODs Received in Global Zone <a href="#">Filter</a>	Resolving SYSMODs Not in Global Zone <a href="#">Filter</a>	FMID Description <a href="#">Filter</a>
<input type="checkbox"/> z/OS_Lab_SWI	P01	March 27, 2012 11:24:23				
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107						
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ						Data Facility System Managed Storage Base & ENU
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA63957	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113	UA62970		
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113	UA62987		
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113	UA63014		
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA63852	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA64681	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA64297	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA64478	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA63299	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA63900	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA63299	
<input type="checkbox"/> z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA64575	

Total: 272, Selected: 0

Refresh Last refresh: Sep 7, 2012 4:29:49 PM

Close Hide



### Maintenance Reports

Review the list of fix categories and determine which APARs are critical for your installation. Use SMP/E to apply the resolving SYSMODs to t

Table view: Tree

Software APAR Filter	D / Missing	System Filter	HOLDDATA Received (GMT) Filter	Target Zones Filter	Resolving SYSMOD Received in Global Zone Filter
		CPAC	July 16, 2013 16:16:48		
				BAT210	UA69423
				BAT210	UA69420
				BAT210	UA69417, UA69420
				BAT210	UA69426

Total: 76

Refresh

Close

z/OSMF V2.1 added the ability to export or print the missing FIXCAT SYSMODs data

Welcome x Software Man... x

Software Management &gt; Software Instances

**Software Instances**

Actions Match: All filters

View  
Modify  
Open Deployments  
Copy...  
Remove...  
Retrieve Product, Feature, and FMID Information  
Maintenance Reports  
Add...  
Show Hidden Maintenance Reports  
Select All  
Deselect All  
Configure Columns...  
Modify Filters...

End of  
Software Instance Validation  
Missing Critical Service  
Missing FIXCAT SYSMODs  
SYSMOD Search  
Software Instance Comparison...  
z/OS V1R12 at RSU1105.

Name	Description	Activity	Global Zone CSI	Target Zones	Ca
MAST S	Source instance for the z/OS Deployment Label instance contains the product with PTFs		ZOSMF.SWDEPLOY.GLOBAL.CS	TSMP36P	
MAST PTFS			ZOSMF.SWDEPLOY.GLOBAL.CS	TSMP36	
MAST			ZOSMF.SWDEPLOY.GLOBAL.CS	TGTZ12	

You can select SYSMOD Search

The SYSMOD Search capability helps you determine if your software instances contain the SYSMODs in which you are interested. This could be to determine:

- If you already installed the fix that a vendor suggested that you install,
- If you already installed a Red Alert or fix associated with security/integrity APAR
- How many software instances are affected by a specific PTF that went PE

While similar to cross zone query, this action can be performed:

- For multiple SYSMODs at the same time
- Against multiple software instances at the same time
- Against software instances throughout your enterprise

Welcome x Software Man... x

Software Management > Software Instances > Maintenance Reports

### Maintenance Reports

SYSMOD Search x

You need to specify one or more SYSMODs

Use this page to search the selected software instances.

\* SYSMOD search list:

U001270,U001281

Search

Search Results

Actions Table view: Tree

Software Instance / Zone Name / SYSMOD	System	Type	F MID	Status	Installed
Filter	Filter	Filter	Filter	Filter	Filter

There is no data to display

You need to specify the SYSMODs for which to search. You can search for multiple SYSMODs simultaneously. To do so, use a comma, space, or line break to separate each SYSMOD ID. At least one SYSMOD ID is required.

Total: 0, Selected: 0

# Results shown in a scrollable tree table

## Maintenance Reports

SYSMOD Search ✕

Use this page to search the selected software instances for one or more SYSMODs.

\* SYSMOD search list:

U001270,U001281

Search

### Search Results

Actions ▼ | Table view: Tree

Software Instance / Zone Name / SYSMOD	System	Type	FMID	Status	Installed
Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> <span>[-]</span> MASTER_SMPEV3.6_WITH_PTFS	LOCAL				
<input type="checkbox"/> <span>[-]</span> DSMP36P					
<input type="checkbox"/> <span>■</span> U001270				Superceded by U001301	
<input type="checkbox"/> <span>■</span> U001281		PTF	HMP1J00	Accepted	January 3, 2012 14:09:28
<input type="checkbox"/> <span>[-]</span> GLOBAL					
<input type="checkbox"/> <span>■</span> U001270		PTF	HBCNC00	Received	January 16, 2012 15:23:34
<input type="checkbox"/> <span>■</span> U001281		PTF	HMP1J00	Received	Januav 16. 2012
Total: 55, Selected: 0					

Close

Hide

**In one request, we queried 4 software instances using 2 different GLOBAL zones for 2 SYSMODs. This simple query would take at least 4 user interactions using SMP/E's cross zone query.**

SYSMOD Search

Use this page to search the selected software instances for one or more SYSMODs.

\* SYSMOD search list:

U001270,U001281

Search

Search Results

Actions Table view: Tree

Software Instance / Zone Name / SYSMOD	System	Type	FMID	Status	Installed
Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> Z1130D					
<input type="checkbox"/> ■ U001270		PTF	HBCNC00	Superceded by U001362	
<input type="checkbox"/> ■ U001281		PTF	HMP1J00	Accepted	January 23, 2012 02:19:45
<input type="checkbox"/> Z1130T					
<input type="checkbox"/> ■ U001270		PTF	HBCNC00	Superceded by U001362	
<input type="checkbox"/> ■ U001281		PTF	HMP1J00	Applied	January 23, 2012 02:21:08

Total: 55, Selected: 0

Close

Hide

More information is displayed using Software Management; and you can query multiple SYSMODs, across multiple GLOBAL zones, possibly residing in separate sysplexes, possibly even in different locations, at the same time!!!

```
Entry Type:  SYSMOD
Entry Name:  U001270
```

To return to the previous panel, enter END .

To select an entry from a zone, enter S next to the zone.

\* - Entry not found in zone.

\*\* - Zone could not be allocated or is not initialized.

----- Status -----						
ZONE	TYPE	FMID	STATUS	DATE	TIME	REWORK
-----						
DLBZ12	PTF	HBCNC00	SUP	11.255	08:26:10	
DSMP36	*					
DSMP36P			SUP			
GLOBAL	PTF		REC	12.016	15:23:34	
TGTZ12	PTF	HBCNC00	SUP	11.214	11:28:39	
TSMP36	*					
TSMP36P			SUP			

Using SMP/E's Cross Zone Query, only 1 SYSMOD at a time can be queried in only 1 GLOBAL zone.

### Maintenance Reports

Use this page to search the selected software instances for one or more SYSMODs.

\* SYSMOD search list:

UK95818

Search

#### Search Results

Actions Table view: Tree

Software Filter	IOD	System Filter	Type Filter	FMID Filter	Status Filter
<input type="checkbox"/>					Not Found
<input type="checkbox"/>			PTF	HSMA215	Applied
<input type="checkbox"/>			PTF	HSMA215	Received

Total: 7,

Close

- View
- Maintenance Reports
- Expand
- Collapse
- Select All
- Deselect All
- Configure Columns...
- Modify Filters...
- Hide Filter Row
- Clear Filters
- Modify Sort...
- Clear Sorts
- Export Table Data
- Print Table Data

z/OSMF V2.1 added the ability to export or print the search results

Welcome x Software Man... x

Software Management &gt; Software Instances &gt; Maintenance Reports

## Maintenance Reports

SYSMOD Search x Missing FIXCAT SYSMODs x Missing Critical Service

Review the list of critical service and determine which service are critical for your system. Use SMP/E to apply the resolving service to the

Actions	Match: All filters	Table view: Tree
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
View	View	View
Maintenance Reports	Maintenance Reports	Maintenance Reports
Expand	Expand	Expand
Collapse	Collapse	Collapse
Select All	Select All	Select All
Deselect All	Deselect All	Deselect All
Configure Columns	Configure Columns	Configure Columns

System	LDATA	Target Zones	Resolving SYSMODs Received in Global Zone
OD /	received (GMT)	Filter	Filter
January 16, 2012	23:46		
LOCAL	January 16, 2012		

You can select Software Instance Comparison

The Software Instance Comparison report can be used to identify the functional and service differences between two software instances. This report can be helpful when you are completing the following actions:

- **Debugging a problem with your software, identifying what software changed to fix (or cause) the problem.**
- **Verifying that your software is at the same service level.**
- **Planning for a deployment to identify what will be changing.**

While somewhat similar to a REPORT SYSMODS command, this action can be performed against software instances throughout your enterprise



### Select Software Instance to Compare

When you compare two software instances, the resulting report identifies the SYSMODs found in the second software instance that are not found against the first software instance.

