



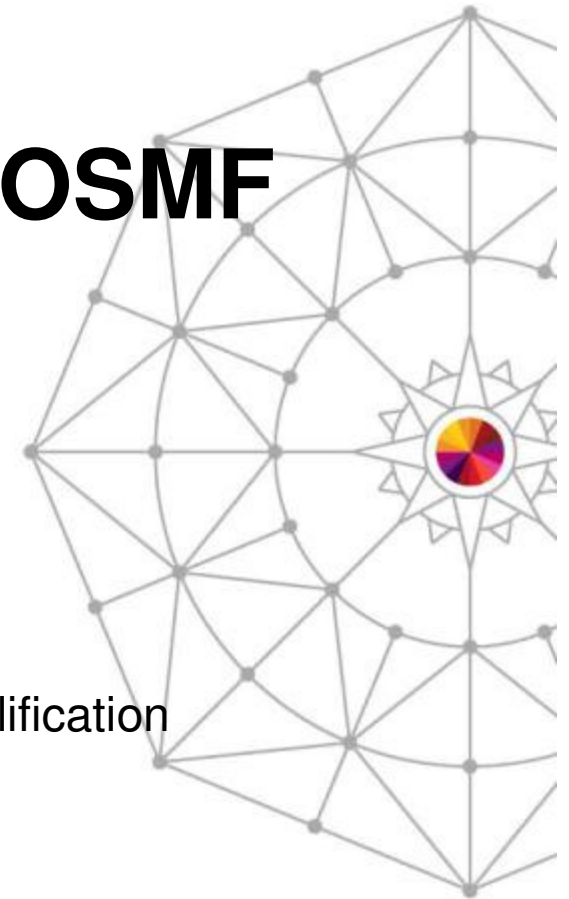
# The new and improved z/OSMF 2.1.... Session 15115

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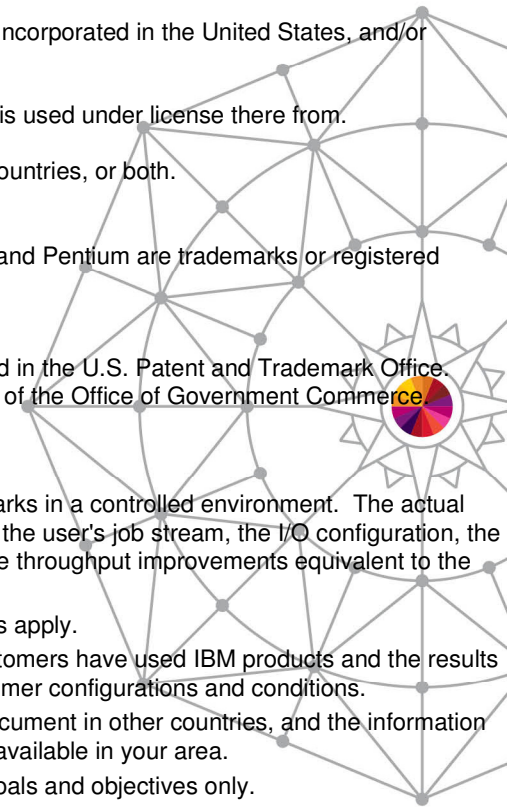
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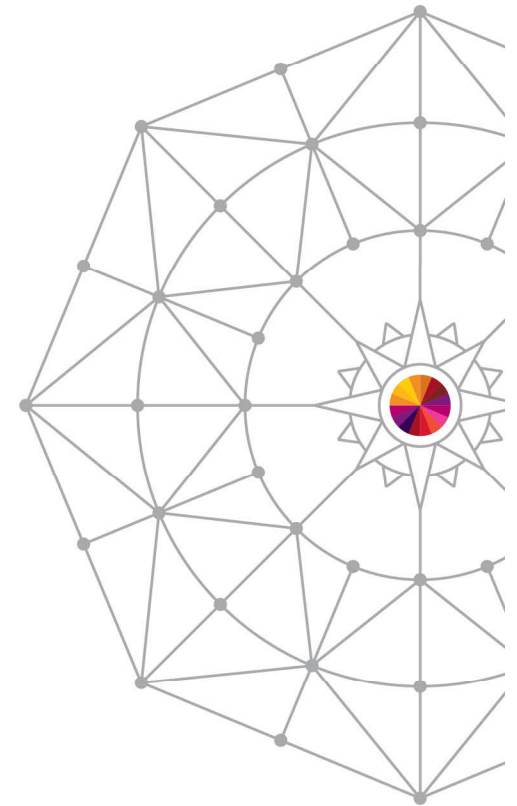
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## Agenda

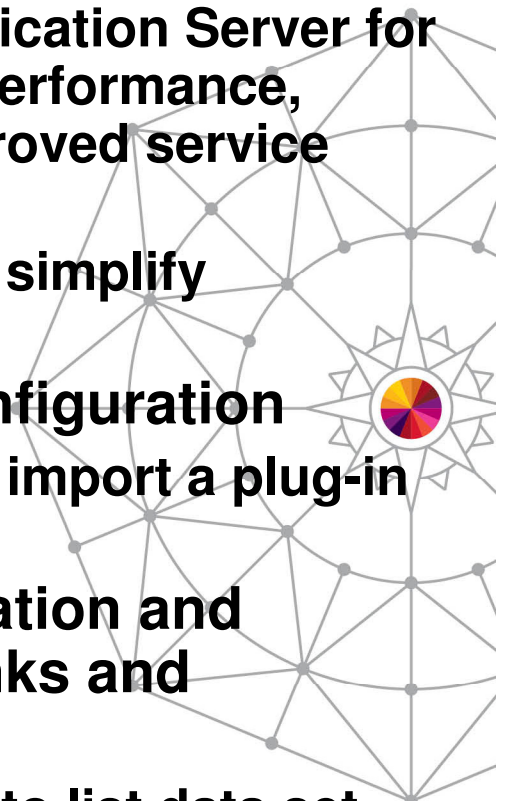
- z/OSMF V2.1 highlights
- New functions
  - z/OSMF Workflow
  - Support for External Applications
    - Exploitation by SDSF
  - New Dataset and files REST Api
- Enhancements to existing plugins
- Other enhancements
  - JOBS REST Apis
- Looking ahead



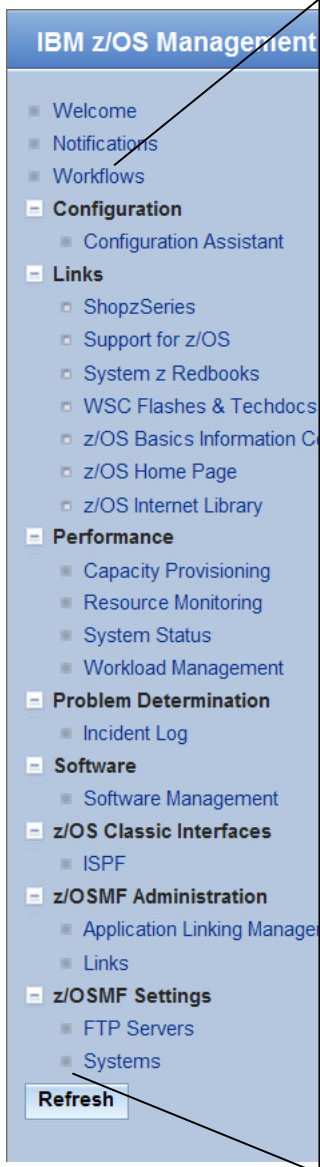
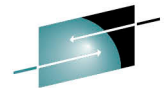
# z/OSMF V2.1 highlights



- **z/OSMF 2.1 delivered in 3Q2013 with new enhancements announced in Feb 2014.**
- **z/OSMF V2.1 is rebased to use the WebSphere Application Server for z/OS V8.5. Liberty profile. This provides improved performance, faster startup, reduced resource requirements, improved service update process and simplified configuration.**
- **A new z/OSMF Workflow Application is delivered to simplify performing tasks on z/OS.**
  - **Workflow exploitation for z/OSMF plugin configuration**
- **New support for external applications to create and import a plug-in into z/OSMF \*\***
  - **New Import Manager task to support registration and management of external applications and links and exploitation by SDSF (APAR 86303)**
- **New RESTful API allows an HTTP client application to list data set names and z/OS UNIX directories or files.\*\***
- **Enhancements to plugins and Jobs Rest API.**

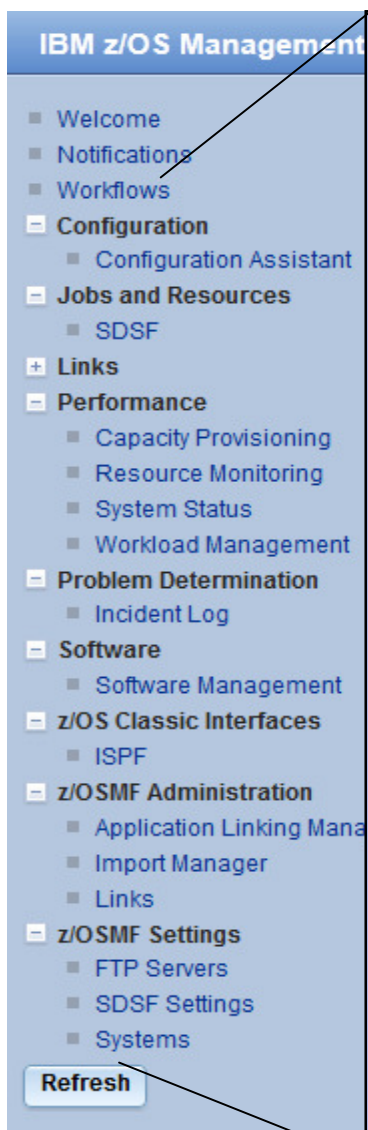
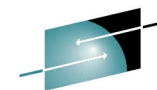


# z/OSMF 2.1



- **Notifications and Workflow \*(R2.1)**
- **Configuration** category
  - **Configuration Assistant for z/OS Communication Server** application
    - Simplified configuration and setup of TCP/IP policy-based networking functions
- **Links** category
  - Links to resources - provides common launch point for accessing resources beyond z/OSMF
- **Performance** category
  - **Capacity Provisioning (R13) (updated)** manage connections to CPMs, view reports for domain status, active configuration and active policy.
  - **Resource Monitoring, System Status** - provide integrated performance monitoring of customer's enterprise
  - **Workload Manager Policy Editor** application
    - Facilitate the creation and editing of WLM service definitions, installation of WLM service definitions, and activation of WLM service policies
- **Problem Determination** category
  - **Incident Log** : provide a consolidated list of SVC Dump related problems, along with details and diagnostic data captured with each incident; facilitate sending the data for further diagnostics.
- **Software** category (R13) (updated)
  - **Management**: deployment of installed software simpler and safer, manage service levels and product levels
- **z/OS classic Interface** category (R13)
  - **ISPF Task** integrate existing ISPF into z/OSMF to enable tasks from single interface and ability to launch to ISPF functions directly
- **z/OSMF Administration** category
  - z/OSMF authorization services for administrator:- dynamically add links to non-z/OSMF resources; application linking manager(R13)
- **z/OSMF Settings** category (New!)
  - Manage FTP destinations and systems

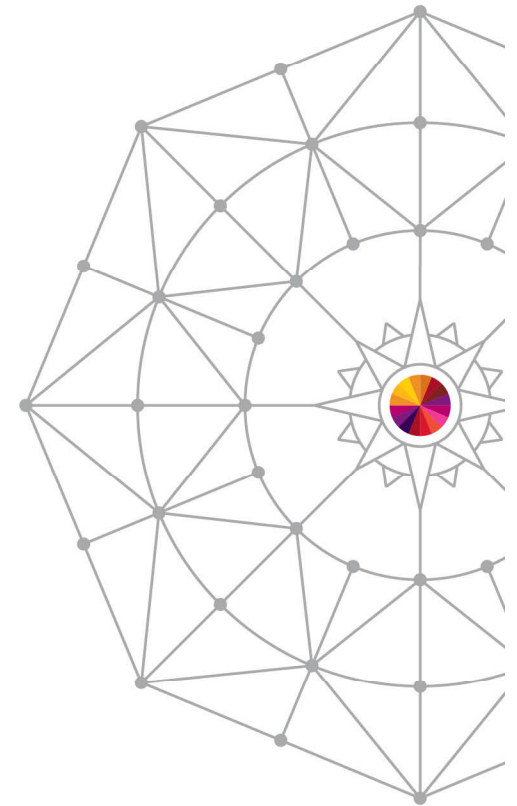
# z/OSMF 2.1 (including new enhancements)\*\*



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    - Simplified configuration and setup of TCP/IP policy-based networking functions
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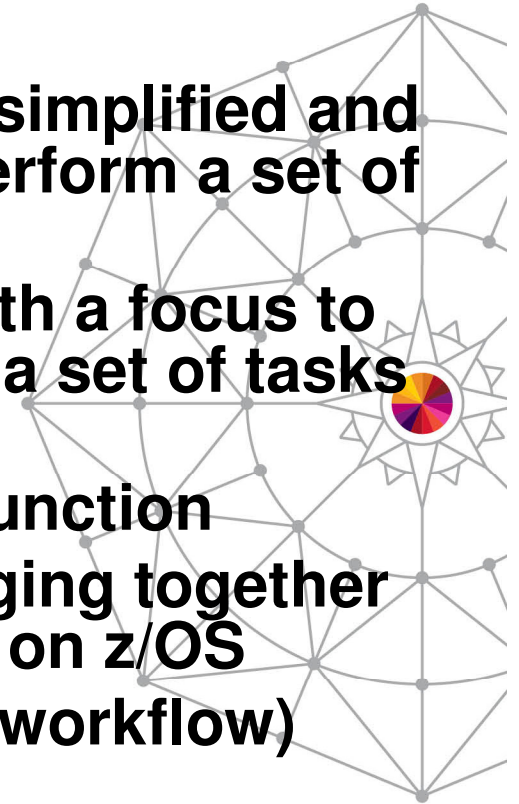
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# z/OSMF Workflow



- **Problem being solved:**
  - **Configuring a new product or component on z/OS is complex and a pain point for end users**
  - **There is a requirement for a consistent, simplified and less error prone way to configure and perform a set of tasks on z/OS**
- **z/OSMF provides a workflow framework with a focus to simplify configuration on z/OS or perform a set of tasks on z/OS**
  - **z/OSMF V2.1 delivers on stage 1 of the function**
- **z/OSMF workflow function will enable bringing together the end-to-end steps for performing a task on z/OS**
  - **Provide an programmatic to-do list (aka workflow)**
  - **Shorten the time to value**
- **Note: the workflow framework will be generic, although the initial focus is on configuration tasks.**





