

What's New in z/OSMF V2.2

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and Deployment Architect



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- **What is the z/OS Management Facility (z/OSMF)**
 - **What's New in z/OSMF V2.2**
 - Integrated into of z/OS
 - Configuration of z/OSMF
 - z/OSMF Look and Feel (“One UI”)
 - Multiple Sysplex Support
 - Configuration Assistant - TCP/IP stack configuration
 - **z/OSMF V2.1 Functions introduced after z/OSMF V2.1 became available:**
 - March 2014
 - September 2014
 - March 2015



What is the z/OS Management Facility (z/OSMF)

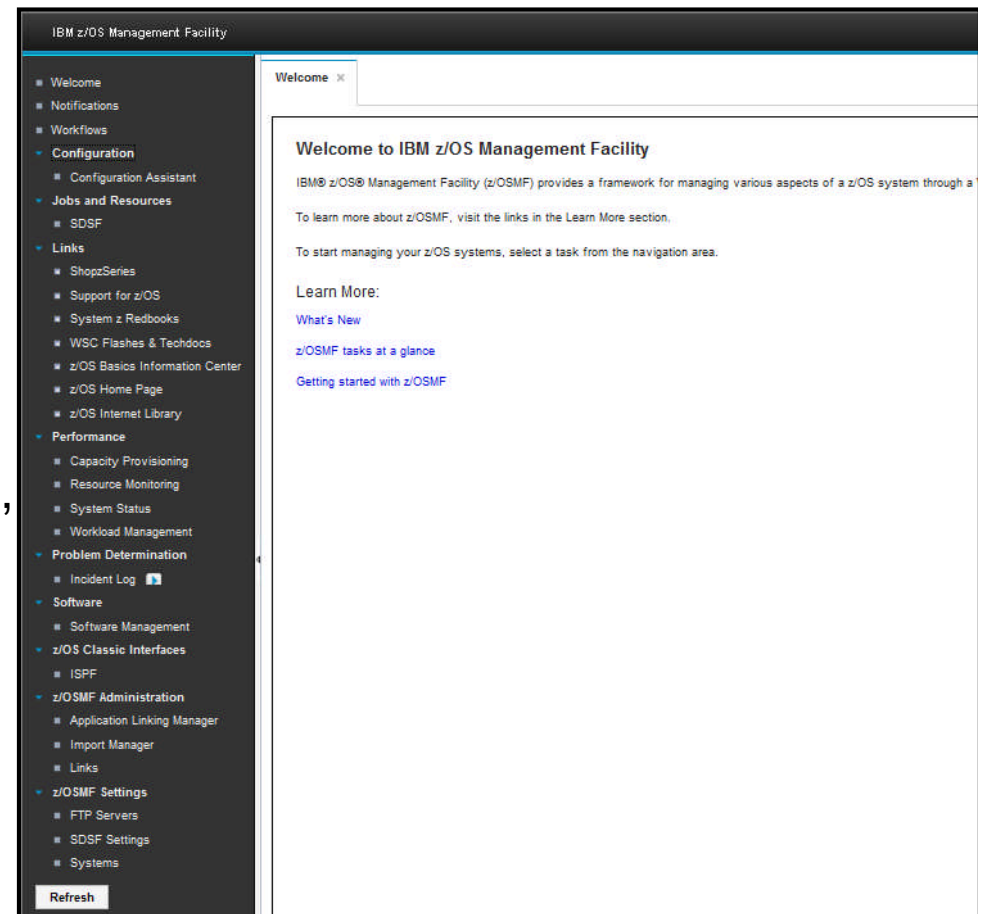
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IBM z/OS Management Facility



- The IBM z/OS Management Facility is a now a part of z/OS V2.2 that provides support for a modern, Web-browser based management console for z/OS.
- It helps system programmers more easily manage and administer a mainframe system by simplifying day to day operations and administration of a z/OS system.
- More than just a graphical user interface, the z/OS Management Facility is intelligent, addressing the needs of a diversified skilled workforce and maximizing their productivity.
 - Automated tasks can help reduce the learning curve and improve productivity.
 - Embedded active user assistance (such as wizards) guide you through tasks and helps provide simplified operations.



z/OS Management Facility



Problem Management & Analysis

Installation, Migration, & Maintenance

Configuration and Performance

Simplify and modernize the user experience and programming requirements

Incident Log (z/OSMF V1.11)

provides a consolidated list of SVC Dump related problems, along with details and diagnostic data captured with each incident. It also facilitates sending the data for further diagnostics.

SDSF (z/OSMF V2.1 with PTF

UI15294) provides a browser-based SDSF application designed to run in a z/OSMF environment that takes advantage of a graphical user interface.

Software Management (z/OSMF V1.13) provides a simple, structured approach to deploying SMP/E installed software. In addition, it allows for inspection of a software instance to view the product, feature, FMID content, SYSMODS, as well as the physical datasets that comprise a particular software instance. It also enables you to perform actions to analyze and report on software instances (such as identifying installed products with an announced end of service date).

z/OSMF Base Services:

- **Security integration with SAF (z/OSMF V1.13)**
- **ISPF Web UI (z/OSMF V1.13)**
- **REST API for Jobs (z/OSMF V1.13)**
- **REST API for Data Sets and Files (z/OSMF V2.1 with PTF UI16044)**
- **REST API for z/OSMF Information Retrieval (z/OSMF V2.1 with PTF UI90005)**
- **REST API for z/OSMF Systems (z/OSMF V2.1 with PTF for APAR PI32148)**
- **REST API for Software Management (z/OSMF V2.1 with PTF for APAR PI32158)**
- **REST API for z/OSMF Workflow (z/OSMF V2.1 with PTF for APAR PI32163)**
- **Notifications (z/OSMF V2.1)** View and act on the z/OSMF notifications that have been assigned to you
- **Use of WebSphere Liberty Profile (z/OSMF V2.1)** faster startup, uses less resources
- **Workflow (z/OSMF V2.1)** Perform a guided set of steps, for example, to configure components or products in your installation. **With PTF UI90005**, A workflow step can use output from another workflow step; also a workflow step can be performed conditionally.
- **Import Manager (z/OSMF V2.1 with PTF UI16044)** Import plug-ins, event types, event handlers, and links into z/OSMF.
- **System Setting - Discover the system definition that hosts the z/OSMF instance (z/OSMF V2.1 with PTF UI90005)**

Configuration Assistant for z/OS Communications Server (z/OSMF V1.11) Simplified configuration and setup of TCP/IP policy-based networking functions

WLM Policy Editor (z/OSMF V1.12)

Simplified management of WLM service definitions and policies. Facilitate the creation and editing of WLM service definitions, installation of WLM service definitions, and activation of WLM service policies

Resource Monitoring (z/OSMF

V1.12) Provides dynamic real time metrics for system performance

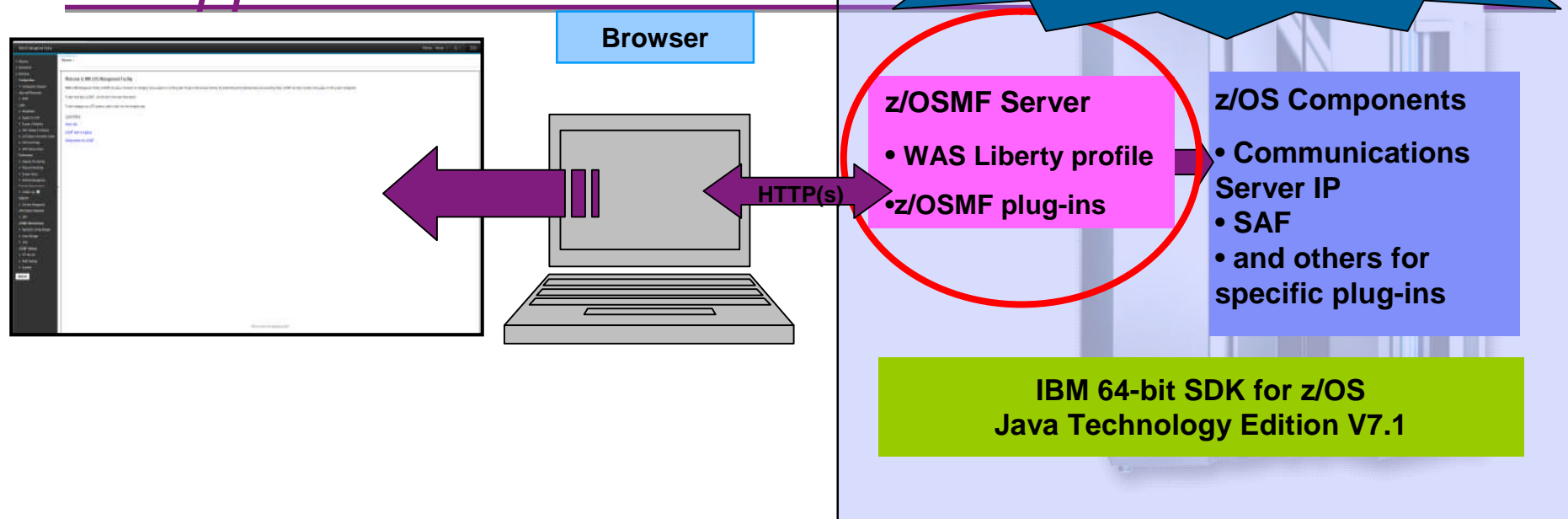
Capacity Provisioning (z/OSMF

V1.13) simplify the work of a z/OS CP administrator to manage connections to CPMs, view reports for domain status, active configuration and active policy.


IBM z/OS Management Facility

The Application Stack


Session 9/29 on z/OSMF V2.2
Configuration and Implementation



- The z/OS Management Facility applications run on the z/OS enabling you to manage z/OS from z/OS
 - Information is presented on a PC using a browser
- The z/OS Management Facility requires:
 - z/OS Communications Server
 - Security definitions (SAF)
 - Other components are required for specific z/OSMF plug-ins
 - IBM 64-bit SDK for z/OS Java Technology Edition V7.1

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- **z/OSMF is now part of z/OS!!!**
 - It is a base element of z/OS V2.2
 - It's documentation is part of z/OS
 - e.g., migration actions are in z/OS Migration manual
 - Comes as part of every z/OS order
 - You no longer have to order it separately
 - You can not remove it, or not install it
 - You are NOT required to configure or start z/OSMF
 - ServerPac delivers z/OSMF as part of the z/OS root file system using the directory of /usr/lpp/zosmf
 - VxRy is now removed.

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z/OSMF V2.2 Configuration

Session 9/29 on z/OSMF V2.2
Configuration and Implementation

- **Objective** **Enabled by PTF UI90027 (available August 5, 2015)**
 - Configure z/OSMF like other z/OS functions
 - Eliminate the use of z/OS UNIX shellscripts to configure z/OSMF
 - Use PARMLIB to specify configuration parameters
 - Provide sample members for
 - PARMLIB specification
 - Security definitions
 - Creation/migration of z/OS UNIX filesystem
 - Utilize z/OSMF Workflows to provide a graphical interface step the user through plug-in prerequisite configuration
 - Planned 4Q2015*
 - Documented in the IBM z/OS Management Facility Configuration Guide V2.2 (SC27-8419)
 - Additional documentation in DOC APAR PI46099
 - **The PTF will be installed in all z/OS V2.2 ServerPacs!!!**

* Planned. All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.



