

z/OS Management Facility (z/OSMF) V1.13 Implementation and Configuration Session: 09733

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STSM, z/OS Systems Management and
Simplification

Agenda

- **Overview of z/OS Management Facility V1.13**
- **Ordering and Installing z/OS Management Facility V1.13**
 - **Via ServerPac or SMP/E**
- **Setup and configuration overall process**
 - Configure z/OS prerequisites for WebSphere Application Server OEM Edition
 - Configure WebSphere Application Server OEM Edition
 - Configure z/OS prerequisites for z/OSMF Plug-ins
 - Configure z/OSMF

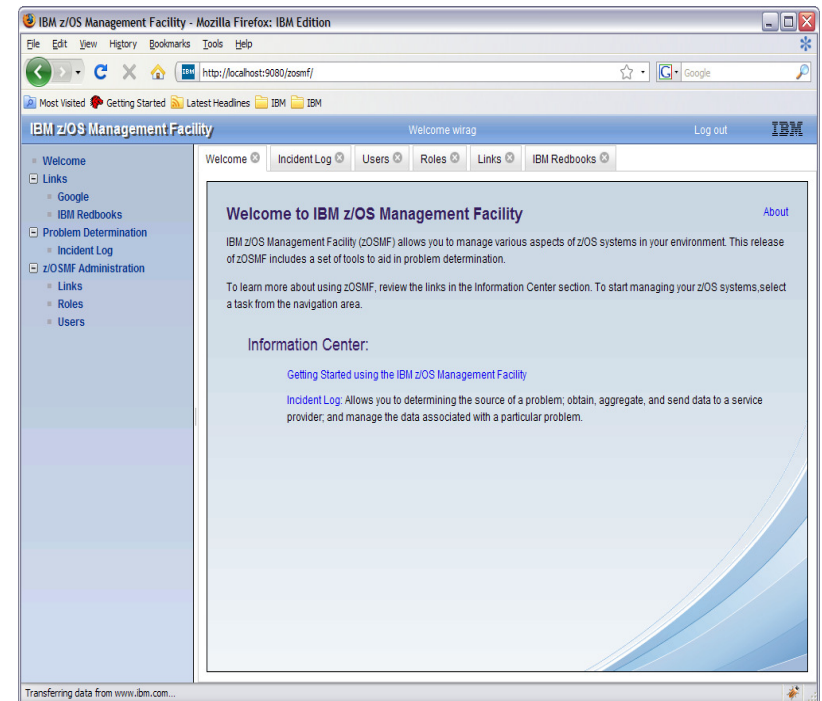
Thanks to **Greg Daynes**, z/OS Installation Deployment Architect, for his contributions to this presentation

Disclaimers

- z/OSMF enables the user to tailor many different configuration settings. Not all of those options will be covered in this presentation.
- Most customer configurations are different. Some settings may need to be different in your environment. For example:
 - If you use existing User IDs or Security Groups
 - If you use AUTOMOUNT
 - If you make changes to support shared OMVS sysplex environment

IBM z/OS Management Facility

- The IBM z/OS Management Facility is a separate product for z/OS 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.



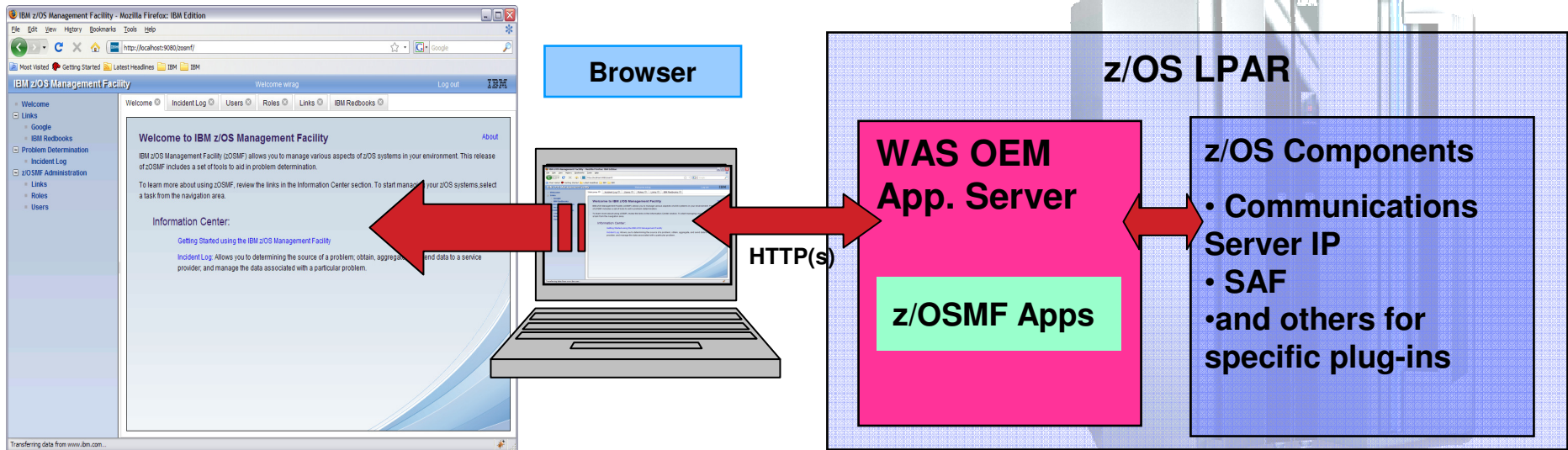
IBM z/OS Management Facility V1R13



- **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)** manage connections to CPMs, view reports for domain status, active configuration and active policy.
 - **Resource Monitoring, System Status** (changed name in R13) - provides 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** provides a consolidated list of SVC Dump related problems, along with details and diagnostic data captured with each incident; facilitates sending the data for further diagnostics.
- **Software** category (R13)
 - **Deployment** make deployment of installed software simpler and safer.
- **Storage** category (R13 with APAR PM40869 coming 1Q2012)
 - **DASD Management** simplify the task of adding storage to a storage group through a single UI.
- **z/OS classic Interface** category (R13)
 - **ISPF Task** integrates existing ISPF into z/OSMF to enable tasks from one interface and ability to launch to ISPF functions directly
- **z/OSMF Administration** category
 - z/OSMF authorization services for administrator: add users, define roles, dynamically add links to non-z/OSMF resources; application linking manager(R13)

IBM z/OS Management Facility

The Application Stack



- The z/OS Management Facility applications run on the z/OS system and are 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
- z/OSMF uses industry standards, such as Java, Dojo, and CIM.
 - z/OSMF is a WAS application and uses a large amount of JAVA
 - Java and z/OS CIM Server workloads can run on available specialty engines.

IBM z/OS Management Facility

- **The IBM z/OS Management Facility is a zero priced separately licensed program product**
 - z/OS Management Facility V1.13 (5655-S28)
 - Same program number as z/OS Management Facility V1.11 and V1.12
 - z/OS Management Facility V1.1 Subscription and Support (5655-S29)
- **The IBM z/OS Management Facility product consists of :**
 - WebSphere Application Server OEM Edition
 - z/OSMF core infrastructure
 - z/OSMF plug-ins
- **z/OS Management Facility V1.11 runs on z/OS V1.10 through z/OS V1.13**
 - The Configuration Assistant for z/OS Communications Server requires z/OS V1.11 or higher
- **z/OSMF V1.12 requires z/OS V1.12 or higher**
- **z/OSMF V1.13 requires z/OS 1.13**

IBM z/OS Management Facility

- z/OSMF V1.13 consists of ten (10) FMIDs:
 - HSMA130 - z/OS Management Facility core
 - HSMA131 - z/OSMF ISPF
 - HSMA132 - z/OSMF RMF
 - HSMA133 - z/OSMF WLM
 - HSMA134 – z/OSMF Software Deployment
 - HSMA135 - z/OSMF Incident Log
 - HSMA136 - z/OSMF Capacity Provisioning
 - HSMA13A - z/OSMF Configuration Assistant
 - HSMA13F - z/OSMF DASD Management
 - HBBN700 - IBM WebSphere Application Server OEM Edition for z/OS

Ordering - ShopzSeries

MVS: z/OS Operating System					
Select	Product	Description	Version	Language	
<input type="checkbox"/>	◆ [5655-P97]	Encryption Facil Encrypt Ser [FMIDs]	1.02.00	English (US)	
<input type="checkbox"/>	◆ [5655-P97]	Encryption DFSMSdss Encrypt [FMIDs]	1.02.00	English (US)	
<input type="checkbox"/>	◆ [5655-S26]	Sys Svcs Runtm Env for z/OS [FMIDs]	1.01.00	English (US)	
<input type="checkbox"/>	◆ [5655-S28]	z/OS Management Facility [FMIDs]	1.13.00	English (US)	
<input type="checkbox"/>	◆ [5694-A01]	z/OS V1 DFSMStvs [FMIDs]	1.13.00	English (US)	
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<input type="checkbox"/>	◆ [5694-A01]	z/OS V1 Base [FMIDs]	1.13.00	English (US)	

Prerequisites

- **Client machine (no client machine install requirements)**

- Microsoft Windows Vista, Windows 7 (32 and 64 bit), and Windows XP
 - Mozilla Firefox 3.5
 - Mozilla Firefox 3.6
 - Internet Explorer 7
 - Internet Explorer 8

- **Host system**

- WebSphere Application Server OEM Edition running z/OSMF minimally requires 120 MIPS and 2G memory
 - Note execution of the Java and CIM code can exploit specialty engines

Overall z/OSMF Installation and Configuration Process

- Install the software (code)
 - Via ServerPac or SMP/E
- Configure WebSphere Application Server OEM Edition
- Configure z/OS prerequisites (if necessary)
- Configure z/OSMF
- Start WebSphere Application Server OEM Edition
 - And Login to z/OSMF

Planning

- There are two manuals that you will use to configure z/OSMF
 - WebSphere Application Server OEM Edition Configuration Guide
 - z/OSMF Configuration Guide
- Each manual has a planning chapter and planning worksheets
 - You should read both planning chapters before you begin
 - You should complete the planning worksheets before you attempt to configure either WebSphere Application Server OEM Edition or z/OSMF
- In general, you should:
 1. Configure the prerequisites for WebSphere Application Server OEM Edition
 2. Configure and verify WebSphere Application Server OEM Edition
 3. Configure the prerequisites for the z/OSMF plug-ins you plan on using
 - This really can be done any time before you perform step 4
 4. Configure and verify z/OSMF

Note: Each step can involve creating or updating security definitions

Software Installation

- **z/OSMF V1.13 ordered in a z/OS ServerPac**
 - Provides default customization via ServerPac provided customization job
 - Provided for Full System Replace installation path
 - Software Upgrade jobs and documentation provided but may need changes based on your existing environment
 - Can also use the WebSphere Application Server OEM Edition Configuration Guide and z/OSMF Configuration Guide
 - Product configuration scripts to setup, if defaults are not viable
- **z/OSMF V1.13 ordered in a CBPDO**
 - Use Program Directory to get started
 - Use the WebSphere Application Server OEM Edition Configuration Guide and z/OSMF Configuration Guide
 - Product configuration scripts to setup

File Systems

- **WebSphere OEM Edition**

- Product file system
 - Described by Program Directory
 - Allocated via sample job CYL(2400 50)
 - Can be HFS or zFS
 - Recommend zFS and use of AGGRGROW
- Configuration file system
 - Described in IBM WebSphere Application Server OEM Edition for z/OS Configuration Guide
 - Can be preallocated or allocated by scripts
 - Default is a ZFS, CYL(420,100)
 - Recommend CYL(620,100) and use of AGGRGROW