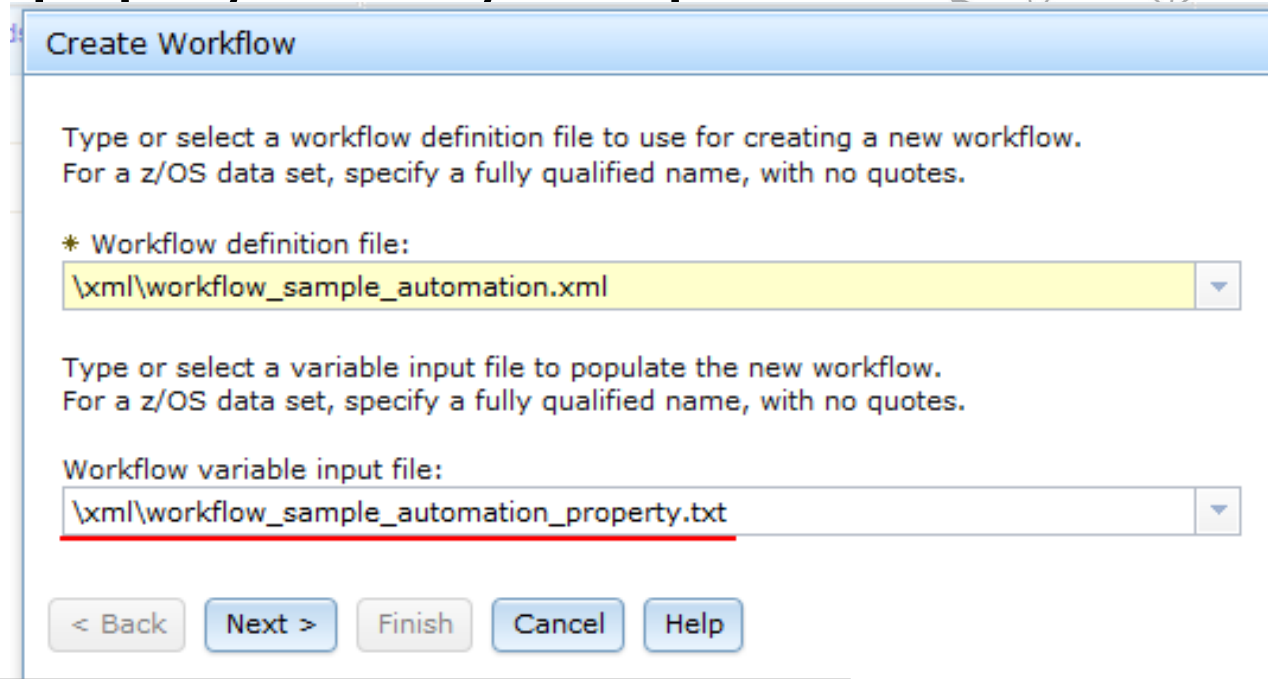
# z/OSMF V2.1 Workflows

- **Workflows will provide a guided flow through end-end steps required to accomplish a task**
  - **XML metadata file contains steps and details.**
  - **Steps may be manual or invoke wizards**
    - **Wizards to update and submit jobs, execute shell scripts and REXX execs**
    - **User can provide variable input manually or via an input file (new)\*\***
  - **Steps may define dependency on other steps**
  - **Steps go through various stages until complete**
    - **The stages may be unassigned, assigned, accepted, not ready, ready, in progress, complete, complete (override), skipped**
  - **Steps may be performed automatically if they meet criteria (new)\*\***
  - **History is maintained of all activities in the workflow task**
- **This application will route tasks among a number of defined users or people assigned to specific roles, such as "system programmer" and "security administrator," to complete setup tasks.**
- **z/OSMF user can be notified of assigned steps via Notification task**

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

## Create Workflow with Input variables in a property file

- The user must create an instance of the workflow to perform the steps in a workflow.
- When creating a workflow instance, in addition to the workflow XML file name, the user can specify a property file which includes all variables, instead of having to input one by one manually. This will greatly improve working efficiency.
- The content of a property file is key value pair.



Create Workflow

Type or select a workflow definition file to use for creating a new workflow.  
For a z/OS data set, specify a fully qualified name, with no quotes.

\* Workflow definition file:

Type or select a variable input file to populate the new workflow.  
For a z/OS data set, specify a fully qualified name, with no quotes.

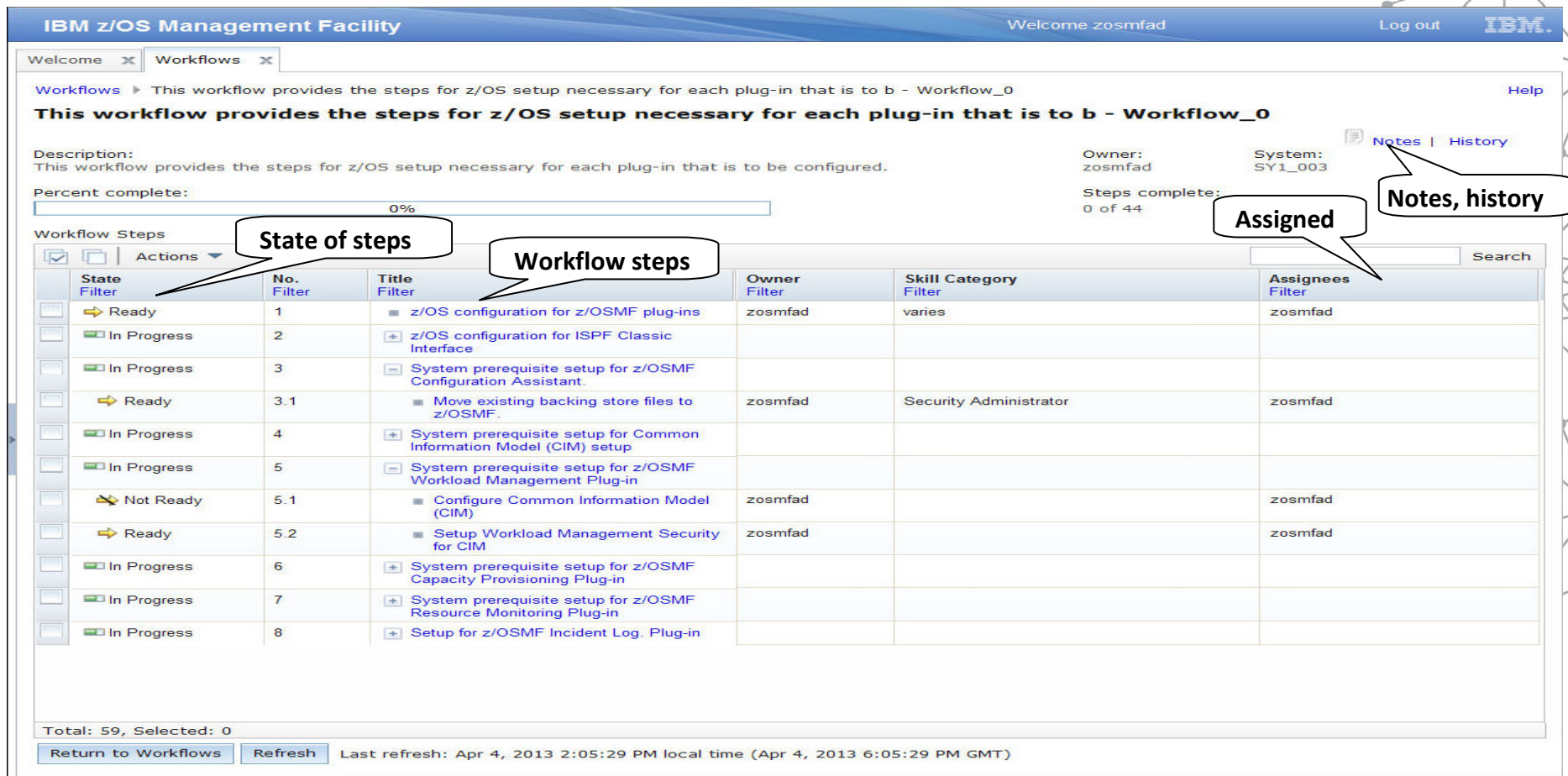
Workflow variable input file:

< Back   Next >   Finish   Cancel   Help

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# z/OSMF configuration - Workflow example

- The steps in the workflow XML are dynamically loaded into the z/OSMF Workflows task. The end user performs these steps and wizards manually or automatically to complete the task on z/OS.



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

Welcome x Workflows x

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

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

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

Owner: zosmfad System: SY1\_003

Steps complete: 0 of 44

Notes | History

Percent complete: 0%

Workflow Steps

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

Total: 59, Selected: 0

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

# z/OSMF Workflow JCL wizard

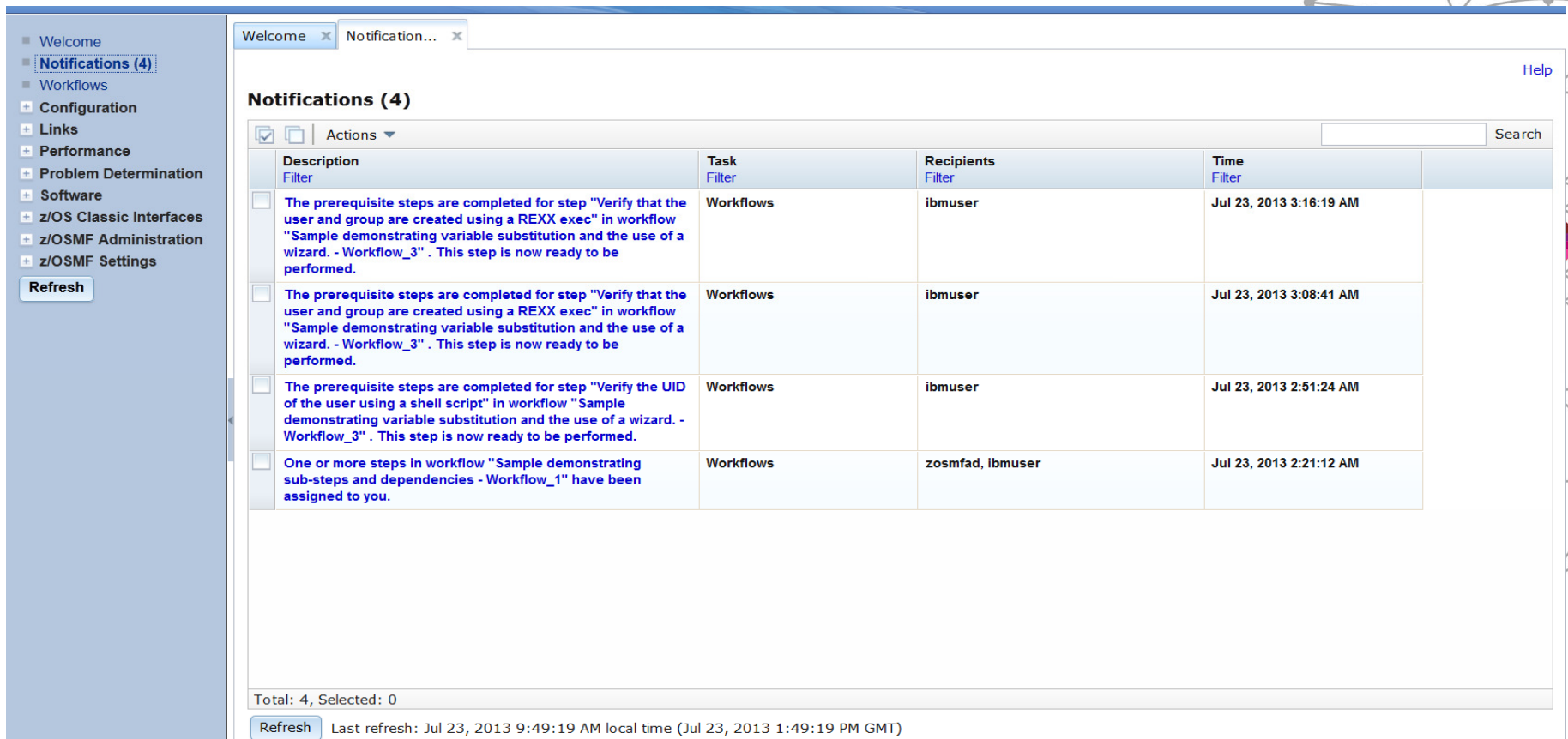


- The JCL template provided with the workflow is updated with the current variable values and can also be modified and saved.
- The JCL can run automatically if eligible and all input requirements are met\*\*.
  - The workflow XML must state that the step can run automatically.

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Notifications

- When a z/OSMF user logs in, they can see if there is any notification for them
- New notifications that have not been 'read' are included in the count for a quick view.
- Notification are sent when a workflow step is assigned or when a step is ready after the dependency is satisfied



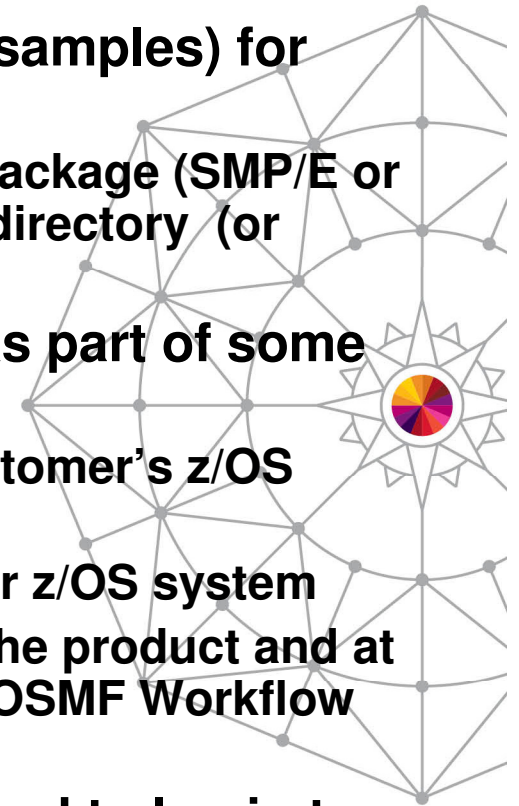
The screenshot shows the z/OSMF interface with a sidebar on the left containing navigation options like 'Welcome', 'Notifications (4)', 'Workflows', 'Configuration', 'Links', 'Performance', 'Problem Determination', 'Software', 'z/OS Classic Interfaces', 'z/OSMF Administration', and 'z/OSMF Settings'. A 'Refresh' button is also present. The main content area displays a 'Notifications (4)' table with columns for Description, Task, Recipients, and Time. Below the table, it shows 'Total: 4, Selected: 0' and a 'Refresh' button with the last refresh time: 'Jul 23, 2013 9:49:19 AM local time (Jul 23, 2013 1:49:19 PM GMT)'.

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

# Use Case scenario



- A product decides to participate in z/OSMF workflow
- The product owner defines the metadata file with steps required by their product
  - z/OSMF will define and publish the schema (and samples) for product owners to code to
- The product delivers its metadata file with their product package (SMP/E or non SMP/E) and documents its location in their program directory (or equivalent)
  - It is possible that the metadata file is generated as part of some other configuration steps for that product.
- The product is installed (SMP/E or non SMP/E) on the customer's z/OS system
- The customer now wants to configure the product on their z/OS system
- They will follow the product instructions for configuring the product and at some point in the instructions it will instruct to use the z/OSMF Workflow task to configure the z/OS artifacts
  - The customer/system programmer would then need to log in to z/OSMF and open the 'Workflow task'



# Use case scenario



- The system programmer logs on to z/OSMF and loads the workflow metadata file for the unit to be configured.
- In the new Workflow task, the user can define the unit to be configured by identifying the metadata file via Action: **CREATE** in this new task
  - Prompts the user to provide the fully qualified location
  - Reads in the metadata file(s). Once loaded, it is ready to be used. The original metadata file(s) is no longer used. If the product provides an update to the metadata file(s), then the z/OSMF user would need to have the Workflow task re-import it to pick up the changes
- The system programmer can then start by opening a workflow
- This will start a workflow instance that will allow the user to view/assign/perform all the steps necessary to configure the given product



# Workflow - Benefit

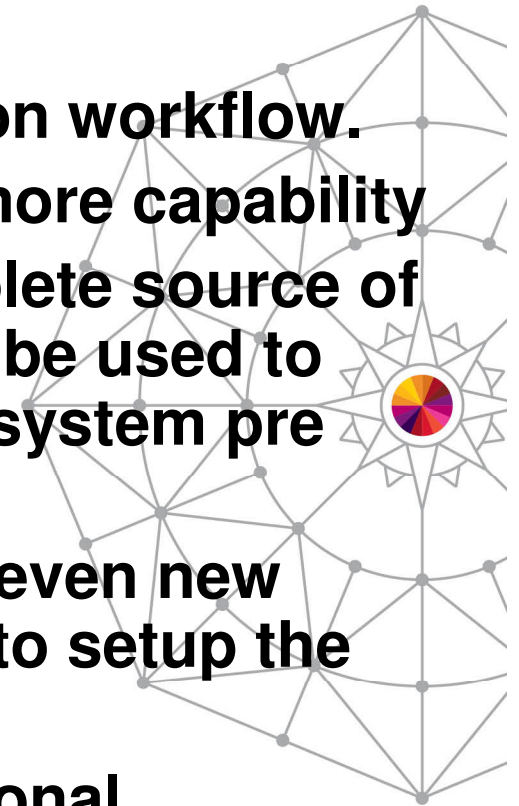
Example Task	<b>Without</b> z/OSMF Workflow	<b>With</b> z/OSMF Workflow
<b>Product &amp; System Configuration</b>	Manual process, users need to refer document, checklist, execute JCL/REXX/Script, verify the output. Frequent window switching is <b>error prone</b> .	Predefined steps, <b>integrated environment</b> for JCL/REXX/Script edit, execution and display make the configuration convenient.
<b>Cooperation &amp; Management</b>	For complicated, multi-person involved work, <b>lack of overall view &amp; management</b> .	Unified process & view for system / storage/ security /middleware owners Provides <b>convenient job assignment and progress tracking</b>
<b>Skills and risks</b>	<b>Need in-depth knowledge</b> of the product and local environment, customized tips & documents are scattered, <b>difficult to maintain</b>	The workflow wizard & instructions make the <b>configuration easier</b> . Metadata file is in z/OS server, <b>easy to maintain</b> .