First software instance: MASTER\_SMPEV3.6\_WITHOUT\_PTFS on system LOCAL

Second Software Instance

Select the Software Instance to compare

Actions Match: All filters

Name	System	Description	Activity	Global Zone CSI
Contains "Master"	Filter	Filter		Filter
<input checked="" type="radio"/> MASTER_SMPEV3.6_WITH_PTFS	LOCAL	Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product with PTFs.		ZOSMF.SWDEPLOY.
<input type="radio"/> MASTER_ZOSV1.12	LOCAL	Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains z/OS V1R12 at RSU1105.		ZOSMF.SWDEPLOY.
<input type="radio"/> MASTER_zOS_R13_w/Other_Product	LOCAL	z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management Lab		SMLAB01.GLOBAL.C

Total: 3, Filtered: 3, Selected: 1

Refresh Last refresh: Jan 14, 2013 6:51:09 PM

OK Cancel

### Select the Zones to Compare

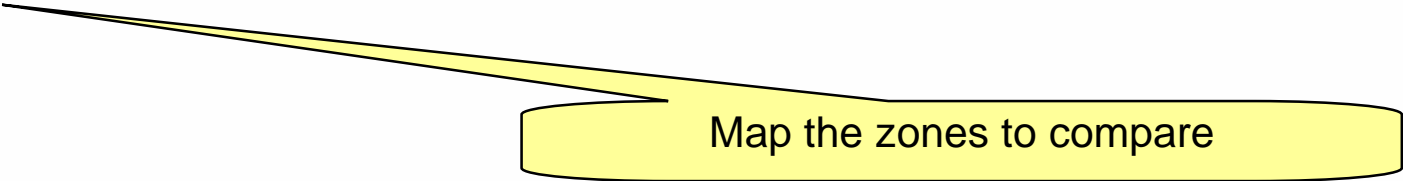
To compare the selected software instances, z/OSMF needs to know which target zones to compare. Use the **Select Zones** action in the **Acti** zone in the first software instance. If the Target Zones in Second Software Instance column is blank, the corresponding target zone in the fir:

First software instance: MASTER\_SMPEV3.6\_WITHOUT\_PTFS on system LOCAL

Second software instance: MASTER\_SMPEV3.6\_WITH\_PTFS on system LOCAL

Target Zones to be Compared

Target Zone in First Software Instance		Target Zones in Second Software Instance	
Filter	Filter		
<input checked="" type="checkbox"/>	TSMP36		TSMP36P



Total: 1, Selected: 1

**Similar to REPORT SYSMODs Output displayed in tree table format. The REPORT SYSMODs command only report on GLOBAL zones that are accessible where the command is run. Software Management can compare software instances where either one of them resides ANYWHERE in your enterprise!!!**

Review the list of SYSMODs found in the second software instance, but not in the first software instance. If the software instances need to be at the same server, the SYSMODs to the corresponding target zones in the first software instance.

First software instance: MASTER\_SMPEV3.6\_WITHOUT\_PTFS on system LOCAL

Second software instance: MASTER\_SMPEV3.6\_WITH\_PTFS on system LOCAL

SYSMODs Not Found in First Software Instance

Actions | Table view: Tree

FMID/SYSMOD	Description	Type	Target Zone in First Software Instance	Target Zone in Second Software Instance	SYSMOD Received in Global Zone
<input type="checkbox"/> HBCNC00	SMP/E Planning and Migration Assistant Software Info Base				
<input type="checkbox"/> UO01301		PTF	TSMP36	TSMP36P	Yes
<input type="checkbox"/> HBCND0B	SMP/E Planning and Migration Assistant				
<input type="checkbox"/> UO01185		PTF	TSMP36	TSMP36P	Yes
<input type="checkbox"/> UO01268		PTF	TSMP36	TSMP36P	Yes
<input type="checkbox"/> UR53091		PTF	TSMP36	TSMP36P	Yes
<input type="checkbox"/> HMP1J00	SMP/E Base				
<input type="checkbox"/> IIAPTF01		USERMOD	TSMP36	TSMP36P	Yes

Total: 16, Selected: 0

Not shown, but z/OSMF V2.1 also added the ability to export or print the comparison results

Welcome x Software Man... x

Select Products to view details about products that are installed in ANY software instance

### Software Management

Use this task to view details about software inventory, including related products, features, FMIDs, data sets, deployments, and SYSMO

- [Software Instance](#) Define your software to z/OSMF; deploy software; generate reports about your software.
- [Products](#) View a consolidated list of the products included in each software instance.
- [Deployments](#) Deploy a software instance, and manage existing deployments.
- [Categories](#) Create new categories for your software instances and deployments, and manage existing categories.
- [Settings](#) Select the time zone in which to display date and time data. Indicate whether to display or suppress information message

A list of installed products is displayed. It can be sorted using ANY column or filtered.

Software Management ▸ Products

H

## Products

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...](#)

**Note: Software Management shows installed products, to see whether the products are actually used you will need other tools such as Tivoli Asset Discovery for z/OS (TADz)**

Switch To:

Actions ▾

Product	Release	Product ID	Messages	Vendor	General Availability	End of Ser
<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="checkbox"/> System Modification Program Extended for z/OS	03.06.00	5655-G44		IBM	Sep 30, 2011	<input checked="" type="checkbox"/> Not Ann
<input type="checkbox"/> z/OS	01.12.00	5694-A01		IBM	Sep 24, 2010	<input checked="" type="checkbox"/> Not Ann
<input type="checkbox"/> Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53		IBM	Sep 27, 2002	<input checked="" type="checkbox"/> Oct 3, 21
<input type="checkbox"/> Debug Tool V9	09.01.00	5655-U27		IBM	Sep 26, 2008	<input checked="" type="checkbox"/> Apr 30, :
<input type="checkbox"/> Enterprise PL/I V4	04.01.00	5655-W67		IBM	Sep 24, 2010	<input checked="" type="checkbox"/> Apr 30, :

Total: 27, Selected: 0

Refresh Last refresh: Jan 14, 2013 7:10:54 PM

You can scroll right

**Note: There is no easy way to compile a list of all installed products across your enterprise using SMP/E list commands or query functions.**

**For example, you can filter the list to identify any product with an announced end of service date later than December 31, 2004.**

### Products

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

Actions ▾

**Product**

Filter

- AFP FONT COLLECTION FOR S/390
- DITTO/ESA FOR MVS
- Debug Tool V12
- Debug Tool V9
- Enterprise COBOL V4

Total: 27, Selected: 0

Refresh Last refresh: Jan 14, 2012

#### Modify Filters

Match: All filters  Match case

Columns: Filters

- ▶ Product
- ▶ Release
- ▶ Product ID
- ▶ Messages
- ▶ Vendor
- ▶ General Availability
- ▼ End of Service
- ▶ Additional Product Information

Condition: Dates from Start date: 12/31/04

OK Cancel Help

Product Name	End of Service	Address
Filter	Filter	Filter
AFP FONT COLLECTION FOR S/390	Not Announced	http://bin/s/appn
DITTO/ESA FOR MVS	Not Announced	http://bin/s/appn
Debug Tool V12	Not Announced	http://bin/s/appn
Debug Tool V9	Apr 30, 2012	http://bin/s/appn
Enterprise COBOL V4	Not Announced	http://bin/s/appn

## Three products that meet the criteria are displayed.

Welcome x Software Man... x

Software Management ▶ Products

### Products

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 info **Feature, and FMID Information** [action](#) provided in the Software Instances view. [Learn more...](#)