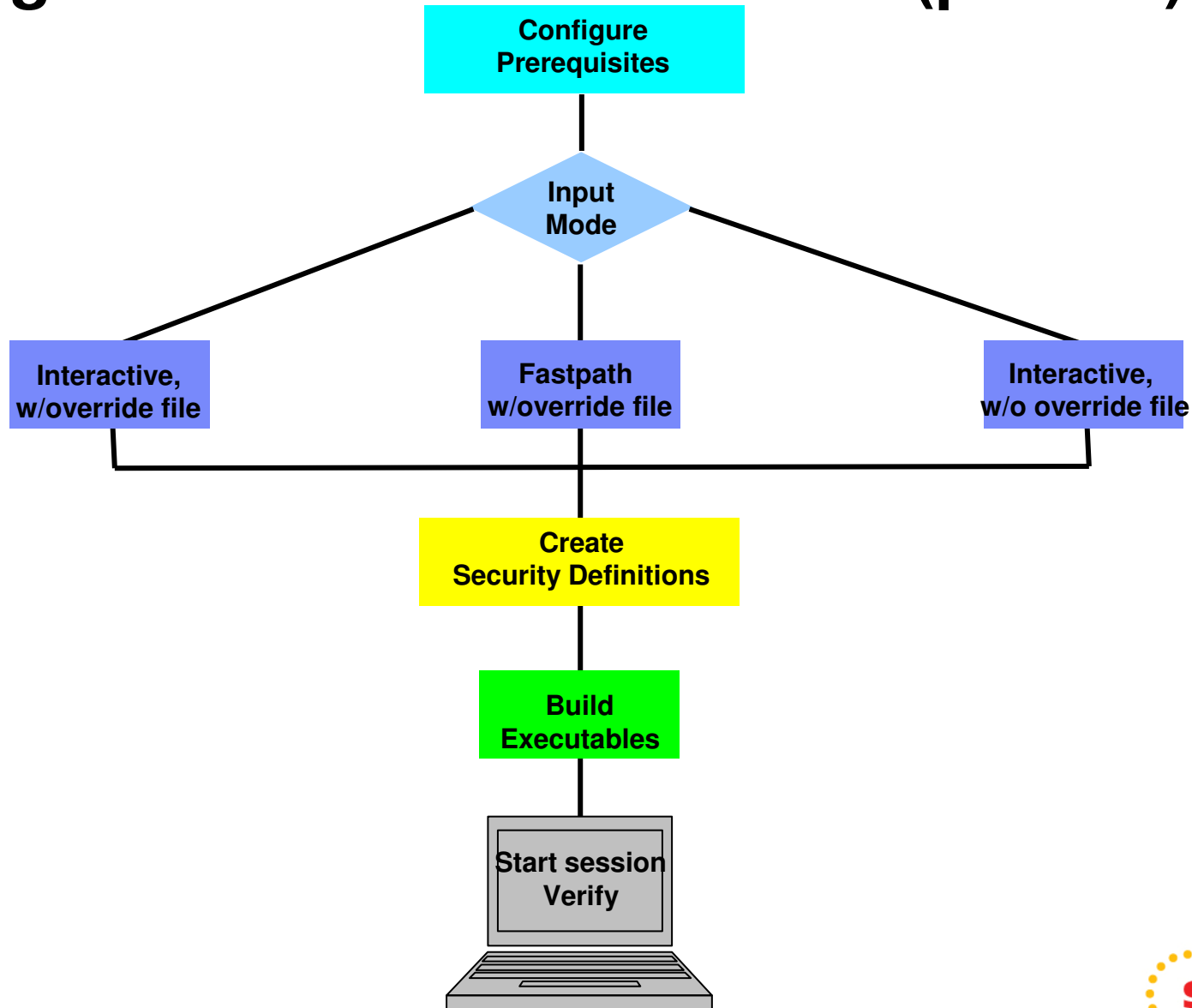
- **z/OSMF Plug-ins**

- Product file system
 - Described by Program Directory
 - Allocated via sample job CYL(150 15)
 - *V1.12 – CYL(100,10)*
 - Can be HFS or zFS
- Persistent data file system
 - Described in z/OSMF Configuration Guide
 - Can be preallocated or allocated by scripts
 - Default is a ZFS, CYL(180,20)
 - *V1.12 – CYL(90,10)*
 - Recommend use of AGGRGROW

Configuration Process Overview

- Both WebSphere Application Server OEM Edition and z/OSMF have four basic phases for configuration
 1. *Configure prerequisites*
 2. *Setup configuration files*
 3. *Create security definitions*
 4. *Build executables (run-time files)*
- Most phases are driven through the use of z/OS UNIX configuration scripts
- Phase 2 scripts can be run:
 - Interactively with an override or response file
 - *Think of it as a PARMLIB member with only the values that you want to change*
 - *Customized values will be used in prompts, which can still be overridden*
 - FASTPATH mode (minimal prompts)
 - *Requires an override file (or a configured configuration file)*
 - Interactively without an override file
 - *Default values will be used in prompts, which can be overridden*

Configuration Process Overview (picture)



Setup Configuration File Script Modes (1 of 3)



- **Interactive mode (with an override file)**

- Script prompts you for all values, displaying the values from your override file as defaults.
- Values not found in the override file are taken from the specified configuration file.
- In response to each prompt, you must either press Enter to accept your installation-specific value, or type a new value.
- Use this mode if you want the configuration session to be preset with your installation-specific values.
- This method saves you from having to enter your customized values interactively in response to script prompts.
 - Instead, you need only review each value displayed by the script and press Enter to accept it.



Setup Configuration File Script Modes (2 of 3)

- **Fastpath mode**
 - The script runs to completion without any interactive prompting.
 - WebSphere Application Server OEM Edition has minimal prompting
 - Values are used as supplied in the specified override file. Any values not found in the override file are taken from the configuration file.
 - If a value is not found in either location, the script ends with an error message indicating the first value that could not be found.
- Use this mode if:
 - You prefer to supply your data in a standalone file, and have no need to review the values interactively.
 - You have verified that all of your configuration data is supplied through the configuration file, or the optional override file, or a combination of both files.
 - You need to re-run the configuration process to update an erroneous value in an existing configuration file, and do not want to repeat the prompts.

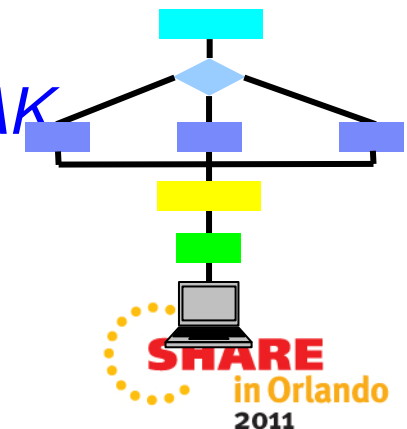
Setup Configuration File Script Modes (3 of 3)



- **Interactive mode (without an override file)**
 - The script prompts you for all values, displaying the values from the configuration file as defaults.
 - In response to each prompt, you must either press Enter to use the configuration file value, or type your installation specific value.
 - Use this mode if you have determined that most of the IBM-supplied defaults are appropriate for your installation, and you would prefer to supply the few needed modifications interactively in response to script prompts.
 - Note that some values have no IBM defaults; these always require your input.

WebSphere Application Server OEM Edition Configuration Process

- The configuration process occurs in four stages, and in the following order:
 - 1. Configure WebSphere Application Server OEM Edition prerequisites**
 - 2. Stage 1 – Configuration**
 - a. Interactive mode (with a response/override file)**
 - *Called “Advanced”*
 - b. Fastpath mode**
 - c. Interactive mode (without a response/override file)**
 - *Called “Typical”*
 - 3. Stage 2 - Security setup**
 - Submit Security Customization Jobs
 - *BBOSBRAK, BBOSBRAM, and BBOCBRAK*
 - 4. Stage 3 - Server instance creation**
 - Invoke WASOEM.sh in create mode



Configure WebSphere Application Server OEM Edition Prerequisites



- Verify that the MAXFILEPROC parameter for your BPXPRMxx member is set to a value that is greater than, or equal to 2000.
- Verify that the following libraries are in the system link list and are APF authorized:
 - Language Environment libraries, SCEERUN, and SCEERUN2
 - System SSL library, SIEALNKE
 - 64-bit support library, SCLBDLL2
- Verify that TCPIP is configured and active
- Verify that Resource Recovery Services (RRS) is defined.
 - See you z/OS documentation for more information about RRS.
- Optional: Define a log stream for IBM WebSphere Application Server OEM Edition for z/OS to use
 - System logger is required for RRS setup

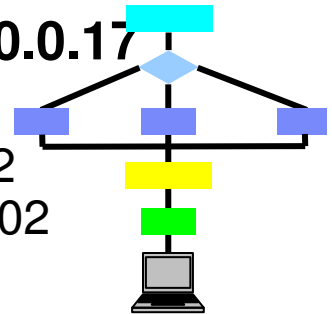
WebSphere Application Server OEM Edition Configuration Hints and Tips RE

- **z/OSMF V1.13 requires WAS OEM Server Fix Pack level 7.0.0.17 level**

- PTFs for this fixpack 6 are : UK69589 UK69590 UK69591 UK69592 UK69593 UK69594 UK69598 UK69599 UK69600 UK69601 UK69602

Please refer to the hold information provided in PTF UK69589 for additional information in regards to servicing WebSphere Application Server OEM for z/OS V7.0.

- Use the Fifth Edition of the IBM WebSphere Application Server OEM Edition for z/OS Configuration Guide (GA32-0631-05)
- **Use the configuration worksheet as a guide determining the appropriate value that should be specified for your system.**
- Fill in the information on the worksheet to help ensure that you know the correct values to enter for the prompts prior to starting the WASOEM script.
- **Use an override file if the default values don't suffice for the system onto which IBM WebSphere Application Server OEM Edition for z/OS is being configured.**



WebSphere Application Server OEM Edition Configuration Hints and Tips



SHRLIBRGNSIZE

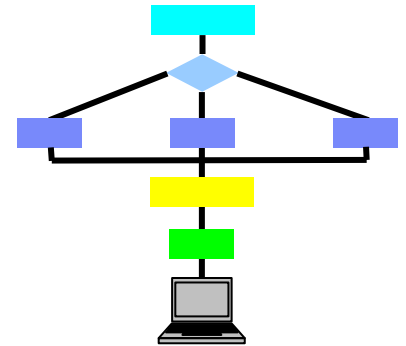
- If you receive an error message that indicates that the SHRLIBRGNSIZE setting is too small, you need to increase this setting to a more appropriate value. However, when adjusting this setting, you must be careful not to make the setting so large for that it impacts other processes running
 - IBM WebSphere Application Server OEM Edition for z/OS requires a minimum of 1 GB of real storage.
 - Refer to the topic “Using the shared library extended attribute” for guidelines on how to determine an appropriate setting for the SHRLIBRGNSIZE parameter.

AUTOUID/AUTOGID

- Instead of manually providing UID/GID values, you can specify to have RACF automatically generate a unique ID values.
 - RACF must be able to automatically select an unused UID or GID value for IBM WebSphere Application Server OEM Edition for z/OS user IDs and groups.
 - Therefore the SHARED.IDS and BPX.NEXT.USER RACF profiles must be defined, and the BPX.NEXT.USER RACF profile must be used to indicate the ranges from which UID and GID values are selected.
 - Refer to the *z/OS Security Server RACF Security Administrator's Guide* for your z/OS system for more information on how to use these operands.