# z/OSMF workflow exploitation



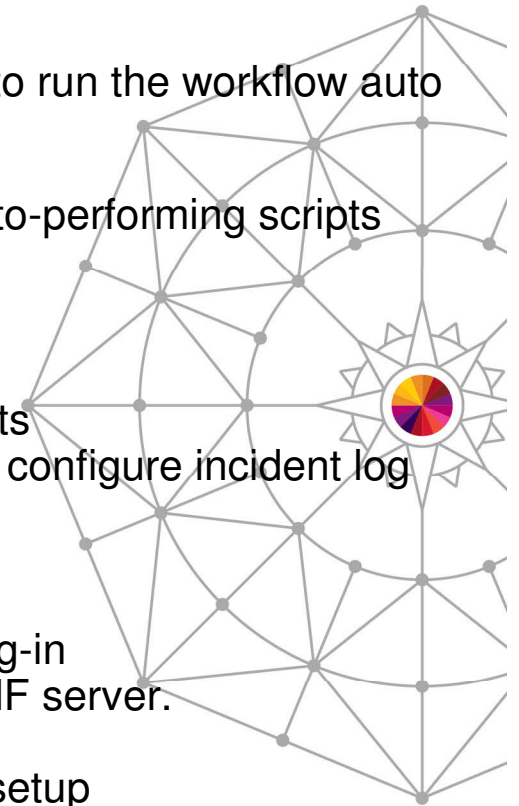
- **z/OSMF exploits the z/OSMF workflow for z/OSMF plugin configuration**
  - **V2R1 delivers stage 1 of the configuration workflow.**
  - **Intent is to enhance over time and add more capability**
  - **The configuration guide is still the complete source of information, although the workflow may be used to manage the steps required to setup the system pre requisites at a high level.**
- **z/OSMF Configuration Assistant delivers seven new workflows, and uses the Workflow engine to setup the policy agent and other daemons.**
- **Samples are provided to help create additional workflows**



# Workflow – z/OSMF Plug-in Configuration (1)\*\*



- z/OSMF provides a **workflow sample** (izu.config.setup.xml) to simplify z/OS customization for each plug-in. Following 3 group of steps are combined to complete the auto discovery and configuration of incident log related setup.
  - “Highlights and pre-reqs of Config Workflow”
    - This workflow is used describe must-be-known items in order to run the workflow auto performing steps.
    - The dependency of priced software are addressed
    - Authorities and access level to z/OS resources required by auto-performing scripts are addressed
  - “Incident Log plug-in”
    - these are the existing workflows developed in V2.1 GA
    - these workflow steps are enhanced with auto-performing scripts
    - these workflows are used to run the auto-performing scripts to configure incident log related z/OS setup(SDDIR,CEA,SYSREXX,etc).
  - “Add Plug-ins into z/OSMF Server”
    - These are the new workflows to do the “-add” function of a plug-in
    - Can be used to add the incident log plug-in into current z/OSMF server.
    - Can be used to add other plug-ins to z/OSMF server as well.
    - Provide the same function as “-add” option of configuration & setup scripts(“izusetup.sh -add”) , but it is provided on z/OSMF web console



\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Workflow – z/OSMF Plug-in Configuration (2)



State Filter	No. Filter	Title Filter
➔ Ready	1	■ Highlights and pre-reqs of Config Workflow
🟢 In Progress	2	⊕ Configuration Assistant plug-in
🟢 In Progress	3	⊕ ISPF plug-in
🟢 In Progress	4	⊕ Common Information Model (CIM) server
🟢 In Progress	5	⊕ Workload Management plug-in
🟢 In Progress	6	⊕ Resource Monitoring plug-in
🟢 In Progress	7	⊕ Capacity Provisioning plug-in
🟢 In Progress	8	⊖ Incident Log plug-in
➔ Not Ready	8.1	■ Ensure that the CIM server is configured
🟢 In Progress	8.2	⊕ Set up a sysplex dump directory
🟢 In Progress	8.3	⊕ (Optional) Configure dump analysis and el
🟢 In Progress	8.4	⊕ Configuring automatic dump data set allocation
🟢 In Progress	8.5	⊕ Ensure that CEA is configured
🟢 In Progress	8.6	⊕ Ensure that SYSREXX is configured
➔ Ready	8.7	■ Authorizing the data set for AMATERS
🟢 In Progress	9	⊖ Add Plug-ins into zOSMF Server
🟢 In Progress	9.1	⊕ Choose to-be-added plug-ins and setup its properties
🟢 In Progress	9.2	⊕ Perform -add function
➔ Ready	9.3	■ Re-start the z/OSMF Server

•Auto-performing steps are developed for z/OS setup (SDDIR,CEA,SYSREXX,etc).

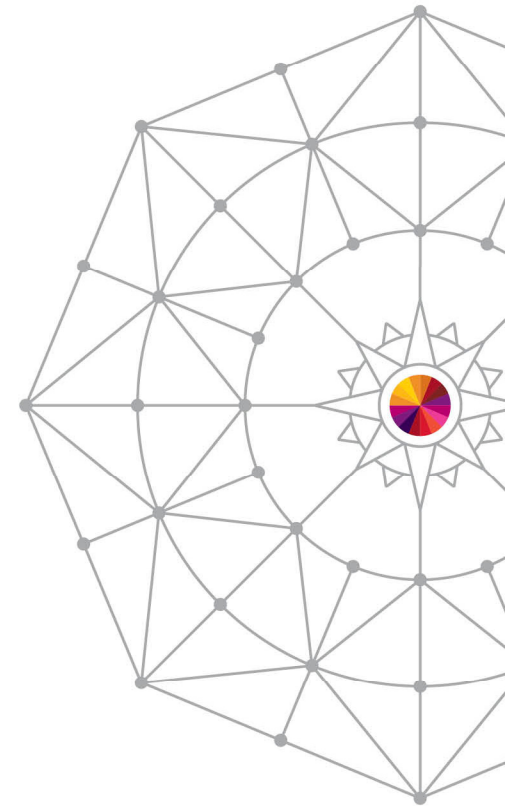
•This step and sub steps are to select which plugins to configure..  
•The variables corresponding to each property in the .cfg file are presented and guide the users to specify the values which are saved in the override file

•This workflow step and sub steps perform the 3 steps previously performed to add a plug-in  
•Workflow receives the necessary Environment variables, and call the "izusetup.sh -add" function directly. The messages are also re-direct in to the 'Status' panel without any changes

•A manual step telling user should re-cycle the current z/OSMF server to refresh

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# Support for external applications



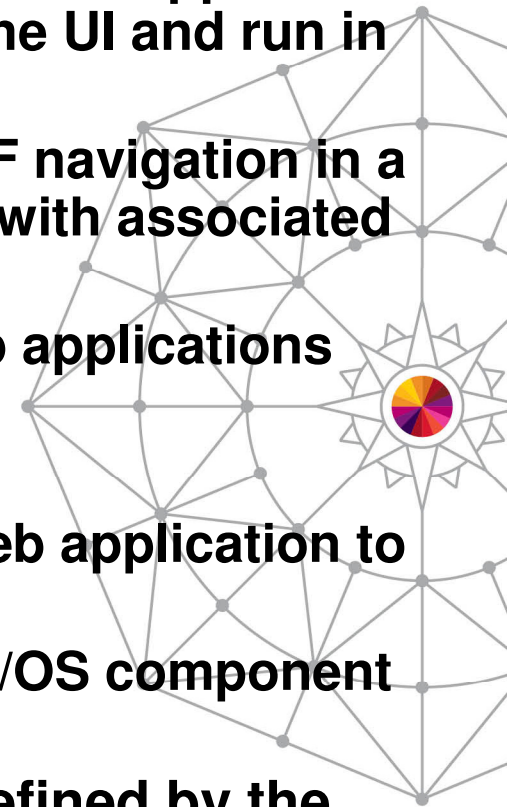
- **Statement of Direction in z/OSMF V2.1 announcement on July 23, 2013**
- **IBM intends to add z/OSMF function to support presentation services for other applications. A new set of programming interfaces is designed to allow TSO/E based applications to be imported into z/OSMF and supported within the z/OSMF user interface, while providing the capability to exploit graphical user interfaces supported by the client browsers.**
- **This support will be made available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs**



# External application support\*\*



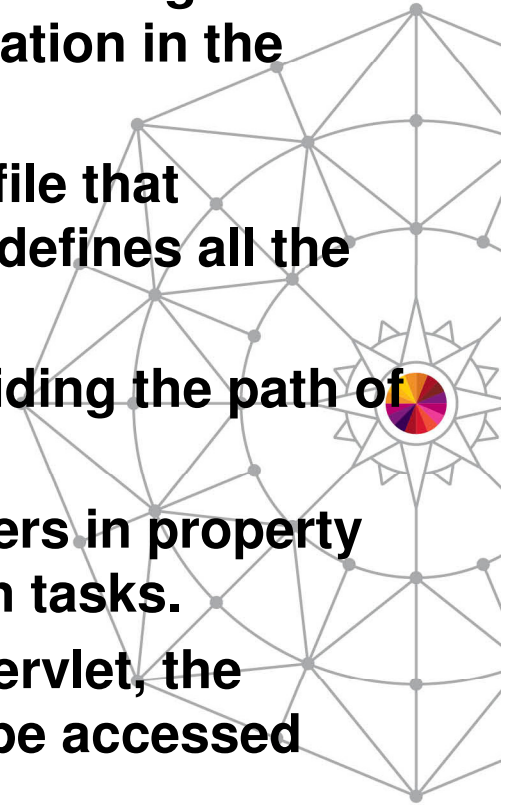
- External application support enables non z/OSMF web application – html and/or JavaScript applications to render the UI and run in the z/OSMF browser.
- The external applications can be added to z/OSMF navigation in a category selected by the user, and communicate with associated z/OS back-end components.
- Customers and vendors can create their own web applications and register to z/OSMF at runtime.
  - SDSF is the first exploiter.
- No special configuration is required to add the web application to the navigation.
- z/OS customization may be needed for backend z/OS component e.g. security setup, starting the z/OS function
  - Application specific z/OS setup should be defined by the application owner.



# Process of plug-in registration

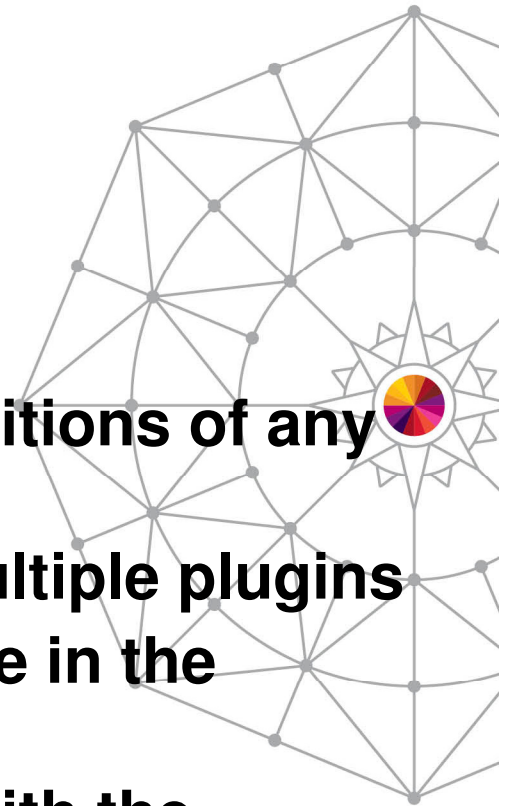


- Before adding a plug-in to z/OSMF, user should have one or more web applications ready for the z/OS application, including the client side source code and online help documentation in the Unix file system.
- The z/OS application needs to provide a property file that describes the attributes for the web interface and defines all the required parameters for z/OSMF.
- The user can register the web application by providing the path of the property file in the Import Manager.
- The Import Manager task will convert the parameters in property file into plug-in object and register the plug-in with tasks.
- With the successful registration and FileServingServlet, the navigation URLs of external plug-ins tasks could be accessed following the pattern of  
“/zosmf/lzuUICommon/externalfiles/relativefilepath” .



# External application properties file

- In one property file only one type of definition can be specified
  - External plug-ins
  - Application linking handlers
  - Application linking events
  - External links
- A properties file may contain multiple definitions of any one type
  - multiple links, or multiple handlers or multiple plugins
- z/OSMF will provide format of properties file in the programming guide
- z/OSMF will provide services to integrate with the z/OSMF framework

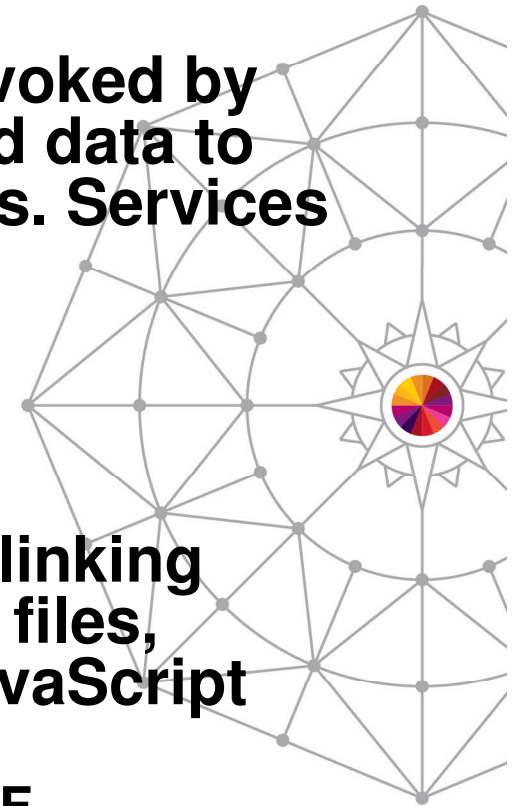




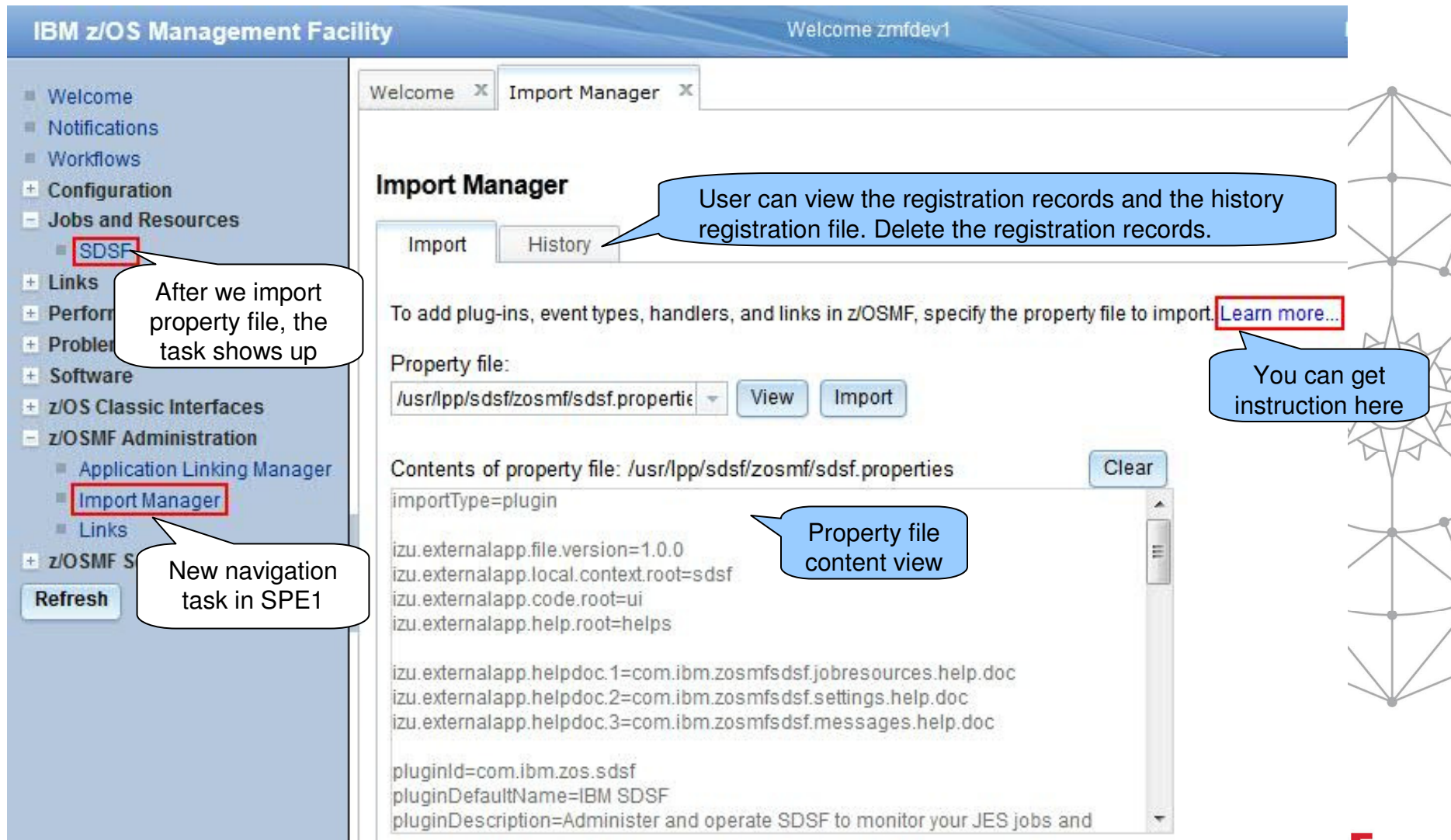
# External Application Support in z/OSMF