Actions ▼ Match: All filters

Product ▲	Release	Product ID	Messages	Vendor	General Availability	End of Service	Additional Product Information
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	Dates from Dec 31, 2004	<a href="#">Filter</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;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-U27">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-U27</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;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-G53</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;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=897/ENUS5655-W67</a>

Total: 27, Filtered: 3, Selected: 0

Last refresh: Jan 14, 2013 7:10:54 PM

Complete your sessions evaluation online at [SHARK.org/BostonEVA](#) © 2013 IBM Corporation

Again, you can click the Additional Product Information link and view the IBM Sales Manual description of the product in another tab of your browser session

# Now you can see where these products are installed by selecting Actions, View and then Software Instances

Software Management ▶ Products

## Products

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

Prod	View	Software Instances	Vendor	General Availability	End of Service	Additional
Filter	Show Hidden Maintenance Reports	Filter	Filter	Filter	Dates from Dec 31, 2004	Filter
Debug	Retrieve End of Service Information	5655-U27	IBM	Sep 26, 2008	✘ Apr 30, 2012	<a href="http://www-01.ibm.com/systems/alias?appname=St">http://www-01.ibm.com/systems/alias?appname=St</a>
Enterp	Select All	5655-G53	IBM	Sep 27, 2002	✘ Oct 3, 2005	<a href="http://www-01.ibm.com/systems/alias?appname=St">http://www-01.ibm.com/systems/alias?appname=St</a>
Enterp	Deselect All	5655-W67	IBM	Sep 24, 2010	⚠ Apr 30, 2014	<a href="http://www-01.ibm.com/systems/alias?appname=St">http://www-01.ibm.com/systems/alias?appname=St</a>
Enterp	Configure Columns...					
	Modify Filters...					
	Hide Filter Row					
	Clear Filters					
	Modify Sort...					
	Clear Sorts					

Total: 27, Filtered: 3, Selected: 3

Refresh Last refresh: Jan 14, 2013 7:10:54 PM



For each product, all the software instances where that product is installed will be displayed.

### View Software Instances by Product

Software Instances by Product

Product / Software Instance	Release	Product ID	Messages	Vendor	General Availability	End of Service	Additional Product Information
<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="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/comm-bin/ssialias?infotype=dd&amp;subty=apname=ShopzSeries&amp;htmlf">http://www-01.ibm.com/comm-bin/ssialias?infotype=dd&amp;subty=apname=ShopzSeries&amp;htmlf</a>
<input type="checkbox"/> ■ MASTER_zOS_R13_w/Other_Product							
<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/comm-bin/ssialias?infotype=dd&amp;subty=apname=ShopzSeries&amp;htmlf">http://www-01.ibm.com/comm-bin/ssialias?infotype=dd&amp;subty=apname=ShopzSeries&amp;htmlf</a>
<input type="checkbox"/> ■ MASTER_zOS_R13_w/Other_Product							
<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/comm-bin/ssialias?infotype=dd&amp;subty=apname=ShopzSeries&amp;htmlf">http://www-01.ibm.com/comm-bin/ssialias?infotype=dd&amp;subty=apname=ShopzSeries&amp;htmlf</a>
<input type="checkbox"/> ■ MASTER_zOS_R13_w/Other_Product							

Total: 6, Selected: 0

Refresh

Close

Note: It is common to have the same product installed in multiple software instances. However, these products with announced end of service dates are only installed in one software instance.

Welcome x Software Man... x

Software Management > Products > View Software Instances

### View Software Instances by Product

Shows the system where the software instance is accessible from

Software Instances by Product

Actions Table view: Tree

Product / Software Instance	System	Description	Activity	Global Zone CSI	Target Zones
<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="checkbox"/> Enterprise COBOL for z/OS and OS/390					
<input type="checkbox"/> <a href="#">MASTER_zOS_R13_w/Other_Product</a>	LOCAL	z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management Lab		SMLAB01.GLOBAL.CSI	COB320T, DT910T, PLI410T, Z1130T
<input type="checkbox"/> Debug Tool V9					
<input type="checkbox"/> <a href="#">MASTER_zOS_R13_w/Other_Product</a>	LOCAL	z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management Lab		SMLAB01.GLOBAL.CSI	COB320T, DT910T, PLI410T, Z1130T
<input type="checkbox"/> Enterprise PL/I V4					
<input type="checkbox"/> <a href="#">MASTER_zOS_R13_w/Other_Product</a>	LOCAL	z/OS V1.13 with over 20 other		SMLAB01.GLOBAL.CSI	COB320T, DT910T,

You can scroll right to see who created and who last modified the software instance

### View Software Instances by Product

Software Instances by Product

Actions ▾
Table view: Tree

	Product ID Filter	Messages Filter	Vendor Filter	Ge...
<input type="checkbox"/>	5650-ZOS	IZUD810I	IBM	
<input type="checkbox"/>	5655-M23		IBM	Ju
<input type="checkbox"/>	5610-A01	IZUD810I	IBM	

Total: 6,

z/OSMF V2.1 added the ability to export or print the software instances by product information



## Same as existing z/OS V1.13 function

Welcome x

Software Man... x

Software Management ▶ Deployments

### Deployments

To deploy a software instance, create a new deployment by selecting **New** or **Copy** from the Actions menu.



Actions ▼

Name	Description	Activity	Categories	Source Software Instance	Sou
Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> DEMO_Deployment_Sample	This is a sample deployment that may be used for demos.	Completed		MASTER_SMPEV3.6_WITH_PT FS	LOCA

To deploy a software instance, create a new deployment by selecting **New** or **Copy** from the Actions menu.

Software Management ▶ Deployments

## Deployments

To deploy a software instance, create a new deployment by selecting **New** or **Copy** from the Actions menu.

The screenshot shows the IBM Software Management interface. The 'Actions' menu is open, displaying options: Modify, View, Copy..., Cancel, Remove..., **New...** (highlighted), Select All, Deselect All, Configure Columns..., Modify Filters..., Hide Filter Row, Clear Filters, Modify Sort..., and Clear Sorts. The background table has the following data:

Name	Activity	Categories	Source Software Instance	Source
Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> DEMO Sample	Completed		MASTER_SMPEV3.6_WITH_PTFS	LOCAL

# The same checklist leads you through the new deployment

Welcome x Software Man... x

Software Management ▶ Deployments ▶ Deployment Checklist

## Deployment Checklist

To deploy a software instance, complete the checklist.

Checklist

Progress	Step
➔	1. <a href="#">Specify the properties for this deployment.</a>
	2. Select the software instance to deploy.
	3. Select the objective for this deployment.
	4. Check for missing SYSMODs. <ul style="list-style-type: none"><li>• View missing SYSMOD reports.</li></ul>
	5. Configure this deployment.
	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. Specify the properties for the target software instance.

Close

Select Categories to create or manage categories

### Software Management

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

<a href="#">Software Instances</a>	Deploy 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 date and time data. Indicate whether to display or suppress information messages.



Same as existing z/OS V1.13 function

Software Management Categories

### Categories

Actions ▾

Name	Description	Activity	Last Modified (Local)	Modified By	Locked (Local)	Locked By
Filter	Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> DM Remote	Software Deployment remote SVT scenarios		Apr 13, 2011 3:14:00 PM	DEBUG71		
<input type="checkbox"/> Demo			Sep 14, 2011 9:38:41 AM	DEBUG30		
<input type="checkbox"/> For test			Oct 25, 2011 5:42:33 AM	DEBUG68		
<input type="checkbox"/> TYQ-Category	This Category is for TIANYQ to test.		Nov 2, 2011 3:02:34 AM	DEBUG67		
<input type="checkbox"/> MUDASD			Dec 13, 2011 9:18:40 AM	DEBUG32		

Total: 5, Selected: 0

Last refresh: Sep 7, 2012 5:44:57 PM local time (Sep 7, 2012 9:44:57 PM GMT)

Select Settings

### Software Management

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

<a href="#">Software Instances</a>	Define 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 date and time data. Indicate whether to display or suppress information messages.

