

Special Focus on z/OSMF

29/08/2023

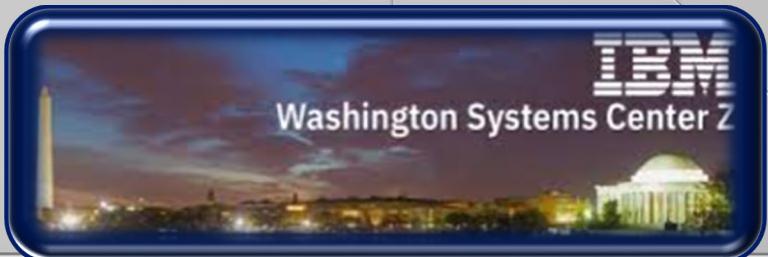
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IBM z Washington Systems Center

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Agenda

- z/OSMF Status in z/OS Platform
- z/OSMF Configuration & Learning Resources
- z/OSMF Interface Samples
- z/OSMF Management Services Catalog
- z/OSMF Sysplex Management
- z/OSMF Security Configuration Assistant
- z/OSMF AI Control Interface Plug-in (AICI)
- z/OSMF Workflows and REST API Updates 4
- z/OSMF Ansible Support
- z/OSMF Enhancements Summary for z/OS 3.1 & CDs



Special About z/OSMF

Provide IBM Feedback Job Output Workflows Workflow Editor RMM Management Services Catalog Software Services Sysplex Management Notification Settings Incident Log Network Configuration Assistant SDSF General Settings

Systems Import Manager FTP Servers ISPF Capacity Provisioning z/OSMF Diagnostic Assistant Workload Management Resource Management Security Configuration Assistant IBM Z Common Data Provider Resource Monitoring Usage Statistics IBM zERT Network Analyzer

Software Management Links z/OS Operator Consoles Application Linking Manager System Status links

Security Configuration Assistant (SCA since 2.4 GA)
Software Update (Since 2.4CD)
Service Management Catalog (Since CD 4Q2021)
DFRMM Plug-in (Since 2.4 GA)
Software Management – Must be used for z/OS 3.1 Install
CFRM Policy Editor with CF Sizer (New with z/OS 3.1)
z/OS Upgrade Workflow Discovery Function (New with z/OS 3.1)

**z/OSMF is your cockpit for managing z/OS!!!
Please Don't miss this!**

meral ▾

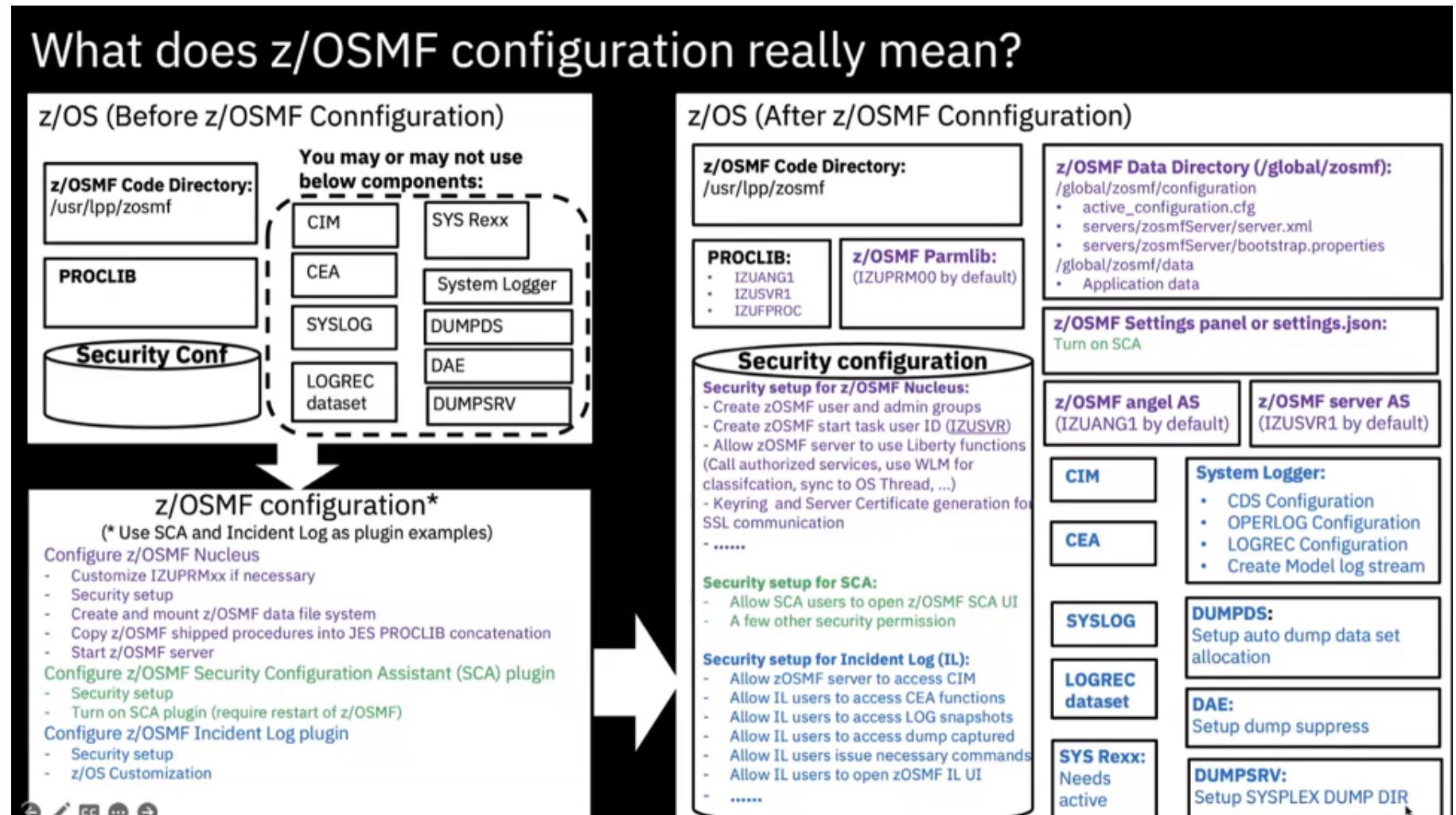
Special For z/OSMF - Easy To Configure!

Easy To Configure

Amazing video about how to configure and recommendations

[z/OSMF community](#)
[Guild Session 11 – Configuration](#)
[Overview & Recommendations](#)

One slide – That shows everything in a very smart way!



[z/OSMF One Stop Hub \(<https://ibm.github.io/zOSMF/>\)](https://ibm.github.io/zOSMF/)

IBM Z Washington Systems Center / © 2023 IBM Corporation

Special For z/OSMF

Ask z/OSMF anything

z/OSMF community Guild Session 15 – Ask z/OSMF anything - February 2023



A6. Now!

The z/OSMF Software Update task provides an "Install Recommended Updates" action to install RSU and other recommended PTFs.

Software Update became available October 2020 for z/OS 2.5, 2.4, 2.3.

Check out this z/OSMF Guild session:

<https://community.ibm.com/community/user/ibmz-and-linuxone/viewdocument/zosmf-guild-session-8-june-15-2?CommunityKey=1ca674e5-aada-4194-a16e-059cafe7b807&tab=librarydocuments>

For more information on Software Up

<https://www.ibm.com/support/z-content-solutions/softw>

A. Kurt Quackenbush

0:28:33 / 1:00:31

1669be66-4e28-bca3-183a-4d10b2d20d75_file

0:00:31



A1. Use the z/OSMF Guild Resources

1. [Session No. 1](#) (Nov 17, 2021) : Introduction, z/OSMF & Ansible Overview
2. Review [z/OSMF Value Proposition Presentation](#)
3. [Session No. 11](#) (Sept 21, 2022) : z/OSMF Configuration Overview & Recommendations
4. [Session No. 7](#) (May 18, 2022) : z/OSMF Desktop & Performance Tuning
5. [Other z/OSMF Guild Session Recordings](#) have covered many Many of the key plugins

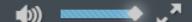
A. Rolando Perez

0:11:17 / 1:00:31



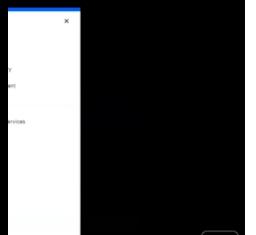
14

4



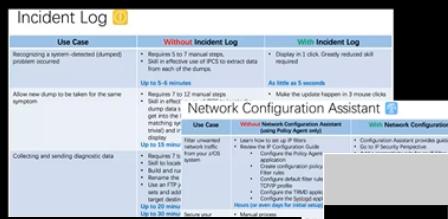
z/OSMF Trial scenarios

- NEW trial specifically for z/OSMF Configuration (Just online this month)
 - Setup a z/OSMF nucleus from scratch
 - Setup a 2nd z/OSMF for DevOps purpose only



z/OSMF Value Proposition chart

Leverage [z/OSMF Value Proposition chart](#) to determine what trial scenario you might want to try



z/OSMF News

- [CFRM Policy Updates Made Easy With the z/OSMF CFRM Policy Editor Article](#) - on the IBM Z and z/OS Platform Evaluation and Test zPET Community
 - z/OSMF Sessions @ SHARE Atlanta -
 - What's New in z/OSMF
 - z/OSMF Workflows for the Baffled Sysprog
 - A Tour of z/OS Software Management
 - Using the Right Tool for the Job - When to use z/OSMF, Ansible and, Zowe
 - Multiple Hands-on Labs + More



5

Special For z/OSMF - Community Guild Web Page

[z/OSMF Community Guild Web page](#)

IBM Community

IBM Z and LinuxONE Community Participate ▾ Topic groups ▾ User groups Solutions ▾ Events Resources

IBM z/OSMF

z/OSMF Community Guild

By Rolando Perez, a year ago

39 Like

Hybrid Cloud IBM Z IBM Z OS Software Solutions z/OS z/OSMF zCX

z/OSMF Community Guild
Discover - Learn - Share

Welcome to the z/OSMF Guild.
Join our z/OSMF subject matter experts as we deep dive through technical demos, learn about improvements to the platform and engage our community in a dialogue about what a modern desktop experience is.

Next Guild Meeting
Wednesday April 19, 2023 10:00 AM - 11:00 AM EST

Register

Polls / Submit your Questions
z/OSMF 2023 Annual Survey, Ask z/OSMF Anything!

Sessions (Presentation Materials, Recordings, Q&A)

17 Apr 19, 2023 : Incident Log z/OSMF Plugin
16 Mar 15, 2023 : z/OS Operator Consoles & Software Management
Automation with Ansible
15 Feb 15, 2023 : Ask z/OSMF Anything!
14 Jan 18, 2023 : z/OSMF Requests for Enhancements (RFEs) & Ideas Portal

Latest blogs

Exciting new features for IBM Z® Monitoring Configuration Manager delivered in Q1 2023! by Egle Barusauskienė ...
Posted by:Matthias Tschafler, 23 hours ago

Webinar: Goodbye to Baby-sitting your z/OS Jobs with Zowe Integrated JCL Checking (demo)
Posted by:Domenico D'ALTERIO, yesterday

IBM Ansible z/OS Core 1.4.1 has released !!!
Posted by:Demetri Dimatos, 2 days ago

DFDL support for XML schema validation (PJ46951)
Posted by:Bradd Kadlecik, 2 days ago

A Deep Dive into Blockchain Technology Layers & Functions
Posted by:Chitra Chhugani, 2 days ago

Special For z/OSMF - Community Guild Web Page

Join our z/OSMF SMEs monthly as we deep dive through technical demos, learn about improvements to the platform, and engage our community in a dialogue about what a modern z/OS management experience is.

Members

Number of Companies /Orgs: 500+

Type



-  Customers 70%
-  IBMers 15%
-  ISV's 7%
-  Service Providers 8%



Sessions (20)

Previous topics include:

- z/OSMF Ansible Collection
- REST APIs
- Workflows Workshop
- Software Install & Update
- Security Configuration
- Management Services Catalog
- Network Configuration & zERT
- z/OSMF Configuration & Recs
- IBM z/OS Change Tracker + plugin
- z/OSMF Ask Us Anything
- z/OSMF Diagnostics I + II
- Software Management
- Sysplex Management plugin



Join us!

Learn more and register for upcoming sessions at:

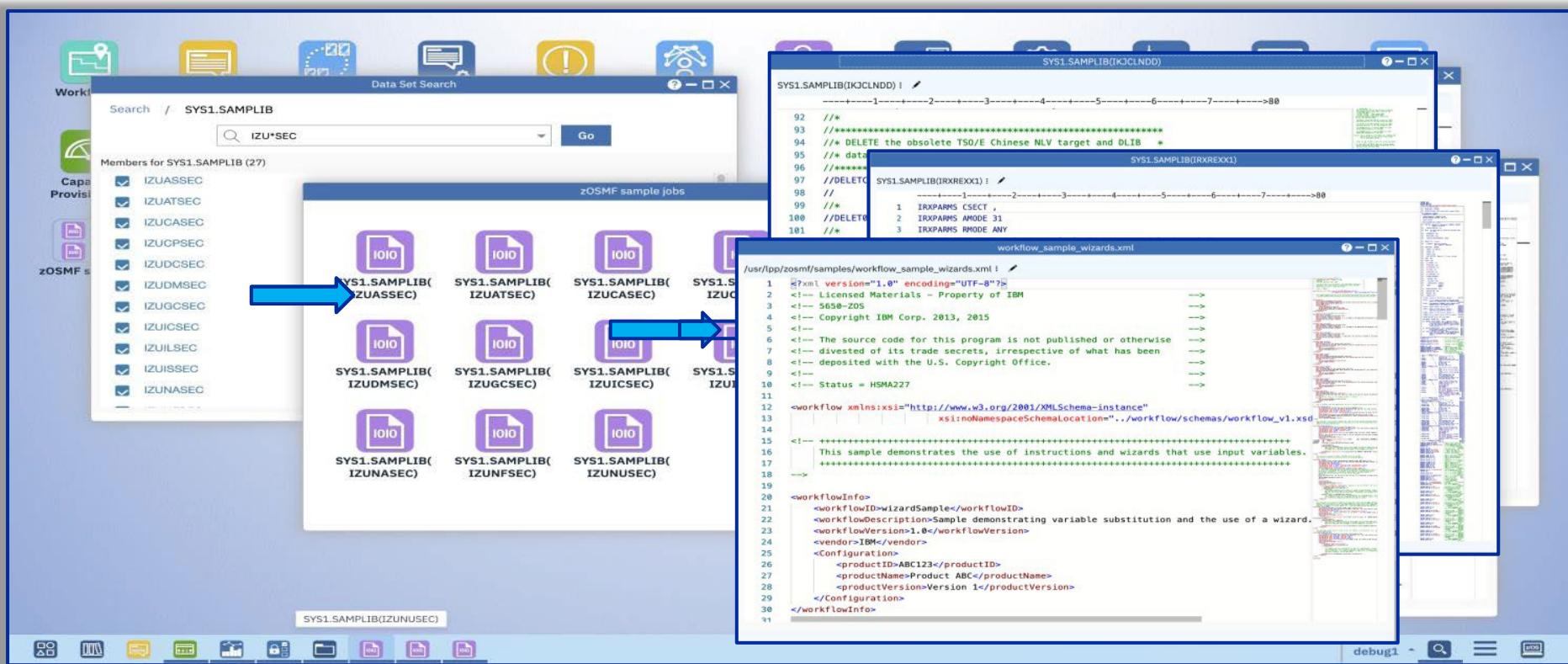
ibm.biz/zOSMFGuildHome

- All recordings and presentation materials are available online!
- Sessions typically held the third Wednesday of the month @ 10am EST.

z/OSMF – Desktop UI

z/OSMF Desktop – Replaces Tab UI in z/OS 2.5 (2.4CD 4Q2019)