- **External application support includes two major parts:**
  - **A set of Restful services which are invoked by external application to retrieve or send data to associated z/OS back-end applications. Services include:**
    - TSO/E Services,
    - Persistence services and
    - File Serving Services
  - **Import Manager, task and application linking registration mechanism by properties files, externalized JavaScript logger and JavaScript callbacks.**
    - **The new Import Manager task under z/OSMF Administration provides the GUI interface to import the properties file and register the web application in the navigation**



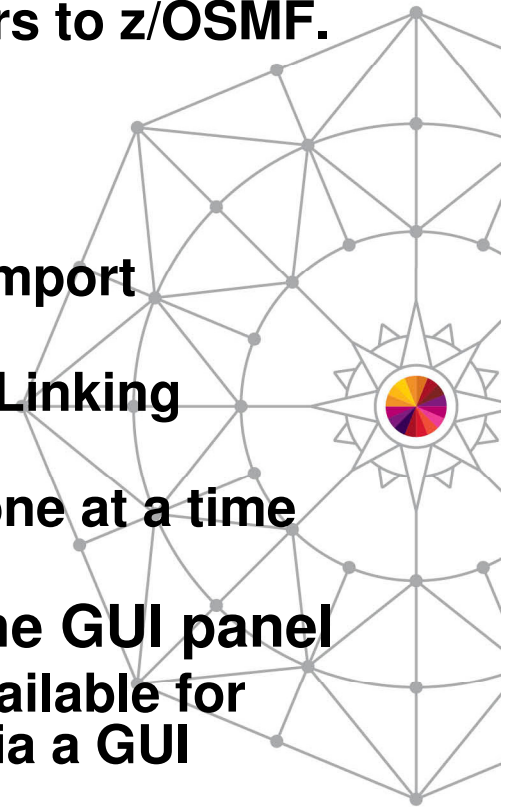
# Import Manager – Import Tab



The screenshot shows the IBM z/OS Management Facility interface. The left sidebar contains a navigation tree with 'Import Manager' selected under 'z/OSMF Administration'. The main content area has two tabs: 'Import' and 'History'. A callout points to the 'History' tab, stating: 'User can view the registration records and the history registration file. Delete the registration records.' Below the tabs, there is a text field for 'Property file:' containing '/usr/lpp/sdsf/zosmf/sdsf.properties', with 'View' and 'Import' buttons. A 'Learn more...' link is also present. A second callout points to this link: 'You can get instruction here'. Below the text field, the 'Contents of property file:' section shows a scrollable list of configuration parameters such as 'importType=plugin', 'izu.externalapp.file.version=1.0.0', and 'pluginId=com.ibm.zos.sdsf'. A callout points to this section: 'Property file content view'. A 'Clear' button is located to the right of the content area. A third callout points to the 'SDSF' item in the left sidebar: 'After we import property file, the task shows up'. A fourth callout points to the 'z/OSMF Administration' section: 'New navigation task in SPE1'.

# Import Manager\*\*

- The Import Manager task provides the following functions:
  - Add plug-in to z/OSMF
  - Add application linking event types and handlers to z/OSMF.
  - Add links to z/OSMF
  - View the property file content before import.
  - View/Delete the import history records.
  - View the historical property file content of the import records.
  - Application linking from Links and Application Linking Manager tasks to Import Manager
- Note: Existing Links task registers external links one at a time via GUI interface
  - User has to type in all the information on the GUI panel
- Note: Existing Application linking manager still available for defining application linking events and handlers via a GUI
  - one at a time
  - required for other apps that are not hosted in z/OSMF



# SDSF Plug-in\*\* Overview



- The SDSF product provides a web interface through a z/OSMF SDSF Plug-in. The Javascript UI calls RESTful web services to retrieve data and perform actions.
- This Plug-in can
  - Show graphic/textual overview about Processors, Spool, Health Checker
  - Display a table of Job list in different status/queue. The property column, filters, sort can be customized, and the table can be exported and printed.
  - Enable users to select a Job, view detailed properties, and perform actions such as Cancel, Edit, Submit, ect.
  - Issue system command and display output.
  - Display the User Session Log. Users can search and take notes.



\*\* available with SDSF PTF for APAR PM86303 and z/OSMF V2R1 with PTFs for APAR PM98630

# SDSF Overview

**SDSF (PLEX1)**

**Overview**

Explore the summary data, or choose a task.

**System Activity Summary: SYS00001 (Local)**

System: **SYS00001 (Local)** [View text](#)

Component	Percentage
zAAP	50%
zIIP	84%
LPAR	25%
MVS / SRM	100%
Spool	66%

Severity	Count
None	28
Low	59
Medium	85
High	82

Active checks: 110    Eligible checks: 200

**Refresh** Last refresh: 9 seconds ago [View icons](#)

**Jobs**

- [Active Jobs](#) Work with active jobs
- [All Jobs](#) Work with jobs in any phase of processing
- [Input Queue](#) Work with jobs on the input queue
- [Output Queue](#) Work with jobs on the output queue
- [Held Output Queue](#) Work with jobs on the held output queue

**z/OS Health Checks**

- [z/OS Health Checks](#) Manage z/OS Health Checks

**z/OS Commands and Logs**

System command line: SYS00001 (Local) [Command reference](#)

Type command here (Maximum 128 characters)

**User Session Log** Display and search the User Session Log

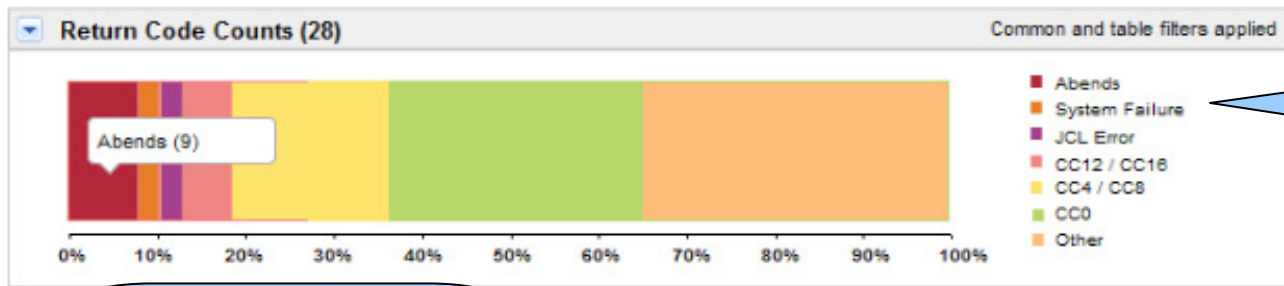
Different Common Filters can apply to different views : Active Jobs, All Jobs, Held Output Queue, Input Queue, Output Queue, Health Checks

**View text** can change the graphics to text view. **System** drop list or **Refresh** button can update the System Activity Summary. **Common Filters** don't apply to this view.

This link can change to more abbreviated icon view. Clicking each view link can open new tab

This link opens help related to starting words typed by users. A command history of 30 commands will be saved in the combo box . Command responses are displayed in a pop-up window. The results also go to the User Session Log and can be seen there.

# All Jobs View



The Job result distribution based on return code. Hover text is provided

Users can specify table filters in the input box

All Jobs

Common filters: Match: All filters

Job Name	Job ID	Owner
<input type="checkbox"/> ZFS	STC00005	DFS
<input type="checkbox"/> VTAM44	STC00007	++++++
<input type="checkbox"/> GRSSTMON	STC00008	++++++
<input type="checkbox"/> ZCFTLMON	STC00012	IBMUSER
<input type="checkbox"/> HWWORKL	STC00062	IBMUSER
<input type="checkbox"/> INIT	STC00019	IBMUSER
<input type="checkbox"/> HZSPROC	STC00060	IBMUSER
<input type="checkbox"/> ZFSCLONE	STC00012	DFS
<input type="checkbox"/> VTAM48	STC00014	++++++
<input type="checkbox"/> GRSSTMO2	STC00016	++++++
<input type="checkbox"/> ZCFTLMO2	STC00024	IBMUSER
<input type="checkbox"/> PAYROLL9	STC00124	IBMUSER
<input type="checkbox"/> BACKUPLB	STC00038	IBMUSER
<input type="checkbox"/> OFFPEAK2	STC00089	IBMUSER
<input type="checkbox"/> ZOSMFAD	TSU00160	ZOSMFAD
<input type="checkbox"/> ZOSMFAD	TSU00161	ZOSMFAD
<input type="checkbox"/> ZOSMFAD	TSU00162	ZOSMFAD

Properties of

Find

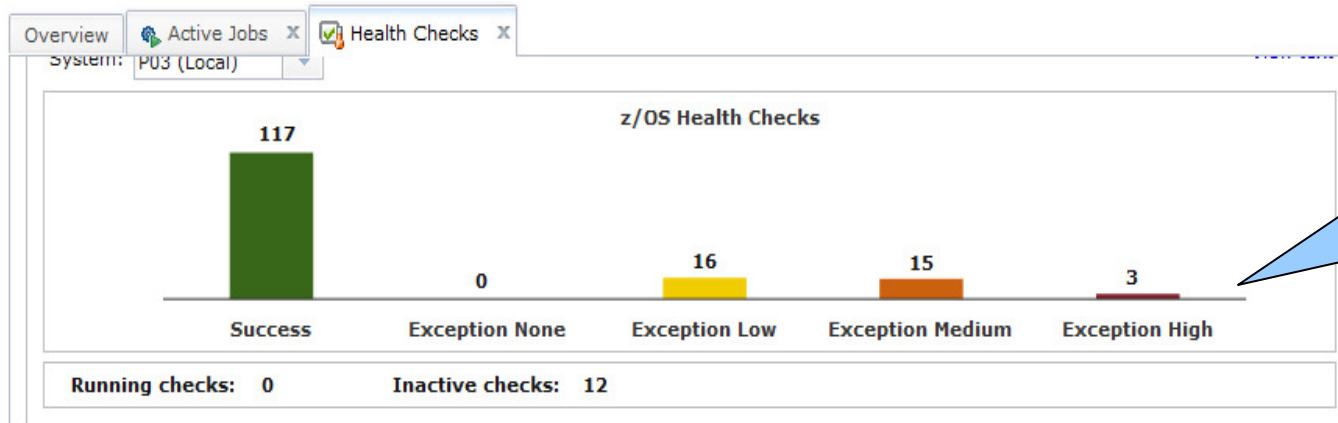
Edit properties

- General
  - Job ID:
  - Job name:
  - Type:
- Accounting
  - Account number:
  - End date:
  - End time:
  - Notify ID:
  - Programmer name:
  - Read date:
  - Read time:
  - Room number:
  - Start date:
  - Start time:
- Advanced
- Printing
- Runtime
- Scheduling
  - Class:

This link brings out **Common Filters** combo box too. The common filter is applied first, and then the table filter is applied.

Job properties are displayed in a collapsible section. When no Jobs are selected, nothing is displayed.

# z/OS Health Checks View



Shows counts for checks by status, with exceptions grouped by severity, followed by counts of running checks and inactive checks.

Health Checks Common Filters

Properties of ALLOC\_ALLC\_OFFFLN\_POLICY

NAME	CheckOwi	State	Status	Result
<input checked="" type="checkbox"/> ALLOC_ALLC_OFFFLN_POLICY	IBMALLOC	ACTIVE	SUCCESSFUL	
<input type="checkbox"/> ALLOC_SPEC_WAIT_POLICY	IBMALLOC	ACTIVE	SUCCESSFUL	
<input type="checkbox"/> ALLOC_TIOT_SIZE	IBMALLOC	ACTIVE	SUCCESSFUL	
<input type="checkbox"/> ASM_LOCAL_SLOT_USAGE	IBMASM	ACTIVE	SUCCESSFUL	
<input type="checkbox"/> ASM_NUMBER_LOCAL_DATA	IBMASM	ACTIVE	SUCCESSFUL	
<input type="checkbox"/> ASM_PAGE_ADD	IBMASM	ACTIVE	SUCCESSFUL	
<input type="checkbox"/> ASM_PLPA_COMMON_SIZE	IBMASM	ACTIVE	EXCEPTION-M	
<input type="checkbox"/> ASM_PLPA_COMMON_USAGE	IBMASM	ACTIVE	SUCCESSFUL	

Properties are more current than table data.

Type to filter properties

**General**

CheckOwner: IBMALLOC

GlobalSys:

NAME: ALLOC\_ALLC\_OFFFLN\_POLICY

Reason: Check ALLC\_OFFFLN POLICY

SevCode: 4

SysLevel: z/OS 02.01.00 HBB7790

SysName: P00

WTOType: INFO

**Advanced**

**Scheduling**

**Status**

Refresh Last refresh: More than 1 minute ago

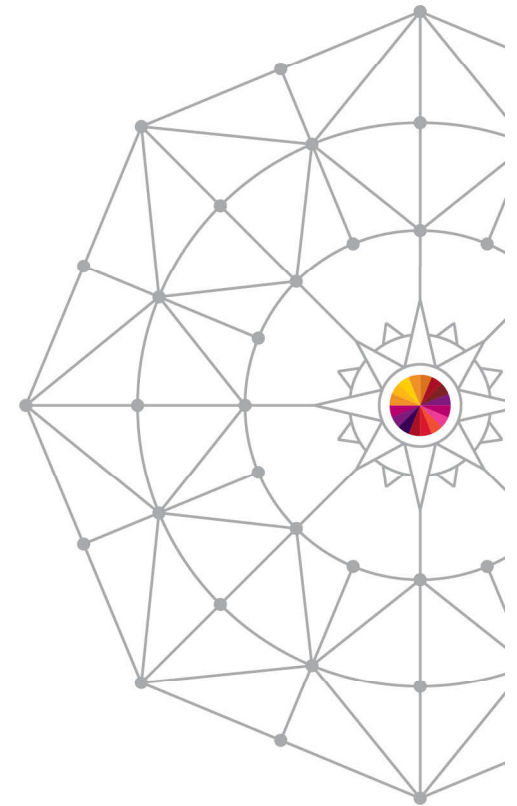
Apply Cancel

To browse a check and see its history, click the check name, or use the **Browse** and **Display History** action. A new tab will popup. Users can perform other operations under **Actions** menu.