Welcome x Software Man... x

Software Management ▶ Settings

**Settings**

Select the time zone to use for date and time data:

- Greenwich Mean Time (GMT)  
 Local (Eastern Daylight Time)

Display information messages that notify you that an object was added, modified, or removed:

- Yes  
 No

\* Maximum number of rows to display in a table:

750

OK

Cancel

# Agenda

- Brief Overview of Software Deployment
- Recent Enhancements to Software Deployment
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- New Enhancement NOW Available!!!
  - Software Management

## Summary

- Software Management Usage at SAS
- Backup

# Software Management Summary

- A new software management task provides new reporting and display capabilities for SMP/E installed software.
- It builds on the Software Deployment capabilities introduced with z/OSMF V1.13.
- You're able to see product information for SMP/E installed software in a software instance.
  - This enables system programmers, operations staff, even procurement personnel to see what products are installed.
  - System programmers are able to see the FMIDs that are installed and the data sets where the software was installed.

# Software Management Summary ...

- Additionally, this function provides a number of new reporting capabilities. Among them are the ability to:
  - Display end of service information about SMP/E installed products to help you to plan timely upgrades to remain service supported;
  - Help you cross-check SMP/E inventory information with catalog entries, volume residency, and data set contents thereby identifying potential integrity problems with your maintenance and or deployment environments;
  - Help identify missing service that might be of interest to you enabling you to improve your preventive maintenance practices;
  - Query selected software instances throughout your enterprise to determine whether if one or more SYSMODs are is installed, to help you identify systems that have (and do not have) PTFs installed. This can help detect software instances which are missing a desired fix, or which software instances have a fix that your want removed installed;
  - Compare two software instances to help you identify changes and simplify problem determination by helping to identify what changed (or will change).

# z/OSMF Software Management - *Benefits*

Task	<b>Without z/OSMF Software Management</b>	<b>With z/OSMF Software Management</b>
Display the product content of software instances.	Can use multiple different methods to report on product content locally (within sysplex). <b>Unable to:</b> <ul style="list-style-type: none"> <li>▪ launch in context other views or reports</li> <li>▪ View product content for remote systems</li> </ul>	Easy (few clicks) to identify one or more software instances (locally or remote) that you want to view product information. Once viewed, the user can launch in context additional views, reports, or follow links to additional information. <b>Seconds</b>
Display the data sets that make up a software instances.	<b>Can NOT be done today.</b> At best, the user can write their own program to identify data sets in local software instances.	Easy (few clicks) to identify the data sets actually used in a software instance. <b>Seconds (or up to a few minutes)</b>
Display all the software instances where a product is installed.	<b>Can NOT be done today.</b>	Easy (few clicks) to identify all the software instances where a product is installed throughout the customer enterprise. <b>Seconds</b>
Identify software products that are approaching, or have reached, end of service support	Currently there are web sites that can be used to identify announced end of service dates, but they don't analyze installed software. <b>Hours (or even days for entire enterprise)</b>	Easy (few clicks) to show end of service information for all installed products (or products in specific software instances). Results shown in both graphic and tabular form. <b>Seconds</b>

# z/OSMF Software Management - Benefits

Task	Without z/OSMF Software Management	With z/OSMF Software Management
Validate the SMP/E structure (zones and data set definitions) and content of software instances.	Can <b>NOT</b> be done today.	Easy (few clicks) to identify any structure problems or missing content in a software instance and the data sets referenced. <b>A few minutes</b>
Identify if any critical service (HIPER, PE fixing, or fixes associated with one or more fix categories) is missing.	Can use multiple SMP/E REPORTs to identify missing critical fixes for local software instances. <b>However, this can only be done for local software instances (within sysplex).</b>  <b>Less than a minute (for the local system)</b>	Easy (few clicks) to identify missing critical fixes. Once viewed, z/OSMF sorting and filtering can help with the analysis. <b>Seconds (or up to a few minutes)</b>
Identify whether a fix is installed or not; and if so in which software instances.	Can use either SMP/E query or LIST functions to see if a SYSMOD is installed. <b>However, this can only be done for local software instances (within sysplex).</b> <b>Less than a minute (for the local system)</b>	Easy (few clicks) to identify whether a fix is installed or not; and if so in which software instances throughout your enterprise. <b>Less than a minute (for local and remote systems)</b>
Compare the service and functional content of two software instances to aid in debugging, change control, or quality assurance.	Can use SMP/E REPORT SYSMODS to identify differences between two target zones for local software instances. <b>However, this can only be done for local software instances (within sysplex).</b> <b>Less than a minute (for the local system)</b>	Easy (few clicks) to identify differences between two target zones for software instances throughout your enterprise.  <b>Seconds (or up to a few minutes)</b>




# Testimonial

- Upon seeing this functionality, Cheryl Watson (a consultant at Watson and Walker) said:
  - *“I think the new features are neat enough to encourage people who haven't installed z/OSMF yet to reconsider installing it.”*
  - **Obviously, I agree**

# Availability

- This function became available on z/OSMF V1.13 on December 17, 2012 via PTFs: UK79887, UK83841, UK83825, UK83828, UK83833, UK83836, UK83842, and UK83852
  - These PTFs provide additional new function beyond Software Management
    - See <http://www-03.ibm.com/systems/z/os/zos/zosmf/enhancements.html> for more information

# Shameless Plug

- You can try this great new function TODAY!!!
  - Without having to install the PTFs (or z/OSMF V1.13) 
- Just attend the z/OSMF Software Management Hands-on Lab
  - Session 13944
    - Thursday, August 15, 2013: 3:00 PM-4:00 PM
    - Room 202 (Hynes Convention Center)

# Agenda

- Brief Overview of Software Deployment
- Recent Enhancements to Software Deployment
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- New Enhancement NOW Available!!!
  - Software Management
- Summary
- ➔ **Software Management Usage at SAS**
- Backup

# Thank you for attending this session!



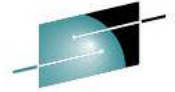
# Agenda

- Brief Overview of Software Deployment
- Recent Enhancements to Software Deployment
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- New Enhancement NOW Available!!!
  - Software Management
- Summary
- Software Management Usage at SAS

 **Backup**

## Additional Information

- z/OS Management Facility website
  - <http://ibm.com/systems/z/os/zos/zosmf/>
- z/OSMF V1.13 SPE Enhancement webpage
  - <http://www-03.ibm.com/systems/z/os/zos/zosmf/enhancements.html>
- 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**



## IBM Systems Lab Services and Training

Helping you gain the IBM Systems skills  
needed for smarter computing



- Comprehensive education, training and service offerings
- Expert instructors and consultants, world-class content and skills
- Multiple delivery options for training and services
- Conferences explore emerging trends and product strategies

### ***Special Programs:***

- IBM Systems 'Guaranteed to Run' Classes --  
***Make your education plans for classes with confidence!***
- Instructor-led online (ILO) training  
***The classroom comes to you.***
- Customized, private training
- Lab-based services assisting in high tech solutions

[www.ibm.com/training](http://www.ibm.com/training)





# z/OSMF Software Management (Deployment)

Task	Without z/OSMF Software Deployment	With z/OSMF Software Deployment
<p>Identify complete content of software to be deployed.</p>	<p>Done manually. Usually requires strict data set naming conventions or volume placement.</p> <p><b>Problems occurred when customers:</b></p> <ul style="list-style-type: none"> <li>▪ For WAS V6, copying PDSE without file system or visa versa</li> <li>▪ For fixes, copying one library w/o another resulting in part of the APAR installed,</li> <li>▪ Not copying a data set that had been renamed and enlarged</li> </ul>	<p>Automatically use SMP/E inventory to identify the all of the data sets that compose the source to be deployed.</p>
<p>Identify missing requisite PTFs on instances that will share resources with the deployed software.</p>	<p>Done manually prior to activation. System programmer can create and run SMP/E jobs to identify missing required service on other instances if the know the proper Fix Categories and commands.</p> <p><b>Problems occurred when customers were missing coexistence maintenance:</b></p> <ul style="list-style-type: none"> <li>▪ Cause an outage</li> <li>▪ In one case caused a sysplex wide outage when fallback was required</li> </ul>	<ul style="list-style-type: none"> <li>▪ Automated.</li> <li>▪ The task is optional, but recommended.</li> </ul>
<p>Identify regressed software on the prior level instance.</p>	<p>Done manually prior to activation. System programmer can create and run SMP/E jobs to compare source with prior instance. Can not be done if source and prior instance are in different sysplexes.</p> <p><b>Problems reoccurred</b></p>	<ul style="list-style-type: none"> <li>▪ Automated.</li> <li>▪ Supports cross-sysplex checking</li> <li>▪ The task is optional, but recommended.</li> </ul>