WebSphere Application Server OEM Edition Prompts and Response File

- The following prompts are the ones that are most likely to require changes:
 - GID and UID defaults (I use AUTOUID/AUTOUID to not require overrides)
 - 17 Port defaults
 - Target Data sets High-level qualifier (HLQ)
 - Target Data sets High-level qualifier (HLQ) VOLSER
 - PROCLIB data set name
 - Configuration File System - Mount point (I take the default)
 - Configuration File System - Data set name
 - Job card information
 - Configuration File System - File system type (we take the default zFS)
 - Configuration File System – VOLSER
 - WebSphere Application Server Product File System - Product file system directory (we take the default)
 - System name, sysplex name and host name – these values are dynamically determined for the system by the script, but can be overridden
- However, you should review ALL of the other prompts to determine if any additional configuration variables need to be updated.
 - If so you can either in respond to the prompts, or update the response file with the changed values
 - We updated the wasOEMOverride.responseFile file



Sample WebSphere Application Server OEM Edition Response File



```
hostName=@HOSTNAME
zAdminConsolePort=30005
zAdminConsoleSecurePort=30006
zAdminLocalPort=30009
zConfigHfsName=ZOSBUILD.HBBN700.CONFIG1.ZFS
zConfigHfsVolume=ZCSDW
zDaemonHomePath=generated
zDaemonIPName=generated
zDaemonPort=30000
zDaemonSslPort=30001
zHighAvailManagerPort=30010
zHttpTransportPort=30007
zHttpTransportSslPort=30008
zJobStatement1=(ACCTNO,ROOM),'HELEN',CLASS=A,REGION=0M,
zJobStatement2=//      MSGCLASS=H,NOTIFY=&SYSUID,MSGLEVEL=(1,1)
zJobStatement3=//*
zJobStatement4=//*
zOrbListenerPort=30003
zOrbListenerSslPort=30004
zProclibName=ZOSBUILD.ZOSMF.PROCLIB
zServiceIntegrationMqPort=30013
zServiceIntegrationPort=30011
zServiceIntegrationSecureMqPort=30014
zServiceIntegrationSecurePort=30012
zSessionInitiationPort=30015
zSessionInitiationSecurePort=30016
zSoapPort=30002
zSysplexName=@PLEXNAME
zSystemName=@SYSNAME
zTargetHLQ=ZOSBUILD.HBBN700.CONFIG1.ZPMTJOBS
# end of file marker - do not remove
```

Complete response file used



Stage 1: Configuration - Required Authority

- You can run the WASOEM.sh script from an OMVS or telnet/rlogin session.
 - You **cannot** run this script from under ISHELL.
- The user ID you use to run the WASOEM.sh script must:
 - Be authorized to create and modify directories, data sets, and file systems in the locations specified by the variables in the configuration file.
 - Have at least 2 GB of memory allocated for its use.
 - WASOEM.sh requires this amount of memory to properly complete the configuration, and instance creation processes.

Stage 1: Configuration – First Time

- If this is the first time the product is being configured since it was installed, issue the following command:
 - WASOEM.sh
- This command copies the two required configuration files from the product installation location to a predetermined location in the file system.
 - Default is /etc/zWebSphereOEM/V7R0
 - This action is required once per product installation
- If you issue this command, and the files have already been copied to the predetermined location in the file system, the help message for the WASOEM.sh command displays.

Stage 1: Configuration – With Prompting

- 1. Edit and update the override response file (if required).**
- 2. Allocate the configuration file system (if required).**
- 3. Issue one of the following commands to configure an IBM WebSphere Application Server OEM Edition for z/OS server instance:**
 - WASOEM.sh –config -mode advanced (My preference)
 - WASOEM.sh –config –mode typical

Notes:

- When you issue the WASOEM.sh –config command, the WASOEM prompts will start.
- In response to these prompts, press enter to accept the default values, or specify your new values.
- During WASOEM.sh -config processing, a final response file is created which is used to invoke WebSphere Application Server for z/OS configuration technology in the form of the zpmt.sh install tool.
 - *This script accepts the responseFile after it has been tailored and produces three (3) security jobs which are submitted in the next stage.*

Stage 2: Security - Required Authority

- **You must run these customization jobs in the indicated order, using a user ID that has RACF special authority to run these jobs, and file system update authority, which is required by the BBOSBRAM job.**
 - Whenever file system update authority is indicated for one of these jobs, the user ID that you use to run that job must have either UID = 0, or the following UNIXPRIV class profile privileges:
 - CONTROL access to SUPERUSER.FILESYS
 - UPDATE access to SUPERUSER.FILESYS.MOUNT
 - READ access to SUPERUSER.FILESYS.CHOWN
 - READ access to SUPERUSER.FILESYS.CHANGEPERMS
 - READ access to SUPERUSER.FILESYS.PFSCCTL
- **For more information about the UNIXPRIV class, see the z/OS Unix System Services Planning publication.**
 - This publication is included in the z/OS Internet Library at:
 - <http://www.ibm.com/systems/z/os/zos/bkserv/>

Stage 2: Security Jobs

The security jobs must be run in the following order:

1. The BBOSBRAK security job

- Running this job creates common IBM WebSphere Application Server OEM Edition for z/OS groups, and user IDs.
- **Note:** This job creates the administrator ID (zAdminUserid) without a password, or password phrase. You must assign this user ID a password, or password phrase that complies with your standards. You must use the password or password phrase that you assign to this user ID if you logon to the IBM WebSphere Application Server OEM Edition for z/OS administrative console.
- If you are using a different security system, make sure that the administrator ID has a password or password phrase.

2. The BBOSBRAM security job

- Running this job creates home directories for IBM WebSphere Application Server OEM Edition for z/OS. All of these home directories are subdirectories of /var/zWebSphereOEM/home, which has permission bits 755.
- Run this job on each z/OS system that will host IBM WebSphere Application Server OEM Edition for z/OS nodes using the IBM WebSphere Application Server OEM Edition for z/OS common groups and owner user ID.
- After this job finishes, verify that the directories exist on each system and have the correct permissions.

3. The BBOCBRAK security job

- Running this job creates RACF users and profiles that are required by the IBM WebSphere Application Server OEM Edition for z/OS node.
- When this job completes, all required user IDs should be defined in the RACF database on each target system for the cell.

For other security products use these jobs as a model

Stage 2: Running the Security Jobs

- **The newly created customization jobs are located in the \$zTargetHLQ.CNTL library.**
 - For example, if the default.Responsefile contained a setting of:
 - \$zTargetHLQ=BBN.V7R0.CONFIG1.ZPMTJOBS
 - Then the security customization jobs would be found in the library
 - BBN.V7R0.CONFIG1.ZPMTJOBS.CNTL
 - And the REXX EXEC used to invoke the RACF commands would be found in the library
 - BBN.V7R0.CONFIG1.ZPMTJOBS.DATA

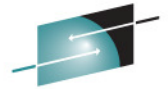
Note: The generated security definitions may need to change to fit your installation's policies

Stage 3: Invoke WASOEM.sh in Create Mode



Create an IBM WebSphere Application Server OEM Edition for z/OS server instance

- Issue command to create a IBM WebSphere Application Server OEM Edition for z/OS server instance.
 - This example uses the default configuration name, CONFIG1.
 - **WASOEM.sh -create CONFIG1**
- The configuration data set specified in the configuration step is allocated and mounted during this step.
- When this step completes a series of messages are displayed



SHARE
Technology - Connections - Results

Stage 3: Sample Messages

BBN0016I:Success: Update of configuration completed.

The following ports have been set, ensure that they are added to the reserved port list:

zDaemonPort 30000

zDaemonSslPort 30001

zSoapPort 30002

zOrbListenerPort 30003

zOrbListenerSslPort 30004

zAdminConsolePort 30005

zAdminConsoleSecurePort 30006

zHttpTransportPort 30007

zHttpTransportSslPort 30008

zAdminLocalPort 30009

zHighAvailManagerPort 30010

zServiceIntegrationPort 30011

zServiceIntegrationSecurePort 30012

zServiceIntegrationMqPort 30013

zServiceIntegrationSecureMqPort 30014

zSessionInitiationPort 30015

zSessionInitiationSecurePort 30016

BBN0152I: To start the application server, issue the MVS command:

BBN0153I: START BBN7ACR,JOBNAME=BBNS001,ENV=BBNBASE.BBNNODE.BBNS001

BBN0154I: To stop the application server, enter the MVS command:

BBN0155I: STOP BBN7ACRS

BBN0231I: The administrative console for your server can be accessed at

<http://ALPS4142.POK.IBM.COM:30005/ibm/console> using user ID WOEMADM

BBN0231I: A password needs to be assigned to WOEMADM before it can be used.

BBN0148I: WASOEM.sh has completed

Check log file /var/zWebSphereOEM/V7R0/logs/WASOEM_020810_180059.log for more information

Configure z/OS Prerequisites for z/OSMF Plug-ins

- Based on your selection of plug-ins, you must complete the associated system prerequisites, as appropriate. The requirements for each plug-in follow.
 - System prerequisites for the Capacity Provisioning plug-in
 - System prerequisites for the Configuration Assistant plug-in
 - System prerequisites for the DASD Management plug-in
 - System prerequisites for the Incident Log plug-in
 - System prerequisites for the ISPF plug-in
 - System prerequisites for the Resource Monitoring and System Status plug-in
 - System prerequisites for the Software Deployment plug-in
 - System prerequisites for the Workload Management plug-in

System Prerequisites for Capacity Provisioning

- If you plan to use the Capacity Provisioning task, ensure that the capacity provisioning manager (CPM) is running on the system on which z/OSMF is installed.
- **Optional:** Determine whether access to a remote Common Information Model (CIM) server is required. This work can be

System Prerequisites for Configuration Assistant

- No system customization is required to enable the Configuration Assistant task.
- **Optional:** If your installation uses the Windows desktop version of Configuration Assistant for z/OS Communications Server, and you want to continue using your existing data in z/OSMF, you can transfer your backing store files to the z/OSMF environment. This setup can be done after configuring z/OSMF

System Prerequisites for DASD Management

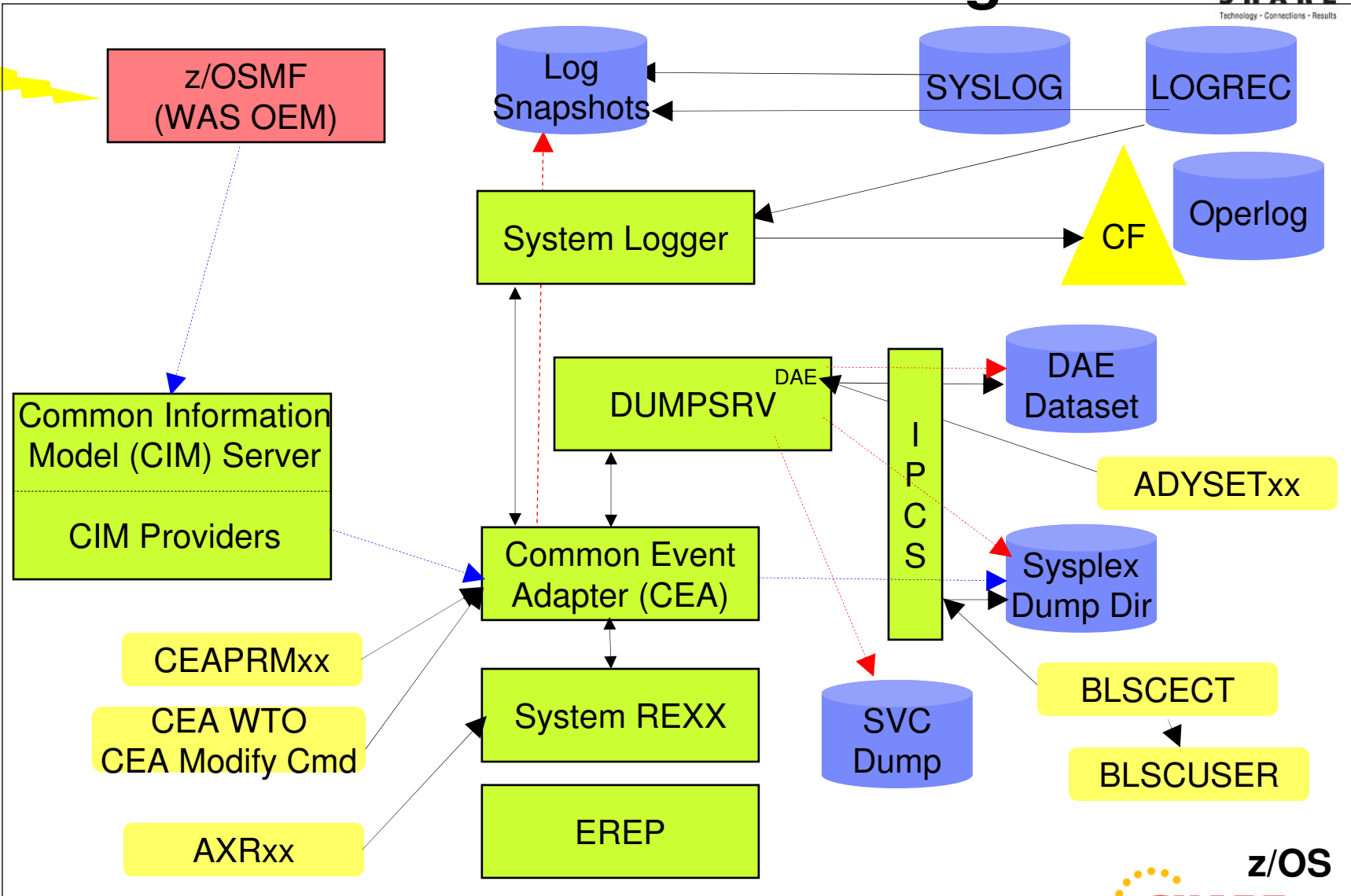
- No system customization is required to enable the DASD Management task.
- Users of the DASD Management task might require access to:
 - Source control data set (SCDS) and the active control data set (ACDS)
 - MVS operator commands
 - A reserve storage pool
 - Resource profiles in your installation's security product.