# Agenda

- z/OSMF V2.1 highlights
- New functions
  - z/OSMF Workflow
  - Support for External Applications
    - Exploitation by SDSF
  - **New Dataset and files REST Api**
- Enhancements to existing plugins
- Other enhancements
  - JOBS REST Apis
- Looking ahead





# RESTful File API\*\*

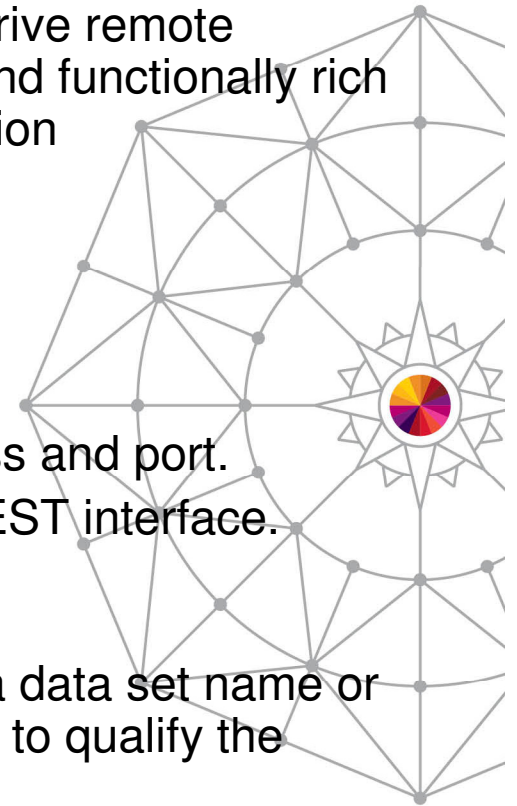
- The RESTful File API allows a client application to list the data sets or UNIX files and directories on a z/OS system.
- Today z/OS supports an interface via FTP. The ability to drive remote requests similar to FTP from HTTP(s) provides a secure and functionally rich interface to retrieve or manipulate file or Data Set information
- The URLs of RESTful File API have the format:

*https://{host}:{port}/zosmf/restfiles/ds/{resource}?{parm}*

or

*https://{host}:{port}/zosmf/restfiles/fs/{resource}*

- "https://{host}:{port}" specifies the target system address and port.
- "zosmf/restfiles" identifies the z/OS data set and file REST interface.
  - "/ds" identifies a data set request
  - "/fs" identifies a UNIX file path request
- "{resource}?{parm}" represents the resource, such as a data set name or file path name, and optionally one or more parameters, to qualify the request.



# Agenda

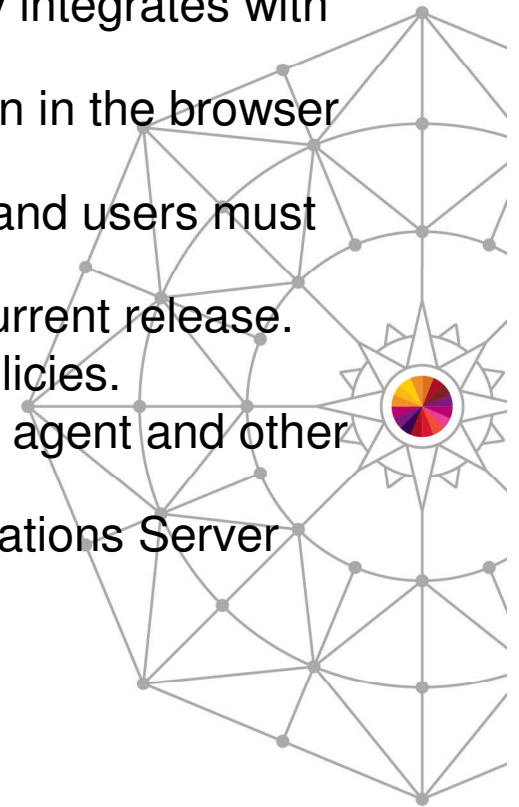
- z/OSMF V2.1 highlights
- New functions
  - z/OSMF Workflow
  - Support for External Applications
    - Exploitation by SDSF
  - New Dataset and files REST Api
- Enhancements to existing plugins
  - Configuration Assistant to Communication server
  - Capacity provisioning
  - Resource Monitoring
  - WLM
  - Incident Log
  - Software Management
  - ISPF
- Other enhancements
  - JOBS REST Apis
- Looking ahead



# Configuration Assistant for Communication server



- This function is redesigned for new and improved web user experience and performance
  - Redesigned panels have a new look and feel that tightly integrates with z/OSMF plug-ins
  - Improved performance due to execution of more function in the browser rather than on the host
- With V2R1, Windows download will no longer be provided and users must migrate to z/OSMF
  - Backing stores from prior releases will be migrated to current release.
- Allows you to configure z/OS V1R12, V1R13, and V2R1 policies.
- Exploits the z/OSMF workflow function for setting up Policy agent and other daemons.
- New function provided in support of V2R1 z/OS Communications Server functions
  - AT-TLS support of TLS V1.2 for the following RFCs:
    - Renegotiation options (RFC 5746)
    - Elliptic Curve Cryptography (RFC 4492 and RFC 5480)
    - TLSv1.2 (RFC 5246)
    - AES GCM Cipher Suites (RFC 5288)
    - Suite B Profile (RFC 5430)
    - ECC and AES GCM with SHA-256/384 (RFC 5289)
  - Policy-based Routing (PBR) support for IPv6



# Configuration Assistant z/OSMF V2R1 Welcome Panel



IBM z/OS Management Facility Welcome user1 [Log out](#)

Welcome x Configuratio... x [Help](#)

**Welcome to V2R1 Configuration Assistant for z/OS Communications Server**  
 Use this task to create and manage configuration for z/OS Communications Server policy-based networking functions.

**Select a backing store for configuration:**  
 DianeBS\_ATTLS\_FF

**Learn more about Configuration Assistant:**

<a href="#">What's New</a>	See what is new in this release.
<a href="#">Getting Started</a>	First time users can learn about Configuration Assistant.
<a href="#">Migrating to z/OSMF</a>	Migrate backing stores from Windows to z/OSMF.
<a href="#">Application Setup Tasks</a>	Workflows to guide the setup of required applications.
<a href="#">Tutorials</a>	Link to tutorials.
<a href="#">FAQs</a>	Link to Frequently Asked Questions.

## Main Panel

IBM z/OS Management Facility Welcome user1 [Log out](#)

Welcome x Configuratio... x [Help](#)

[Configuration Assistant \(Home\)](#) > IPsec

**V2R1 Current Backing Store = DianeBS\_ATTLS\_FF**

Select a perspective: IPsec

Systems | Traffic Descriptors | Security Levels | Address Groups | Requirement Maps | Reusable Rules

Actions

Name	Type	Status	Release	Description
[-] \$AA	Image	Complete	V2R1	
[-] A	Stack	Complete	V2R1	
[-] AAA	Stack	Incomplete	V2R1	
[-] ATTLS	Stack	Incomplete	V2R1	Imported from Policy Data
[-] TCPCS	Stack	Complete	V2R1	
[-] A12	Image	Complete	V1R12	
[-] A12	Stack	Incomplete	V1R12	
[-] A13	Image	Complete	V1R13	
[-] A13	Stack	Incomplete	V1R13	
[-] IMAGE1	Image	Complete	V2R1	

Total: 19, Selected: 0

# Capacity Provisioning

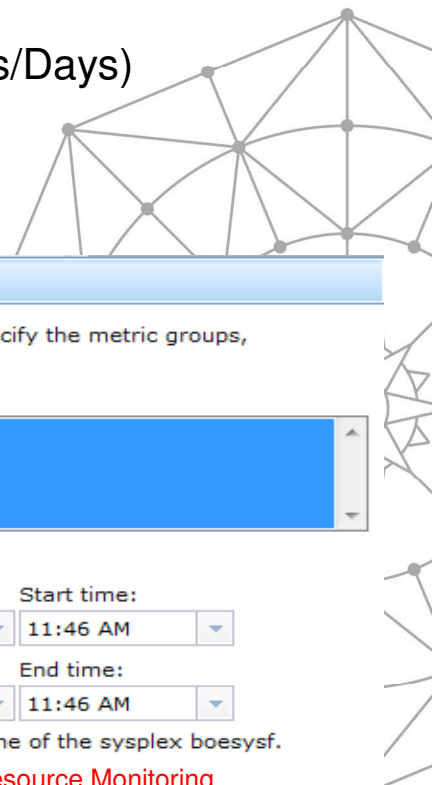
- With z/OS 2.1 and z/OSMF 2.1 you can install and activate your policies on the Capacity Provisioning Manager, monitor the status of your Capacity Provisioning Manager and display reports about your current configuration and active policy.
- The z/OSMF Capacity Provisioning application is enhanced to allow you to create, edit, install and activate domain configurations and capacity provisioning policies. (Also available with APAR PM74519 on R13)
- In V2R1, you will require the z/OSMF Capacity Provisioning task for managing the z/OS Capacity Provisioning Manager (CPM)
  - The Microsoft Windows-based Capacity Provisioning Control Center (CPCC) is no longer being enhanced.
- z/OSMF V2R1 also supports the latest enhancements in the capacity provisioning manager
  - Defined Capacity and Group Capacity management capabilities
  - can be increased and decreased via z/OSMF based on your schedules or the workload running on your system.
  - allows you to define additional scopes and limits to reflect your business needs for additional Defined Capacity or Group Capacity.



# Resource Monitoring



- With z/OS 2.1 support has been added for system x, windows 2008 server.
- Retrieve Historical Data\*\*: New feature can retrieve historical performance data from Resource Monitoring DDS before a RM dashboard was started.
  - Timeframe
    - Past: To specify the interval by the number of units (Minutes/Hours/Days)
    - Date from: To specify Start Date/Time, ending at now
    - Date between: To specify Start Date/Time and End Date/Time



\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs



# Resource Monitoring – Spreadsheet Export (1)



- In Resource Monitoring task, Open a dashboard, click “Actions -> Export” can bring up Export Wizard.
- User can choose a metric group or the entire dashboard, and select a range of intervals to export. Specific metrics and resources can also be sorted out.

General Activity ▶ Export Dashboard

### Export Dashboard

Step 1: Select Scope and Intervals

Step 2: Select Metrics and Resources

Select the scope and interval range of the data to export in CSV format.

**Scope of Data to Export**

Metric group:  
Users

Include all metrics and resources

Include a selection of metrics and resources

Entire dashboard with all metrics and resources

**Range of Intervals to Export**

Start time of first interval:  
01/09/2014 03:07:00

End time of last interval:  
01/09/2014 03:09:00

< Back Next > Finish Cancel

General Activity ▶ Export Dashboard

### Export Dashboard

Step 1: Select Scope and Intervals

Step 2: Select Metrics and Resources

Select the metrics and resources to include

Metric group to export: Users

**Metrics:**

- [?], SYSPLEX # users by MVS image
- [?], SYSPLEX # active users by MVS image

**Resources:**

- P00
- P02
- P03

< Back Next > Finish Cancel

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

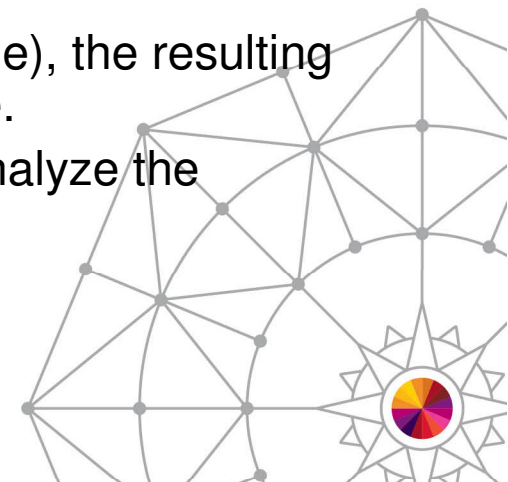
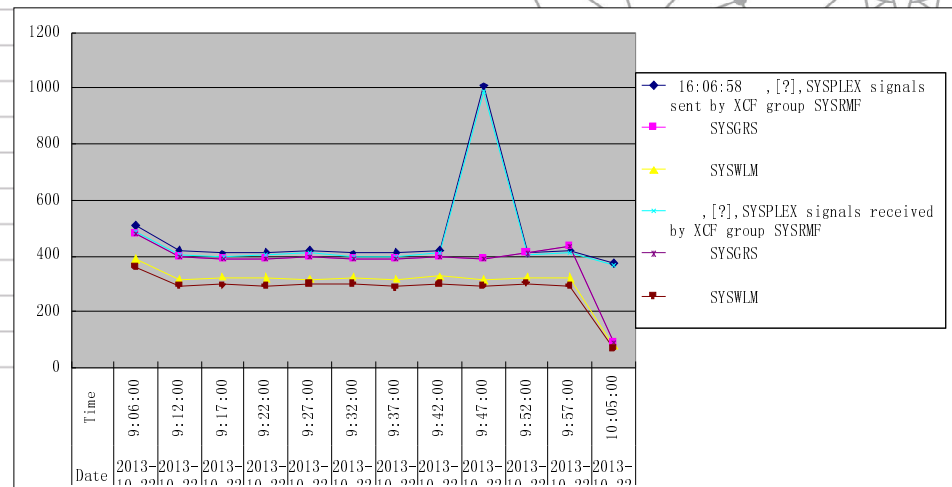


# Resource Monitoring – Spreadsheet Export (2)



- One CSV file is created for each metric group in the dashboard. Multiple metric groups data will generate a compressed zip file.
- If the CSV file covers multiple metrics and resources (list value), the resulting table sorts the table columns: 1) by metric and 2) by resource.
- The user can view the performance data in table/chart and analyze the performance of the systems

z/OSMF Resource Monitoring					
Exported:		2013/10/24 11:02:38			
Dashboard:		Coupling Facility Overview			
Metric group:		Requests-POKDDS			
Metric:		[,?],SYSPLEX total request ,[,?],SYSPLEX % total physical utilization (AAP) by partition			
Resource:		CF02	CF01	4255.VMC	4255.VMA
Date	Time				
2013/10/24	4:43:00	53.8	33.3	0.2	0.1
2013/10/24	4:44:00	56.8	32.3	0.2	0
2013/10/24	4:45:00	53.3	32.6	0.2	0.1
2013/10/24	4:46:00	53.3	32.6	0.2	0.2
2013/10/24	4:47:00	52.9	33	0.2	0.1
2013/10/24	4:48:00	53.2	32.6	0.2	0.1
2013/10/24	4:49:00	52.9	32	0.2	0.1
2013/10/24	4:50:00	53.2	32.6	0.2	0.1
2013/10/24	4:51:00	54	32.8	0.2	0.1
2013/10/24	4:52:00	54.1	33.2	0.2	0.1





# Workload Management – Add Comments



- When users create, modify, import, export, install and activate service policy, they can add comments to describe the intention of each action.
- Comments are saved along with each action in history data, and the user can also add comments to specific history record later.

The screenshot shows the 'Workload Management' application interface. The 'New Service Definition' tab is active. A 'Comments' dialog box is open, prompting the user to enter a comment for the current action. The dialog box contains the following text:

**Comments for action:**  
Create new service definition by zosmfad

**\* Comments (Maximum 500 characters, currently 0 characters)**

Enter comments about modifying this service definition. This comment will be added to the history for the service definition.

