



New z/OSMF Software Management Capabilities

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Session 13082



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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
- 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

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- **Brief Overview of Software Deployment**
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Software Deployment

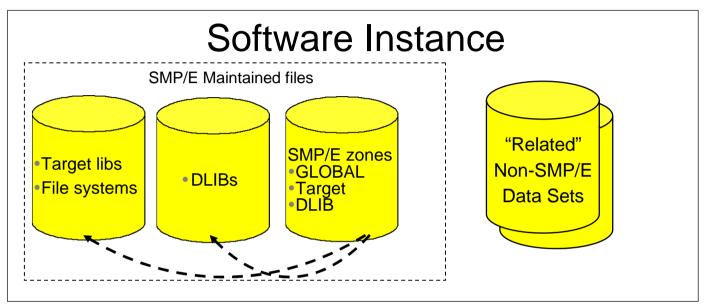


- z/OSMF V1.13 introduced a Software Deployment function
 - Web-based application
 - User interaction is via a browser on a workstation
 - z/OSMF and Software Deployment will be active on one system in a sysplex, allowing access to shared DASD
 - Locally, either on a single system or system-to-system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



Software Instance





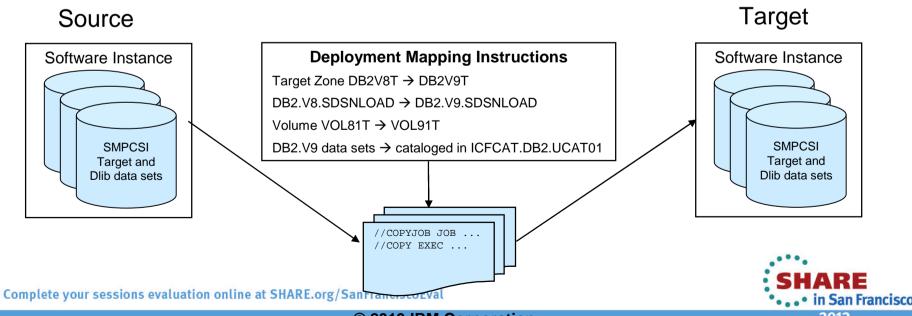
- For Software Deployment, the primary purpose of a software instance was to identify the data sets to be deployed
 - Used to describe the SMP/E Global zone and target zone(s) that will be analyzed to identify the data sets to copy.
 - DLIB data sets and the DLIB zone are optional
 - Can also include 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

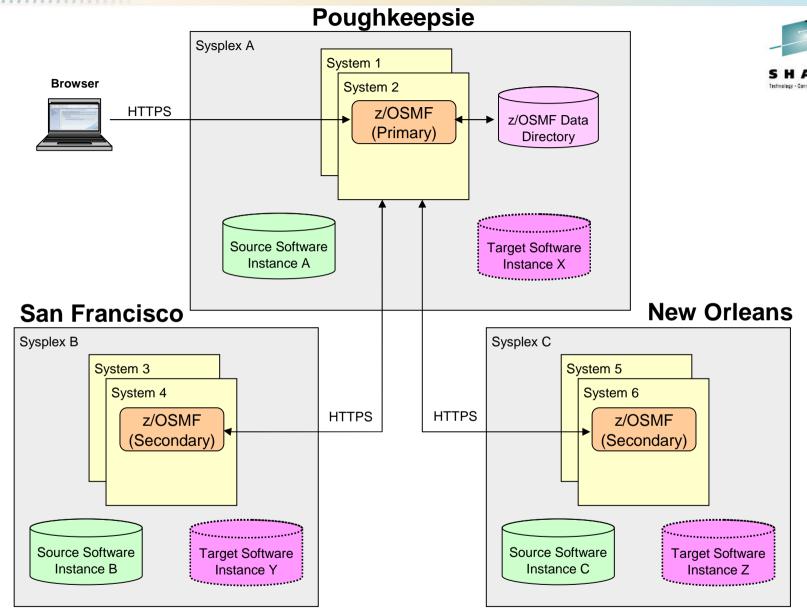


Basic Deployment Operation Flow



- 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.





Software instances can be viewed or deployed throughout your enterprise



z/OSMF Software Deployment Summary



- The z/OS Software Deployment function of z/OSMF will provide rigor in the deployment of <u>any</u> 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 Complete your sessions evaluation online at SHARE.org/SanFranciscoEval



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Brief Overview of Software Deployment



Recent Enhancements to Software Deployment

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NEW FUNCTION – PTFs UK73699 and UO01300



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.

NEW FUNCTION – APAR PM40764 and IO14873 Deployment Copy

- S H A R E
- 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.



NEW FUNCTION – APAR PM40764 and PM50651 User Authorization

- SHARE
- 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 <u>SAF mode authorization</u>
 - Repository mode is not supported for authorization checks
- The default z/OSMF configuration allows all users full authorization

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in San Francisco

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: <safPrefix>.ZOSMF.pluginName.taskName<.suffix>
 - safPrefix 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
 - **<u>suffix</u>** 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 <u>only</u> supported characters
 - Blank (among other characters) are no longer supported...



User Authorization: Hints and Tips

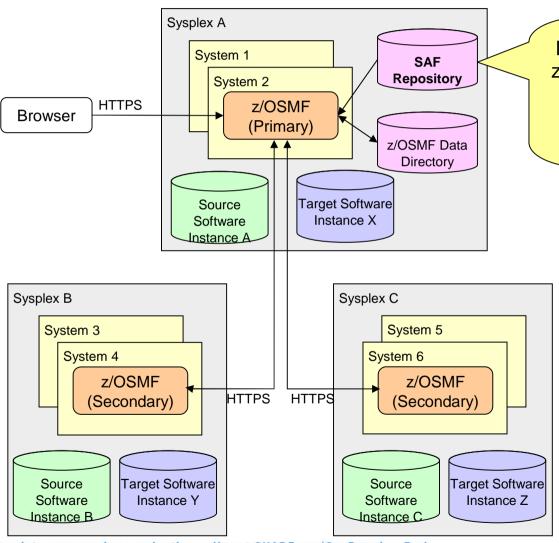


- SAF resource names and profiles are case sensitive.
 - Object names and profiles must have matching case in order for a particular profile to be used when checking authorization of an object.
- Useful RACF commands:
 - Search for all of the profiles that affect Software Deployment:
 SEARCH ALL CLASS(ZMFAPLA) +
 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...





No matter which system a global zone or software instance resides on, the SAF repository on the **primary system** is used for authorization checking.

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New Enhancement NOW Available!!!

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Software Management



- z/OSMF V1.13 introduced a Software **Deployment function**
 - Introduced a concept of a software instance
- 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 <a href="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.

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IBM z/OS Management

New/Renamed Software Management selection

- Welcome
- * Configuration
- + Links
- + Performance
- + Problem Determin
- 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 simp management.

mfdev6

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...

Software Instances	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 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.

Welcome X Software Man...

Select Software Instances to view details about software instances

Help

Software Management

Use this task to view details oftware inventory, including related products, features, FMIDs, data sets, deployments, and SYSMODs. Learn more...

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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 messages.

IBM z/C

You will see a list of software instances already defined

Software Management

Software Instances

Na	ame	System	Messages	Description	Activity	Global Zone CSI	Tai
Filte	er	Filter	Filter	Filter		Filter	
MAS S	STER_SMPEV3.6_WITH_PTF	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 TSM
MA: _P1	STER_SMPEV3.6_WITHOUT FS	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 TSM
MAS	STER_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 TGT
DE	MO_SMPEV3.6_WITH_PTFS	LOCAL	■ IZUD809 I	Completed demo software instance, of SMP/E V3.6 with PTFs.		ZOSMF.SWDEPLOY.GLOBAL	.CSTSM
MAS odu	STER_zOS_R13_w/Other_Pr ct	LOCAL		z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management		SMLAB01.GLOBAL.CSI	COE PLI4
-5-10-1-0	F 5 L 3 L 5		*			111	
Total: Refres	5, Selected: 0 h Last refresh: Jan 11, 2	2013 9:31:58	AM	Yo	u can scr	coll right	

IBM z/

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

Software Managem

Software Instances

Name	System	Target Zones	Categories	Product, Feature, and
Contains "Master"	Filter			FMID Information Retrieved (Local)
				Filter
MASTER_SMPEV3.6_WITH_PT FS	LOCAL	TSMP36P		Jan 14, 2013 10:51:58 AM
MASTER_SMPEV3.6_WITHOUT _PTFS	LOCAL	TSMP36		Jan 9, 2013 4:13:16 PM
MASTER_ZOSV1.12	LOCAL	TGTZ12		Jan 9, 2013 4:13:39 PM
MASTER_zOS_R13_w/Other_Pr	LOCAL	COB320T, DT910T,		Jan 9, 2013 5:39:55 PM
oduct		PLI410T, Z1130T	You ca	an scroll right, again

