

IBM z/OS Management Facility Hands-on Lab

Session: 13943 (Monday August 12, 2013)

Session 14315 (Friday August 16, 2013)

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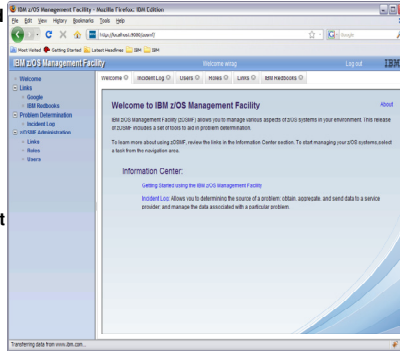
Lab Agenda

- **Brief overview of z/OSMF**
- **Start the hands on Lab – Logon to z/OSMF**
 - **Explore the different tasks in z/OSMF**
- **Lab 1 - Incident Log**
- **Lab 2 - z/OSMF ISPF, including Application Linking with Incident Log**
- **Lab 3 - Workload Management**
- **Lab 4 - System status**
- **Lab 5 - Resource Monitoring**
- **Lab 6 – Software Deployment**
- **Lab 7 – Capacity Provisioning**
- **Optional Labs**
 - **Lab 7 – Capacity Provisioning**
 - **Lab 8 - Workload Management : Print Preview of Service Definition**
 - **Lab 9 - Workload Management : View the History of a Service Definition**
 - **Lab 10 - Workload Management : View the WLM Status of the Sysplex**
 - **Lab 11 – Monitoring Desktops: Add new metrics to monitor**

New Face of z/OS

IBM z/OS Management Facility

- The IBM z/OS Management Facility is a new product for z/OS that provides support for a modern, Web-browser based management console for z/OS.
- **First release is z/OSMF 1.11, introduced with z/OS 1.11**
- **Helps system programmers to 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.**
- Make System Programmers who are new to the mainframe productive more quickly by:
 - ▶ Providing a modern browser-based user interface that is more familiar to those new to the platform
 - ▶ Automating tasks, thus reducing the learning curve
 - ▶ Embedding active user assistance in the UI (e.g., wizards that guide users through tasks, interactive troubleshooting aids).
- Make experienced System Programmers more productive by:
 - ▶ Making functions easier
 - ▶ z/OS Management Facility is optional for those who prefer traditional interfaces

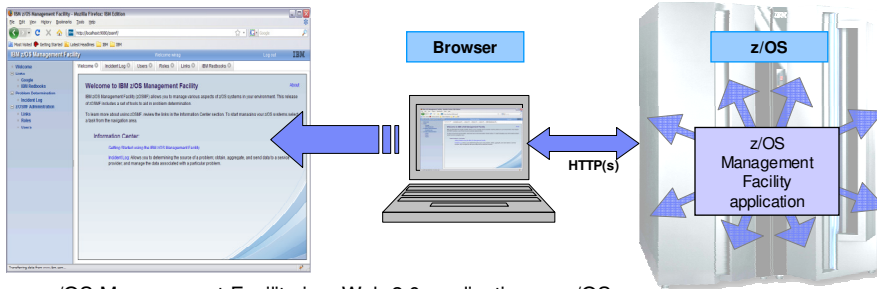


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New Face of z/OS

IBM z/OS Management Facility

z/OS application, browser access

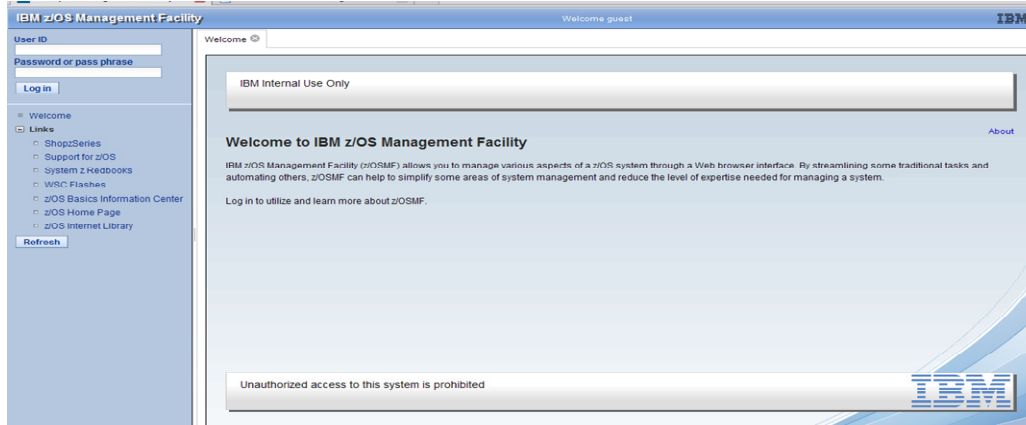


- z/OS Management Facility is a Web 2.0 application on z/OS
 - ▶ Manages z/OS from z/OS
 - ▶ Browser communicates with z/OSMF via secure connection, anywhere, anytime
 - ▶ z/OSMF V1R11 is supported on z/OS V1R10 w/maint, z/OSV1R11, and above
 - ▶ z/OSMF V1R12 is supported on z/OS V1R12
 - ▶ z/OSMF V1R13 is supported on z/OS V1R13