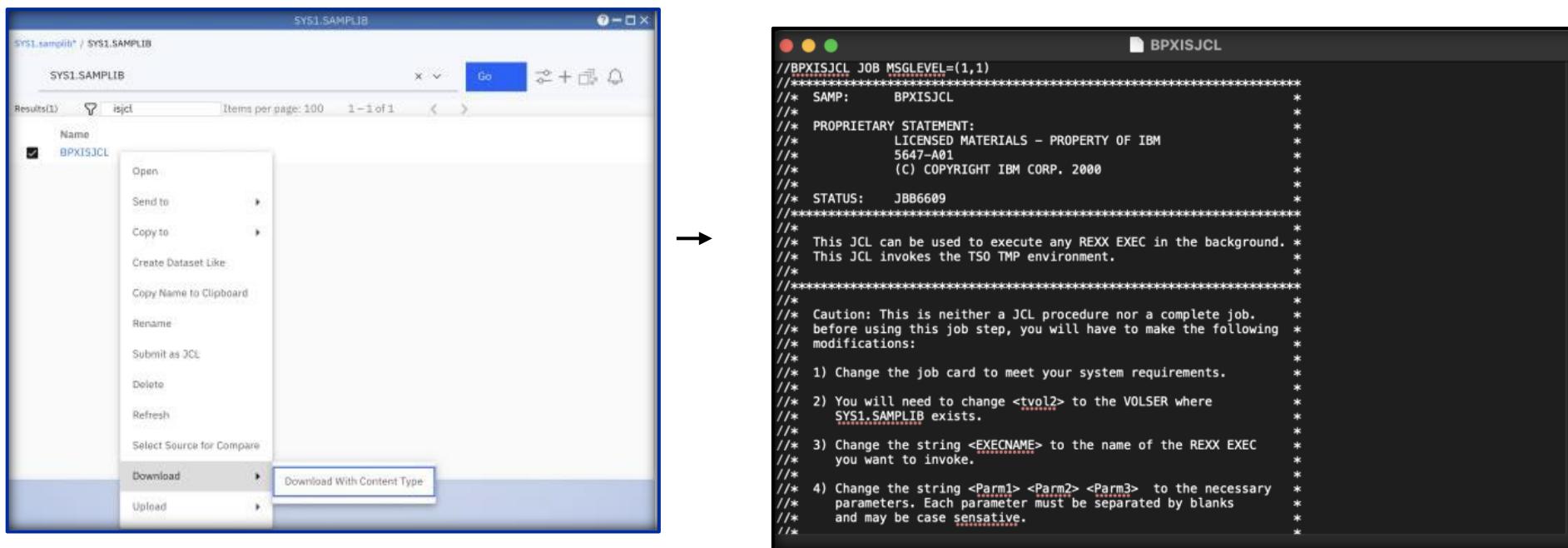
- Customer grouping of items in folders, such as data sets or Jobs
- Search, Browse, Edit files and data sets
- Submit, query, browse jobs – Job Output Task
- Editor Syntax highlighting, user created links, improved performance



Usability & Skills – z/OSMF – Download Upload Files

[z/OSMF Upload & Download files on Desktop \(CD 4Q2022\)](#)

Users can upload or download a sequential data set, PDSE member, or zFSfile between z/OS and their workstation with a few clicks or drag and drop



z/OSMF Compare

The screenshot displays four code editors side-by-side, each showing a different file or dataset from the z/OS environment:

- SYS1.SAMPLIB(ISCJCL80)**: A shell script containing environment variable definitions and a Java configuration section.
- SYS1.SAMPLIB(ISCJCL86)**: A REXX parameter module example for TSO.
- SYS1.PARMLIB(BPXPRMOS)**: A PARMLIB member defining various system parameters like MAXPROCSYS, MAXPROCUSER, and MAXUIDS.
- SYS1.PARMLIB(BPXRMOZ)**: Another PARMLIB member with similar definitions.

The interface includes standard window controls (minimize, maximize, close) and tabs for navigating between the four windows. The code is presented in a monospaced font with syntax highlighting for comments and specific keywords.

z/OSMF Data Set and File Compare (CD 1Q2022)

Enhanced desktop editor to compare two files and visualize the differences.

Special About Z/OSMF - Useful Pop Up Window Help Capability

The screenshot illustrates a useful feature of the z/OS Management Facility (z/OSMF) interface, specifically the Incident Log task. A pop-up window from the IBM Knowledge Center provides detailed information about the 'Incident Log page'. The main window shows a table of incidents, while the help window details the functionality and filtering options for the log table.

Incident Log Table (Main Window):

Actions	Incident Type	Description	Date and Time (G past "3 days")
Filter	User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 19:30
Filter	User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 19:30
Filter	User Initiated	SLIP DUMP ID=LMDA	21 Nis 2023 17:07
Filter	User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 11:48
Filter	User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 11:47
Filter	User Initiated	SLIP DUMP ID=WMQ2	21 Nis 2023 11:47
Filter	User Initiated	SLIP DUMP ID=LMD1	21 Nis 2023 11:45
Filter	ABEND U0411	CSLODBM8 ODBM ODBM TCB U0411-0000000F, MODULE=CSLDRRS1, THD=ODBM 2023-04-20 17:22:22 BPE210 ODBM80D	20 Nis 2023 21:22
Filter	ABEND U0411	CSLODBM8 ODBM ODBM TCB U0411-0000000F, MODULE=CSLDRRS1, THD=ODBM 2023-04-20 17:21:53 BPE210 ODBM80D	20 Nis 2023 21:22
Filter	User Initiated	CICS DUMP: SYSTEM=CICS3A8C CODE=RM0002 ID=24/0001	20 Nis 2023 20:34
Filter	User Initiated	CICS DUMP: SYSTEM=CICS3A8C CODE=RM0002 ID=?/0001	20 Nis 2023 20:32

Help Window (IBM Knowledge Center):

The help window is titled 'Incident Log page' and provides the following information:

- You can use the *Incident Log* page in the *Incident Log* task to manage the incidents that have occurred on a system or in a sysplex.
- z/OSMF retrieves the incidents from the system and displays them in the *Incident Log* table. A maximum of 500 of the incidents that match the date and time filter criteria are retrieved and are available to be displayed in the table. By default, only the incidents that occurred in the past three days are displayed, and they are sorted in descending order according to the **Date and Time** column.
- For more information about incidents, see help topic [About incidents](#). If incidents are missing from the log, for troubleshooting tips, see help topic [Incidents not appearing in the incident log](#).
- For a description of the columns or actions, see [Columns in the Incident Log table](#) or [Actions for incidents](#).

Filtering and sorting incidents

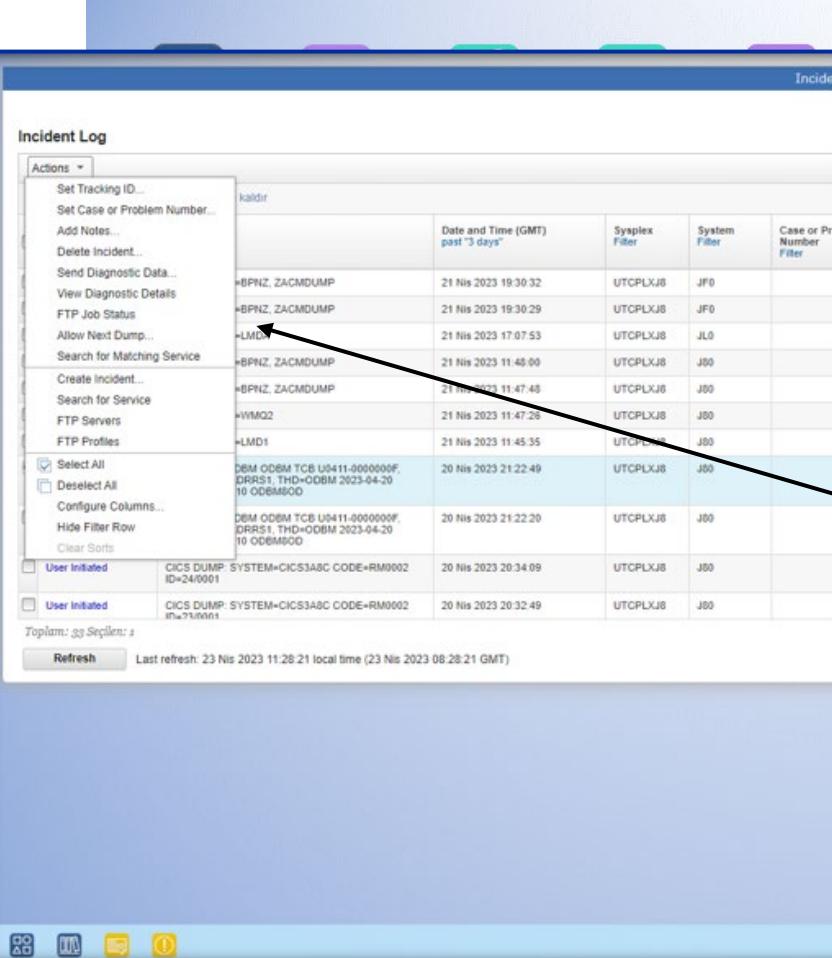
When you specify filter criteria (in addition to the date and time filter), you are filtering within the set of incidents that z/OSMF retrieved from the system. For example, if you filter for the *User Initiated* incidents that occurred in the past three days, z/OSMF retrieves up to 500 of the incidents that occurred in the past three days. From this set of incidents, z/OSMF selects and displays only the *User Initiated* incidents. Similarly, when you sort the *Incident Log* table, you are sorting within the set of incidents that z/OSMF retrieved from the system.

Columns in the Incident Log table

Table 1. Columns in the Incident Log table

Column	Description
Incident Type	Type of incident. The value is either <i>User Initiated</i> , <i>ABEND</i> , or <i>Manual Created</i> . For <i>ABEND</i> incidents, the term <i>ABEND</i> might also be followed by the abend completion code.
Search for matching service	When you click the incident type link for a specific incident, the <i>Diagnostic Data</i> tab on the <i>View Diagnostic Details</i> page is displayed.
Displaying the FTP Servers page	For more information about incidents, see help topic About incidents .

Special About Z/OSMF - Incident Log



The screenshot shows the z/OSMF Incident Log interface. A search term 'kadir' has been entered in the search bar, and the results table displays several incidents, including:

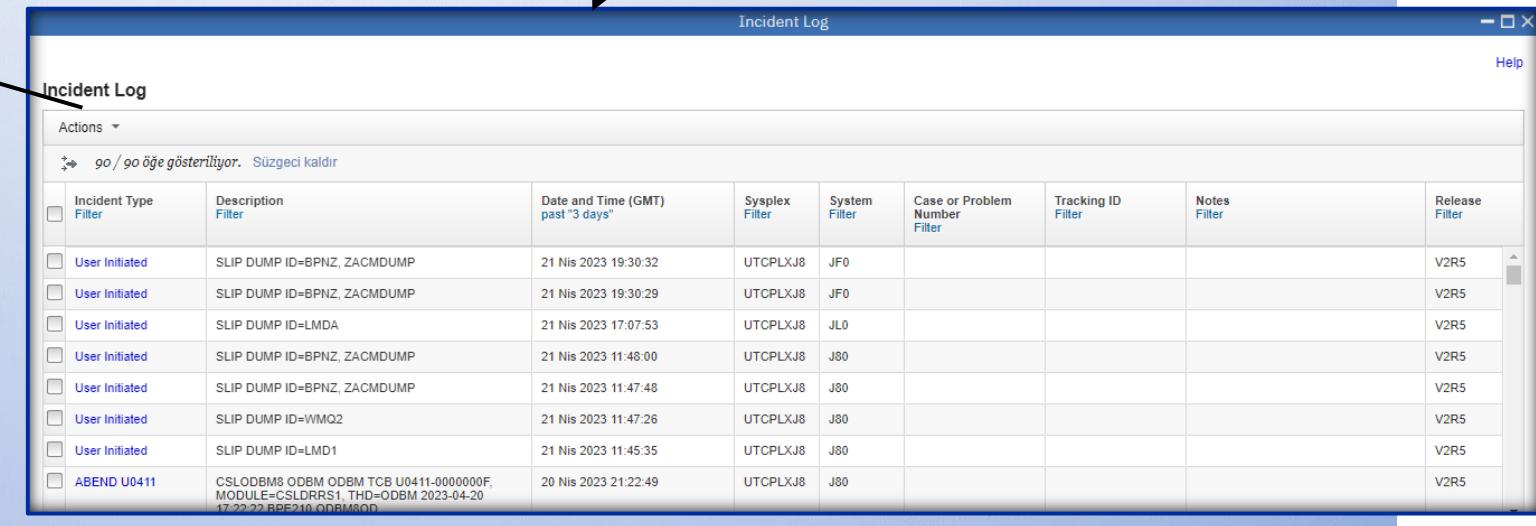
Incident Type	Description	Date and Time (GMT)	Sysplex	System	Case or Problem Number
User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 19:30:32	UTCPLXJ8	JF0	
User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 19:30:29	UTCPLXJ8	JF0	
User Initiated	SLIP DUMP ID=LMDA	21 Nis 2023 17:07:53	UTCPLXJ8	JL0	
User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 11:48:00	UTCPLXJ8	J80	
User Initiated	SLIP DUMP ID=BPNZ, ZACMDUMP	21 Nis 2023 11:47:48	UTCPLXJ8	J80	
User Initiated	WMQ2	21 Nis 2023 11:47:26	UTCPLXJ8	J80	
User Initiated	LMD1	21 Nis 2023 11:45:35	UTCPLXJ8	J80	
ABEND U0411	CSLODBM8 ODBM ODBM TCB U0411-0000000F, MODULE=CSLDRRS1, THD=ODBM 2023-04-20 17:22:22 RPF210 ODBM800	20 Nis 2023 21:22:49	UTCPLXJ8	J80	
ABEND U0411	CSLODBM8 ODBM ODBM TCB U0411-0000000F, MODULE=CSLDRRS1, THD=ODBM 2023-04-20 10 ODBM800	20 Nis 2023 21:22:20	UTCPLXJ8	J80	
User Initiated	CICS DUMP: SYSTEM=CICS3ABC CODE=RM0002 ID=24/0001	20 Nis 2023 20:34:09	UTCPLXJ8	J80	
User Initiated	CICS DUMP: SYSTEM=CICS3ABC CODE=RM0002 ID=24/0001	20 Nis 2023 20:32:49	UTCPLXJ8	J80	

Below the table, there is a message: "90 / 90 öğe gösteriliyor. Sügeci kaldır".



The navigation bar includes the following icons:

- Management Services Catalog
- Software Services
- Sysplex Management
- Notification Settings
- Incident Log (highlighted)
- Network Configuration Assistant
- SDSF
- General Settings
- Software Update
- z/OSMF Diagnostic Assistant
- Workload Management
- Resource Management
- Security Configuration Assistant
- IBM Z Common Data Provider
- Resource Monitoring
- Usage Statistics
- IBM zERT Network Analyzer



z/OSMF – Console

- Support for WTOR/HOLD messages (2.4CD)
- Improved handling of large amounts of messages
- Simplified Configuration of console (2.4CD)

The screenshot shows the z/OS Operator Consoles interface with two panes of log output. The left pane displays a timeline from Feb 17 20:39:37 to Feb 17 20:43:12, showing numerous messages related to trace commands and system alerts. The right pane shows a similar timeline from Feb 17 20:39:37 to Feb 17 20:42:00, also containing trace command specifications and system alerts. Both panes include a top navigation bar with tabs for Overview and the current session, and a bottom command input field.

z/OS Operator Consoles

Console "bug1P03" for System "P03" is started now.