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- **Eliminate use of z/OS UNIX Shellscripts and REXX EXECs**
 - izumigrate.sh will still be used to assist in migration
 - **Eliminate the use of generated customized REXX EXECs for RACF security definitions**
 - Eliminate configuration parameters only needed to customize security definitions
 - **Eliminate the use of z/OS UNIX Shellscripts and generated customized REXX EXECs to authorize users to use z/OSMF**

- **Use PARMLIB to specify configuration parameters**
 - **PARMLIB member IZUPRMxx contains remaining configuration parameters**
 - Members can contain comments /* comment */
 - Members can use of system symbols
 - Members can be concatenated (xx,yy,zz,...)
 - Member can be in any data set in the logical PARMLIB concatenation
 - **IZUPRMxx is optional.**
 - Not needed if all defaults are used
 - **Sample PARMLIB member provided**
 - SYS1.SAMPLIB(IZUPRM00)
 - **Tip: Specify values only for those defaults that you want to override (that is, omit any statement for which the default value is acceptable).**
 - Doing so will ensure that you always obtain the default values, even if they happen to change in a future release.
- **New parameter added to the IZUSVR1 started procedure to identify PARMLIB member(s) to use**
 - **Concatenation of members is supported**
 - IZUPRM='(xx,yy,zz)'
 - **Default is IZUPRM=NONE**

z/OSMF V2.2 Configuration ...




```
HOSTNAME('*')
HTTP_SSL_PORT(443)
INCIDENT_LOG UNIT('SYSALLDA')
JAVA_HOME('/usr/lpp/java/J7.1_64')
KEYRING_NAME('IZUKeyring.IZUDFLT')
LOGGING('*=warning:com.ibm.zosmf.*=info:com.ibm.zosmf.environment.ui=fi
ner')
RESTAPI_FILE ACCT(IZUACCT) REGION(32768) PROC(IZUFPROC)
SAF_PREFIX('IZUDFLT')
SEC_GROUPS USER(IZUUSER),ADMIN(IZUADMIN),SECADMIN(IZUSECAD)
SESSION_EXPIRE(495)
TEMP_DIR('/tmp')
UNAUTH_USER(IZUGUEST)
WLM_CLASSES DEFAULT(IZUGHTTP) LONG_WORK(IZUGWORK)
/* Uncomment the following statement and any plugins that
   are desired */
/* PLUGINS(                                     */
/*     INCIDENT_LOG,                           */
/*     COMMSERVER_CFG,                         */
/*     WORKLOAD_MGMT                           */
/*     RESOURCE_MON,                           */
/*     CAPACITY_PROV,                           */
/*     SOFTWARE_MGMT,                           */
/*     ISPF)                                    */
```



- **SAMPLIB(IZUxxSEC)**
 - **IZUSEC** – defines base (“Core”) z/OSMF security definitions
 - **IZUCASEC** – defines security definitions for Configuration Assistant
 - **IZUCPSEC** – defines security definitions for Capacity Provisioning
 - **IZUDMSEC** – defines security definitions for Software Management
 - **IZUILSEC** – defines security definitions for Incident Log
 - **IZUISSEC** – defines security definitions for ISPF
 - **IZURMSEC** – defines security definitions for Resource Monitoring
 - **IZUWLSEC** – defines security definitions for Workload Management
- **SAMPLIB(IZUAUTH)** – security definitions to authorize a user to use z/OSMF

SAMPLIB(IZUMKFS)

- Defines, formats, and temporarily mounts the z/OSMF user file system.
 - Initializes the z/OSMF user file system, which contains configuration settings and persistence information for z/OSMF.
 - The job performs the following actions:
 - Allocates the z/OSMF user file system as /var/zosmf.
 - Mounts the filesystem at mount point /var/zosmf:
 - As a zFS type file system
 - With the option PARM('AGGRGROW') to allow the filesystem to grow dynamically, as needed
 - With the option UNMOUNT to ensure that it is unmounted if the z/OS system becomes unavailable
 - Changes the ownership and permissions and ownership of the directories and files in the z/OSMF user file system, as follows:
 - The file system is owned by the IZUSVR user ID and the IZUADMIN security group
 - The file system is protected with the permissions 755
- Note:** It is recommended that you give the z/OSMF file system sysplex-wide scope.
- To do so, update the job to ensure that it mounts the user directory at a shared mount point.

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New Look and Feel (“One UI”)



- **z/OSMF V2.2 now is compliant with IBM’s One UI standard**
 - IBM One UI standard delivers consistent user experience to IBM clients
- **The UI style is has changed to be compliant with One UI standard.**
 - Existing users will notice several changes:
 - The colors scheme is black and white (links in blue)
 - The Welcome page has a Log in action to bring up a pop-up window to enter user ID and password
 - Once logged on, the Log in action is replaced by a pull down to either:
 - Log out
 - Switch User
 - Change Password
 - New Help pull down identified by ⓘ
 - The “About z/OSMF” function is a pull down action
 - Once logged on, “Help Contents” is the other pull down action



z/OSMF V2.2 Welcome Page



IBM z/OS Management Facility

Log in

Welcome x

Welcome to IBM z/OS Management Facility

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

Log in to utilize and learn more about z/OSMF.

Check browser and operating system

Log in Action

New Help Pull Down

Refresh



z/OSMF Log in Pop-up Window



IBM z/OS Management Facility

Welcome x

Welcome to IBM z/OS Management Facility

IBM® z/OS® Management Facility provides a secure, self-administered environment for managing the z/OS system through a Web browser interface. By streamlining some traditional tasks and automating others, it helps you manage the z/OS system more efficiently.

Log in to utilize and learn more about the z/OS Management Facility.

Log in

User ID

Password or pass phrase

Log in Cancel

Secure authentication to z/OS host using regular z/OS User ID and password.



z/OSMF About Pop-up Window



IBM z/OS Management Facility

Welcome x

Welcome

IBM® z/OS® Ma
some areas of z

Log in to uti

Refresh

Pop-up window that identifies which plug-ins have been configured and the last time the plug-in (or core function) was updated (e.g., by service).

IBM z/OS Management Facility
Version 2.2

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Plugin Name	Version
WorkloadManagement	hsma223;pi44431;2015-07-22T03:32:09
Import Manager	hsma220;pi44092;2015-07-22T06:47:27
IBM SDSF	HQX77A0;HQX77A0;driver17;2015-03-09T00:00:00Z
Capacity Provisioning	hsma226;PI44441;2015-07-10T10:54:27
Software Deployment	hsma224;PI44434;2015-07-22T04:41:49
ConfigurationAssistant	hsma22a;PI43329;2015-06-30T05:59:09
IncidentLog	hsma225;pi44435;2015-07-22T03:37:40
ISPF	hsma221;pi44427;2015-07-08T05:20:56
ResourceMonitoring	hsma222;PI44429;2015-07-16T11:20:28
Workflow	hsma227;pi44442;2015-07-22T04:00:17

Build pi44092



z/OSMF V2.2 Welcome Page (once logged on)



IBM z/OS Management Facility

Welcome | ibmuser | ? | IBM

- Log Out
- Switch User
- Change Password

Welcome to IBM z/OS Management Facility

IBM® z/OS® Management Facility (z/OSMF) provides a framework for managing various aspects of z/OS system management.

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

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

Learn More:

- [What's New](#)
- [z/OSMF tasks at a glance](#)
- [Getting started with z/OSMF](#)

Pull down to:

- Log Out
- Switch User
- Change Password

Help Contents now available

After logging on, you can click on What's New to see new functions

Check browser and operating system



IBM z/OS Management Facility – What's New



IBM Knowledge Center English

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z/OS Management Facility 2.2.0

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Search Results

Welcome > What's new in the z/OSMF online help

What's new in the z/OSMF online help

This topic describes the enhancements provided in the online help for z/OSMF Version 2 Release 2.

- z/OSMF provides a modern, intuitive interface that is consistent with other IBM products.
- The Capacity Provisioning task has been enhanced to allow you to define processor utilization thresholds that can trigger provisioning of additional processor capacity for a central processor complex (CPC).
- The Incident Log task has been enhanced to provide multi-sysplex support, which allows you to manage all the incidents that occurred for all the sysplexes in your enterprise from a single z/OSMF instance.
- The Resource Monitoring task has been enhanced to:
 - Allow a metric to be used multiple times for different resources within the same metric group. With this support, the identifier used in metric groups has been extended from metric ID only to metric ID plus resource name. This enables the creation of metric groups that enable easy comparison of performance differences for different resources in one metric group.
 - Support new resource types PCIE, PCIE FUNCTION, SCM, and SCM CARD.
 - Provide an enhanced color scheme for monitoring dashboards to indicate different metrics that is accessible in both normal and high contrast modes, eliminating the need for a color scheme setting.
- The Systems task provides a graphical view -- the system topology -- of the systems, sysplexes, CPCs, and groups that have been defined to z/OSMF.
- The Workflows task has been enhanced, as follows:
 - You can upgrade a workflow with updates from the workflow provider. With the new Upgrade action, you can upgrade a workflow to the latest level without losing your changes or having to start again with a new instance.


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September 2015



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Multiple Sysplex Support

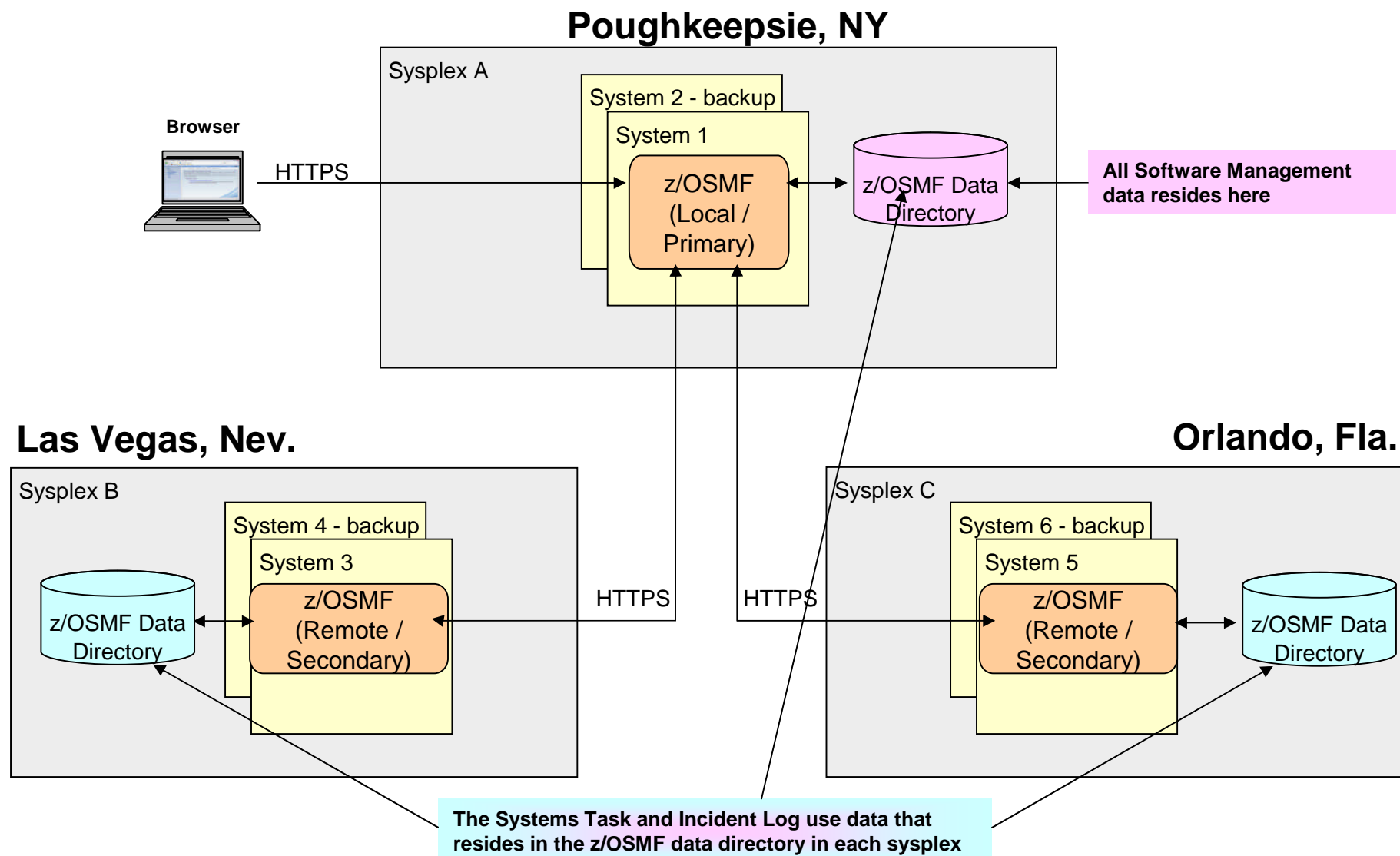


- **Previously z/OSMF was single sysplex scope**
 - Some plug-ins have the capability to manage multiple sysplex
 - e.g., Resource Monitoring or Software Management
 - It was also possible to have multiple z/OSMF instances within a sysplex
 - **z/OSMF V2.2 supports managing multiple sysplexes from single z/OSMF**
 - This framework enables managing multiple sysplexes from single user interface (one z/OSMF tab in browser).
 - The first exploiter is Incident Log. You can now manage incidents from:
 - multiple sysplexes (Group), or
 - multiple systems on a CEC, or
 - the existing multiple systems in a sysplex
- Note:** Software Management supported managing software instances residing in multiple sysplexes using one z/OSMF tab in a browser since z/OSMF V1.13
- **Each sysplex must have at least one z/OSMF instance running**
 - The z/OSMF instance which is connected by the user interface is known as “primary z/OSMF”.
 - Other z/OSMF instances which are managed by “primary z/OSMF” are known as “remote or secondary z/OSMF”.