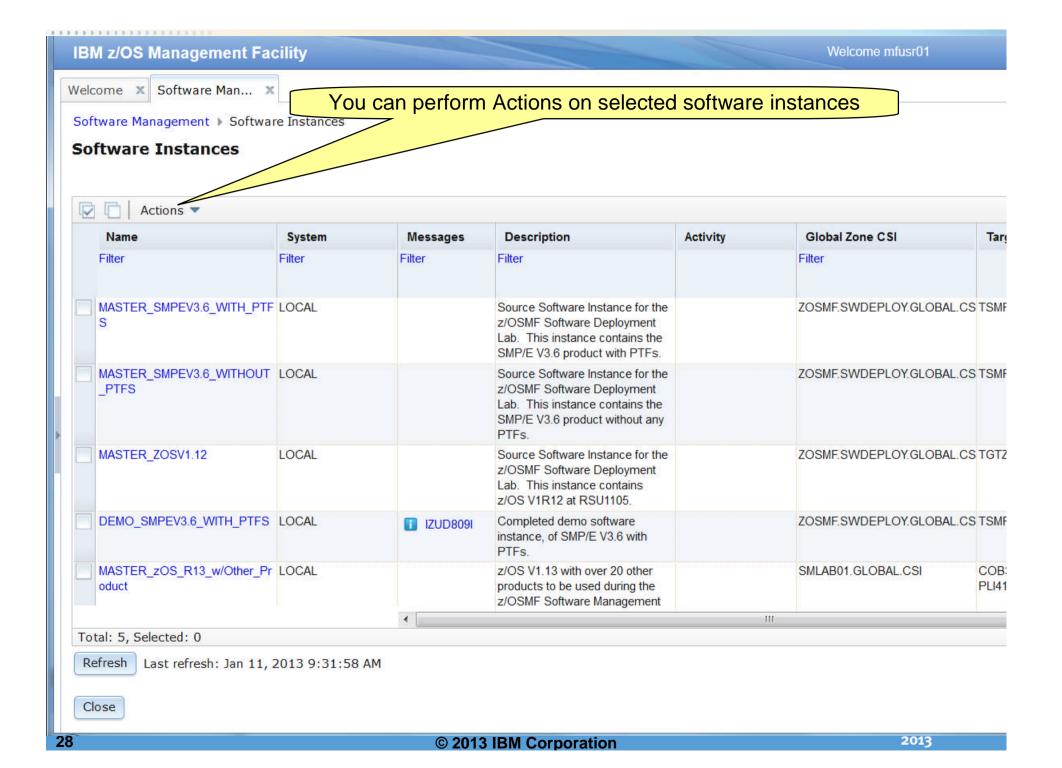
IBM z/OS Man

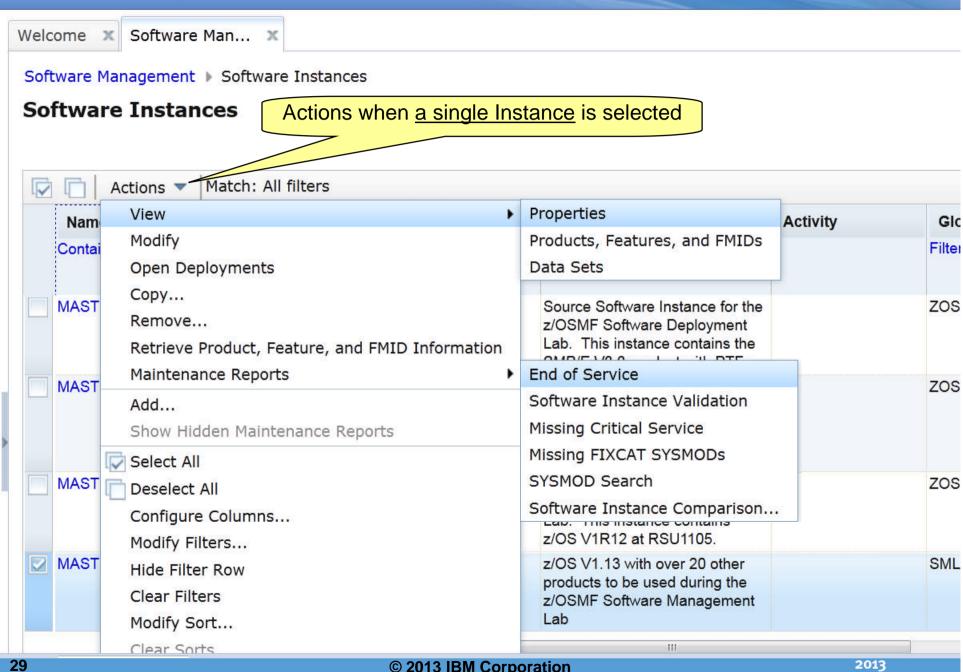
You will see information on who created the software instance, when it was last modified, and by whom.

Software Management > Software Instances

Software Instances





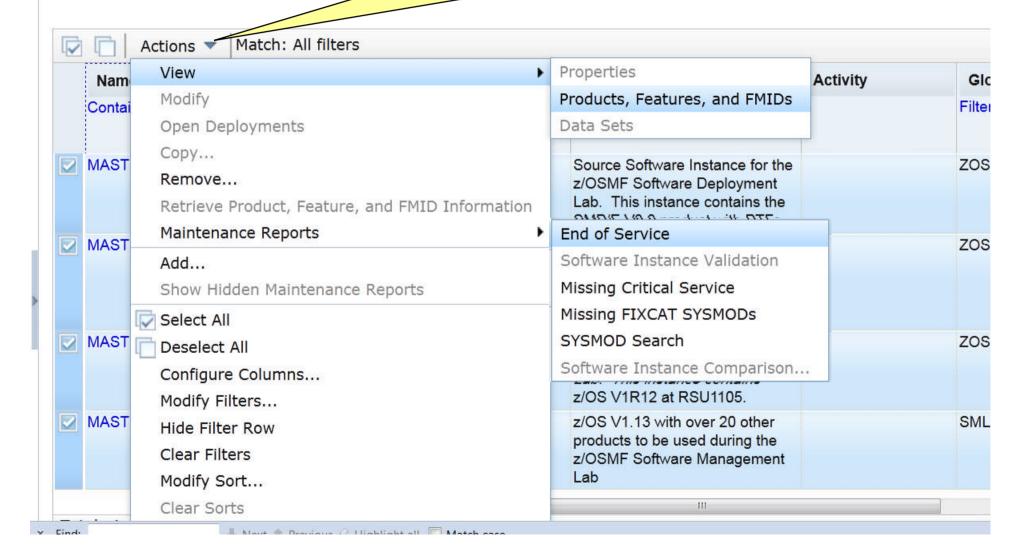


Actions that are not valid (and therefore not operational) are grayed out and not selectable.

Software Management ▶ Software Instances

Software Instances

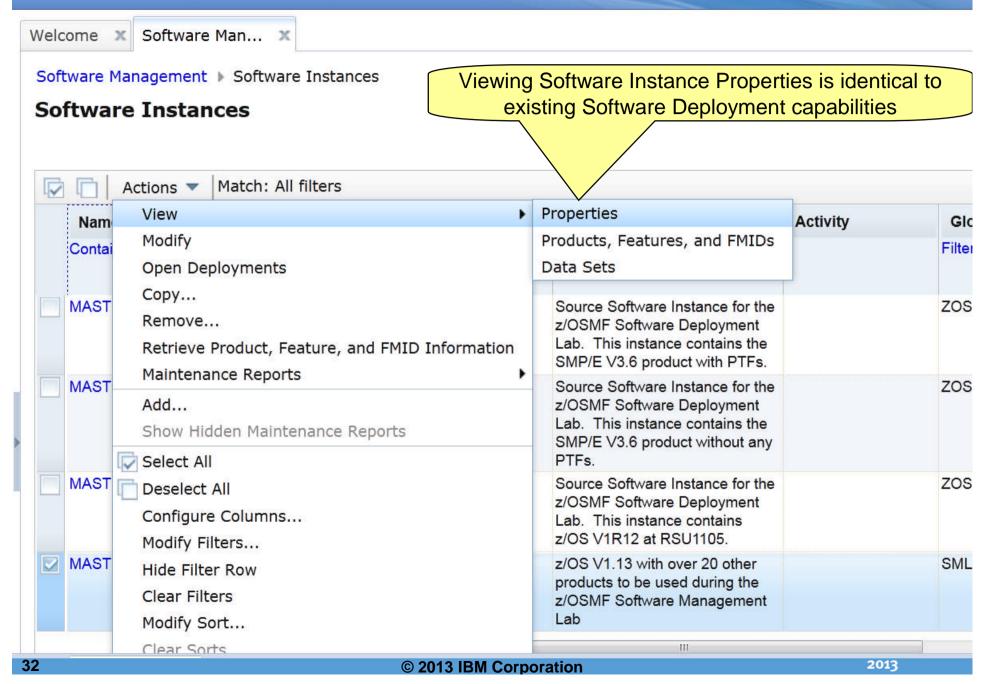
Actions when multiple instances are selected





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





Multiple tabs are a 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

View MAS	errer_Product
VICVV III	other_noduce

General	SMP/E Zones	Non-SMP/E Managed Data Se
ame:		
ASTER_Z	zOS_R13_w/Oth	er_Product
eccrintion	. (maximum 25)	c 1
		6 characters, currently 0 chara
z/os V1	.13 with ove	b characters, currently U chara r 20 other products to z/OSMF Software
z/OS V1 be used	.13 with ove during the	r 20 other products to
z/os V1	.13 with ove during the	r 20 other products to
z/OS V1 be used Manageme	.13 with ove during the ent Lab	r 20 other products to
z/OS V1 be used Manageme	.13 with ove during the ent Lab	r 20 other products to

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.

General SMP/E Zones	Non-SMP/E Mai	naged Data Sets				
Global Zones	347.					
CSI Data Set		System	Description	Activity	Last Modified (Local)	Modified By
ZOSMF.SWDEPLOY.GLOB	ALCSI	LOCAL	Master GLOBAL CSI for Software Deployment Lab		Jan 5, 2012 10:32:12 AM	MFUSR01
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		,				
W-504 CHO 4000 AD 001 BANK CHO		,				
Total: 2, Selected: 1 Target Zones: COB320T DT910T PLI410T						

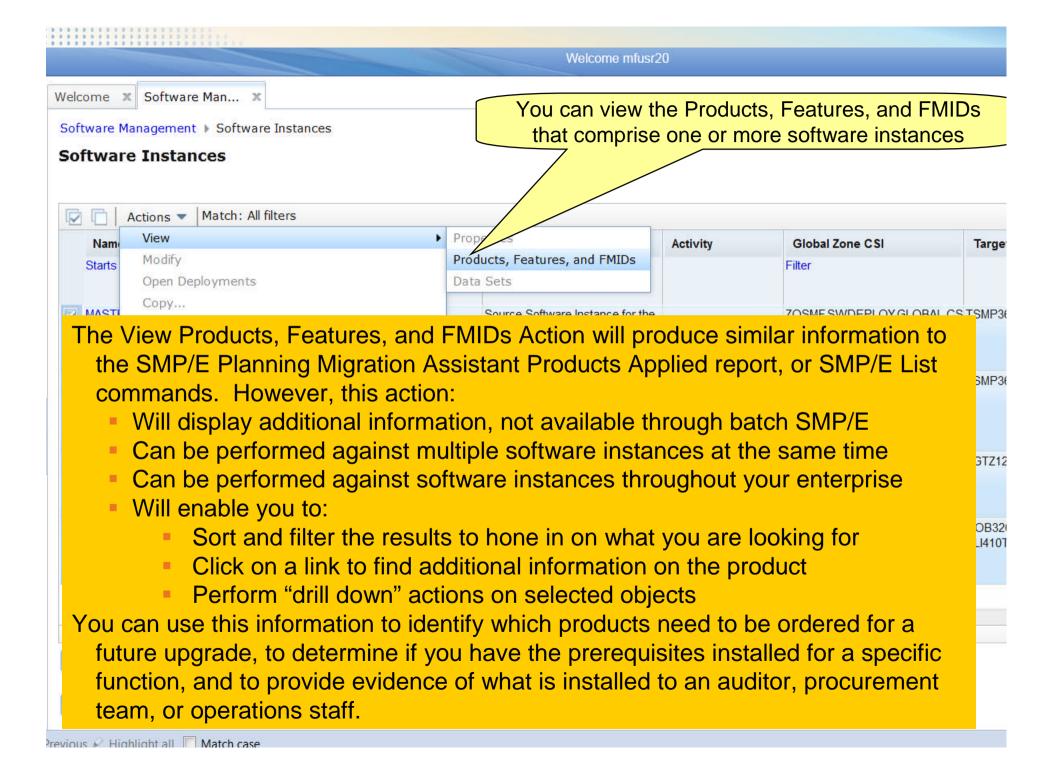
Previous P Highlight all Match case

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 Instance

View MASTER_zOS_R13____oduct

General	SMP/E Zones	Non-SMP/E Managed Data Sets	
Data Sets			
Actions •	7		
Name			
Filter			
SYS1.PARM	ИLIB		
SYS1.PRO	CLIB		