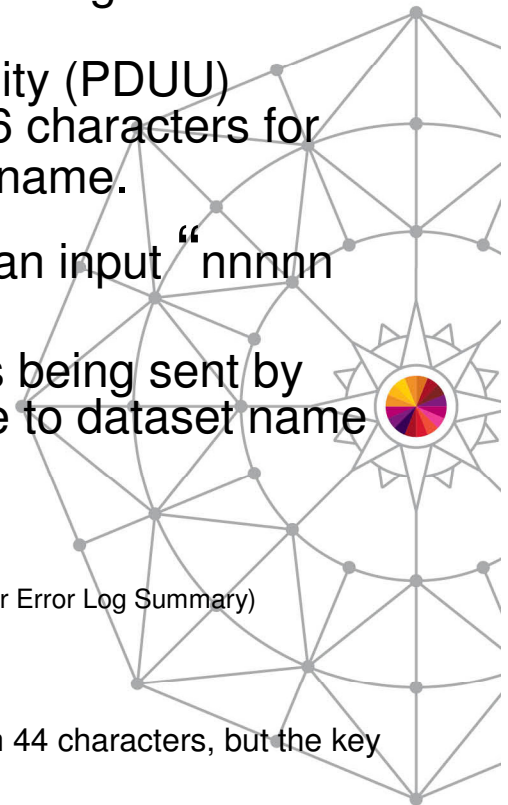
Buttons: OK, Cancel, Help

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Incident Log

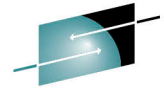


- The allowable length for Log snapshot data set name high-level qualifier (HLQ) has increased from four- to eight-characters via a setting in CEAPRMxx.
- When using the z/OS Problem Documentation Upload Utility (PDUU) transfer method, support has been added for a total of 256 characters for the FTP server host, FTP server port, and FTP.DATA file name.
- \*\* PMR number formats: Besides “nnnnn,bbb,ccc”, user can input “nnnnn bbb ccc” or “nnnnn.bbb.ccc”
- \*\* Provide the new naming convention for dumps and logs being sent by Incident Log, which can avoid key information missing due to dataset name length limitation(44 characters).
  - ppppp.bbb.ccc.ssssssss.Dyymmdd.ttt.Thhmmss.TRS
    - ssssssss - system name (up to 8 characters)
    - yymmdd - date in YYMMDD format
    - ttt - a simplified file type (DUM for dumps, OPE for Oper Log, ERR for Error Log, and SUM for Error Log Summary)
    - hhmmss - time in HHMMSS format
  - Old Convention: 45387.035.724.SVC.E4E4.2011.08.19T18.47.06.331Z.TRS
  - New Convention: 45387.035.724.E4E4TEST.D111230.DUM.T234537.TRS
  - In case the client send it to the FTP Server at the VS1 system, It hits the limit from 44 characters, but the key information is not removed. the support team will receive the file in dataset:
    - ONTOP.GS035.P45387.C724.E4E4TEST.D111230.DUM



\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Software Management



**SHARE**  
Technology · Connections · Results

## Products view

Welcome mfsur01 Log out

Welcome x Software Man... x Help

### Software Management

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

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

Management Facility Welcome zosmfad Log out

Welcome x Software Man... x Help

Software Management > Products

### Products

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

Switch To: ▾

Product	Release	Product ID	Messages	Vendor	General Availability	End of Service	Additional Product Information
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
<input type="checkbox"/> System Modification Program Extended for z/OS	03.06.00	5655-G44		IBM	Sep 30, 2011	✔ Not Announced	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=S97/ENUS6555-G44">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=S97/ENUS6555-G44</a>
<input type="checkbox"/> z/OS	01.12.00	5694-A01		IBM	Sep 24, 2010	✔ Not Announced	
<input type="checkbox"/> Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53		IBM	Sep 27, 2002	✘ Oct 3, 2005	
<input type="checkbox"/> Debug Tool V9	09.01.00	5655-U27		IBM	Sep 26, 2008	✘ Apr 30, 2012	
<input type="checkbox"/> Enterprise PL/I V4	04.01.00	5655-W67		IBM	Sep 24, 2010	⚠ Apr 30, 2014	
<input type="checkbox"/> z/OS	01.13.00	5694-A01		IBM	Sep 30, 2011	✔ Not Announced	
<input type="checkbox"/> AFP FONT COLLECTION FOR S/390	02.01.01	5648-B33		IBM	Oct 27, 2000	✔ Not Announced	

Total: 27, Selected: 0

[Refresh](#) Last refresh: Jan 29, 2013 10:10:49 PM

[Close](#)

IBM z/OS Management Facility Welcome zosmfad Log out

Welcome x Software Man... x Help

Software Management > Software Instances > Maintenance Reports

### Maintenance Reports

End of Service: ▾

Timeline: 2011 2012 2013 2014 View Legend

Retrieve End of Service Information

Software Instances by Product

Product / Software Instance	Release	Product ID	Messages	Vendor	General Availability	End of Service	Additional Product Information	Product Information	System
<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>	<a href="#">Filter</a>
System Modification Program Extended for z/OS	03.06.00	5655-G44		IBM	Sep 30, 2011	✔ Not Announced	<a href="http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=S97/ENUS6555-G44">http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&amp;subtype=sm&amp;appname=ShopzSeries&amp;htmlfid=S97/ENUS6555-G44</a>	Jan 5, 2010	
z/OS	01.12.00	5694-A01		IBM	Sep 24, 2010	✔ Not Announced		Jan 5, 2010	
Enterprise COBOL for z/OS and OS/390	03.02.00	5655-G53		IBM	Sep 27, 2002	✘ Oct 3, 2005		Jan 5, 2010	
Debug Tool V9	09.01.00	5655-U27		IBM	Sep 26, 2008	✘ Apr 30, 2012		Jan 5, 2010	

Total: 27, Selected: 0

[Refresh](#) Last refresh: Jan 14, 2013 1:14:58 PM

[Close](#) [Help](#)

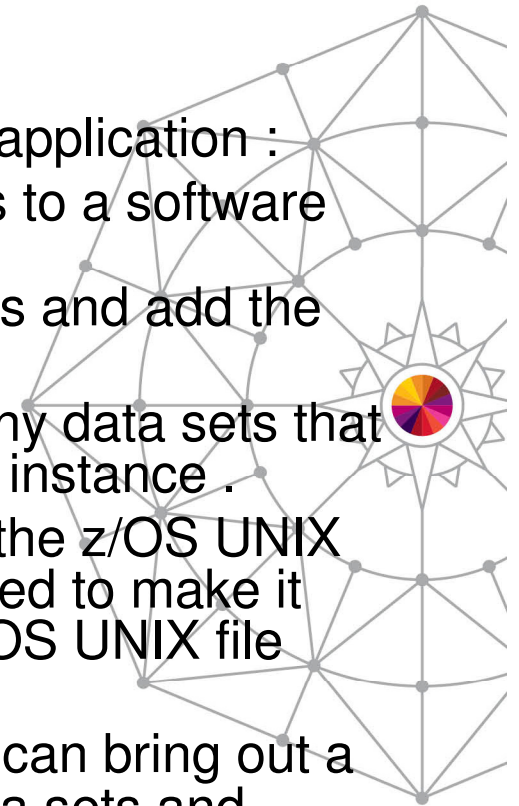
# Software Management



- New in z/OSMF V2.1 you can print and export reports about your software and installed products.

\*\*Recent new capabilities in the Software Management application :

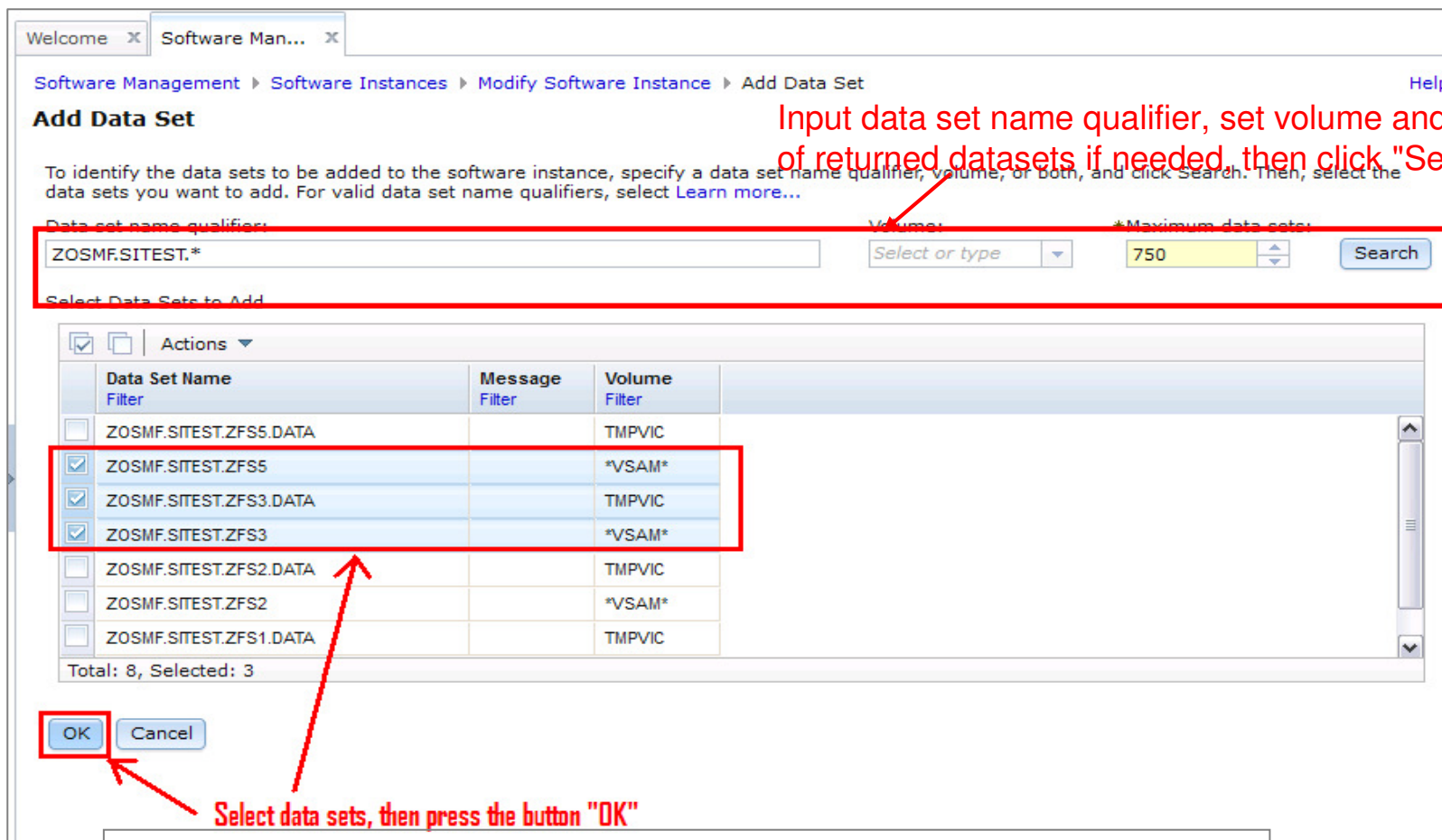
- Make it easier to add non-SMP/E-managed data sets to a software instance.
  - It will utilize the new File API to search for data sets and add the selected Non-SMP/E data sets to the instance.
  - This is designed to make it easier to associate many data sets that are not managed by SMP/E zones with a software instance .
- Offer a more convenient way to edit mount points for the z/OS UNIX System Services file system. This capability is designed to make it easier for you to manage multiple mount points for z/OS UNIX file system data sets during a deployment operation.
- The "Software Instance → View → Data Sets" action can bring out a separate view. SMP/E managed UNIX file system data sets and related UNIX directories can be viewed easily.



\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Software Management – Search & Add Non-SMP/E Data Set\*\*

- Utilizes the File API to search for data sets and add the selected Non-SMP/E data sets to the instance.



**Add Data Set**

To identify the data sets to be added to the software instance, specify a data set name qualifier, volume, or both, and click Search. Then, select the data sets you want to add. For valid data set name qualifiers, select [Learn more...](#)

Data set name qualifier:  Volume:  \*Maximum data sets:

Select Data Sets to Add

<input type="checkbox"/>	Data Set Name Filter	Message Filter	Volume Filter
<input type="checkbox"/>	ZOSMF.SITEST.ZFS5.DATA		TMPVIC
<input checked="" type="checkbox"/>	ZOSMF.SITEST.ZFS5		*VSAM*
<input checked="" type="checkbox"/>	ZOSMF.SITEST.ZFS3.DATA		TMPVIC
<input checked="" type="checkbox"/>	ZOSMF.SITEST.ZFS3		*VSAM*
<input type="checkbox"/>	ZOSMF.SITEST.ZFS2.DATA		TMPVIC
<input type="checkbox"/>	ZOSMF.SITEST.ZFS2		*VSAM*
<input type="checkbox"/>	ZOSMF.SITEST.ZFS1.DATA		TMPVIC

Total: 8, Selected: 3

*Input data set name qualifier, set volume and max number of returned datasets if needed, then click "Search"*

*Select data sets, then press the button "OK"*

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Software Management – Mass Edit of Multiple Mount Points\*\*

**Configure Deployment for ZM\_UNIX\_MountPoints**

**Mount Points**

The Mount Points table lists the mount points that will be used for the UNIX file system data sets included in the target software instance. Accept the default mount points, or use the **Modify Target Mount Point** action to modify them.

Select the menu Actions -> Modify Target Mount Point

Target Filter	Mount Name	Source mount point Filter	Source Data Set Name Filter
/PT	DATA.SET.A	/PT	TEST.UNIX.DATA.SET.A
/u/mp	DATA.SET.B	/u/mpoint	TEST.UNIX.DATA.SET.B
/u/u	DATA.SET.C	/u/u	TEST.UNIX.DATA.SET.D
/u/un	DATA.SET.D	/u/unix	TEST.UNIX.DATA.SET.C

**Modify Target Mount Point**

Enter a new target mount point for the selected mount points.

\* Common mount points directory:  
From /u

Example target mount point:  
/u/mpoint  
/test/mpoint

To:

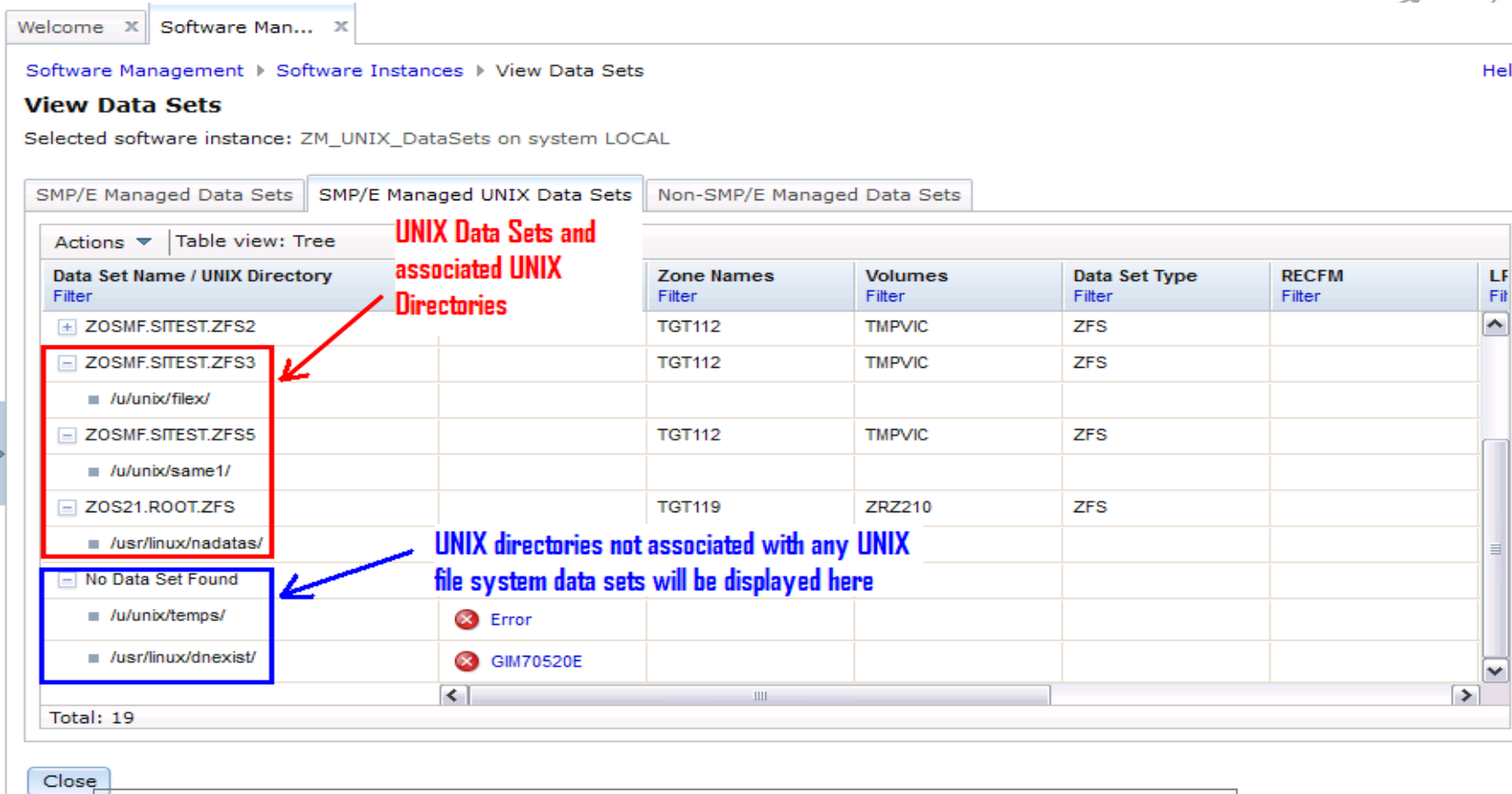
Selected mount points

Target mount point	Target Data Set Name	Source mount point	Source Data Set Name
/u/mpoint	PEV173.UNIX.DATA.SET.B	/u/mpoint	TEST.UNIX.DATA.SET.B
/u/u	PEV173.UNIX.DATA.SET.C	/u/u	TEST.UNIX.DATA.SET.D
/u/unix	PEV173.UNIX.DATA.SET.D	/u/unix	TEST.UNIX.DATA.SET.C

Change the common mount point from the "/u" to "/test"

# Software Management – View UNIX data sets and directories

- The "Software Instance → View → Data Sets" action can bring out a separate view. SMP/E managed UNIX file system data sets and related UNIX directories can be viewed easily.