- *Planned to be made available in first quarter 2012 with the PTF for APAR PM40869

System Prerequisites for the Incident Log

- z/OSMF's Incident Log exploits existing best practices for data management for problem determination.
 1. **Sysplex Dump Directory (required)**
 2. **Use of System Logger for Log**
 1. z/OSMF V1.12 Incident Log is planned to also support the creation of diagnostic log snapshots based on the SYSLOG and LOGREC data sets, as well as the OPERLOG and LOGREC sysplex log streams.
 3. **Dump analysis and elimination (DAE) is active and its symptom data set is available**
 4. **Automatic Dump Data Set Allocation**
 5. **AMATERSE program is enabled to run**
 6. **CIM server is setup and started**
 7. **CEA and System REXX components are available**
- **z/OSMF V1.12 the Incident Log supports parallel encrypted File Transfer Protocol FTP to IBM**
 - Incident log leverages the Problem Documentation Upload Utility, which offers encryption and parallel FTP of diagnostic data to IBM. Information can be found at
 - <http://www14.software.ibm.com/webapp/set2/sas/f/zaid/pduf.html>
- Note: For more information on these topics see *z/OS V1R11.0 MVS Diagnosis Tools and Service Aids (GA22-7589)*

z/OS Infrastructure for Incident Log



System Prerequisites for the Incident Log - 1

• Sysplex Dump Directory

- The sysplex dump directory describes the SVC dumps generated by a sysplex in a central, compact, and manageable place. If you have write access, you can add source descriptions for other unformatted dumps that IPCS can format and for trace data sets.
- When setting up the sysplex dump directory, arrange for all systems in the sysplex to share it:
 - Use the default name of SYS1.DDIR for the sysplex dump directory or specify the same name for it in the SYSDDIR statement in the BLSCUSER PARMLIB member.
 - Place the data set for the sysplex dump directory on a DASD shared by all systems in the sysplex.
 - When a system that has access to a sysplex dump directory generates an SVC dump, the system automatically records the source description for it in the sysplex dump directory. IPCS adds the source description without initializing the dump, which takes time.
- Authorized users can access the sysplex dump directory and edit it.
- Do not access the sysplex dump directory via a ISPF IPCS session
 - Doing so will lockout DUMPSRV and CEA, resulting in dumps not being recorded in the directory, and not appearing in the Incident Log summary
- z/OSMF Incident Log uses the sysplex dump directory to get the dump data set name and display Summary and Detail information of incidents
- Instructions on setting up the sysplex dump directory is documented in the z/OSMF Configuration Guide.

System Prerequisites for the Incident Log – 2

- **Use of System Logger for Log snapshots**
 - OPERLOG and LOGREC are important z/OS diagnostic logs that provide a recording of system activity.
 - The OPERLOG and LOGREC log streams capture message and error log information from all systems in the sysplex, and writes that information to log streams managed by the system logger component of z/OS.
 - The log streams should be written to coupling facility structures (in non-monoplex environments) and are ultimately backed up to system managed storage (SMS)-DASD data sets.
 - The OPERLOG and LOGREC log streams have been the strategic method for capturing sysplex-scope log data for many years.
 - In the z/OSMF's Incident Log, the log streams are used to automate the gathering of diagnostic data (log snapshots) associated with an SVC dump.
 - Sample jobs are documented in the z/OSMF Configuration Guide.
 - Additional information documented in the August 2009 Hot Topics Newsletter
- Note: Recommended for multi-system Parallel Sysplex environments

Note: As of V1.12, SYSLOG and LOGREC datasets can be used instead to capture snapshots on DASD shared between the systems.

System Prerequisites for the Incident Log - 3



- **Dump analysis and elimination (DAE)**

- Dump analysis and elimination (DAE) allows an installation to suppress SVC dumps and SYSMDUMP ABEND dumps that are not needed because they duplicate previously written dumps. To identify the cause of previous and requested dumps, DAE uses symptom strings, which contain data that describes a problem. DAE stores these symptom strings in a DAE data set that you provide.
- You can use the DAE data set in a single-system environment, or the systems in a sysplex can share a single DAE data set.
 - IBM suggests that you provide a name other than SYS1.DAE for the DAE data set to be shared in the sysplex.
- z/OSMF uses a shared DAE data set to allow the user to enable future dumps that occur on any system in the sysplex to be captured (not suppressed)
- Instructions on setting up the a shared DAE environment is documented in the z/OSMF Configuration Guide.



System Prerequisites for the Incident Log - 4

• Automatic Dump Data Set Allocation

- SVC dump processing supports automatic allocation of dump data sets at the time the system writes the dump to DASD. Automatically allocated dumps will be written using the system-determined block size. The dump data sets can be allocated as SMS-managed or non-SMS-managed, depending on the VOLSER or SMS classes defined on the DUMPDS ADD command. When the system captures a dump, it allocates a data set of the correct size from the resources you specify.
 - Using Extended Format Sequential data sets, the maximum size of the dump can exceed the size allowed for non-SMS managed data sets.
 - If automatic allocation fails, pre-allocated dump data sets are used. If no pre-allocated SYS1.DUMPnn data sets are available, message IEA793A is issued, and the dump remains in virtual storage. SVC Dump periodically retries both automatic allocation and writing to a pre-allocated dump dataset until successful or until the captured dump is deleted either by operator intervention or by the expiration of the CHNGDUMP MSGTIME parameter governing message IEA793A.
 - *If you set the MSGTIME value to 0, the system will not issue the message, and it deletes the captured dump immediately.*
- If you rename the dump data set, or copy it to another data set, you must include a batch job to update the dump data set name in the sysplex dump directory.
 - Doing so will allow Incident prepare and send to locate the dump.
 - See the z/OSMF Configuration Guide for more info.
- Instructions on setting up automatic dump data set allocation is documented in the z/OSMF Configuration Guide.

System Prerequisites for the Incident Log - 5

- **AMATERSE program is enabled to run**
 - AMATERSE is a service aid program that you use to pack a data set before transmitting a copy to another site, typically employing FTP as the transmission mechanism.
 - A complementary unpack service is provided to create a similar data set at the receiving site.
 - z/OSMF uses AMATERSE to prepare the diagnostic data to be sent (e.g., to IBM)
 - For z/OSMF to use AMATERSE, it must be explicitly APF authorized
 - *Ensure that SYS1.MIGLIB is APF-authorized*

System Prerequisites for the Incident Log - 6

- **CIM server setup**

- Incident Log task requires that the Common Information Model (CIM) server be setup and running
- CIM includes jobs to help you perform these tasks (CFZSEC and CFZRCUST). See the chapter on CIM server quick setup and verification in *z/OS Common Information Model User's Guide*, SC33-7998.
- When configuring Incident Log plug-in or the Workload Management plug-in, the z/OSMF administrator user must have the proper level of access to the CIM server resources
- Ensure that the CIM server is active on the system before continuing to the –prime step.
 - You can verify that the CIM server is started by entering a command like the following: `D A,CFZCIM`

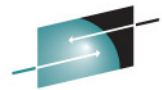
System Prerequisites for the Incident Log - 7



Customizing CEA

- Common event adapter (CEA) is a component of the BCP that provides the ability to deliver z/OS events to C-language clients, such as the z/OS CIM server. A CEA address space is started automatically during initialization of every z/OS system.
- CEA has two modes of operation:
 - *Full function mode.* In this mode, both internal z/OS components and clients such as CIM providers can use CEA indication functions.
 - *Minimum mode.* In this mode, only internal z/OS components can use CEA indication functions.
- Incident Log requires CEA in full function mode.
- To start CEA in full function mode, perform the following customization:
 - Define user ID CEA to the security product
 - Give user ID CEA read access to the profile protecting SYS1.PARMLIB:
 - The user ID CEA needs write and execute access to the z/OS UNIX directory, /SYSTEM/var
- If CEA is running in minimum mode, you can change to full function mode by:
 - Making the security definitions above,
 - Stopping CEA (P CEA), and restarting it (S CEA).
- Other customization that you might have to perform for CEA is the following:
 - If your system will run with multilevel security, allow CEA to perform multilevel security file accesses you'll need additional security definitions
 - If your MAXCAD setting in PARMLIB member IEASYSxx is inadequate to accommodate the data space created by CEA, raise the setting.

z/OS Functionality for Incident Log - Summary



z/OS Function	z/OSMF Incident Log capability if enabled	z/OSMF Incident Log capability if NOT enabled
Sysplex Dump Directory	z/OSMF can display summary and details of incidents	None – function required
OPERLOG and LOGREC use of System Logger	Log snapshots are gathered ¹	<ul style="list-style-type: none"> •Log snapshots are NOT gathered¹ •Available with z/OSMF V1.12³
Shared dump analysis and elimination (DAE)	z/OSMF can make DAE let future dumps be captured on any system in the sysplex	z/OSMF can NOT make DAE let future dumps be captured on other systems in the sysplex
Automatic Dump Data Set Allocation	Dump included in diagnostic data gathered and sent	Dump NOT included in diagnostic data gathered and sent ²
AMATERSE program is enabled	Dump included in diagnostic data gathered and sent	Can NOT prepare or send any diagnostic data
CIM, CEA, and SYSREXX enabled and active	z/OSMF can display incidents	None – function required
Problem Documentation Upload Utility	Supports parallel encrypted FTP to IBM ³	Dump not encrypted nor broken into multiple data sets

1 – In z/OSMF V1.11, DASD-only logs can be used in monoplex environments, but not in basic sysplex environments. In z/OSMF V1.12, Incident Log also support the creation of diagnostic log snapshots based on the SYSLOG and LOGREC data sets, as well as the OPERLOG and LOGREC sysplex log streams.

2 – Depending on how you archive and reuse your dumps, some capabilities may exist to send dumps as part of diagnostic data

3 – z/OSMF V1.12 function

Reminder: Don't override the IBM module in the post dump exit list module – IEAVTSEL.

System Prerequisites for the ISPF (classic)

- To use the ISPF task, a user should be an existing TSO/E user with a valid, non-expired password.
- For each user of the ISPF task, you must ensure that the corresponding user ID:
 - Is authorized to TSO/E
 - Is authorized to the JES spool. This authorization allows the user to use various functions in TSO/E, such as the SUBMIT, STATUS, TRANSMIT, and RECEIVE commands, and to access the SYSOUT data sets through the command TSO/E OUTPUT command.
 - Has an OMVS segment defined, which allows for access to z/OSMF
 - Has a home directory defined, which is required for z/OSMF.
- By default, the ISPF task is setup to use the logon procedure IKJACCNT, which is supplied by IBM. A user can select to use a different logon procedure, as long as the user's logon procedure is properly configured for ISPF.
- Some TSO/E users require the use of multiple ISPF sessions (this is different than having split screens, which is also allowed). If you plan to allow the use of multiple ISPF sessions, the user's logon procedure must be configured to allow profile sharing.
 - This option avoids enqueue lock outs and loss of profile updates when the same profile data set is used for concurrent ISPF sessions.
 - With profile sharing enabled, the user's logon procedure is required to allocate ISPF profile data sets with the disposition SHARED, rather than NEW, OLD, or MOD, and the data sets must already exist. Or, these data sets must be temporary data sets.
- Ensure that the TRUSTED attribute is assigned to the common event adapter (CEA) started task, if you have not done so already, to allow the CEA address space to access or create any resource it needs.