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

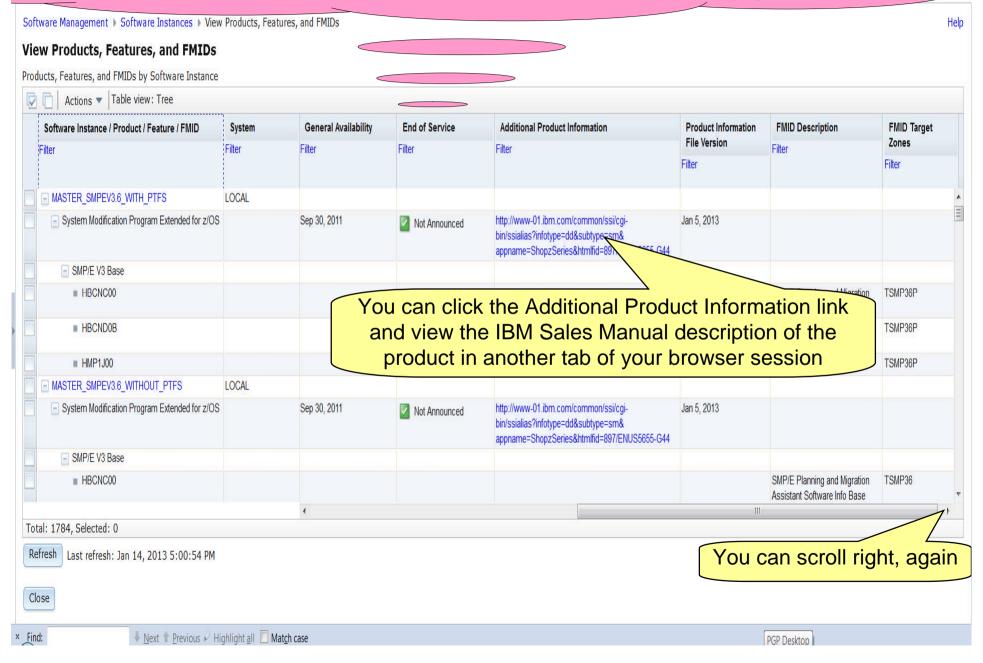
Software Instance / Product / Feature / FMID	System	Messages	Product, Feature, and	Release	Product ID	Vendor
lter	Filter	Filter	FMID Information Retrieved (Local)	Filter	Filter	Filter
			Filter			
MASTER_SMPEV3.6_WITH_PTFS	LOCAL		Jan 14, 2013 10:51:58 AM			
System Modification Program Extended for z/OS				03.06.00	5655-G44	IBM
SMP/E V3 Base						
■ HBCNC00						
■ HBCND0B						
■ HMP1J00						
MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL		Jan 9, 2013 4:13:16 PM			
System Modification Program Extended for z/OS				03.06.00	5655-G44	IBM
SMP/E V3 Base						
■ HBCNC00						
■ HBCND0B						
■ HMP1J00						
MASTER_ZOSV1.12	LOCAL		Jan 9, 2013 4:13:39 PM			
200					111	1.2

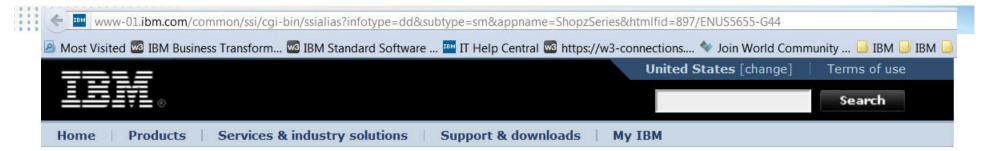
Refresh

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

You can scroll right

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





Offering Information

5655-G44 IBM System Modification Program Extended (SMP/E) for

IBM Sales Manual

IBM United States Sales Manual

Revised: July 12, 2011.

Related links

Feedback

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z/OS V3.6

- ▶ Product Life Cycle Dates
- ↓ Abstract
- ♣ Product Positioning
- Highlights

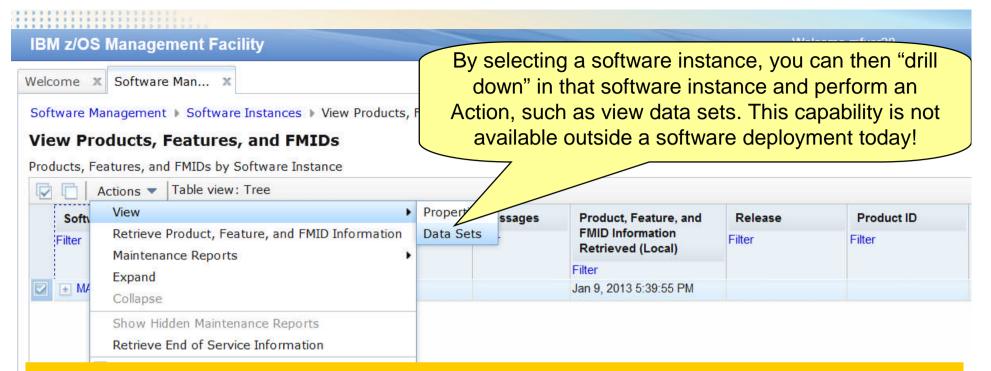
- ↓ Description
- ↓ Technical Description
- ♣ Planning Information
- ♣ Security, Auditability, and Control

Product Life Cycle Dates

Program Number	VRM	Announced	Available	Marketing Withdrawn	Service Discontinued	
5655-G44	3.06.0	2011/07/12	2011/09/30	*200	-	
5655-G44	3.05.0	2008/08/05	2008/09/26	1211	-	
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 Manage View Products, Features, and FMIDs Products, Features, and FMIDs by Software Instance Actions ▼ | Table view: Tree Software Instance / Product / Feature / FMID System **Product Information FMID Description FMID Target** File Version Zones Filter Filter Filter Filter Filter MASTER zOS R13 w/Other Product LOCAL Enterprise COBOL for z/OS and OS/390 Jan 5, 2013 COBOL Alt Function H26L320 IBM ENTERPRISE COBOL FOR COB320T Z/OS AND OS/390 BASE J26L32H IBM ENTERPRISE COBOL FOR COB320T Z/OS AND OS/390 HFS J26L321 IBM ENTERPRISE COBOL FOR COB320T Z/OS AND OS/390 ENU J26L322 IBM ENTERPRISE COBOL FOR COB320T Z/OS AND OS/390 JPN Cobol Alt Function JPN H26L320 IBM ENTERPRISE COBOL FOR COB320T Z/OS AND OS/390 BASE Total: 286, Selected: 0 2013 © 2013 IBM Corporation

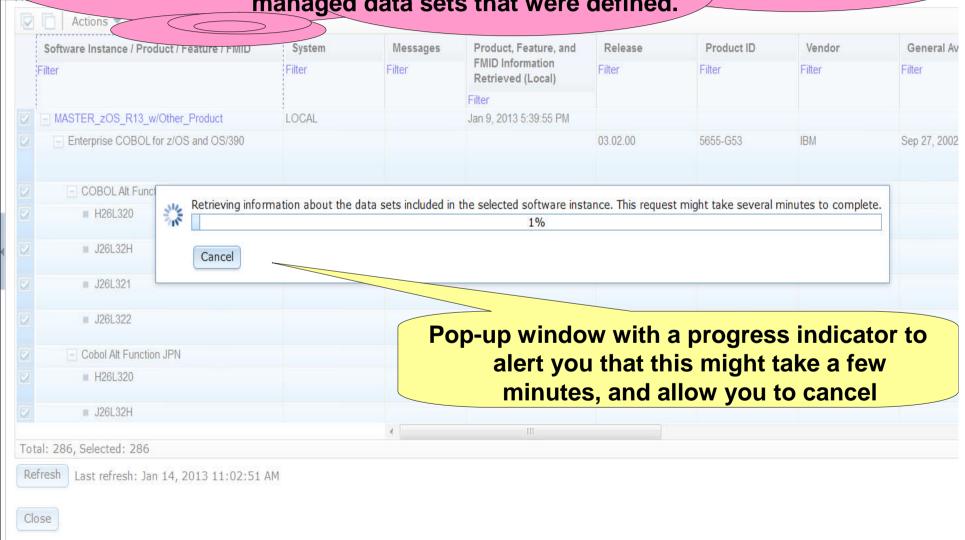


You can use the View Data Sets page in the Software Management task to identify all the data sets included in the software instance. The data sets included in the software instance are divided into two groups

- 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.



Provious A Highlight all Match case

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

Software Management ▶ Software Inst

S View Data Sets

View Data Sets

Selected software instance: MASTER_zOS_R13_w/Other_Product on sys

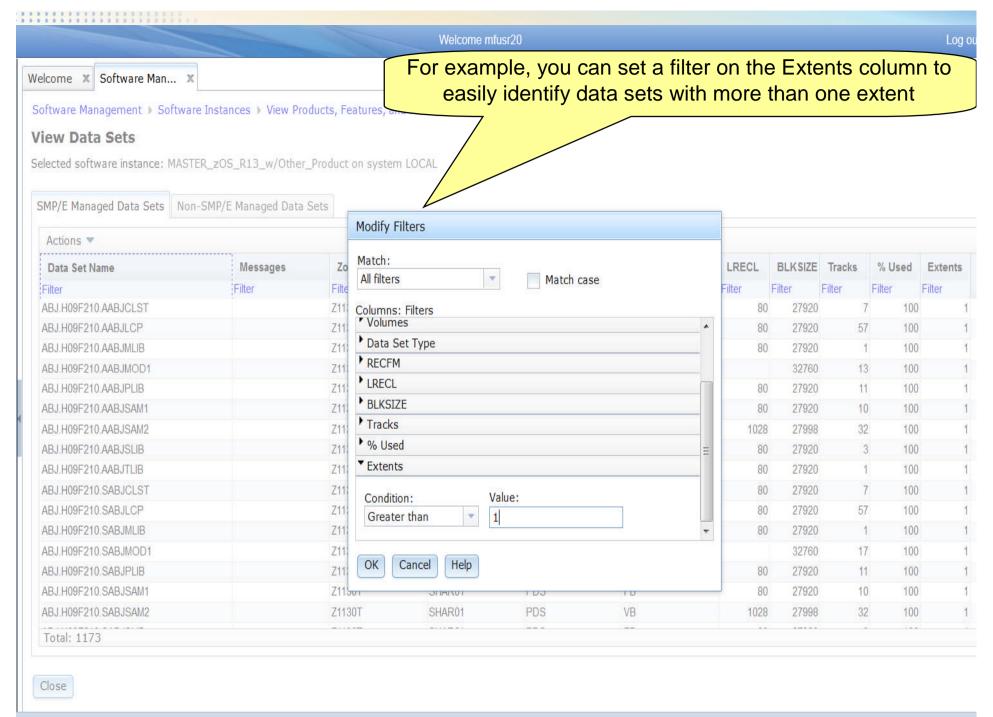
SMP/E Managed Data Sets Non-SMP/E Managed Data Sets

You can use filters to identify conforming/non-conforming Data set names

Data set placement, possibly based on data set type

Data sets with more than one extent

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	Filter
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



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-Jmr/ - ranaged Data Sets

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	3 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	9 2
SYS1.SIEALNKE		Z1130T	SHAR01	PDSE	U		32760	3135	90) 2
SYS1.SIEAMIGE		Z1130T	SHAR01	PDSE	U		32760	4	72	2 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	9 2