Feb 17 20:39:37 P03 5 *0005 ITT006A SPECIFY OPERAND(S) FOR TRACE CT COMMAND.
Feb 17 20:41:52 P01 HESPROC

Feb 17 20:41:07 P01 CHASPO1 +DPHLG0777 T6PICMPL
Feb 17 20:41:11 P01 ALXMIUSS A temporary error condition occurred during MVS to IXGCONN CONNECT for log stream CICS.T6PICMPL.DPHLOG
Feb 17 20:41:18 P00 ALXMIUSS codes: X'00000008', X'00000089'.
Feb 17 20:41:18 P00 ALXMIUSS ALXALERT A ALXMIUSS P01 840C4000 A55FA760 000A9
Feb 17 20:41:18 P00 ALXMIUSS ALXMIUSS abandoned 0
Feb 17 20:41:18 P00 ALXMIUSS ALXALERT A ALXMIUSS P00 840C4000 A4BE3916 000AO
Feb 17 20:41:18 P00 ALXMIUSS ALXMIUSS suspending for 5 minutes 0
Feb 17 20:41:32 P03 ALXMIUSS ALXALERT A ALXMIUSS P03 840C4000 A4946D5E 000A8
Feb 17 20:41:32 P03 ALXMIUSS ALXMIUSS abandoned 0
Feb 17 20:41:32 P03 ALXMIUSS ALXMIUSS suspending for 5 minutes 0
Feb 17 20:41:38 P01 CHASPO1 +DPHLG0777 T6PICMPL
Feb 17 20:41:38 P01 ALXMIUSS A temporary error condition occurred during MVS to IXGCONN CONNECT for log stream CICS.T6PICMPL.DPHLOG
Feb 17 20:41:38 P01 ALXMIUSS codes: X'00000008', X'00000089'.
Feb 17 20:41:39 P01 BPXINIT BPX027I COMMAND ACCEPTED.
Feb 17 20:41:41 P01 ALXMIUSS ALXALERT A ALXMIUSS P01 840C4000 A55FA76C 000A9
Feb 17 20:41:41 P00 ALXMIUSS ALXMIUSS abandoned 0
Feb 17 20:41:41 P00 ALXMIUSS ALXALERT A ALXMIUSS P00 840C4000 A4BE3916 000AO
Feb 17 20:41:41 P00 ALXMIUSS ALXMIUSS suspending for 5 minutes 0
Feb 17 20:41:49 P00 ALXMIUSS ALXALERT A ALXMIUSS P01 840C4000 A4946D5E 000A8
Feb 17 20:41:49 P00 ALXMIUSS ALXMIUSS abandoned 0
Feb 17 20:41:49 P00 ALXMIUSS ALXMIUSS suspending for 5 minutes 0
Feb 17 20:41:52 P01 HESPROC HE5002E CHECK(IBMVSM,VSM_SQA_THRESHOLD):
Feb 17 20:41:52 P01 HESPROC IXVM100E ESGA has exceeded the threshold percentage:
Feb 17 20:41:52 P01 HESPROC Current allocation is 117% of 64420K. Allocation exceeds 7169 (E)CSA pages were converted to (E)SQA.
Feb 17 20:41:52 P01 HESPROC Unallocated amount is 0 bytes.

z/OS Operator Consoles

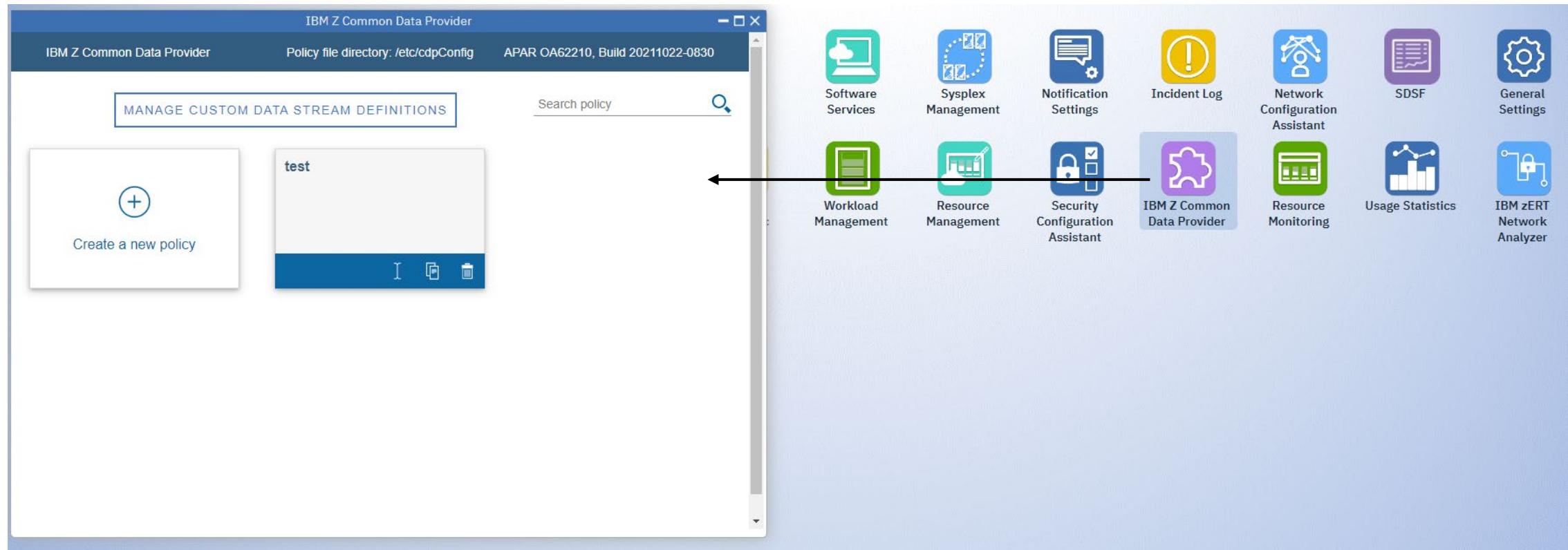
Console "bug1P03" for System "P03" is started now.

Feb 17 20:39:37 P03 5 *0005 ITT006A SPECIFY OPERAND(S) FOR TRACE CT COMMAND.
Feb 17 20:41:52 P01 HESPROC

Feb 17 20:42:00 P00 PDS6 SETUP: 16983686; CRON is running on P00
Feb 17 20:42:00 P00 PDS7 SETUP: 33760902; Cron calling /usr/spool/cron/cronta
Feb 17 20:42:00 P01 PDS6 SETUP: 16910186; CRON is running on P01
Feb 17 20:42:00 P01 PDS7 SETUP: 33687402; Cron calling /usr/spool/cron/cronta
Feb 17 20:42:00 P03 PDS2 SETUP: 16845082; CRON is running on P03
Feb 17 20:42:00 P03 PDS3 SETUP: 33622298; Cron calling /usr/spool/cron/cronta

Command: Select or type Submit

z/OSMF - IBM z Common Data Provider Configuration Tool



z/OSMF Management Services Catalog

Have you tried ?

Not yet ?, if you haven't, you are missing a great capability, please evaluate it !

z/OSMF –Management Services Catalog Updates

Available since CD 4Q2021

z/OS Management Services Catalog in z/OSMF leverages the power of z/OSMF workflows to enable system programmers to run services that help complete z/OS management tasks faster and with fewer errors.

- **Experienced z/OS system programmers will be able to create a catalog of customized services, each written with unique institutional knowledge, protocols, and processes.**
- **These services can then be run by less experienced colleagues.**
- An initial set of services to help z/OS system programmers of all skill levels get started, demonstrate accepted practices, and simplify information sharing.

Capabilities:

- Powerful graphical interface for creating new services, editing existing and sample services, and running services on z/OS
- Capability to view all services performed by the team, which can be used for audits
- z/OS Management Services Catalog is designed to transform how z/OS systems programmers manage their z/OS environments. With the ability to translate z/OS management processes into modern services, system programmers can independently complete tasks efficiently and with fewer errors. With z/OS 3.1, z/OS Management Services Catalog provides the following abilities to help z/OS system programmers create, submit, run, and manage their services
- **Sample services that provide step-by-step guidance for completing z/OS management tasks**

z/OSMF - Management Services Catalog

- No more need to prepare common procedure directory
- Useful for new team members for experienced Sysprogs as well

Sample Services:

- Remove expired certificates from keyring.
- Add load library to LNKLST.
- Create a zFS z/OS File System.
- Rename a zFS file system.
- Expand a zFS file system.
- Encrypt a zFS file system.
- Mount a zFS file system.
- Unmount a zFS file system.
- List attributes of a RACF user ID.
- Delete a RACF user ID.
- Create a RACF digital certificate.
- Delete an alias from a catalog.
- Replace an SMP/E RECEIVE ORDER certificate.

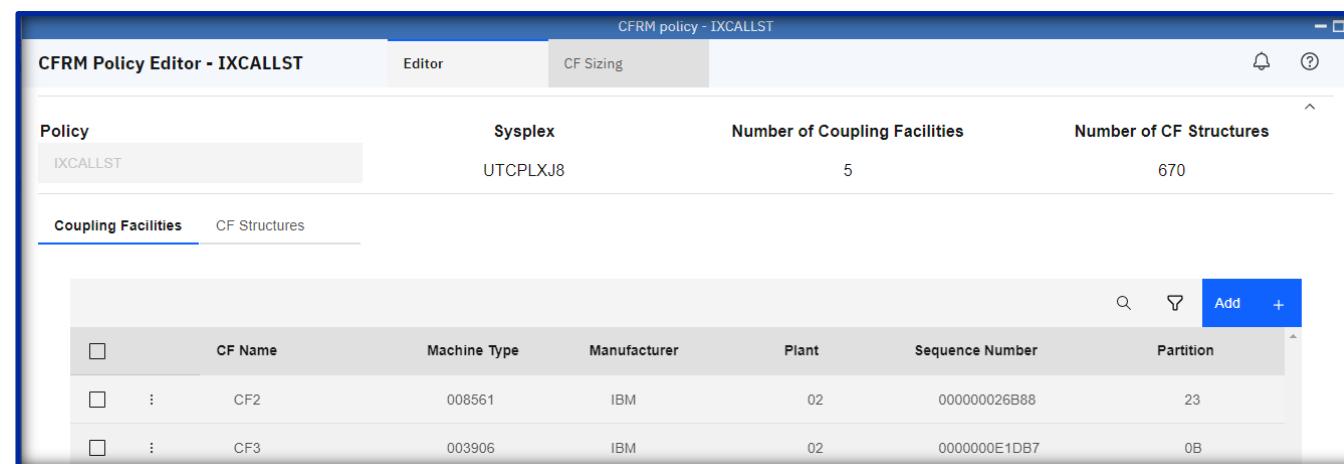
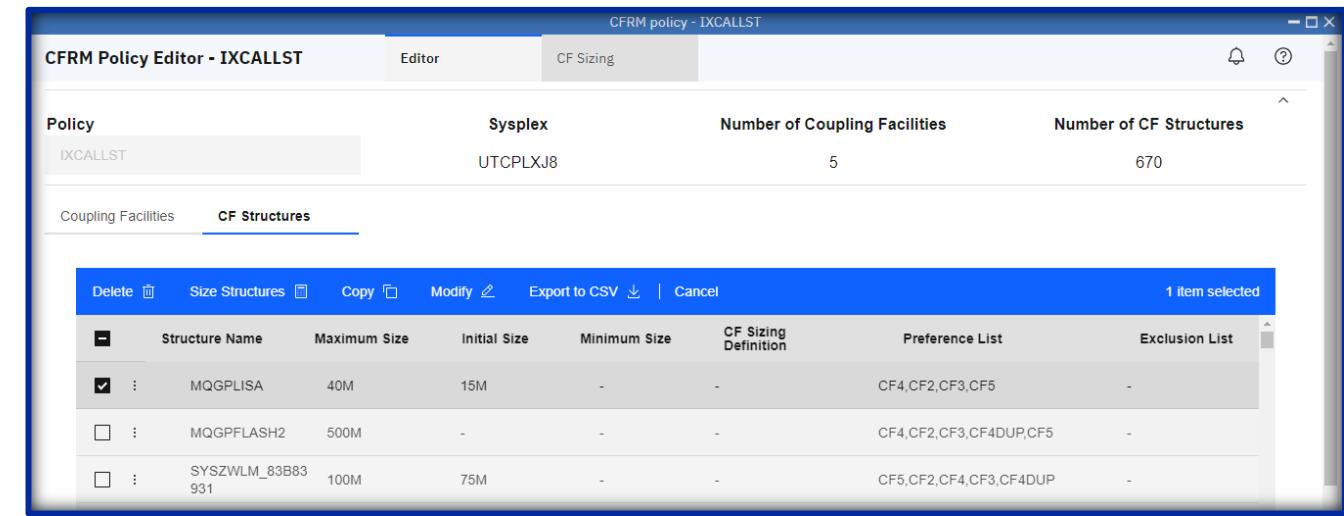
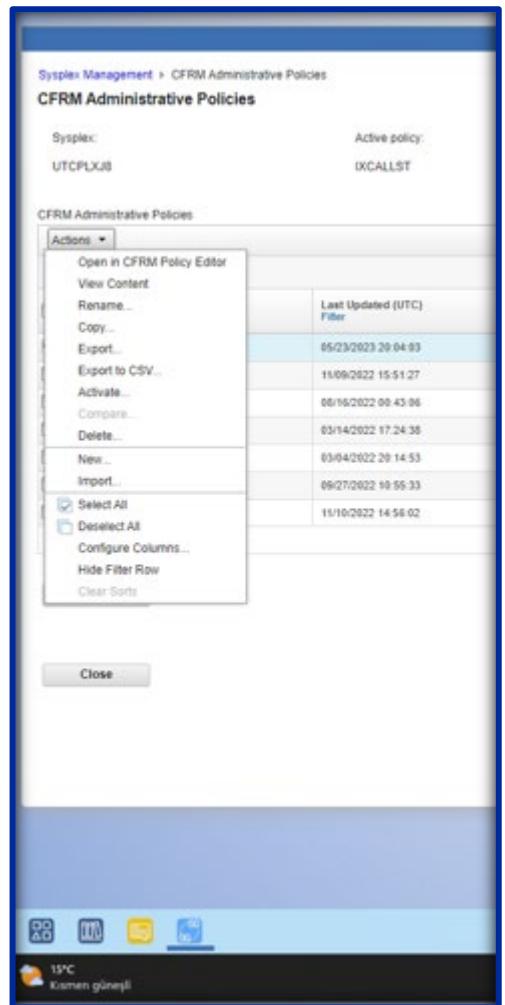
- New additional services in z/OS 3.1

Learn more about services on the [z/OS Management Services Catalog content solution/support/z-content-solutions/management-services](#).