- **The multiple sysplex support includes:**
 - **z/OSMF Systems task** is improved to be able to manage the topology information of systems, sysplex, CPC and group.
 - Supports graphic view of topology information and exporting the graphic view.
 - **Incident Log** can now be invoked with a scope of a single sysplex, single CEC, or specific group which is defined by user and could contain any systems.
 - A “**Topology REST interface**” is provided for working with topology information such as groups, sysplexes through REST API invocation.
 - A “**Multisystem routing REST service**” is provided for communicating with single remote system or group of remote systems.
 - **Single Sign On (SSO)** can be set up to avoid the need to logon each remote/secondary z/OSMF when managing them from primary z/OSMF
- **The z/OSMF Primary system must be z/OS V2.2**
 - The remote/secondary systems can be z/OS V2.1 or z/OS V2.2u

Managing Multiple Sysplexes



z/OSMF Systems task



- View topology by sysplex, Group, or CPC (CEC)

Welcome x Systems x

Systems [Help](#)

View systems by: Sysplex

Actions Table view: Tree

No filter applied

<input type="checkbox"/>	Sysplex/System Name filter	Nickname filter	Description filter	Groups filter	z/OSMF URL filter	z/OS Version and Release filter	JES Member Name filter	JES Type filter	CPC Name filter
<input type="checkbox"/>	PLEX1								
<input type="checkbox"/>	SY1	SY1	The first system in PLEX1	ProdGroup	https://pev063.pok.ibm.com:443/zosmf	z/OS V2R2	SY1	JES2	CPC1
<input type="checkbox"/>	SYSTEM2	System2	The second system in PLEX1	ProdGroup		z/OS V2R1		JES2	CPC1
<input type="checkbox"/>	PLEX2								
<input type="checkbox"/>	SYSTEM3	System3	The 3rd system	TestGroup	https://pev061.pok.ibm.com/zosmf	z/OS V2R1		JES2	CPC2
<input type="checkbox"/>	SYSTEM4	System4	The 4th system	TestGroup		z/OS V2R2		JES2	CPC2

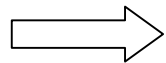
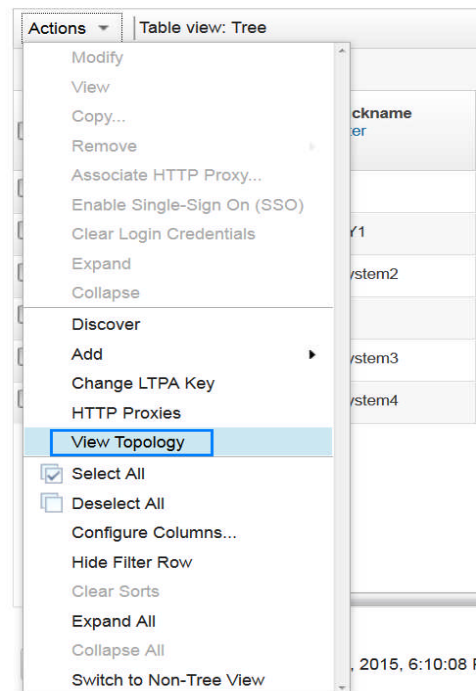


z/OSMF Systems task



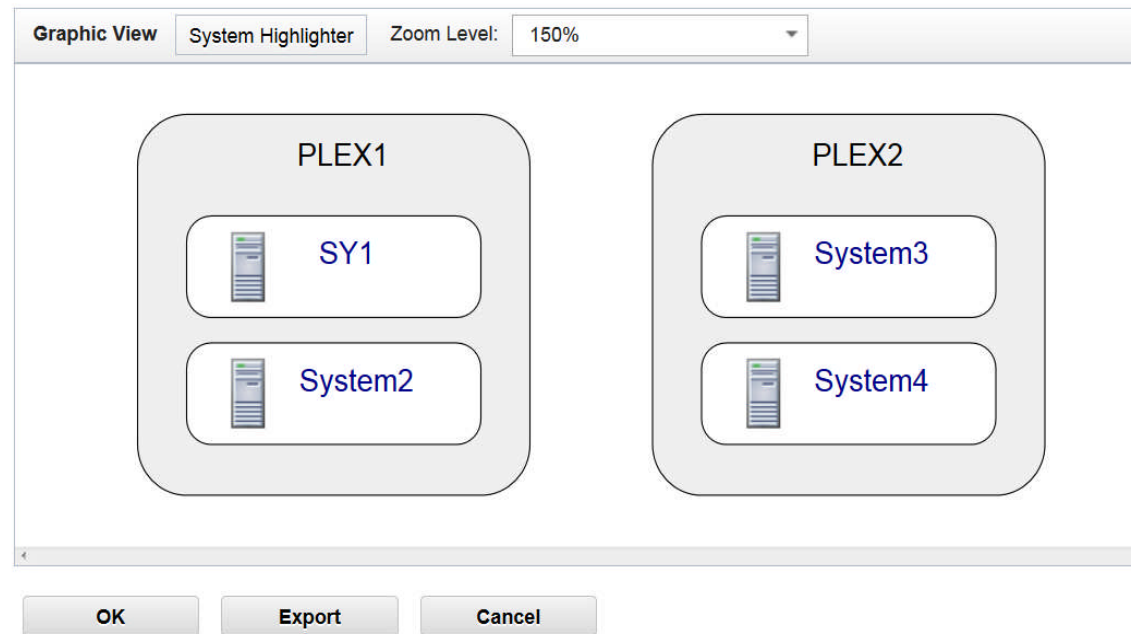
- Graphic view support (Take sysplex view for instance)

Systems



Systems ▸ View Topology

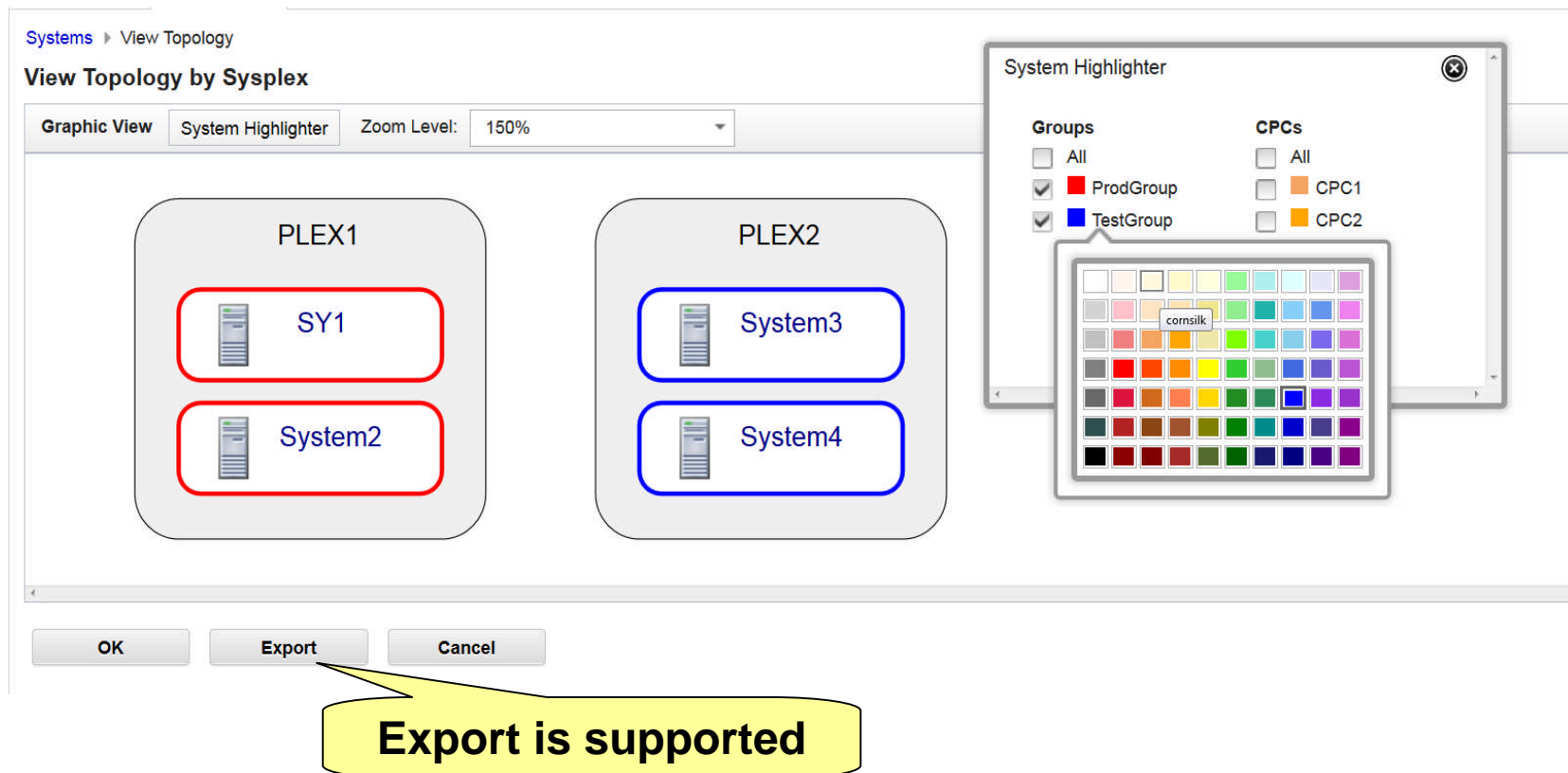
View Topology by Sysplex



z/OSMF Systems task



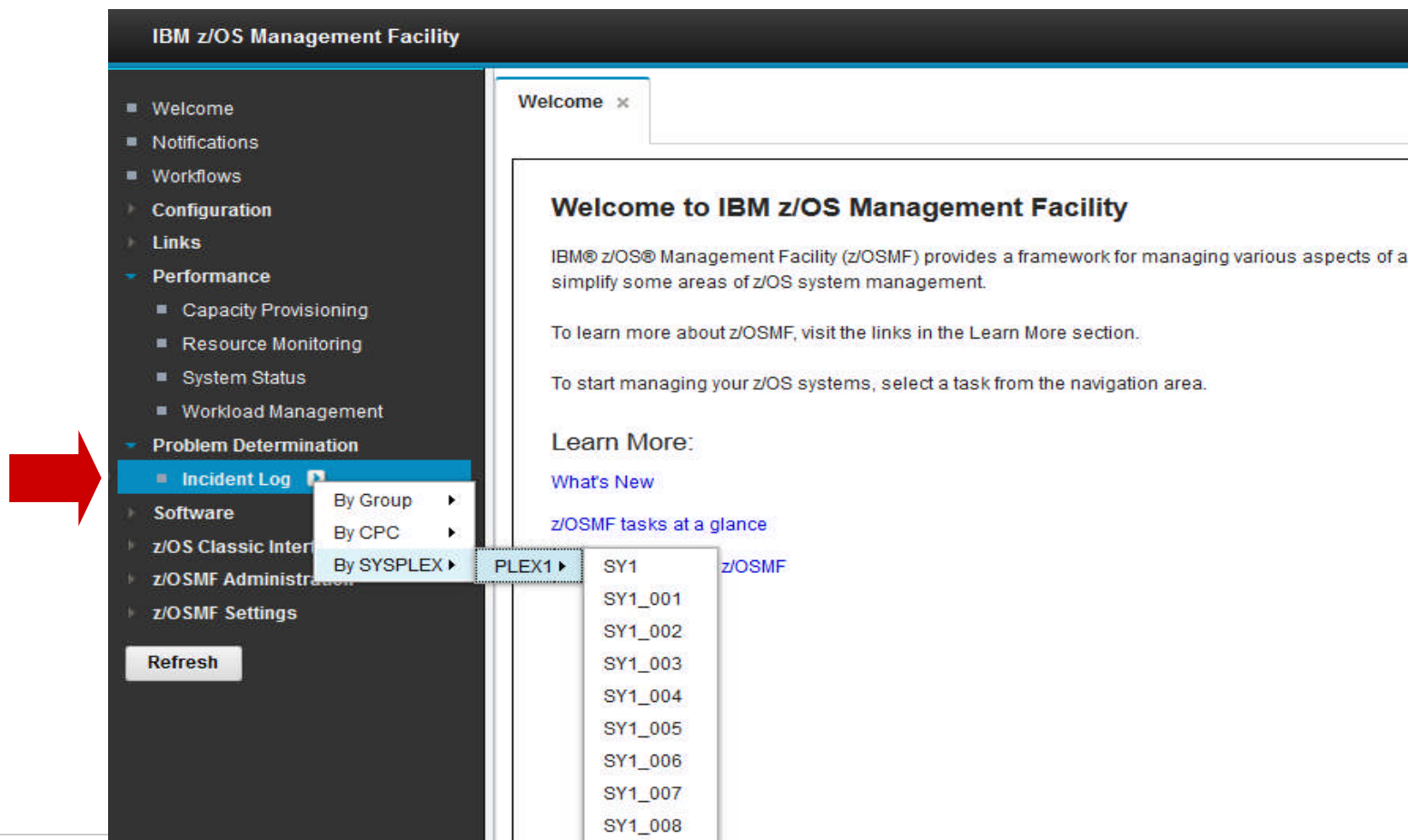
- Graphic view support (More customization of visual effects)



Incident Log Selection Options



- The Incident Log task has been enhanced to provide multi-sysplex support, which allows the user select the scope that they want to use (Group, CPC (CEC), or Sysplex)



Incident Log Selection Options ...