Total: 1173, Filtered: 10

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

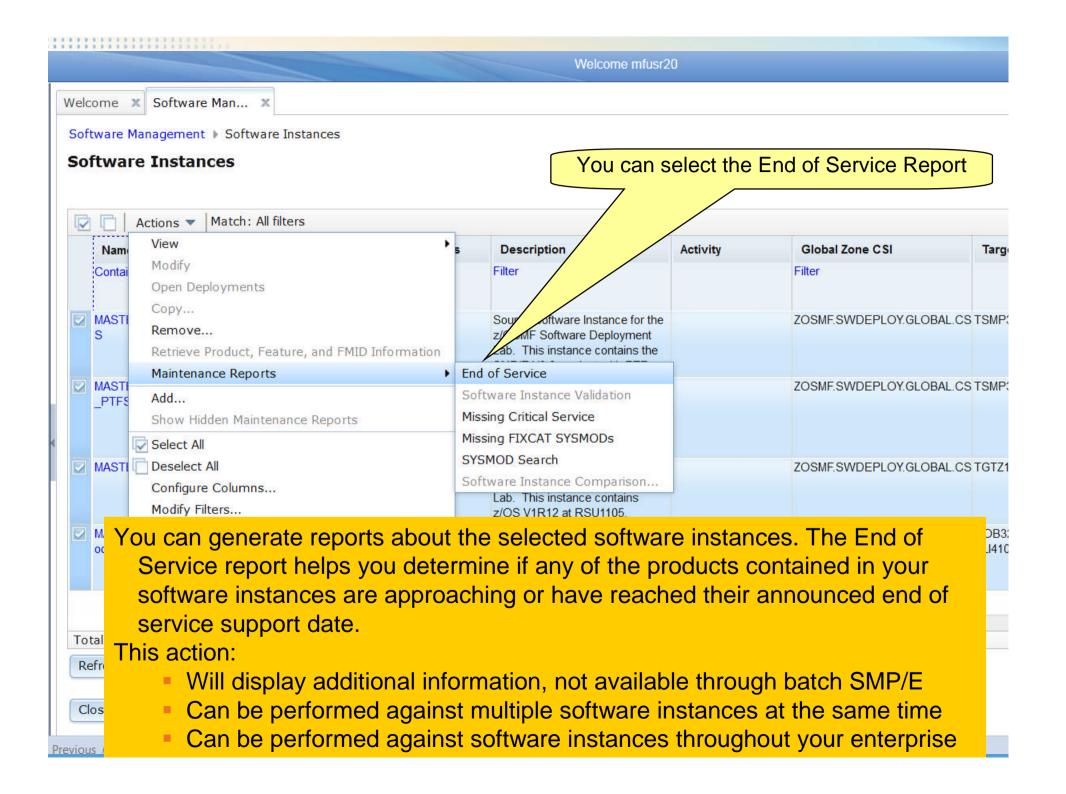
View Data Sets

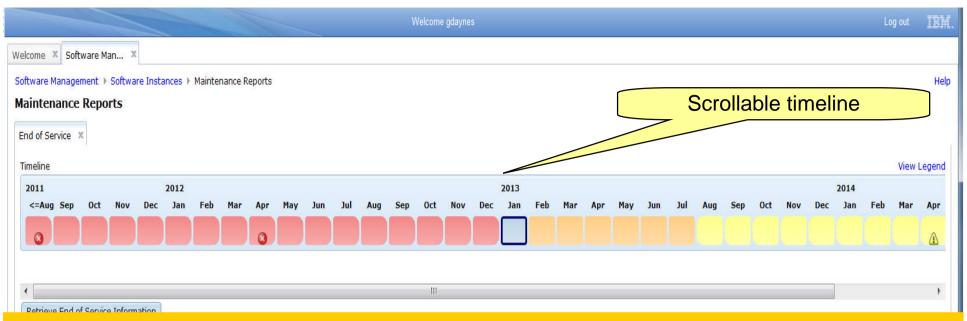
Selected software instance: MASTER_zOS_

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
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
SYS1.PARMLIB		SHAR03	PDS	FB	80	27920		1 100	1
SYS1.PROCLIB		SHAR03	PDS	FB	80	27920		1 100	1

Total: 2



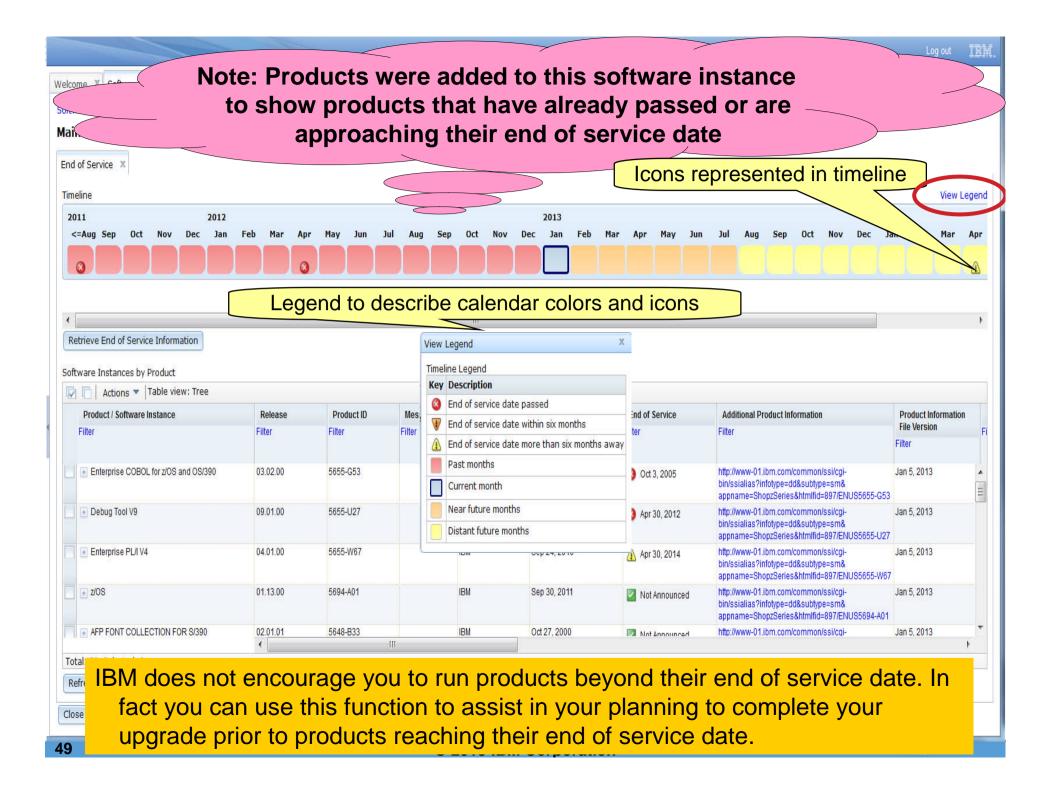


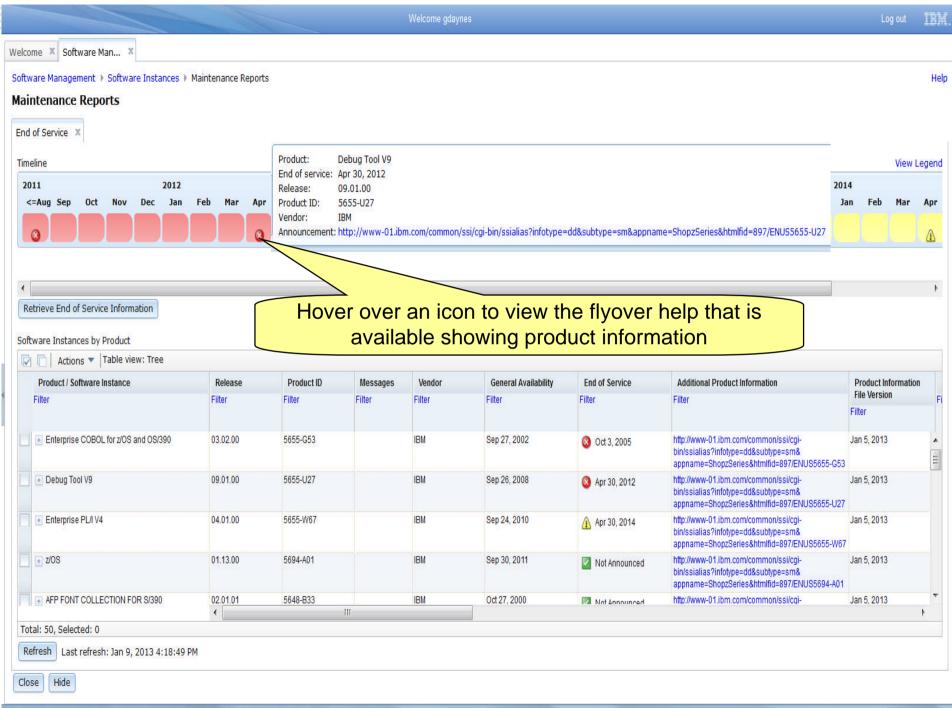
The timeline contains 36 bars, which represent the following months:

- 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 icons 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.





Welcome zmfdev6



Product Information Files



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.