z/OSMF Sysplex Management

z/OSMF Sysplex Management

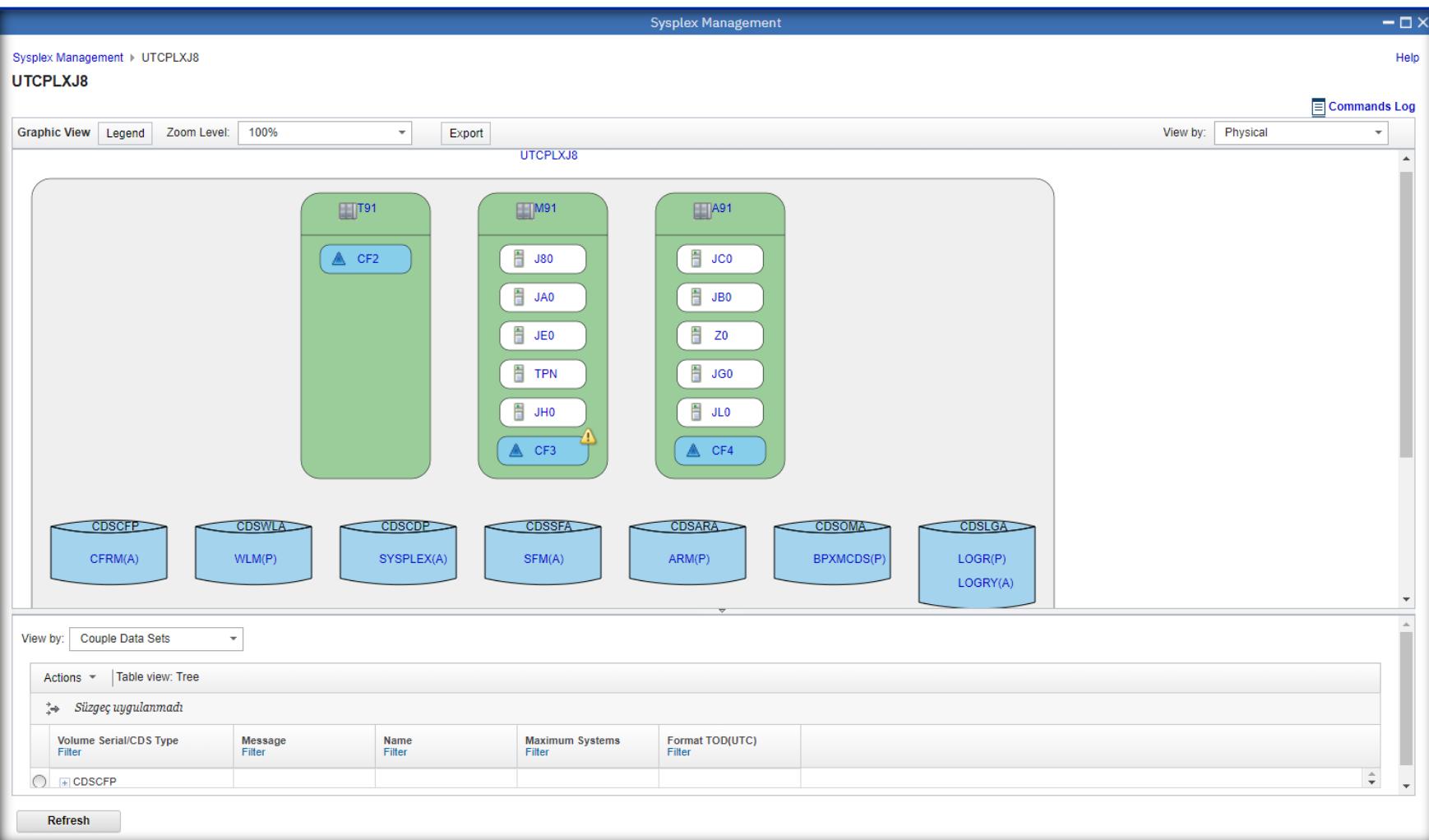
z/OSMF - Sysplex Management – CFRM Policy Editor Enhancements



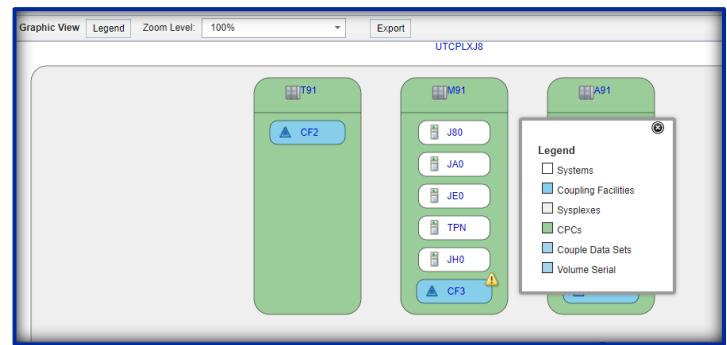
Several Enhancements were delivered via CDs

z/OS 3.1 - The CFRM Policy Editor supports a new integrated CF structure sizing capability, designed to calculate CF structure sizes

z/OSMF - Sysplex Management – Graphical View



Changable Legend



No need to try to draw diagram of CECs, LPARs separate anymore to share internally in your organization....

«Just take screen shot of this panel»

z/OSMF - Sysplex Management – Connection Status Information

The image displays three windows from the z/OSMF Sysplex Management interface:

- Sysplex Management (Main Window):** Shows a graphical view of coupling facilities (CFs) and their connections. A connection between T91 and M91 is highlighted with a yellow warning icon. The connection ID is 40. The window includes a legend, zoom level (100%), and export options.
- Commands Log for UTCPLXJ8 (60):** A table showing command logs. Two entries for "Activate Policy" with object IXCALLST and sysplex UTCPLXJ8 have a status of "Completed" and an output type. The log includes filters for Command, Objects, Sysplex, System, Status, Details, Date Submitted, Date Updated, and Usage.
- Warning Dialog:** A modal dialog titled "Warning" with a yellow exclamation mark icon. It states: "The following connections from M91 to T91 have an offline or degraded physical or logical status." It lists five systems (J80, TPN, JH0, JE0, JA0) with CHPID 5A, PCHID 528, Type CL5, and Physical Status Offline. All listed Logical Statuses are Online. The dialog also includes columns for Adapter, Port, and CF Name.

Arrows indicate the relationship between the main connection view and the detailed logs and warnings.

System Name	CHPID	PCHID	Type	Physical Status	Logical Status	Adapter	Port	CF Name
J80	5A	528	CL5	Offline	Online	17C	2	CF2
TPN	5A	528	CL5	Offline	Online	17C	2	CF2
JH0	5A	528	CL5	Offline	Online	17C	2	CF2
JE0	5A	528	CL5	Offline	Online	17C	2	CF2
JA0	5A	528	CL5	Offline	Online	17C	2	CF2

z/OSMF - Sysplex Management – Notification

Sysplex Management

Graphic View Legend Zoom Level: 100% Export

UTCPLXJ8

CF2 JH0
CF5 JI0
CF4 JJ0
CF3 JL0
J80
JF0

Süzgeç uygulanmadı

Actions Table view: Tree Süzgeç uygulanmadı

Sysplex Management > Notifications

Notifications for Sysplex UTCPLXJ8

Errors: 0 Warnings: 14

Actions

Süzgeç uygulanmadı

Notification Message Filter	Notification Description Filter	Sysplex Filter	System Filter
<input type="radio"/> IZUS404W	The graphic view is incomplete because the CPC which "CF5" belongs to is not defined correctly in the Systems task.	UTCPLXJ8	JJ0
<input type="radio"/> IZUS400W	There is no alternate couple data set defined for type "WLM"	UTCPLXJ8	JJ0
<input type="radio"/> IZUS406W	The channel path "5A" on systems "J80" is not online.	UTCPLXJ8	JJ0
<input type="radio"/> IZUS406W	The channel path "7B" on systems "JF0" is not online.	UTCPLXJ8	JJ0
<input type="radio"/> IZUS406W	The channel path "5A" on systems "JA0" is not online.	UTCPLXJ8	JJ0

Sysplex/CF Name or System Name Filter

Message Filter Partition Filter CPCID Filter Volatile Filter CF Level Filter CFCC Release Filter Service Level Filter Total Space Filter Free Space Filter System Status Filter Timing Filter

+ UTCPLXJ8

- ZPETPLX2 IZUG476E

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z/OSMF - z/OS Sysplex Management

- **View Sysplex configuration**
 - Table and graphical views
 - Available in z/OS 2.2 and up
- **Modify Sysplex configuration**
 - Sysplex-wide commands and results display
 - Command Log retained across IPL
 - Allows review of who took what action when (and the detailed results of each action)
 - Optionally view generated commands before issuing them
 - Actions include Rebuild, Duplex, Reallocate, CF actions, CF connectivity management, Couple Dataset Mgmt. ([2.4CD 1Q2020](#))
- **Sysplex CFRM Policy Editor**
 - Edits information about Sysplex CFRM policy including structure sizes
 - Bulk editing of CF structures
 - Policy actions – create, delete, rename, activate
 - CF and CF structure definition, modify, delete, rename, etc
 - Full referential integrity, health checking and best practices, etc.
 - Prevent mistakes rather than recover from them!
 - Replacing the need for IXCMIAPU batch utility
 - Coexists and interoperates with IXCMIAPU batch utility
- REST APIs ([CD 4Q2021](#))
 - Copy, Rename, Delete, Changing CFRM Policy available with the PTFs for APAR PH39685 for z/OS V2.4 and later.
 - Import/Export of CFRM policy data and bulk copy of structures with PTF for APAR PH39687 ([CD 2Q2022](#))
 - Exporting policies in CSV format and comparing policies after changes with PTF for APAR PH44343 ([CD 3Q2022](#))
- **CF Structure Sizer (New z/OS 3.1 Function) (See next slides)**
 - Easy tool for re-sizing Structures
 - Retains CF sizing information for future use
 - Based on CF Level going forward
 - Support for CF LEVEL 25

CF Structure Sizing With z/OSMF (z/OS 3.1 New Function)

Resolves a long-standing pain-point

CF Structure Sizing With z/OSMF – Problems in CFSizer Web Application

- Support CF Sizing in z/OSMF Sysplex CFRM Policy Editor
 - Problem to be solved – CF Sizer web application



IBM IT Infrastructure > System z > CFSizer >

CFSizer	Function	Type	Structure Name	INITSIZE	SIZE
APPC					
BatchPipes					
CICS					
Communications Server					
DB2	DB2 IRLM	LOCK	grpname_LOCK1	20M	21M
DFSMShsm Common Recall Queue					
Enhanced Catalog					

Lock table entry count=2097152. Specify this count as your IRLMPROC LTE value to ensure that the structure is allocated with sufficient record list entries (RLEs).

Function	Type	Structure Name	INITSIZE	SIZE
DB2 SCA	LIST	grpname_SCA	19M	31M

The following are provided as sample CFRM statements only and are not intended to reflect the results of the size request above. You can cut and paste these statements into your CFRM policy and modify them as necessary.



CF Structure Sizing With z/OSMF

For Many Years,

CFSizer, web-based application used to size structures for new CF Levels , new or changing workloads, or to validate current size

- It takes application-specific workload description as input which is hard to collect
- There is no way to preserve input specifications
- Sizing performed by CF installed in Poughkeepsie
 - CF Level is not selectable
 - Typically uses the latest available CF Level
 - May not match installation configuration

CF Structure Sizing With z/OSMF – z/OSMF Sysplex Management Plug-in

Prior to 3.1, z/OSMF Sysplex Management plugin provided graphic interface for

- Display sysplex topology and sysplex resources like structures, CDS, etc.
- Modify sysplex resources such as switching primary and alternate CDS, create CDS, rebuild structure, reallocate structure, etc.
- Graphic interface with best practice built-in to help with editing CFRM policies

z/OSMF 3.1 and CD provide CFRM policy editor for graphic based CFRM policy editing

- Bulk editing and copy (PH39687) are supported to increase efficiency
- Import CFRM policy from data set, USS file or JCL (PH39687)
- Export CFRM policy from CFRM Policy Editor to data set or USS file (PH39687)
- Modernized Comparison view for policy changes (PH44343)
- Export CFRM policy to CSV file (PH44343)
- **CF Sizing in z/OSMF (z/OS 3.1 new function)**

CF Structure Sizing With z/OSMF

Support CF Sizing in z/OSMF Sysplex CFRM Policy Editor

Goals —→ Significant improvement over existing sizing methods (CF Sizer web application)

1. Persistence of user sizing inputs
2. Ability to map sizing inputs to (multiple) specific structures
3. Size multiple structures in a single action (bulk sizing)
4. Minimize manual input
5. Calculating structure sizings using CF levels that you already have or CF Levels that you do not already have

Integrated into the CFRM Policy Editor (z/OSMF Sysplex Management plugin)

Sizing input (and output) tightly coupled to administrative policies

This is intended as a replacement to the CF Sizer Web Application; the Sizer.exe Batch functionality will be addressed in the future

CF Structure Sizing With z/OSMF – What z/OS 3.1 can do in background

Historically, z/OS issued CF requests to compute structure sizes

Requires an accessible CF

Limits the set of available CFLEVELs to whatever happens to be installed

Sizing operations with z/OS 3.1

Can specify desired CFLEVEL

Sizing requests will be computed:

1. By a CF at the requested CFLEVEL, if available
2. Otherwise, z/OS if emulation for that CFLEVEL is available
3. Otherwise, the request fails

z/OS 3.1 can emulate sizing operations

Initially, just CFLEVEL 25 (IBM z16)

CF Structure Sizing With z/OSMF

Support CF Sizing in z/OSMF Sysplex CFRM Policy Editor

Implementation – CF Sizing Definition

- New z/OSMF managed object
- Used for persisting user sizing inputs
- Can be applied to multiple structures
- A structure can only be associated with one CF Sizing Definition
- Define once, run sizing multiple times, across multiple structures as needed
- Flexibility (ability to change CF Level)

CF Structure Sizing With z/OSMF

How it works ? CF Sizing in z/OSMF Sysplex CFRM Policy Editor

The screenshot shows the 'CFRM Policy Editor and Sizer - CLASS1' window. The top menu bar includes 'Sysplex Management', 'CFRM Policy Editor and Sizer - CLASS1', 'Editor', 'CF Sizing' (which is highlighted with a red arrow), and 'Help'. Below the menu is a section titled 'Sizing Definitions' (also highlighted with a red arrow). The main area is a table with the following columns: Product, Name, Function, Groups, CF Level, and No. of Structures. Red arrows point from the 'Name' and 'Groups' headers to a text block explaining their purpose. At the bottom of the window are 'Close' and 'Submit' buttons, and a toolbar with various icons.

	Product ↑	Name	Function	Groups	CF Level	No. of Structures	Actions
<input type="checkbox"/>	CICS	CICS Production	CICS Named Counter		24	2	⋮
<input type="checkbox"/>	CICS	CICS Test	CICS Named Counter		23	5	⋮
<input type="checkbox"/>	DB2	DB2 Upgrade	DB2 SCA List Structure	Upgrade	24	2	⋮
<input type="checkbox"/>	GRS	GRS Upgrade	GRS LOCK Structure	RPJ Upgrade	24	1	⋮
<input type="checkbox"/>	IMS	IMS Upgrade	IMS OSAM structure	RPJ Upgrade	24	6	⋮
<input type="checkbox"/>	InfoSphere	Info Upgrade	InfoSphere Classic Control	Upgrade	24	2	⋮
<input type="checkbox"/>	JES	JES Upgrade	JES2 Checkpoint		24	5	⋮
<input type="checkbox"/>	LOGREC	LOG Upgrade	LOGREC Structure		24	7	⋮

New CF Sizing Tab

Sizing Definitions Table

The Name and Groups fields are used to identify the sizing definition

CF Structure Sizing With z/OSMF

How it works ? CF Sizing in z/OSMF Sysplex CFRM Policy Editor

Sysplex Management
CFRM Policy Editor and Sizer – CLASS1

CFRM Policy Editor and Sizer – CLASS1 Editor **CF Sizing** Help

Sizing Definitions

Product ↑	Name	Function	Groups	CF Level	No. of Structures	Actions
□	CICS	CICS Production	CICS Named Counter	24	2	⋮
□	▼ CICS	CICS Test	CICS Named Counter	23	5	⋮
□	▼ DB2	DB2 Upgrade	DB2 SCA List Structure	Upgrade	2	⋮

Inputs

No. of Databases	No. of Tables
50	100

Results

Maximum Size	Initial Size	Results Modifier
31 M	18 M	0 %

Associated Structures (2)