- Incident Log is opened on the chosen scope
 - The sysplex can be local or remote

IBM z/OS Management Facility

Welcome x Systems x Incident Log x
ProdGroup

'By Group' was selected

Incident Log

Actions 2 of 2 i

Sysplex	System	Nickname	Groups
PLEX1	SY1	SY1	ProdGroup
PLEX1	SYSTEM2	System2	ProdGroup

Incident Type filter

User Initiated TEST03 Jan 30, 2015, 10:41:59 AM PLEX1 SY1

User Initiated TEST03 Jan 30, 2015, 10:41:38 AM PLEX1 SY1

Date and Time (GMT) past 3 days

Sysplex filter

System filter

Problem Number filter



-
- **Incident Log plugin now supports two modes in terms of the managed scope:**
 - **Basic-Proxy mode:** Incident Log is opened on a single sysplex
 - **Aggregation mode:** Incident Log is opened on a group which can contain multiple sysplexes

Incident Log Aggregation ...



■ Basic-Proxy mode:

- The sysplex selected (local or remote) is used for:
 - Table settings (e.g. filter, sort, column configuration) - z/OSMF data directory
 - Data (incidents) – the sysplex dump directory
 - Actions to be performed (capture next dump, FTP diagnostic data, etc.)
 - The function of actions remain the same as z/OSMF V2.1

IBM z/OS Management Facility

Welcome zosmfad

Welcome x Incident Log x
PLEX1.testSystem

'By Sysplex' was selected

Incident Log

Actions

3 of 3 items shown. Clear filter

Incident Type filter	Description filter	Tracking ID filter	Notes filter	Component Name filter	Component ID filter
<input type="checkbox"/> User Initiated	TEST02			V	
<input type="checkbox"/> User Initiated	TEST01			V	
<input type="checkbox"/> User Initiated	TEST01			V	

Refresh



Incident Log Aggregation ...



■ Aggregation mode:

- Table settings (e.g. filter, sort, column configuration) are retrieved from the primary z/OSMF
- Data (incidents) is consolidated from all the managed sysplexes in the selected Group and presented in a single table.
- Actions are routed to all sysplexes in the Group (local and remote) to be performed
 - The function of actions remain the same as z/OSMF V2.1

The screenshot displays the IBM z/OS Management Facility (z/OSMF) interface. The left sidebar shows the navigation menu with 'Incident Log' selected under 'Problem Determination'. The main content area shows the 'Incident Log' page with a table of incidents. A red box highlights the 'Incident Log aggregation' tab, and another red box highlights the 'By Group' selection in the table header. A red text overlay states 'By Group' was selected. The table shows incidents from two sysplexes (PLEX1 and PLEX2) grouped under the 'aggregation' group.

Sysplex	System	Nickname	Groups
PLEX1	SY1	testSystem	aggregation
PLEX2	SY2	testSystem2	aggregation

Incident ID	Notes	Component Name	Component ID
User Initiated	TEST02		
User Initiated	TEST01		
User Initiated	TEST01		
User Initiated	TEST02		
User Initiated	TEST01		
User Initiated	TEST01		



- **Single sign-on (SSO)** enables users to log into one z/OSMF instance and to access other z/OSMF instances without getting prompted to log in again.
- z/OSMF uses the **Lightweight Third Party Authentication (LTPA)** security protocol to enable a secure single sign-on environment among z/OSMF instances.
 - The LTPA protocol uses an LTPA token to authenticate a user with the z/OSMF servers that are enabled for single sign-on.
 - The LTPA token contains information about the user and is encrypted using a cryptographic key.
 - The z/OSMF servers pass the LTPA token to other z/OSMF servers through cookies for web resources.
 - If the receiving server uses the same key as the *primary z/OSMF server* -- the server that generated the key to be used for SSO, the receiving server
 - decrypts the token to obtain the user information,
 - verifies that the token has not expired, and
 - confirms that the user ID exists in its user registry.
 - After the receiving server validates the LTPA token, the server authenticates the user with that z/OSMF instance, and allows the user to access any resource to which the user is authorized.

Multisystem routing REST service



- Multisystem routing REST service is provided for communicating with single system/group of systems via HTTP API invocation.
 - Requires the target systems to be running
 - Can be z/OS V2.1 or z/OS V2.2 systems

Operation	HTTP Method
Retrieve data from one system, a list of systems or all the systems in a group	GET
Update data for one system, a list of systems or all the systems in a group	POST or PUT
Delete data from one system, a list of systems or all the systems in a group	DELETE
Authenticate with a secondary z/OSMF instance	POST




Topology REST service



- Topology REST service is provided for working with topology information managed by z/OSMF via HTTP API invocation.

Operation	HTTP Method
List the system defined to z/OSMF	GET
List the groups defined to z/OSMF	GET
List the systems included in a group	GET
List the sysplexes defined to z/OSMF	GET
List the systems included in a sysplex	GET



-
- **What is the z/OS Management Facility (z/OSMF)**
 - **What's New in z/OSMF V2.2**
 - Integrated into of z/OS
 - Configuration of z/OSMF
 - z/OSMF Look and Feel (“One UI”)
 - Multiple Sysplex Support
 -  **Configuration Assistant - TCP/IP stack configuration**
 - **z/OSMF V2.1 Functions introduced after z/OSMF V2.1 became available:**
 - March 2014
 - September 2014
 - March 2015

- Skilled z/OS system programmers and administrators are an aging skillset, leading to concerns about future skill shortages.
- Configuration Assistant (CA) only supports configuration of z/OS CS policy-based networking functions, such as IPSec, AT-TLS, and IDS.
- While TCP/IP configuration is not that complex, some aspects are not intuitive.
- User must look through a lot of documentation.
- Some statements are not easy to configure.

Configuration Assistant - TCP/IP stack configuration



- z/OSMF V2.2 will provide a new “TCP/IP” configuration perspective in the CA
- Support will be provided for both novice and more experienced users.
- CA will include integrated health checks for best practices configuration, including migration health checks for deprecated functions.
- The configuration model will support “levels of configuration” which include a sysplex level, image level, and a stack level with the goal to allow for configuration to be applied for grouping of stacks that require related configuration.
- CA will assist with “install” of the generated configuration files as it does with policy configuration.

Select a TCP/IP technology to configure : TCP/IP Profile

Systems Reusable Configuration Security Reusable Resources

Actions

System Group or Sysplex / System Image / Stack	Type
<input type="radio"/> Default	System Group
<input type="radio"/> I	System Image
<input type="radio"/> S	Stack
<input type="radio"/> S2	Stack




Statement of Direction*: Configuration Assistant for z/OS Communications Server (Issued July 28, 2015)



- **IBM plans to further extend the capabilities of the Configuration Assistant for z/OS Communications Server, a plug-in for z/OSMF, in z/OS V2.2.**
- **Additional planned enhancements will be designed to support:**
 - **Making dynamic configuration changes to an active TCP/IP configuration, and**
 - **A function designed to import existing TCP/IP profile data.**

* Statements regarding IBM future direction and intent are subject to change or withdrawal, and represent goals and objectives only.



-
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 - **March 2015**

PTF UI16044 (and its requisite PTFs) introduce a new:

- **Import Manager task in the z/OSMF Administration category.**
 - Administrators can use the Import Manager task to import plug-ins, event types, event handlers, and links into z/OSMF.
 - SDSF PTF UI15294 provides the descriptor to enable SDSF to be used as an external z/OSMF task
- **z/OS data set and file REST interface**
 - This API allows an HTTP client application to work with z/OS data sets and UNIX files on the z/OSMF host system.

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Adding External Plug-ins (e.g., SDSF)*



- Besides the optional plug-ins that are supplied with z/OSMF, your installation can choose to add plug-ins from other sources (IBM or other vendors) to your configuration.
 - For example, the z/OS System Display and Search Facility (SDSF) product supplies a plug-in for use with z/OSMF.
 - For the installation and customization requirements for a particular plug-in, see the documentation that is provided with the plug-in.
- To add the SDSF task to z/OSMF, you import a properties file through the Import Manager task of z/OSMF, which is in the z/OSMF Administration category.
 - The properties file for SDSF is /usr/lpp/sdsf/zosmf/sdsf.properties
- The function provided by the SDSF task in z/OSMF is protected just as z/OS SDSF is protected, with the same SAF resources and ISFPARMS parameters.

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



z/OSMF Import Manager*



- Use the Import Manager to import or view property files and to manage the import history.
- Use the Import tab in the Import Manager task to import property files into z/OSMF.
 - You can use property files to add new links, event types, or event handlers to z/OSMF, or to add, modify, or remove plug-ins.
- Use the History tab in the Import Manager task to view a list of the import requests and the results of each request, to display the contents of a property file, and to view the messages returned for an import request so you can determine the root cause of a problem.
- Use the View Property File tab to view the contents of a property file.
 - The contents (properties) are specified as name and value pairs, and the supported properties depend on whether you are defining a property file for links, event types, event handlers, or plug-ins.

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Import Manager* ...



Import Manager

Welcome

Welcome to IBM z/OS Management Facility

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

Log in to utilize and learn more about z/OSMF.

Check browser and operating system

Refresh

New navigation task for z/OSMF Administrators

* available for z/OSMF v2.1 with PTF UI16044 and its requisite PTFs (March 2014)



z/OSMF Import Manager*



IBM z/OS Management Facility

- Support for z/OS
 - System z Redbooks
 - WSC Flashes & Techdocs
 - z/OS Basics Information Center
 - z/OS Home Page
 - z/OS Internet Library
- Performance
 - Capacity Provisioning
 - Resource Monitoring
 - System Status
 - Workload Management
- Problem Determination
 - Incident Log
- Software
 - Software Management
- z/OS Classic Interfaces
 - ISPF
- z/OSMF Administration
 - Application Linking Manager
 - Import Manager**
 - Links
- z/OSMF Settings

Welcome x Import Manager x

Import Manager

Import History Imported Plug-ins

To add plug-ins, event types, handlers, and links in z/OSMF, specify the property file to import. [Learn more...](#)

Property file:

Select or type the path and r View Import

Contents of property file Clear

Click View to display the contents of the specified property file.

This is where you specify the properties file for SDSF:
/usr/lpp/sdsf/zosmf/sdsf.properties

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Import Manager* ...



IBM z/OS Management Facility

- Welcome
- Notifications
- Workflows
- ▼ Configuration
 - Configuration Assistant
- ▼ **Jobs and Resources**
 - SDSF
- ▼ Links
 - ShopzSeries
 - Support for z/OS
 - System z Redbooks
 - WSC Flashes & Techdocs
 - z/OS Basics Information Center
 - z/OS Home Page
 - z/OS Internet Library
- ▼ Performance
 - Capacity Provisioning
 - Resource Monitoring
 - System Status
 - Workload Management
- ▼ Problem Determination
 - Incident Log
- ▼ Software
 - Software Management

Welcome x

Welcome to IBM z/OS Management Facility

IBM® z/OS® Management Facility (z/OSMF) provides a framework for managing various aspects of a z/OS system through a Web browser interface. E simplify some areas of z/OS system management.

Log in to utilize and learn more about z/OSMF.