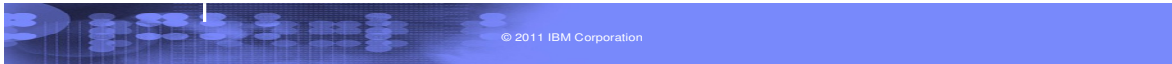
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Guest view - Login



- To log in you will need a z/OS userID that has been defined and enabled to for z/OSMF (and the WebSphere® runtime environment)
 - Guidance is provided.



To access z/OSMF, you point your browser to the URL for the z/OSMF instance which is the host name, the port name and the context root for z/OSMF -this is the result

New Face of z/OS

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

Once you log in with a valid userid, all functions that are configured and authorized for the userid are made available.

Starting the Lab – log in to z/OSMF

- Launch the Mozilla Firefox browser
 - Note: If browser asks to add exception for certificate, do so
- Point Browser to z/OSMF – enter the url provided by the instructor
 - Note: Ignore and close the warning message
 - IZUG809W Unsupported Web browser version or level found: "3.6.13 (.NET CLR 3.5.30729)" . Some z/OSMF functions might not be available if you continue.
- View the Welcome page with the customized Logo
 - view 'About' panel
 - Click top right on 'About'
 - See the details on build and service levels in the installed package.
 - Close the About panel (X on top right)
- Login with SHARE userid/pw as provided by the lab instructor.
 - See the Full Navigation list and welcome page
- Expand each category to see the tasks available

Lab 1: Incident log Lab

This lab consists of 5 tasks.

It is recommended that you execute these tasks in the order listed above. As you get familiar with the Incident Log, you will be able to work directly with the task you need to accomplish.

As with all the labs in this session, all the teams will be working with the same z/OSMF instance. Each team will be given a unique id to work with. However, you must remember that as you work with a given incident, that incident is also available to the other teams to work with. When you are working with updating an incident please make sure you work with the user defined incident assigned to your team to avoid confusing the other teams.

1. View all the incidents across all the systems in your sysplex
2. Customize your view of these incidents
3. View the details of an abend incident
4. FTP the diagnostic data captured for an incident to your service provider
5. View the status of the FTP for that incident

Optional tasks if you have time and interest

6. View FTP destinations
7. View firewall proxy

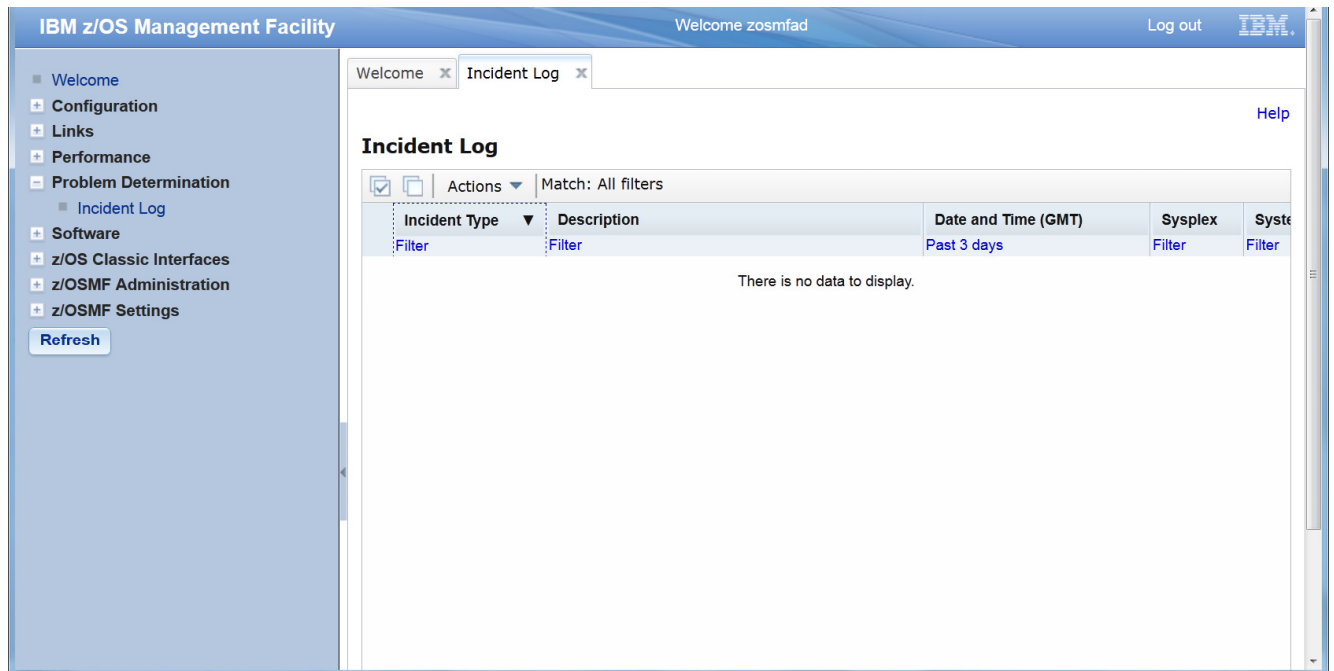
Task 1: View all the incidents across all the systems in your sysplex