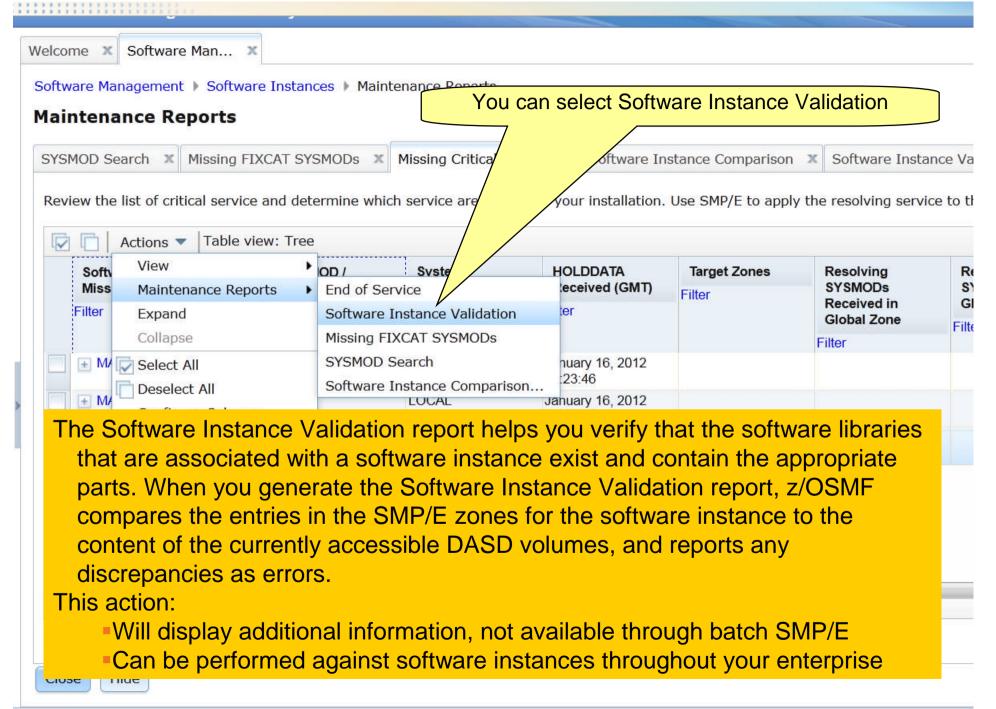
Total: 3, Selected: 0

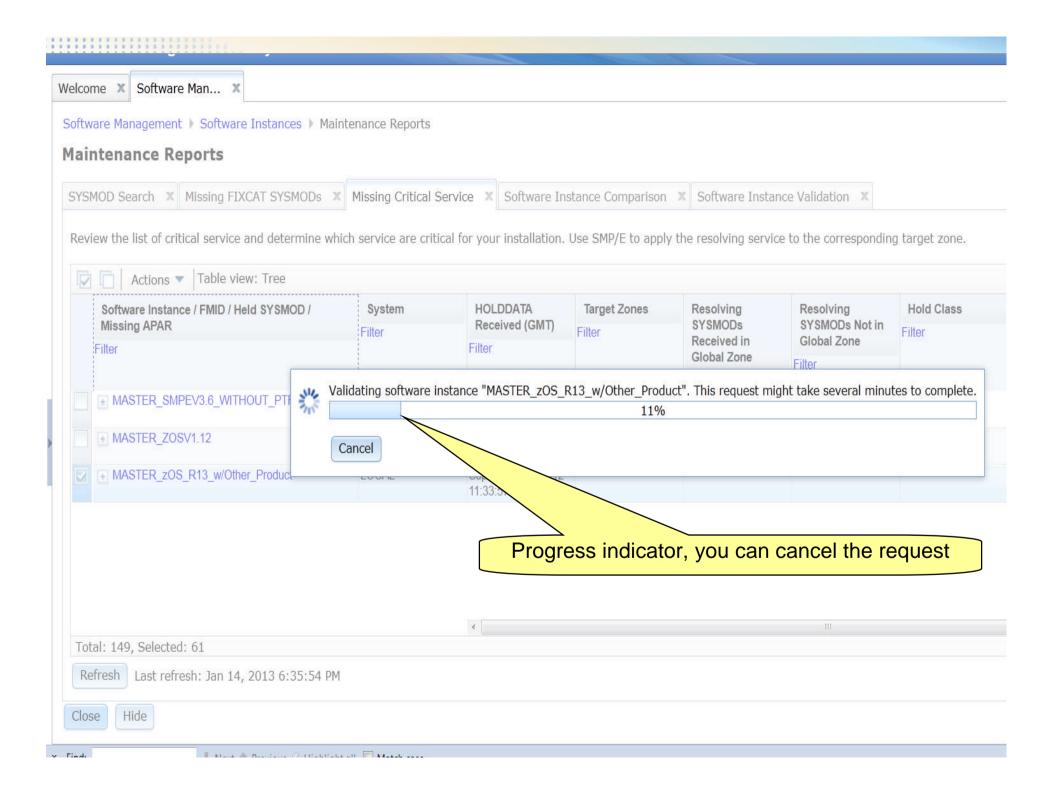
Refresh

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

Close

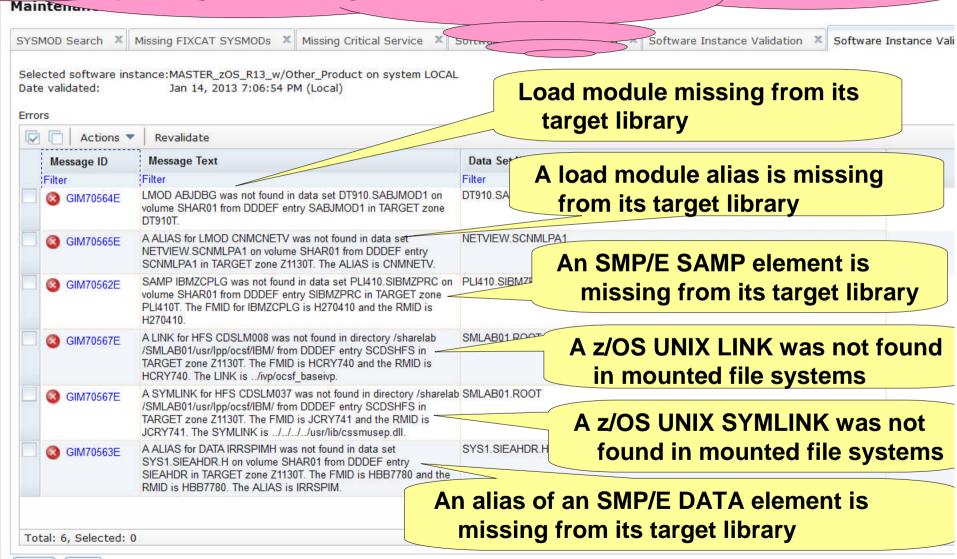
III SUII LIUIIGISSO



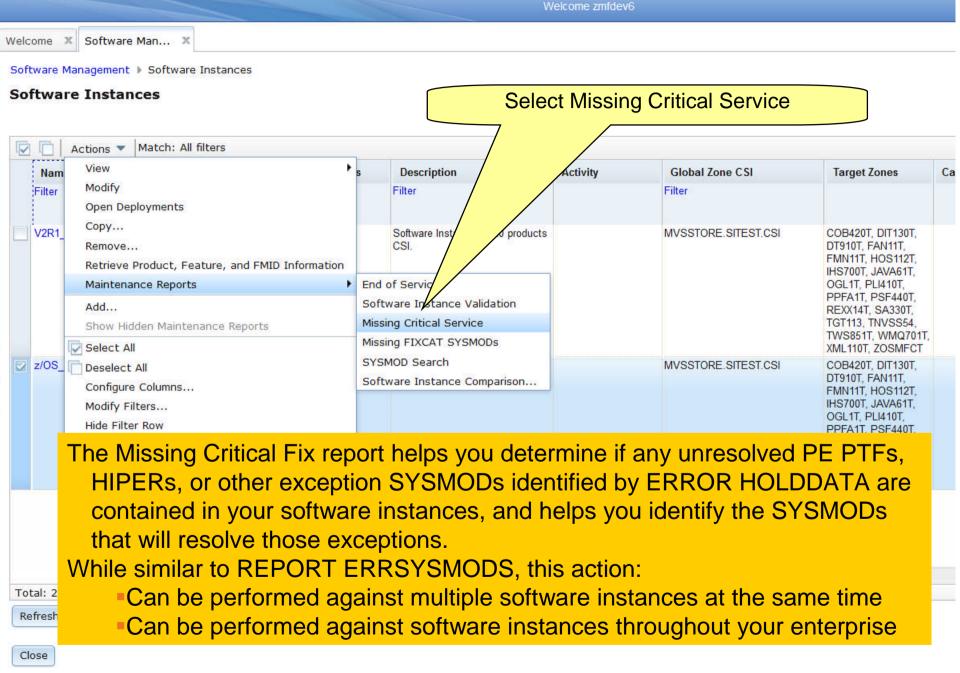


Note: Errors were introduced in the software instance to show errors.

The kinds of validation errors that are identified include DDDEFs pointing to the wrong data sets, file systems not mounted, or ...

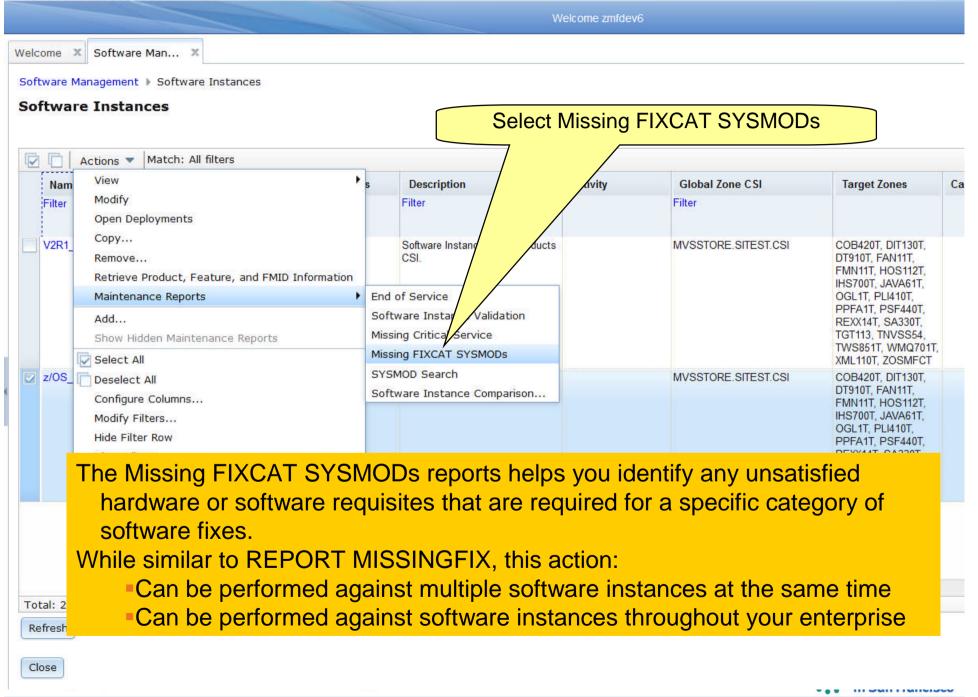


If no errors discovered text "There is no data to display " will be displayed within table



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 / System HOLDDATA **Target Zones** Resolving Resolving **Hold Class Hold Symptom FMID Description** SYSMODs Not in SYSMODs Missing APAR Received (GMT) Filter Filter Filter Filter Filter Received in Global Zone Filter Filter **Global Zone** Filter Filter z/OS Lab SWI March 27, 2012 11:24:23 H0GI400 **OSA/SF** - H0GI400 **TGT113** HIPER AA38381 UA63960 FUL UA62211 AA38381 **TGT113** UA63960 PE HADRB10 Debug Tool Base HADRB10 AM54307 FMN11T UK75928 HIPER FUL - HBB7780 BCP Base - HBB7780 AA32240 **TGT113** HIPER FUL AA36875 **TGT113** HIPER AA36969 **TGT113** UA64112 HIPER IPL.PRF.SYSPLXDS AA37064 III Total: 192, Selected: 0 Refresh Last refresh: Sep 7, 2012 4:16:35 PM Close Hide



Similar to REPORT MISSINGFIX Output displayed in tree table format

Welcome 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 System HOLDDATA **Target Zones** Resolving Resolving **FMID Description SYSMODs** SYSMODs Not in APAR Received (GMT) Filter Filter Filter Received in Global Zone Filter Filter Global Zone Filter Filter z/OS Lab SWI P01 March 27, 2012 11:24:23 IBM.Device.Disk.DS8000-2107 Data Facility System HDZ1D10 Managed Storage Base & ENU AA34857 TGT113 UA63957 AA36163 TGT113 UA62970 AA36164 TGT113 UA62987 TGT113 UA63014 AA36166 TGT113 UA63852 AA36863 AA37597 TGT113 UA64681 TGT113 UA64297 AA37891 TGT113 UA64478 AA38031 AA38077 TGT113 UA63299 TGT113 UA63900 AA38119 III 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

Software Management ▶ Software Instances ▶ Maintenance Reporte

Maintenance Reports

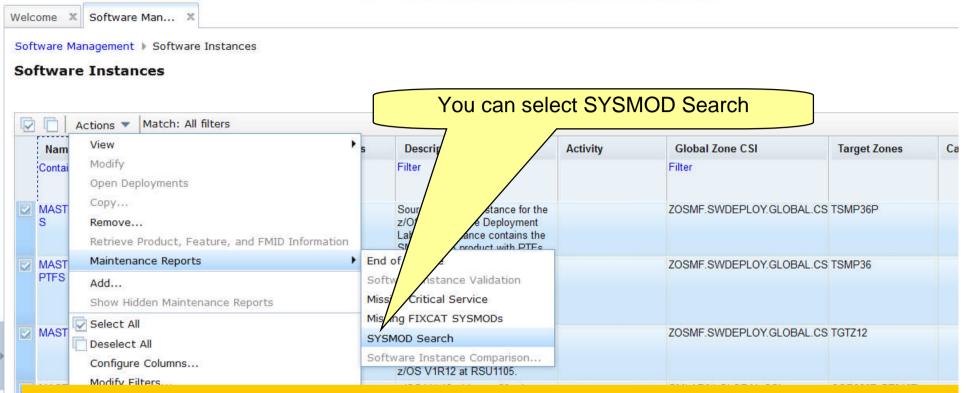
Missing FIXCAT SYSMODs X

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.