After you import the SDSF properties file, and define the security definitions, authorized users will see the “Jobs and Resources” category and the SDSF Plug-in

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



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, etc.
 - Issue system command and display output.
 - Display the User Session Log. Users can search and take notes.

* available with z/OS V2.1 SDSF PTF UI15294 and z/OSMF V2.1 with PTF UI16044



SDSF Overview*



SDSF (PLEX1)

Overview

Explore the summary data, or choose a task.

System Activity Summary: SYS00001 (Local)

System: **SYS00001 (Local)** View text

System Activity Percent Busy

Component	Percent Busy
zAAP	50%
zIIP	84%
LPAR	25%
MVS / SRM	100%
Spool	65%

z/OS Health Checks by Severity

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 256 characters) Submit

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.

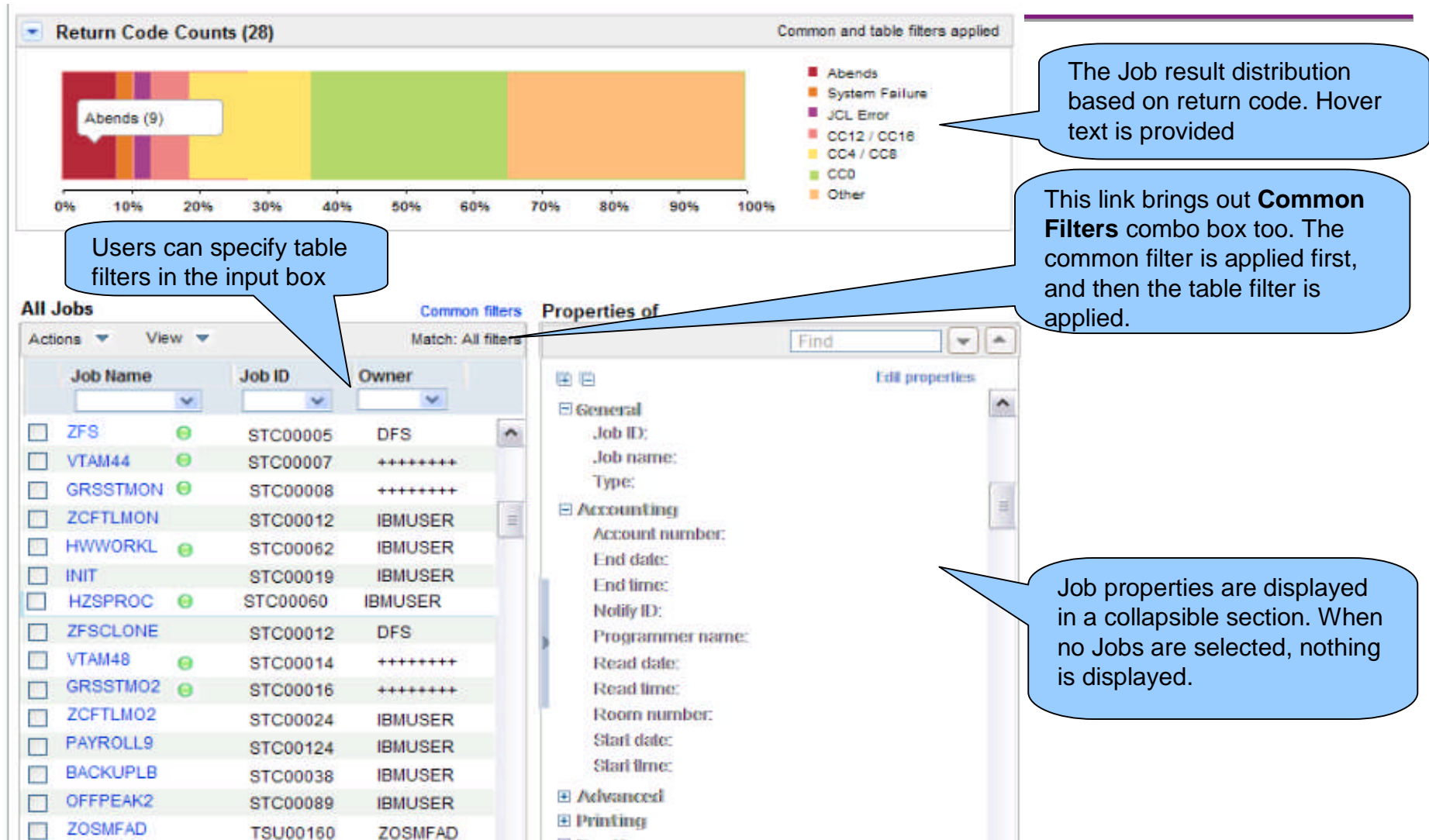
This link can change to more abbreviated icon view. Clicking each view link can open new tab

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.

* available with z/OS V2.1 SDSF PTF UI15294 and z/OSMF V2.1 with PTF UI16044



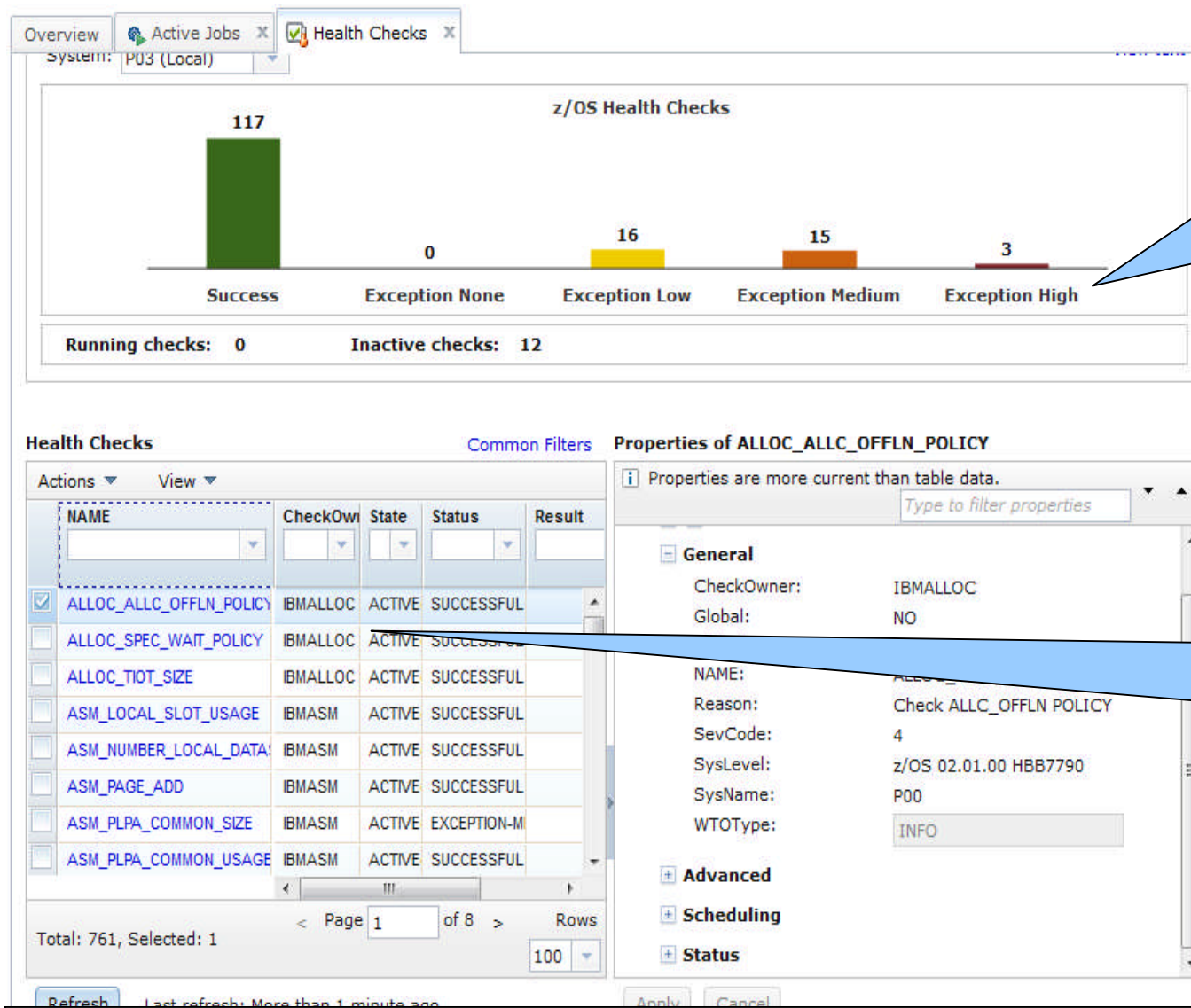
All Jobs View *



* available with z/OS V2.1 SDSF PTF UI15294 and z/OSMF V2.1 with PTF UI16044



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.

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.

* available with z/OS V2.1 SDSF PTF UI15294 and z/OSMF V2.1 with PTF UI16044



z/OSMF's Enhancements March 2014*

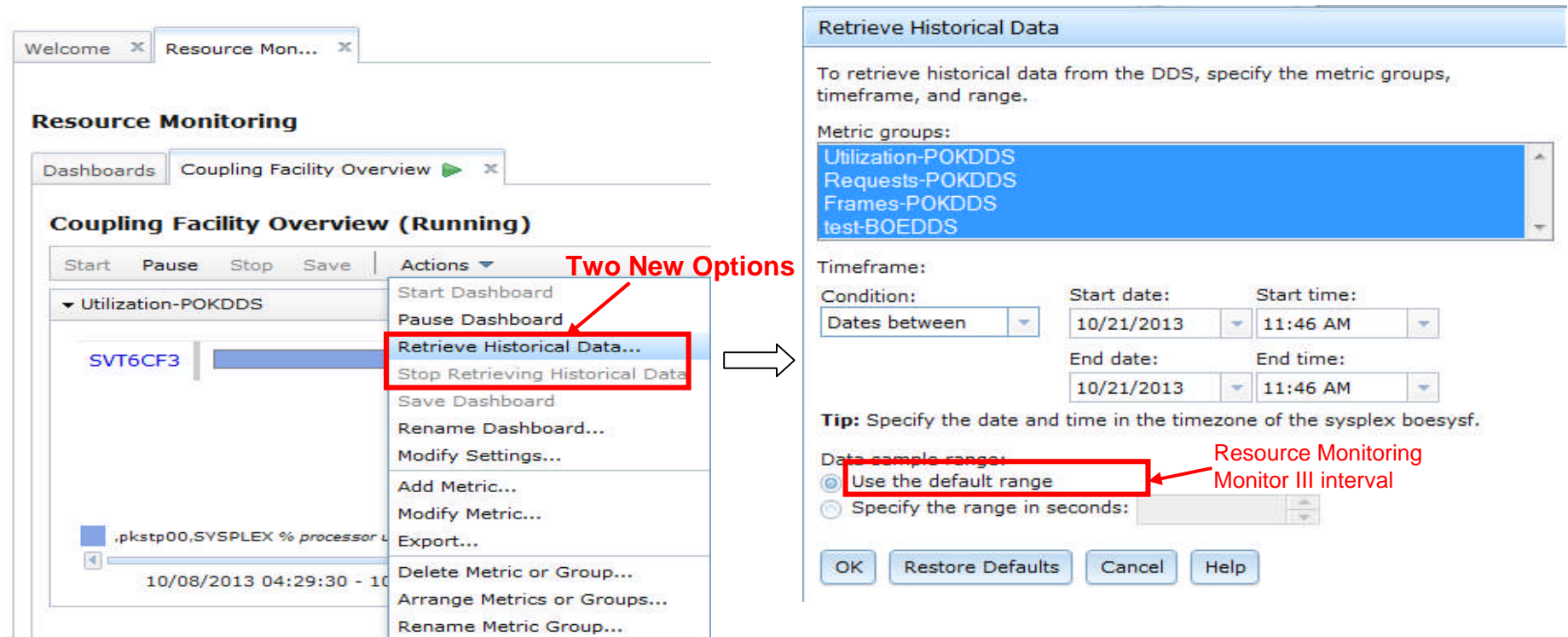


- **The Incident Log task**
 - Increased the allowable length of the high-level qualifier for log snapshot data sets from four- to eight-characters
 - Support a total of 256 characters for the FTP server host, FTP server port, and FTP.DATA file name when using the z/OS Problem Documentation Upload Utility (PDUU) transfer method
- **The ISPF task**
 - 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.
- **The Resource Monitoring task**
 - Retrieve Historical Data
 - New feature can retrieve historical performance data from Resource Monitoring DDS before a RM dashboard was started.
 - Export data collected in monitoring dashboards
- **The Workload Management task**
 - Support the addition of comments to the service definition history

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Resource Monitoring - Retrieve Historical Data*



The screenshot shows the 'Resource Monitoring' application window. The 'Coupling Facility Overview (Running)' dashboard is active, displaying a bar chart for 'SVT6CF3'. The 'Actions' menu is open, highlighting 'Retrieve Historical Data...' and 'Stop Retrieving Historical Data...'. A red box and an arrow point to these two options, with the text 'Two New Options' written above them. The 'Retrieve Historical Data' dialog box is open, showing the following fields:

- Metric groups:** A list box containing 'Utilization-POKDDS', 'Requests-POKDDS', 'Frames-POKDDS', and 'test-BOEDDS'.
- Timeframe:** A section with 'Condition' set to 'Dates between', 'Start date' and 'Start time' both set to '10/21/2013' and '11:46 AM', and 'End date' and 'End time' both set to '10/21/2013' and '11:46 AM'.
- Tip:** Specify the date and time in the timezone of the sysplex boesysf.
- Data sample range:** A section with two radio buttons: 'Use the default range' (selected) and 'Specify the range in seconds:'. A red box and an arrow point to the 'Use the default range' option, with the text 'Resource Monitoring Monitor III interval' written next to it.
- Buttons:** 'OK', 'Restore Defaults', 'Cancel', and 'Help'.