# z/OSMF Software Management (Deployment)

Task	Without z/OSMF Software Deployment	With z/OSMF Software Deployment
<p>Identify required actions from PTF HOLDs.</p>	<p>Done Manually. No SMP/E report capability to compare source with the prior instance available. System programmer has to keep track of all SYSTEM HOLDs installed and check applicable to each system they deploy to.</p> <p><b>Problems occurred because ACTIONS not performed on deployed to system</b></p>	<ul style="list-style-type: none"> <li>▪ Automated.</li> <li>▪ Supports cross-system checking.</li> <li>▪ The task is optional, but recommended.</li> </ul>
<p>Modify the target instance data set layout (names, placement, and catalog</p>	<p>Done manually.</p> <ul style="list-style-type: none"> <li>▪ Compare <u>source</u> data sets with the target system catalog and volumes</li> <li>▪ Compare <u>target</u> data set names with the target system catalogs to ensure the desired catalogs will be updated and new HLQs are identified</li> <li>▪ Best-guess comparison of available free space and required space for target data sets.</li> </ul> <p><b>Problems typically result in the deployment jobs having to be rerun</b></p>	<p>Automated</p> <ul style="list-style-type: none"> <li>▪ Does not allow a user to accidentally clobber an existing data set.</li> <li>▪ Analyzes target system catalogs to identify which will be updated for the target data sets, calling out new, updated, or deleted catalog entries.</li> <li>▪ Analyzes existing space used, accounting for data sets added, replaced, and deleted.</li> </ul>
<p>Ability to model target instance after current test/prod instance</p>	<p>Done manually</p>	<p>Automated</p>





# z/OSMF Software Management (Deployment)

Task	Without z/OSMF Software Deployment	With z/OSMF Software Deployment
Create deployment jobs.	<p>Done manually.</p> <ul style="list-style-type: none"> <li>▪ Create jobs from scratch, copy IBM supplied samples, or reuse prior deployment jobs.</li> <li>▪ Inhibits exploiting new technologies, like zFS.</li> </ul> <p><b>Problems occurred when customers</b></p> <ul style="list-style-type: none"> <li>▪ mistakenly deploy subsets of software</li> <li>▪ miss copying new libraries</li> </ul>	<p>Automated</p> <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.	<p>No real way to do this. If done at all, manually:</p> <ul style="list-style-type: none"> <li>▪ Compare source volumes with the target system,</li> <li>▪ Review deployment jobs</li> </ul> <p><b>Problems typically result in the deployment jobs having to be rerun</b></p>	<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>
Run the jobs	Done manually. Jobs and output can be saved for audit purposes	Same
Save instance for future deployments	N/A	Simple update required using the GUI

Note: The same z/OSMF Software Deployment tool can be used for z/OS, middleware and vendor software.

Complete your session's evaluation online at [SHARE.org/DoctorEval](http://SHARE.org/DoctorEval)

© 2013 IBM Corporation



Some customers have separate tools/techniques for z/OS and other software.

# Agenda

- **Brief Overview of Software Deployment**
- **Recent Enhancements to Software Deployment**
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- **New Enhancement NOW Available!!!**
  - **Software Management**
- **Summary**
- **Software Management Usage at SAS**
- **Backup**
  - ➔ **Additional information for unmounted z/OS UNIX file system data set support**
    - Additional information for deployment configuration copy
    - Additional information for more granular authority

## NEW FUNCTION – Unmounted UNIX File Systems

### ■ Support for Unmounted z/OS UNIX File System Data Sets

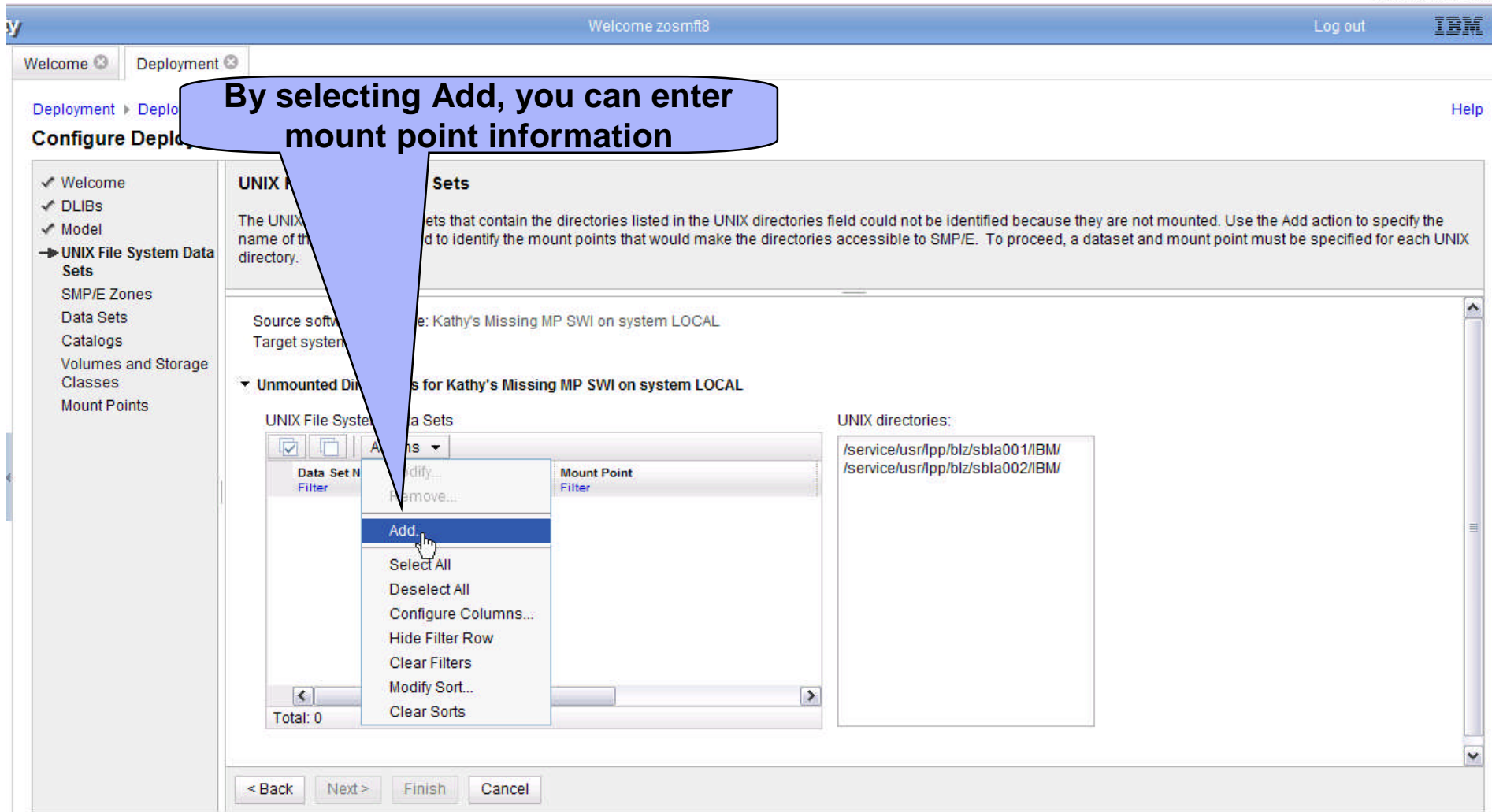
- Initially UNIX file system data sets had to be mounted so the Deployment task of z/OSMF can find the data sets where directories defined by DDDEF entries reside.
- If a data set cannot be found for one or more directories because the data set is not mounted, then the Deployment task generates an error message to identify the directory and does not continue the deployment operation.
- **Now the user is given the opportunity to identify the data sets that contain the subject directories.**

# Configure Deployment Wizard ...



If a data set cannot be determined because a directory is not mounted or cannot be found, the user will be given the opportunity to supply the mount point and the UNIX file system data set. The deployment will not proceed until the user provides the data set for the mount point or the directory is mounted so that the data set can be determined.

