



z/OSMF Software Management Hands on Lab

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Test link: www.SHARE.org



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Agenda



- Lab Objective
- z/OSMF Software Management Overview
- Lab Environment
- Lab Exercises
 - 1. Logon to z/OSMF and invoke software management
 - 2. Change the Software Management specific "Settings"
 - 3. View the "Master" Software Instances
 - a. Their Products, Features, and FMIDs
 - b. Additional Product Information
 - c. Properties
 - d. Data sets (filtering by attribute)
 - e. Export (or Print) Table Data
 - 4. Report on the "Master" Software Instances
 - a. End of Service
 - b. SYSMOD Search
 - c. Missing FIXCAT SYSMODs
 - d. Missing Critical Fixes
 - e. Software Instance Comparison
 - f. Software Instance Validation
 - View Products
 - 6. Deployments





Lab Objectives and Hints and Tips

- Use z/OSMF to view and report on previously defined software instances
- Gain familiarity in using the z/OSMF application

Hints and Tips

- At any time you can use the Help facilities by clicking on the link in the upper right hand corner of the screen
- You are encouraged to follow the instructions provided, but you can use the new views and reports on any defined software instance
 - Please note that the closer you follow the instructions, the easier it will be to assist you if you go astray
 - The handout contains screen captures and guidance to lead you through the lab
- Please note: Do NOT use the Browser BACK button to go to the prior screen!!!
- Also note that if you change the browser display size (Ctrl/+, or Ctrl/-)
 then what you see may not exactly match the handout.



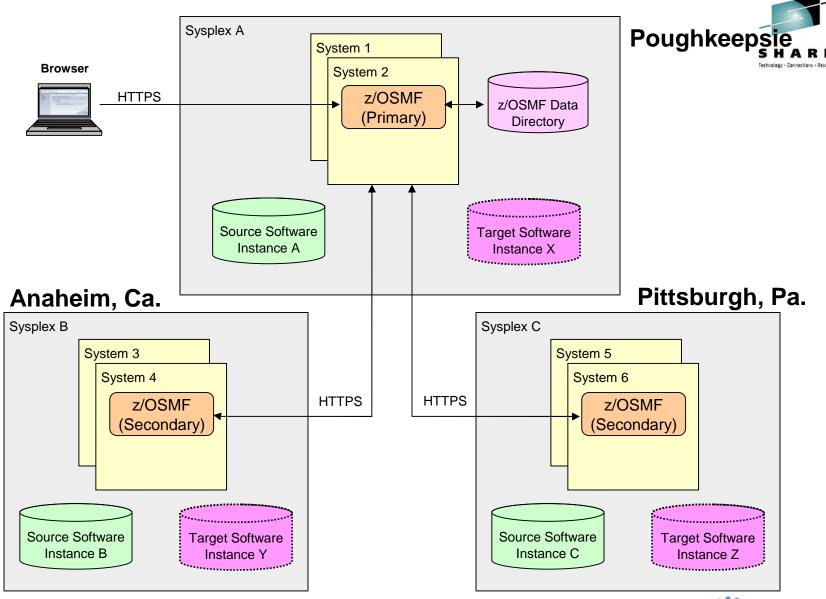
z/OSMF Software Management

- 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
- This function was integrated and enhanced in z/OSMF V2.1
 - This lab will use a z/OSMF V2.1 system



z/OSMF Software Management ...

- SHARE
- 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.



Software instances can be viewed or deployed throughout your enterprise

in Anaheim

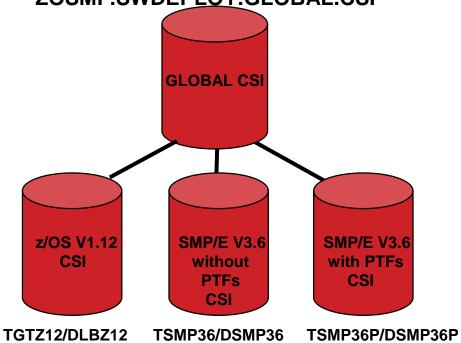


Lab SMP/E Environment

Four (4) "Master" Software Instances

- 1.MASTER ZOSV1.12
- 2.MASTER_SMPEV3.6_WITHOUT_PTFS
- 3.MASTER_SMPEV3.6_WITH_PTFS
- 4. MASTER_zOS_R13_w/Other_Products

ZOSMF.SWDEPLOY.GLOBAL.CSI



SMLAB01.GLOBAL.CSI



TGT zone	DLIB zone
Z1130T	Z1130D
COB320T	COB320D
PLI410T	PLI410D
DT910T	DT910D





Step 1: Logon to z/OSMF and invoke Software Management





Starting the Lab – Log in to z/OSMF

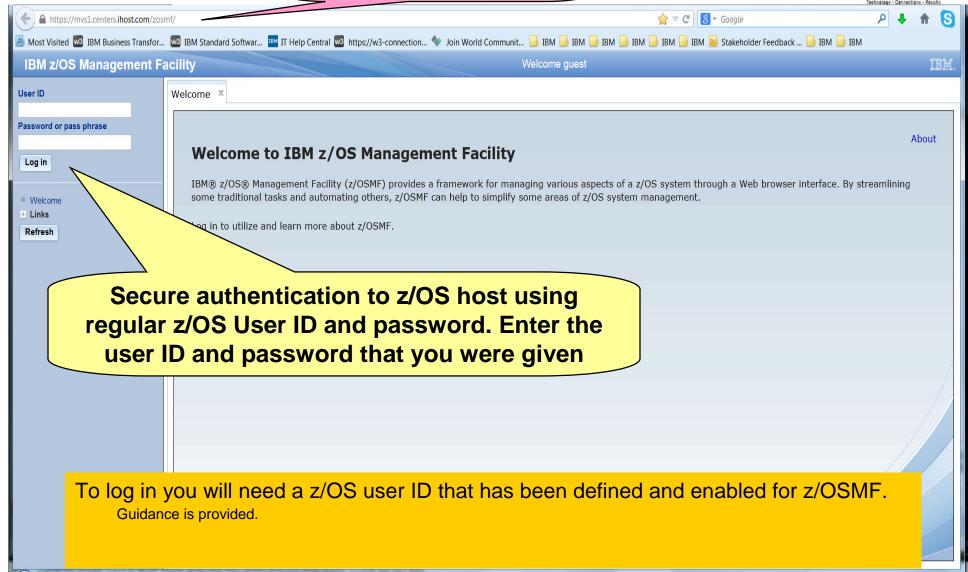
- Launch the Mozilla Firefox browser
 - Note: If browser asks to add exception for certificate, do so
- Point Browser to z/OSMF enter the following url
 - https://mvs1.centers.ihost.com/zosmf/
 - Note: Ignore and close the warning message
 - IZUG809W Unsupported Web browser version or level found:
 "3.6.13 (.NET CLR 3.5.30729)". Some z/OSMF functions might not be available if you continue.
- Login with SHARE userid/pw as provided by the lab instructor
 - Each workstation has been assigned a unique z/OS User ID
 - SHARAnn (where nn is 01 20)
 - Password: to be provided
- Each User ID has been authorized to all the z/OSMF applications (Plug-ins)



Step 1

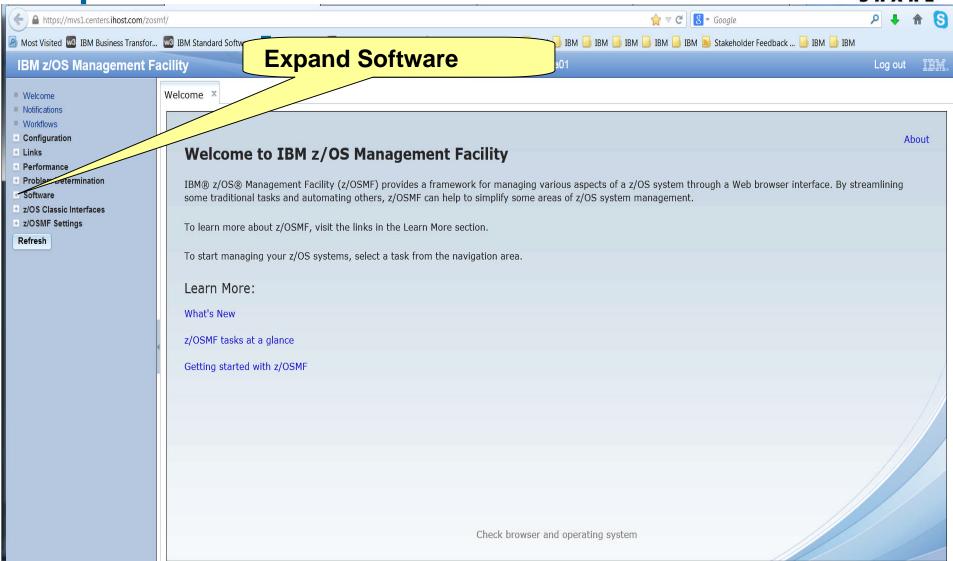
Secure connection to z/OS host





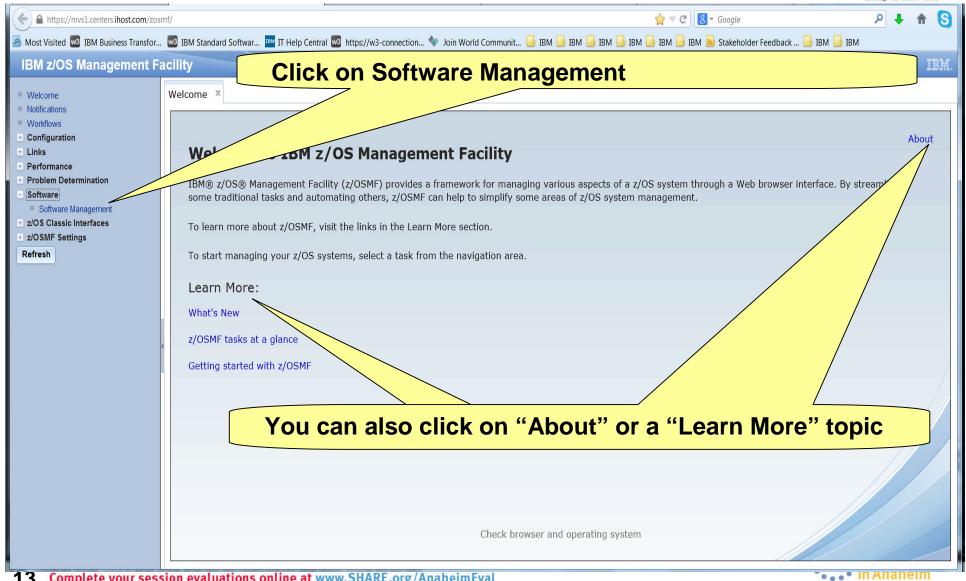


Step 1 ...





Step 1





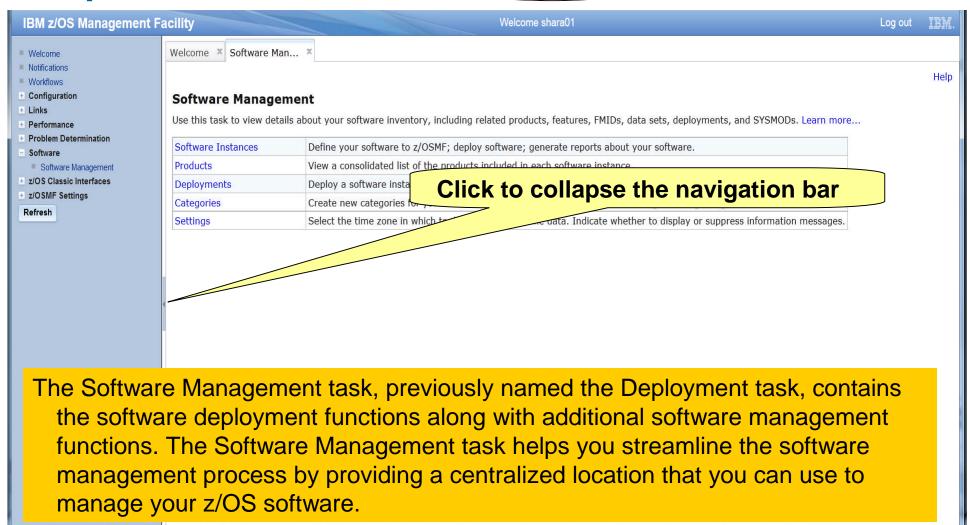
Step 2: Change the Software Management specific "Settings"



Before you change the Settings, you will attempt to view Products, Features, and FMIDs for all the "Master" software instances. You will need to change the settings to see all the data.

Step 2





Step 2 ...



Click on Software Instances

IBM z/OS Management Facility

Software Management

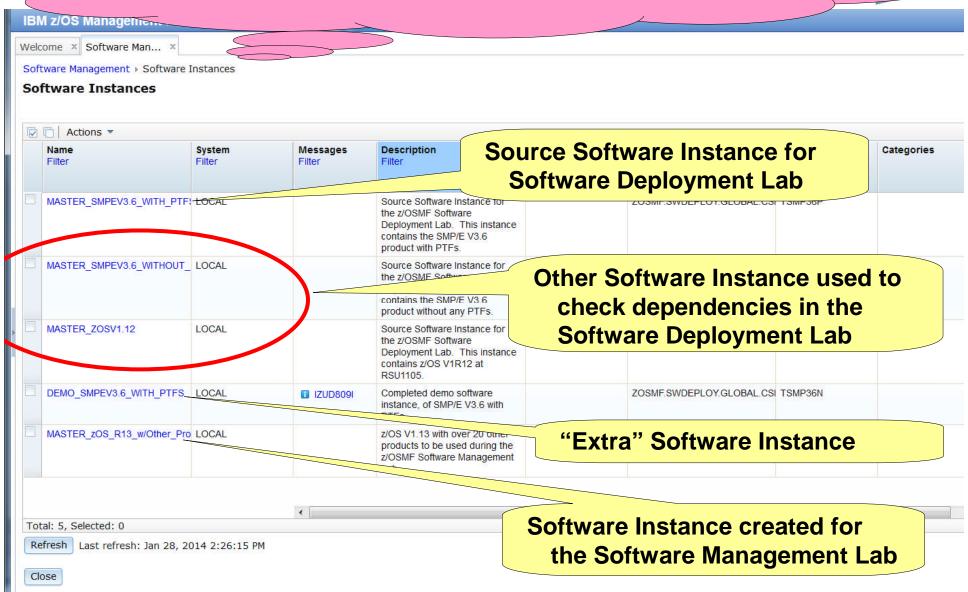
Welcome × Software Man... ×

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

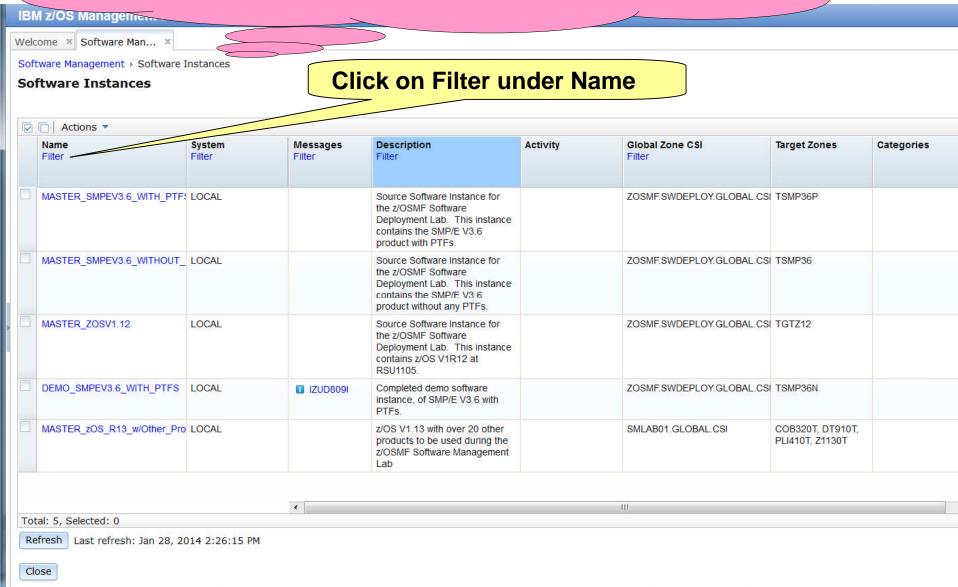
Define your software to z/OSMF; deploy software; generate reports about your software.				
Products View a consolidated list of the products included in each software instance.				
Deployments	Deploy a software instance, and manage existing deployments.			
Categories	Create new categories for your software 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.			



You will see a list of software instances already defined

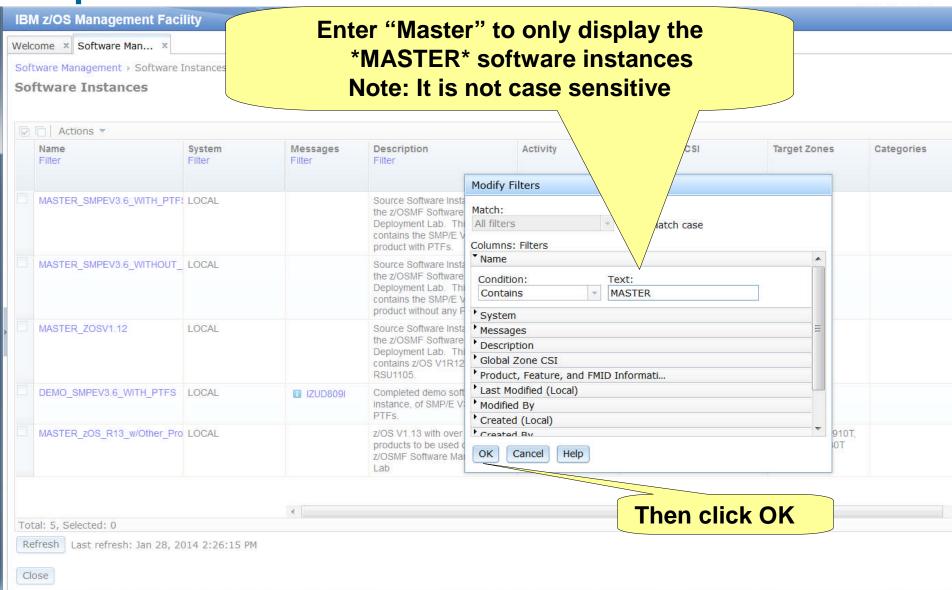


For this lab, you will focus on the Software Instances whose names begin with "MASTER"

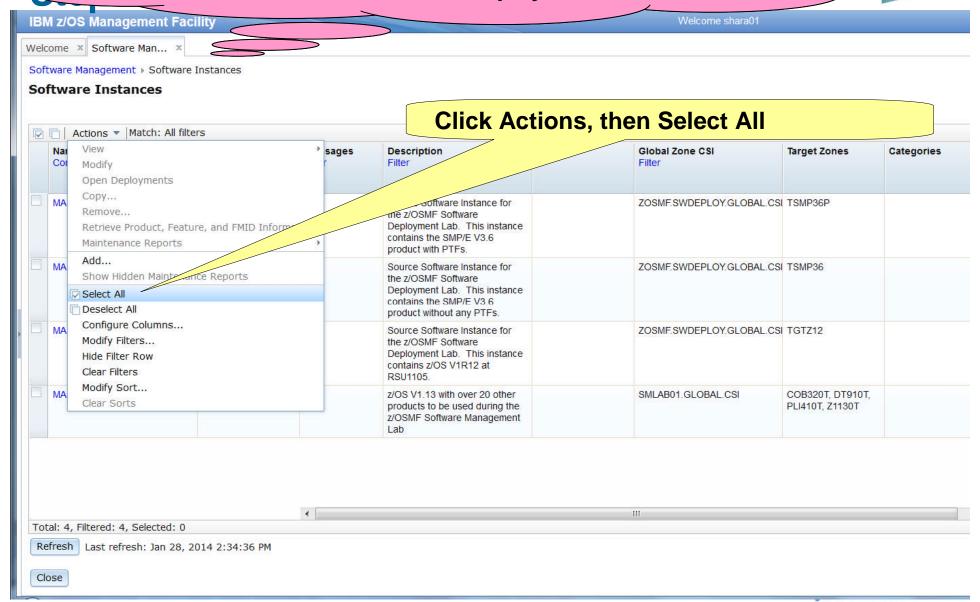


Step 2 ...

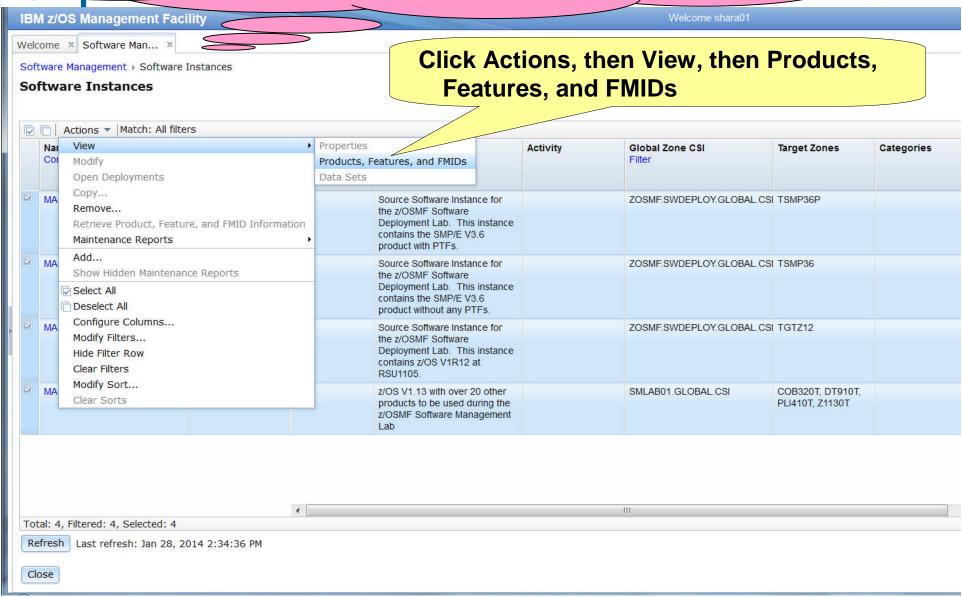




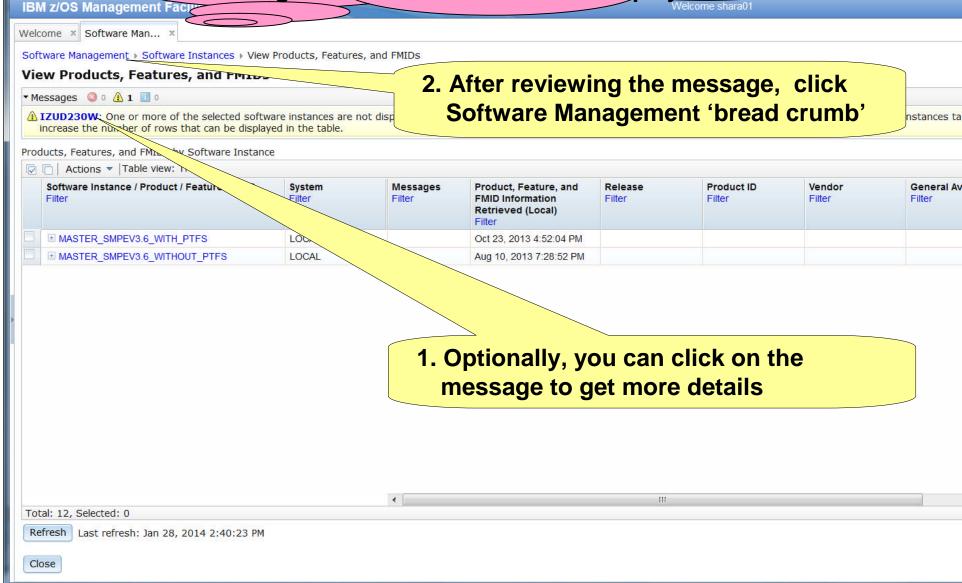
Only the software instances that contain "MASTER" are now displayed



All the software instances are now selected



Message IZUD230W is generated stating that the display will exceed 750 rows. You will change the Settings to allow more rows to be displayed.



Step 2

Categories

Settings

Click on Settings

Select the time zone in which to display date and time data. Indicate whether to display or suppress information messages.



IBM z/OS Management Facility Welcome shara01 Welcome × Software Man... × **Software Management** Use this task to view details about you ware inventory, including related products, features, FMIDs, data sets, deployments, and SYSMODs. Learn more... Software Instances Me 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. Deploy a software instance, and manage existing deployments. Deployments

Create new categories for your software instances and deployments, and manage existing categories.