CF Structure
DB2_A_SCA
DB2_B_SCA

Close Submit

Expand Sizing Definition Content

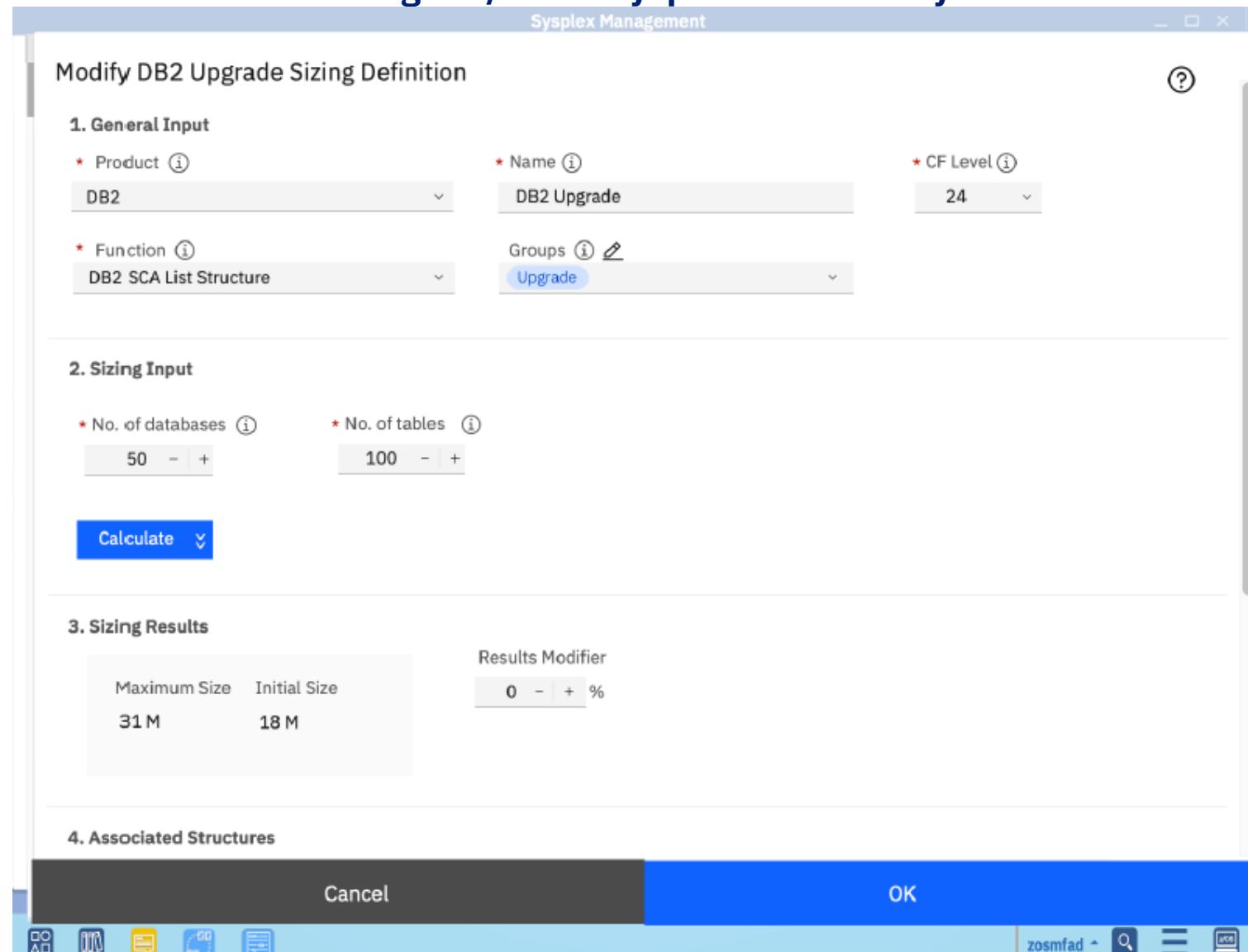
Calculated Results

Input Parameters

Structures that are associated with the definition

CF Structure Sizing With z/OSMF

How it works ? CF Sizing in z/OSMF Sysplex CFRM Policy Editor



Editing /Adding a Sizing Definition

4 Sections

1. What is being sized(Product, Function)
2. Input Parameters
3. Sizing Results
4. What CF Structures are associated with this sizing definition

CF Structure Sizing With z/OSMF

How it works ? CF Sizing in z/OSMF Sysplex CFRM Policy Editor

CFRM Policy Editor and Sizer – CLASS1

CFRM Policy Editor and Sizer – CLASS1 Editor CF Sizing Help

Policy CLASS1 Sysplex PLEX7 Number of CF Structures 40 Number of Coupling Facilities 26

CF Structures Coupling Facilities

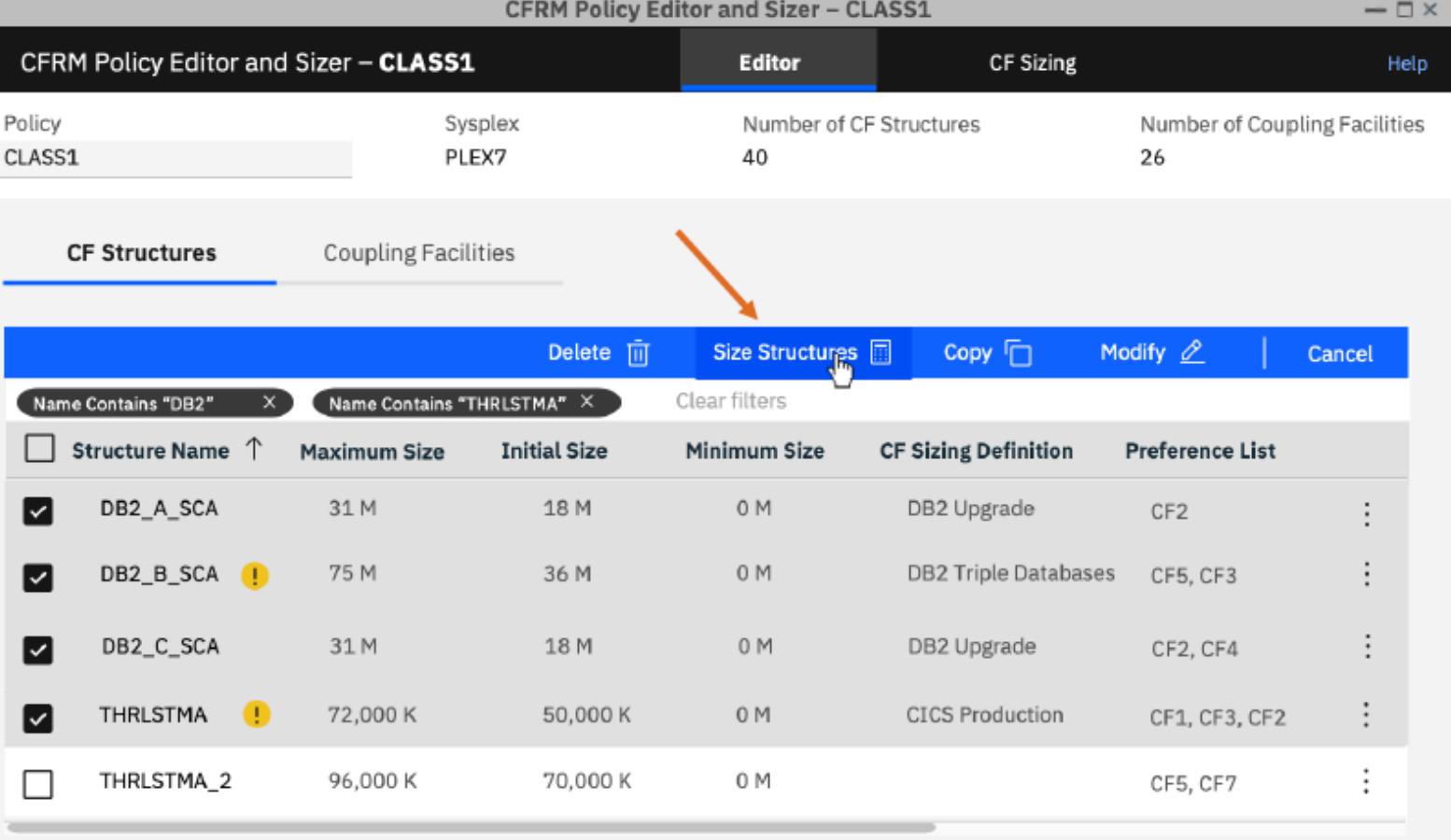
Delete Size Structures Copy Modify Cancel

Name Contains "DB2" Name Contains "THRLSTMA"

Clear filters

<input type="checkbox"/> Structure Name ↑	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	⋮
<input checked="" type="checkbox"/> DB2_A_SCA	31 M	18 M	0 M	DB2 Upgrade	CF2	⋮
<input checked="" type="checkbox"/> DB2_B_SCA !	75 M	36 M	0 M	DB2 Triple Databases	CF5, CF3	⋮
<input checked="" type="checkbox"/> DB2_C_SCA	31 M	18 M	0 M	DB2 Upgrade	CF2, CF4	⋮
<input checked="" type="checkbox"/> THRLSTMA !	72,000 K	50,000 K	0 M	CICS Production	CF1, CF3, CF2	⋮
<input type="checkbox"/> THRLSTMA_2	96,000 K	70,000 K	0 M		CF5, CF7	⋮

Close **Submit**



Making a Sizing Update

- You can size Structures from 'Size Structure' section
- You can size one or more structures

CF Structure Sizing With z/OSMF

How it works ? CF Sizing in z/OSMF Sysplex CFRM Policy Editor

The screenshot shows the 'Size Multiple Structures' interface in the z/OSMF Sysplex Management tool. The 'Sizing Details' tab is selected. The main area displays a table of structures being sized, with one row expanded to show detailed inputs and results. The expanded row for 'DB2 Upgrade' shows the following details:

Product	Name	Function	Groups	CF Level
DB2	DB2 Upgrade	DB2 SCA List Structure	RPJ Upgrade	24
Inputs		Results		
No. of Databases	No. of Tables	Maximum Size	Initial Size	Results Modifier
50	100	31 M	18 M	0%

Below this, there is a section for 'Structure to size' containing a list of 'CF Structure' names: DB2_A_SCA and DB2_C_SCA.

At the bottom of the interface are buttons for 'Cancel', 'Back', and 'Next', with 'Next' being highlighted.

Sizing Structures (Step 1 of 2) Use Sizing Details

- Check what CF Sizing Definition will be used
- Sizing input details

CF Structure Sizing With z/OSMF

How it works ? CF Sizing in z/OSMF Sysplex CFRM Policy Editor

Sysplex Management

Size Multiple Structures

②

Sizing Details Summary of Updates → **Summary Of Updates**

Structure Sizings that will be Updated ⓘ

Q Search

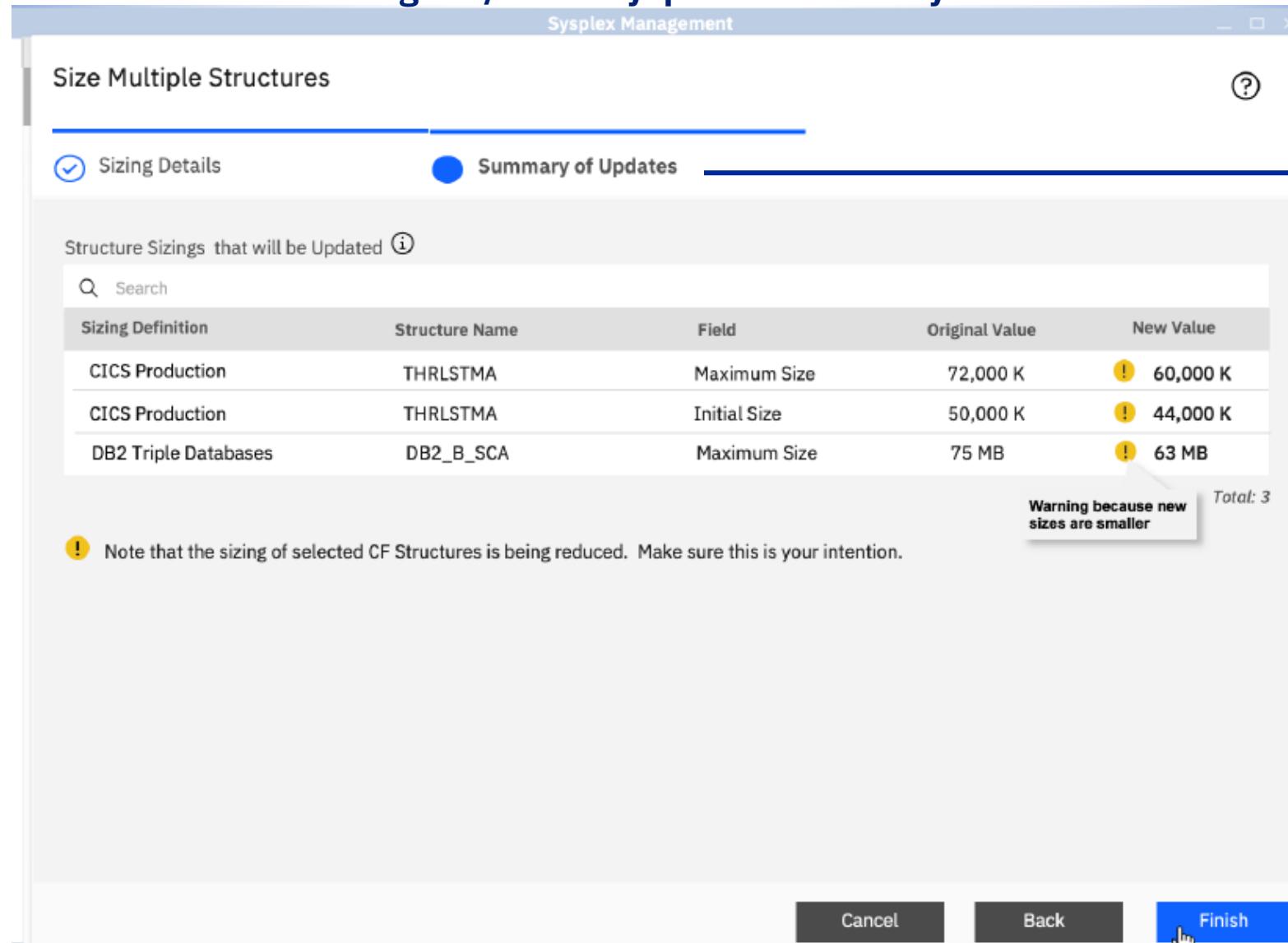
Sizing Definition	Structure Name	Field	Original Value	New Value
CICS Production	THRLSTMA	Maximum Size	72,000 K	! 60,000 K
CICS Production	THRLSTMA	Initial Size	50,000 K	! 44,000 K
DB2 Triple Databases	DB2_B_SCA	Maximum Size	75 MB	! 63 MB

Total: 3

Warning because new sizes are smaller

! Note that the sizing of selected CF Structures is being reduced. Make sure this is your intention.

Cancel Back Finish



Summary Of Updates

Sizing Structures (Step 2 of 2) Use Summary of Updates

- Shows all values that will be updated
- Warning if the new value is smaller than original

z/OSMF SCA **Security Configuration Assistant**

z/OSMF – SCA – Security Configuration Assistant

It exists since 2.4 GA!. VERY Useful Capability !

The screenshot shows the Security Configuration Assistant interface. At the top, there are tabs for "Security Configuration Assistant", "zOSMF", and "Imported Products". Below the tabs, a search bar contains "temel" and a button labeled "Validate selected" with a progress icon. To the right of the search bar, it says "7 items selected". On the far right, there are icons for "Filters" and "Show started services only".

The main area displays three service configurations:

- z/OSMF Incident Log:** Checked. Status: Automated (5 green, 1 red). Configuration: Configurable (0 green, 0 red), Manual (2 blue, 0 red).
- z/OSMF Notifications:** Unchecked.
- z/OSMF Resource Monitoring:** Unchecked.

A pop-up panel is open for the "z/OSMF Incident Log" service, showing detailed validation results for each configuration level:

Configuration Level	Count	Status
Automated	5	Green (Valid)
Configurable	0	Green (Valid)
Manual	2	Blue (Valid)

Two arrows point from the text "Pop Up panels" at the bottom right to the open pop-up panel and the "Validate" button in the pop-up panel.

Pop Up panels

z/OSMF – SCA – Security Configuration Assistant

VERY Useful Capability !