Software Instance / Fix Category / FMID / Missing	System	HOLDDATA	Target Zones	Resolving	Resolving	FMID Description	
APAR	Filter	Received (GMT)	Filter	SYSMODs Received in	SYSMODs Not in Global Zone	Filter	
Filter		Filter		Global Zone	Filter		
				Filter			
z/OS_Lab_SWI	P01	March 27, 2012 11:24:23					
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107							
z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ						Data Facility Syster Managed Storage Base & ENU	
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107 > HDZ			TGT113		UA63957		
z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113	UA62970			
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107 > HDZ	Š		TGT113	UA62987			
z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ	5		TGT113	UA63014			
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107 > HDZ	1		TGT113		UA63852		
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107 > HDZ			TGT113		UA64681		
z/OS_Lab_SWI IBM.Device.Disk.DS8000-2107 HDZ			TGT113		UA64297		
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107 > HDZ	ipinatarananananananan		TGT113		UA64478		
z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ			TGT113		UA63299		
z/OS_Lab_SWI IBM.Device.Disk.DS8000-2107 HDZ			TGT113		UA63900		
z/OS_Lab_SWI > IBM.Device.Disk.DS8000-2107 > HDZ	1		TGT113		UA63299		
z/OS_Lab_SWI ▶ IBM.Device.Disk.DS8000-2107 ▶ HDZ	5	7	TGT113		UA64575		

Refresh

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

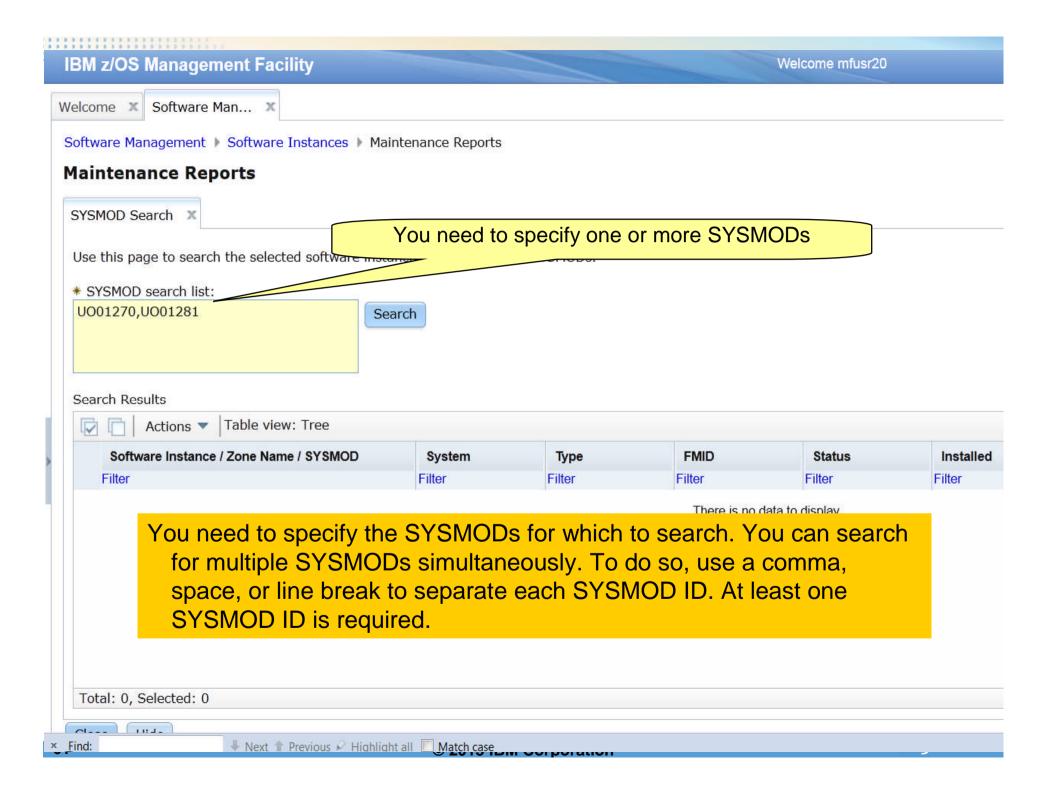


The SYSMOD Search capability helps you determine if your software instances contain the SYSMODs in which you are interested. This could be to determine:

- 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 Soft Results shown in a scrollable tree table **Maintenance Reports** SYSMOD Search X Use this page to search the selected software instances for one or more SYSMODs. * SYSMOD search list: U001270,U001281 Search Search Results Table view: Tree Actions 🔻 Software Instance / Zone Name / SYSMOD **FMID** Status Installed System Type Filter Filter Filter Filter Filter Filter MASTER SMPEV3.6 WITH PTFS LOCAL DSMP36P Superceded by UO01270 UO01301 PTF UO01281 January 3, 2012 HMP1J00 Accepted 14:09:28 GLOBAL January 16, 2012 ■ UO01270 PTF HBCNC00 Received 15:23:34 UO01281 HMP1J00 January 16, 2012 PTF Received Total: 55, Selected: 0 Hide Close



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.

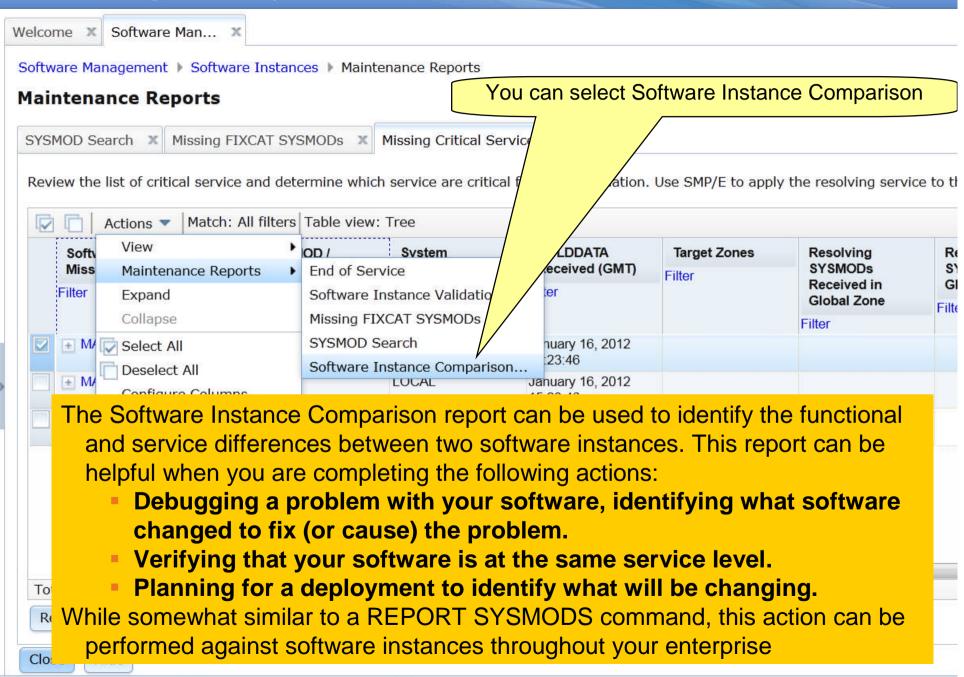


More information is displayed using Software Management; and you can query multiple SYSMODs, across multiple GLOBAL zones, possibly residing in separate sysplexes, possibly even in different locations, at the same time!!!

```
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
                                        11.255
                                                 08:26:10
                              SUP
  DSMP36
  DSMP36P
                               SUP
  GLOBAL
            PTF
                               REC
                                        12.016
                                                 15:23:34
                                        11.214
                                                 11:28:39
   TGTZ12
            PTF
                     HBCNC00
                              SUP
   TSMP36
   TSMP36P
                               SUP
```

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

Complete your sessions evaluation online at SHARE.org/SanFranciscoEval





Software Management > Software Instances > Maintenance Reports > Compare Software Instances

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 for against the first software instance.

First software instance: MASTER_SMPEV3.6_WITHOUT_PTFS on system LOCAL

Markala, All Gile			Select the Software Instance to compare				
Actions V Match: All filt	ers 			111			
Name	System	1	Description	Activity	Global Zone CSI		
Contains "Master"	Filton	Filter	Filter		Filter		
MASTER_SMPEV3.6_WIFS	TH_PT LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product with PTFs.		ZOSMF.SWDEPLO		
MASTER_ZOSV1.12	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains z/OS V1R12 at RSU1105.		ZOSMF.SWDEPLC		
MASTER_zOS_R13_w/Of oduct	ther_Pr LOCAL		z/OS V1.13 with over 20 other products to be used during the z/OSMF Software Management Lab		SMLAB01.GLOBAL		
			ī	ii .			

Total: 3, Filtered: 3, Selected: 1

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

OK Cancel



Software Management > Software Instances > Maintenance Reports > Select Zones

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 **Act**i zone in the first software instance. If the Target Zones in Second Software Instance column is blank, the corresponding target zone 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

Target Zones to be Compared



Map the zones to compare

Total: 1, Selected: 1



Cancel

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!!!

SYSMOD Search A Prissing FIACAT STSPILE

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 service 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

II Name A Desiration A Distribute of The March of

SYSMODs Not Found in First Software Instance

FMID/SYSMOD	Description	Туре	Target Zone in First Software	Target Zone in Second	SYSMOD Received in Globa Zone	
Filter	Filter	Filter	Instance	Software Instance		
			Filter	Filter	Filter	
■ HBCNC00	SMP/E Planning and Migration Assistant Software Info Base					
■ UO01301		PTF	TSMP36	TSMP36P	Yes	
■ HBCND0B	SMP/E Planning and Migration Assistant					
UO01185		PTF	TSMP36	TSMP36P	Yes	
■ UO01268		PTF	TSMP36	TSMP36P	Yes	
■ UR53091		PTF	TSMP36	TSMP36P	Yes	
■ HMP1J00	SMP/E Base					
= LIAPTE01		USERMOD	TSMP36	TSMP36P	Yes	

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

ware inventory, including related products, features, FMIDs, data sets, deployments, and SYSMO

Software Instance enine 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

2013

IBM z/OS Manago

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

Software Management Products

Products

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

Switch To:

Actions ▼

Release Product ID Messages Vendor General Availability End of Ser

Product	Release	Product ID	Messages	Vendor	General Availability	End of Ser
Filter	Filter	Filter	Filter	Filter	Filter	Filter
System Modification Program Extended for z/OS	03.06.00	5655-G44		IBM	Sep 30, 2011	Not Ann
z/OS	01.12.00	5694-A01		IBM	Sep 24, 2010	Not Ann
Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53		IBM	Sep 27, 2002	Oct 3, 2
Debug Tool V9	09.01.00	5655-U27		IBM	Sep 26, 2008	Apr 30, 3
Enterprise PL/I V4	04.01.00	5655-W67		IBM	Sep 24, 2010	⚠ Apr 30, :
		*	111)

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.

Cl---

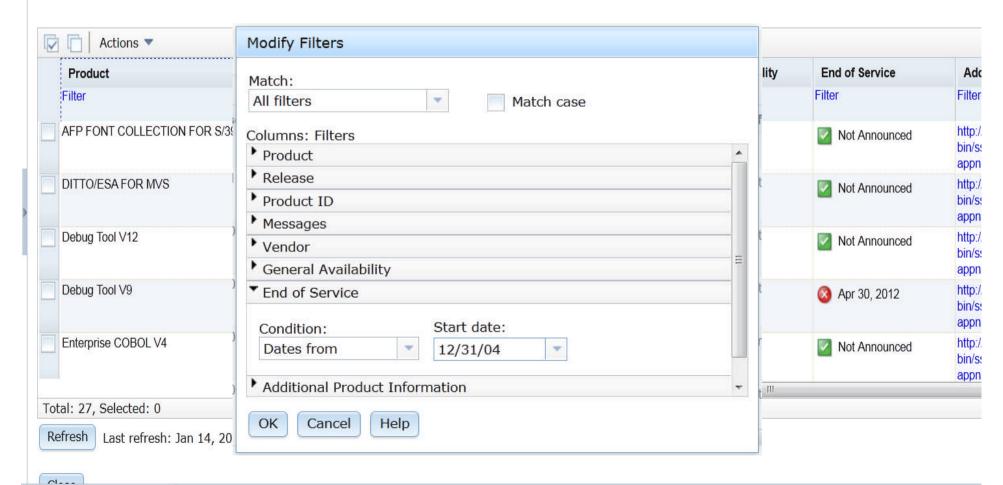
IBM z/OS

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

Software managemen

Products

This table lists the products that are one software instance where the product information was retrieved. To ensure that this list reflects the latest SMP/E ir Feature, and FMID Information would in the Software Instances view. Learn more...



Three products that meet the criteria are displayed.

Welcome X Soft	ware Man 🗶	
Software Managen	nent > 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...

