

z/OSMF provides a web-based graphical user interface providing a framework for managing various aspects of a z/OS system through a Web browser interface using a WEB 2.0 based solution.

- By streamlining some traditional tasks and automating others, z/OSMF can help to simplify some areas of system management and reduce the level of expertise needed for managing a system.
- More than just a graphical user interface having its design based on intelligent functionality maximizing productivity.

z/OSMF provides a single platform for hosting the administrative console functions of IBM server, software, and storage products.

With z/OSMF, customers manage solutions rather than specific IBM products because z/OSMF provides system management as a task-oriented, Web browser based user interface with integrated user assistance, both new and less experienced system programmers can more easily manage the day-to-day operations and administration of the mainframe z/OS systems.

z/OSMF provides customers with a single point of control for:

- Performing common system administration tasks
- Defining and updating policies that affect system behavior
- Performing problem data management.

z/OSMF allows customers to communicate with the z/OS system through a Web browser, so they can access and manage their z/OS system from anywhere.

The debut release of z/OSMF provides: Ease of problem data management, configuration assistance for TCP/IP networking policies, sundry of automated tasks to reduce skill requirements, wizards to guide users in operation simplification, and several built in functions to dramatically reduce the time required to perform system programming tasks.

NOTE: Existing user interfaces such as ISPF and operator commands will continue to be supported.

A large portion of the z/OS Management Facility application is written in Java, and therefore, is eligible for the zAAP and the new feature of zIIP. Some functions in z/OS Management Facility use the Common Information Model (CIM)* set of industry standards to communicate with z/OS subsystems and starting with z/OS V1.11, the z/OS CIM server processing is eligible to run on the zIIP.

Problem data management - The z/OS Management Facility Incident Log capability is intended to facilitate problem data management tasks for new or less-skilled system programmers and system administrators while providing procedural advantages for the experienced system programmer by providing an event log summary and detailed view of z/OS incidents.

The initial focus of an incident is on abend and user-initiated SVC dumps were a intuitive task-oriented user interface will:

- Auto-capture system diagnostic materials (operlog, logrec, logrec summary)
- Allow the captured diagnostic materials to be transferred via FTP to IBM, or an ISV, without having to keep track of where logs are archived
- Provide an easier way to request that a dump be taken for a suppressed dump when it is generated within the specified symptom string.

NOTE: The z/OS Management Facility Incident Log capability can mean fewer errors while obtaining, aggregating, and sending data to IBM, or an ISV, and can result in faster diagnosis and higher system availability.

TCP/IP network policy-based configuration - Configuring a network can be complex involving multiple tasks and the configuration system can be complicated and error-prone, and it is often difficult to assess how configuration changes impact the network.

The z/OS Management Facility V1.11 Configuration Assistant for z/OS Communications Server provides assistance in configuring TCP/IP networking policies and can help dramatically reduce the amount of time required to create network configuration files.

Configuration assistance is provided for the following policy-based network technologies: Application Transparent - Transport Layer Security, IP Security, Intrusion Detection Services, Network Security Services, Quality of Service, Policy Based Routing, and Defense Manager Daemon.

NOTE: z/OSMF V1R11 can be installed on z/OS Version 1 Release 10 or later, although to use Configuration Assistant in z/OSMF, the system must be running z/OS V1R11 or later.

Installation PreReq: IBM WebSphere Application Server OEM Edition for z/OS accompanies z/OSMF containing easy to deploy scripts.

Set Up: The system programmer runs a series of z/OSMF configuration shell scripts.

These scripts perform a number of setup tasks, including setting up the z/OSMF data file system, deploying z/OSMF into WAS OEM Edition for z/OS, creating command templates for authorizing users to system resources. During this processing, the scripts issue messages and create log statements to indicate the actions performed.

Using z/OSMF requires sufficient authority in both z/OS and z/OSMF, as follows:

- On the z/OS system to be managed, the resources to be accessed on behalf of z/OSMF users (data sets, operator commands and so on) are secured through the security management product at the client's installation; (i.e. RACF).

The z/OSMF configuration scripts create RACF commands in a REXX exec, which the security administrator verifies and runs.

Though the scripts generate RACF commands by default, customers can create a script with equivalent SAF commands if their installation uses another security management product (ACF2 or TopSecret).

In z/OSMF, access to tasks are secured through management of user roles, and here is where the CIM Server is employed.

* **Common Information Model (CIM)** - Manageable objects are represented in CIM by instances of object oriented classes used by a schema to manage computer systems. z/OSMF uses a CIM Server through the HMC to add or remove functions. HMC extends parts of the schema to provide System z specific functionality. CIM is controlled by the DMTF consortium; Distributed Management Task Force. CIM on z/OS was introduced in V1R9.0.

CheatSheet

#53 zTidBits

z/OS Management Facility

z/OSMF

Platform Simplification

Available on z/OS 1.10 and beyond

You can display Log status natively at the console with the following commands:
d logger,l or d logger,st

Configuration - Select this category to view tasks for working with the system configuration. This category contains Configuration Assistant for z/OS Communications Server, which provides a guided interface for configuring TCP/IP policy-based networking functions.