The screenshot shows the "Security Configuration Assistant" interface for the "z/OSMF" product. The main navigation bar includes tabs for "Security Configuration Assistant", "z/OSMF", and "Imported Products". The "Services" tab is currently selected. A search bar at the top left shows "Validate for ID temel" and a button to "Validate selected" with "7 items selected". A modal window titled "Validation results for fixing z/OSMF Incident Log" is displayed, listing the following recommendations:

- ZMFAPLA (IZUDFLT.ZOSMF INCIDENT_LOG INCIDENT_LOG)
 | RDEFINE ZMFAPLA (IZUDFLT.ZOSMF INCIDENT_LOG INCIDENT_LOG)
 | PERMIT IZUDFLT.ZOSMF INCIDENT_LOG INCIDENT_LOG CLASS(ZMFAPLA) ID (TEMEL) ACCESS (READ)
 | SETROPTS RACLIST (ZMFAPLA) REFRESH

Below the modal, there are sections for "z/OSMF Incident Log", "z/OSMF Notifications", and "z/OSMF Resource Monitoring". Each section has a status bar indicating counts of successful (green checkmark), failed (red X), and informational (blue question mark) items. The "z/OSMF Incident Log" section has 4 successful, 0 failed, and 0 informational items. The "z/OSMF Notifications" section has 0 successful, 0 failed, and 0 informational items. The "z/OSMF Resource Monitoring" section has 3 successful, 0 failed, and 0 informational items.

z/OSMF – SCA – Security Configuration Assistant

VERY Useful Capability ! Fix automatically

The screenshot shows the z/OSMF - SCA - Security Configuration Assistant interface. A modal dialog is open, titled "Security update for fixing z/OSMF Incident Log". The dialog contains a "Command" section with the following text:

```
# ZMFAPLA (IZUDFLT.ZOSMF INCIDENT_LOG INCIDENT_LOG)
RDEFINE ZMFAPLA (IZUDFLT.ZOSMF INCIDENT_LOG INCIDENT_LOG)
PERMIT IZUDFLT.ZOSMF INCIDENT_LOG INCIDENT_LOG CLASS(ZMFAPLA) ID (TEMEL) ACCESS (READ)
SETROPTS RACLIST (ZMFAPLA) REFRESH
```

At the bottom of the dialog are two buttons: "Cancel" and "Submit". The "Submit" button is highlighted with a blue border. Below the dialog, there is a summary bar with three status indicators: "Automated" (green), "Configurable" (blue), and "Manual" (purple). The "Automated" section shows 3 checked items and 0 crossed-out items. The "Configurable" section shows 0 checked items and 0 crossed-out items. The "Manual" section shows 2 information items.

z/OSMF – SCA – Security Configuration Assistant

- z/OSMF application to help system programmers in configuring z/OS security ([2.4 GA](#))
- Support for variable substitution, user groups
- Support for External applications
SDSF, DFSMSdss, DFMSHsm, etc.
- **Validation REST API ([CD 1Q2022](#))**
 - Allows applications to verify proper security configuration before execution
- **Support to create or optionally fix security configuration ([CD 3Q2022](#))**
- **Allows authorized personnel to add or change security rules**
- Line mode SCA support for use before z/OSMF starts ([CD 4Q2022](#))
- **SCA can be used to setup z/OSMF Security**

z/OSMF AI Control Interface for z/OS (New z/OS 3.1) New Plug-in

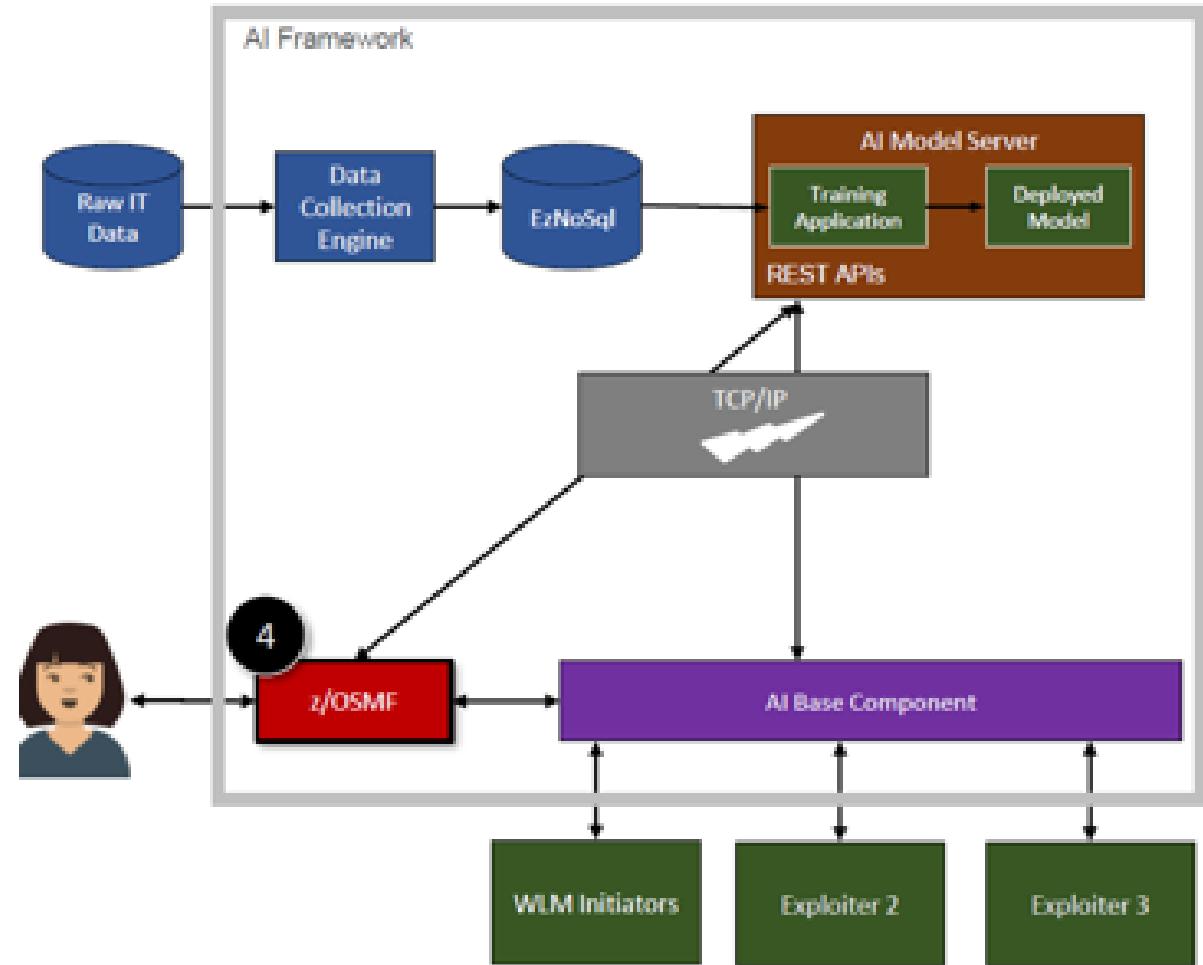
z/OSMF AI Control Interface For z/OS

- AI Control Interface for /OS (a.k.a. **AICI** plugin) is the control center for **z/OS 3.1 AI Framework**
- **z/OS 3.1 AI Framework Overview**

z/OS 3.1 AI Framework provides capabilities to infuse AI into z/OS products while simplifying the management by clients.

The AI Framework consists of:

1. **Data Collection**
2. **AI Model Server**
3. **AI Base Component**
4. **User Interface**
5. **Use Case Providers**





z/OSMF Workflows

z/OSMF Workflows

z/OSMF Workflows

Workflows

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

Actions ▾ Active ▾ Süzgeç uygulanmadı Search

Workflow Name Filter	Description Filter	Version Filter	Vendor Filter	Access Filter	Owner Filter	System Filter	Status	Percent Complete	Date Created(GMT) Filter	
d grs.analyze.waiter - Workflow_3	d grs.analyze.waiter	1.0		Public		UTCPLXJ8.J80	✓ Complete	%100	2019-12-31 08:24:07	
d grs.analyze.waiter - Workflow_4	d grs.analyze.waiter	1.0		Public		UTCPLXJ8.J80	✓ Complete	%100	2019-12-31 08:29:33	
Sdspool - Workflow_1	Sdspool	1.0		Public		UTCPLXJ8.J80	■ In Progress	%0	2019-12-31 08:37:52	
d grs.analyze.waiter - Workflow_5	d grs.analyze.waiter	1.0		Public		UTCPLXJ8.J80	■ In Progress	%25	2020-01-09 07:18:54	
							✓ Complete	%100	2020-01-09 07:32:35	
							■ In Progress	%23	2020-01-09 07:40:53	
							■ In Progress	%46	2020-01-09 07:54:04	
							■ In Progress	%7	2020-01-14 14:30:22	
							■ In Progress	%99	2020-02-20 18:53:04	
							■ In Progress	%0	2020-03-17 10:01:02	
zOS V2R5 Upgrade Workflow from zOS V2R4 - Workflow_0	zOS V2R5 Upgrade Workflow from zOS V2R4	1.0		Public		UTCPLXJ8.J80 (J80)	■ In Progress	%25	2020-07-24 02:57:26	
In this workflow definition, a basic set of elements and connections is specified for you.	In this workflow definition, a basic set of elements and connections is specified for you.	Specify the connection of	g	Public		UTCPLXJ8.J80 (J80)	■ In Progress	%0	2020-07-27 01:33:09	

Toplam: 179 Seçilen: 0

Refresh Last refresh: 25 May 2023 11:40:15 local time (25 May 2023 08:40:15 GMT)

Help

✓ A series of steps to accomplish a task and a tool to track each steps status
✓ Can involve one person or many people
✓ Workflow authors decide on style and technical approach of a workflow
✓ Can be: Manual instructions, Semi-automated instructions, Fully automated actions
✓ Consist of Jobs, Shell scripts, REXX execs, REST calls, file updates etc.
✓ Optionally retains a log of what has been done
✓ Useful for Installation, Service, Upgrade, or any configuration actions

z/OSMF REST API Updates with 3.1 and CDs

Easy to drive z/OS operations

- Storage Management REST API enhancements
- NEW REST API for retrieving OPERLOG/SYSLOG messages
- NEW REST API for CFRM Policy operations
- NEW REST API for SCA based Security Validation and Security Provisioning
- Enhanced REST API for retrieving runtime value of z/OS Symbols
- Enhanced REST data set and USS file API and published tuning guide
- Enhanced REST Jobs API

z/OSMF Ansible Support with 3.1 and CDs

Unleash z/OSMF capability to Ansible via Ansible collection “ibm_zosmf”

IBM z/OSMF Ansible collection “ibm_zosmf”, intends to provide simple and consistent experience for Ansible users to drive z/OSMF REST APIs for z/OS operations and automation.

Part of Red Hat Ansible Certified Content for IBM Z.

Available in both Ansible Galaxy and Red Hat Ansible Automation Hub:

[https://cloud.redhat.com/ansible/automation-hub/repo/published\(ibm\)/ibm_zosmf](https://cloud.redhat.com/ansible/automation-hub/repo/published(ibm)/ibm_zosmf)

https://galaxy.ansible.com/ibm/ibm_zosmf

Documentation: https://ibm.github.io/z_ansible_collections_doc/ibm_zosmf/docs/ansible_content.html

What's available today via z/OSMF Ansible collection “ibm_zosmf”

“ibm_zosmf” collection drives z/OSMF REST APIs start with:

Workflow operations (version 1.0 and above)

Drive a z/OSMF workflow to complete, Delete a workflow instance, Query workflow status, etc.

Provision and Manage z/OS software instances via Cloud Provisioning and Management for z/OS (version 1.0 and above)

Provision or deprovision a z/OS middleware/software instance, start or stop the software instance, etc.

Security validation based on SCA (version 1.1)

Security fix/provision based on SCA (version 1.2)

Software query based on z/OSMF Software Management (version 1.3)

Run zMSC services (version 1.4)

z/OS UUID Support

For decades, software installers have asked, "**How do I know which SMP/E CSI represents my running z/OS system?**" z/OS 3.1 supports generating a Universally Unique Identifier (UUID) during the installation and deployment of z/OS, correlating the UUID with the z/OSMF Software Management software instance. This represents that copy of z/OS, storing the UUID value in a well-known location on z/OS, and retrieving the UUID from a running z/OS system to directly identify the proper software instance.

UUID value for a software instance object is intended for use by programs when calling the Software Management REST APIs.

Also we expose the actual UUID value within the z/OSMF UI in one place.

From the list of Software Instances, select a software instance and use the View -> Properties action. Then hover the cursor over the information bubble (blue "i" bubble) next to the "Name" field label.

The screenshot shows the 'Software Management' interface with the title 'View zOSV25_GA_OS250015'. The top navigation bar includes 'Software Management', 'Software Instances', 'View Software Instance', 'Help', and standard window controls. Below the title, there are tabs: General (selected), System and Zones, Non-SMP/E Managed Data Sets, Products, Workflows, and Provider Defined Properties. The 'General' tab displays the following details:

- Name:** zOSV25_GA_OS250015 (with an information bubble icon)
- Universally Unique Identifier (UUID):** 3235d571-9da2-45bf-85be-9cf8886c0d0a (highlighted with a yellow box)
- Description:** (maximum 256 characters, currently 86 characters)
ServerPac: OS250015
This is the z/OS V2.5 GA ServerPac that was used for verification.
- Categories:** Marna_Build_Systems, ZOS-ServerPac

Below these sections is the 'Action Summary' table:

Action	Date and Time (Local)	User
Modified	Dec 8, 2021, 5:46:17 PM	MWALLE
Created	Dec 8, 2021, 5:46:17 PM	MWALLE
Locked		

Installing z/OS 3.1 ServerPac
As -> z/OSMF Portable Software Instance
Using -> z/OSMF Software Management

z/OS 3.1 ServerPac is only provided as a z/OSMF Portable Software Instance

We covered this section more detailed in ‘Upgrade Hints & Tips For z/OS 3.1 Section’

Getting z/OS 3.1 as Portable Software Instance using z/OSMF

Add a new Portable Software Instance in z/OSMF

Specify the files to be downloaded from server – similar jcl as you used to do on receiving from Shopz
(z/OSMF uses SMP/E GIMGTPKG program to download)

The screenshot shows the 'Portable Software Instances' page in the z/OSMF interface. On the left, a context menu is open under the 'Actions' dropdown, with 'Add...' selected. A red arrow points from the 'From Download Server' option in the list below to the 'Add...' button in the menu. The main table lists three instances: one from the z/OSMF system and two from a download server.

	Description Filter	Activity Filter	System Filter	File Location Filter	Category Filter
From z/OSMF System	ServerPac/CICS: OT246095, added on 2020-09-16	AQFT		/u/kurtq/serverpac/CICS-2019-09-16	
From Local Workstation	GA on Dec 6, 2019, received by MARNA. CICS: OS240354	AQFT		/u/kurtq/KurtCICSPSIGaDec62019	
From Download Server					

Installing z/OS 3.1 as Portable Software Instance

Choose your order that you downloaded

Software Management > Deployments > Deployment Checklist > Select Software

Select Software

Select the type of software to deploy:

Software Instance Portable Software Instance

Portable Software Instances

Name Filter	Description Filter	Activity Filter
	Update.	
DU000299-zOSv25	ServerPac: DU000299 Early look at z/OS V2.5 Beta product in a z/OSMF ServerPac. Received 4/15/2021	Being deployed
OS-Try-zOS31 -Name you gave during download to z/OSMF	ServerPACDescription you gave during download	Being deployed

And start configuring as you used to configure in CustomPac Dialog

Software Management

Software Management > Deployments > Deployment Checklist

Deployment Checklist

To deploy software, complete the checklist.

Checklist

Progress	Step	This is available for SMP/E managed PSWI like z/OS
○	Specify the properties for this deployment.	
○	Select the software to deploy.	
○	Select the objective for this deployment.	
○	Check for missing SYSMODs. • View missing SYSMOD reports.	
	Configure this deployment.	
	Define the job settings. z/OSMF creates the deployment summary and jobs. • View the deployment summary.	
	Submit deployment jobs.	
	Perform workflows.	
	Specify the properties for the target software instance.	