Product A	Release	Product ID	Messages	Vendor	General	End of Service	Additional Product Information
Filter	Filter	Filter	Filter	Filter	Availability	Dates from Dec 31, 2004	Filter
	1 1 1				Filter		
Debug Tool V9	09.01.00	5655-U27		IBM	Sep 26, 2008		http://www-01.ibm.com/common/ssi/cgi- bin/ssialias?infotype=dd&subtype=sm& appname=ShopzSeries&htmlfid=897/ENUS5655-U27
Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53		IBM	Sep 27, 2002	Oct 3, 2005	http://www-01.ibm.com/common/ssi/cgi- bin/ssialias?infotype=dd&subtype=sm& appname=ShopzSeries&htmlfid=897/ENUS5655-G5.
Enterprise PL/I V4	04.01.00	5655-W67		IBM	Sep 24, 2010	⚠ Apr 30, 2014	http://www-01.ibm.com/common/ssi/cgi- bin/ssialias?infotype=dd&subtype=sm& appname=ShopzSeries&htmlfid=897/ENUS5655-W6

Total: 27, Filtered: 3, Selected: 0

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

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

IDI

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 t **Feature, and FMID Information** action provided in the Software Instances view. Learn more...



Total: 27, Filtered: 3, Selected: 3

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

Olar-

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

View Software Instances by Product

P. 00000	\$100 to \$200.00			100	April 20 (2000) 1 (20	
Release	Product ID	Messages	Vendor	General	End of Service	Additional Product Inform
Filter	Filter	Filter	Filter	Availability	Filter	Filter
				Filter		
03.02.00	5655-G53		IBM	Sep 27, 2002	Oct 3, 2005	http://www-01.ibm.com/comn
						bin/ssialias?infotype=dd&subtappname=ShopzSeries&html
09.01.00	5655-U27		IBM	Sep 26, 2008	Apr 30, 2012	http://www-01.ibm.com/comn bin/ssialias?infotype=dd&subf
						appname=ShopzSeries&html
04.01.00	5655-W67		IBM	Sep 24, 2010	⚠ Apr 30, 2014	http://www-01.ibm.com/comn
						bin/ssialias?infotype=dd⊂ appname=ShopzSeries&html
	03.02.00 09.01.00 04.01.00	Filter Filter 03.02.00 5655-G53 09.01.00 5655-U27 04.01.00 5655-W67	Filter Filter Filter 03.02.00 5655-G53 09.01.00 5655-U27 04.01.00 5655-W67	Filter Filter Filter Filter 03.02.00 5655-G53 IBM 09.01.00 5655-U27 IBM 04.01.00 5655-W67 IBM	Filter Filter Filter Filter Filter Filter Filter 03.02.00 5655-G53 IBM Sep 27, 2002 09.01.00 5655-U27 IBM Sep 26, 2008 04.01.00 5655-W67 IBM Sep 24, 2010	Filter Sep 27, 2002 ⊗ Oct 3, 2005 Oct

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.

You can select Deployments to deploy a software instance or manage existing deployments

Software Management

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

Software Instances P 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

IBM Z/OS M

Same as existing z/OS V1.13 function

Welcome × Software Man... ×

Software Management > Deployments

Deployments

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

Actions 🔻					10
Name	Description	Activity	Categories	Source Software Instance	Sou
Filter	Filter	Filter	Filter	Filter	Filter
DEMO_Deployment_ Sample	This is a sample deployment that may be used for demos.	Completed		MASTER_SMPEV3.6_WITH_PT FS	LOCA

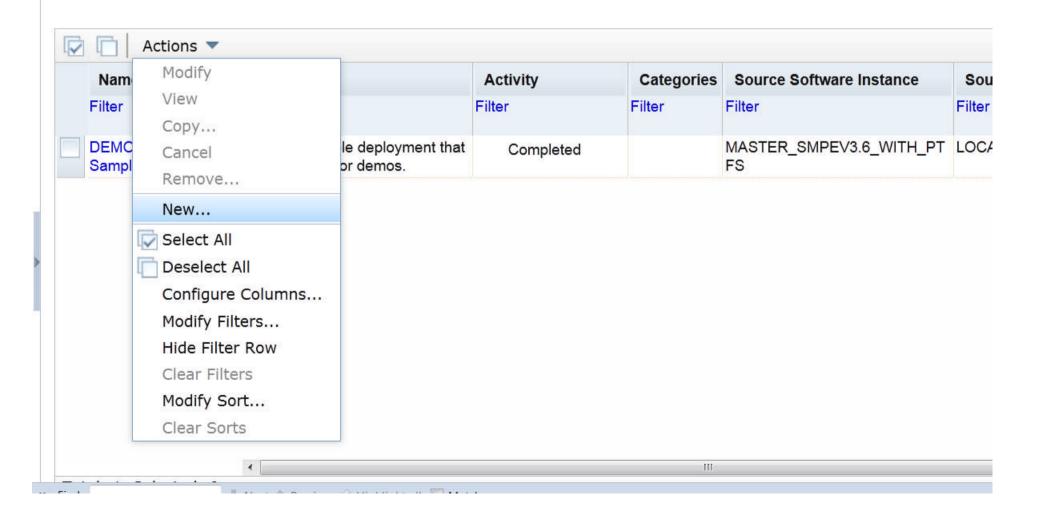
77

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

Software Management Deproyments

Deployments

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



The same checklist leads you through the new deployment

Welcome X Software Man... X

Software Management ▶ Deployments ▶ Deployment Checklist

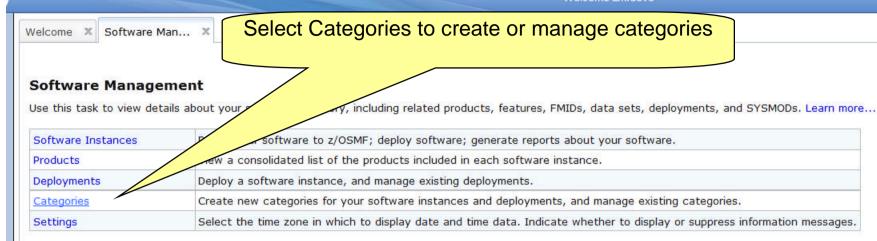
Deployment Checklist

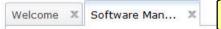
To deploy a software instance, complete the checklist.

Checklist

Progress	Step
4	1. Specify the properties for this deployment.
	2. Select the software instance to deploy.
	3. Select the objective for this deployment.
	4. Check for missing SYSMODs. • View missing SYSMOD reports.
	5. Configure this deployment.
	 6. Define the job settings. z/OSMF creates the deployment summary and jobs. View the deployment summary. View the deployment jobs.
	7. Specify the properties for the target software instance.

Close





Same as existing z/OS V1.13 function

Software Management > Categories

Categories

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

Total: 5, Selected: 0

Refresh

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

Close

Welcome X Software Man... X

Select Settings

Software Management

Use this task to view details about your software y, including related products, features, FMIDs, data sets, deployments, and SYSMODs. Learn more...

Software Instances	Defineoftware to z/OSMF; deploy software; generate reports about your software.	
Products	w 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 messages.	

Welcome debug99

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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).
 The vour sessions evaluation online at SHARE.org/SanFranciscoEval

in San Francisco

z/OSMF Software Management Benefits



Task	Without z/OSMF Software Management	With z/OSMF Software Management
Display the product content of software instances.	Can use multiple different methods to report on product content locally (within sysplex). Unable to: •launch in context other views or reports •View product content for remote systems	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. Seconds
Display the data sets that make up a software instances.	Can NOT be done today. 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. Seconds (or up to a few minutes)
Display all the software instances where a product is installed.	Can <u>NOT</u> be done today.	Easy (few clicks) to identify all the software instances where a product is installed throughout the customer enterprise. Seconds
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. Hours (or even days for entire enterprise)	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. Seconds



z/OSMF Software Management Benefits



		S. H. A. R. E. Technology - Connections - Results
Task	Without z/OSMF Software Management	With z/OSMF Software Management
Validate the SMP/E structure (zones and data set definitions) and content (members on libraries and files) of software instances.	Can <u>NOT</u> be done today.	Easy (few clicks) to identify any structure problems or missing content in a software instance and the data sets referenced. A few minutes
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. However, this can only be done for local software instances (within sysplex). Less than a minute (for the local system)	Easy (few clicks) to identify missing critical fixes. Once viewed, z/OSMF sorting and filtering can help with the analysis. Seconds (or up to a few minutes)
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. However, this can only be done for local software instances (within sysplex). Less than a minute (for the local system)	Easy (few clicks) to identify whether a fix is installed or not; and if so in which software instances throughout your enterprise. Less than a minute (for local and remote systems)
Compare the service and functional content of two software instances to aid in debugging, change control, or quality	Can use SMP/E REPORT SYSMODS to identify differences between two target zones for local software instances. However, this can only be done for local software instances (within sysplex).	Easy (few clicks) to identify differences between two target zones for software instances throughout your enterprise. Seconds (or up to a few minutes)
assurance.	Less than a minute (for the local system)	SHARE

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.ht
 ml for more information



Shameless Plug(s)



- You can try this great new function THIS WEEK!!!
 - Without having to install the PTFs (or z/OSMF V1.13)
- Just attend the z/OSMF Software Management Handson Lab
 - Session 13070
 - Friday, February 8, 2013: 8:00 AM-9:00 AM
 - Union Square 23-24, Fourth Floor (San Francisco Hilton)
- You can also attend the z/OSMF Software Deployment Hands-on Lab
 - Session 12753
 - Same time, same place













New z/OSMF Software Management Capabilities

Greg Daynes
IBM Corp.
gdaynes@us.ibm.com

Thursday, February 7, 2013: 8:00 AM-9:00 AM
Franciscan B, Ballroom Level
Session 13082

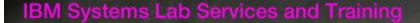


Additional Information



- 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





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in San Francisco

Agenda

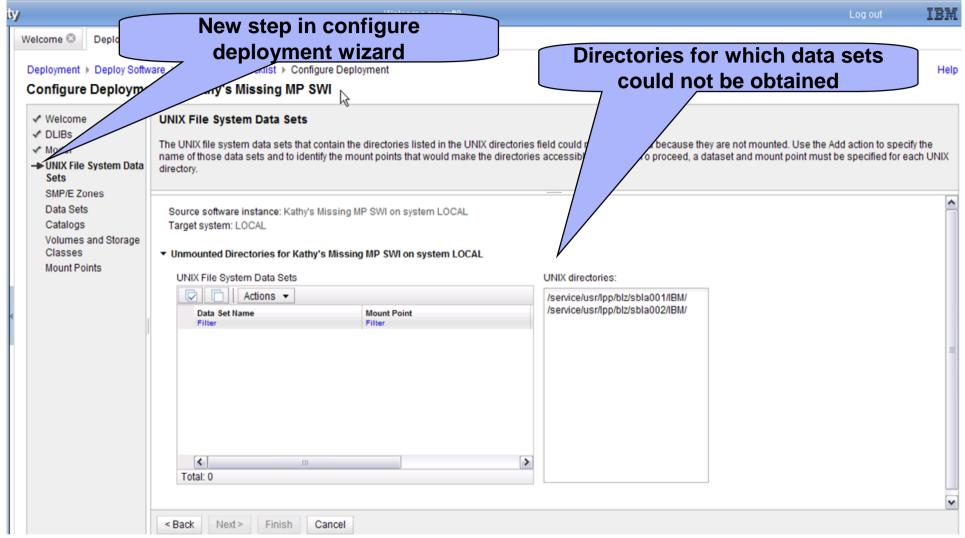


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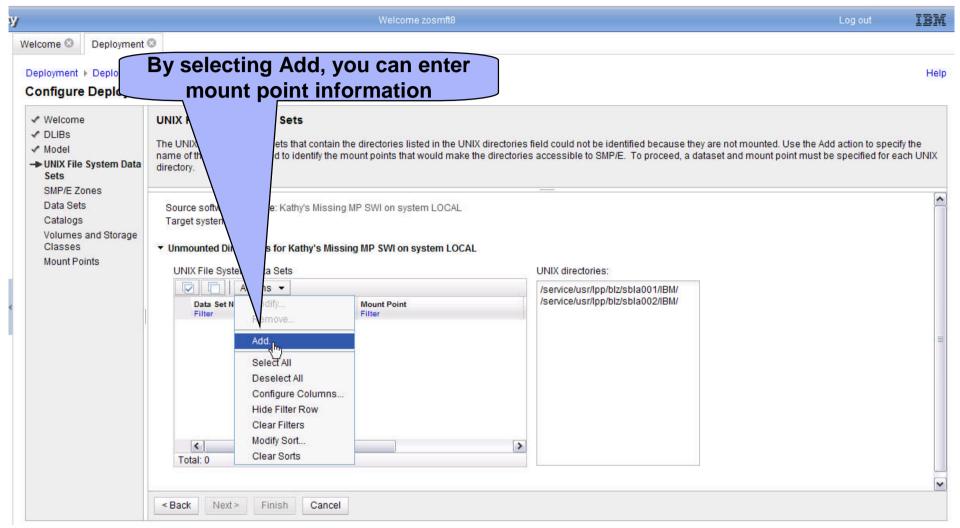
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If a data set cannot be determined because a directory is not mounted or cannot be found, the user will be given the opportunity to supply the mount point and the UNIX file system data set. The deployment will not proceed until the user provides the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