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs



Resource Monitoring – Spreadsheet Export (1)* IBM

- 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

Step1: Select Scope and Intervals

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

General Activity ▶ Export Dashboard

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

Step2: 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

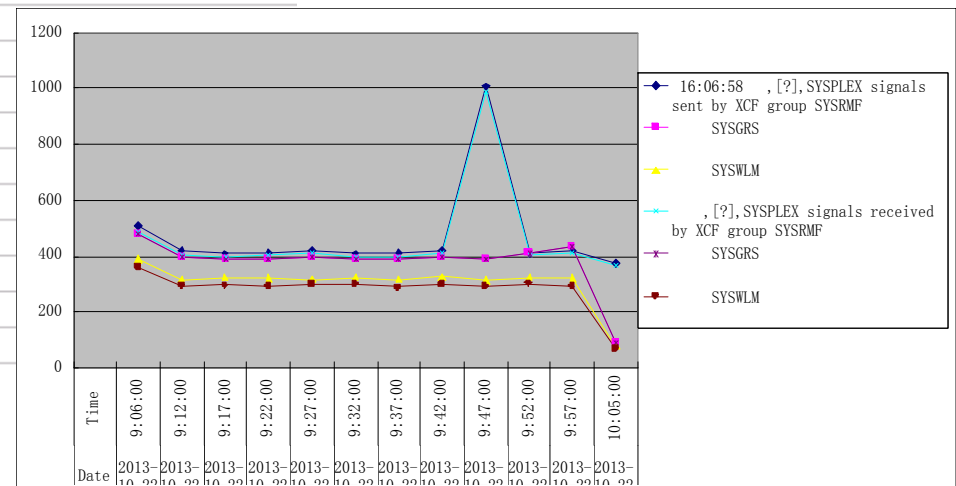
* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs



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



* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs



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: CEANN
Region size (kilobytes): 0
Account number: 123789
User group: ZOSMFGRP
Profile sharing: On
Screen size rows: 204
Screen size columns: 160
Code page: United States (1047, 697)
Language: English

Map colors from z/OS ISPF to z/OSMF ISPF.

z/OS ISPF colors:	z/OSMF ISPF colors:
Sample blue text	Sample blue text
Sample red text	Sample red text
Sample pink text	Sample pink text
Sample green text	Sample green text

OK Apply Cancel Help

The default is unchecked

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs



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.

Workload Management

[Help](#)

Overview Service Definitions **New Service Definition**

[Add comments to history](#) [Notes](#) [Switch To](#)

Service Definition Details

To define a complete service definition, you must name the service definition and define at least one workload and one service class. To move between items within the service definition, use the *Switch To* button.

* Service definition name:

Description:

Functionality level: 008

Service Coefficients

- * Central processing unit (CPU)
- * Input and output channel (I/O)
- * Main storage occupancy (MSO)
- * Service request block (SRB)

Service Options

Comments

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.

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs



- **The Software Management task**

- Make it easier to add non-SMP/E-managed data sets to a software instance.
- Offer a more convenient way to edit mount points for the z/OS UNIX System Services file system.
 - Simplifies management of multiple mount points for z/OS UNIX file system data sets during a deployment operation.
- Add new tab to view SMP/E managed UNIX file system data sets and related UNIX directories can be viewed easily.

- **The Workflows task**

- A configuration workflow provided the a number of wizards to guide the user to implement the requisites for Incident log and configure z/OSMF to add plug-ins.

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Add non-SMP/E-managed data sets to a Software Instance*



Can use wildcards*

Can specify a volume

Then click Search

May need to increase the maximum

IBM z/OS Management Facility

Welcome shara20

Software Management > Software Instances > Add Software Instance > Add Data Set

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 names, see the z/OSMF documentation.

Data set name qualifier:

Volume:

Maximum data sets:

Select Data Sets to Add

Data Set Name	Volume
There is no data to display.	

Total: 0, Selected: 0

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Add non-SMP/E-managed data sets to a Software Instance* ...



You get a selection list like ISPF 3.4

IBM z/OS Management Facility Welcome shara20

Welcome x Software Man... x

Software Management > Software Instances > Add Data Set

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 names, see the z/OSMF documentation.

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

Select Data Sets to Add

<input checked="" type="checkbox"/>	<input type="checkbox"/> Actions	Data Set Name Filter	Volume Filter
<input checked="" type="checkbox"/>		SHARA20.SPF1.LIST	SHTSO4
<input checked="" type="checkbox"/>		SHARA20.SPFTEMP3.LIST	SHTSO3
<input checked="" type="checkbox"/>		SHARA20.SPFLOG1.LIST	SHTSO3
<input checked="" type="checkbox"/>		SHARA20.SPF.ISPPROF	SHTSO7

Total: 4, Selected: 4

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



Edit Mount Points*



You can add or change a directory (or subdirectory) and ALL target mount points that match the “common mount points directory” will change

IBM z/OS Management Facility

Welcome x Software Man... x

Software Management > Deployments > Deployment Checklist > Common Mount Point

Modify Target Mount Point

Enter a new target mount point for the selected mount point

* Common mount points directory:

From: /sharelab/swdeploy/smpe36p

To:

Example target mount point:
/sharelab/swdeploy/smpe36p
/sharelab/swdeploy/smpe36p/sharc30

Selected mount points

Target mount point	Target Data Set Name	Source mount point	Source Data Set Name
/sharelab/swdeploy/smpe36p	ZOSMF.SWDEPLOY.SHARC30.SMPE36P.ZFS	/sharelab/swdeploy/smpe36p	ZOSMF.SWDEPLOY.SMPE36P.ZFS

OK Cancel

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



SMP/E Managed UNIX Data Sets*



Information about each of the z/OS UNIX file systems for the SMP/E managed files has been dynamically retrieved and displayed.

IBM z/OS Management Facility

Welcome x Software Man... x

Software Management > Software Instances > View Data Sets

View Data Sets

Selected software instance: MASTER_zOS_R13_w/Other_Product on system LOCAL

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

Actions ▾ Table view: Tree

Data Set Name / UNIX Directory Filter	Messages Filter	Zone Names Filter	Volumes Filter	Data Set Type Filter	RECFM Filter	LRECL Filter	BLKSIZE Filter	Tracks Filter	% Used Filter	Extents Filter
+ SMLAB01.COB32.ZFS		COB320T	SHAR04	ZFS				15		
+ SMLAB01.JAVA31V7		Z1130T	SHAR04	ZFS				5310		
+ SMLAB01.JAVA64V7		Z1130T	SHAR04	ZFS				6795		
+ SMLAB01.NETVHFS		Z1130T	SHAR04	ZFS				135		
+ SMLAB01.PLI41.ZFS		PLI410T	SHAR04	ZFS				75		
+ SMLAB01.ROOT		Z1130T	SHAR04	ZFS				49755		
+ SMLAB01.SBBN7HFS		Z1130T	SHAR04	ZFS				32280		
+ SMLAB01.SHAPHFS		Z1130T	SHAR04	ZFS				555		
+ SMLAB01.SHPEROOT		Z1130T	SHAR04	ZFS				1305		
+ SMLAB01.SHPHROOT		Z1130T	SHAR04	ZFS				180		
+ SMLAB01.SHPUROOT		Z1130T	SHAR04	ZFS				150		
+ SMLAB01.SIBMROOT		Z1130T	SHAR04	ZFS				30		
+ SMLAB01.SIGYROOT		Z1130T	SHAR04	ZFS				16		
+ SMLAB01.SIZUROOT		Z1130T	SHAR04	ZFS				3705		
+ SMLAB01.TKANROOT		Z1130T	SHAR04	ZFS				16		

Total: 168


* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



-
- **The z/OS jobs REST interface services API**
 - Support for submit job to secondary JES subsystem
 - Support for hold & release a job
 - **REST API for Data Sets and Files to list the data sets or UNIX files and directories on a z/OS system.**
 - List the members of a z/OS partitioned data set (PDS or PDSE)
 - List the z/OS UNIX files and directories

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)



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 - March 2014
 -  September 2014
 - March 2015

z/OSMF's Enhancements September 2014**



The following new functions have been made available by PTFs UI90005 and its requisites:

- Provide browser support for Mozilla Firefox ESR 24 and Microsoft Internet Explorer 10.
- Enhance SDSF by restructuring views and adding security options
- Enhance Incident Log to provide support for the use of SSH File Transfer Protocol (SFTP) for sending dumps and logs to IBM or another vendor.
- Enhance the Software Deployment function of Software Management to:
 - Provide support for the use of SFTP for remote software deployments.
 - Provide integrated management of the generated deployment jobs.
- Enhance the Software Management task to improved the End of Service report
 - User can choose multiple product information files to retrieve End of Service information

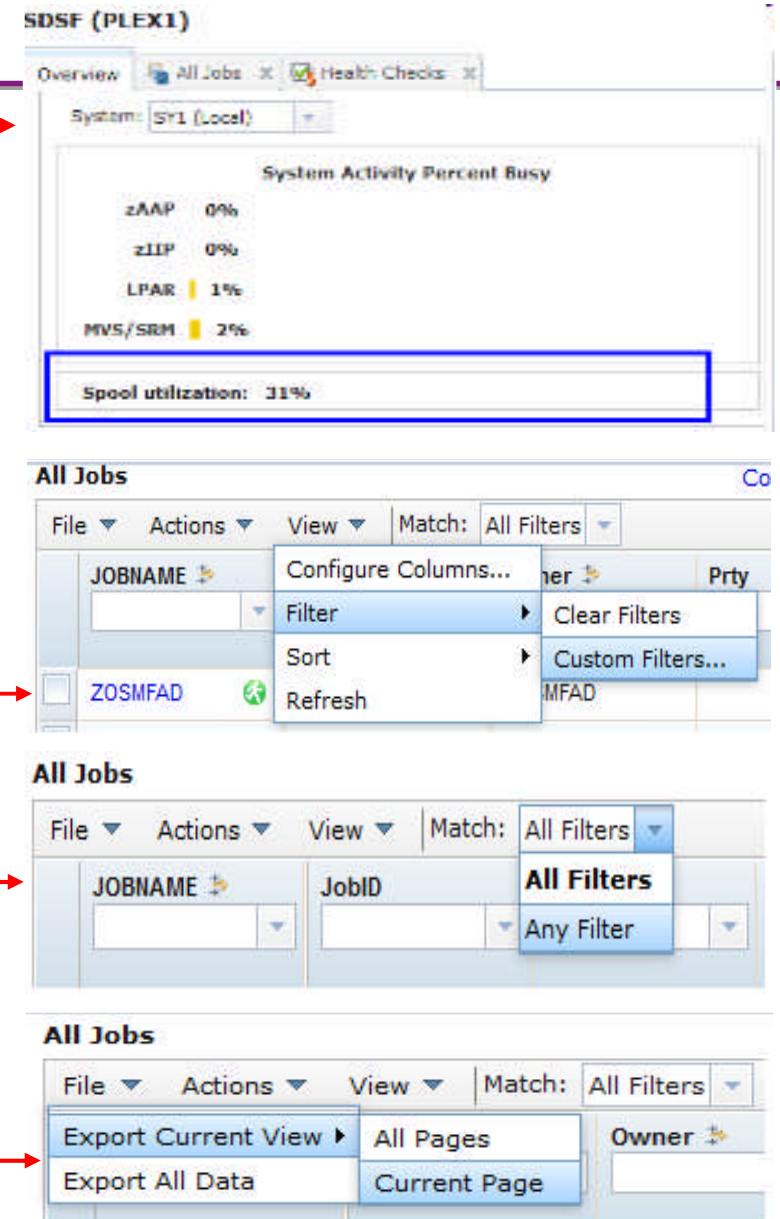
** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs (September 2014)



SDSF –View Restructure **



- Remove the Spool utilization bar and add the value of the bar to the graph footer in text. →
- Regardless of table selection, the More actions item under Actions pull-down will be always enabled so that the user can view SDSF actions without selecting any rows.
- Restructure the table View menu.
 - Filter and sort related actions are separated by groups. →
 - The Filter Match selection is moved to table header. Default value is All Filters. Selection from this menu results in immediate change to the match value and table data. →
 - Export Table Data actions are move to a new table pull-down named File. →



SDSF – Security **



- New SDSF Settings panel layout. Add security tracing support:
 - Send trace messages to message dialog
 - Send trace messages to user sessic
- Give user control to show or hide UI elements including those the user is not authorized to use.
- The UI elements to be shown/hidden are graphic sections in both Overview panel and table views.