Close

Configure everything (see next slide) and submit jobs

Installing z/OS 3.1 as Portable Software Instance

Similar to what you used to do during installation in CustomPac Dialog, you can configure everything and jobs will be submitted using ‘submit deployment job’ step (in previous slide)

There are a lot more capabilities with z/OSMF z/OS installation.
Just some of them are :

- Reports
- SYSMOD Search
- Missing Critical Service

Software Management

Software Management > Deployments > Deployment Checklist > Configure Deployment

Configure Deployment for ZOS31_OS319003_RBP

Model

Select the software to use as a model for configuring the target software instance. z/OSMF uses the data sets, volumes, mount points, catalogs, and SMP/E zones that are associated with the model to prime the corresponding values for the target software instance.

Select the software to use as a model.

The source software

An existing software instance If your existing installed software is not in the list below, use the Add action and follow the wizard steps to define a software instance, and then select it. [Learn more...](#)

Software Instances

Name Filter	System Filter	Description Filter	Activity Filter	Global Zone CSI Filter	Target Zones Filter
ZOS25_GA_OS251807_MJ_2022	AQFT	ServerPac: OS251807		MJTMP25A.C90MJTST.ZOS25GAT.C	TGT25, TGT25A
ZOS31_OS319003_RBP	AQFT	ServerPac: OS319003		ZOS31RBPMBUILD.ZOS31RBP.C	TGT31
zOS24_FVT_ServerPac	AQFT	z/OS V2R4 GA ServerPac		C90BUILD.ZR24FVT.CSI	TGT240
zOS24_GA_ServerPac_CSI	AQFT	Carolyn CSI for model		C90BUILD.ZR24FVT.CSI	TGT240
zOSV25_GA_OS250015	AQFT	ServerPac: OS250015 This is the z/OS V2.5 GA ServerPac that was used for verification.		CKTEMPMC.C90BLDC1.ZR25GA.GL	TGT25, TGT25A

End Of Service Dates For IBM Products

- <http://www.ibm.com/software/support/lifecycle/>
- Use **z/OSMF Software Management** to look at the End of Service report

The screenshot shows the IBM z/OSMF Software Management interface, specifically the Maintenance Reports section. The timeline at the top indicates the end of service dates for different products. A legend on the right shows color-coded boxes for years: 2020 (red), 2021 (orange), and 2022 (yellow). The timeline shows a series of red boxes from March 2020 to November 2021, with a single blue box for February 2020. Below the timeline, a table lists software instances by product, including their names, end of service dates, and URLs.

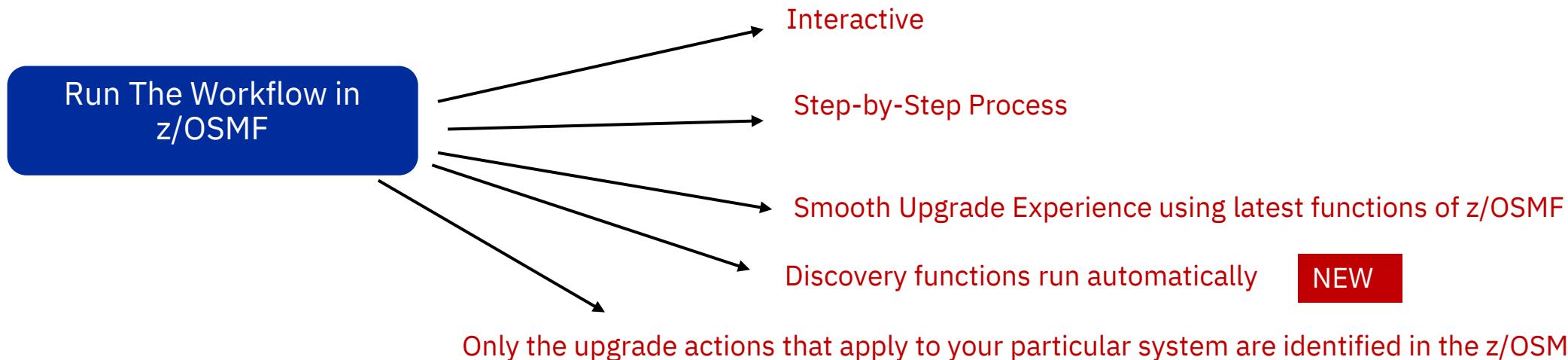
Product / Software Instance Filter	Release Filter	Product ID Filter	Vendor Filter	End of Service Filter	General Availability Filter	System Filter	Description Filter	Additional Product Information Filter
<input type="checkbox"/> CICS Transaction Server for z/OS V5	05.05.00	5655-Y04	IBM	<input checked="" type="checkbox"/> Not Announced	Dec 14, 2018			http://www.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&subtype=s
<input type="checkbox"/> IBM Security zSecure CICS Toolkit	02.03.01	5655-N18	IBM	<input checked="" type="checkbox"/> Not Announced	Sep 14, 2018			http://www.ibm.com/common/ssi/cgi-bin/ssialias?infotype=sm&appname=ShopzSeries&htmlf

How To Get Benefit From z/OSMF z/OS 3.1 Upgrade Workflow ?

- How to get it and WHEN?
- How to use it ?
 - For learning what is new
 - For Planning and getting ready as a project plan
 - Single place to do everything as well from being to end
- Strength of using during upgrade
- What is new in upgrade workflow within z/OS 3.1 Upgrade Workflow

z/OS 3.1 Upgrade Workflow – z/OSMF

Provides the steps for upgrading to z/OS® 3.1 from your currently supported z/OS system



The z/OS 3.1 Upgrade Workflow is available in a choice of two z/OSMF workflows, depending on your upgrade path – from z/OS 2.5 or z/OS 2.4:

- zOS3.1_From_zOS2.5_Upgrade_Workflow.xml
- zOS3.1_From_zOS2.4_Upgrade_Workflow.xml

Now included with z/OS: IBM provides the upgrade workflows as part of the z/OS product.

Updates and fixes for the upgrade workflows are delivered through the standard z/OS service process.

APAR that ships z/OS 3.1 Upgrade Workflows OA63269

→ It is also in **IBM. Coexistence.z/OS.3.1 FIXCAT**

For the z/OS 3.1, IBM z16™, and IBM z15 workflows, the workflow definition files reside in file path **/usr/lpp/bcp/upgrade** after you install the associated PTFs on your z/OS system.

→ Earlier than GA Announcement, through new function website that we mentioned today in our previous session- Subscribe!

z/OS 3.1 Upgrade Workflow

➤ New Capability in z/OS 3.1 Upgrade Workflow Discovery Function

NEW

The z/OS 3.1 Upgrade Workflow includes the following functional enhancements:

- **Runs the SMP/E MISSINGFIX report** to determine whether any fix category (FIXCAT) APARs exist that are applicable and have not yet been installed.
- **Discovers which upgrade-related APARs are installed**, then **automatically skip steps** for which no actions are required if a given APAR is installed.

➤ There are Upgrade Related Health Checks (next slides)

Nice Capability

These Health Checks can be directly invoked by the z/OS 3.1 Upgrade Workflow when using z/OSMF with one Click

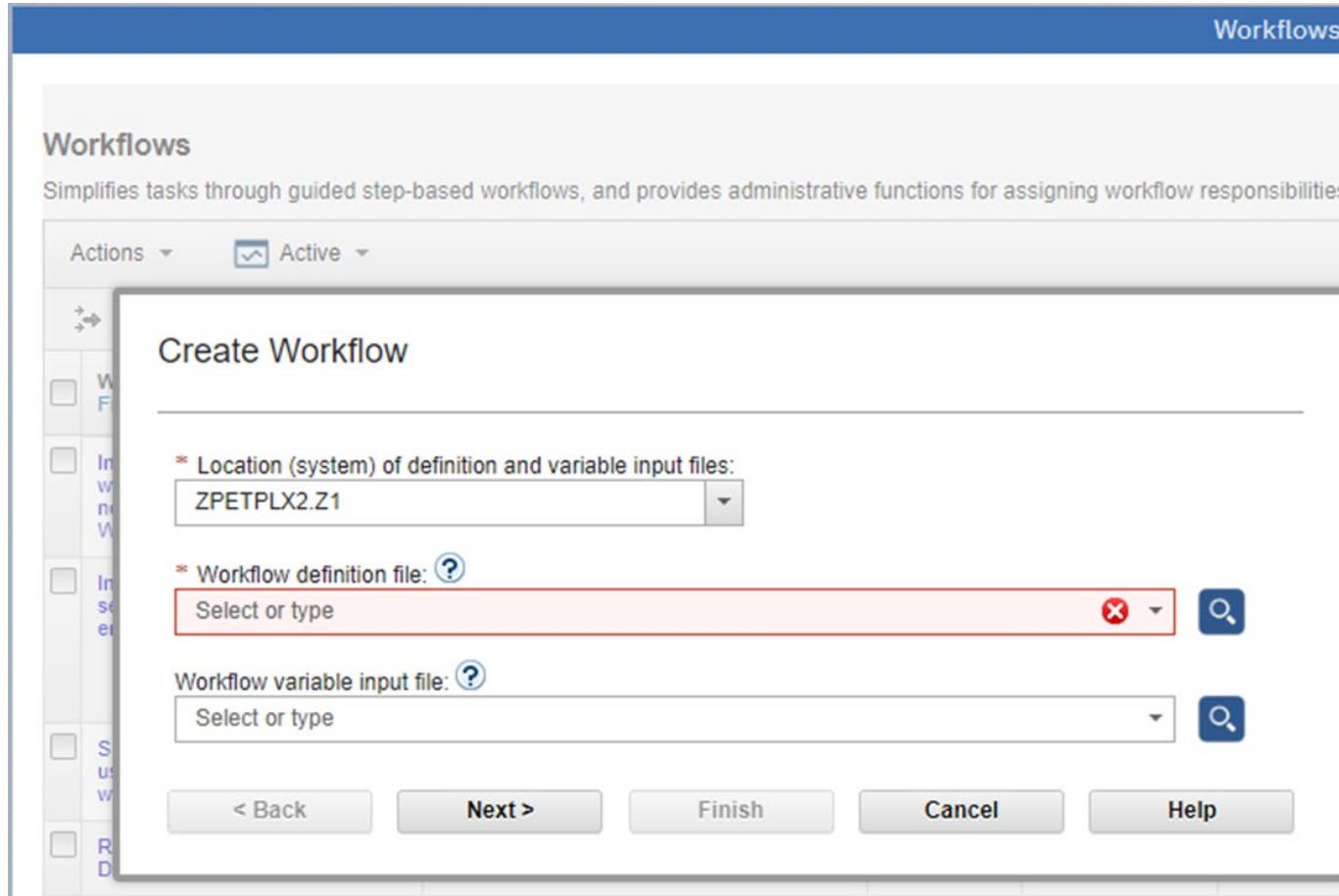
z/OS 3.1 Upgrade Workflow – How to start using ?

1 Get OA63269 and apply

2 Create a new workflow in z/OSMF:

In the z/OSMF Desktop, open the Workflows task.

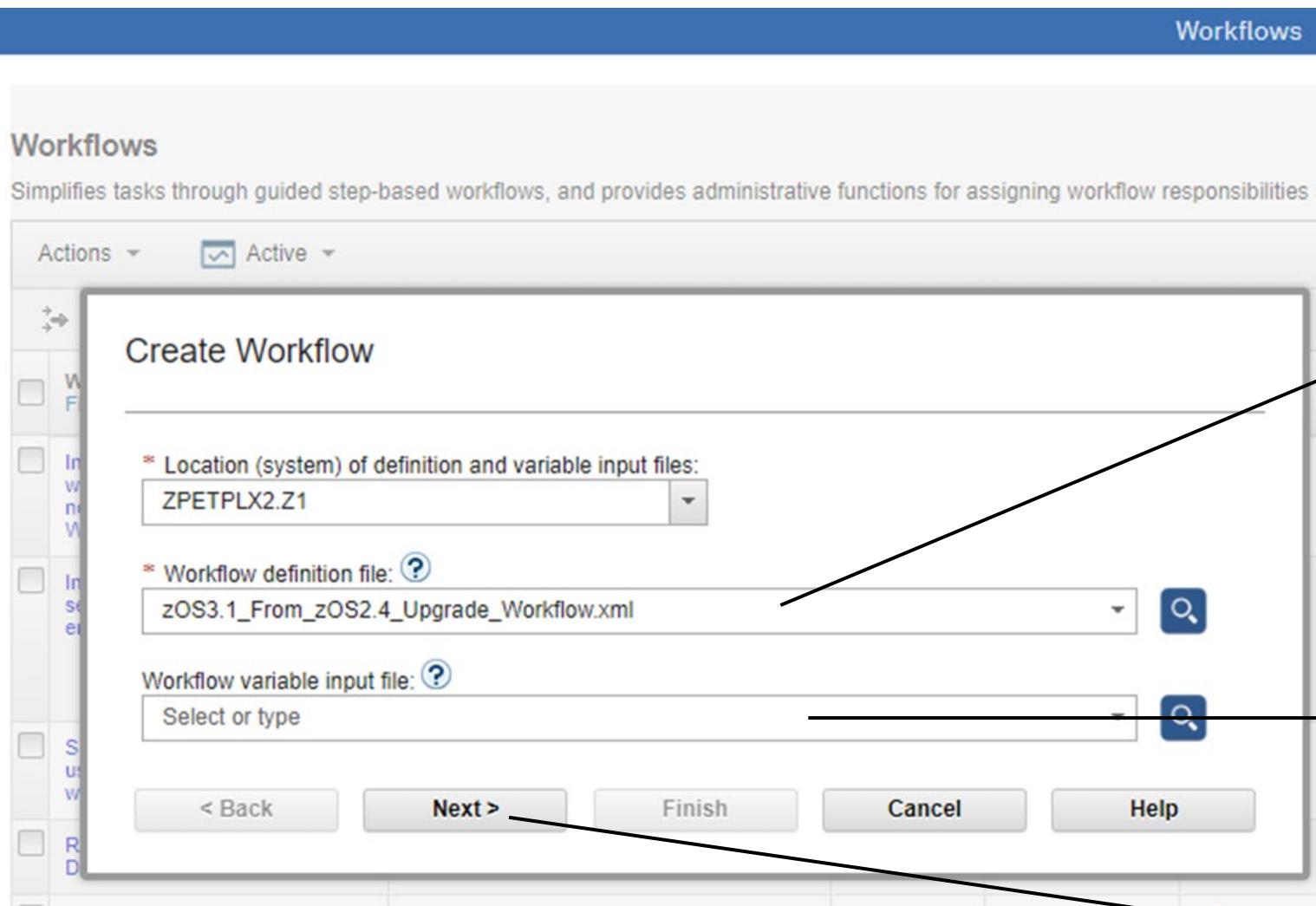
From the Actions menu, select **Create Workflow**. The Create Workflow dialog is displayed



Your user ID requires at least READ authority to the workflow XML files and the related .txt files

z/OS 3.1 Upgrade Workflow – How to start using ?

- 3 Write down the name of the workflow inside Workflow definition file box



APAR that ships z/OS 3.1 Upgrade Workflows is OA63269 and ptf puts workflow xml file in your zFS directory

zOS3.1_From_zOS2.5_Upgrade_Workflow.xml

Leave this area empty

Click Next

z/OS 3.1 Upgrade Workflow – How to start using ?

4

Create Workflow

Location (system) of definition and variable input files:
ZPETPLX2.Z1

Workflow definition file:
/usr/lpp/bcp/upgrade/zOS_3.1_from_V2.5_Upgrade_Workflow.xml

Description:
zOS 3.1 Upgrade Workflow from zOS V2R5

Vendor: IBM Version: 1.0 Is Callable: [?](#)
Cannot be called by another workflow

* Workflow name:

zOS 3.1 Upgrade Workflow from zOS V2R5 - Workflow_1

* Owner user ID: meral Archive SAF ID: [?](#) * System (where workflow steps will be performed):

meral ZPETPLX2.Z1

Comments:

New instance of
zOS_3.1_from_V2.5_Upgrade_Workflow for Meral to demo

* Access([Learn More](#)):

Public

Save jobs output

Jobs output directory: [?](#)

/u/meral

Open workflow on finish Assign all steps to owner user ID Delete workflow on completion

< Back

Next >

Finish

Cancel

Help

Complete Fields

- System
- Workflow Name
- Owner UserID
- Comments
- Access Type

Select Open Workflow in Finish
Click Finish .
Done!
Start using / checking it !

z/OSMF Updates – MANY!