System Prerequisites for the Resource Monitoring and System Status tasks

- Enable the optional priced feature, Resource Measurement Facility (RMF), on one of the systems in your enterprise.
- For data collection and monitoring of your systems, ensure that the RMF distributed data server (DDS) is active on one of the systems in your sysplex.
 - To monitor several sysplexes, ensure that a DDS is running on one system in each sysplex.
 - You can use the following command to check for the existence of any GPMSEVERE address spaces in your sysplex:
 - `ROUTE *ALL,D A,GPMSEVERE`
 - `ROUTE *ALL,D A,GPM*`
 - For information about setting up the DDS server, see *z/OS RMF User's Guide*, SC33-7990.
- Determine whether the RMF Distributed Data Server (DDS) is configured to require authentication.
 - You can use the following command to display the active DDS options: `MODIFY GPMSEVERE,OPTIONS`. In the command output, the `HTTP_NOAUTH` statement indicates the scope of authentication for the DDS.
 - If your installation requires the authentication feature of the DDS: Ensure that the PassTicket is set up properly, and that the WebSphere Application Server servant user ID is authorized to generate PassTickets. This setup can be done after configuring z/OSMF.
 - If your installation does not require the authentication feature of the DDS: It is recommended that you disable DDS authentication. Doing so allows the Resource Monitoring and System Status tasks to access the DDS on behalf of z/OSMF users without encountering authentication errors.

System Prerequisites for the Software Deployment

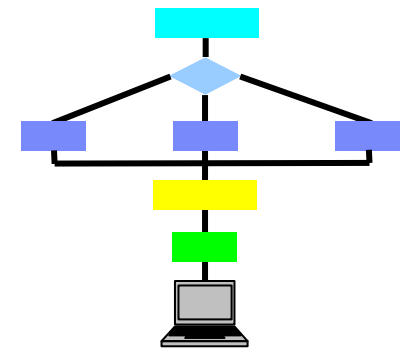
- No system customization is required to enable the Deployment task.
- **Optional:** If you want to manage the priority of work performed by the Deployment task, your installation can define a Workload Manager transaction class to manage the execution of long-running work. This step is recommended.
 - Using the z/OSMF Workload Management task or the WLM ISPF Administration Application, add a classification rule for subsystem CB (Component Broker) to your WLM service definition.
 - Specify qualifier type transaction class (TC) and qualifier name IZUGWORK for the classification rule and assign a service class with a goal of either discretionary or low velocity.
 - The subject service class should not have multiple periods and should not have a response time goal.
 - Create a report class specific for the IZUGWORK transaction class, for example, RIZUGWRK, and assign it to the classification rule, so that you can obtain a separate report on the actual usage of the Deployment task long-running work.
- If your installation is running a System z Application Assist Processor (zAAP), and if IFAHONORPRIORITY is set to YES in the IEAOPTxx member of parmlib, discretionary work is not permitted to use a general central processor (GCP).
 - If this processing style is desired, use a discretionary goal.
 - To allow the work to cross-over to a GCP if the zAAP capacity is exhausted, use a low velocity goal.
- For more information on WLM, see *z/OS MVS Planning Workload Management*, SA22-7602

System Prerequisites for the Workload Management

- The Workload Management task requires that the Common Information Model (CIM) server is configured on your system, including security authorizations and file system customization.
- Ensure that library BLDUXTID in SYS1.MIGLIB is program controlled. For example, in a RACF system, you can use the following commands to ensure that a library is program controlled:
 - RDEFINE PROGRAM BLSUXTID
 - RALT PROGRAM BLSUXTID ADDMEM('SYS1.MIGLIB'/'*****'/NOPADCHK) UACC(READ)
 - SETROPTS WHEN(PROGRAM) REFRESH
- This step is performed in the CIM provided job CFZSEC. See the chapter on customizing the security for the CIM server in *z/OS Common Information Model User's Guide, SC33-7998*.

z/OSMF Configuration Process

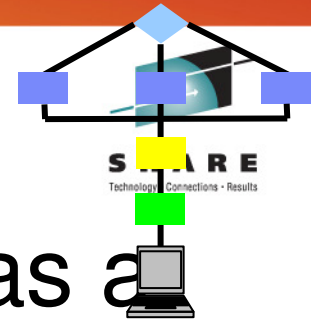
- The configuration process occurs in three stages, and in the following order:
 1. Stage 1 – Configuration
 - a. Interactive mode (with an override file)
 - b. Fastpath mode
 - c. Interactive mode (without an override file)
 2. Stage 2 - Security setup
 - Invoke Security REXX EXEC
 - */etc/zosmf/izuconfig1.cfg.rexx*
 - Verify the RACF Security Setup
 - *izusetup.sh -file /etc/zosmf/izuconfig1.cfg –verify racf*
 3. Stage 3 – Build the executables – deploy the z/OSMF apps
 - Prime the z/OSMF data file system
 - *izusetup.sh -file /etc/zosmf/izuconfig1.cfg -prime*
 - Complete the setup (deploy, configure, and verify z/OSMF)
 - *izusetup.sh -file /etc/zosmf/izuconfig1.cfg -finish*



z/OSMF Configuration Roles and Authorities



Action to perform	Script invocation	Performed by
Step 1: Create the initial configuration	<pre>izusetup.sh -file <pathname/filename>.cfg -config [...other options...]</pre>	Superuser
Step 2: Run the security commands	<code><IZU_CONFIG_DIR>/izuconfig1.cfg.rexx</code>	Security Administrator
Step 3: Verify the RACF security setup	<pre>izusetup.sh -file <pathname/filename>.cfg -verify racf</pre>	Security Administrator
Step 4: Prime the z/OSMF data file system	<pre>izusetup.sh -file <pathname/filename>.cfg -prime</pre>	Superuser
Step 5: Complete the setup	<pre>izusetup.sh -file <pathname/filename>.cfg -finish</pre>	z/OSMF Administrator
Step 6: Access the z/OSMF Welcome task	At the end of the z/OSMF configuration process, you can verify the success of your configuration changes by opening your browser to the z/OSMF Welcome task.	Any authorized z/OSMF user



z/OSMF Configuration Hints and Tips

- Use the configuration worksheet as a guide, determine the appropriate value that should be specified for that system.
- Fill in the information on the worksheet to help ensure that you know the correct values to enter for the prompts prior to starting the izusetup script.
- Use an override file if the default value does not suffice for the system onto which z/OSMF is being configured.

z/OSMF Prompts and Override File

- **The following prompts are the ones that are most likely to require changes:**
 - GID and UID defaults (I use AUTOUID/AUTOGID but still need overrides)
 - WebSphere Application Server OEM Edition configuration file location
 - z/OSMF data filesystem data set name
 - Volume serial numbers for data sets
 - z/OSMF Administrator's TSO security segment settings
 - PARMLIB data set names
 - PARMLIB suffixes
 - Whether to allow z/OSMF to setup security for CIM
 - z/OSMF V1.12 recommendation is to specify "N" and use the CIM sample jobs.
 - This prompt is removed in V1.13
 - Whether to configure CEA (Whether to configure the Incident Log Task)
 - CEA default parameters
 - Configure specific z/OSMF plug-ins (Y/N)
- However, you should review ALL of the other prompts to determine if any additional configuration variables need to be updated.
 - If so you can either in respond to the prompts, or update the override file with the changed values
 - **We used an `/etc/zosmf/izuhlt.ovr` override file.**

Sample z/OSMF V1.12 Override File

```
# Licensed Materials - Property of IBM
# 5655-S28
# Copyright IBM Corp. 2009, 2010
#
# Status = HSMA120
IZU_OVERRIDE_FILE_VERSION=1.12.0
IZU_ADMIN_UID=AUTOUID
IZU_ADMIN_GROUP GID=AUTOGID
IZU_WAS_CONFIG_FILE KNOWN=Y
IZU_WAS_CONFIG_FILE_LOCATION=/etc/zWebSphereOEM/V7R0/conf/CONFIG1/CONFIG1.responseFile
IZU_DATA_FS_NAME=MVSBUILD.IZUDATA
IZU_DATA_FS_TYPE=ZFS
IZU_DATA_FS_SIZE=500
IZU_DATA_FS VOLUME=ZCSDW
IZU_CIM_GROUP_ID=AUTOGID
IZU_CEA_UID=AUTOUID
IZU_CEA_GROUP ID=AUTOGID
IZU_CEA_PARM_NAME=MF
IZU IEA_PARM_NAME=MF
IZU PARMLIB=MVSBUILD.ZOSMF.PROCLIB
IZU PARMLIB_SOURCE=SYS1.PARMLIB.INSTALL
IZU INCIDENT_LOG=Y
IZU_CIM_SETUP=N
IZU_ADMIN_PROC=ISPFPROC
IZU_ADMIN_ACCOUNT=FRED
IZU_COUNTRY_CODE=000
IZU_BRANCH_CODE=035
IZU_STORAGE_VALUE="VOLSER(ZCSDW,ZCSDWX,ZCSDWY)"
#IZU_STORAGE_VALUE="STORCLAS(STRCLS)"
#IZU_STORAGE_VALUE="VOLSER(VOL1,VOL2,VOL3,VOL4,VOL5,VOL6,VOL7)"
IZU_IL_CONFIGURE=Y
IZU_CA_CONFIGURE=Y
IZU_WLM_CONFIGURE=Y
IZU_RMF_CONFIGURE=Y
IZU_CIM_CONFIGURE=Y
```

Complete override file used

Migrating to a New z/OSMF Release

- If you have a z/OSMF V1.11 or z/OSMF V1.12 system configured and want to migrate your configuration file or override file to z/OSMF V1.13 format, there is script `izumigrate.sh` for doing that.
- The script produces a report that indicates what is changed, removed or added.
- Migrating to a new release of z/OSMF from an older release is a two-step process.
 1. Start by migrating your existing configuration file and override file to the latest format via `izumigrate.sh` script.
 2. Then, configure the product as you would normally, supplying the updated configuration and override files as input to the z/OSMF configuration process.
- Depending on your current release of z/OSMF, you might also need to perform additional migration actions.

Migrating to a New z/OSMF Release - izumigrate.sh

- This script migrates your configuration file, and, if specified, your override file from a previous release of z/OSMF to the latest format.
- In updating the configuration file and override file, the script retains your current settings when possible.
- For any properties that are no longer valid for z/OSMF, the script omits the properties when creating the updated files.
- If your existing configuration file contains commented sections (it should not), the script removes this information from the updated configuration file.
- If you choose to migrate an existing override file, understand that:
 - The script processes only the properties that are specified in the override file. The script does not add any new properties to the updated override file.
 - The script determines the version of the override file by examining the override file property IZU_OVERRIDE_FILE_VERSION.
 - This property, which was introduced in z/OSMF V1R12, should not be modified.
 - If this property is missing from the override file, the script processes the override file as though it had originated from a z/OSMF V1R11 configuration.
 - If this property is set incorrectly in the override file, the script fails with an error message.
 - If your existing override file contains user comments, these commented sections are retained in the updated override file, though the placement of these sections might change as a result of the migration processing, which removes properties that no longer apply.
- You can migrate the configuration file and override file together in one invocation of this script. Or, if you prefer, you can migrate these files individually by running separate invocations of the script.

Step 1: Create the initial configuration

- The **izusetup.sh -config** script uses the input you supply, based on your environment and the z/OSMF tasks that you plan to configure. The script saves your input in the configuration file, which is used as input to subsequent script invocations.
- You can run the **izusetup.sh** script either interactively (like an “interview”) or “quietly” (the fastpath option).
- Regardless of which mode you use, the script does the following:
 - Creates a file for storing your configuration information (the configuration file). If you retained the configuration file from a previous configuration of z/OSMF, and you wish to re-use some or all of the values for this configuration, you can select that file to use when you invoke this script.
 - If the z/OSMF data file system is not already allocated and mounted, the script allocates the data file system and mounts it at the mount point you specify. The default mount point is /var/zosmf/data.
 - The script also creates a REXX exec with RACF commands for creating the necessary security definitions for your installation.
 - For z/OSMF V1.12 the REXX script will be tailored based on the set of plug-ins selected
 - If you specify that the script is to set up the Incident Log task, the generated REXX exec will include the RACF commands that your security administrator can use to create security definitions for the CIM server, CEA, and other system components, and the security definitions that allow the z/OSMF administrator to access and run the Incident Log task.