# Configure Deployment Wizard ...



Welcome zosmf8 Log out IBM

Deployment > Deployment

Configure Deployment

By selecting Add, you can enter mount point information

UNIX File System Data Sets

The UNIX file system data sets that contain the directories listed in the UNIX directories field could not be identified because they are not mounted. Use the Add action to specify the name of the mount point to identify the mount points that would make the directories accessible to SMP/E. To proceed, a dataset and mount point must be specified for each UNIX directory.

Source software: Kathy's Missing MP SWI on system LOCAL  
Target system: LOCAL

Unmounted Directories for Kathy's Missing MP SWI on system LOCAL

UNIX File System Data Sets	UNIX directories:				
<table border="1"><thead><tr><th>Data Set Name</th><th>Mount Point</th></tr></thead><tbody><tr><td>Filter</td><td>Filter</td></tr></tbody></table>	Data Set Name	Mount Point	Filter	Filter	<pre>/service/usr/lpp/biz/sbla001/IBM/ /service/usr/lpp/biz/sbla002/IBM/</pre>
Data Set Name	Mount Point				
Filter	Filter				

< Back Next > Finish Cancel

On the right you can see the directories for which z/OS UNIX file system data sets could not be obtained. By selecting the Add Action, the user can enter the mount point information.

# Configure Deployment Wizard ...



Welcome zosmf8 Log out

Welcome Deployment

Deployment > Deploy Software > Deployment Checklist > Co Help

### Add UNIX Data Set and Mount Point

Specify a UNIX file system data set name and mount point that makes the data set accessible to SMP/E. The mount point must have a prefix for one or more of the listed UNIX directories. z/OSMF uses the mount point to identify the directories contained in the data set. z/OSMF does not mount the data set.

Software instance: Kathy's Missing MP SWI

\* UNIX file system data set name:

\* Mount point:

UNIX directories:

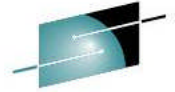
Enter the z/OS UNIX file system data set name and mount point

The user can enter the Unix file system data set and the mount point.





# Configure Deployment Wizard ...



Welcome zosmf8 Log out

Deployment | Deploy Software | Deployment Checklist | Configure Deployment Help

### Configure Deployment for Kathy's Missing MP SWI

- ✓ Welcome
- ✓ DLIBs
- ✓ Model
- UNIX File System Data Sets
  - SMP/E Zones
  - Data Sets
  - Catalogs
  - Volumes and Storage Classes
  - Mount Points

#### UNIX File System Data Sets

The UNIX file system data sets that contain the directories listed in the UNIX directory. Specify the name of those data sets and to identify the mount points that would make the directories accessible. To proceed, a dataset and mount point must be specified for each UNIX directory.

Messages: 1 Close All

**IZUD593I:** 1 UNIX directories were assigned to data set "SMPTEST.MIG2.VL144B". Oct 19, 2011 8:53:51 AM

Source software instance: Kathy's Missing MP SWI on system LOCAL  
Target system: LOCAL

▼ Unmounted Directories for Kathy's Missing MP SWI on system LOCAL

UNIX File System Data Sets

Data Set Name	Mount Point	Messages
<input checked="" type="checkbox"/> SMPTEST.MIG2.VL144B	/service/usr/lpp/blz/sbla001	

Total: 1, Selected: 1

UNIX directories:  
/service/usr/lpp/blz/sbla002/IBM/

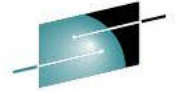
< Back   Next >   Finish   Cancel

Mount point assigned to a z/OS UNIX file system data set

Upon return from adding a mount point, you can see that one has been resolved. The user would again use the Add Action to resolve the second missing Unix directory.



# Configure Deployment Wizard ...



Welcome zosmf8

Log out



Welcome x Deployment x

Deployment > Deploy Software > Deployment Checklist > Configure Deployment

Help

## Configure Deployment for Kathy's Missing MP SWI

- ✓ Welcome
- ✓ DLIBs
- ✓ Model
- UNIX File System Data Sets
- SMP/E Zones
- Data Sets
- Catalogs
- Volumes and Storage Classes
- Mount Points

### UNIX File System Data Sets

The UNIX file system data sets that contain the directories listed in the UNIX directory cannot be identified because they are not mounted. Use the Add action to specify the name of those data sets and to identify the mount points that would make the directories accessible to SMP/E. To proceed, a dataset and mount point must be specified for each UNIX directory.

All mount points are resolved, configuration can continue

Messages 0 0 2 Close All

- IZUD593I: 1 UNIX directories were assigned to data set "SMPTTEST.MIG2.VL144B". Oct 19, 2011 8:53:51 AM x
- IZUD593I: 1 UNIX directories were assigned to data set "PINTO.VICOM.JCL". Oct 19, 2011 8:56:04 AM x

Source software instance: Kathy's Missing MP SWI on system LOCAL  
Target system: LOCAL

### Unmounted Directories for Kathy's Missing MP SWI on system LOCAL

Data Set Name	Mount Point	Messages
<input type="checkbox"/> SMPTTEST.MIG2.VL144B	/service/usr/lpp/blz/sbla001	
<input checked="" type="checkbox"/> PINTO.VICOM.JCL	/service/usr/lpp/blz/sbla002/IBM	

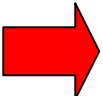
Total: 2, Selected: 1

UNIX directories:

< Back **Next >** Finish Cancel

After all mount points have been resolved, clicking Next will proceed through the Configuration process as normally done. If errors result from the mount points entered by the user, control will remain on this pane until the errors are resolved.

# Agenda

- **Brief Overview of Software Deployment**
- **Recent Enhancements to Software Deployment**
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- **New Enhancement NOW Available!!!**
  - **Software Management**
- **Summary**
- **Software Management Usage at SAS**
- **Backup**
  - Additional information for unmounted z/OS UNIX file system data set support
  -  Additional information for deployment configuration copy
  - Additional information for more granular authority

# NEW FUNCTION – Deployment Copy

- Allows users to reuse the configuration from a prior completed deployment.
  - Currently a deployment is a one-time operation.
    - To perform the same deployment later, a user must create a new deployment from scratch
    - The user must supply all the configuration information.
- With this SPE, z/OSMF will allow a user to make a copy of a prior completed deployment and reuse the information that describes the target of that deployment.
  - Data set names, volumes, storage classes, catalog state, UNIX directory mount points, and zone names
  - z/OSMF will compare the saved information to the current source software instance and identify any discrepancies or differences
- z/OSMF reuses specific saved information - making second or subsequent deployments much quicker and easier.
- Examples:
  - Distribute a single software instance to several different systems:
    - Create a deployment from scratch to the first system.
    - Copy the first deployment for the second and subsequent systems.
  - Deploy a software instance today. 6-months later update that instance with PTFs and deploy again:
    - Create a deployment from scratch for the first deployment.
    - 6-months later, copy the first deployment.

# Deployment Copy

- All of the information from the original deployment is copied into the new deployment, but can be changed if desired.
- Each step of the new deployment must be visited so the user can verify the default/copied selections.
  1. A default deployment name is generated using a name suffix algorithm. Description and Categories are copied.
  2. Original source software instance is selected.
  3. Original objective and target system are selected.
  4. Original instances for reporting are selected. New reports must be run.
  5. Original configuration is primed.
    - Zone names, data set names, volumes, storage classes, data set catalog state, volume properties, UNIX data set mount points.
  6. Job card for the user and system is used, not copied from the original deployment.
  7. A default target software instance name is generated using a name suffix algorithm. Description and Categories are copied.

# Deployment Copy

- When displaying the list of deployments, only Completed deployments may be copied.