Enhancements/New Features	Since When & Updates
z/OSMF Files and Datasets Network Compression	2.4CD
z/OSMF Request Queueing	2.4CD
z/OSMF CEA Increased TSO Sessions	2.4CD
z/OSMF Improved configuration	2.4CD
z/OSMF Granular Configuration	2.4CD
z/OSMF Start Up Improvements	2.4CD
z/OSMF Updated Liberty	2.4CD
z/OSMF UI Type Ahead Search	2.4CD
z/OSMF Desktop Create Data Set	2.4CD
z/OSMF Desktop File and Data Sets Hot-links	2.4CD
z/OSMF Change Password API	2.4CD
z/OSMF ISPF Application Global Settings	2.4CD
z/OSMF Incident Log Diagnostic Viewing	2.4CD
IBM z/OSMF support for JSON Web Token	2.4CD
z/OSMF Remote REST APIs	2.4CD

z/OSMF Updates – MANY!

Enhancements/New Features	Since When & Updates
z/OSMF Dynamic Parmlib IZUPRMxx Update	2.4CD
REST Files & Dataset Update -Allocate Like another dataset, handling carriage returns automatically	2.4CD
REST Jobs - Spool Search options, improved spool codepage support, option to retrieve active jobs, return additional data	2.4CD
z/OSMF REST API for SYSLOG	2.5CD 1Q2022
z/OSMF REST API for System Symbols	2.5CD 1Q2022
z/OSMF Systems Task Improvements	2.5CD 2Q2022
z/OSMF Incident Log Support for HTTPs	2.5CD 4Q2021
z/OSMF Upload & Download files on Desktop	2.5CD 4Q2022
z/OSMF Browser Support for V2.5	2.5GA
z/OSMF Data Set and File Compare	2.5CD 1Q2022
REST Jobs Update -Remove dependency on CIM and CEA and replace with JES2	2.5CD 2Q2022
REST Jobs Update - Additional notification points when a job is submitted and when a job begins execution	2.5CD 4Q2022
Storage Management REST API -New APIs to retrieve data class or storage class available	2.5CD 4Q2021
Storage Management REST API -New API to add a volume to a storage group	2.5CD 4Q2022
REST Files & Dataset Update -Support for international characters in a data set or file name	2.5CD 4Q2021
REST Files & Dataset Update -Support for adding and removing USS symbolic links	2.5CD 2Q2022

z/OSMF Updates – MANY!

Enhancements/New Features	Since When & Updates
Workflow Update -Policy-based archive workflow management	2.5CD 1Q2022
Workflow Update - Signed workflow steps in support of running as another user	2.5CD 1Q2022
Workflow Update - Catch-all workflow archive policy	2.5CD 1Q2022
z/OSMF Usage - Ability to perform data set and USS file operations directly from the desktop	2.5CD -4Q2021
z/OSMF Usage -Copy, Rename, Change File Permissions, Update Attributes	2.5CD -4Q2021
Many new REST APIs related to several components of z/OS	z/OS 3.1 and nearly all CDs
Discovery Capability in z/OS 3.1 Upgrade Workflow	3.1
Upgrade Workflow Change (Flow in sequence of upgrade actions instead of component base)	3.1
z/OSMF Sysplex Management – CF Sizing Capability (CF Sizer)	3.1

Summary Of z/OS 3.1 and CD Updates

Reduce learning curve and improve efficiency

- Modernized z/OS daily operations, start with data set, USS file and job operations
- NEW plugin—AI Control Interface for z/OS
- Higher efficiency and less error-prone for Sysplex CFRM policy editing
- Simplify security configuration and trouble shooting
- Incident Log supports PDUU with HTTPS
- Systems task supports validating connection status

Easy to drive z/OS operations

- Enhanced Storage Management REST API
- NEW REST API for retrieving OPERLOG/SYSLOG messages
- NEW REST API for CFRM Policy operations
- NEW REST API for SCA based Security Validation and Security Provisioning
- NEW REST API for retrieving runtime value of z/OS Symbols
- Enhanced REST data set and USS file API and published tuning guide
- Enhanced REST Jobs API
- Unleash z/OSMF capability to Ansible via Ansible collection “ibm_zosmf”

Enhanced Workflow engine for persisting, streamline and collaborating z/OS tasks

- Workflow supports signing steps and run steps with different user id
- Policy based Workflow Archive
- Flexible cross sysplex communication by supporting basic authentication
- Improved workflow UX
- Improved workflow management
- Supports polling REST API workflow step
- Enhanced Workflow Editor

Improved z/OSMF management

- Verify security setup of z/OSMF nucleus with job or start command
- WLM CIM dependency removal
- NEW z/OSMF Configuration Trial

THANK YOU!

BACKUP SLIDES



[z/OSMF Files and Datasets Network Compression \(2.4CD\)](#)

- Support is added to compress content when retrieving large amounts of data. This can speed up the REST files and Datasets API when transferring over long or slow links.

[z/OSMF Request Queueing \(2.4CD\)](#)

- z/OSMF REST Data Set and File service is enhanced to queue concurrent requests from the same user when the number of Time Sharing Option (TSO) address spaces are exhausted. This can improve the processing when a large number of requests are sent to z/OSMF.

[z/OSMF CEA Increased TSO Sessions \(2.4CD\)](#)

- z/OS CEA is updated to increase the maximum TSO sessions allowed per user from 10 to 99.

[z/OSMF Improved configuration \(2.4CD\)](#)

- Start up performance improvements when there are no changes to PARMLIB

[z/OSMF Granular Configuration \(2.4CD\)](#)

- z/OSMF is enhanced to provide a simple UI to enable or disable most z/OSMF services.
- Simplified settings deployment with a simple JSON file

[z/OSMF Start Up Improvements \(2.4CD\)](#)

- z/OSMF startup time and resource consumption during startup is improved. In laboratory measurements of a small z15 LPAR, the startup time improved by 30% elapsed time and 48% CPU time. Results depend on a client's configuration.



[z/OSMF Updated Liberty \(2.4CD\)](#)

- z/OSMF now uses the default path in embedded liberty

[z/OSMF UI Type Ahead Search \(2.4CD 4Q2020\)](#)

- The z/OSMF desktop utilities are enhanced. The search function is enhanced to provide typeahead capability for searching data sets, UNIX System Services (USS) files, and USS directories.

[z/OSMF Desktop Create Data Set \(2.4CD\)](#)

- Adds the function of “create data set” into the z/OSMF desktop. Clients can create a new physical sequential or partitioned data set based on an existing data set, a predefined template, or fully specified attributes.

[z/OSMF Desktop File and Data Sets Hot-links \(2.4CD\)](#)

- The z/OSMF desktop editor is enhanced to highlight data set names and zFS file paths as hot-linkable URLs. A user can open the referenced data set or a zFS file from the z/OSMF desktop editor simply by clicking on the link.

[z/OSMF Change Password API \(2.4CD\)](#)

- z/OSMF adds a RESTAPI to support changing a user's z/OS password or passphrase.



[z/OSMF ISPF Application Global Settings \(2.4CD\)](#)

- The z/OSMF ISPF application, provides system-wide defaults for the ISPF application settings rather than requiring each user to configure those values.
- The setting values of the z/OSMF ISPF application also can be captured in a file and used by an administrator to set up other systems' global configurations.

[z/OSMF Incident Log Diagnostic Viewing \(2.4CD\)](#)

- The z/OSMF Incident Log application adds support for viewing diagnostic data using the z/OSMF desktop editor application. This standardizes the user experience using a more native browser look and feel. Previously, viewing the diagnostic data was performed only using the z/OSMF ISPF application.

[IBM z/OSMF support for JSON Web Token \(2.4CD\)](#)

- z/OSMF supports JSON Web Token (JWT) by returning JWT token during authentication and accepting JWT token for authorization of z/OSMF services.

[z/OSMF Remote REST APIs \(2.4CD\)](#)

- REST data set and file service is enhanced to support accessing data sets and files in remote systems.

[z/OSMF Dynamic Parmlib IZUPRMxx Update \(2.4CD\)](#)

- New z/OS operator commands (SETIZU and SET IZU) are added for z/OSMF to dynamically change z/OSMF parmlib options without requiring an IPL or in some cases a full server restart.

[z/OSMF REST API for SYSLOG \(CD 1Q2022\)](#)

Retrieves SYSLOG entries based on timestamps.

[z/OSMF REST API for System Symbols \(CD 1Q2022\)](#)

Retrieves current value of z/OS system symbols.

[z/OSMF Systems Task Improvements \(CD 2Q2022\)](#)

Fast validation of connection status for managed systems.

[z/OSMF Incident Log Support for HTTPs \(CD 4Q2021\)](#)

New option on PDUU to transfer data over HTTPs.

[z/OSMF Upload & Download files on Desktop \(CD 4Q2022\)](#)

- Users can upload or download a sequential data set, PDSE member, or zFS file between z/OS and their workstation with a few clicks or drag and drop
- Available with PTFs for APAR PH 44157

[z/OSMF Browser Support for V2.5](#)

- For z/OS 2.5 z/OSMF now formally supports Chrome, Firefox, and Edge. Other browsers should work such as Safari.

[z/OSMF Data Set and File Compare \(CD 1Q2022\)](#)

- Enhanced desktop editor to compare two files and visualize the differences.

[z/OSMF REST JOBS Updates](#)

Spool Search options, improved spool codepage support, option to retrieve active jobs, return additional data [\(2.4CD\)](#)

Remove dependency on CIM and CEA and replace with JES2 [\(CD 2Q2022\)](#)

Additional notification points when a job is submitted and when a job begins execution [\(CD 4Q2022\)](#)

[z/OSMF Storage Management REST APIs](#)

New APIs to retrieve data class or storage class available [\(CD 4Q2021\)](#)

New API to add a volume to a storage group [\(CD 4Q2022\)](#)

[z/OSMF REST files and datasets updates](#)

Allocate Like another dataset, handling carriage returns automatically [\(2.4CD\)](#)

Support for international characters in a data set or file name [\(CD 4Q2021\)](#)

Support for adding and removing USS symbolic links [\(CD 2Q2022\)](#)

[z/OSMF Workflow updates](#)

Policy-based archive workflow management [\(CD 1Q2022\)](#)

Signed workflow steps in support of running as another user

Catch-all workflow archive policy

[z/OSMF Productivity Enhancements](#)[\(CD 4Q2021\)](#)

Ability to perform data set and USS file operations directly from the desktop

Copy, Rename, Change File Permissions, Update Attributes

z/OS Cloud Provisioning and Management (CP&M)

[z/OS System Provisioning](#)

Problem : z/OS system provisioning in a single system or sysplex environment is complex, cumbersome and time consuming. Frequently z/OS systems are defined using configuration approaches that no longer exploit current system capabilities

Solution : z/OS Cloud Provisioning and Management (CP&M) is enhanced to provide capability to provision an entire new z/OS system. Entry level system programmers can provision a new z/OS system in less than one hour using Cloud Provisioning and Management automation and a template provided by an experienced system programmer.

A z/OS System is configured from scratch using an IBM provided best practices workflow. Experienced system programmers can customize a small set of environment specific properties and provide them as a template in the CP&M Catalog.

One or more z/OS Systems can be provisioned on pre-defined LPARs identified by the system programmer in the CP&M LPAR Pool.

Initial capability is provided to provision a z/OS with a “MONOPLEX” configuration.

New capability to configure NJE, SMS, ICSF, RACF, Health Checker and Policy Agent ([CD 2Q2022](#))

z/OS Cloud Provisioning and Management (CP&M)

[z/OS Cloud Provisioning and Management](#)

Cloud Provisioning and management is enhanced to support provisioning of a new z/OS system.

- The Resource Management task now includes actions for creating, viewing, and modifying an LPAR resource pool.
- LPAR resource pool is enhanced to support SMS and NJE configuration for z/OS instance([CD 2Q2022](#))
- Shared resource pool support for the z/OS provisioning service that allows one resource pool to be shared across multiple z/OS provisioning templates. ([CD 2Q2022](#))
- Automatic creation of a default shared resource pool for use during provisioning in "default" domain([CD 2Q2022](#))

Cloud provisioning and management UI is enhanced to provide improved user experience. ([CD 2Q2022](#))

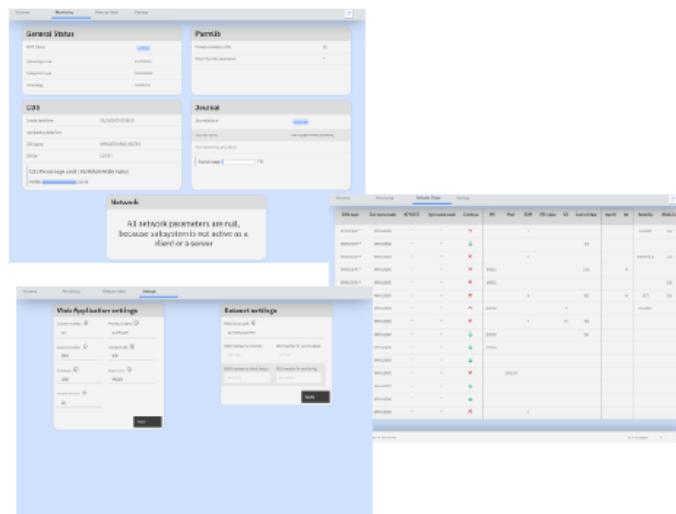
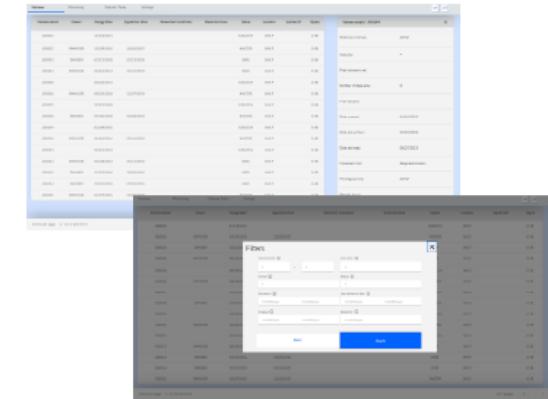
- Users can now see template and resource pool associations. Users can now see software instance and resource pool associations.
- User can easily access public variables of provisioned instance with a single click.

Administrators can archive history captured for various actions performed against software templates and resource pools. ([CD2Q2022](#))

The template approval process is enhanced to support RACF group and any user in RACF group can approve a RunAsUserstep. ([CD2Q2022](#))

For more information, see the [Cloud Provisioning and Management content solution](#) (<https://www.ibm.com/support/z-content-solutions/cloud-provisioning/>).

z/OSMF DFRMM Plug-in



DFSMSrmm z/OSMF plug-in enhancements

- DFSMSrmm (RMM) supports a modern graphical user interface via a z/OSMF plugin in addition to the existing TSO and ISPF dialog support.
- Customizable RMM z/OSMF plug-in displays
 - Allow the table columns within Defaults Table view to toggle on/off and settings to be stored with the user profile providing improved usability.
- **z/OSMF plug-in enhancements to provide additional features to support the RMM Defaults Table (CD)**
 - Easily view defaults table entries that are applicable to an existing data set or to a specified set of conditions in order to ensure the policies are set up as expected.

DFSMSrmm plug-in for z/OSMF (CD)

- In The RMM plug-in for z/OSMF has been improved to view data sets defined to RMM and the related data set information and export this data to a CSV format file. 2.4CD 3Q2020
- New support for RMM defaults table to filter and view entries with PTF for APAR OA62705 (**CD 3Q2022**)



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