Step 1: Expand the Problem Determination Category in the Left Navigation Tree

Step 2: Click on Incident Log

The first panel that opens is the main panel of the Incident Log. Here you will see a summary view of all the Incidents across all the systems in the sysplex. Take some time to scroll through and look at all the columns.

Note: It is possible that you do not see any incidents yet! See next task!



Task 2: Customize your view of these incidents

You have the ability to control what data you see in terms of configuring what columns are displayed and the order of those columns. You can also control the data you see, which is you can filter on different columns. You can also sort the columns to view the data in different sort orders. You can sort on up to 3 columns at a time!

Remember that all customizations are saved on a per user basis.

Step 1: Filter the columns

By default you will get all the incidents that have occurred in the last 3 days. You can change this.

Click on the filter displayed under a column header to change the filter. For this example, let us say we want to look at incidents from the last **150 days**.

Click on the Date and Time column filter. In the resulting dialog, change the days to 150 days and click OK

The screenshot shows the Incident Log interface with a 'Modify Filters' dialog box open. The dialog has a 'Match' dropdown set to 'All filters' and a 'Match case' checkbox. Under 'Columns: Filters', the 'Date and Time (GMT)' filter is expanded to show 'Past 45 days'. The 'Condition' is 'Past', the 'Amount' is '45', and the 'Unit' is 'Days'. A callout points to the 'Amount' field with the text 'Change to 150 days'. Another callout points to the 'Date and Time (GMT)' column header in the background table with the text 'Click here'. The background table shows incident data with columns for Incident Type, Description, Date and Time (GMT), Sysplex, System, and Problem Number. The status bar at the bottom indicates 'Total: 8, Filtered: 8, Selected: 0' and shows a 'Refresh' button and the last refresh time.

You will now see Incidents from the last 150 days on your sysplex.

The screenshot shows the Incident Log interface with a list of incidents. The 'Date and Time (GMT)' column header is now 'Past 150 days'. A callout points to this header with the text 'Column changed to 150days'. The table lists several incidents, all with 'User Initiated' type and descriptions starting with '** MFUSR00 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **'. The dates range from May 8, 2013 to Jun 19, 2013. A callout on the left side of the table points to the scroll bar with the text 'More incidents'. The status bar at the bottom shows 'Total: 8, Filtered: 8, Selected: 0' and a 'Refresh' button.

Step 2: Sort the columns

Click on the column header of the column you want to sort on. The first time you click on it, it will sort it in ascending order, the second time in descending order and the third time it will clear the sort. Try sorting in descending order on the Date and Time column. Notice the arrows that show up. Next try to sort on the Incident Description column. Now note the sort order numbers that show up on the column headers.

The screenshot displays the IBM z/OS Management Facility Incident Log. The interface includes a navigation bar with 'Welcome' and 'Incident Log' tabs. The main content area shows a table of incidents. Two callout boxes highlight the 'Date and Time (GMT)' column with a downward arrow (indicating descending sort) and the 'Description' column with an upward arrow (indicating ascending sort). The table lists various incidents, including 'User Initiated' and 'ABEND' types, with details on their descriptions, dates, times, and system information.