Software Management > Software Instances > View Data Sets

View Data Sets

Selected software instance: ZM\_UNIX\_DataSets on system LOCAL

SMP/E Managed Data Sets | **SMP/E Managed UNIX Data Sets** | Non-SMP/E Managed Data Sets

Actions | Table view: Tree

**UNIX Data Sets and associated UNIX Directories**

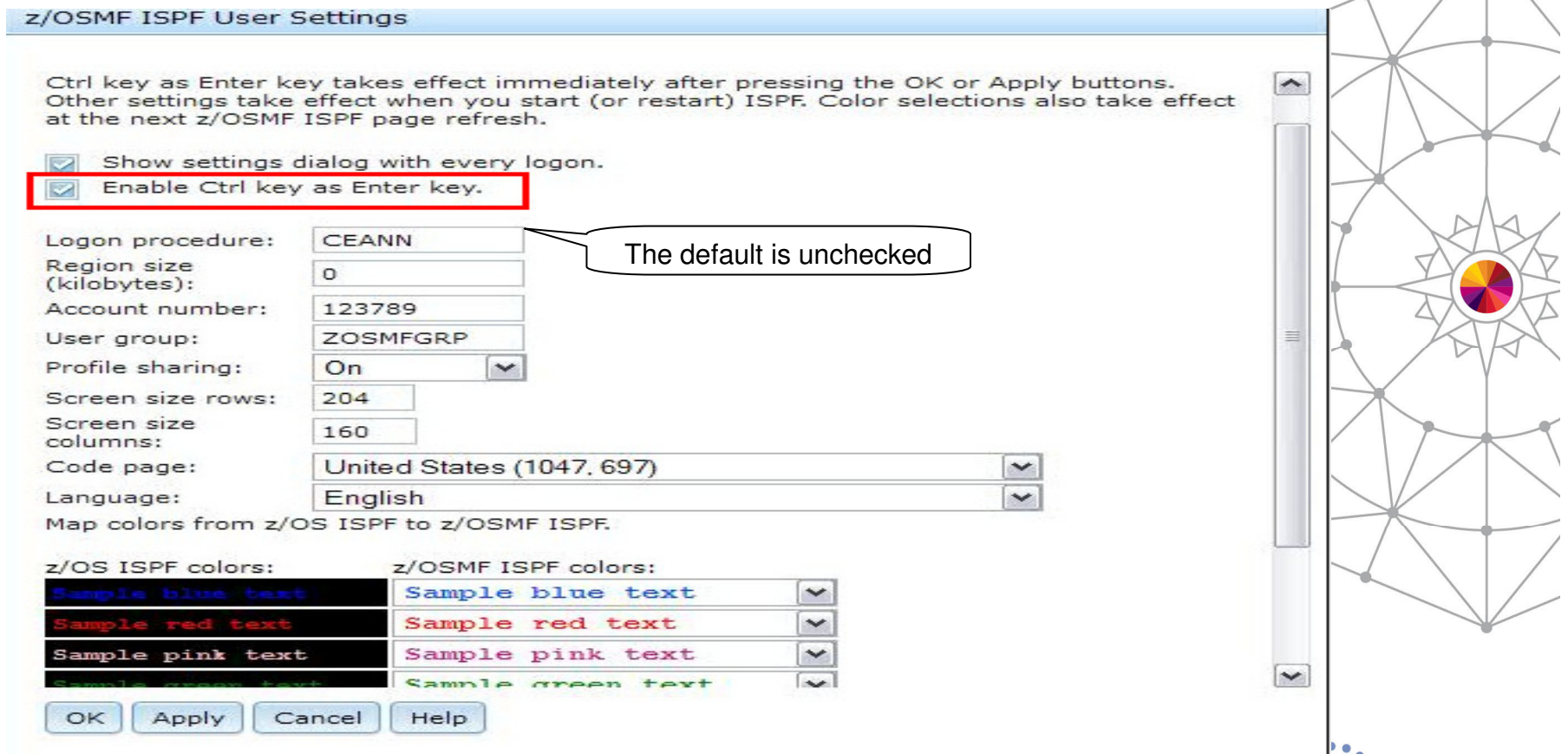
Data Set Name / UNIX Directory Filter	Zone Names Filter	Volumes Filter	Data Set Type Filter	RECFM Filter	LF Filter
+ ZOSMF.SITEST.ZFS2	TGT112	TMPVIC	ZFS		
- ZOSMF.SITEST.ZFS3	TGT112	TMPVIC	ZFS		
- /u/unix/filex/					
- ZOSMF.SITEST.ZFS5	TGT112	TMPVIC	ZFS		
- /u/unix/same1/					
- ZOS21.ROOT.ZFS	TGT119	ZRZ210	ZFS		
- /usr/linux/nadatas/					
- No Data Set Found					
- /u/unix/temps/					
- /usr/linux/dnexist/					
					⊗ Error
					⊗ GIM70520E

Total: 19

Close

# z/OSMF ISPF - Enable Ctrl key\*\*

- User can use z/OSMF WebISPF Ctrl key as Enter key; This allows the user to submit requests in a way similar to 3270 z/OS ISPF.



**z/OSMF ISPF User Settings**

Ctrl key as Enter key takes effect immediately after pressing the OK or Apply buttons. Other settings take effect when you start (or restart) ISPF. Color selections also take effect at the next z/OSMF ISPF page refresh.

Show settings dialog with every logon.  
 **Enable Ctrl key as Enter key.**

Logon procedure:  The default is unchecked  
 Region size (kilobytes):   
 Account number:   
 User group:   
 Profile sharing:    
 Screen size rows:   
 Screen size columns:   
 Code page:    
 Language:    
 Map colors from z/OS ISPF to z/OSMF ISPF.

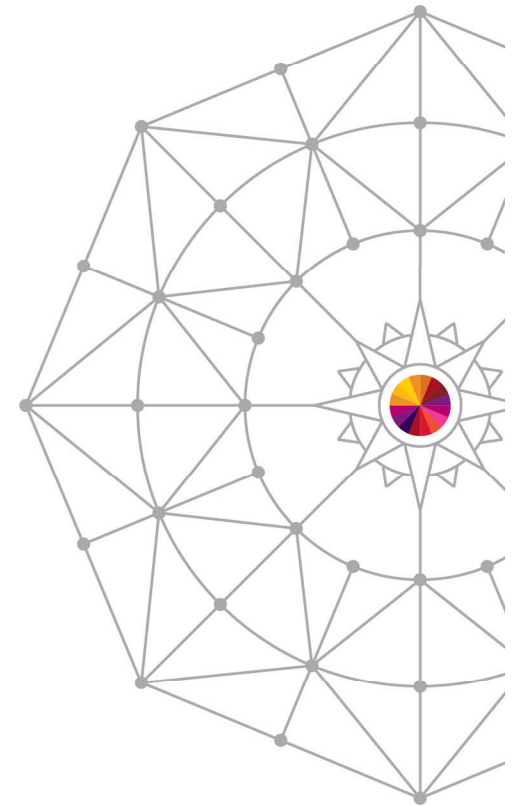
z/OS ISPF colors:	z/OSMF ISPF colors:
Sample blue text	Sample blue text <input type="button" value="v"/>
Sample red text	Sample red text <input type="button" value="v"/>
Sample pink text	Sample pink text <input type="button" value="v"/>
Sample green text	Sample green text <input type="button" value="v"/>

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs



# Agenda

- z/OSMF V2.1 highlights
- New functions
  - z/OSMF Workflow
  - Support for External Applications
    - Exploitation by SDSF
  - New Dataset and files REST Api
- Enhancements to existing plugins
- Other enhancements
  - JOBS REST Apis
- Looking ahead



# Jobs REST APIs enhancements

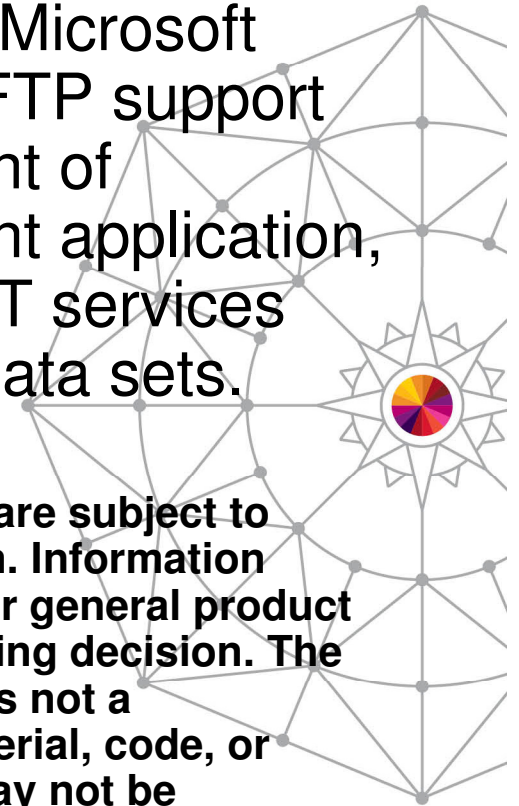
- **z/OSMF R13 introduces RESTful API interface to z/OS for submitting and accessing batch job**
- **Enhancement in V2.1:**
  - **Support for JCL symbolics, use correlator instead of jobname/jobid, asynchronous notification on job completion**
  - **Support for submit job to secondary JES subsystem \*\***
    - **The Jobs API already supports submitting a job to secondary JES2. The request format is updated to allow the user to specify the JES2 subsystem name on which the job is going to be processed.**
  - **Support for hold & release a job \*\***
    - **Jobs being processed, or waiting to be processed, are kept on a job queue in priority sequence.**
    - **You can issue hold job http request via the Jobs API which will issue JES2 commands to hold specified jobs or all jobs currently in a system.**
    - **You can also keep jobs in specified job queues or all job queues from being executed until you issue release request via the Jobs API to release them.**

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

# Statement Of Directions for z/OSMF 2.1 (Feb 2014)



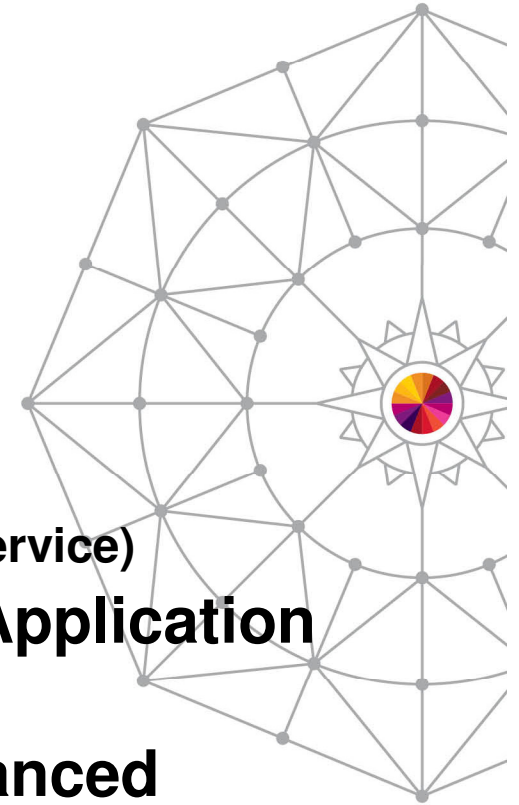
- **New function for z/OSMF:** New function is planned for z/OSMF V2.1 to include support for the Microsoft Internet Explorer 10 browser, OpenSSH SFTP support for the Incident Log, integrated management of generated jobs in the Software Management application, workflow improvements, and z/OSMF REST services support for editing and browsing files and data sets.
- **IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.**



# Summary



- **z/OSMF V2.1 uses the WebSphere Application Server Liberty profile**
  - **Runs on smaller configurations**
  - **Simplified configuration**
  - **Initializes faster**
  - **Uses less CPU**
  - **Uses less memory**
  - **Installation of service is easier**
    - You no longer have to run a script (`izusetup -service`)
- **z/OSMF V2.1 provides a new Workflow Application and Notifications**
- **Many other z/OSMF functions were enhanced**
- **Additional details in backup.**



# Additional information

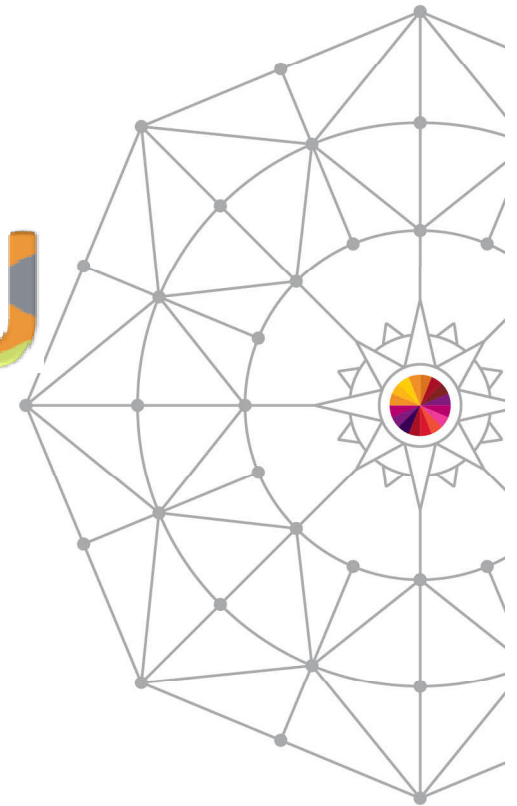


- z/OS Management Facility website
  - <http://ibm.com/systems/z/os/zos/zosmf/>
  - **Provides links to all documentation and publications**
- IBM z/OS Management Facility education modules in IBM Education Assistant
  - <http://publib.boulder.ibm.com/infocenter/ieduasst/stgv1r0/index.jsp>
  - **Scroll down to z/OS Management Facility**
- z/OS Hot Topics, Issue 21, 23, 25 and 27:
  - [http://ibm.com/systems/z/os/zos/bkserv/hot\\_topics.html](http://ibm.com/systems/z/os/zos/bkserv/hot_topics.html)
- Program Directory for z/OS Management Facility (GI11-9847)
  - <http://www-03.ibm.com/systems/z/os/zos/zosmf/moreinfo/index.html>
- IBM z/OS Management Facility Configuration Guide (SA38-0657)
  - <http://www-03.ibm.com/systems/z/os/zos/zosmf/moreinfo/index.html>
- IBM z/OS Management Facility Programming (SA32-1066)
  - <http://www-03.ibm.com/systems/z/os/zos/zosmf/moreinfo/index.html>
- IBM z/OS Management Facility Information center
  - <http://publib.boulder.ibm.com/infocenter/zosmf/v2r1/index.jsp>
- z/OS Management Facility V2.1 Resource Requirements
  - <http://www.ibm.com/support/techdocs/atmastr.nsf/Web/WhitePapers>
- z/OS Management Facility 2.1 Redbook
  - <http://www.redbooks.ibm.com/Redbooks.nsf/RedpieceAbstracts/sq247851.html?Open>