SDSF Settings

Environment Definition User Preferences Diagnostics

Authorization:

☐ Display functions the user is not authorized to use

☒ Hide functions the user is not authorized to use

Jobs:

☐ Show all address spaces on Active Jobs panel

SDSF Settings

Environment Definition User Preferences Diagnostics

The Diagnostics settings should be used under the direction of IBM Service.

User and Module Information

Display User

Module name: Display

SDSF Trace

☐ Activate initialization tracing

☐ Activate task tracing

☒ Activate security tracing

☒ Trace messages are sent to message dialog

☐ Trace messages are sent to user session log

Save Reset

Overview

Explore the summary data, or choose a task. Messages 2 0 1 | Help

System Activity Summary: SY1 (Local)

System: SY1 (Local) View text

System Activity Percent Busy

zAAP	3%
zIIP	0%
LPAR	3%
MVS/SRM	4%

Refresh Last refresh: More than 1 minute ago

Jobs

Active All Jobs Input Output

Held Output Queue Work with jobs on the held output queue

Messages Close All

ISF792E: Data not available, not authorized to CK command.	Jun 24, 2014, 4:26:04 PM X
ISF792E: Data not available, not authorized to JP command.	Jun 24, 2014, 4:26:04 PM X
ISF767I: Request completed.	Jun 24, 2014, 4:26:04 PM X

** available for z/OSMF V2.1 with PTF UI90005 and z/OS SDSF PTF UI90004

September 2013

whole or in part without the prior written permission of IBM.

SDSF - Property Sheet Usability **



- **Persist the real-time property sheet width as part of user customization cross sessions so that the property sheet will always be rendered in user-demanded width.**
 - The width percentage is persisted by command, so different views have their own width percentage separately.
- **If the property sheet is collapsed (hidden), the UI will suppress the properties loading, which improves the efficiency.**

The screenshot displays the SDFS (System Display and Search Facility) interface. On the left, the 'Active Jobs' table lists several jobs. The job 'HZPENG' is selected. On the right, the 'Properties of HZPENG' panel is expanded, showing various system parameters.

JOBNAME	StepName	ProcStep	JobID
DEBUG15	STEP1		S00002
IGVDGNMN	IGVDGNMN	IGVDGNMN	S00002
<input checked="" type="checkbox"/> HZPENG	PROCDB	SP0TC001	T00002
P00SVR2S	P00SVR2S	STEP1	S00002
HZPENG	STEP1		S00012
DEBUG12	*OMVSEX		S00012
DEBUG12	STEP1		S00012

Properties of HZPENG

Properties are more current than table data.

Type to filter properties

- General**
- Advanced**
- Performance**
- Scheduling**
 - C:
 - DP: FF
 - ResGroup: TSOHIGH
 - RptClass:
 - SP: 1
 - SrvClass: TSOHIGH
 - Workload: TSO_WLD
- Security**

** available for z/OSMF V2.1 with PTF UI90005 and z/OS SDSF PTF UI90004



Incident Log – SFTP Support **



- Incident Log provides new functionality to support openSSH based SFTP tool. It includes both the SFTP client and server of the IBM USS Ported Tools and other openSSH based 3rd party tools.
- New IBM default SFTP server
 - Americas: *IBM-testcase-mvs-sftp* and *IBM-testcase-tivoli-sftp*.
 - Asia Pacific/Europe: *IBM-ecurep-mvs-sftp* and *IBM-ecurep-tivoli-sftp*.
- Incident Log allows customers to do SFTP authentication with server by public key or by user/password.
 - The user name is required when SFTP is used, but the password is optional.
 - If the password is specified, the user/password authentication will be used, otherwise, the public key authentication is used.
- z/OSMF omits the password when authenticating with the IBM-ecurep SFTP servers because these servers do not support password authentication.
 - For other SFTP servers that do not support password authentication, you must select the Specify a user ID and password option and leave the Password field blank. Otherwise, an error will occur.

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



Incident Log – Add Server and Profile for SFTP

FTP Servers ▸ Add

Add FTP Server

* FTP server name:

* Host:

* Path name:

Port number (must be between: 1-65535): → *Default port number*

FTP profile:

☒ Use the default profile. Currently, the default SFTP profile is No SSH Proxy Command

☐ Use the selected profile.

☒ Use anonymous user ID and password.

Description:

Transfer method:

☐ FTP

☒ SFTP (openSSH based secure FTP)

* Client utility path: → *Default path*

☐ z/OS Problem Documentation Upload

Welcome x Systems x FTP Servers x

FTP Servers ▸ FTP Profiles ▸ Add

Add FTP Profile

* Profile name:

Profile type:

☐ FTP ☒ SFTP

☐ Make this profile the default SFTP profile.

* SSH proxy command:

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



Software Management – “Submit Deployment Jobs”**



- A new step 'Submit deployment jobs' is added in Deployment Checklist, in which jobs can be submitted & managed by users

[Software Management](#) ▶ [Deployments](#) ▶ [Deployment Checklist](#)

Deployment Checklist

To deploy a software instance, complete the checklist.

Checklist

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

Close

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



Software Management - Submit and Manage jobs **



- **Job management actions provided to allow user to browse, submit, view status and results of jobs. These actions include:**
 - Submit Job : Jobs must be run in sequence
 - View JCL, Job Output : Single selection action
 - Cancel : Single selection action
 - Purge : Multiple selection action
 - Override Complete : Multiple selection action, mark the complete status

[Software Management](#) > [Deployments](#) > [Deployment Checklist](#) > [Submit Deployment Jobs](#)

Submit Deployment Jobs

Review the jobs created for this deployment, and submit the jobs in sequential order. When all the jobs are complete, click **Close** to proceed to the r

JCL data set name: ZOSMFAD.DM.D140625.T162244.CNTL

Target system: PEV171

Jobs

Actions				
Sequence Filter	JCL Data Set Member Name Filter	Description [More Less] Filter	System Filter	Status Filter
<input checked="" type="checkbox"/>	1	IZUD01CP	Copy Data Sets: Copy the source software instance data sets to: PEV171	<input checked="" type="checkbox"/> Complete
<input type="checkbox"/>	2	IZUD02RN	get software instance data sets: PEV171	
<input type="checkbox"/>	3	IZUD03UC	sets: Update the entries within the SMP/E CSI data: PEV171	

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



Software Management – SFTP support **



- In Deployment Checklist for a remote deployment, the pane of 'Define Job Settings' has a new tab called 'Transfer Settings'. User needs to select a FTP or SFTP server from the FTP server selector
- If user chooses an OpenSSH SFTP server, source software instance data sets must be copied into UNIX file. Generated deployment jobs add related processing automatically according to FTP choice.

Define Job Settings

To specify the job settings, provide the information requested on the Source System, Target System, system in the specified JCL data set. z/OSMF does not run the jobs.

Source system: PEV171

Target system: PEV173

Source System	Target System	Transfer Settings
* FTP server on the source system:		
<div>Select or type</div> <div>IBM-ap-mvs</div> <div>IBM-ap-tivoli</div> <div>IBM-ecurep-mvs</div> <div>IBM-ecurep-mvs-sftp</div>		

* FTP server on the source system:

IBM-ecurep-mvs-sftp Select...

Transfer method:

SFTP

* Client program path:

Authentication credentials to log into the SFTP server on the source system:

* SFTP server user ID: SFTP server password:

ZOSMFAD

Select the SFTP profile required by the target system to connect to the SFTP :

* SFTP profile:

Select or type Select...

* Source system work directory:

* Target system work directory:

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



Software Management – Improved EOS report ****IBM**

Select Product Information File

A product information file contains information about one or more products, such as the product announce date, general availability date, and end of service date. To retrieve information from a product information file, select the file and click **Retrieve**.

Product information files:

☒ Select files that reside on or can be accessed by primary system

Product Information Files

File Filter	Description Filter	Version Filter	Activity Filter	HTTP Proxy Filter	Last Retrieved (Local) Filter	Retrieved By Filter
<input checked="" type="checkbox"/> http://public.dhe.ibm.com/services/zosmf/JSONs/IBMProductEOS.txt	This product information file contains details about IBM System z® software.	Aug 7, 2014			Aug 8, 2014, 4:48:51 PM	DEBUG26
<input checked="" type="checkbox"/> USER.VENDOR.PRODUCT.EOSINFO	The VENDOR Product End Of Service information					

Total: 2, Selected: 2

Last refresh: Aug 15, 2014, 3:51:24 PM local time (Aug 15, 2014, 7:51:24 AM GMT)

☒ Select a file that resides on your local workstation
Select the product information file to retrieve from your local workstation.
*File name:

User can choose multiple product information files to retrieve End of Service information

Change options in Action menu to radio buttons

**** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs**



The following new functions have been made available by PTFs UI90005 and its requisites:

- **Enhance the Workflows task to enable:**
 - A workflow step to be designed to save its output in an *output file* which on completion of the step, the contents of the output file become available for use by subsequent steps in the workflow instance, or by other workflow instances.
 - A workflow step to be designed to be performed conditionally, based on whether a logical condition is satisfied on the z/OS system.
- **Enhance the configuration workflow through the discovery functions of z/OS and z/OSMF configuration settings to determine the status of the current setup.**
- **The 'Systems' task now provides support for defining groups for organizing your systems.**
 - Allows users to view the system definitions in the Systems table by sysplex or group.
 - Adds a new Discover action, which allows users to discover and create system definitions for the active systems that belong to the same JES2 multi-access spool (MAS) or JES3 complex as the z/OSMF host system.

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs (September 2014)



The following new functions have been made available by PTFs UI90005 and its requisites:

- **REST API for Data Sets and Files enhanced to support for editing and browsing files and data sets**
 - Retrieve the contents of a sequential data set, or a member of a PDS or PDSE
 - Retrieve the contents of a z/OS UNIX file
 - Write data to a sequential data set or a member of a PDS or PDSE
 - Write data to a z/OS UNIX file.
- **A new REST service is added to allow a caller to obtain information about z/OSMF on the z/OS host system**
 - You can retrieve version, release, and service level.
 - With this information, a program can determine which z/OSMF plug-ins and core functions are available for use on a given system.

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs (September 2014)

System setting – Discover **



- Discover the system definition that hosts the z/OSMF instance automatically.
- When a conflict occurs (same sysplex and system name but other attributes differs) the user can add a new entry with another nickname or update the old one.

The screenshot shows the IBM Systems console interface. On the left, a context menu is open for the 'Discover' action. The main window displays the 'Discovered Systems' wizard. The wizard has a 'Welcome' tab and a 'Summary' tab. The 'Welcome' tab shows a table of 'Discovered Systems without Conflicts' and a table of 'Discovered Systems with Conflicts'.