Step 2



Welcome shara01 Welcome × Software Man... × Software Management → Settings Settings Select the time zone to use for date and time data: Greenwich Mean Time (GMT) O Local (Eastern Standard Time) Display information messages that notify you that an object was added, modified, or removed: O No * Maximum number of rows to display in tables with data about software instances: OK Cancel Change the maximum number of rows to display to 9999, and the click OK



Step 3a: View the "Master" Software Instances' Products, Features, and FMIDs



You will now view ALL the "Master" software instances' Product, Feature, and FMIDs



Step 3a

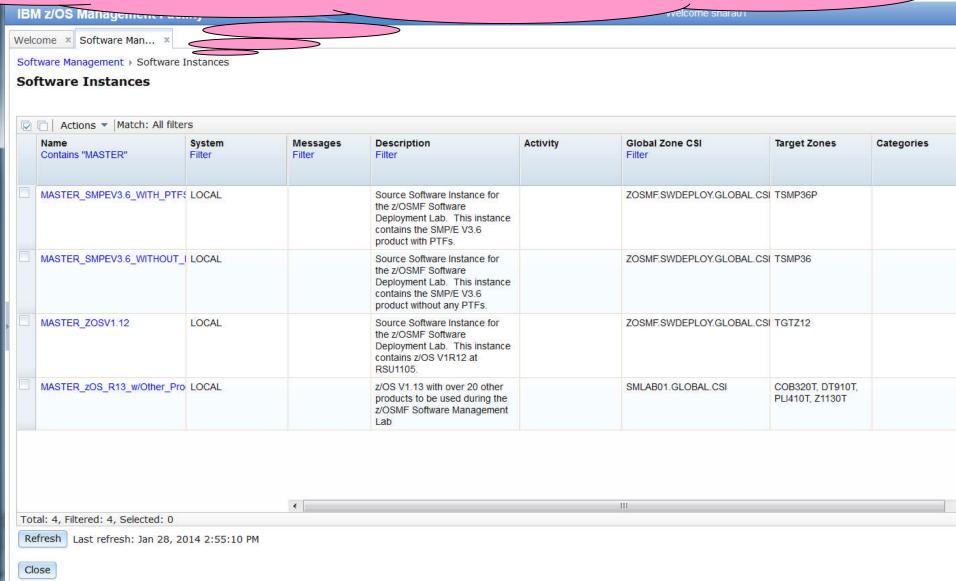


Software Management

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

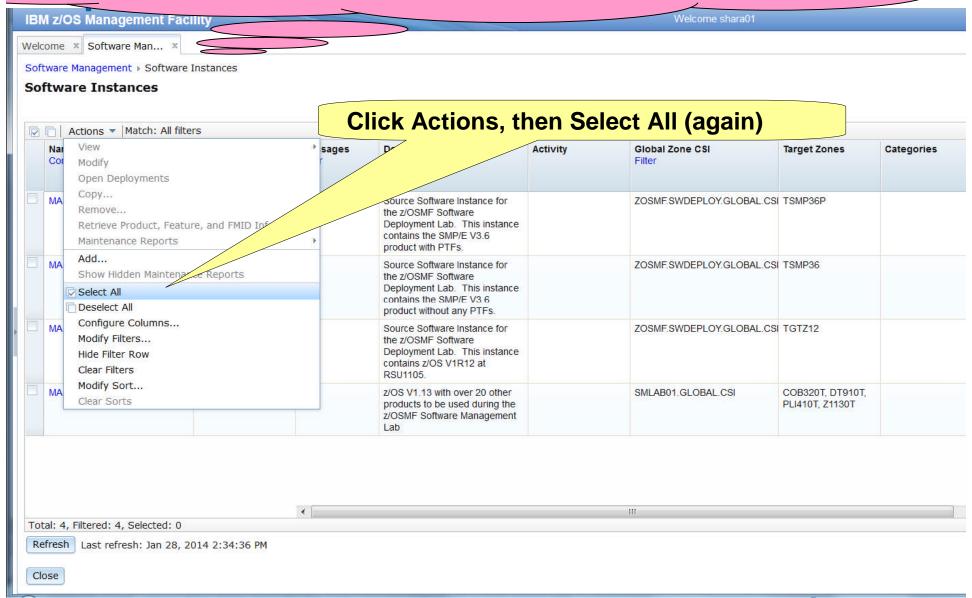
Software Instances Define your software to z/OSMF; deploy software; generate reports about your software.					
Products	View a consolidated list of the products included in each software instance.				
Deployments	Deploy a software instance, and manage existing deployments.				
Categories	Create new categories 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.				

Notice that the Name Filter is still set and that ONLY Software Instances that contain "Master" are displayed.



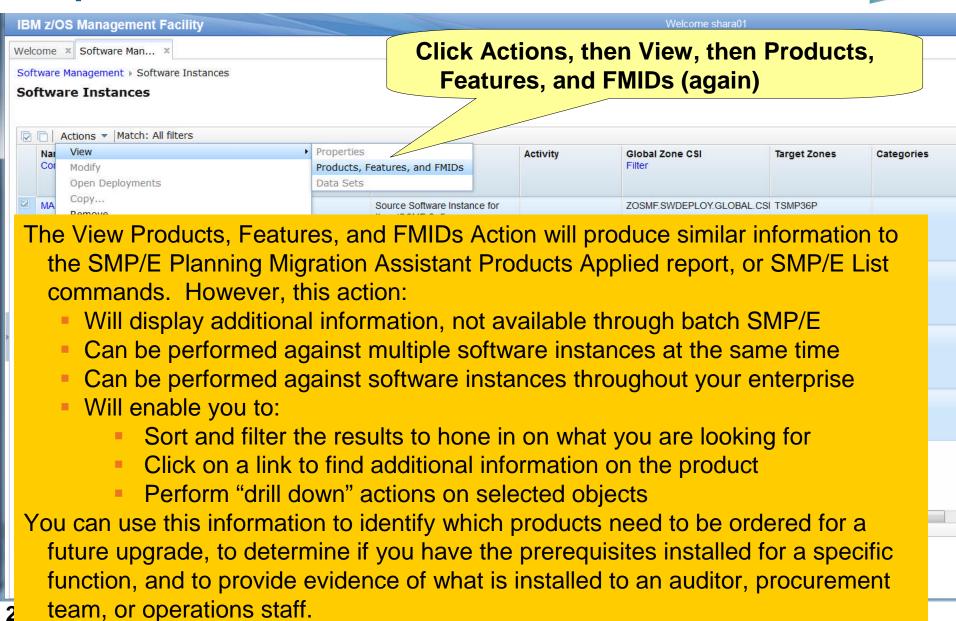


You are going to display Products, Features, and FMIDs for all Software Instances that contain "Master" (again).



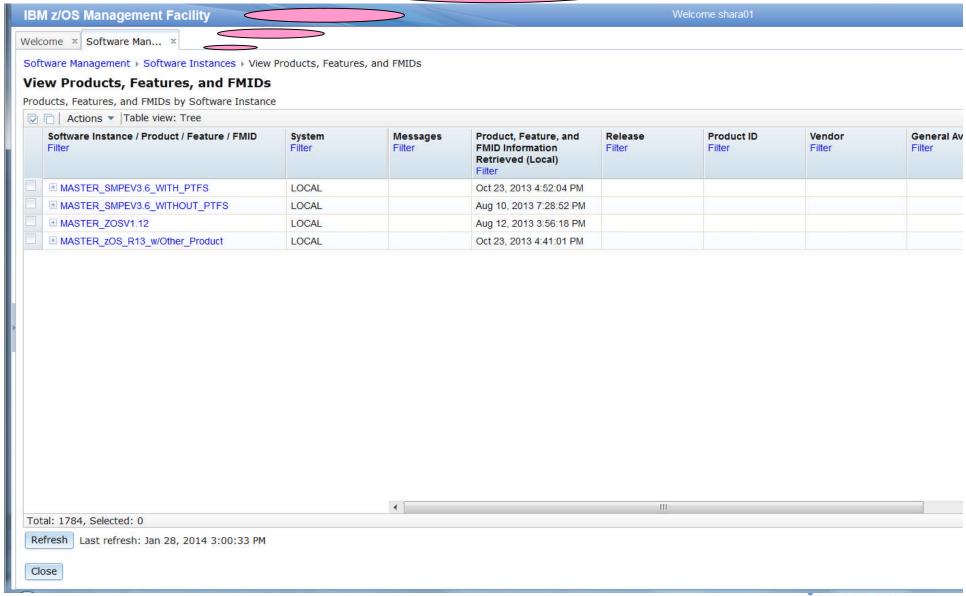
Step 3a ...





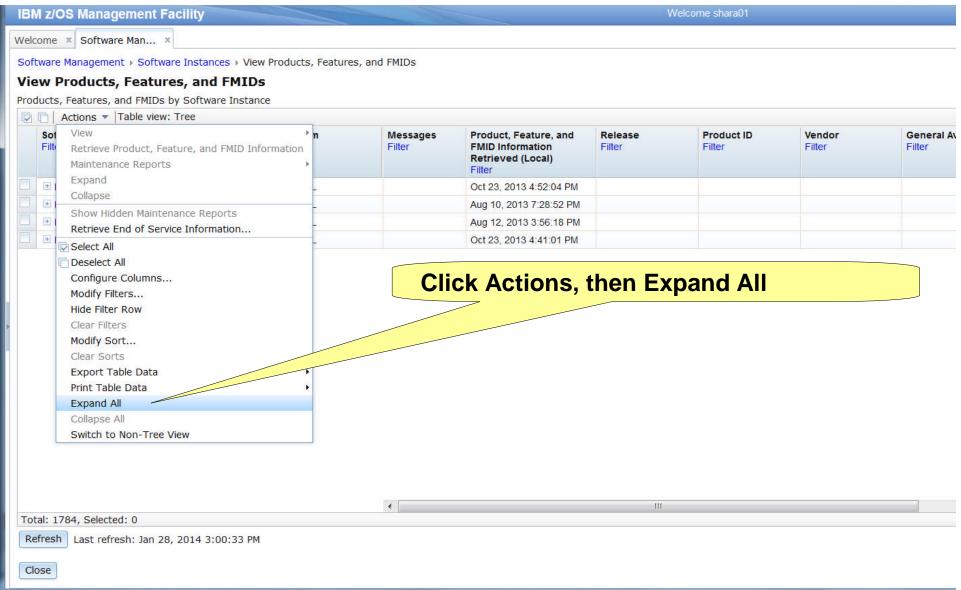
This time all the software instances can be viewed. No more message IZUD230W.



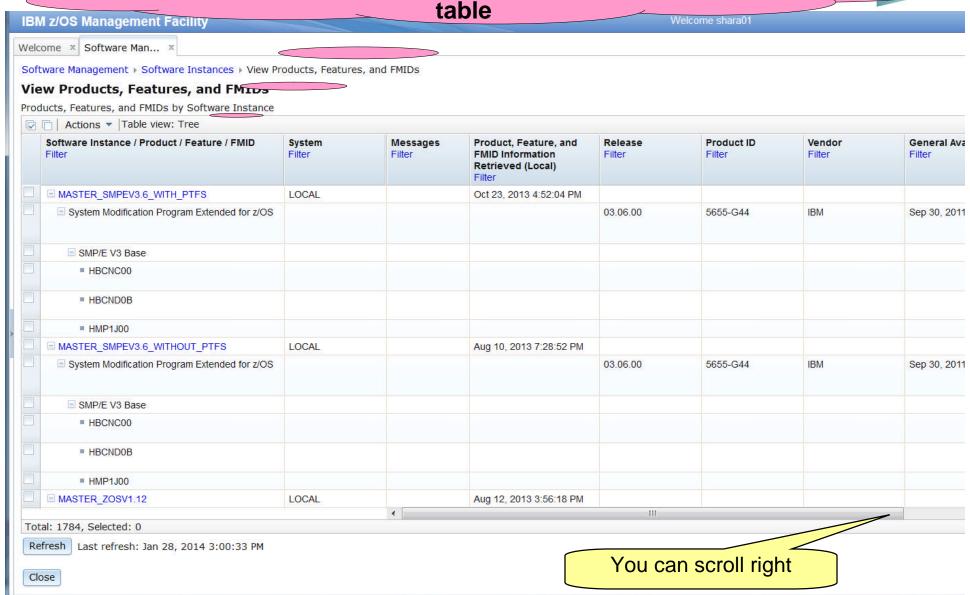


Step 3a ...





The products, features and FMIDs are listed in a tree



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

iew Products, Features, and FMIDs					
oducts, Features, and FMIDs by Software Instance					
☐ Actions ▼ Table view: Tree					
Software Instance / Product / Feature / FMID Filter	System Filter	General Availability Filter	End of Service Filter	Additional Product Information Filter	Product In File Versio Filter
☐ MASTER_SMPEV3.6_WITH_PTFS	LOCAL				
System Modification Program Extended for z/OS		Sep 30, 2011	Not Announced	http://www-01.ibm.com/common/ssi/cgi- bin/ssialias?infotype=dd&subtype=sm& appname=ShopzSeries&htmlfid=897/ENUS5655-G44	Oct 17, 201
■ SMP/E V3 Base					
■ HBCNC00					
■ HBCND0B					
■ HMP1J00					
☐ MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL				
System Modification Program Extended for z/OS		Sep 30, 2011	Not Announced	http://www-01.ibm.com/common/ssi/cgi- bin/ssialias?infotype=dd&subtype=sm& appname=ShopzSeries&htmlfid=897/ENUS5655-G44	Oct 17, 201
■ SMP/E V3 Base					
= HBCNC00					
■ HBCND0B					
= HMP1J00					
■ MASTER ZOSV1.12	LOCAL				

Note: Additional columns are displayed but not shown in the handout. If they don't appear, then optionally you can scroll right again.

33 Complete your session

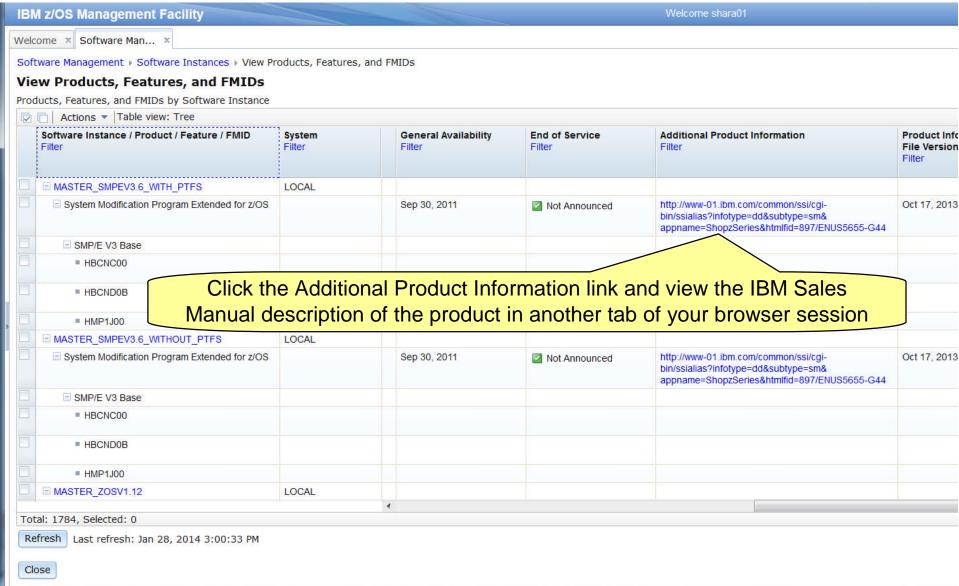


Step 3b: View the "Master" Software **Instances' Additional Product Information**



Step 3b





The Additional Product Information link enables you to view the IBM Sales Manual description of the product in another tab of your browser session

Step 3b ...

Feedback

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

IBM United States Sales Manual Revised: August 06, 2013.

- ♣ Product Life Cycle Dates
- Program Number
- ↓ Abstract
- Product Positioning
- Highlights

- ◆ Description
- ◆ Technical Description
- Operating Environment
- ◆ Planning Information
- Security, Auditability, and Control

Product Life Cycle Dates

Program Number	VRM	Announced	Available	Marketing Withdrawn	Service Discontinued
5655-G44	03.06.00	2011/07/12	2011/09/30	121	6.23
5655-G44	03.05.00	2008/08/05	2008/09/26	-	2014/09/30
5655-G44	03.04.00	2005/07/26	2005/09/30	2008/09/26	2010/09/30
5655-G44	03.03.00	2004/08/10	2004/09/24	2005/09/30	2007/09/30
5655-G44	03.02.00	2003/05/13	2003/05/30	2004/09/24	2007/09/30
5655-G44	03.01.00	2001/09/11	2001/10/26	2003/05/30	2007/03/31

^{*} Back to top

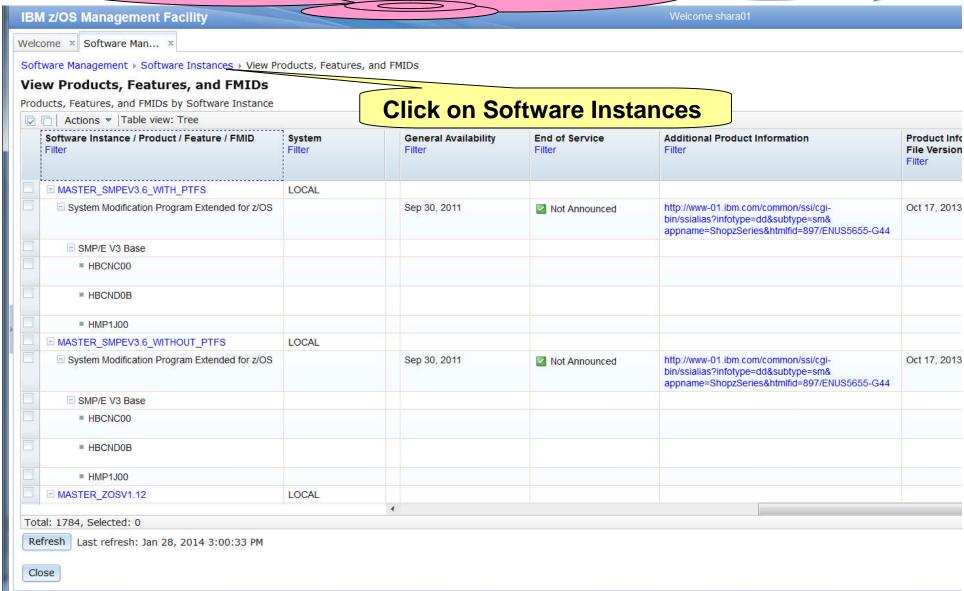
Program Number



Step 3c: View the "Master" Software **Instances' Properties**



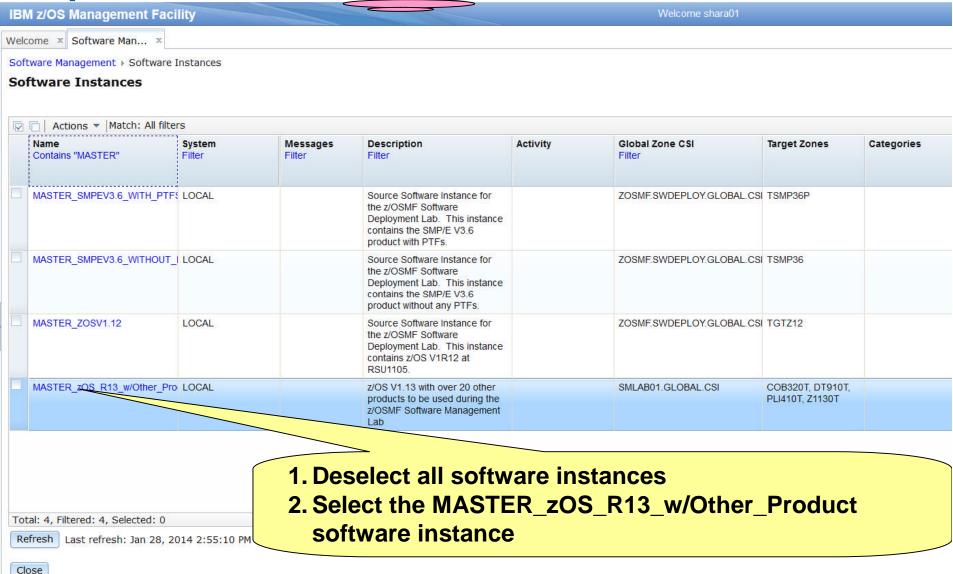
You are going to perform actions against a single Software Instance, so click on the "breadcrumbs"



Now select the "Master" software instance created for this lab.



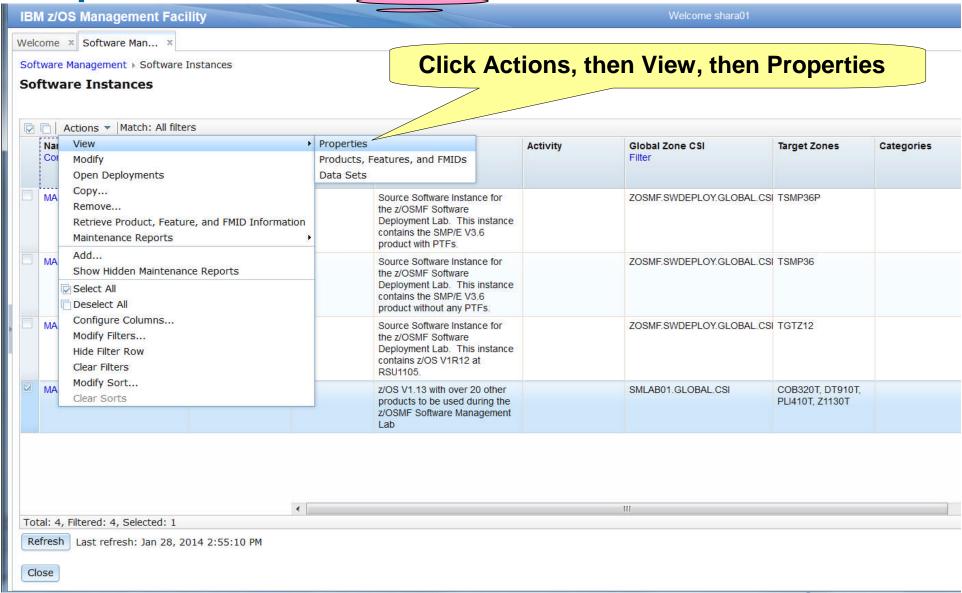
Step so ...



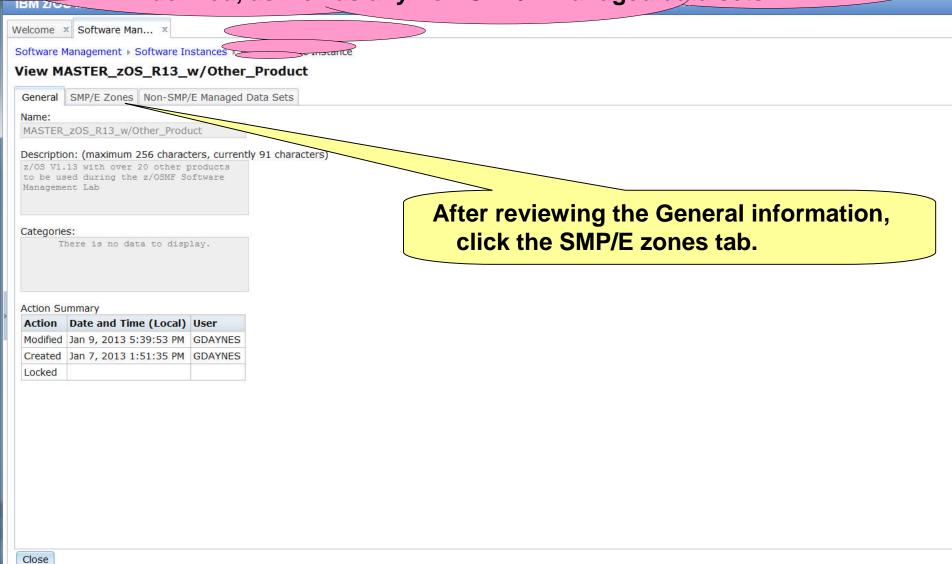
First you will view the properties.



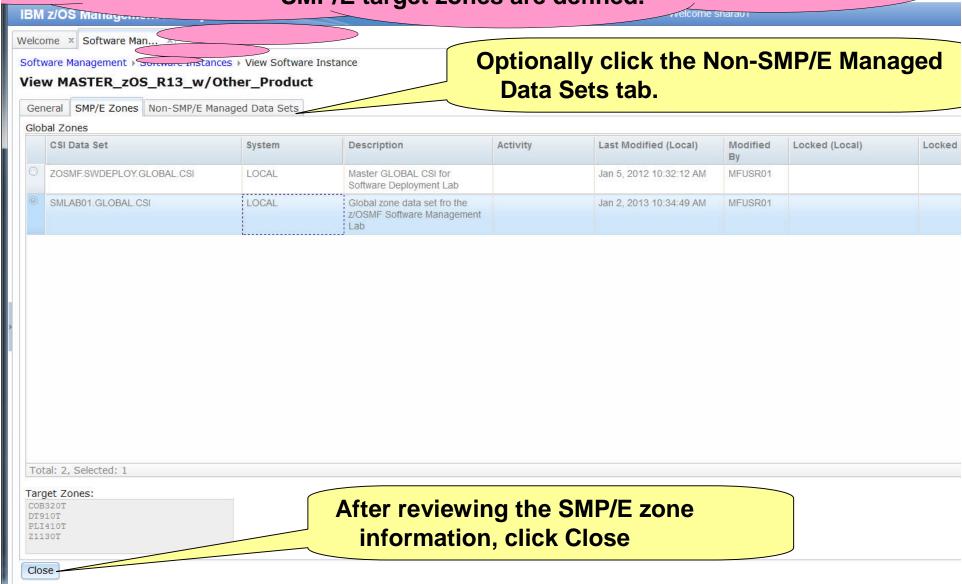




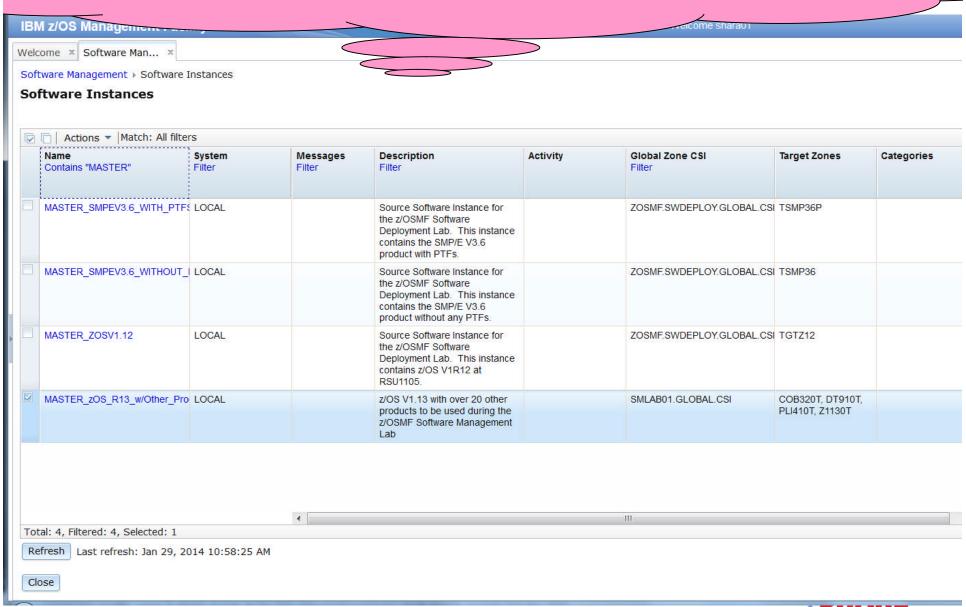
Multiple tabs are a available to view details of this specific software instance. You can see the description, what SMP/E zones are defined, as well as any non-SMP/E managed data sets



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.