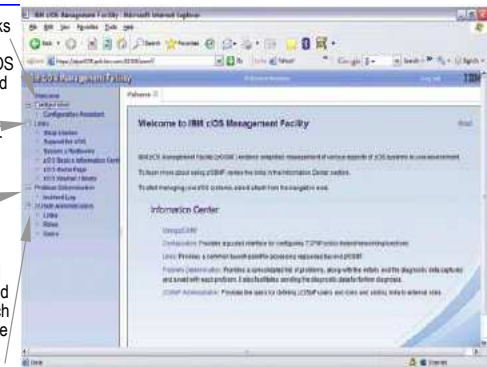
Links - Select this category to view links to other Web sites for system management tools and information. A customer installation can add their own links to this category.

Problem Determination - Select this category to view tasks that can help customers manage problems on z/OS. This category contains the Incident Log task, which provides a consolidated list of system problems, along with the details and the diagnostic data captured and saved with each problem. This task also helps customers send the diagnostic data to IBM or a vendor for diagnosis.

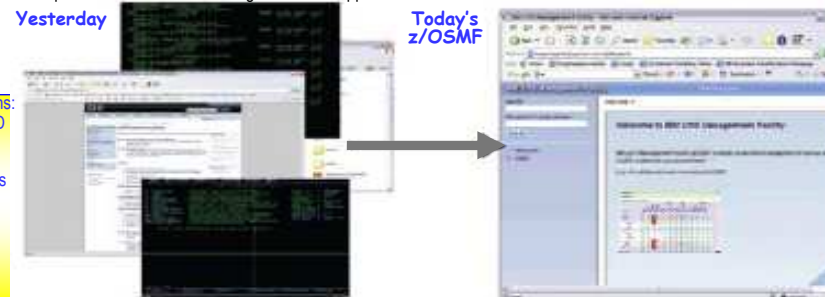
z/OSMF Administration - Contains the product administration tasks, such as defining z/OSMF roles and users. This category also allows a customer installation to define links for other external Web applications and Web sites that they can launch. This allows them to have a single launch point for all their z/OS management Web applications and Web sites.

Yesterday

Today's z/OSMF



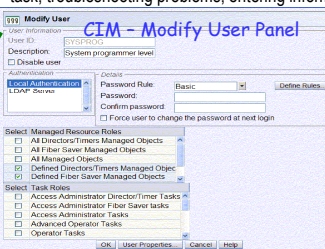
- LOGREC contains:
1. Failing Mod. ID
 2. Return and Reason code
 3. Controls blocks available at time of record.
 4. Module that performed the record.



Working with z/OSMF - The user interface of z/OSMF consists primarily of tables and property sheets.

- Customers can tailor the values shown with functions such as filtering and sorting, refresh the data displayed with the latest z/OS information, and set preferences to customize their user experience.
- Configuration Assistant contains a navigation tree as part of its user interface.
 - For optimum viewing, clients can increase the size of the Configuration Assistant work area and its navigation tree with respect to the surrounding z/OSMF interface.
 - To do so, reduce the size of the z/OSMF navigation area by dragging it to the left, which helps to avoid horizontal scrolling.
- To log into z/OSMF, enter a valid z/OS user ID and password (or pass phrase) in the log in section of the navigation area.
 - Logging in requires that their user ID has sufficient authorization on both the z/OS system to be managed (through RACF, for example) and in the z/OSMF product.
- z/OSMF uses the concept of Roles to group similar users for managing user access to tasks.
 - > Role definitions can be modified at any time by the z/OSMF administrator through the z/OSMF interface.
 - > Though any z/OS user with sufficient RACF authorization can log into z/OSMF, a user must be assigned a role of Administrator or User to start working with z/OSMF tasks.
- Customers can launch multiple instances of z/OSMF using different computers, different browsers, or multiple instances of the same browser.
 - If they use multiple instances of the same browser (new window or tab) and their browser is configured to use the same browser session for each instance, when they log into or log out of one z/OSMF instance, they are automatically logged into or logged out of each instance.

Getting help in z/OSMF - Help information is provided to assist customers with understanding and performing a task, troubleshooting problems, entering information, and using all aspects of z/OSMF.



- Three types of help are available in z/OSMF: panel-level help, message help, and field-level help.
- Customers can access the help information only after they have authenticated to z/OSMF.

Trouble Shooting - z/OSMF is composed of a number of system layers, each maintaining a different set of diagnostic information. Some errors that are intercepted at the lowest system levels can surface at the user interface layer. Some errors appear as messages in a CIM log, and others might be issued as standard z/OS messages to the system logs (SYSLOG or OPERLOG).

OPERLOG is a log stream using the System Logger to record and merge communications about programs and system functions from each system in a sysplex. This is a DASD Only logstream.