IBM z/OS Management Facility Welcome zosmf6 Log out

Welcome Deployment

Deployment Deploy Software Help

**Deploy Software**

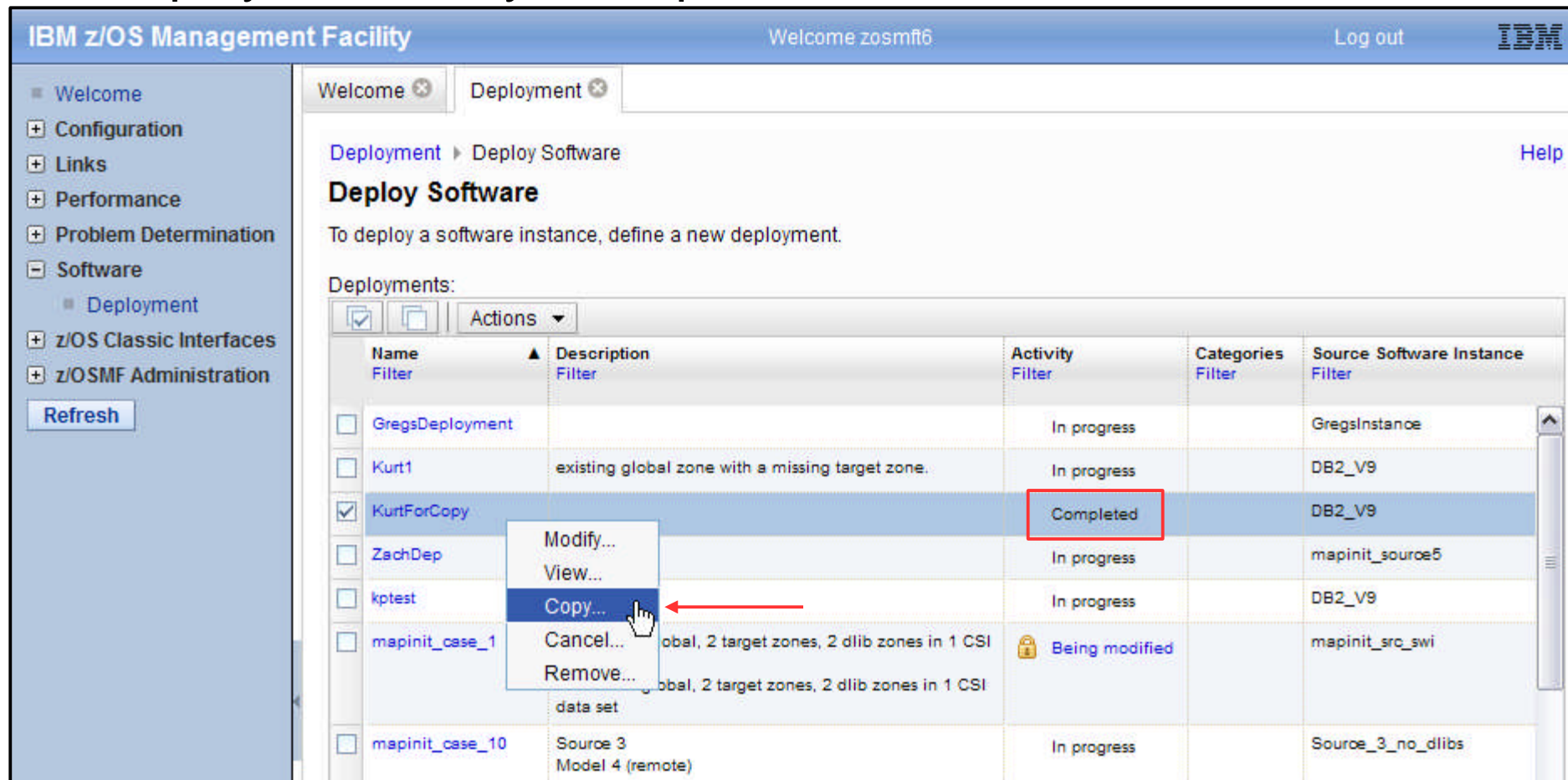
To deploy a software instance, define a new deployment.

Deployments:

Name Filter	Description Filter	Activity Filter	Categories Filter	Source Software Instance Filter
<input type="checkbox"/> GregsDeployment		In progress		GregsInstance
<input checked="" type="checkbox"/> Kurt1	existing global zone with a missing target zone.	In progress		DB2_V9
<input type="checkbox"/> KurtF		Completed		DB2_V9
<input type="checkbox"/> ZachD		In progress		mapinit_source5
<input type="checkbox"/> kptest		In progress		DB2_V9
<input type="checkbox"/> mapinit_case_1	Source 1 = global, 2 target zones, 2 dlrib zones in 1 CSI data set Model 1 = global, 2 target zones, 2 dlrib zones in 1 CSI data set	Being modified		mapinit_src_swi
<input type="checkbox"/> mapinit_case_10	Source 3 Model 4 (remote)	In progress		Source_3_no_dlrib

# Deployment Copy

- When displaying the list of deployments, only Completed deployments may be copied.



IBM z/OS Management Facility | Welcome zosmf6 | Log out

Deployment > Deploy Software

### Deploy Software

To deploy a software instance, define a new deployment.

Deployments:

Name Filter	Description Filter	Activity Filter	Categories Filter	Source Software Instance Filter
<input type="checkbox"/> GregsDeployment		In progress		GregsInstance
<input type="checkbox"/> Kurt1	existing global zone with a missing target zone.	In progress		DB2_V9
<input checked="" type="checkbox"/> KurtForCopy		Completed		DB2_V9
<input type="checkbox"/> ZachDep		In progress		mapinit_source5
<input type="checkbox"/> kptest		In progress		DB2_V9
<input type="checkbox"/> mapinit_case_1	Global, 2 target zones, 2 dlrib zones in 1 CSI	Being modified		mapinit_src_swi
<input type="checkbox"/> mapinit_case_10	Source 3 Model 4 (remote)	In progress		Source_3_no_dlribs

# Deployment Copy

IBM z/OS Management Facility
Welcome zosmf6 [Log out](#)

- Welcome
- + Configuration
- + Links
- + Performance
- + Problem Determination
- Software
  - Deployment
- + z/OS Classic Interfaces
- + z/OSMF Administration

Welcome ✕
Deployment ✕

Deployment > Deploy Software > Deployment Checklist
Help

## Deployment Checklist


To deploy a software instance, complete the checklist.

Checklist

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

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

© 2013 IBM Corporation





# Agenda

- **Brief Overview of Software Deployment**
- **Recent Enhancements to Software Deployment**
  - Support for unmounted z/OS UNIX file system data sets
  - Support for deployment configuration copy
  - Support for granular control over which users can view and modify deployment task artifacts
- **New Enhancement NOW Available!!!**
  - **Software Management**
- **Summary**
- **Software Management Usage at SAS**
- **Backup**
  - Additional information for unmounted z/OS UNIX file system data set support
  - Additional information for deployment configuration copy
  - ➔ Additional information for more granular authority

## NEW FUNCTION – User Authorization

- Allow use of SAF profiles to control which users may access individual objects.
- For example, don't let DB2 sysprogs touch z/OS objects and vice versa. The objects supported are:
  - Software instances
  - Deployments
  - Global zones
  - Categories
- All objects are visible in the table displays, but actions may not be allowed for selected objects based on a user's authorization.
  - No authorization checks are performed to populate lists of objects.
- When a user selects an object and action, z/OSMF will perform an authorization check for the user and action for the selected object before continuing.
- Software Deployment will only perform authorization checks if z/OSMF is configured to use SAF mode authorization
  - Repository mode is not supported for authorization checks
- The default z/OSMF configuration allows all users full authorization access.