You are brought back to the list of "Master" software instances, with the MASTER_zOS_R13_w/Other_Product still selected

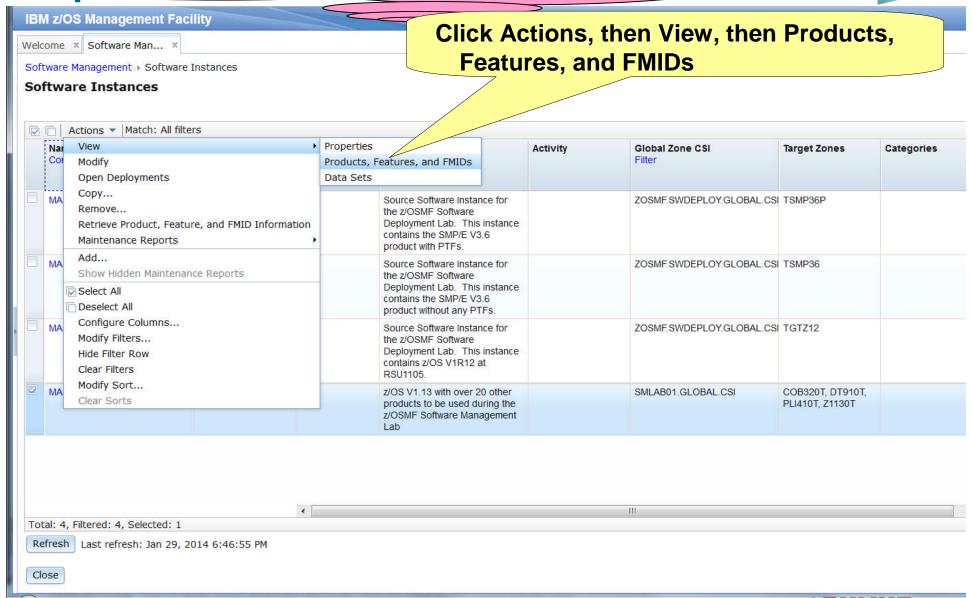




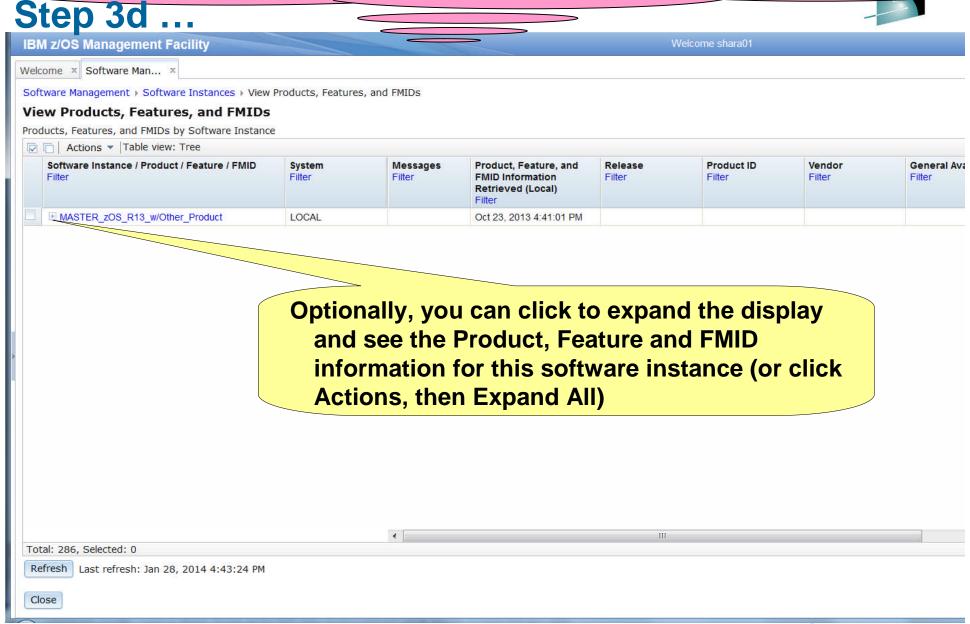
Step 3d: View the "Master" Software **Instances' Data Sets**



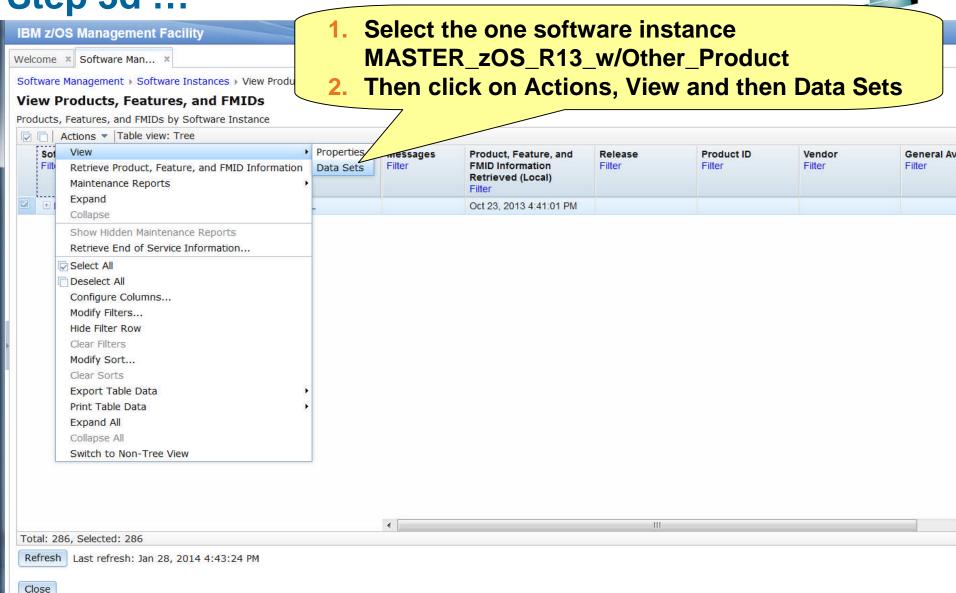
Now you will view Products, Features, and FMIDs just for this instance so that you can see how to drill down deeper in the tables



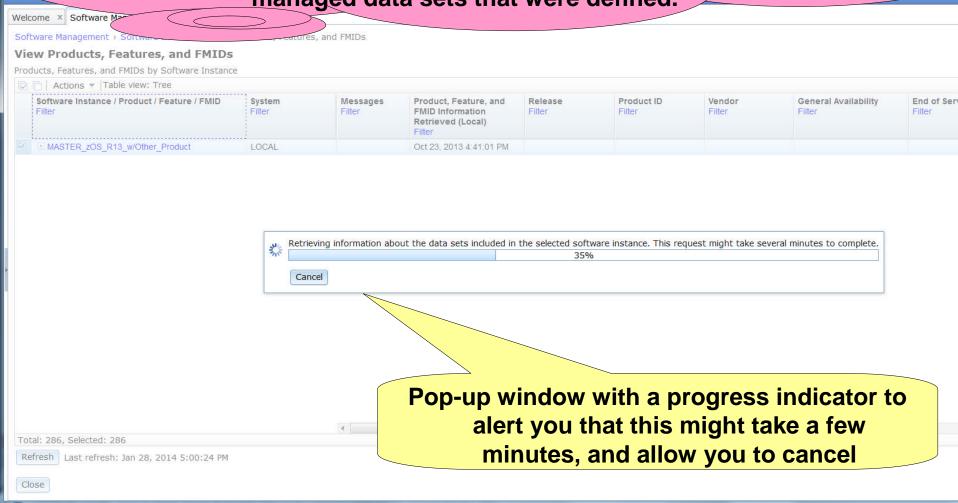
Next you will view data sets from viewing Products, Features, and FMIDs







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.



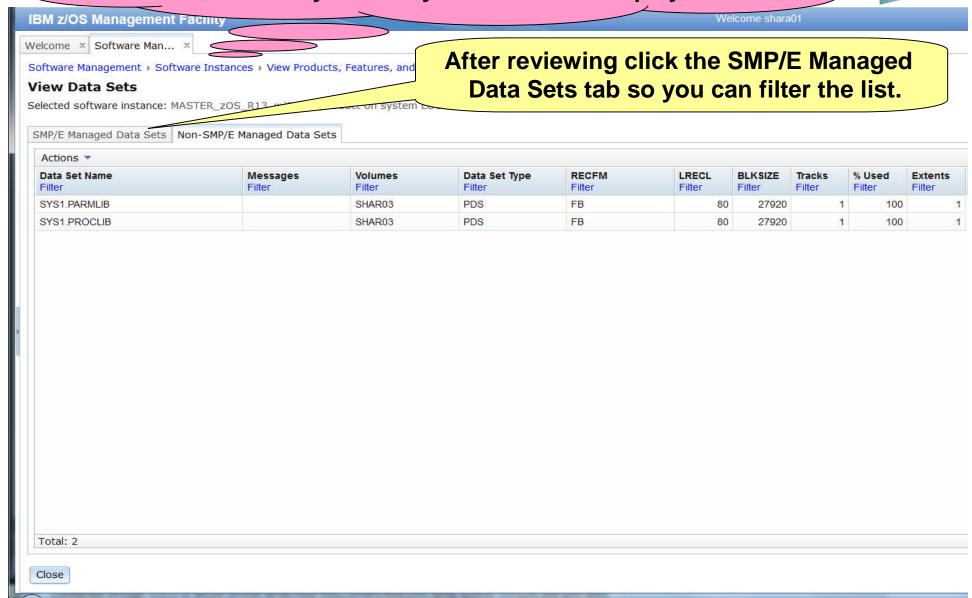
Data sets are displayed in ISPF Data Set List (3.4) like format showing the data sets and its attributes.



Close

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, etc. In the lab you will identify data sets with more than one extent.

Information about the non-SMP/E managed data sets is also dynamically retrieved and displayed.



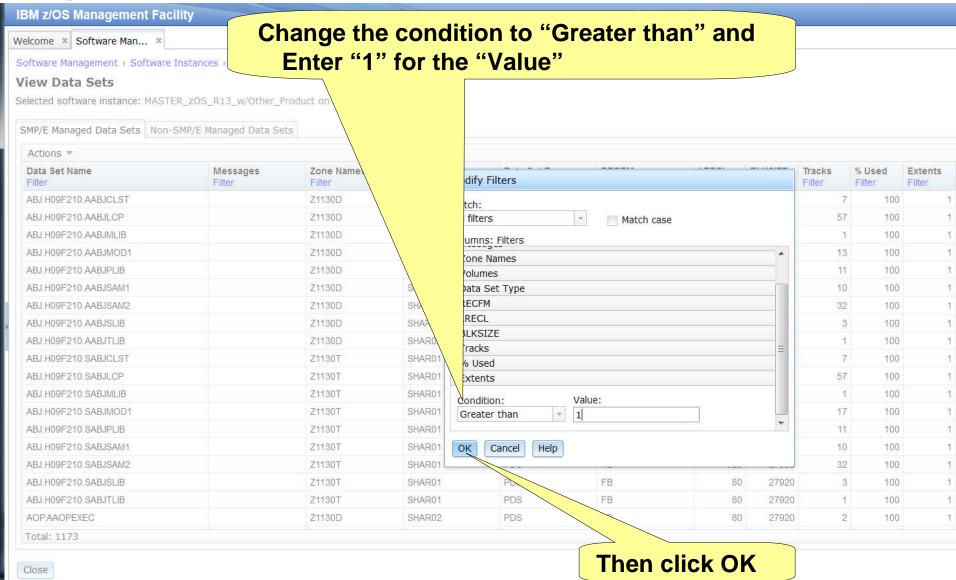
Step 3d ...



IBM z/OS Management Facility Welcome shara01 Click on the filter in the Extents column Welcome × Software Man... × Software Management > Software Instances > View Products, Features, and **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 **Zone Names** Volumes Data Set Type RECFM **LRECL** BLKSIZE Tracks % Used Extents Filter FB 80 7 ABJ.H09F210.AABJCLST Z1130D SHAR02 PDS 27920 100 ABJ.H09F210.AABJLCP Z1130D SHAR02 PDS FB 80 27920 57 100 ABJ.H09F210.AABJMLIB Z1130D SHAR02 PDS FB 80 27920 1 100 ABJ.H09F210.AABJMOD1 Z1130D SHAR02 **PDS** U 32760 13 100 ABJ.H09F210.AABJPLIB Z1130D SHAR02 PDS FB 80 27920 11 100 Z1130D SHAR02 PDS FB 80 27920 100 ABJ.H09F210.AABJSAM1 10 VB 1028 SHAR02 PDS 27998 32 100 ABJ.H09F210.AABJSAM2 Z1130D FB ABJ.H09F210.AABJSLIB Z1130D SHAR02 PDS 80 27920 3 100 SHAR02 PDS FB 27920 1 100 ABJ.H09F210.AABJTLIB Z1130D 80 SHAR01 PDS FB 7 ABJ.H09F210.SABJCLST Z1130T 80 27920 100 ABJ.H09F210.SABJLCP Z1130T SHAR01 PDS FB 80 27920 57 100 ABJ.H09F210.SABJMLIB Z1130T SHAR01 **PDS** FB 80 27920 1 100 U ABJ.H09F210.SABJMOD1 PDS 17 Z1130T SHAR01 32760 100 ABJ.H09F210.SABJPLIB Z1130T SHAR01 PDS FB 80 27920 11 100 FB 80 ABJ.H09F210.SABJSAM1 Z1130T SHAR01 PDS 27920 10 100 ABJ.H09F210.SABJSAM2 Z1130T SHAR01 **PDS** VB 1028 27998 32 100 ABJ.H09F210.SABJSLIB Z1130T SHAR01 PDS FB 80 27920 3 100 ABJ.H09F210.SABJTLIB Z1130T SHAR01 PDS FB 80 27920 1 100 FB 2 AOP.AAOPEXEC Z1130D SHAR02 PDS 80 27920 100 Total: 1173

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.

Software Manager

View Data Sets

Click on the filter in the Extents column

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

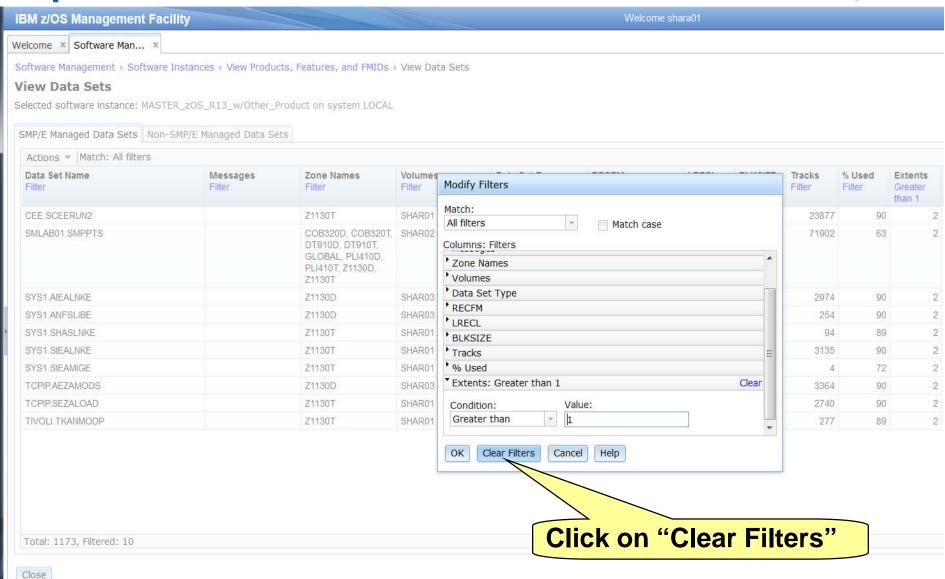
Selected software instance: MASTER_zOS_R13_w/Other_Product on syste

Data Set Name		Zana Namas	Maluman	Data Cat Tuna	DECEM	LDEGL	DLIVEIZE	Treates	0/	Futanta
Filter	Messages Filter	Zone Names Filter	Volumes Filter	Data Set Type Filter	RECFM Filter	LRECL Filter	BLKSIZE Filter	Tracks Filter	% 0s Filter	Extents Greater than 1
CEE.SCEERUN2		Z1130T	SHAR01	PDSE	U		32760	23877	9) 2
SMLAB01.SMPPTS		COB320D, COB320T, DT910D, DT910T, GLOBAL, PLI410D, PLI410T, Z1130D, Z1130T	SHAR02	PDSE	FB	80	32720	71902	6	3 2
SYS1.AIEALNKE		Z1130D	SHAR03	PDSE	U		32760	2974	9) 2
SYS1.ANFSLIBE		Z1130D	SHAR03	PDSE	U		32760	254	9) 2
SYS1.SHASLNKE		Z1130T	SHAR01	PDSE	U		32760	94	8	9 2
SYS1.SIEALNKE		Z1130T	SHAR01	PDSE	U		32760	3135	9) 2
SYS1.SIEAMIGE		Z1130T	SHAR01	PDSE	U		32760	4	7	2 2
TCPIP.AEZAMODS		Z1130D	SHAR03	PDSE	U		32760	3364	9) 2
TCPIP.SEZALOAD		Z1130T	SHAR01	PDSE	U		32760	2740	9) 2
TIVOLI.TKANMODP		Z1130T	SHAR01	PDSE	U		32760	277	8) 2

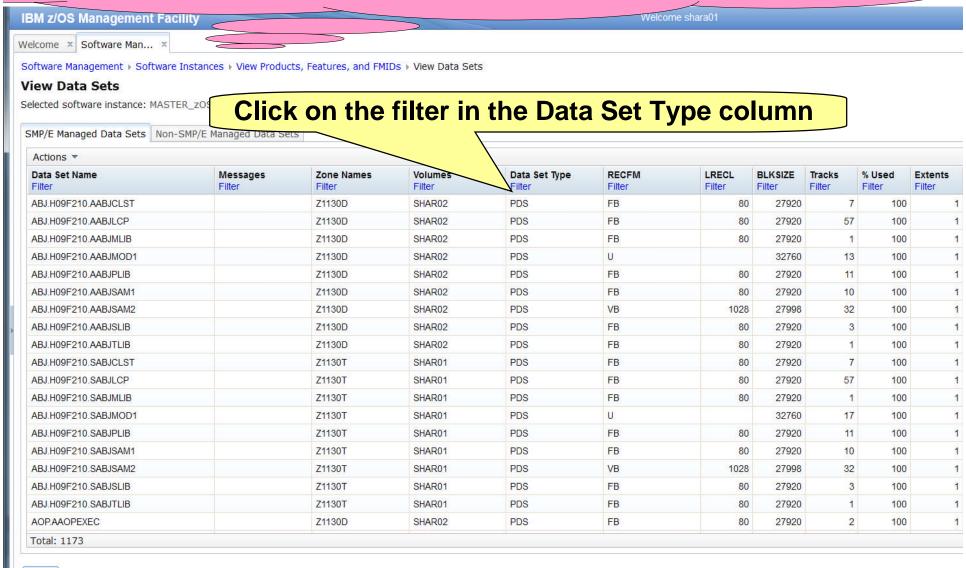
Total: 1173, Filtered: 10

Close



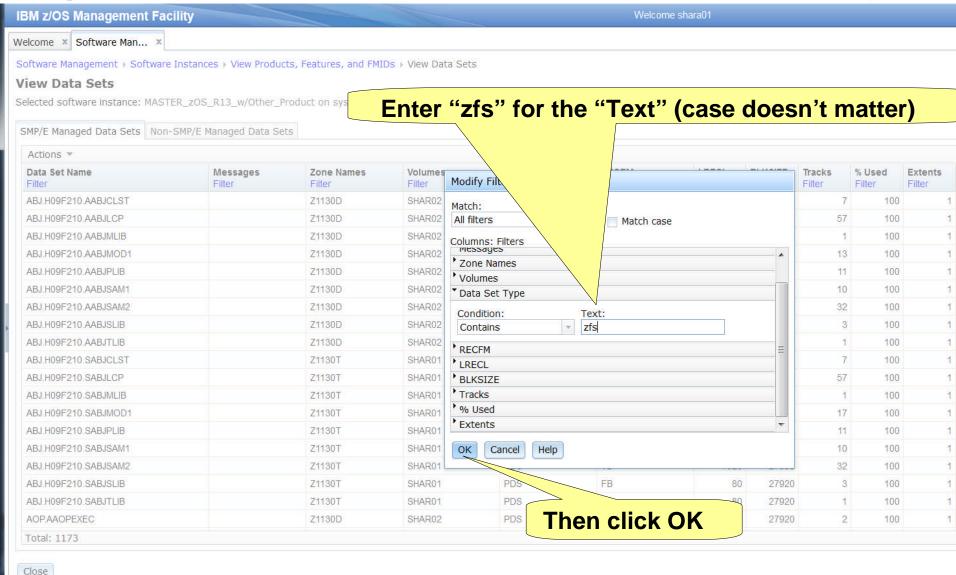


You are back to the original list of data sets. You will now use filtering to verify that all ZFS file systems are on volume SHAR04.



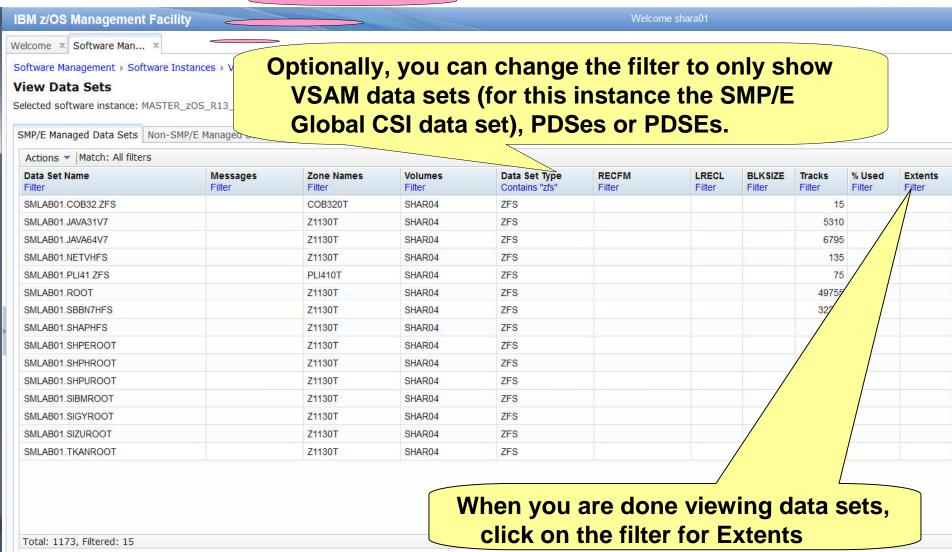
Close



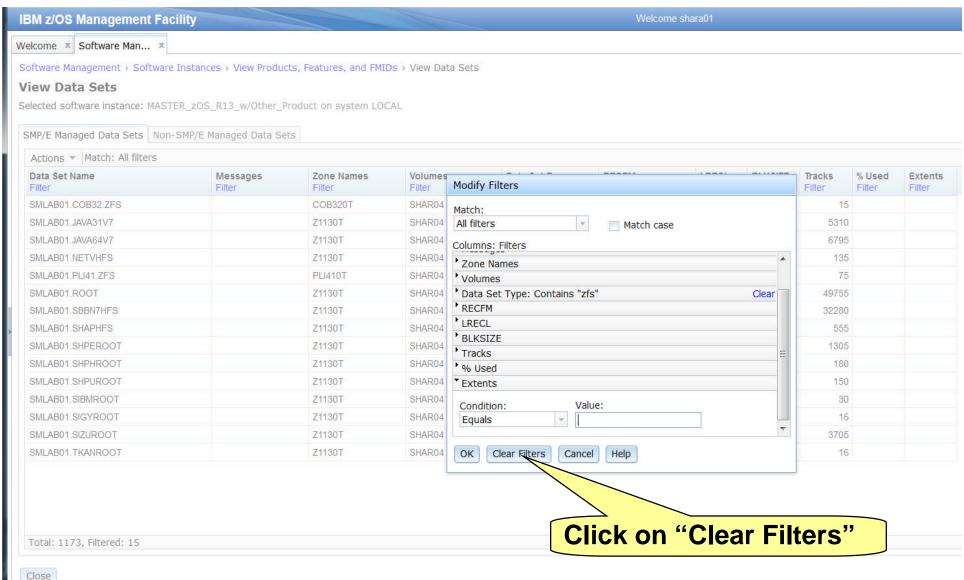


Notice that all data sets are on SHAR04.