• Sample command:

Remember the name of the configuration file

- `izusetup.sh -file /etc/zosmf/izuconfig1.ctg -config -overridefile /etc/zosmf/izuhlt.ovr`

Step 2: Run the Security Commands

- Prior to running the REXX EXEC your security administrator must define security for z/OS components (CEA, CIM, and CP) by running the appropriate (customized) sample jobs
 - CEASEC, CFZSEC, and CPOSEC1
- This exec is run by your installation's security administrator.
- If your installation uses a security management product other than RACF, do not perform this step. Instead, your installation must create equivalent commands for your security product.

Scenario	Action to take
New installation of z/OSMF	Run izuconfig1.cfg.rexx
Migrating from an earlier release of z/OSMF to a new z/OSMF configuration	Run izuconfig1.cfg.rexx (will need to edit the exec if existing security data base is used).
New z/OSMF configuration is already created; just changing the authorization mode from Repository to SAF.	Run izuconfig1.cfg.convertFromREPtoSAF.rexx
New z/OSMF configuration is already created; just changing the authorization mode from SAF to Repository.	Run izuconfig1.cfg.convertFromSAFtoREP.rexx (the exec might consist of commented sections only).

Step 2: Run the Security Commands

- Prior to running the REXX EXEC review the RACF commands and comments making any necessary changes
 - For example,
 - Uncomment commands if running in an MLS environment
 - Uncomment commands for CEA.* data set protection
 - Update any commands to conform to installation security policies

Recommend making changes to a copy of the file

Note: If you provided the proper user ID and group names during the configuration process, you shouldn't have to edit those commands

- Sample invocation of REXX EXEC
 - From the /etc/zosmf/ directory
 - `./izuconfig1.cfg.rexx | tee izuconfig1_cfg_rexx.log`

Captures command output in a file

Step 3: Verify the RACF Security Setup

- This exec is run by your installation's security administrator.
- The **izusetup.sh** script verifies the RACF security setup actions that were performed in the previous steps.
- If your installation uses a security management product other than RACF, do not perform this step. Instead, take the appropriate steps to verify your security setup.
- Sample command
 - `izusetup.sh -file /etc/zosmf/izuconfig1.cfg -verify racf`
- On completion, the script creates a report called **izuracfverify.report**, which is stored by default in the following location:
 - `/etc/zosmf/izuracfverify.report`

Step 4: Prime the z/OSMF Data File System

- The **izusetup.sh -prime** script performs the following:
 - Initializes or "primes" the z/OSMF data file system, which is mounted by default at /var/zosmf/data
 - Changes the permissions and ownership of the directories and files in /var/zosmf/data
 - Creates the home directory for the z/OSMF administrator, if one does not already exist. By default, this directory is /u/zosmfad
 - Changes ownership and permissions for the other directories that z/OSMF uses.
- In z/OSMF V1.11 priming the data file system can be done only once.
- Sample command:
 - ***izusetup.sh -file /etc/zosmf/izuconfig1.cfg -prime***

Same configuration file as prior command

Step 5: Complete the Setup

- **The `izusetup.sh -finish` script deploys z/OSMF, using the values you supplied earlier.** Specifically, the script:
 - Registers z/OSMF with IBM WebSphere Application Server OEM Edition for z/OS, which includes creating a symbolic link.
 - Updates the WebSphere Application Server configuration
- **The script also prepares your z/OS system for running the Incident Log task**, if you chose to configure this task earlier. Specifically, the script performs the following z/OS setup actions:
 1. Copies the IEADMCnn member to the installation PARMLIB you specified earlier.
 2. Copies the IBM-supplied CEAPRM00 member to the installation PARMLIB you specified earlier and modifies it.
 3. Activates the new CEAPRMnn member.
 4. Establish the help symbolic links in the configuration directory
 5. The script verifies the setup for z/OSMF core functions and if you configured the Incident Log task, the script runs an installation verification program (IVP) that verifies the setup of z/OS system components such as:
 - ▶ Sysplex dump directory, System logger, Common event adapter (CEA), and System REXX.
 6. Upon completion, the script issues an informational message (IZUG349I) that contains the URL that you use to log in to z/OSMF.
- **The script is intended to be run by the z/OSMF Administrator**
 - By default no password or passphrase is assigned to this ID
 - Prior to running the script you will need to define a password for the User ID
 - Ex: `ALU ZOSMFAD PASSWORD(password) NOEXPIRED`
- **Ensure that IBM WebSphere Application Server OEM Edition for z/OS is NOT running.**
- **Sample command:**
 - `izusetup.sh -file /etc/zosmf/izuconfig1.cfg -finish`

Same configuration file as prior command

Step 5: Results - izuincidentlogverify.report



The script checks that all necessary steps were carried out, and creates a report indicating any areas that might require further action on your part. If you selected to configure the Incident Log task, the script ran an installation verification program (IVP) to verify the setup of z/OS system components. To see the results of the IVP, check the report file named **/etc/zosmfizuincidentlogverify.report**.

```
-----  
Incident Log Verification Report  
-----  
Sysplex Dump Directory : SUCCESS  
CEA                    : SUCCESS  
System REXX           : SUCCESS  
System Logger Active  : SUCCESS  
-----  
Diagnostic Data Results  
-----  
SVCDump              : SUCCESS  
Operations Log       : SUCCESS  
Error Log            : SUCCESS  
Error Log Summary   : SUCCESS  
-----  
Incident Log Operations Results  
-----  
Prepare Dump Request      : SUCCESS  
Prepare Operations Log Request : SUCCESS  
Prepare Error Log Request : SUCCESS  
Prepare Error Log Summary Request : SUCCESS  
Prepare View Operations Log Request : SUCCESS  
Prepare View Error Log Request : SUCCESS  
Prepare View Error Log Summary Request : SUCCESS  
Set PMR Request          : SUCCESS  
Set Tracking Request     : SUCCESS  
Set User Comment Field Request : SUCCESS  
-----  
CEA Parmlib Member  
-----  
SnapShot   : Y  
Branch     : 999  
Country    : 000  
Storage Value : STANDARD  
HLQ       : CEA  
continue →
```

```
SLIP OperLog      time : 3540  
SLIP LOGREC      time : 3540  
SLIP LOGRECSUMMARY time : 14400  
DUMP OperLog     time : 3540  
DUMP LOGREC     time : 3540  
DUMP LOGRECSUMMARY time : 14400  
ABEND OperLog    time : 3540  
ABEND LOGREC    time : 3540  
ABEND LOGRECSUMMARY time : 14400  
-----  
Incident Log Logstreams Properties  
-----  
Operations Log      : OPERLOG  
Logrec             : LOGSTREAM  
LOGR Subsystem Active : TRUE  
Primary Logger CDS : "CIMPROV.LOGR001"  
Alternate Logger CDS : "CIMPROV.LOGR002"  
Number of LSR for Primary CDS : 60  
CEA OperLog Logstream Model : "CEA.MODEL.OPERLOG"  
CEA Logrec Logstream Model : "CEA.MODEL.LOGREC"  
-----  
Sysplex Dump Directory Properties  
-----  
Name              : "MVSSPT.SYSPLEX.DMPDIR"  
Size              : 112 cylinders  
On Shared Volume  : TRUE  
Free Space Available : TRUE  
IPCS Initialized  : TRUE
```



Other Scripts and Options

- **izuauthuser.sh**
 - Your security administrator can use this script to create a REXX EXEC with RACF commands for authorizing users to z/OSMF.
 - The content of the exec is automatically tailored for the plug-ins you select when configuring z/OSMF.
 - This script replaces scripts izuaddcoreuser.sh and izuaddloguser.sh from V1.11
 - Authorizing a user is a two step process
 1. Running this script and resultant REXX EXEC
 2. Using the z/OSMF UI
- **izusetup.sh**
 - An option, **-add**, is added to the izusetup.sh script to allow you to add plug-ins to an already configured instance of z/OSMF.
 - Specify the **-add** option with the existing options **-config** to limit the scope of the script operations to new plug-ins only.
 - *izusetup.sh -file <pathname/filename.cfg> -config [-overridefile <overridefilename>] [-fastpath] -add*
 - An option, **-addlink**, is added to the izusetup.sh script provides an alternative means of adding a link to the z/OSMF navigation area.
 - In most cases, however, it is recommended that you use the Links task to add a link.
 - An option, **-service**, is added to the izusetup.sh script to allow you to deploy service to your z/OSMF instance without re-configuration.

z/OSMF V1.13 Configuration Enhancements (1 of 2)

- **Support for new z/OSMF system management tasks**
 - Capacity Provisioning, Software Deployment, ISPF, and DASD Management
- **Command simplification**
 - Can provide a single file to define global settings or environment variables and export the location of the file to your shell session.
 - -file and -override file parameters will pre-pend IZU_CONFIG_DIR if no path is specified.
 - Configuration and override files are kept in the configuration directory and managed by the scripts
 - Script log files and report files are written to the z/OSMF log file directory, which is identified by the IZU_LOGFILE_DIR environment setting for the UNIX shell.
 - By default, this directory is /var/zosmf/configuration/logs/.
 - Flexibility is enhanced through the addition of overrides which allow you set options globally for any UID or GID values that you choose not to specify individually.
 - z/OS configuration tasks moved to -prime step



z/OSMF V1.13 Configuration Enhancements (2 of 2)

- **Migration Improvements**
 - Now supports both override and configuration files
 - From any prior supported release
 - Can do either, or both at the same time
 - Report file is generated
- **Security Simplification**
 - Group Management
 - Scripts only create groups owned by z/OSMF (Administrator, User, Storage Administrator).
 - Will prompt for and use other groups if known
 - Authorization Mode switch
 - Can specify either SAF or Repository and then switch later.
 - Will generate all necessary commands for this switch
 - Authorization of additional users is based on Mode
- **RAS Items**
 - Additional messages for better log file documentation and diagnosis
 - Temporary file handling is improved
 - Input validation improved

Coexistence Considerations

- **Coexistence applies to lower-level systems which coexist (share resources) with latest z/OS systems.**
 - If you require the capability to fall back from z/OS Management Facility V1.13 to a lower level system (z/OS Management Facility V1.11 or z/OSMF V1.12 system), you require:
 - z/OS Management Facility V1.11
 - **APAR PM09519**
 - **APAR PM27448**
 - z/OS Management Facility V1.12
 - **APAR PM27450**
 - **APAR PM32108**
 - For both of these z/OSMF releases the SMP/E Fix Category **IBM.Coexistence.z/OSMF.V1R13** can be used to identify z/OSMF coexistence service

Summary (1 of 2)

- **IBM z/OS Management Facility (z/OSMF) V1.13 is a new release of the separate product for z/OS V1.13 customers (Program Number 5655-S28) . It consists of ten (10) FMIDs:**
 - HSMA130 - z/OS Management Facility core
 - HSMA131 - z/OSMF ISPF
 - HSMA132 - z/OSMF RMF
 - HSMA133 - z/OSMF WLM
 - HSMA134 – z/OSMF Software Deployment
 - HSMA135 - z/OSMF Incident Log
 - HSMA136 - z/OSMF Capacity Provisioning
 - HSMA13A - z/OSMF Configuration Assistant
 - HSMA13F - z/OSMF DASD Management
 - HBBN700 - IBM WebSphere Application Server OEM Edition for z/OS
- **Configuration for WebSphere Application Server OEM Edition and z/OSMF has 3 basic phases:**
 1. Setup configuration files
 2. Create Security Definitions
 3. Build executables (run-time files)
 - Note: Most phases are driven through the use of z/OS UNIX configuration scripts. Phase 1 can be run interactively (interview style) or silently (fastpath mode)
- **z/OSMF Incident Log exploits existing best practices for data management for problem determination**
 - Instructions on setting up the z/OS functional prerequisites is documented in the z/OSMF Configuration Guide.