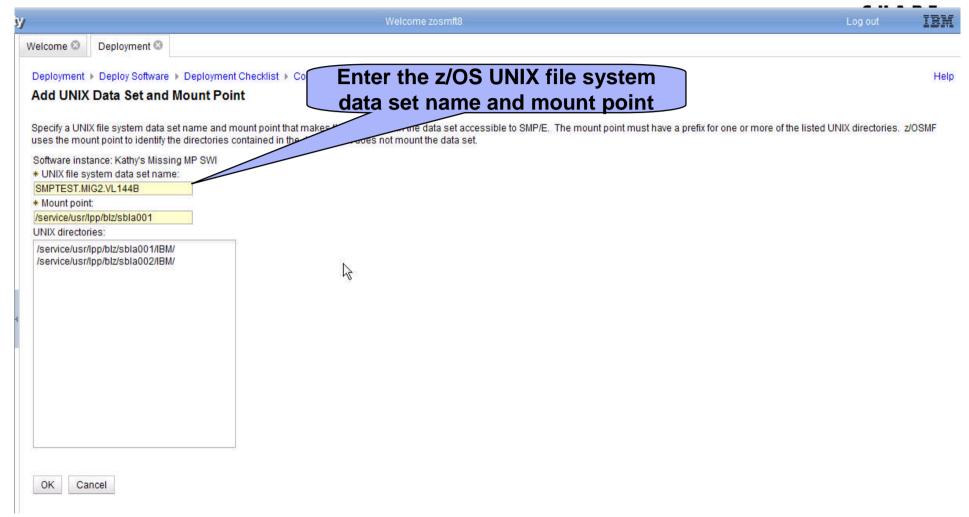


On the right you can see the directories for which z/OS UNIX file system data sets could not be obtained. By selecting the Add Action, the user can enter the mount point information.

Complete your sessions evaluation online at SHARE.org/SanFranciscoEval

• . . • in San Francisco

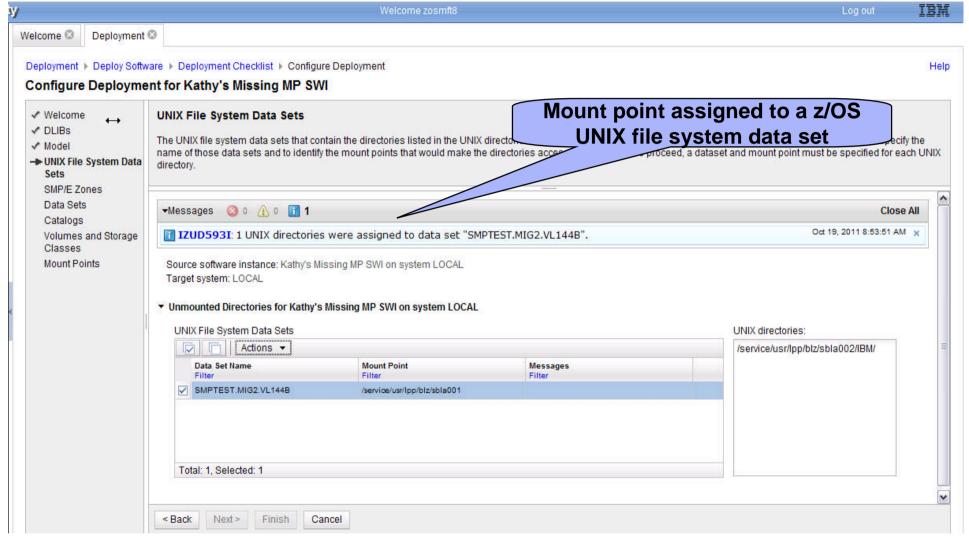




The user can enter the Unix file system data set and the mount point.

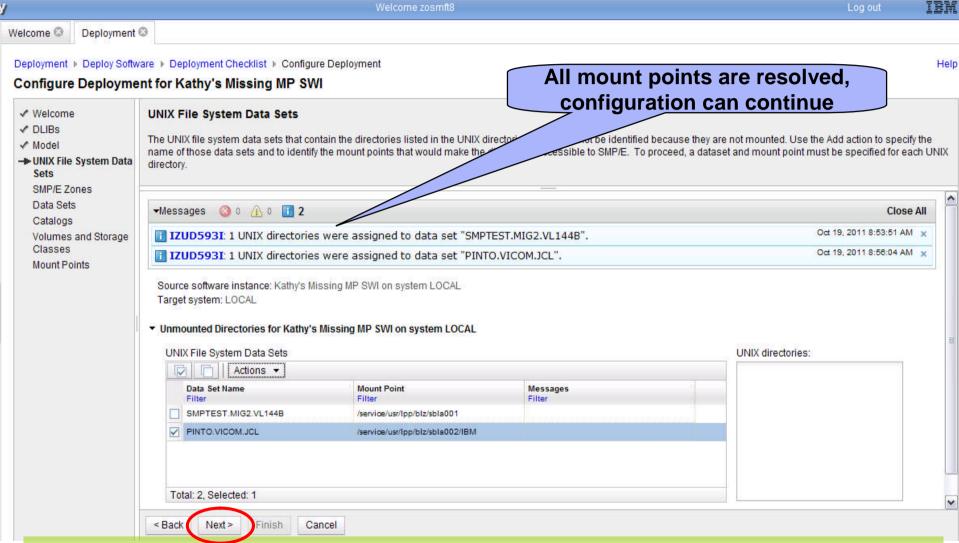






Upon return from adding a mount point, you can see that one has been resolved. The user would again use the Add Action to resolve the second missing Unix directory.





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.

SHARE.org/SanFranciscoEval

Agenda

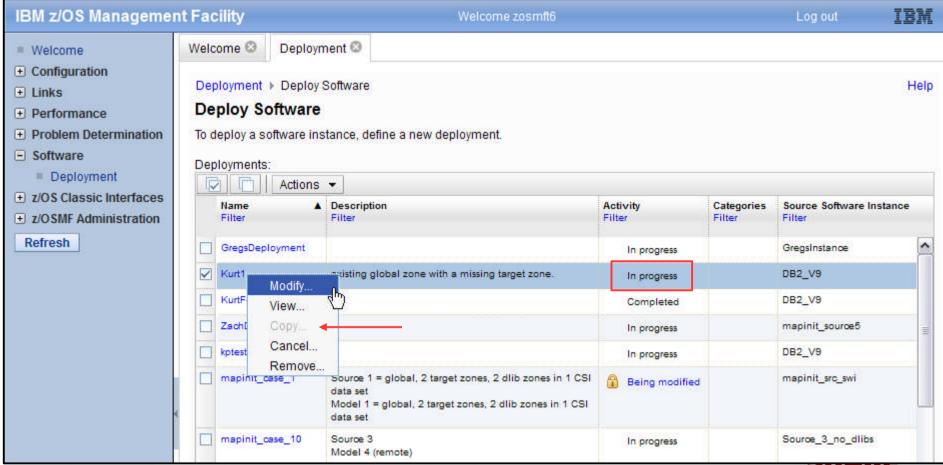


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Deployment Copy



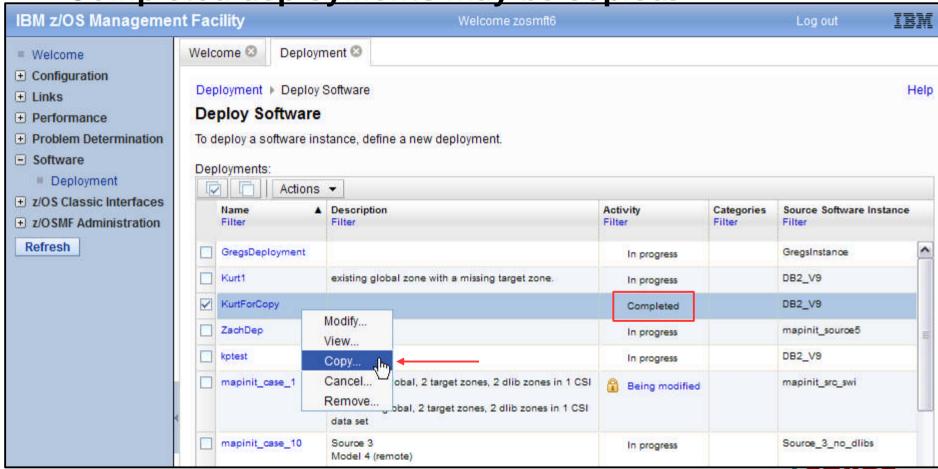
 When displaying the list of deployments, only Completed deployments may be copied.



Deployment Copy



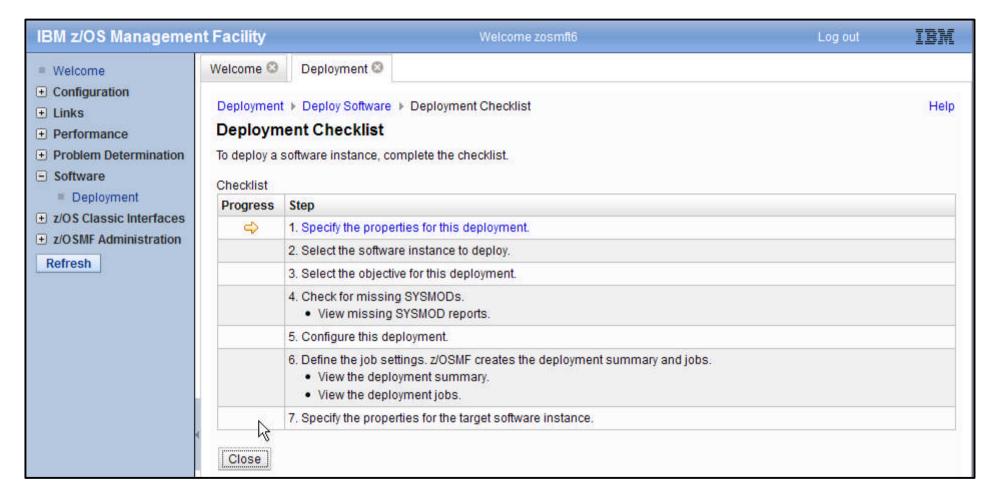
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Deployment Copy



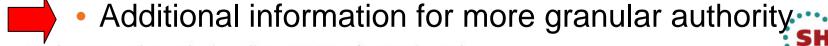




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User Authorization: Example – z/OS and DB2 Sysprogs



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" SH

User Authorization: Example – 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)
```