Notice that when you clear filters it clears ALL filters and not just the filter for the column you selected.

IBM z/OS Management Facility

Welcome shara01

Welcome × Software Man... ×

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

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

Data Set Name Filter	Messages Filter	Zone Names Filter	Volumes Filter	Data Set Type Filter	RECFM Filter	LRECL Filter	BLKSIZE Filter	Tracks Filter	% Used Filter	Extents Filter
ABJ.H09F210.AABJCLST		Z1130D	SHAR02	PDS	FB	80	27920	7	100	1
ABJ.H09F210.AABJLCP		Z1130D	SHAR02	PDS	FB	80	27920	57	100	1
ABJ.H09F210.AABJMLIB		Z1130D	SHAR02	PDS	FB	80	27920	1	100	1
ABJ.H09F210.AABJMOD1		Z1130D	SHAR02	PDS	U		32760	13	100	1
ABJ.H09F210.AABJPLIB		Z1130D	SHAR02	PDS	FB	80	27920	11	100	1
ABJ.H09F210.AABJSAM1		Z1130D	SHAR02	PDS	FB	80	27920	10	100	1
ABJ.H09F210.AABJSAM2		Z1130D	SHAR02	PDS	VB	1028	27998	32	100	1
ABJ.H09F210.AABJSLIB		Z1130D	SHAR02	PDS	FB	80	27920	3	100	1
ABJ.H09F210.AABJTLIB		Z1130D	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
ABJ.H09F210.SABJSLIB		Z1130T	SHAR01	PDS	FB	80	27920	3	100	1
ABJ.H09F210.SABJTLIB		Z1130T	SHAR01	PDS	FB	80	27920	1	100	1
AOP.AAOPEXEC		Z1130D	SHAR02	PDS	FB	80	27920	2	100	1

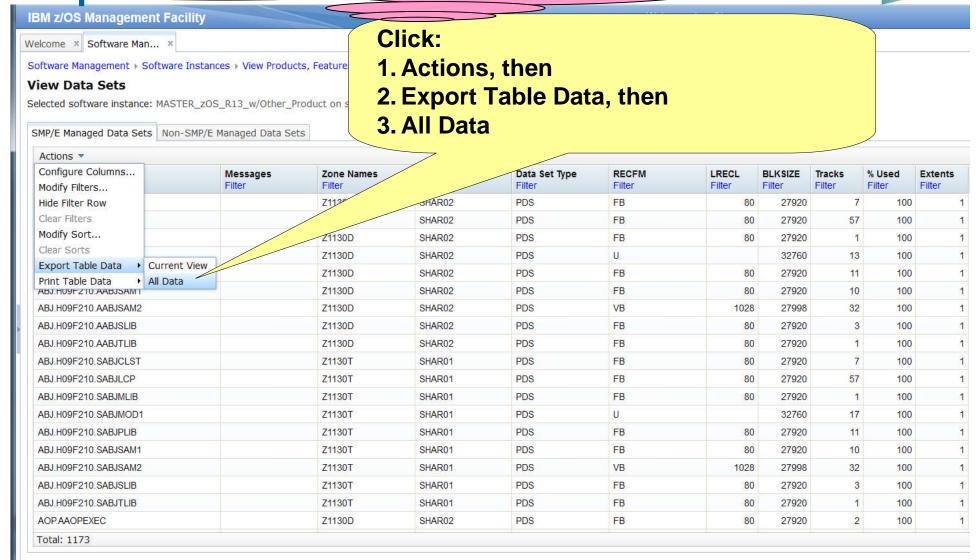
Close



Step 3e: Export the "Master" Software **Instances' Data Set Information**



Now you will save the data set information in a file on your workstation so that you can use speadsheet functions to manipulate the data or print it

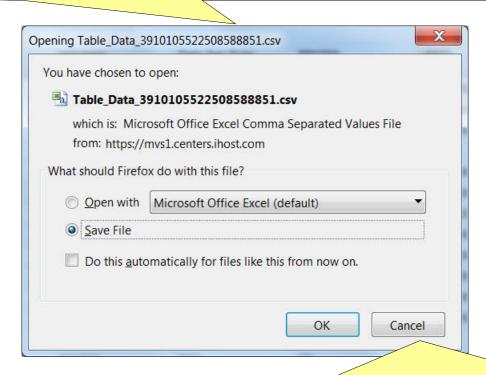


Close

Step 3e ...



Pop-up window will allow you to save the file or open it with a program such as Microsoft Office Excel. You also have the opportunity to cancel



Since this is a lab, please click cancel. The next slide in the handout shows how the data set information would be displayed in a spread sheet.



Now you would be able to launch a program like Microsoft Office Excel to view or manipulate the z/OSMF "Master" Software Instances' data set information



-	licrosoft Excel				OCCUPANTON INC.	1000					
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			\$ 1 ×	<u>□</u> <u>□</u> -	J 19 +1	Cm - 8	$\Sigma - \stackrel{\wedge}{Z} \downarrow \stackrel{Z}{A}$	1 🛍 🛷 1	100%	▼ 🕡 🥃 i A	rial
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3	ABJ.H09F2			SHAR02	PDS	FB					1
4	ABJ.H09F2			SHAR02	PDS	FB					
5	ABJ.H09F2			SHAR02	PDS	U					
6	ABJ.H09F2			SHAR02	PDS	FB					
7	ABJ.H09F2	10.AABJS	Z1130D	SHAR02	PDS	FB					
8	ABJ.H09F2			SHAR02	PDS	VB					1
9	ABJ.H09F2			SHAR02	PDS	FB					
10	ABJ.H09F2			SHAR02	PDS	FB					1
11	ABJ.H09F2			SHAR01	PDS	FB					
12	ABJ.H09F2			SHAR01	PDS	FB					
13	ABJ.H09F2	10.SABJN	Z1130T	SHAR01	PDS	FB					
14	ABJ.H09F2	10.SABJN	Z1130T	SHAR01	PDS	U					
15	ABJ.H09F2	10.SABJF	Z1130T	SHAR01	PDS	FB					
16	ABJ.H09F2	10.SABJS	Z1130T	SHAR01	PDS	FB					
17	ABJ.H09F2	10.SABJS	Z1130T	SHAR01	PDS	VB					
18	ABJ.H09F2	10.SABJS	Z1130T	SHAR01	PDS	FB					
	ABJ.H09F2			SHAR01	PDS	FB					
-	AOP.AAOP		Z1130D	SHAR02	PDS	FB					
21	AOP.AAOP		Z1130D	SHAR02	PDS	VB					
22	AOP.AAOPI	MENU	Z1130D	SHAR02	PDS	FB					
	AOP.AAOP		Z1130D	SHAR02	PDS	U					1
24	AOP.AAOP	The state of the s	Z1130D	SHAR02	PDS	FB					
	AOP.SAOP		Z1130T	SHAR01	PDS	FB					
CT 1 1 2 2	AOP.SAOP		Z1130T	SHAR01	PDS	FB	1				
27	AOP.SAOP		Z1130T	SHAR01	PDS	FB					
	ASM.AASM		Z1130D	SHAR02	PDS	FB					
	ASM.AASM		Z1130D	SHAR02	PDS	FB					
	ASM.AASM		Z1130D	SHAR02	PDS	U	1				
31	ASM.AASM		Z1130D	SHAR02	PDS	U	1				
	ASM.AASM		Z1130D	SHAR02	PDS	FB					
	ASM.AASM		Z1130D	SHAR02	PDS	FB					
	ASM.AASM		Z1130D	SHAR02	PDS	FB					
	ASM.SASM		Z1130T	SHAR01	PDS	FB	1				
36	ASM.SASM		Z1130T	SHAR01	PDS	FB					
37	ASM.SASM		Z1130T	SHAR01	PDS	U					
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Step 3e ...



IBM z/OS Management Facility Welcome shara01

Welcome × Software Man... ×

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

View Data Sets

Selected software instance: MASTER_zOS_R13_w/Other_Product on system LOCAL

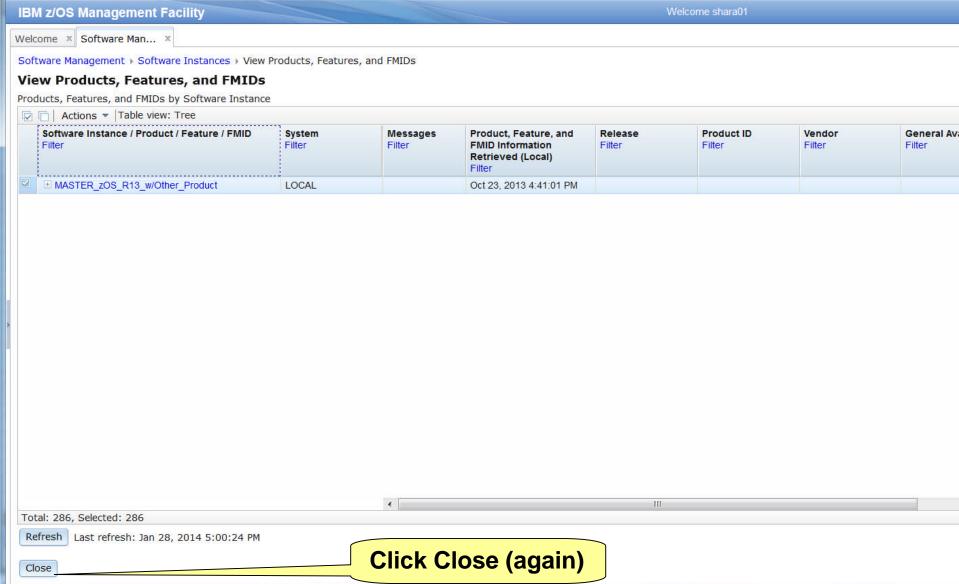
SMP/E Managed Data Sets Non-SMP/E Managed Data Sets

Data Set Name Filter	Messages Filter	Zone Names Filter	Volumes Filter	Data Set Type Filter	RECFM Filter	LRECL Filter	BLKSIZE Filter	Tracks Filter	% Used Filter	Extents Filter
ABJ.H09F210.AABJCLST		Z1130D	SHAR02	PDS	FB	80	27920	7	100	1
ABJ.H09F210.AABJLCP		Z1130D	SHAR02	PDS	FB	80	27920	57	100	1
ABJ.H09F210.AABJMLIB		Z1130D	SHAR02	PDS	FB	80	27920	1	100	1
ABJ.H09F210.AABJMOD1		Z1130D	SHAR02	PDS	U		32760	13	100	1
ABJ.H09F210.AABJPLIB		Z1130D	SHAR02	PDS	FB	80	27920	11	100	1
ABJ.H09F210.AABJSAM1		Z1130D	SHAR02	PDS	FB	80	27920	10	100	1
ABJ.H09F210.AABJSAM2		Z1130D	SHAR02	PDS	VB	1028	27998	32	100	1
ABJ.H09F210.AABJSLIB		Z1130D	SHAR02	PDS	FB	80	27920	3	100	1
ABJ.H09F210.AABJTLIB		Z1130D	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
ABJ.H09F210.SABJSLIB		Z1130T	SHAR01	PDS	FB	80	27920	3	100	1
ABJ.H09F210.SABJTLIB		Z1130T	SHAR01	PDS	FB	80	27920	1	100	1
AOP.AAOPEXEC		Z1130D	SHAR02	PDS	FB	80	27920	2	100	1

Total: 1173

Click Close



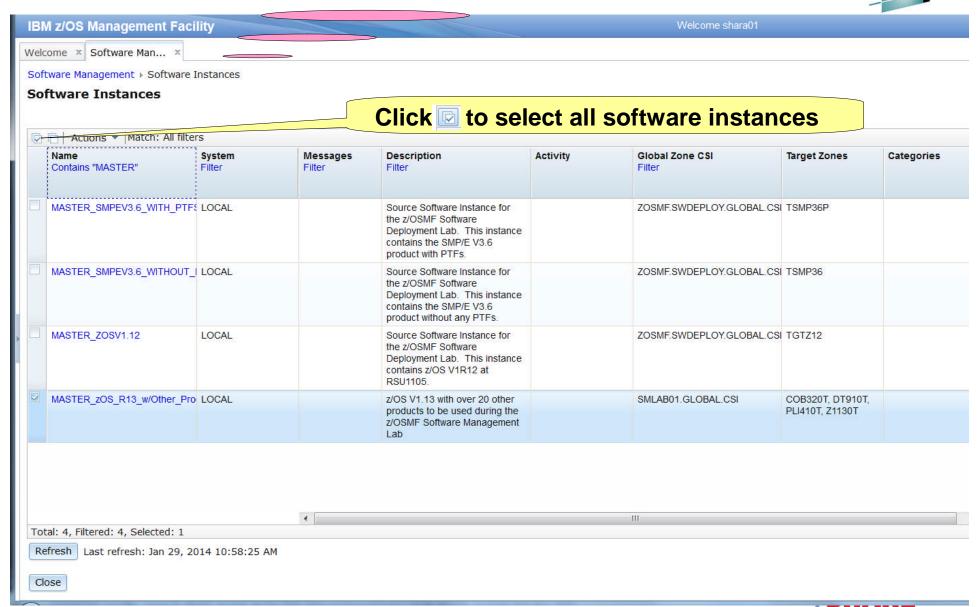




Step 4a: Report on "Master" Software **Instances' End of Service**



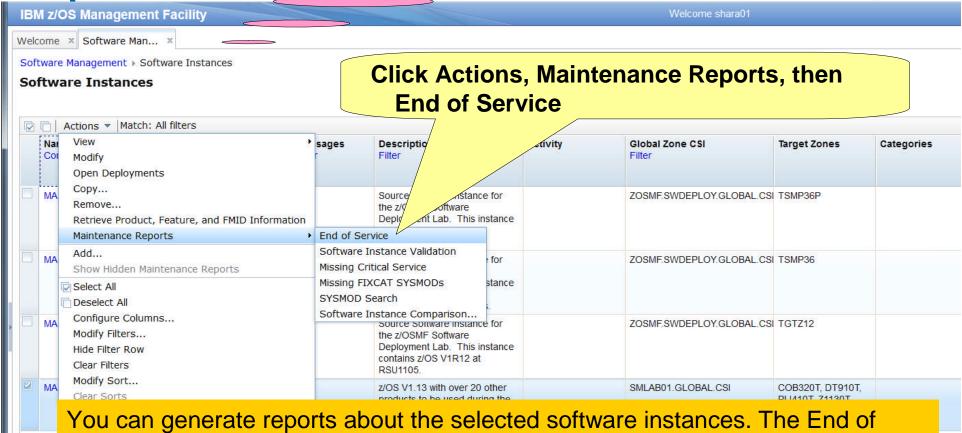
For the first set of reports you will use all "Master" software instances



Prepare to be WOWed!!!







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:

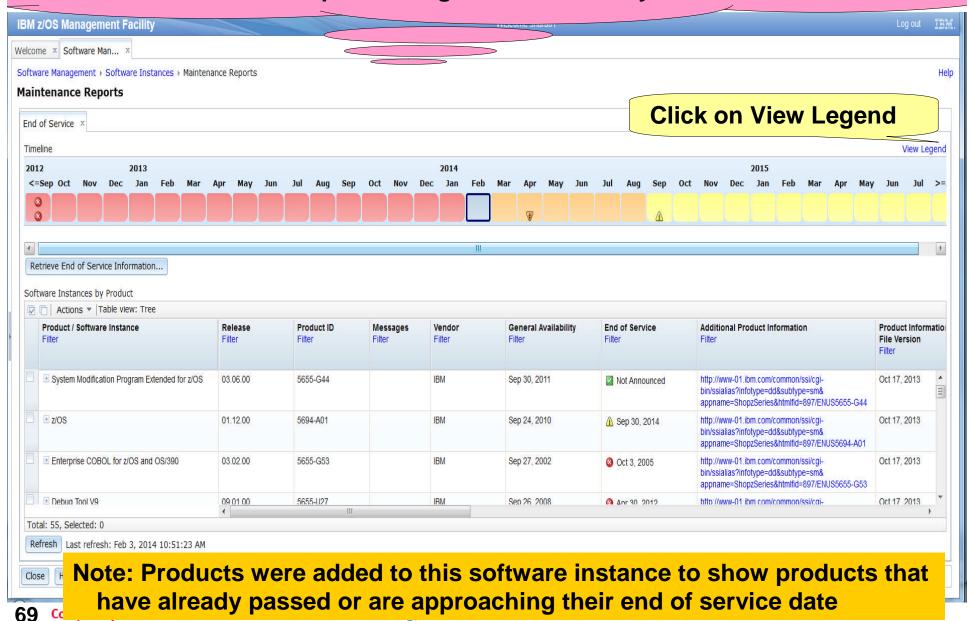
- Will display additional information, not available through batch SMP/E
- Can be performed against multiple software instances at the same time
- Can be performed against software instances throughout your enterprise

Total:

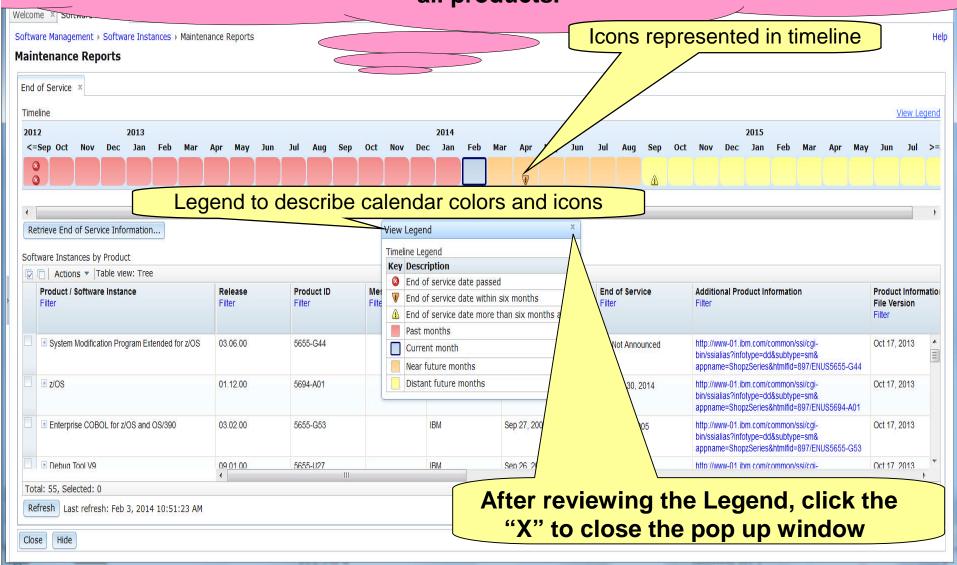
Refres

Close

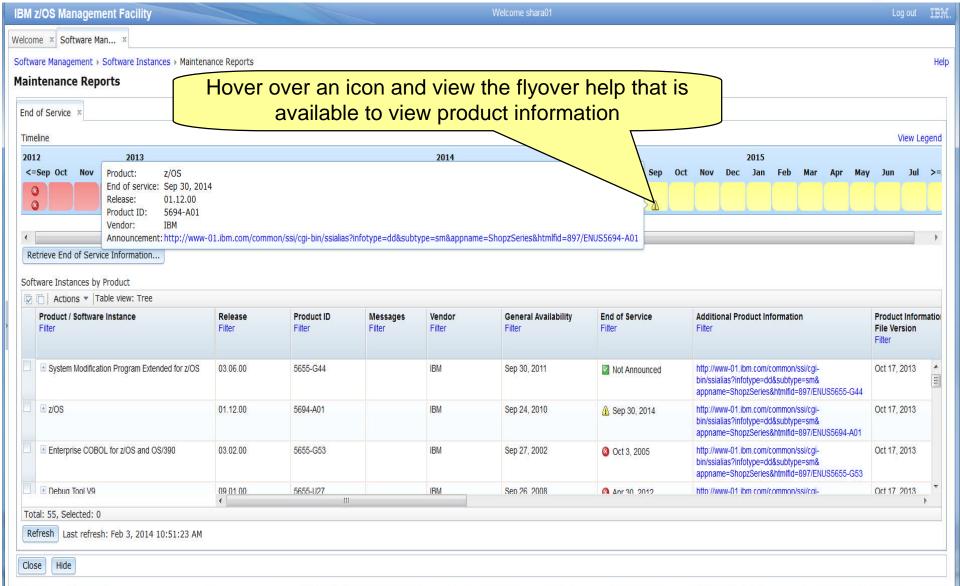
The display shows any product that was in a selected software instance with information about the product's general availability and end of service



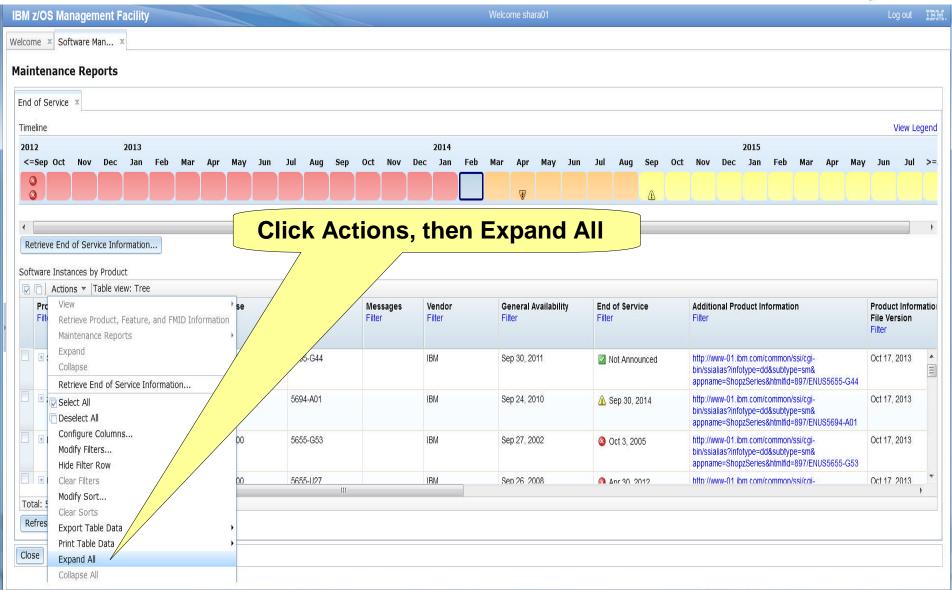
Notice that the scrollable timeline has icons and that any product that has an announced End of Service date has an icon. The table below shows all products.





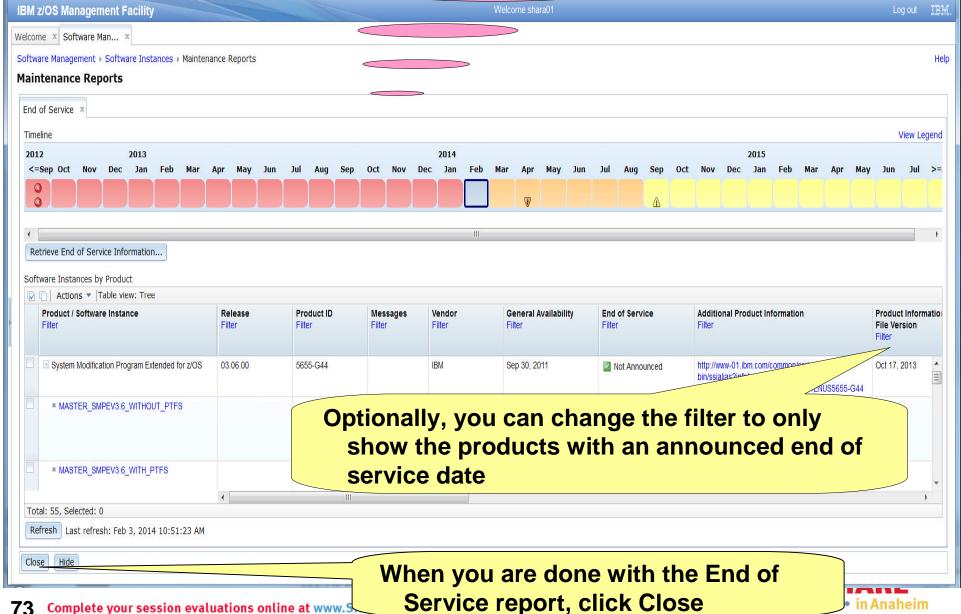






You can see all the software instances where SMP/E (and all the other products) is installed.