Summary (2 of 2)

- **Planning, Planning, Planning**
 - Take time to go through the planning sections for WASOEM and z/OSMF. It will be worth it!
 - Think about configuring the easier plug-ins first – those that have few or no pre-requisites, unless the pre-requisite setup is not an issue at all.
- **Security, Security, Security**
 - Security definitions required for:
 - z/OS infrastructure prerequisites
 - *CIM sample job provided (CFZSEC)*
 - *Additional sample jobs provided in z/OS V1.13*
 - WebSphere Application Server OEM Edition
 - *Tailored sample RACF commands generated by script*
 - *Defaults in Backup slides*
 - z/OSMF setup
 - *Tailored sample RACF commands generated by script*
 - *Defaults in Backup slides*
 - It is likely that the shipped default values need to be changed to conform to your site security policies or conventions.

BACKUP

Additional Information

- z/OS Management Facility website
 - <http://ibm.com/systems/z/os/zos/zosmf/>
- IBM z/OS Management Facility education modules in IBM Education Assistant
 - <http://publib.boulder.ibm.com/infocenter/ieduasst/stgv1r0/index.jsp>
 - **Scroll down to z/OS Management Facility**
- z/OS Hot Topics, Issue 21, 23 and 25:
 - http://ibm.com/systems/z/os/zos/bkserv/hot_topics.html
- IBM z/OS Management Facility Configuration Guide (SA38-0652)
 - Renamed from IBM z/OS Management Facility User's Guide in z/OSMF V1.12
- **z/OS Management Facility Messages** (SA38-0654)
- IBM WebSphere Application Server OEM Edition for z/OS Configuration Guide, Version 7.0 (GA32-0631)
- Program Directory for z/OS Management Facility (GI11-2886)
- IBM z/OS Management Facility License Information (GC52-1263)



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WAS OEM Default Directory Names and Descriptions

Directory	Permission bits	Description
/usr/lpp/zWebSphereOEM/V7R0	755	Default read-only mount point for product file system
/usr/lpp/zWebSphereOEM/V7R0/bin	755	Script files WASOEM.sh, createWASOEMHFS.sh, updateConfigWASOEM.py, zpmt.sh and the plexname module.
/usr/lpp/zWebSphereOEM/V7R0/zOS-config/zpmt/samples	755	Samples of the default response files wasOEMDefault.responseFile, and wasOEMOverride.responseFile, and the environment shell script wasOEM_env.sh,
zWebSphereOEM/V7R0/config1	775	Default read-write mount point for configuration file system
/etc/zWebSphereOEM/V7R0/conf	755	Location of the environment shell script along with custom response file entries
/var/zWebSphereOEM/V7R0/logs	755	Location of the log files
/tmp/zWebSphereOEM/V7R0/zpmt/work	755	Work area for zPMT

WAS OEM Default Directory Names and Descriptions ...

- **/usr/** - requires READ and EXECUTE permissions for running scripts, and for the IBM WebSphere Application Server OEM Edition for z/OS server ID.
- **/etc/** - requires READ, WRITE, and EXECUTE permissions. These permissions enable you to copy, or modify the configuration file and default environment files.
 - Note: If you cannot use the **/etc/** directory to store the configuration file and the default environment files, you can specify a different working directory for these files when you receive the script prompts. These prompts only appear the first time you issue the **WASOEM.sh** command.
- **/tmp/** - requires READ and WRITE permissions to create directories, and to read and write files.
- **/var/** - requires READ, WRITE, and EXECUTE permissions. These permissions enable you to run scripts with log output.

z/OSMF Default Directory Names and Descriptions ...

Directory	Permission bits	Description
/usr/lpp/zosmf/V1R13	755	Default read-only mount point for product file system
/etc/zosmf	755	Default location of the read-write mount point used for the z/OSMF configuration file, override file, and security REXX EXECs.
/var/zosmf/configuration/logs/	755	Location of the configuration log files
/var/zosmf/data	755	Default location of the read-write mount point used for the persistence data file system
/var/zosmf/data/logs/	755	Location of the run-time log files
/tmp/	755	Location of the temporary directory to be used for sending z/OS UNIX file attachments through FTP when using Incident Log. The size will depend on what files are to be sent as attachments.

Groups and User IDs (1 of 2)



Variable	Value	Component
zConfigurationGroup	WSCFG1	WASOEM
zConfigurationGroupGID	2500	WASOEM
zLocalUserGroup	WSCLGP	WASOEM
zLocalUserGroupGID	2502	WASOEM
zServantGroup	WSSR1	WASOEM
zServantGroupGID	2501	WASOEM
zAdminAsynchTaskUserid	WSADMSH	WASOEM
zAdminUnauthenticatedUserid	WSGUEST	WASOEM
zAdminUserid	WOEMADM	WASOEM
zControlUserid	WSCRU1	WASOEM
zServantUserid	WSSRU1	WASOEM
zAdminAsynchTaskUid	2504	WASOEM
zAdminUid	2403	WASOEM
zAdminUnauthenticatedUid	2402	WASOEM
zControlUid	2431	WASOEM
zServantUid	2432	WASOEM
zSAFProfilePrefix	BBNBASE	WASOEM
zDefaultSAFKeyringName	WASKeyring.BBNBASE	WASOEM
zClusterTransitionName	BBNC001	WASOEM
zCellShortName	BBNBASE	WASOEM
zAdminAsynchProcName	BBN7ADM	WASOEM
zDaemonProcName	BBN7DMNB	WASOEM
zControlProcName	BBN7ACR	WASOEM
zServerShortName	BBNS001	WASOEM

Groups and User IDs (2 of 2)

Variable	Value	Component
IZU_ADMIN_NAME	ZOSMFAD	ZOSMF
IZU_ADMIN_UID	9001	ZOSMF
IZU_ADMIN_GROUP_NAME	IZUADMIN	ZOSMF
IZU_ADMIN_GROUP_GID	9003	ZOSMF
IZU_USERS_GROUP_NAME	IZUUSER	ZOSMF
IZU_USERS_GROUP_GID	9004	ZOSMF
IZU_WAS_PROFILE_PREFIX	BBNBASE	ZOSMF
IZU_CELL_SHORT_NAME	BBNBASE	ZOSMF
IZU_CLUSTER_TRANSITION_NAME	BBNC001	ZOSMF
IZU_CONTROL_USERID	WSCRU1	ZOSMF
IZU_SERVANT_USERID	WSSRU1	ZOSMF
IZU_WLM_GROUP_NAME	WLMGRP	ZOSMF-WLM
IZU_CP_QUERY_GROUP_NAME	CPOQUERY	ZOSMF-CP
IZU_CP_CONTROL_GROUP_NAME	CPOCTRL	ZOSMF-CP
IZU_STORAGE_GROUP_NAME	IZUSTGA	ZOSMF-DASD MGMT
IZU_STORAGE_GROUP_GID	9005	ZOSMF-DASD MGMT
IZU_CIM_ADMIN_GROUP_NAME	CFZADMGP	ZOSMF - CIM
IZU_CEA_HLQ	CEA	ZOSMF-IL

Security Resources and Required Access (1 of 4)

Class	Profile	UID/GID	Users/Groups Authorized	Access	Component	Defined By
Group	WSCFG1	2500	WSSRU1,ZOSMFAD		WASOEM	BBOCBRAK
Group	WSCLGP	2502			WASOEM	BBOCBRAK
Group	WSSR1	2501			WASOEM	BBOCBRAK
User	WSADMSH	2504	WSCFG1		WASOEM	BBOCBRAK
User	WSGUEST	2402	WSCLGP		WASOEM	BBOCBRAK
User	WOEMADM	2403	WSCFG1		WASOEM	BBOCBRAK
User	WSCRU1	2431	WSCFG1		WASOEM	BBOCBRAK
User	WSSRU1	2432	WSSR1		WASOEM	BBOCBRAK
APPL	BBNBASE		WSCFG1,WSGUEST	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.adminsecuritymanager		WOEMADM	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.auditor		WOEMADM	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.administrator		WSCFG1	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.CosNamingRead		WSGUEST	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.CosNamingWrite		WSCFG1	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.CosNamingCreate		WSCFG1	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.CosNamingDelete		WSCFG1	READ	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.monitor			NONE	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.configurator			NONE	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.operator			NONE	WASOEM	BBOCBRAK
EJBROLE	BBNBASE.deployer			NONE	WASOEM	BBOCBRAK

Security Resources and Required Access (2 of 4)

Class	Profile	UID/GID	Users/Groups Authorized	Access	Component	Defined By
FACILITY	BBO.SYNC.BBNBASE.BBNC001			NONE	WASOEM	BBOCBRAK
FACILITY	BPX.WLMSEVER		WSSR1	READ	WASOEM	BBOCBRAK
FACILITY	IRR.DIGTCERT.LIST		WSCFG1	READ	WASOEM	BBOCBRAK
FACILITY	IRR.DIGTCERT.LISTRING		WSCFG1	READ	WASOEM	BBOCBRAK
FACILITY	BBO.TRUSTEDAPPS.BBNBASE.BBNC001		WSCFG1	READ	WASOEM	BBOCBRAK
STARTED	BBN7ADM.*		WSADMSH		WASOEM	BBOCBRAK
STARTED	BBN7DMNB.*		WSCRU1		WASOEM	BBOCBRAK
STARTED	BBN7ACR.*		WSCRU1		WASOEM	BBOCBRAK
STARTED	BBNS001A.*		WSCRU1		WASOEM	BBOCBRAK
STARTED	BBNS001S.*		WSSRU1		WASOEM	BBOCBRAK
SERVER	CB.*			NONE	WASOEM	BBOCBRAK
SERVER	CB.*.BBNC001.*		WSCRU1, WSSR1	READ	WASOEM	BBOCBRAK
SERVER	CB.*BBNC001ADJUNCT.*		WSCRU1	READ	WASOEM	BBOCBRAK
CBIND	CB.BIND.BBNBASE.**		WSCFG1	CONTROL	WASOEM	BBOCBRAK
CBIND	CB.BBNBASE.**			READ	WASOEM	BBOCBRAK
CERTAUTH	WebsphereCA					
KEYRING	WASKeyring.BBNBASE		WSCRU1, WSSRU1, WOEMADM, WSADMSH		WASOEM	BBOCBRAK
KEYRING	WASKeyring.BBNBASE.Root		WSCRU1		WASOEM	BBOCBRAK
KEYRING	WASKeyring.BBNBASE.Signers		WSCRU1		WASOEM	BBOCBRAK
CERT	DefaultWASCert.BBNBASE		WSCRU1		WASOEM	BBOCBRAK
CERT	DefaultDaemonCert.BBNBASE		WSCRU1		WASOEM	BBOCBRAK

Security Resources and Required Access (3 of 4)



Class	Profile	UID/GID	Users/Groups Authorized	Access	Component	Defined By
Group	IZUADMIN	9003			ZOSMF	izuconfig1.cfg.rexx
Group	IZUUSER	9004			ZOSMF	izuconfig1.cfg.rexx
Group	IZUSTGA	9005			ZOSMF	izuconfig1.cfg.rexx
User	ZOSMFAD	9001	IZUADMIN		ZOSMF	izuconfig1.cfg.rexx
Group	WLMGRP	xxxx			WLM	Documentation
Group	CPOQUERY		ZOSMFAD		CP	CPOSEC1
Group	CPOCTRL		ZOSMFAD		CP	CPOSEC1
Group	CFZADMGP		ZOSMFAD		CIM	CEASEC
Group	CFZUSRGP				CIM	CEASEC
APPL	BBNBASE		IZUADMIN, IZUUSER	READ	ZOSMF	izuconfig1.cfg.rexx
EJBROLE	BBNBASE.izuUsers		IZUADMIN, IZUUSER	READ	ZOSMF	izuconfig1.cfg.rexx
FACILITY	BBO.SYNC.BBNBASE.BBNC001		WSCRU1	CONTROL	ZOSMF	izuconfig1.cfg.rexx
FACILITY	MVSADMIN.WLM.POLICY		WLMGRP	UPDATE	ZOSMF-WLM	izuconfig1.cfg.rexx
SERVAUTH	CEA.CEATSO.*		IZUADMIN, IZUUSER, WSSRU1	READ	ZOSMF-ISPF	izuconfig1.cfg.rexx
SERVAUTH	CEA.CEAGETPS		IZUADMIN, IZUUSER	UPDATE	ZOSMF-IL	izuconfig1.cfg.rexx
SERVAUTH	CEA.CEADOCMD		IZUADMIN, IZUUSER	UPDATE	ZOSMF-IL	izuconfig1.cfg.rexx
SERVAUTH	CEA.CEAPDWB*		IZUADMIN, IZUUSER	UPDATE	ZOSMF-IL	izuconfig1.cfg.rexx
SERVAUTH	CEA.CEADOCONSOLECMD		IZUADMIN, IZUUSER	UPDATE	ZOSMF-IL	izuconfig1.cfg.rexx
DATASET	CEA.*		IZUADMIN, IZUUSER	ALTER	ZOSMF-IL	izuconfig1.cfg.rexx