# User Authorization...

- z/OSMF SAF authorization uses resources in the ZMFAPLA class
  - New class in z/OS V1.13
- z/OSMF SAF resource names are of the form:  
<saPrefix>.ZOSMF.pluginName.taskName<.suffix>
  - **saPrefix** is defined during WAS OEM configuration, default and typical is BBNBASE
  - **pluginName** is the name of the plug-in, SOFTWARE\_DEPLOYMENT
  - **taskName** is the name for the task in the Navigator, DEPLOYMENT
  - **suffix** is additional qualifiers to uniquely identify actions and resources for the plug-in.
- For Software Deployment each object has a unique SAF resource name associated with it of the form:  
BBNBASE.ZOSMF.SOFTWARE\_DEPLOYMENT.DATA.objectType.objectSuffix
  - **DATA** separates the resource name space for objects from the name space for actions
  - **objectType** indicates the type of object:
    - SWI – software instance
    - DEP – deployment
    - GZN – global zone
    - CAT – category
  - **objectSuffix** is unique for each type of object

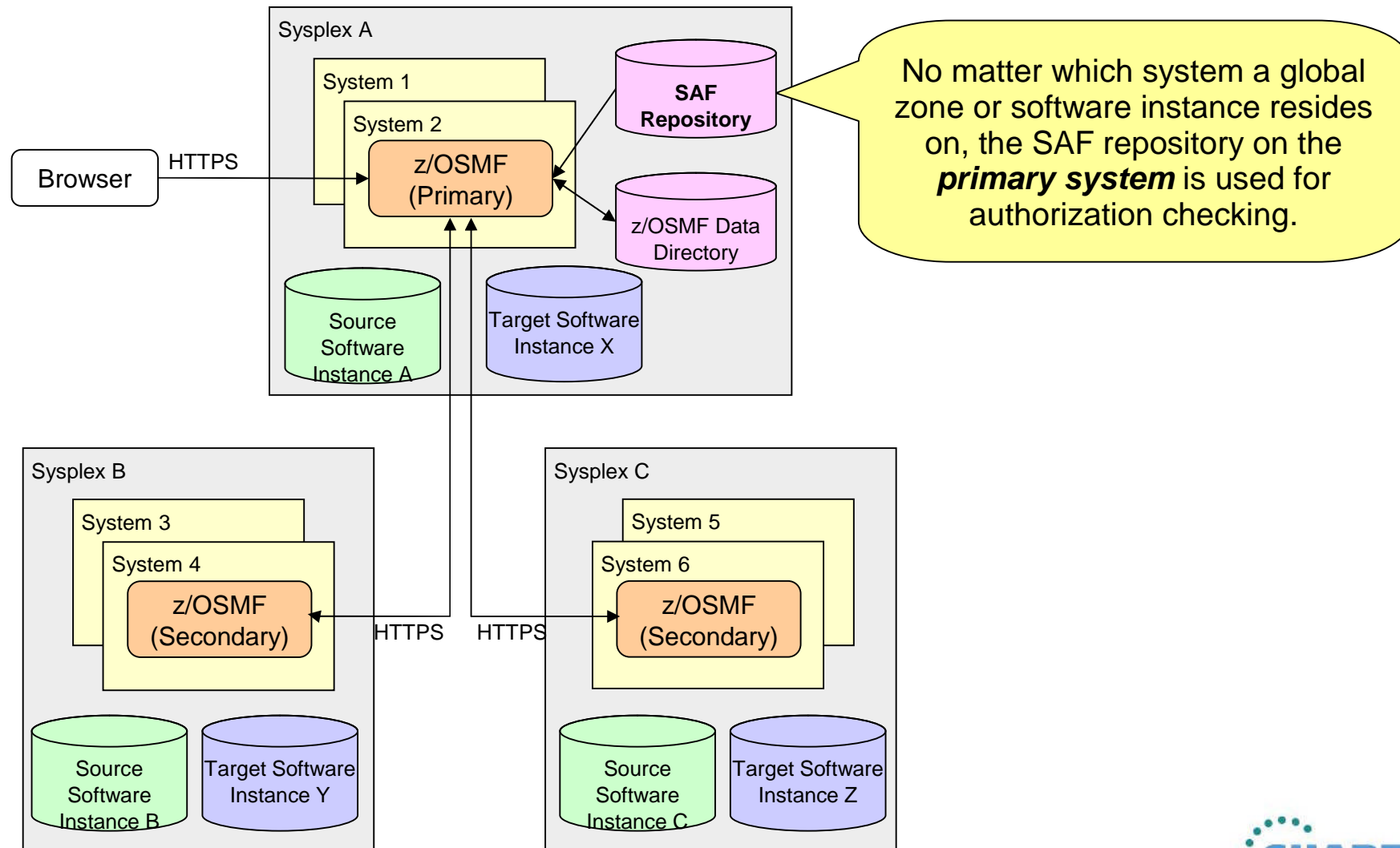
## User Authorization: Object Name Syntax

- Software Deployment object names will be used in SAF resource names.
- z/OSMF currently has little or no restrictions on the allowed character set in object names.
- However, SAF and TSO have some limitations:
  - SAF does not support some characters in resource or profile names (ie. blank)
  - Some characters are supported in profile names but are used as generic characters (ie. \*, &, %)
  - Some characters and combinations cannot be specified in TSO commands to create SAF profiles (ie. parenthesis)
- Therefore, Software Deployment object names are now more restrictive.
  - Ensures object names can be used in SAF resource and profile names.
  - Add and Modify actions will allow **only** supported characters.
    - Blank (among other characters) are no longer supported.

# User Authorization: Hints and Tips

- SAF resource names and profiles are case sensitive.
  - Object names and profiles must have matching case in order for a particular profile to be used when checking authorization of an object.
- Useful RACF commands:
  - Search for all of the profiles that affect Software Deployment:  
`SEARCH ALL CLASS(ZMFAPLA) +  
FILTER(BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.**)`
  - List a specific profile:  
`RLIST ZMFAPLA  
BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.** + AUTHUSER`
  - Or in one fell swoop:  
`SEARCH ALL CLASS(ZMFAPLA) +  
FILTER(BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT) +  
CLIST(RLIST ZMFAPLA ' ' AUTHUSER') NOLIST  
EXEC EXEC.RACF`
- To debug authorization troubles a z/OSMF trace can be helpful.
  - Resource names and userids for authorization checks are echoed in the trace.

# User Authorization: Hints and Tips...



## User Authorization: Ex. z/OS and DB2 Sysprogs

Give z/OS sysprogs CONTROL access to z/OS objects and DB2 sysprogs CONTROL access to DB2 objects. Allow everyone READ access.

### 1. Allow only administrators to add and modify categories:

```
RDEFINE ZMFAPLA +
```

```
(BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DEPLOYMENT.CATEGORIES.MODIFY) UACC(NONE)
```

```
PERMIT
```

```
BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DEPLOYMENT.CATEGORIES.MODIFY +
```

```
CLASS(ZMFAPLA) ID(IZUADMIN) ACCESS(READ)
```

### 2. Force all objects to be assigned at least one category:

```
RDEFINE ZMFAPLA +
```

```
(BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.CAT.NOCATEGORY) UACC(NONE)
```

Permit no users!

### 3. As an administrator, define categories “z/OS” and “DB2”.

## User Authorization: Ex. z/OS and DB2 Sysprogs

### 4. Allow DB2 sysprogs CONTROL access to DB2 objects:

```
RDEFINE ZMFAPLA +  
  (BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.*.DB2.**)  
UACC(NONE)  
PERMIT BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.*.DB2.** +  
  CLASS(ZMFAPLA) ID(DB2PROG) ACCESS(CONTROL)
```

### 5. Allow all other users READ access to DB2 objects:

```
PERMIT BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.*.DB2.** +  
  CLASS(ZMFAPLA) ID(IZUUSER) ACCESS(READ)
```

### 6. Allow z/OS sysprogs CONTROL access to z/OS objects:

```
RDEFINE ZMFAPLA +  
  (BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.*.z/OS.**)  
UACC(NONE)  
PERMIT BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.*.z/OS.** +  
  CLASS(ZMFAPLA) ID(ZOSPROG) ACCESS(CONTROL)
```

### 7. Allow all other users READ access to z/OS objects:

```
PERMIT BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.DATA.*.z/OS.** +  
  CLASS(ZMFAPLA) ID(IZUUSER) ACCESS(READ)
```