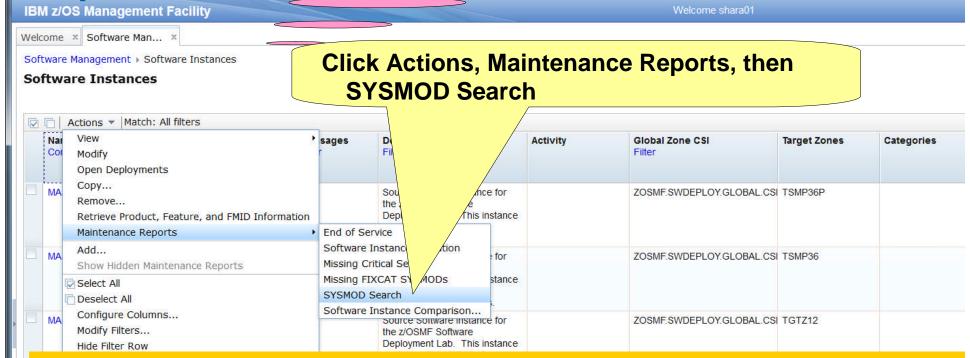
Step 4b: Report on "Master" Software Instances' **SYSMOD Search**



Now you will perform a Cross Zone Query on steroids!!!!

Step 4b





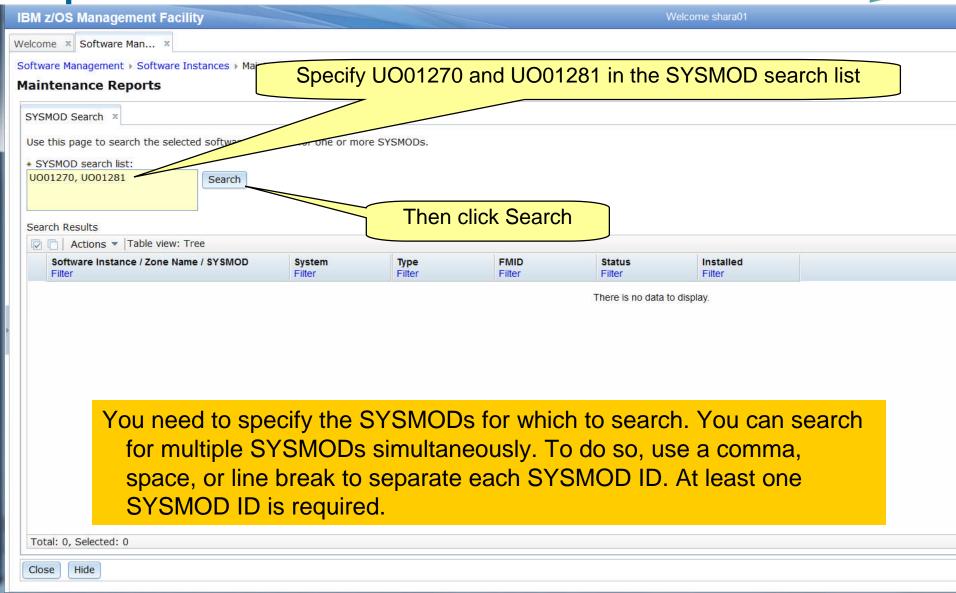
The SYSMOD Search capability helps you determine if your software instances contain the SYSMODs in which you are interested. This could be to determine:

- 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

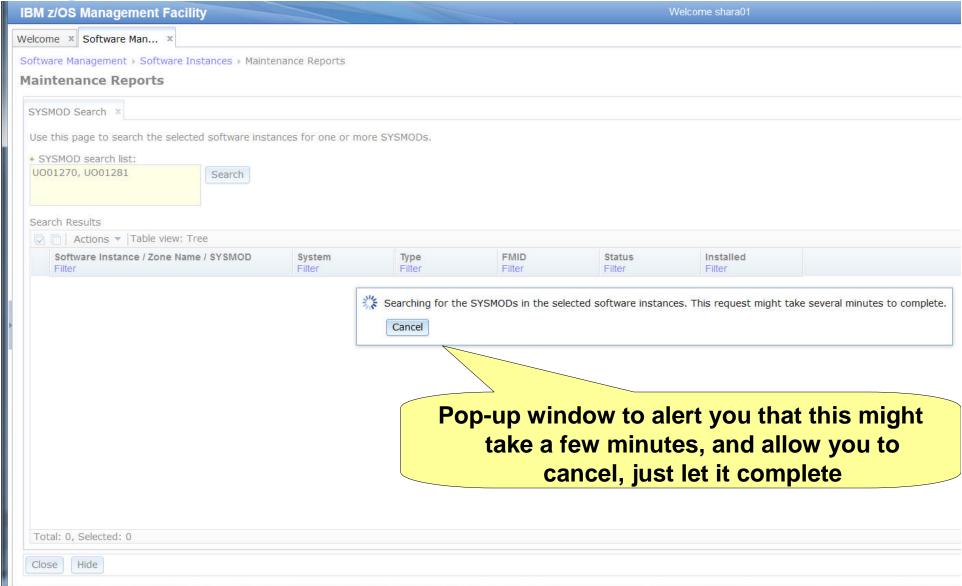
While similar to cross zone query, this action can be performed:

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







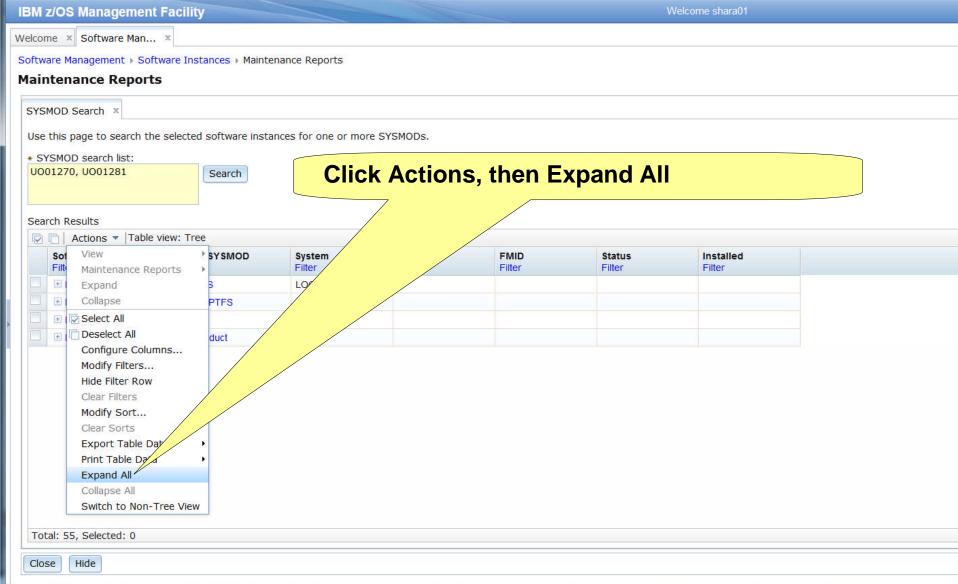


Results shown in a scrollable tree table. You will have to expand each row to see the actual results.

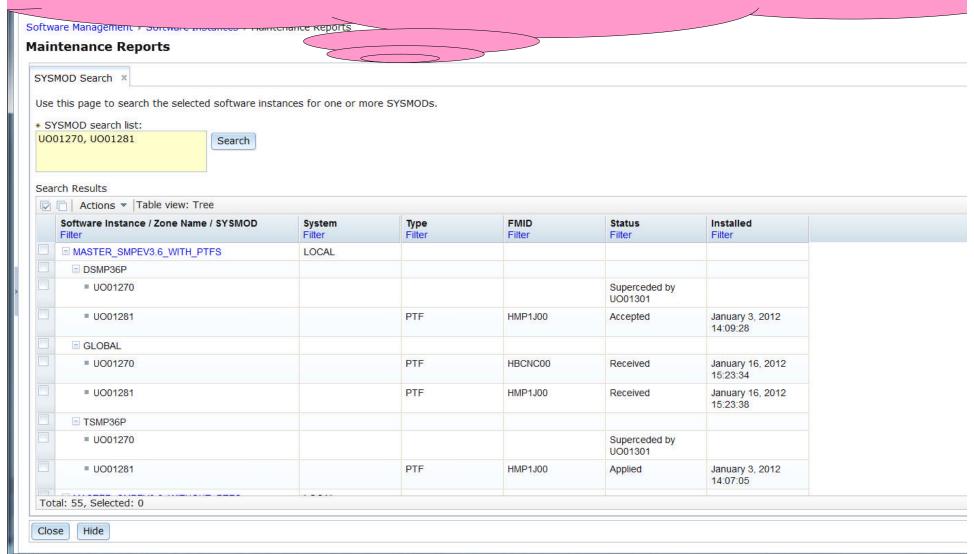


IBN	z/OS Management Facility					Welcome shara01				
Welco	ome × Software Man ×	•								
	ware Management > Software Instances > Maint ntenance Reports	enance Reports		>						
SY	SMOD Search ×									
He	e this page to search the selected software inst	ances for one or me	ore EVEMODE							
		ances for one of fin	ore 313MODS.							
	SYSMOD search list: 001270, U001281 Search									
	Search									
Se	arch Results									
Į.	☐ Actions ▼ Table view: Tree									
	Software Instance / Zone Name / SYSMOD Filter	System Filter	Type Filter	FMID Filter	Status Filter	Installed Filter				
	■ MASTER_SMPEV3.6_WITH_PTFS	LOCAL								
	■ MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL								
,	■ MASTER_ZOSV1.12	LOCAL								
	MASTER_zOS_R13_w/Other_Product	LOCAL								
Т	otal: 55, Selected: 0									
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C	bse Hide									

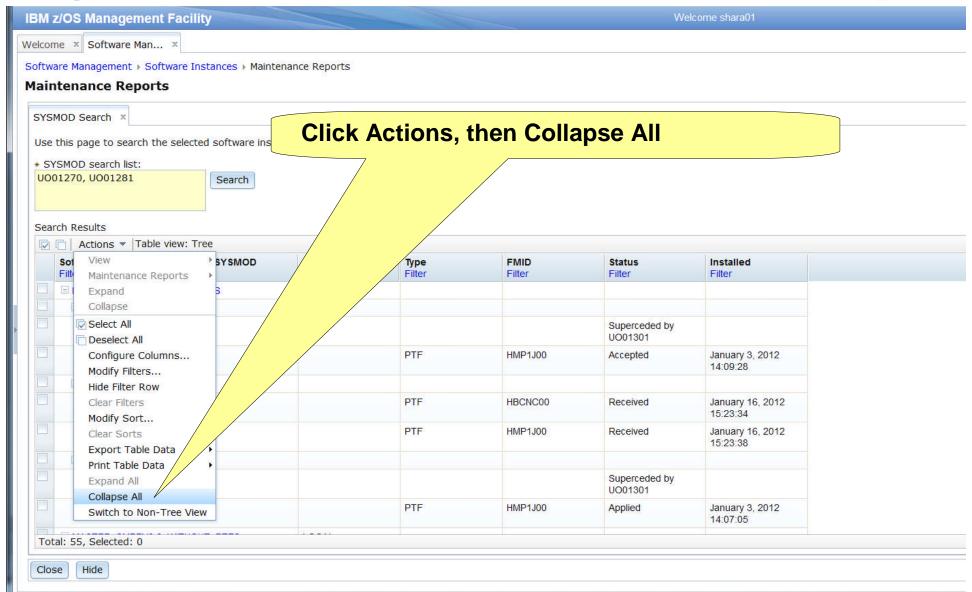




In one request, you queried 4 software instances using 2 different GLOBAL zones for 2 SYSMODs. This simple query would take at least 4 user interactions using SMP/E's cross zone query.







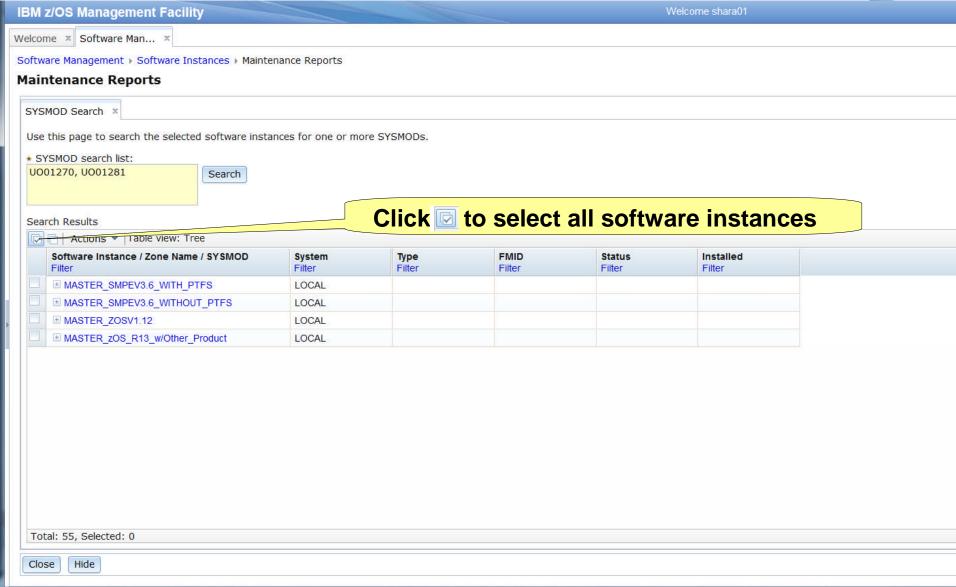


Step 4c: Report on "Master" Software **Instances' Missing FIXCAT SYSMODs**

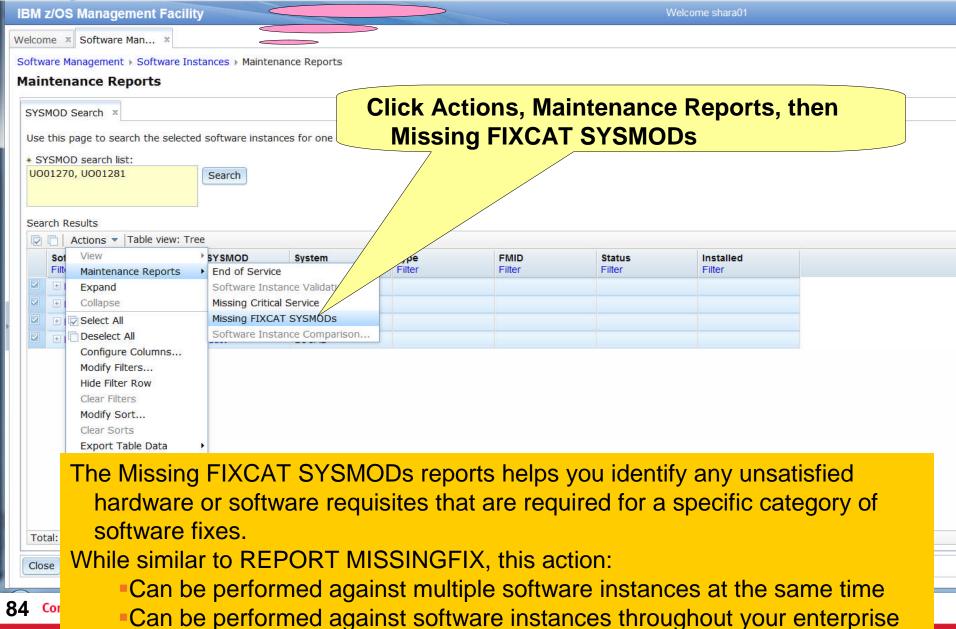


Step 4c

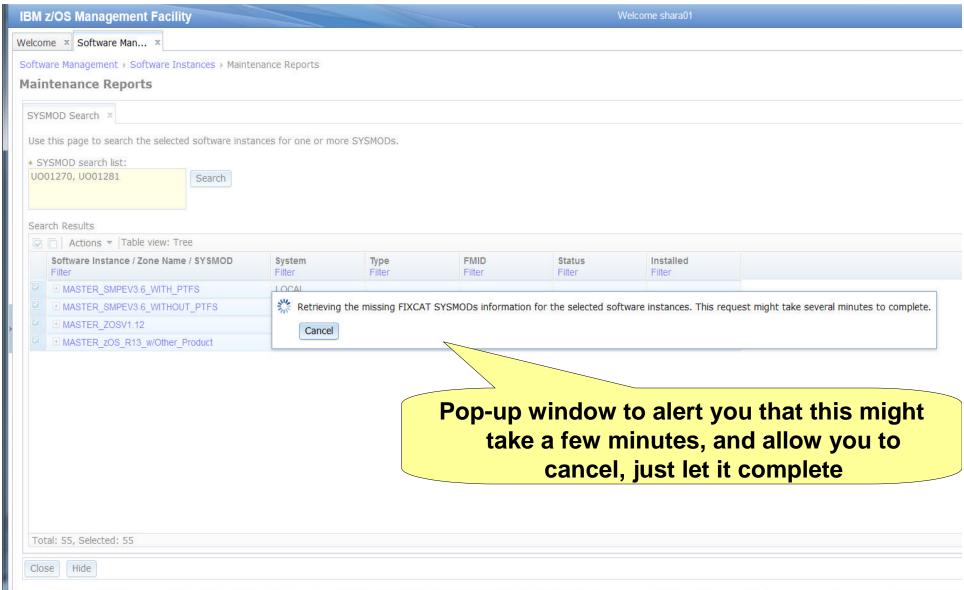




Next you will look for missing fixes associated with one or more SMP/E Fix Categories.





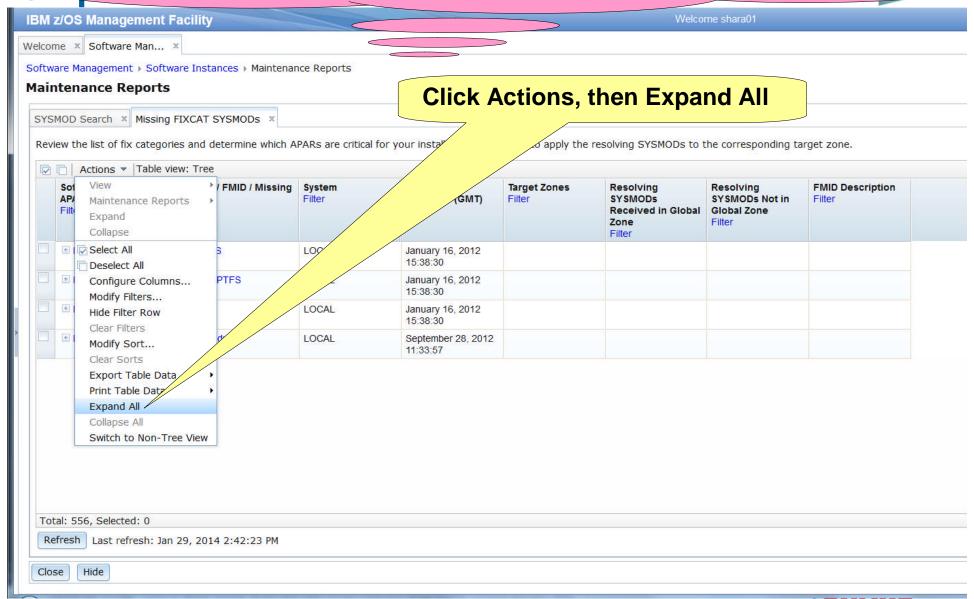


Results shown in a scrollable tree table. You will have to expand each row to see the actual results.



vi	MOD Search Missing FIXCAT SYSMODS Wew the list of fix categories and determine which A	PARs are critica	ll for your installation. Use \$	SMP/E to apply the	resolving SYSMODs to t	the corresponding ta	arget zone.
	Software Instance / Fix Category / FMID / Missing APAR Filter	System Filter	HOLDDATA Received (GMT) Filter	Target Zones Filter	Resolving SYSMODS Received in Global Zone Filter	Resolving SYSMODs Not in Global Zone Filter	FMID Description Filter
	■ MASTER_SMPEV3.6_WITH_PTFS	LOCAL	January 16, 2012 15:38:30				
	■ MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL	January 16, 2012 15:38:30				
	■ MASTER_ZOSV1.12	LOCAL	January 16, 2012 15:38:30				
	MASTER_zOS_R13_w/Other_Product	LOCAL	September 28, 2012 11:33:57				

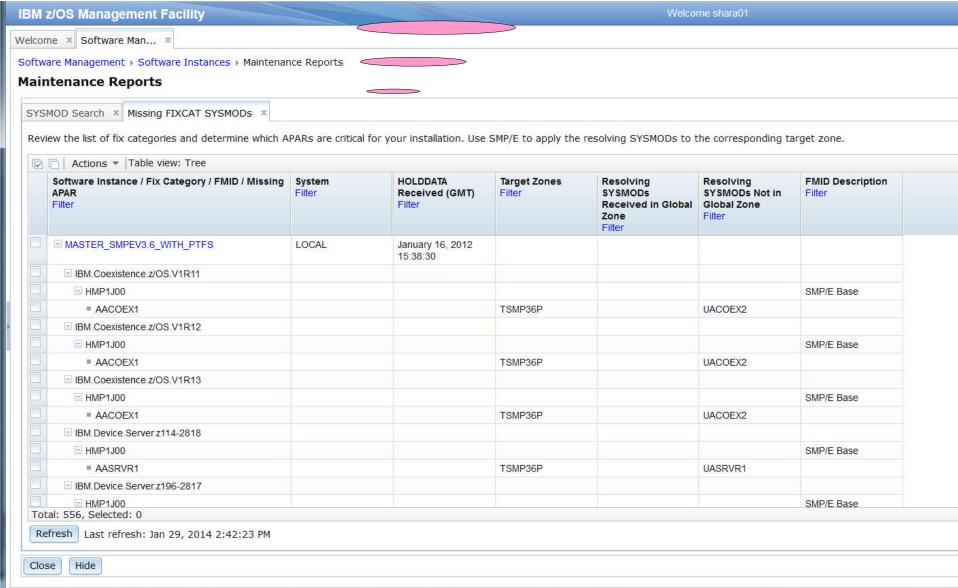
Notice that a second tab was created under Maintenance Reports. You can go back to prior reports by clicking the appropriate tab.