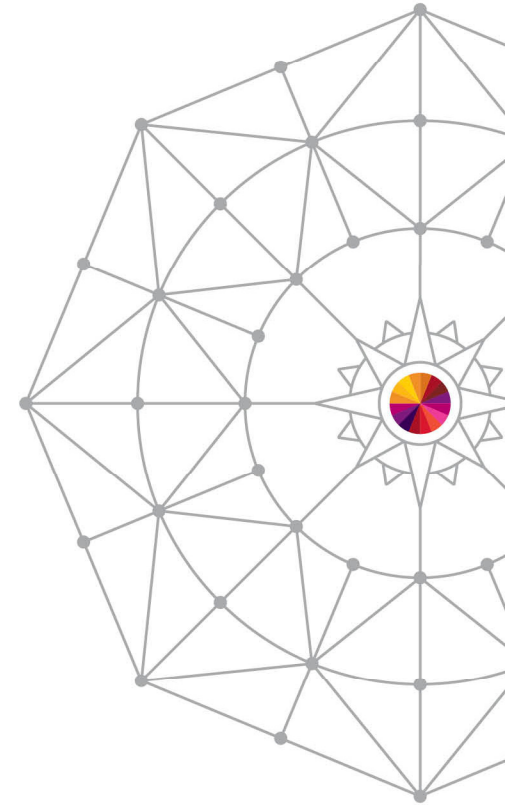


# THANK YOU

## Session 15115



# BACKUP



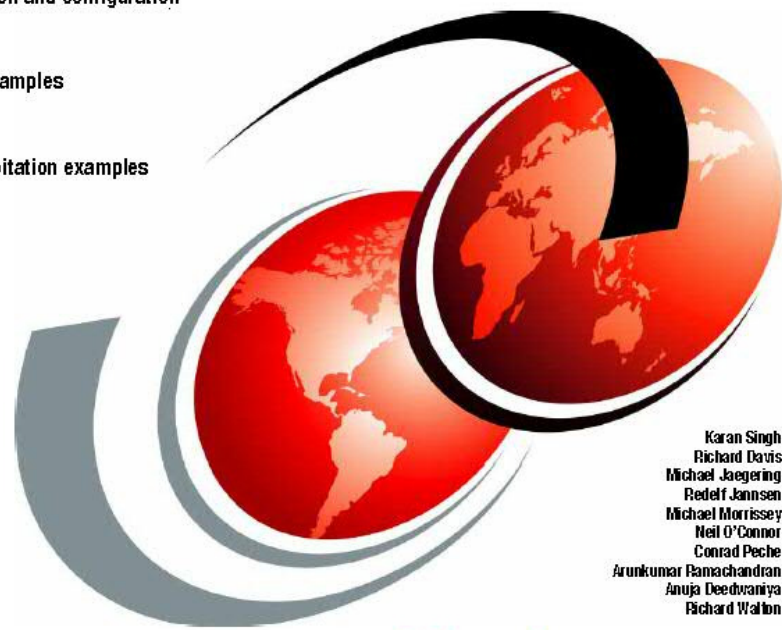
New.....



Draft Document for Review November 1, 2013 1:48 pm

# IBM z/OS Management Facility V2R1

- Installation and configuration
- Usage examples
- API exploitation examples



Karan Singh  
Richard Davis  
Michael Jaegering  
Redelf Janssen  
Michael Morrissey  
Neil O'Connor  
Conrad Peche  
Arunkumar Panachandran  
Anuja Deedvaniya  
Richard Walton

[ibm.com/redbooks](http://ibm.com/redbooks)

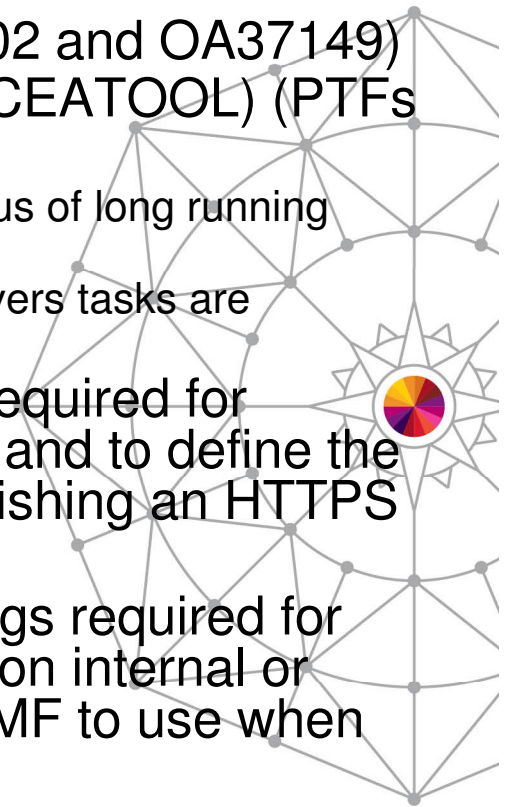
# Redbooks



# z/OSMF enhancements also available in R13



- Incident Log application
  - allows you to modify its default JCL to meet the needs of your organization (APAR PM74518)
  - Handle migrated datasets (PTFs for APARs PM46302 and OA37149)
  - Manage the deletion of incidents using a batch job (CEATOOL) (PTFs for APARs OA38812 and UA65835)
- The z/OSMF ISPF application is enhanced to get the completion status of long running commands, without any user intervention (APAR PM74507 )
- With APAR PM74502 on z/OSMF V1R13, the Systems and FTP Servers tasks are available under z/OSMF Settings.
  - The Systems task allows you to define the settings required for z/OSMF to access other systems in your installation and to define the HTTP proxy settings for z/OSMF to use when establishing an HTTPS connection to another system.
  - The FTP Servers task allows you to define the settings required for z/OSMF to access the FTP servers that are running on internal or external systems and to define the settings for z/OSMF to use when transferring files between systems.
- Usability: Additional filter capabilities are designed to improve ease of use for the user. The z/OSMF table filtering support has been enhanced to allow for AND/OR filtering as well as case sensitive filtering for more granular filtering capabilities (APAR PM74502)



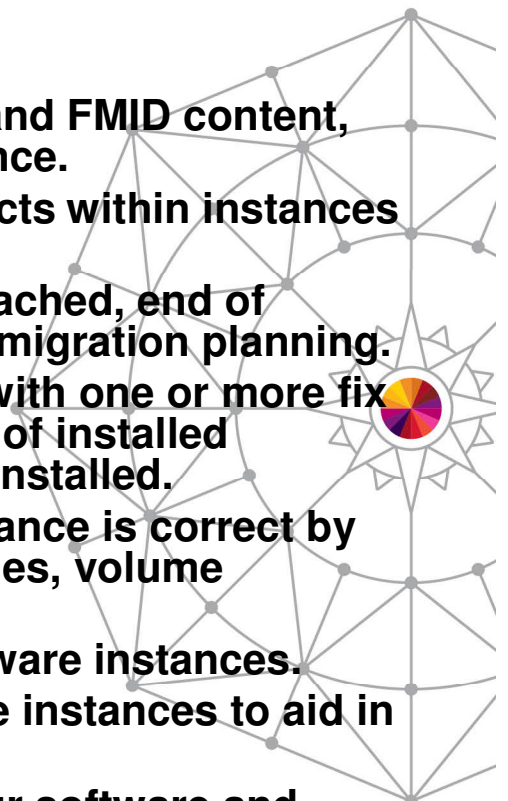
# Software Management



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

The Software Management task supports

- deploying a software instance,
- inspection of a software instance to view the product, feature and FMID content, and view the physical data sets that compose a software instance.
- actions to analyze and report on software instances and products within instances to:
  - Identify software products that are approaching, or have reached, end of service support, thus helping customers with upgrade and migration planning.
  - Identify missing HIPER and PE fixes, and fixes associated with one or more fix categories to help customers assess the risks and stability of installed software and ensure hardware and software requisites are installed.
  - Validate the SMP/E structure and content of a software instance is correct by cross-check SMP/E inventory information with catalog entries, volume residency and data set content.
  - Determine if individual fixes are installed and in which software instances.
  - Compare the service and functional content of two software instances to aid in debugging or migration planning.
- New in z/OSMF V2.1 you can print and export reports about your software and installed products.

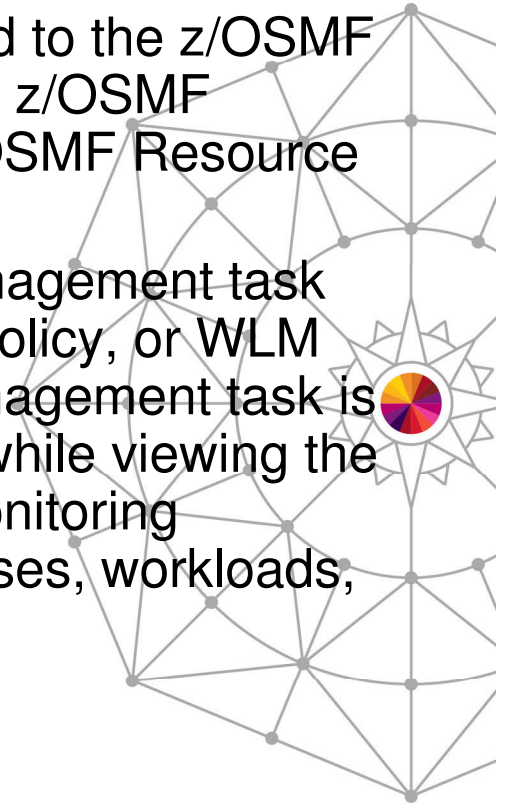


# R13 application linking exploitation



With APAR PM74508 and APAR PM74517

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



# View performance of Active policy



IBM z/OS Management Facility

Welcome zosmfad

Log out IBM

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

## Workload Management

Overview WLM Status x

### WLM Status for Sysplex SHARPLEX from System S1

**Active Service Policy** [\(View performance of active policy\)](#)

Name: SHAREPOL  
 Description: SHARE Base Policy  
 Activated: Jul 16, 2012 2:18:22 PM GMT  
 Activated by: stevem from system S1  
 Related service definition: SHARPLEX  
 Functionality level: 8  
 Installed: Jul 16, 2012 2:18:12 PM GMT  
 Installed by: stevem from system S1

**Systems** [\(View performance of systems\)](#)

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

Total: 1

**Installed Service Definition**

Name: SHARPLEX  
 Description: WLM Policy for Share Systems  
 Installed: Jul 16, 2012 2:18:12 PM GMT  
 Installed by: stevem from system S1

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

IBM z/OS Management Facility

Welcome zosmfad

Log out IBM

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

### Resource Monitoring

Dashboards WLM Service Class - LOCALPLEX x

#### WLM Service Class - LOCALPLEX (Running)

Start Pause Save Actions

**Performance Index**

CICSTX.1	0.5
OMVS.1	0.5

**Execution Velocity**

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

**Response Time**

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

**Percentile Response Time**

CICSTX.1	80
WEBFAST3.1	90
WEBFAST3.2	90
WEBFAST3.3	90

# View active service definition



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

## System Status

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

Resources

Resource	System Type	Connectivity	Performance Index Status	Related Service Definition	Active WLM Policy
LOCALPLEX	z/OS	Connected	PI <= 1 for all periods	SHARPLEX	SHAREPOL

Total: 1, Selected: 0

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

Automatic refresh

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

### Workload Management

Overview WLM Status x View SHARPLEX x

This service definition is installed and policy SHAREPOL is active

**Service Definition Details**

**Service definition name:**  
SHARPLEX

**Description:**  
WLM Policy for Share Systems

**Functionality level:**  
008

**Service Coefficients**

Central processing unit (CPU):  
1.0

Input and output channel (IOC):  
0.1

Main storage occupancy (MSO):  
0.0000

Service request block (SRB):  
1.0

**Service Options**

Enable I/O priority management:  
No

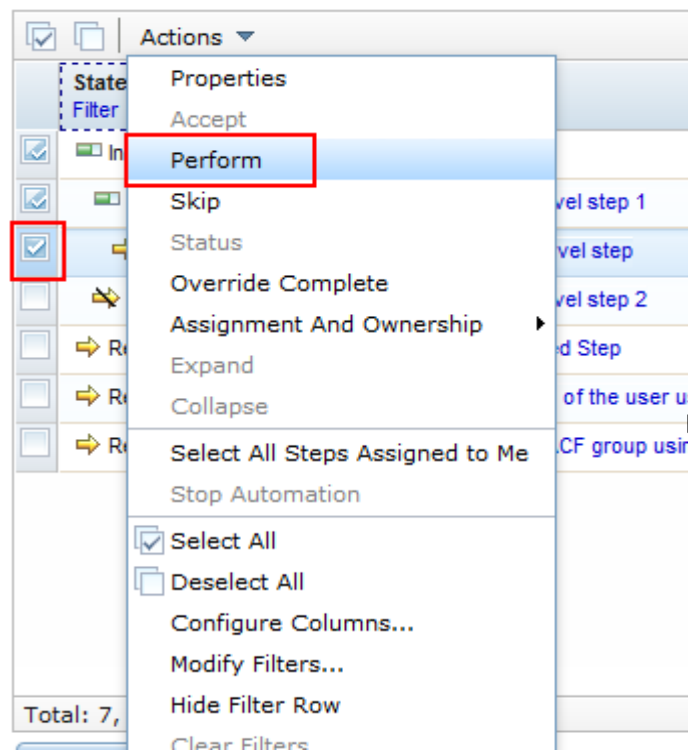
Enable dynamic alias management:  
Yes

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

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

Excluded systems:  
N/A

# Workflow – Perform Step Automatically



**Perform Automated Step**

The selected step can be performed automatically. How would you like to proceed?

Automatically perform the selected step, and all subsequent automated steps, according to their declared step dependencies, until one of the following occurs:

- all workflows steps have been completed.
- a non-automated, non-Complete step, is reached, or
- an error occurs.

Automatically perform the selected step only.

Manually perform the selected step.

OK Cancel Help

## Workflows

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

Workflow Name	Vendor	Owner	System	Percent Complete	Status
sample_wizards.xml	IBM	zosmfad	DUMBPLEX.DUMBNODE (DUMBNODE_002)	22%	In Progress
50.xml	workflowFVT	zosmfad	DUMBPLEX.DUMBNODE (DUMBNODE_002)	38%	Automation in Progress [zosmfad]
Sample Workflow Automation	IBM	zosmfad	DUMBPLEX.DUMBNODE (DUMBNODE_002)	25%	Automation in Progress [zosmfad]

\*\* available for z/OSMF V2R1 with PTFs for APAR PM98630 and its corequisite APARs

## Notice Regarding Specialty Engines (e.g., zIIPs, zAAPs and IFLs):

Any information contained in this document regarding Specialty Engines ("SEs") and SE eligible workloads provides only general descriptions of the types and portions of workloads that are eligible for execution on Specialty Engines (e.g., zIIPs, zAAPs, and IFLs). IBM authorizes customers to use IBM SE only to execute the processing of Eligible Workloads of specific Programs expressly authorized by IBM as specified in the "Authorized Use Table for IBM Machines" provided at [www.ibm.com/systems/support/machine\\_warranties/machine\\_code/aut.html](http://www.ibm.com/systems/support/machine_warranties/machine_code/aut.html) ("AUT").

No other workload processing is authorized for execution on an SE.

IBM offers SEs at a lower price than General Processors/Central Processors because customers are authorized to use SEs only to process certain types and/or amounts of workloads as specified by IBM in the AUT.