Security Resources and Required Access (4 of 4)



Class	Profile	UID/GID	Users/Groups Authorized	Access	Component	Defined By
ZMFAPLA	BBNBASE.ZOSMF.**		IZUADMIN, IZUUSER	READ	ZOSMF	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.ADMINTASKS.**		IZUADMIN, IZUUSER	READ	ZOSMF	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.LINK.**		IZUADMIN, IZUUSER	READ	ZOSMF	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.CONFIGURATION_ASSISTANT.**		IZUADMIN, IZUUSER	READ	ZOSMF-CA	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.INCIDENT_LOG.**		IZUADMIN, IZUUSER	READ	ZOSMF-IL	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.WORKLOAD_MANAGEMENT.WORKLOAD_MANAGEMENT.VIEW		IZUADMIN, IZUUSER	READ	ZOSMF-WLM	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.WORKLOAD_MANAGEMENT.WORKLOAD_MANAGEMENT.MODIFY		IZUADMIN	READ	ZOSMF-WLM	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.WORKLOAD_MANAGEMENT.WORKLOAD_MANAGEMENT.INSTALL		IZUADMIN	READ	ZOSMF-WLM	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.RESOURCE_MONITORING.**		IZUADMIN, IZUUSER	READ	ZOSMF-RMF	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.CAPACITY_PROVISIONING.**		IZUADMIN, IZUUSER	READ	ZOSMF-CP	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.SOFTWARE_DEPLOYMENT.**		IZUADMIN, IZUUSER	READ	ZOSMF-SD	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.ISPF.**		IZUADMIN, IZUUSER	READ	ZOSMF-ISPF	izuconfig1.cfg.rexx
ZMFAPLA	BBNBASE.ZOSMF.DASD_MANAGEMENT.**		IZUSTGA	READ	ZOSMF-DM	izuconfig1.cfg.rexx

Security Resources and Required -Access for CEA



Class	Profile	UID / GID	Users/Groups Authorized	Access	Component	Defined By
User	CEA	9002	SYS1		CEA	CEASEC
STARTED	CEA.**		SYS1		CEA	CEASEC
DATASET	CEA.*		SYS1		CEA	Sec Admin
SERVAUTH	CEA.CEAGETPS			NONE	CEA	CEASEC
SERVAUTH	CEA.CEADOCMD			NONE	CEA	CEASEC
SERVAUTH	CEA.CEADOCONSOLECMD			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB*			NONE	CEA	CEASEC
SERVAUTH	CEA.CEATSO*			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEACHECKSTATUS			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEADELETEINCIDENT			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEAGETINCIDENT			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEAGETINCIDENTCOLLECTION			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEAPREPREAREINCIDENT			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEASETINCIDENTINFO			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEASETPROBLEMTRACKINGNUMBER			NONE	CEA	CEASEC
SERVAUTH	CEA.CEAPDWB.CEAUNSUPPRESSDUMP			NONE	CEA	CEASEC
SERVAUTH	CEA.CEATSO.CEATSOREQUEST			NONE	CEA	CEASEC
SERVAUTH	CEA.CONNECT			NONE	CEA	CEASEC
SERVAUTH	CEA.SUBSCRIBE.WTO_*			NONE	CEA	CEASEC
SERVAUTH	CEA.SUBSCRIBE.ENF_*			NONE	CEA	CEASEC
SERVAUTH	CEA.SUBSCRIBE.PGM_*			NONE	CEA	CEASEC
SERVAUTH	CEA.SUBSCRIBE.ENF_0068*			NONE	CEA	CEASEC



Security Resources and Required Access for CP



Class	Profile	UID / GID	Users/Groups Authorized	Access	Component	Defined By
User	CPOSRV				CP	CPOSEC1
STARTED	CPOSERV.*				CP	CPOSEC1
FACILITY	IXCARM.SYSCPM.SYSCPO		CPOSRV	UPDATE	CP	CPOSEC1
Group	CPOQUERY	xxxx	CPOSRV	USE	CP	CPOSEC1
Group	CPOCTRL	xxxx	CPOSRV	USE	CP	CPOSEC1
Group	CFZUSRGP		CPOSRV	USE	CIM	CFZSEC
DATASET	CPO.DOMAIN1.*		CPOSRV	UPDATE	CP	CPOSEC1
DATASET	CPOSRV.**		CPOSRV	CONTROL	CP	CPOSEC1
FACILITY	BPX.CONSOLE		CPOSRV	READ	CP	CPOSEC1
PTKTDATA	CFZAPPL SSIGNON(KEYMASKED(.....)) APPLDATA('NO REPLAY PROTECTION')				CP	CPOSEC1
PTKTDATA	CFZAPPL		CPOSRV	READ	CP	CPOSEC1
PTKTDATA	IRRPTAUTH.CFZAPPL.CPOSRV		CPOSRV	UPDATE	CP	CPOSEC1
FACILITY	IRR.RTICKETSERV		CPOSRV	READ	CP	CPOSEC1
SERVAUTH	CEA.CONNECT		CPOSRV	READ	CP	CPOSEC1
SERVAUTH	CEA.SUBSCRIBE.ENF_0068*		CPOSRV	READ	CP	CPOSEC1
FACILITY	HWI.APPLNAME.HWISERV		CPOSRV	READ	CP	CPOSEC1
FACILITY	HWI.TARGET.netname.cpc1		CPOSRV	CONTROL	CP	CPOSEC1
FACILITY	HWI.CAPREC.netname.cpc1.*		CPOSRV	READ	CP	CPOSEC1

Security Resources and Required Access for CIM (1 of 3)



Class	Profile	UID / GID	Users/Groups Authorized	Access	Component	Defined By
GROUP	CFZSRVGP	9501			CIM, ZOSMF	CFZSEC
GROUP	CFZADMGP	9502			CIM, ZOSMF	CFZSEC
GROUP	CFZUSRGP	9503			CIM, ZOSMF	CFZSEC
USER	CFZSRV	0	CFZSRVGP		CIM, ZOSMF	CFZSEC
CDT	WBEM				CIM, ZOSMF	CFZSEC
WBEM	CIMSERV		CFZSRV	CONTROL	CIM, ZOSMF	CFZSEC
WBEM	CIMSERV		CFZADMGP	CONTROL	CIM, ZOSMF	CFZSEC
WBEM	CIMSERV		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
SURROGAT	BPX.SRV.**		CFZSRV	READ	CIM, ZOSMF	CFZSEC
FACILITY	BPX.SERVER		CFZSRV	UPDATE	CIM, ZOSMF	CFZSEC
FACILITY	BPX.SMF		CFZSRV	READ	CIM	CFZSEC
FACILITY	BPX.CONSOLE		CFZSRV	READ	CIM	CFZSEC
FACILITY	IXCARM.DEFAULT.CFZ_SRV_*		CFZSRV	UPDATE	CIM	CFZSEC
FACILITY	MRCLASS.CLUSTER		CFZADMGP	UPDATE	CIM	CFZSEC
FACILITY	MRCLASS.CLUSTER		CFZUSRGP	UPDATE	CIM	CFZSEC
FACILITY	MVSADMIN.*		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
FACILITY	MVSADMIN.*		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
FACILITY	MVSADMIN.XCF.*		CFZADMGP	UPDATE	CIM	CFZSEC
FACILITY	MVSADMIN.XCF.*		CFZUSRGP	UPDATE	CIM	CFZSEC
FACILITY	MVSADMIN.XCF.CFRM		CFZADMGP	UPDATE	CIM	CFZSEC
FACILITY	MVSADMIN.XCF.CFRM		CFZUSRGP	UPDATE	CIM	CFZSEC



Security Resources and Required Access for CIM (2 of 3)



Class	Profile	UID / GID	Users/Groups Authorized	Access	Component	Defined By
FACILITY	IOSCDR		CFZADMGP	UPDATE	CIM	CFZSEC
FACILITY	IOSCDR		CFZUSRGP	UPDATE	CIM	CFZSEC
FACILITY	MVSADMIN.WLM.*		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
FACILITY	MVSADMIN.WLM.*		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
FACILITY	MVSADMIN.WLM.POLICY		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
FACILITY	MVSADMIN.WLM.POLICY		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
APPL	CFZAPPL		CFZSRV	READ	CIM, ZOSMF	CFZSEC
APPL	CFZAPPL		CFZADMGP	READ	CIM, ZOSMF	CFZSEC
APPL	CFZAPPL		CFZUSRGP	READ	CIM, ZOSMF	CFZSEC
STARTED	CFZCIM.*				CIM, ZOSMF	CFZSEC
DATASET	CEA.*		CFZADMGP, CFZUSRGP	ALTER	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.*		CFZADMGP, CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CONNECT		CFZADMGP	UPDATE	CIM	CFZSEC
SERVAUTH	CEA.SUBSCRIBE		CFZADMGP	UPDATE	CIM	CFZSEC
SERVAUTH	CEA.SUBSCRIBE.ENF_0068*		CFZADMGP	UPDATE	CIM	CFZSEC
SERVAUTH	CEA.CEAGETPS		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CEADOCMD		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CEAPDWB		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CEADOCONSOLECMD		CFZADMGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.*		CFZADMGP, CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC



Security Resources and Required Access for CIM (3 of 3)



Class	Profile	UID / GID	Users/Groups Authorized	Access	Component	Defined By
SERVAUTH	CEA.CONNECT		CFZUSRGP	UPDATE	CIM	CFZSEC
SERVAUTH	CEA.SUBSCRIBE		CFZUSRGP	UPDATE	CIM	CFZSEC
SERVAUTH	CEA.SUBSCRIBE.ENF_0068*		CFZUSRGP	UPDATE	CIM	CFZSEC
SERVAUTH	CEA.CEAGETPS		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CEADOCMD		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CEAPDWB		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	CEA.CEADOCONSOLECMD		CFZUSRGP	UPDATE	CIM, ZOSMF	CFZSEC
SERVAUTH	EZB.CIMPROV.*		CFZADMGP	READ	CIM	CFZSEC
SERVAUTH	EZB.CIMPROV.*		CFZUSRGP	READ	CIM	CFZSEC
PTKTDATA	GPMSEVERE				CIM, ZOSMF	CFZSEC
PTKTDATA	IRRPTAUTH.GPMSEVERE.*		CFZSRV	UPDATE	CIM, ZOSMF	CFZSEC



Security Resources and Required Access other(1 of 1)

Class	Profile	UID / GID	Users/Groups Authorized	Access	Component	Defined By
JESSPOOL	your_system_name'.+MASTER+.SYSL OG.*.*		CEA	ALTER	ZOSMF-IL	izuconfig1.cfg .rexx
DATASET	YOUR_MASTER_CATALOG'		ZOSMFAD	UPDATE	ZOSMF-IL	izuconfig1.cfg .rexx
OPERCMDS	MVS.DISPLAY.**		CFZSRV	READ	ZOSMF-IL	izuconfig1.cfg .rexx
OPERCMDS	MVS.DUMP		CFZSRV	CONTROL	ZOSMF-IL	izuconfig1.cfg .rexx
OPERCMDS	MVS.MODIFY.JOB.CEA		CFZSRV	UPDATE	ZOSMF-IL	izuconfig1.cfg .rexx