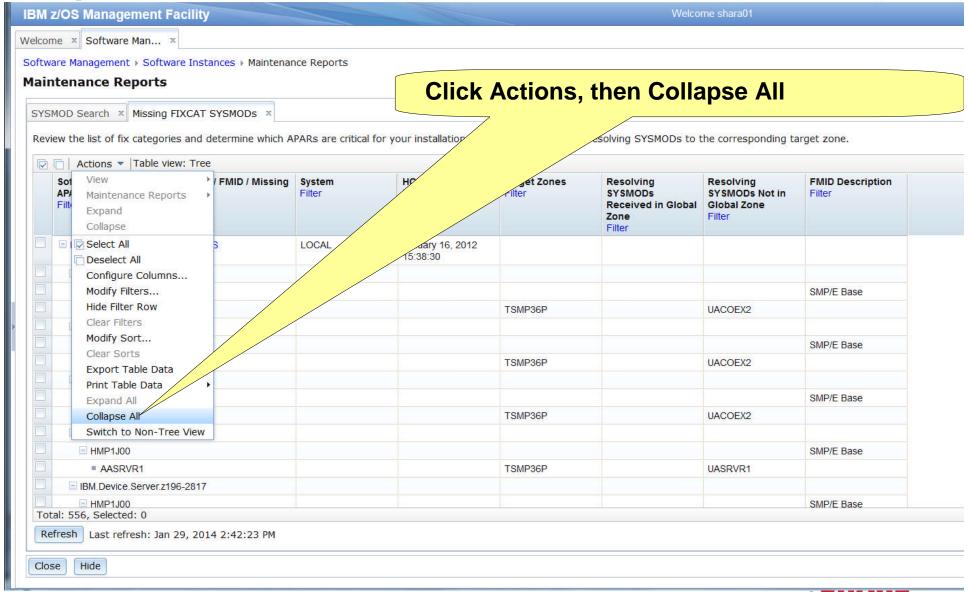


Similar to REPORT MISSINGFIX Output displayed in tree table format









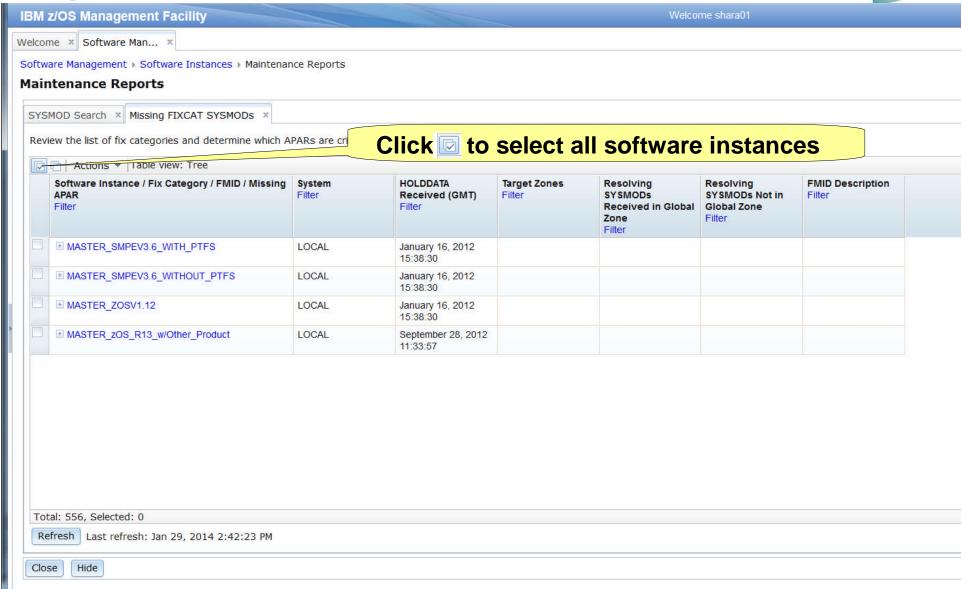


Step 4d: Report on "Master" Software Instances' Missing **Critical Fixes**

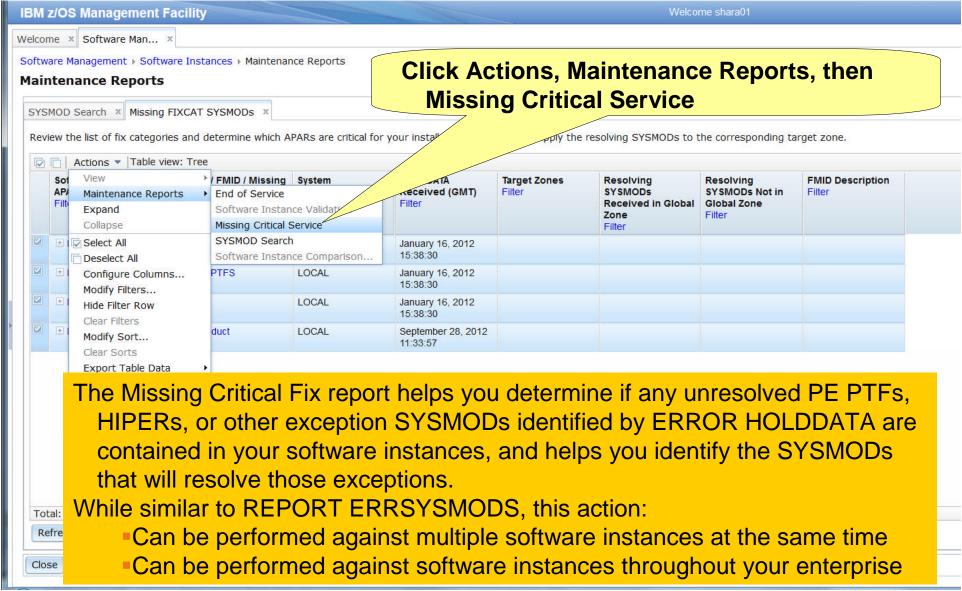


Step 4d

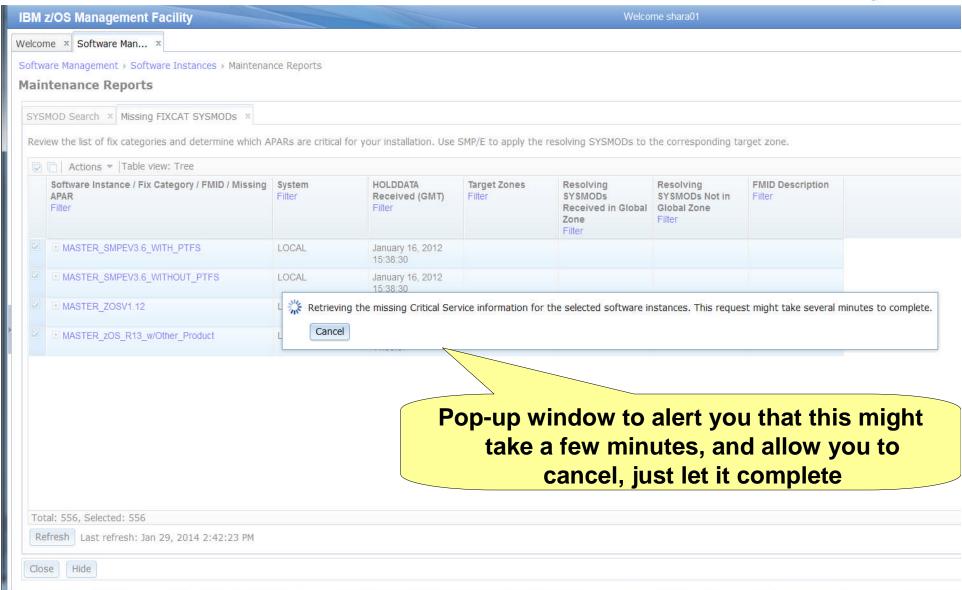












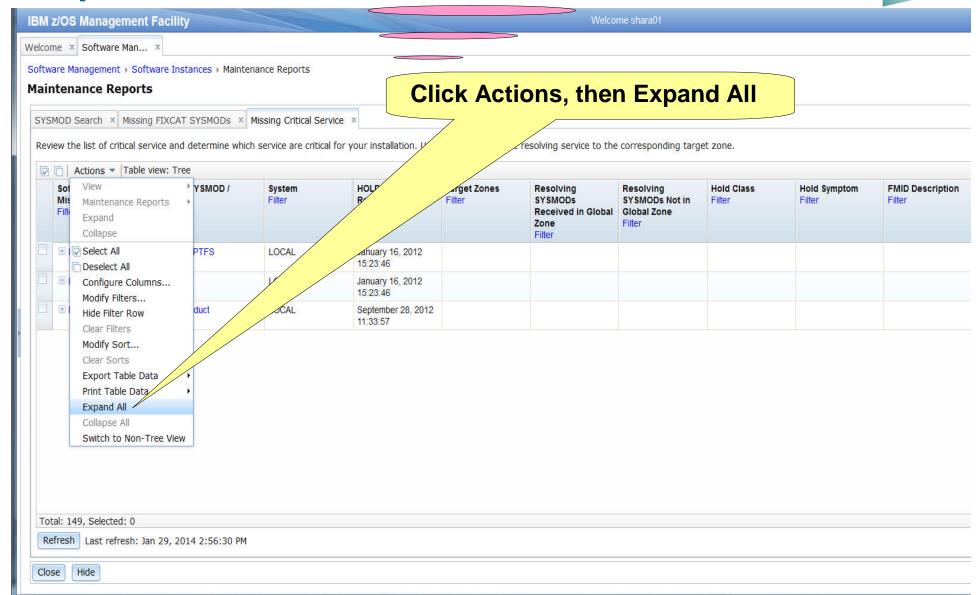


Results shown in a scrollable tree table. You will have to expand each row to see the actual results.



	v the list of critical service and determine which			5/2 to app./					
٨	Software Instance / FMID / Held SYSMOD / Missing APAR illter	System Filter	HOLDDATA Received (GMT) Filter	Target Zones Filter	Resolving SYSMODS Received in Global Zone Filter	Resolving SYSMODS Not in Global Zone Filter	Hold Class Filter	Hold Symptom Filter	FMID Description Filter
	MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL	January 16, 2012 15:23:46						
] [MASTER_ZOSV1.12	LOCAL	January 16, 2012 15:23:46						
	MASTER_zOS_R13_w/Other_Product	LOCAL	September 28, 2012 11:33:57						
	MASTER_205_RTS_WOULD_Product		11.00.01						
	WAGTER_203_KTS_WOULD_FTOUGHT		71.00.07						

Notice that a third tab was created under Maintenance Reports.





Similar to REPORT ERRSYSMODS Output displayed in tree table format

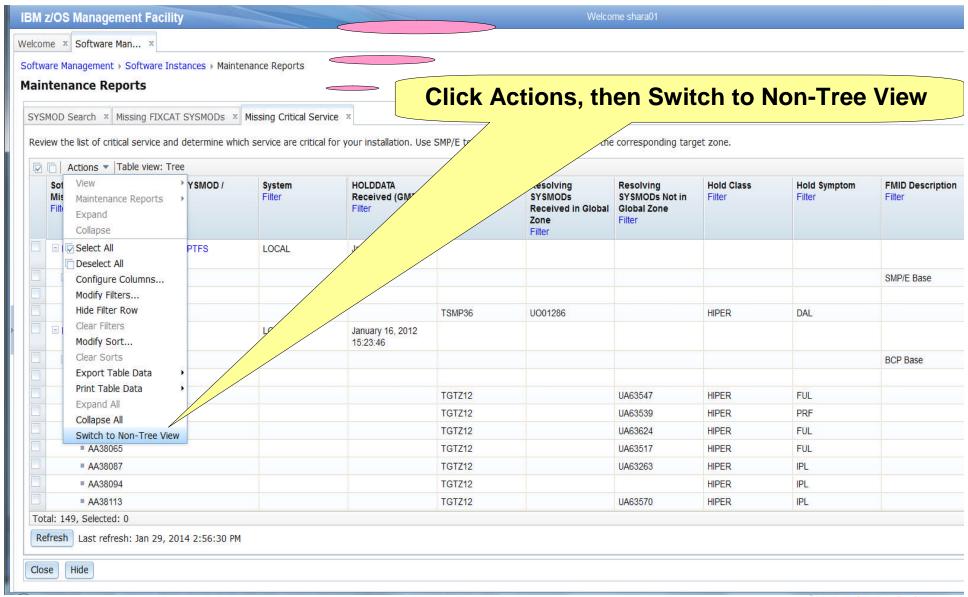


	are Management > Software Instances > Mainte tenance Reports	enance Reports							
"	tenance Reports								
/S	MOD Search × Missing FIXCAT SYSMODs ×	Missing Critical Serv	vice x						
			9890°89				500 C 800 C 200 C		
evi	ew the list of critical service and determine which	ch service are critical	l for your installation. Use	SMP/E to apply the	e resolving service to the	corresponding targ	et zone.		
V	☐ Actions ▼ Table view: Tree								
	Software Instance / FMID / Held SYSMOD / Missing APAR Filter	System Filter	HOLDDATA Received (GMT) Filter	Target Zones Filter	Resolving SYSMODS Received in Global Zone Filter	Resolving SYSMODS Not in Global Zone Filter	Hold Class Filter	Hold Symptom Filter	FMID Descri Filter
	■ MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL	January 16, 2012 15:23:46		The second secon				
	☐ HMP1J00								SMP/E Base
	□ HMP1J00								
	■ AO14750			TSMP36	UO01286		HIPER	DAL	
	☐ MASTER_ZOSV1.12	LOCAL	January 16, 2012 15:23:46						
	☐ HBB7770								BCP Base
	■ HBB7770								
	AA37192			TGTZ12		UA63547	HIPER	FUL	
	■ AA37848			TGTZ12		UA63539	HIPER	PRF	
	■ AA37905			TGTZ12		UA63624	HIPER	FUL	
	AA38065			TGTZ12		UA63517	HIPER	FUL	
	■ AA38087			TGTZ12		UA63263	HIPER	IPL	
	■ AA38094			TGTZ12			HIPER	IPL	
	■ AA38113			TGTZ12		UA63570	HIPER	IPL	
	al: 149, Selected: 0								

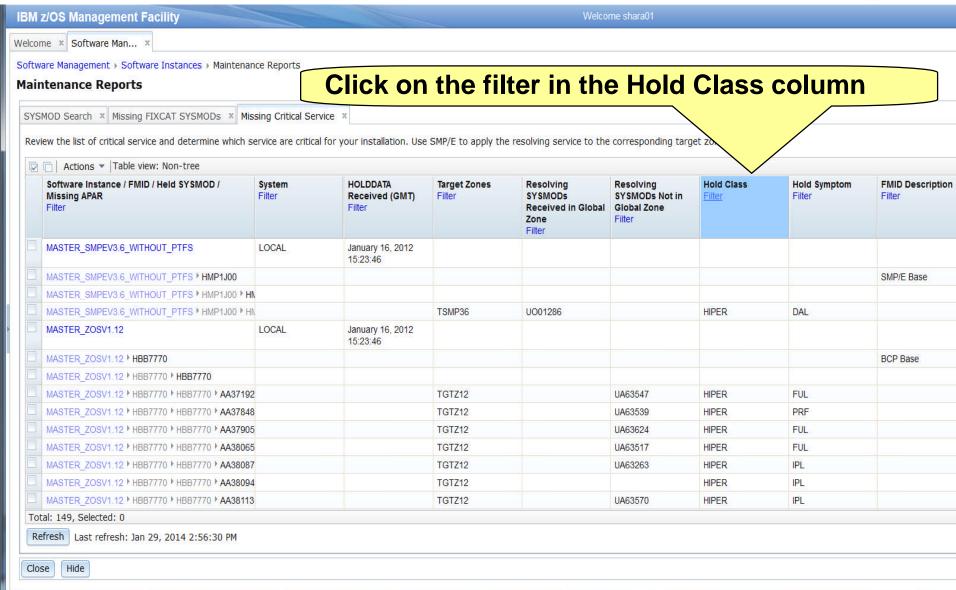


Now you are going to change the view and add a filter to identify missing HIPERs

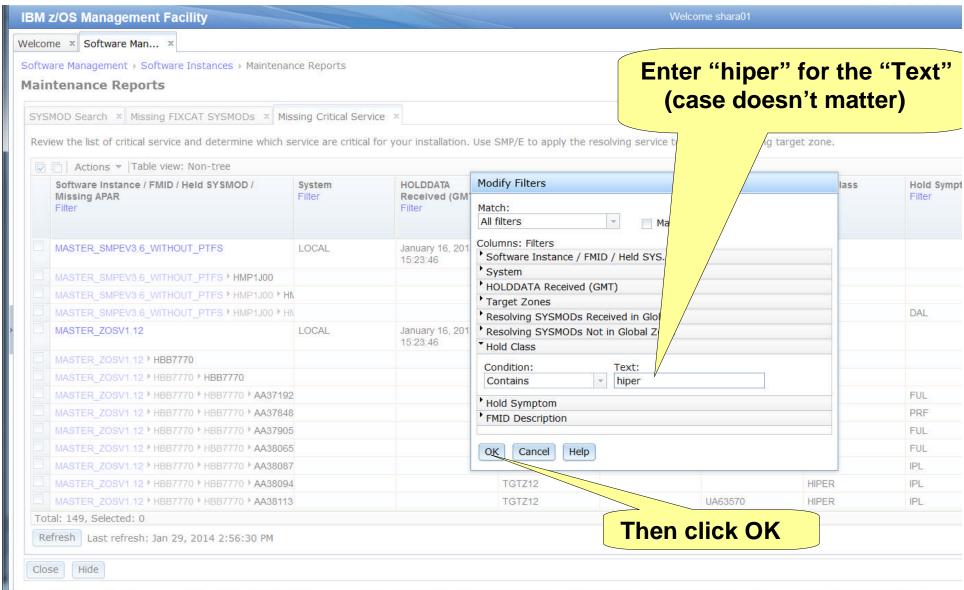




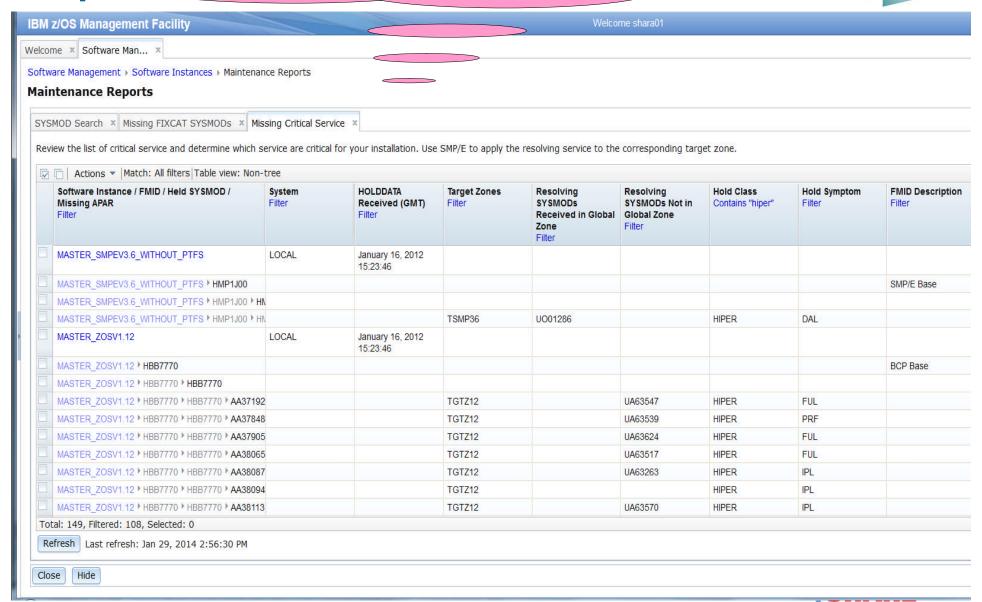




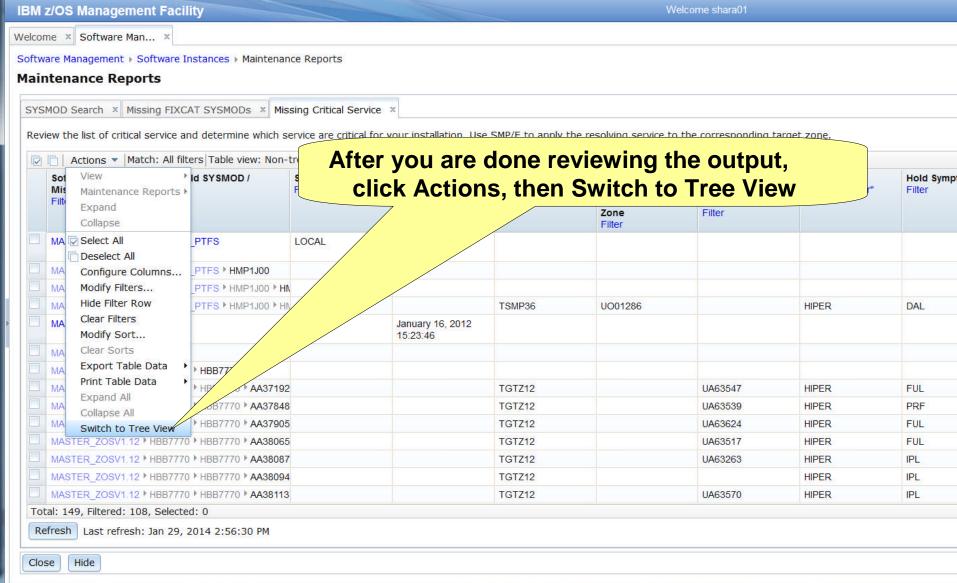










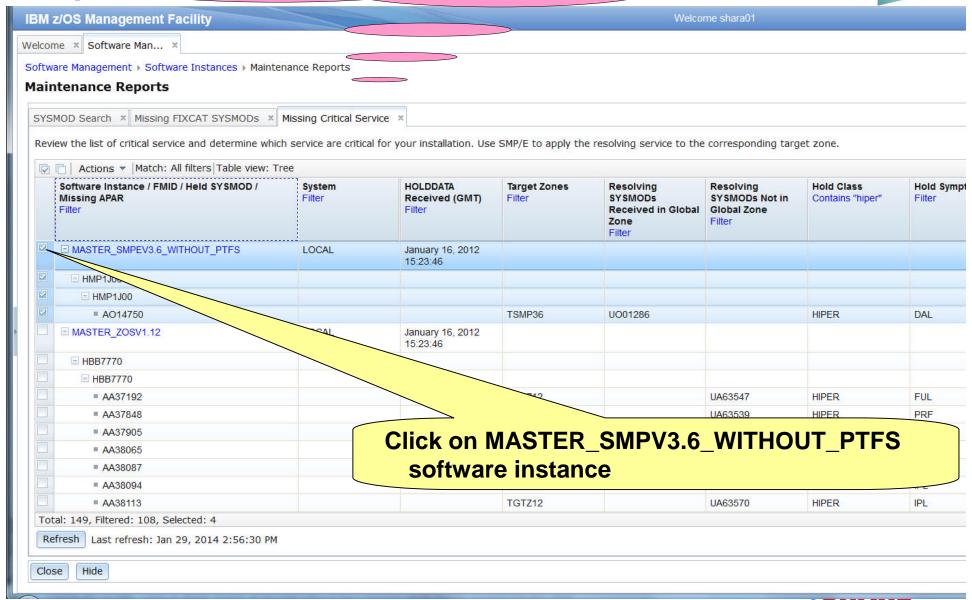




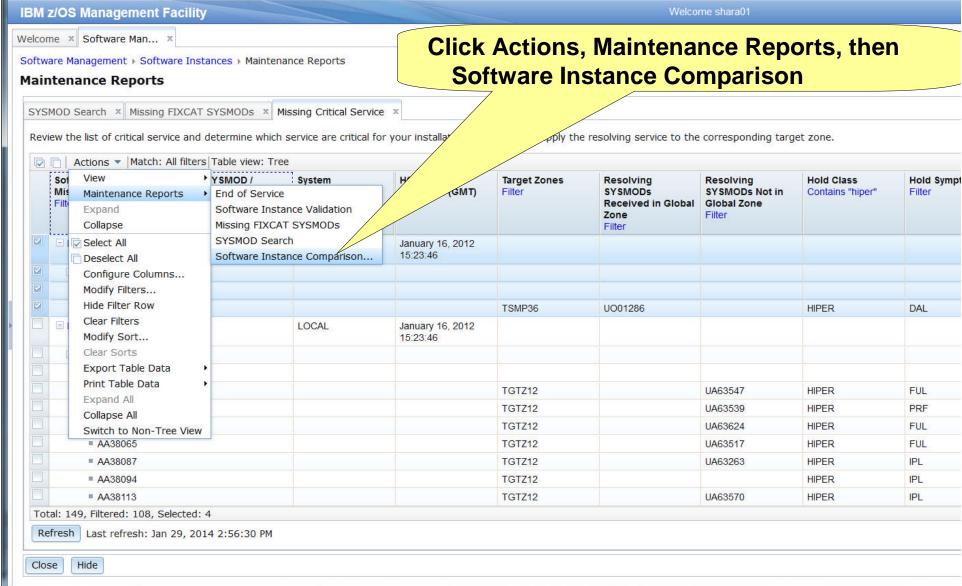
Step 4e: Report on "Master" Software Instances' Instance Comparison



You will now run a report on a single software instance



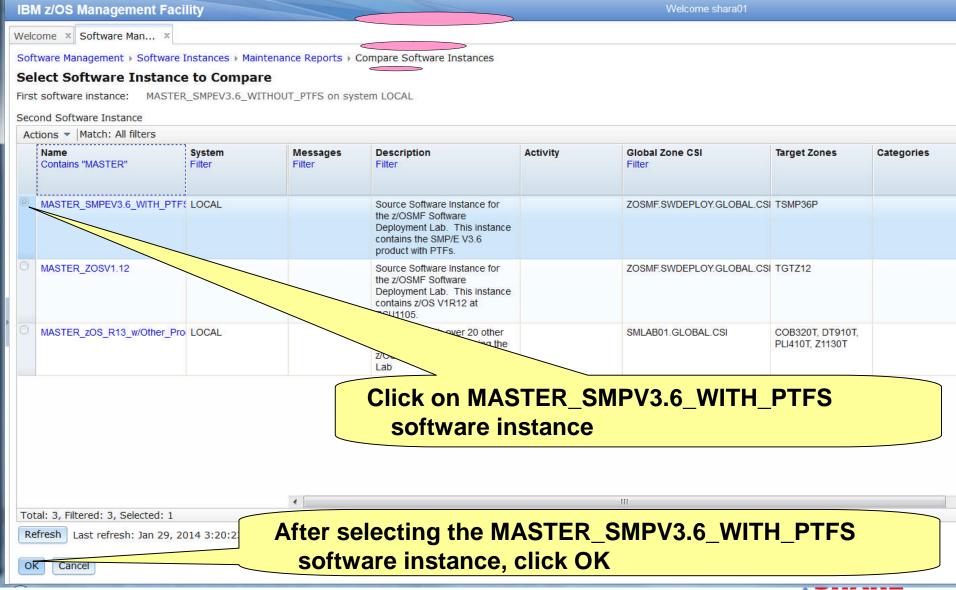




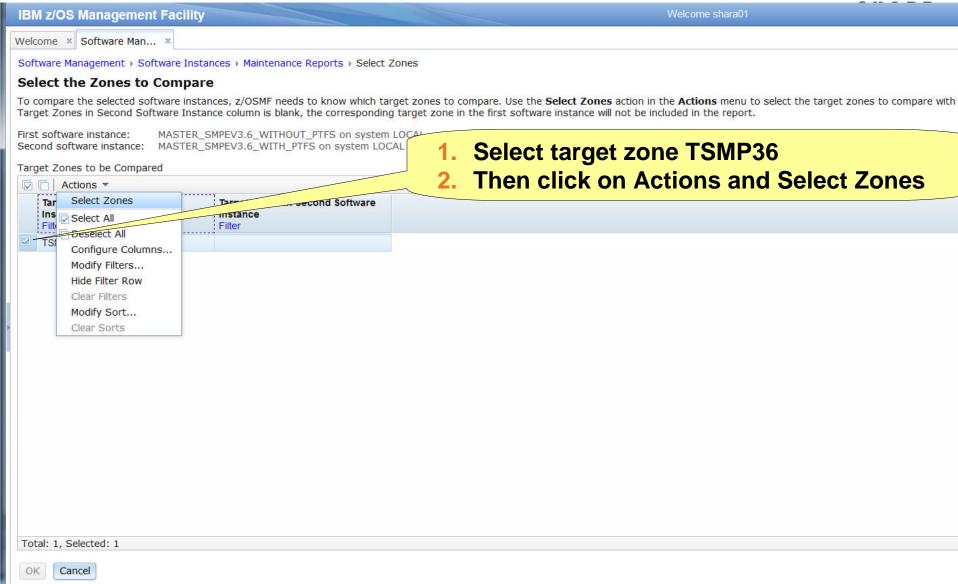


Now you have to identify the software instance to compare to





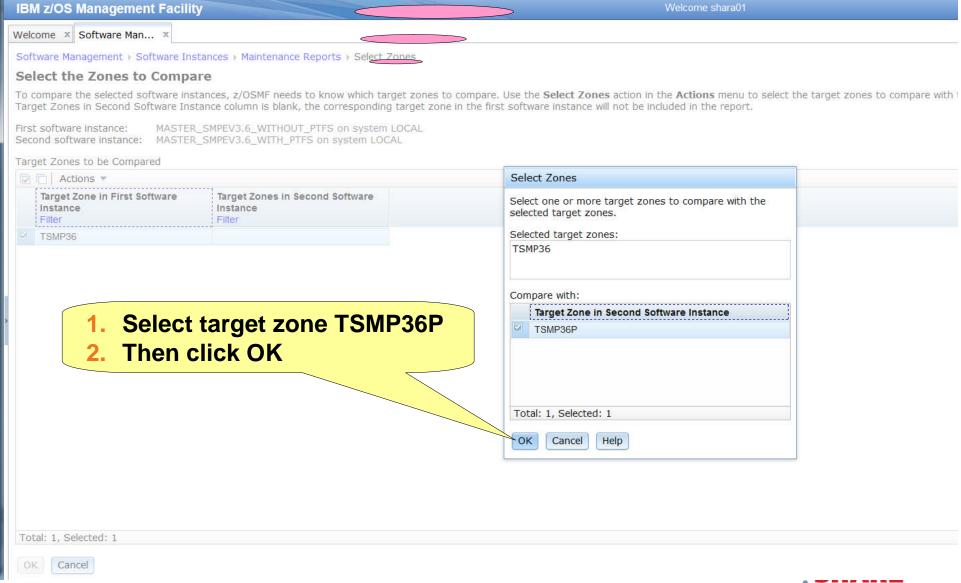




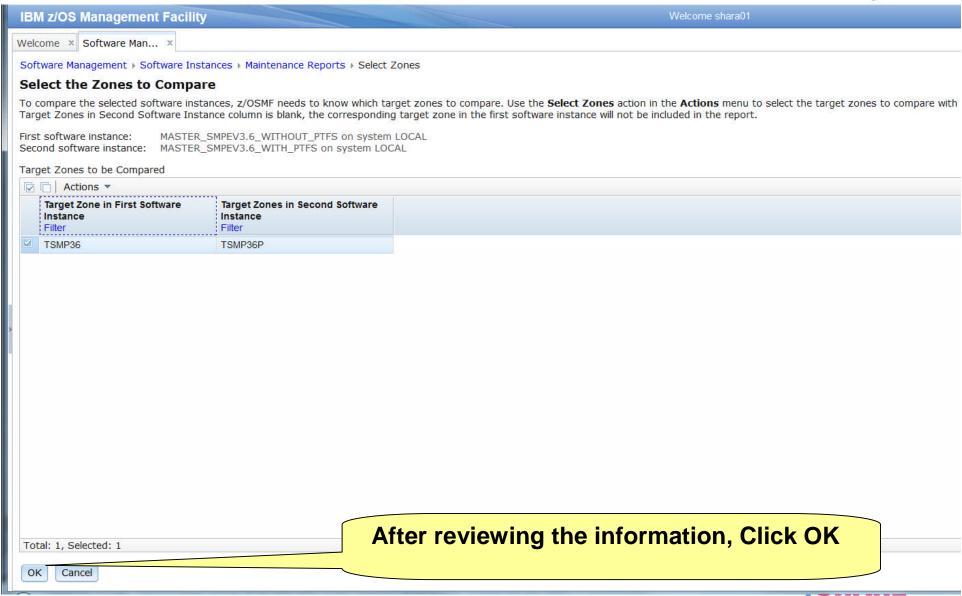


A pop-up display allows you to select the target zone in the second software instance