Discovered Systems without Conflicts

Sysplex	System	z/OS Version and Release	JES Member Name	JES Type
PLEX1	SYSNEW	z/OS V1R13	SYSNEW	JES2

Discovered Systems with Conflicts

Sysplex	System	z/OS Version and Release	JES Member Name	JES Type
PLEX1	SY1	z/OS V2R1	SY1	JES2
PLEX1	SMPSYS	z/OS V2R1	SMPSYS	JES2
PLEX1	OLDSYS	z/OS V1R12	OLDSYS	JES3

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



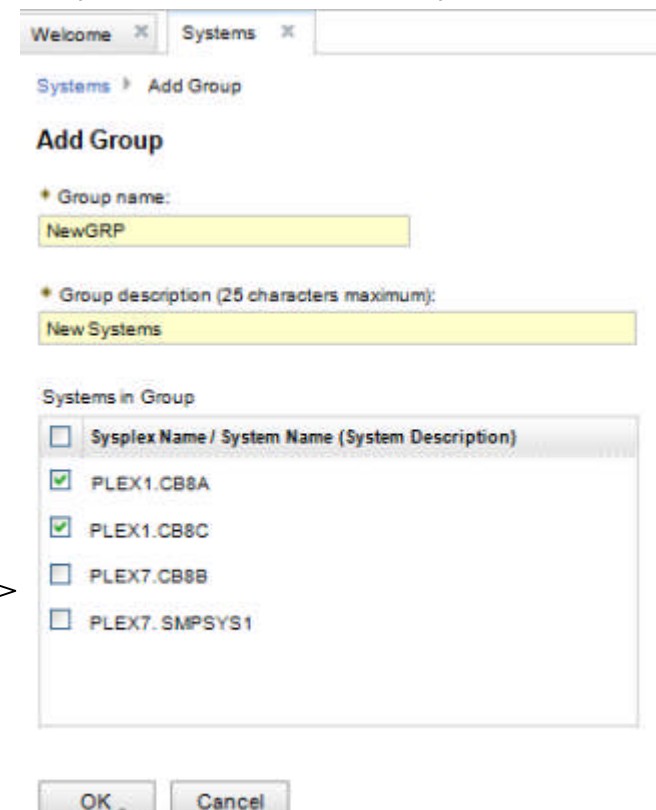
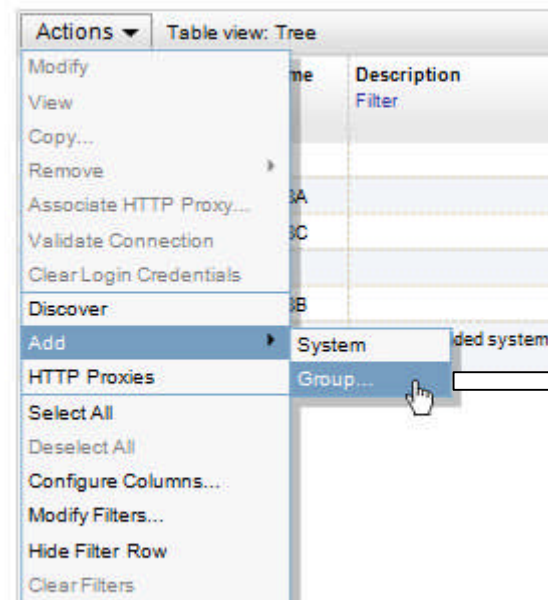
System setting – Group **



- The group definition is introduced.
 - A group represents a logical list of system entries (which can be exploited by other plug-ins in the future)
- User can link systems to groups in “Add Group”, “Modify Group”, “Add System”, “Modify System” panels.
- System table is changed to tree view.


Default view
is by sysplex,
can be changed
to view by group

Systems



** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs



- **What is the z/OS Management Facility (z/OSMF)**
- **What's New in z/OSMF V2.2**
 - Integrated into of z/OS
 - Configuration of z/OSMF
 - z/OSMF Look and Feel (“One UI”)
 - Multiple Sysplex Support
 - Configuration Assistant - TCP/IP stack configuration
- **z/OSMF V2.1 Functions introduced after z/OSMF V2.1 became available:**
 - March 2014
 - September 2014
 -  March 2015

z/OSMF's Enhancements March 2015***



The following new functions were made available March 26, 2015:

- **Enhance the Systems task to:**
 - Support for organizing the system definitions by CPC (central processor complex).
 - Support for establishing a secure single sign-on (SSO) environment using the Third Party Authentication (LTPA) security protocol in System task.
- **Enhance the Workflows XML schema to support workflow-to-workflow execution.**
 - That is, a workflow can be designed to invoke another workflow for execution.
- The target workflow is referred to as a “called workflow”
- **Provide a scope option for customizing the JOB statement for a workflow.**
 - When you create the JOB statement for a step that runs a job, you can specify a scope for the JOB statement, so that it applies to other steps and workflows.

*** available for z/OS V2.1 with PTFs UI90019, UI90020, UI90021, and UI90022



The following new functions were made available March 26, 2015:

- Provide z13 support in Resource Monitoring
 - Support new resource types PCIE, PCIE FUNCTION, SCM, and SCM CARD.
- Enhance the z/OSMF configuration workflow to figure out the status of the current setup to determine what steps are required complete the z/OS requirement setup for ISPF, WLM, Capacity Provisioning, or Incident Log.

*** available for z/OS V2.1 with PTFs UI90019, UI90020, UI90021, and UI90022

The following new functions were made available March 26, 2015:

- Enhance the z/OSMF topology REST API to work with the groups, sysplexes, and systems that are defined to z/OSMF. You can list the:
 - Systems defined to z/OSMF;
 - Groups defined to z/OSMF;
 - Systems included in a group;
 - Sysplexes defined to z/OSMF; or
 - Systems included in a sysplex.
- Provide a REST API to allow a client application to interact with the z/OSMF Software Management task. The new services allow a caller to:
 - List the software instances defined to z/OSMF
 - Retrieve the properties of a software instance
 - Add a new software instance.
- Provide a REST API to allow you to create and manage a workflow programmatically.

*** available for z/OS V2.1 with PTFs UI90019, UI90020, UI90021, and UI90022





Summary



Summary (1 of 3)



- **z/OSMF is now part of z/OS!!!**
 - It is a base element of z/OS V2.2
 - It's documentation is part of z/OS
 - Comes as part of every z/OS order
 - You are NOT required to configure or start z/OSMF
- **Configuration Changes for z/OSMF V2.2 enabled by PTF UI90027 (which will be installed in all z/OS V2.2 ServerPacs)**
 - Eliminate the use of z/OS UNIX shellscripts to configure z/OSMF
 - Use PARMLIB to specify configuration parameters
 - Provide sample members for: PARMLIB, security definitions, and creation/migration of z/OS UNIX filesystem
 - Documented in the IBM z/OS Management Facility Configuration Guide V2.2 (SC27-8419)
 - Additional documentation in DOC APAR PI46099
- **z/OSMF Look and Feel (“One UI”)**
 - IBM One UI standard delivers consistent user experience to IBM clients
 - Existing users will notice several changes:
 - The colors scheme is black and white (links in [blue](#))
 - The Welcome page has a Log in action to bring up a pop-up window to enter user ID and password



- **Multiple Sysplex Support**

- This framework enables managing multiple sysplexes from single user interface (one z/OSMF tab in browser).
- The first exploiter is Incident Log. You can now manage incidents from:
 - multiple sysplexes (Group), or
 - multiple systems on a CEC, or
 - the existing multiple systems in a sysplex
- Each sysplex must have at least one z/OSMF instance running
 - The z/OSMF instance which is connected by the user interface is known as “primary z/OSMF”.
 - Other z/OSMF instances which are managed by “primary z/OSMF” are known as “remote or secondary z/OSMF”.

- **z/OS V2.2 Communications Server extends the IBM Configuration Assistant!**

- Designed to support creating and storing new configuration profiles for TCP/IP stacks with integrated help
- Intended to make it faster and easier to create and maintain TCP/IP configurations
- Also: Statement of Direction for having the Configuration Assistant consume configuration data from an active stack to prime the tool!*

* Statements regarding IBM future direction and intent are subject to change or withdrawal, and represent goals and objectives only.

Summary (2 of 3)



-
- **z/OSMF V2.1 Functions introduced after z/OSMF V2.1 became available:**
 - March 2014
 - September 2014
 - March 2015



z/OSMF's March 2014 Enhancements *



This PTF (and its requisite PTFs) introduce a new:

- Import Manager task in the z/OSMF Administration category.
 - Administrators can use the Import Manager task to import plug-ins, event types, event handlers, and links into z/OSMF.
 - SDSF PTF UI15294 provides the descriptor to enable SDSF to be used as an external z/OSMF task
- z/OS data set and file REST interface
 - This API allows an HTTP client application to work with z/OS data sets and UNIX files on the z/OSMF host system.

Several existing z/OSMF functions are enhanced:

- The Incident Log task
- The ISPF task
- The Resource Monitoring task
- The Software Management task
- The Workflows task
- The Workload Management task
- The z/OS jobs REST interface services API

* available for z/OSMF V2.1 with PTF UI16044 and its requisite PTFs (March 2014)
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z/OSMF's September 2014 Enhancements **



The following new functions have been made available by PTFs UI90004, UI90005, UI90006, UI90007, UI90008, UI90009, UI90010, UI90011, UI90012, UI90013, and UI90014 (9/30/2014):

- Provide browser support for Mozilla Firefox ESR 24 and Microsoft Internet Explorer 10.
- Enhance Incident Log to provide support for the use of SSH File Transfer Protocol (SFTP) for sending dumps and logs to IBM or another vendor.
- Enhance the Software Deployment function of Software Management to:
 - Provide support for the use of SFTP for remote software deployments.
 - Provide integrated management of the generated deployment jobs.
- Enhance the Workflows task to enable:
 - A workflow step to be designed to save its output in an *output file* which on completion of the step, the contents of the output file become available for use by subsequent steps in the workflow instance, or by other workflow instances.
 - A workflow step to be designed to be performed conditionally, based on whether a logical condition is satisfied on the z/OS system.
- Enhance the configuration workflow through the discovery functions of z/OS and z/OSMF configuration settings to determine the status of the current setup.
- Provide z/OSMF REST services support for editing and browsing files and data sets
- A new REST service is added to allow a caller to obtain information about z/OSMF on the z/OS host system
- The 'Systems' task now provides support for defining groups for organizing your systems.
 - Allows users to view the system definitions in the Systems table by sysplex or group.
 - Adds a new Discover action, which allows users to discover and create system definitions for the active systems that belong to the same JES2 multi-access spool (MAS) or JES3 complex as the z/OSMF host system..

** available for z/OSMF V2.1 with PTF UI90005 and its requisite PTFs (September 2014)



z/OSMF's March 2015 Enhancements ***



The following new functions were made available March 26, 2015:

- **Provide z13 support in Resource Monitoring**
- **Enhance the Systems task to:**
 - Support for organizing the system definitions by CPC (central processor complex).
 - Support for establishing a secure single sign-on (SSO) environment using the Third Party Authentication (LTPA) security protocol in System task.
- **Enhance the Workflows XML schema to support workflow-to-workflow execution.**
- **Provide a scope option for customizing the JOB statement for a workflow.**
- **Enhance the z/OSMF configuration workflow to figure out the status of the current setup to determine what steps are required complete the z/OS requirement setup for ISPF, WLM, Capacity Provisioning, or Incident Log.**
- **Enhance the z/OSMF topology REST API to work with the groups, sysplexes, and systems that are defined to z/OSMF.**
- **Provide a REST API to list the software instances defined to z/OSMF; retrieve the properties of a software instance; or add a new software instance.**
- **Provide a REST API to allow you to create and manage a workflow programmatically.**

*** available for z/OS V2.1 with PTFs UI90019, UI90020, UI90021, and UI90022



Shameless Plug



- **If you plan on installing z/OSMF V2.2 come hear how to configure z/OSMF by attending the call on September 29, 2015 (2PM EDT) on z/OSMF V2.2 Implementation and Configuration**





Thank You



- **z/OS Management Facility website**
 - <http://www-03.ibm.com/systems/z/os/zos/features/zosmf/index.html>
- **IBM z/OS Management Facility Browser Compatibility**
 - http://www-03.ibm.com/systems/z/os/zos/features/zosmf/browser_notes.html
- **z/OS Management Facility Publications**
 - <http://www-03.ibm.com/systems/z/os/zos/features/zosmf/moreinfo/>
 - IBM z/OS Management Facility Configuration Guide (SC27-8419)
 - IBM z/OS Management Facility Programming (SC27-8420)
- **z/OS Management Facility Resource Requirements**
 - <http://www-03.ibm.com/support/techdocs/atsmastr.nsf/WebIndex/WP101779>
- **z/OS Management Facility Downloads**
 - <http://www-03.ibm.com/systems/z/os/zos/features/zosmf/downloads/>

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Notes:

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

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