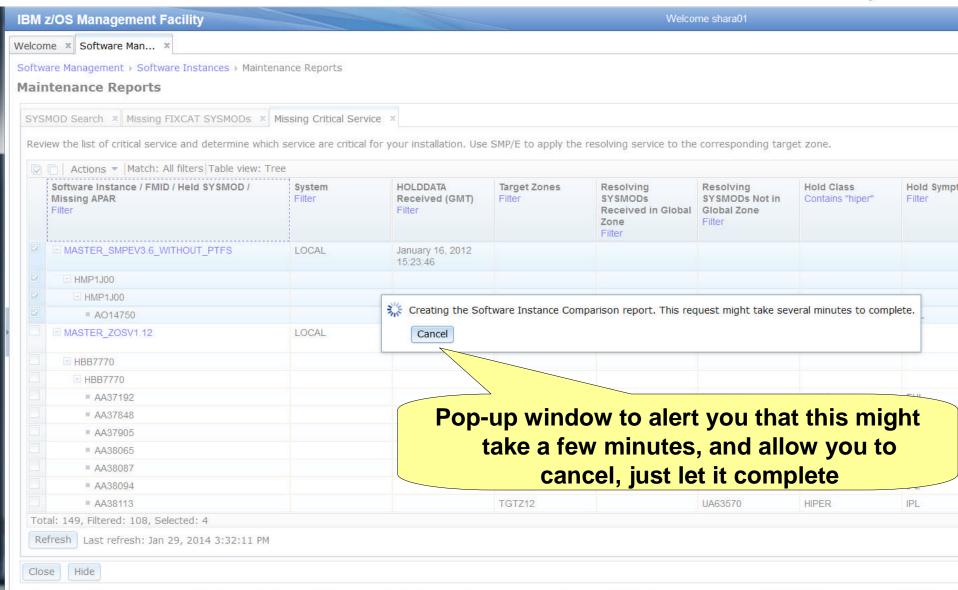






Step 4e ...







Results shown in a scrollable tree table. You will have to expand each row to see the actual results.



							CHAD		
M.	z/OS Managemer	nt Facility				Welcome shara01			
cor	me × Software Man.	x							
tw	are Management > So	oftware Instances > Maint	enance Reports	5					
	ntenance Repor								
	•								
'S	MOD Search × Missi	ing FIXCAT SYSMODs ×	Missing Critica	Software Instance Com	parison ×				
rst ecc	et zones in the first s t software instance: ond software instance		_WITHOUT_PTF		nce. If the software instance	s need to be at the same service lev	el or contain the sa		
7	☐ Actions ▼ Table	Actions Value View: Tree							
	FMID/SYSMOD Filter	Description Filter	Type Filter	Target Zone in First Software Instance Filter	Target Zone in Second Software Instance Filter	SYSMOD Received in Global Zone Filter			
		SMP/E Planning and Migration Assistant Software Info Base							
	■ HBCND0B	SMP/E Planning and Migration Assistant							
	⊞ HMP1J00	SMP/E Base							
ot	tal: 16, Selected: 0								
_									

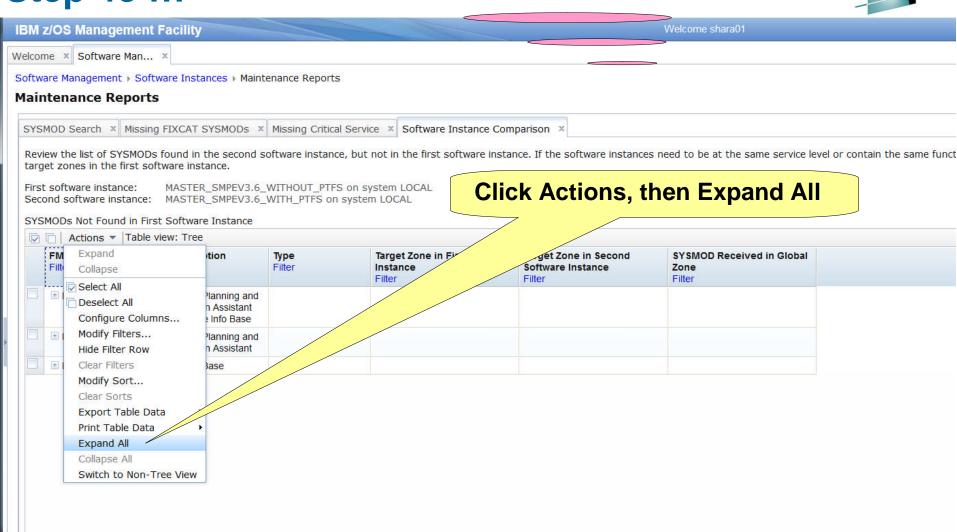
Notice that a fourth tab was created under Maintenance Reports.

216h 4c ...

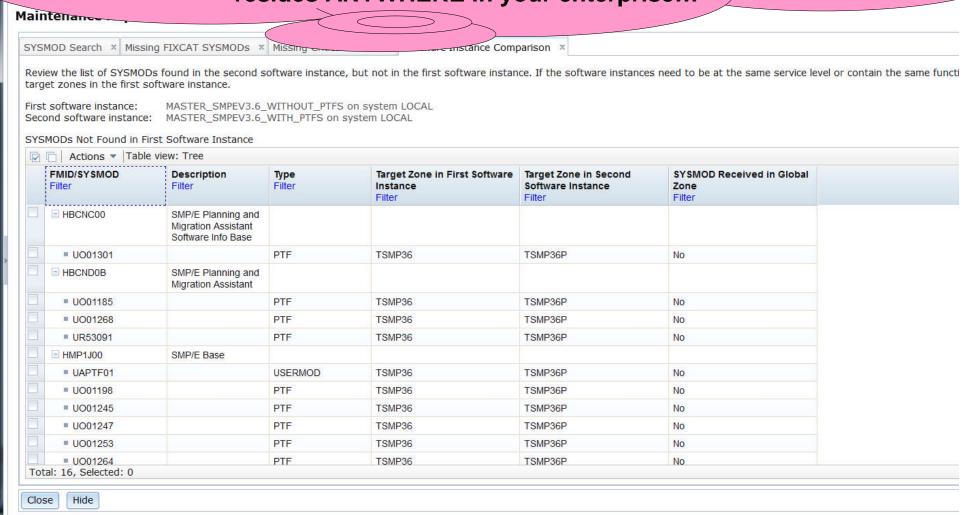
Total: 16, Selected: 0

Hide

Close



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!!!

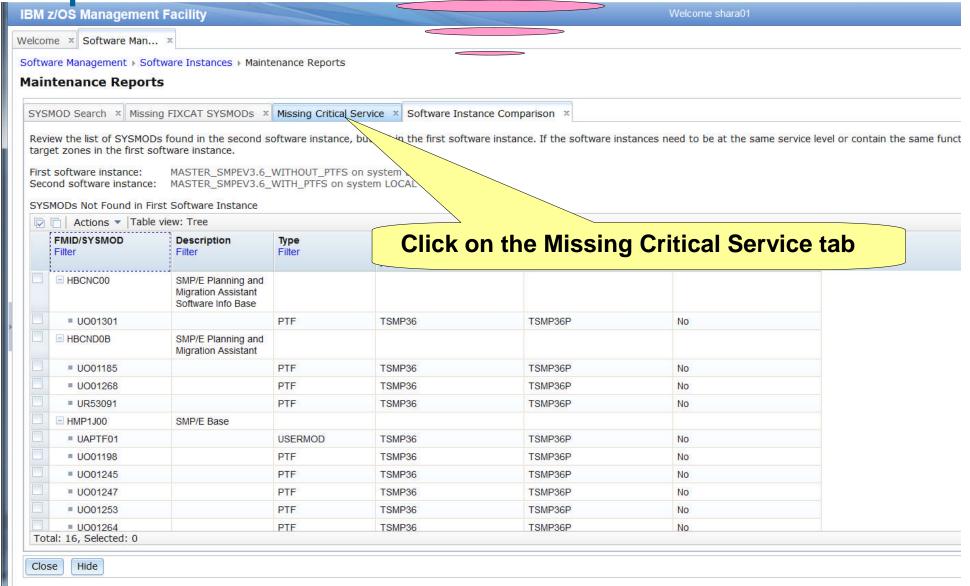




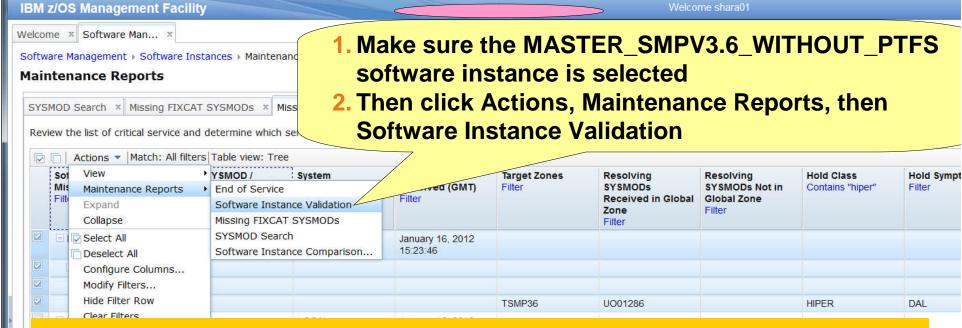
Step 4f: Report on "Master" Software Instances' Instance Validation



To prepare for the next report, you will go back to the Missing Critical Service tab



Now you will perform two software instance validation. First the simple one, then the more complex software instance.



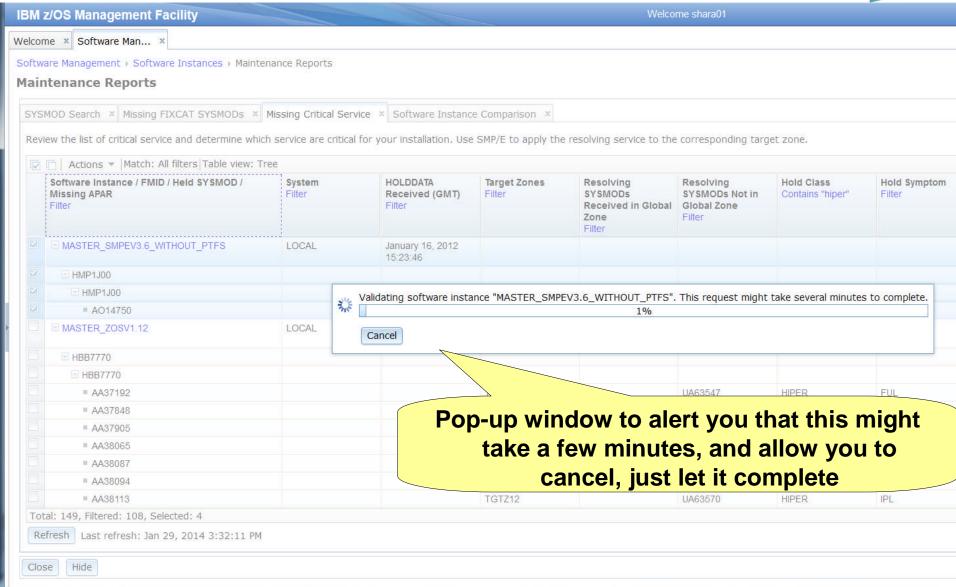
The Software Instance Validation report helps you verify that the software libraries that are associated with a software instance exist and contain the appropriate parts. When you generate the Software Instance Validation report, z/OSMF compares the entries in the SMP/E zones for the software instance 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

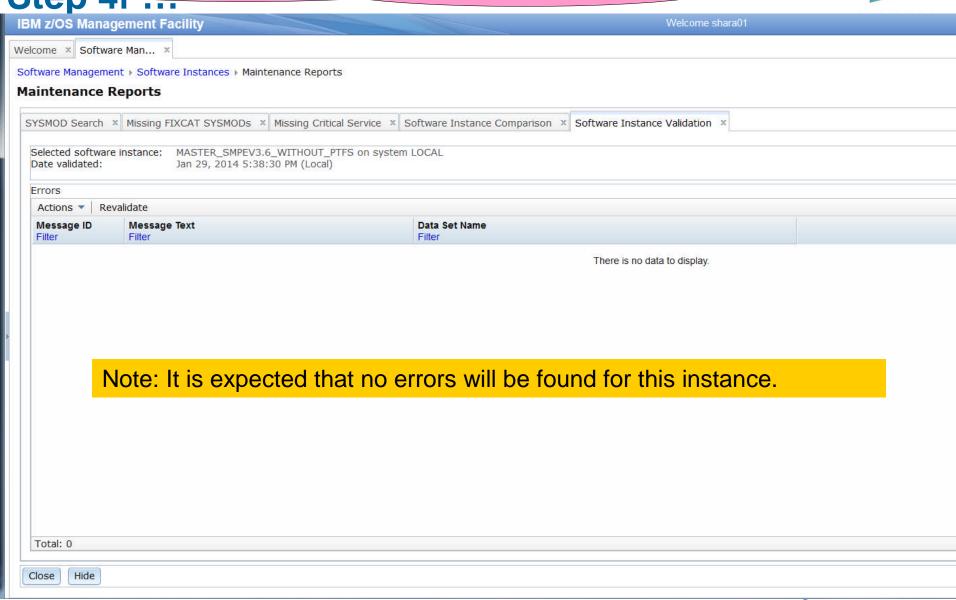
Step 4f ...



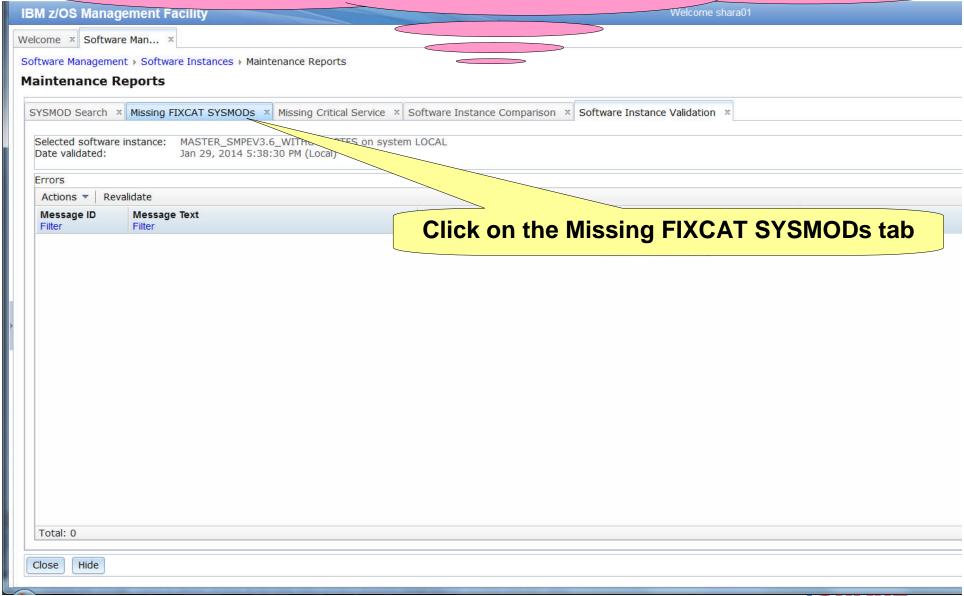


The results are displayed.



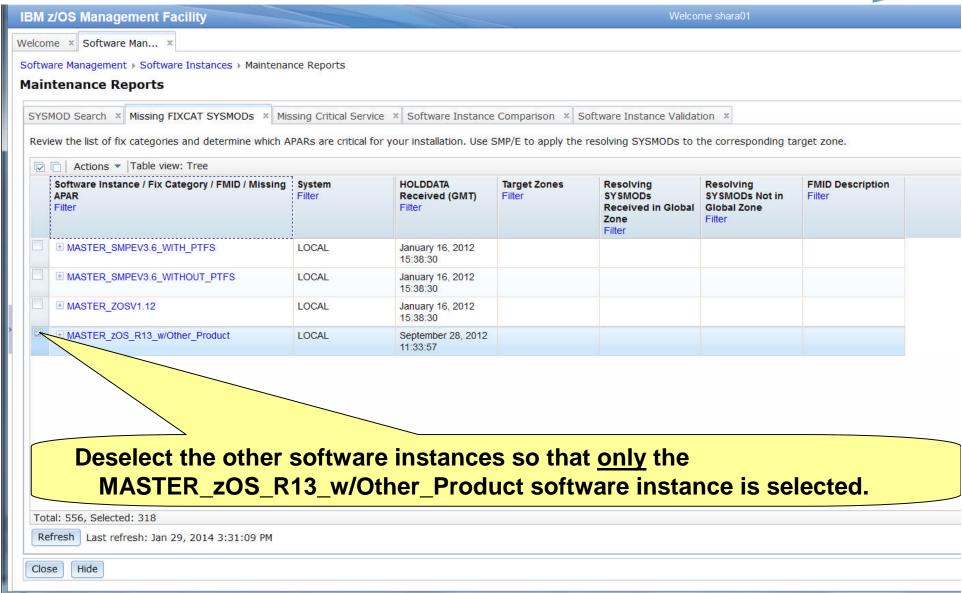


To prepare for the more complex instance validation, you will need to go back to the Missing FIXCAT SYSMODs tab



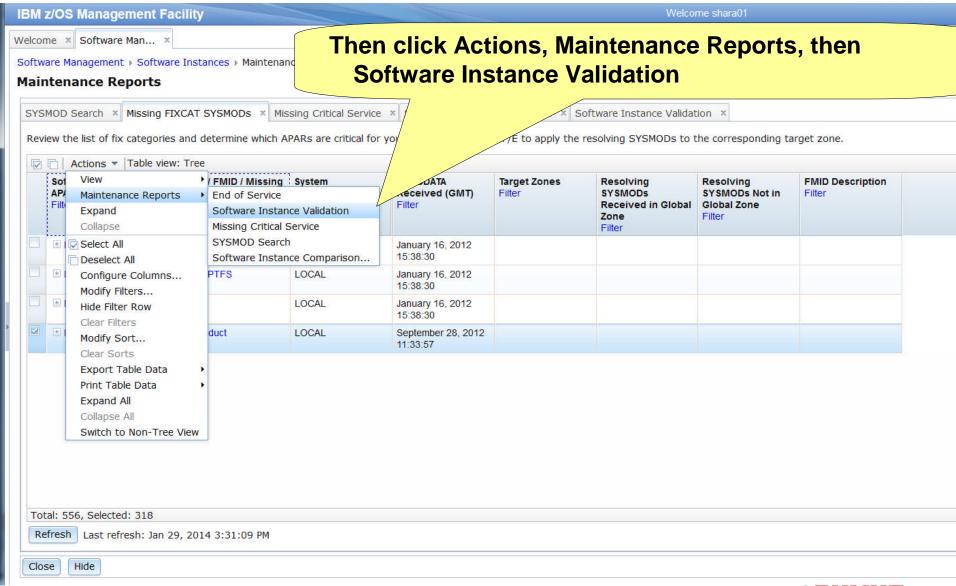
Step 4f ...





Step 4f ...

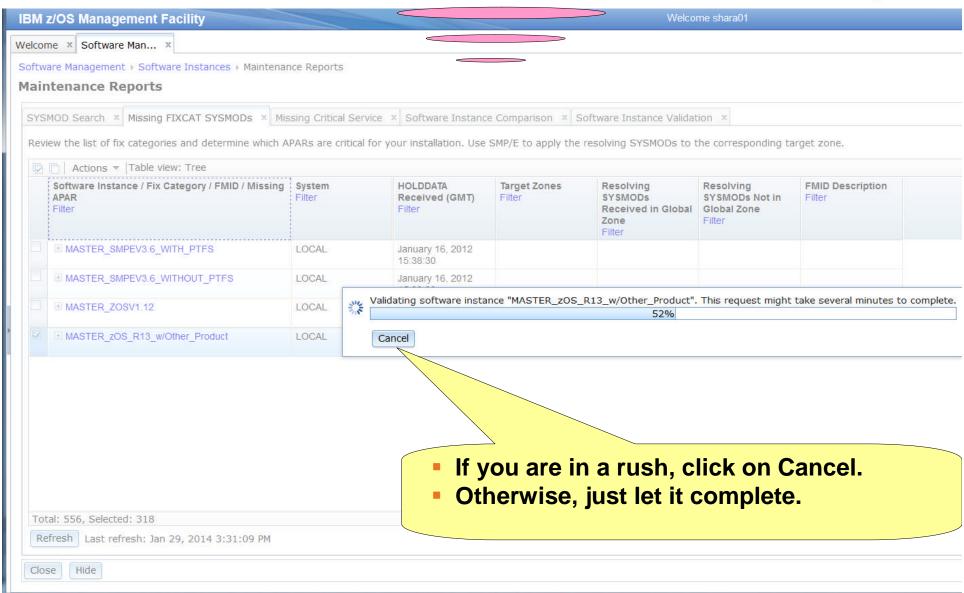




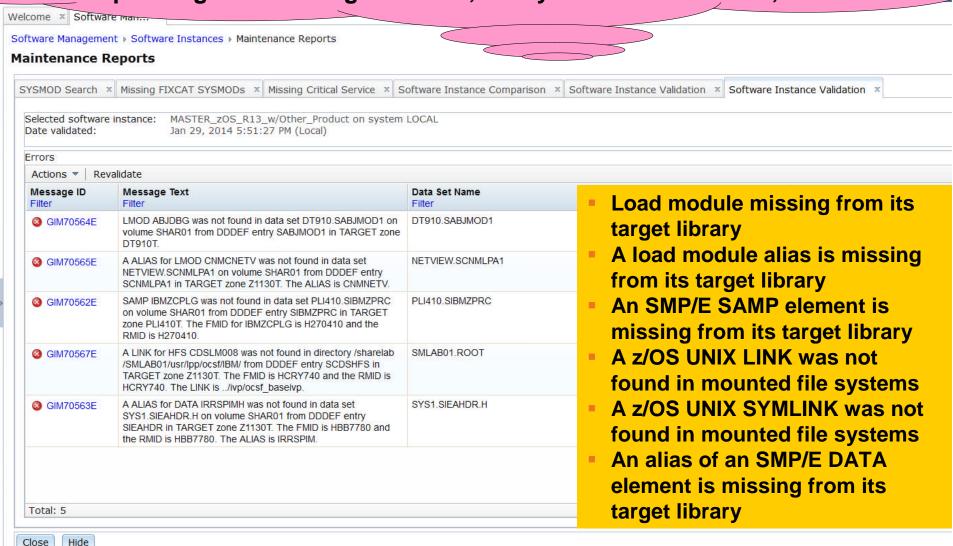
This validation will take a few minutes to complete

Step 4f





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 ...



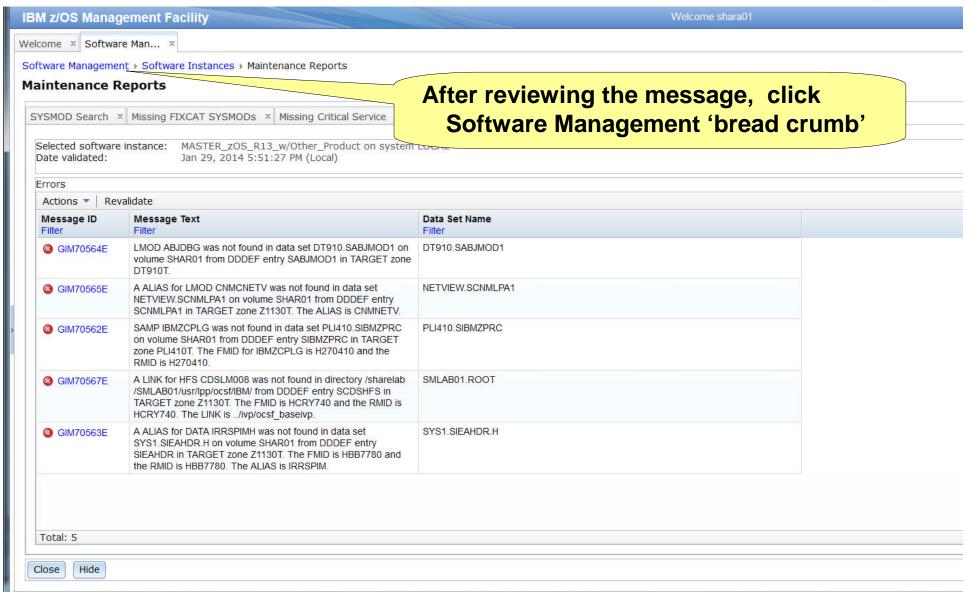


Step 5: View Products



Step 5







Click on Products

IBM z/OS Management Facility

Welcome × Software Man... ×

Software Management

Use this task to view details about a 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.

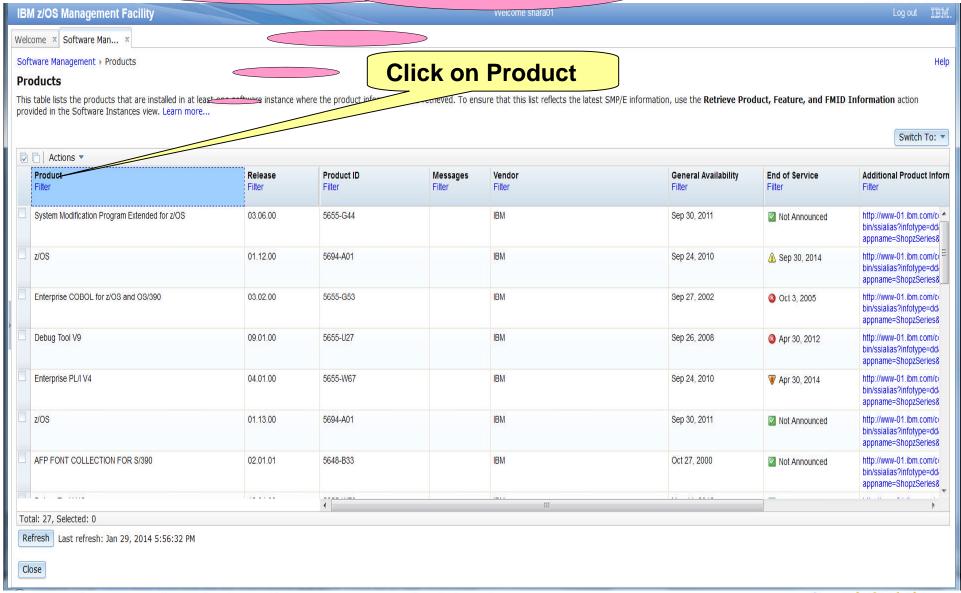
A list of installed products is displayed. It can be sorted using ANY column or filtered.



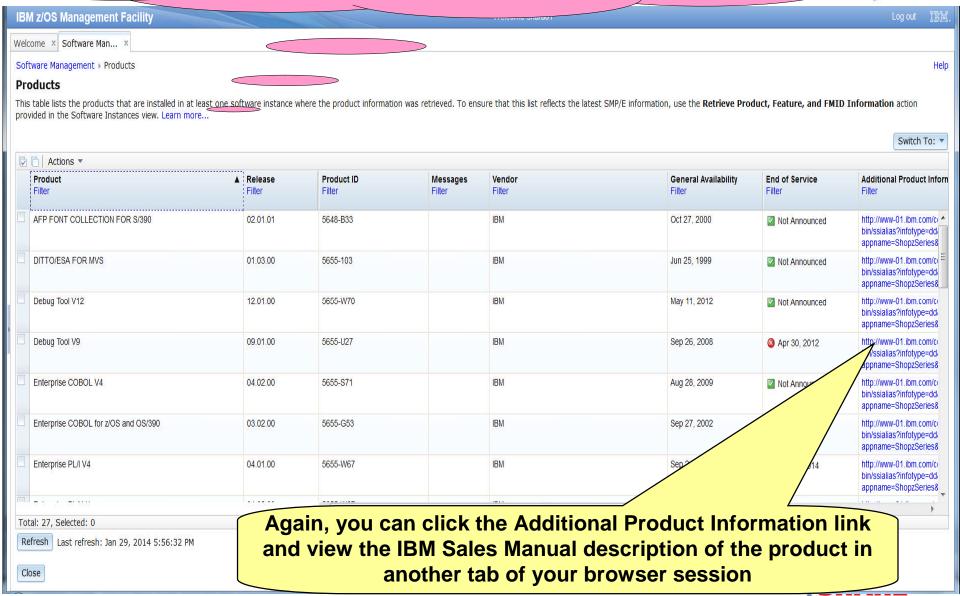
Note: There is no easy way to compile a list of all installed products across your enterprise using SMP/E list commands or query functions.

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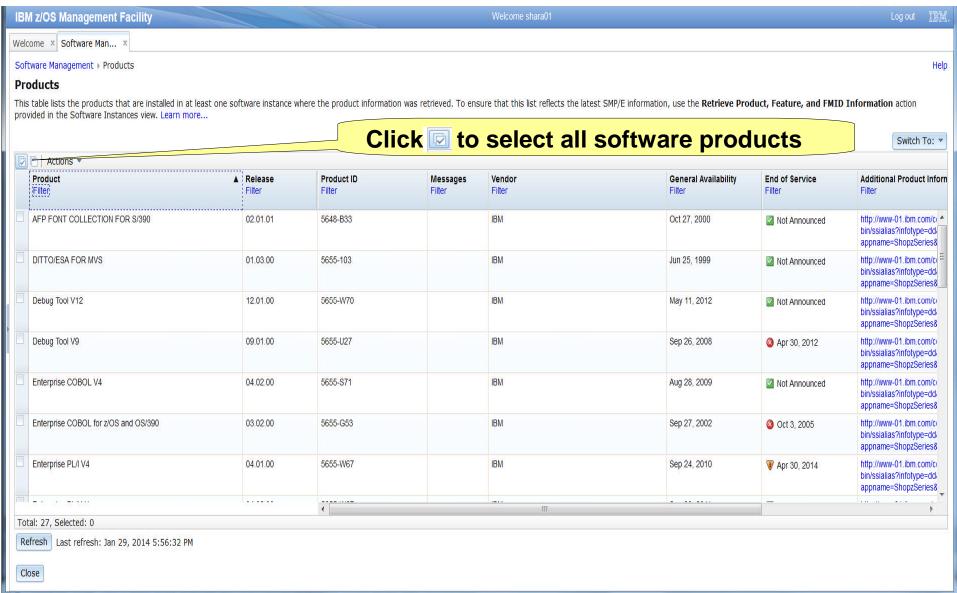
For example clicking on Product will sort the table based on product name.



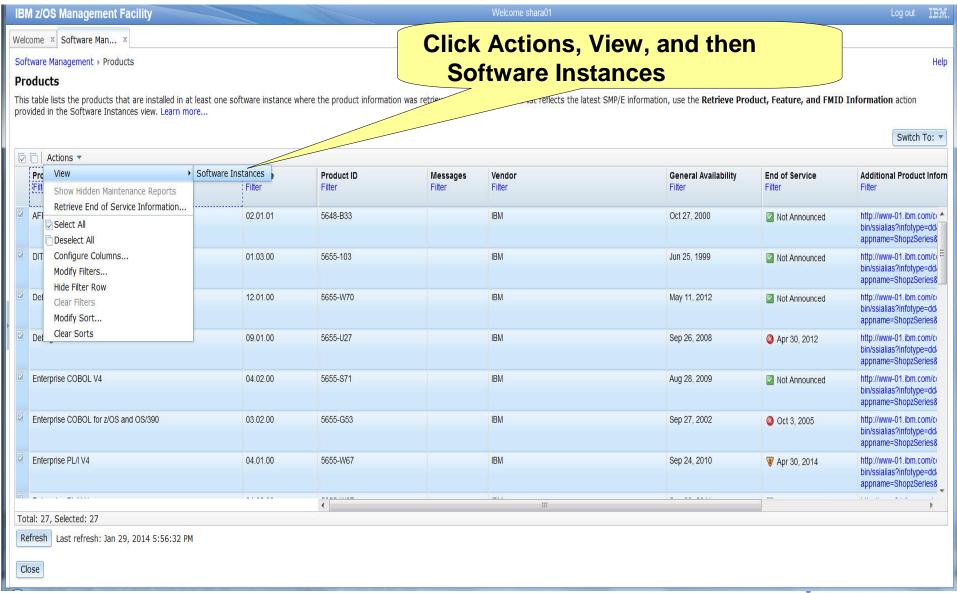
The table is now sorted and a triangle point up is now displayed in the Product column heading.





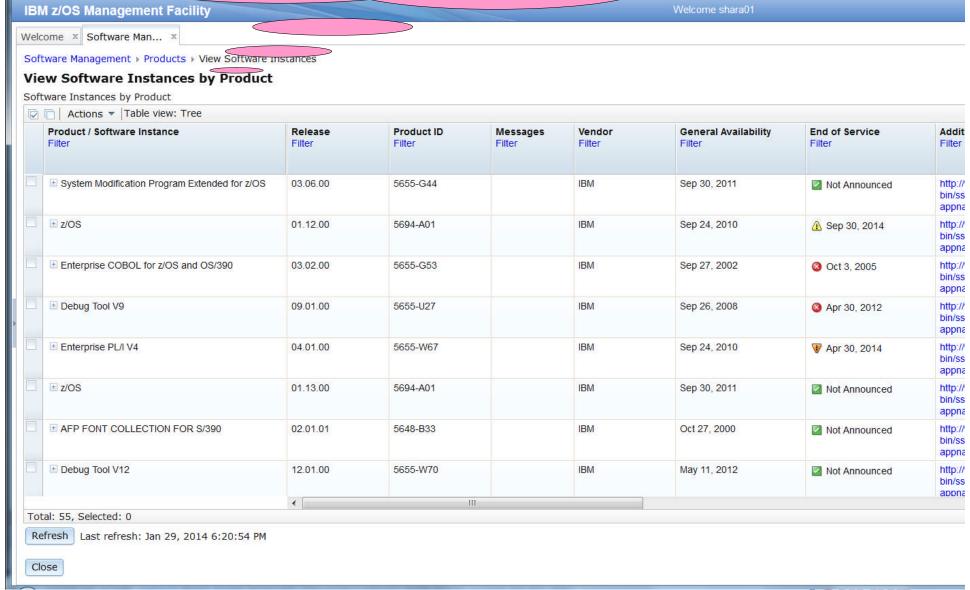




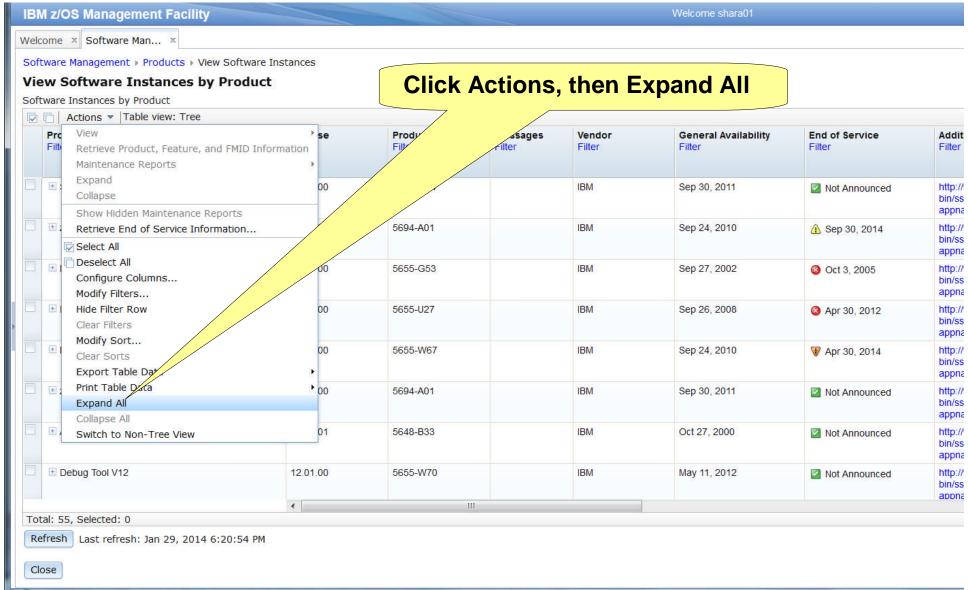


For each product, <u>all</u> the software instances where that product is installed will be displayed.









IBM z/OS Management I

Software Management > Produc

Welcome × Software Man...

Again, you can click on Actions, then Export Table Data, then All Data to export your list of SMP/E installed products to a file on your workstation so that you can use spreadsheet functions to manipulate the data or print it. Since you are using lab workstations, please don't do that.

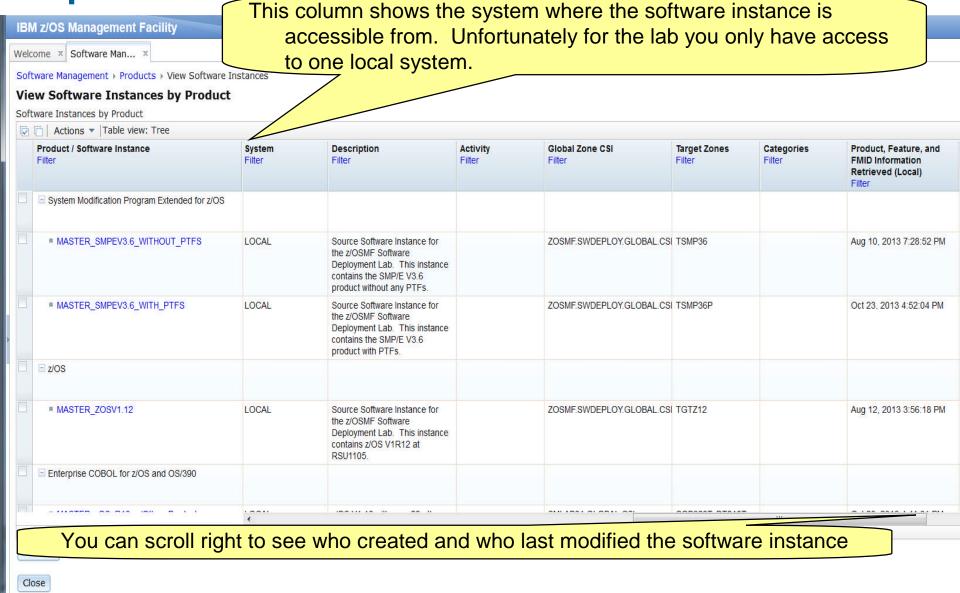
View Software Instances by Product Software Instances by Produc Actions Table view: Tree Product / Software Instance Release Product ID Messages Vendor **General Availability End of Service** Additi Filter Filter Filter Filter Filter Filter Filter Filter System Modification Program Extended for z/OS 03 06 00 5655-G44 IBM Sep 30, 2011 http:// Not Announced bin/ss appna ■ MASTER SMPEV3.6 WITHOUT PTFS ■ MASTER SMPEV3.6 WITH PTFS = z/OS 01.12.00 5694-A01 **IBM** Sep 24, 2010 http:// Sep 30, 2014 bin/ss appna MASTER ZOSV1.12 Enterprise COBOL for z/OS and OS/390 03.02.00 5655-G53 IBM Sep 27, 2002 Oct 3, 2005 http:// bin/ss appna You can scroll right Total: 55, Selected: 0 Refresh Last refresh: Jan 29, 2014 6:20:54 PM

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.

133Complet

Close

aheim



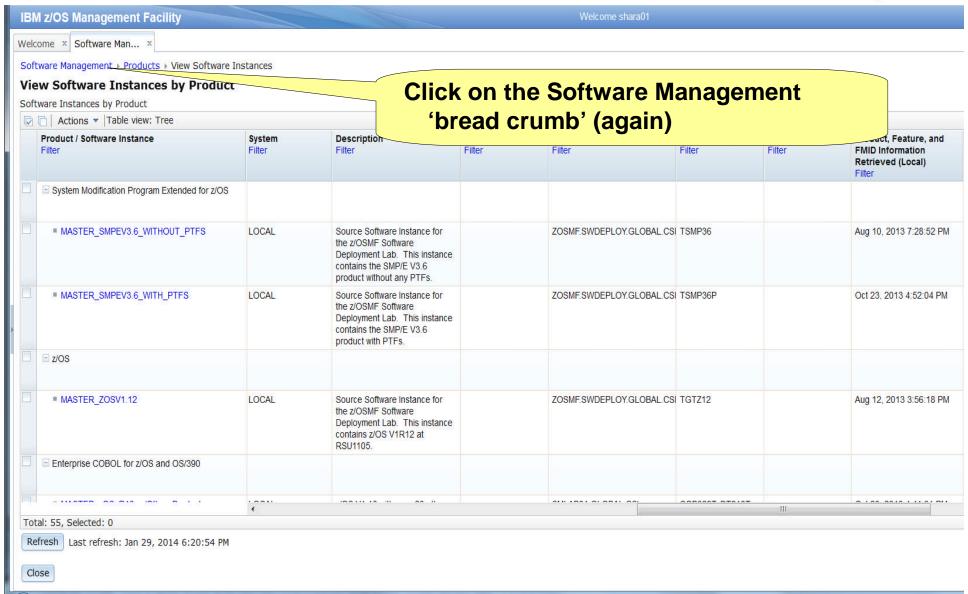


Step 6: Deployments



Step 6





Step 6 ...

Select Deployments

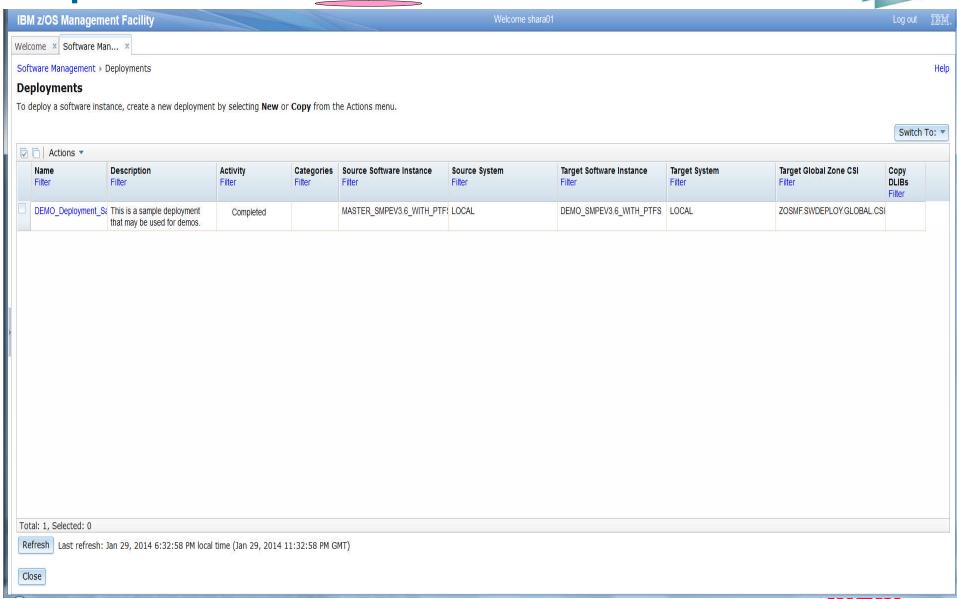


IBM z/OS Managem	nent Facility Welcome shara01	
Welcome × Software M	an ×	
Software Manage Use this task to view de		re
Software Instances	Define your software to z/OSMF; deploy software; generate reports about your software.	
Software Instances Products	Define your software to z/OSMF; deploy software; generate reports about your software. View a consolidated list of the products included in each software instance.	
Products	View a consolidated list of the products included in each software instance.	

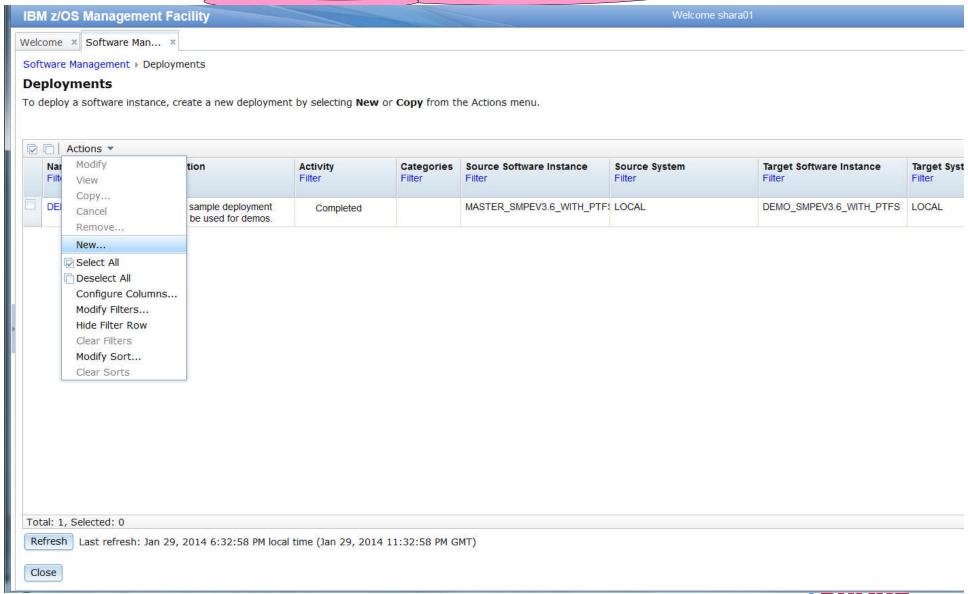
You see a complete list of deployments.

Step 6 ...





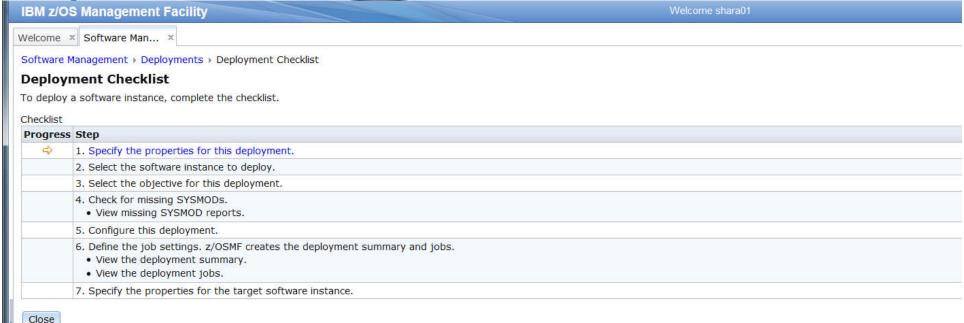
To deploy a software instance, create a new deployment by selecting Step 6 ... New or Copy from the Actions menu.



The deployment checklist leads you through the new deployment

Step 6 ...





Note: A separate lab is required to demonstrate how to add a software instance and perform a deployment.



Thank You





Additional information



- z/OS Management Facility website
 - http://ibm.com/systems/z/os/zos/zosmf/
- IBM z/OS Management Facility education modules in IBM Education Assistant
 - http://publib.boulder.ibm.com/infocenter/ieduasst/stgv1r0/index.jsp
 - Scroll down to z/OS Management Facility
- IBM Publications Center
 - Program Directory for z/OS Management Facility (GI11-9847)
 - IBM z/OS Management Facility Configuration Guide (SA38-0657)
 - IBM z/OS Management Facility Programming (SA32-1066)
 - IBM z/OS V2R1.0 Management Facility License Information (GC52-1386)
 - http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss
- IBM z/OS Management Facility Information center
 - http://pic.dhe.ibm.com/infocenter/zos/v2r1/index.jsp