Incident Type	Description	Date and Time (GMT)	Sysplex	System	Probl
Filter	Filter	Past 45 days	Filter	Filter	Filter
User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:38:29 PM	SHARPLEX	S1	
User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:32:31 PM	SHARPLEX	S1	
User Initiated	** MFUSR15 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:55 PM	SHARPLEX	S1	
User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:22 PM	SHARPLEX	S1	
User Initiated	** MFUSR17 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:30:39 PM	SHARPLEX	S1	12345,
User Initiated	** MFUSR18 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:57 PM	SHARPLEX	S1	
User Initiated	** MFUSR19 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:18 PM	SHARPLEX	S1	
User Initiated	** MFUSR20 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:28:21 PM	SHARPLEX	S1	
ABEND S0EC3	COMPON=WEBSPPHRE Z/OS, COMPID=5655N0200,ISSUER=BBORADMP,ABEND IN PC ROUTINE BBOOOUTP	Jan 17, 2013 2:54:15 AM	SHARPLEX	S1	
ABEND S00D6	COMPON=WEBSPPHRE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Jan 11, 2013 2:13:53 PM	SHARPLEX	S1	1234,1
ABEND S0EC3	COMPON=WEBSPPHRE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Jan 11, 2013 2:13:53 PM	SHARPLEX	S1	
ABEND S00C1	ZTT TIENDUMP SVCDUMP DUMP FOR PROBLEM # 1,CAT=300DC7F8,JOB#=01000002	Jan 10, 2013 3:27:51 PM	SHARPLEX	S1	
ABEND S00C1	ZTT ZTTABND ABEND FOR PDW1,CAT=300DC7F8,JOB#=01000001	Jan 10, 2013 3:27:02 PM	SHARPLEX	S1	

Total: 13, Filtered: 13, Selected: 0

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Step 3: Rearrange the order of the columns as you would like to see it

Click on Actions->Configure Columns

The screenshot shows the IBM z/OS Management Facility Incident Log interface. The 'Actions' menu is open, and 'Configure Columns...' is highlighted. The table below shows columns for Incident, Date and Time (GMT), Sysplex, System, and Problem Number. The 'Sysplex' and 'System' columns are currently selected.

Incident	Date and Time (GMT)	Sysplex	System	Problem Number
Filter	Past 45 days	Filter	Filter	Filter
User I	Jan 19, 2013 1:38:29 PM	SHARPLEX	S1	
User I	Jan 19, 2013 1:32:31 PM	SHARPLEX	S1	
User I	Jan 19, 2013 1:31:55 PM	SHARPLEX	S1	
User I	Jan 19, 2013 1:31:22 PM	SHARPLEX	S1	
User I	Jan 19, 2013 1:30:39 PM	SHARPLEX	S1	12345,
User I	Jan 19, 2013 1:29:57 PM	SHARPLEX	S1	
User I	Jan 19, 2013 1:29:18 PM	SHARPLEX	S1	
User I	Jan 19, 2013 1:28:21 PM	SHARPLEX	S1	
ABEN	Jan 17, 2013 2:54:15 AM	SHARPLEX	S1	
ABEN	Jan 11, 2013 2:13:53 PM	SHARPLEX	S1	1234,1,
ABEN	Jan 11, 2013 2:13:53 PM	SHARPLEX	S1	
ABEN	Jan 10, 2013 3:27:51 PM	SHARPLEX	S1	
ABEN	Jan 10, 2013 3:27:02 PM	SHARPLEX	S1	

Total: 13, Filtered: 13, Selected: 0

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Assume you do not want to see the sysplex and system columns. Select them and click on the Remove button

Incident Log

Match: All filters

Incident Type	Description	Date and Time (GMT)	Sysplex	System	Problem Number	Tracking ID
Filter	Filter	Past 45 days	Filter	Filter	Filter	Filter
User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:38:29 PM	SHARPLEX	S1		
User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:32:31 PM	SHARPLEX	S1		
User Initiated						
User Initiated						
User Initiated						
User Initiated						
User Initiated						
User Initiated						
ABEND S00C3					12345,123,123	
ABEND S00D6						
ABEND S00C3					1234,123,123	
ABEND S00C1						
ABEND S00C1	ZTT ZTTABND ABEND FOR PDW1,CAT=300DC7F8,JOB#=01000001	Jan 10, 2013 3:27:02 PM	SHARPLEX	S1		

Total: 13, Filtered: 13, Selected: 0

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z/OSMF Lab

Now let's say you want to see the 'Component Name' column next to the Date and Time column

Select the Component Name column and then click on the Up button, until it is in the position you want it.

The screenshot shows the IBM z/OS Management Facility Incident Log interface. A 'Configure Columns' dialog box is open, allowing users to customize the columns displayed in the incident log table. The dialog has two main sections: 'Available' and 'Selected'. The 'Available' section contains a list of columns: 'Sysplex' and 'System'. The 'Selected' section contains a list of columns: '+Description', 'Date and Time (GMT)', 'Component Name', 'Problem Number', 'Tracking ID', 'Notes', 'Release', and 'Product'. The 'Component Name' column is currently selected in the 'Selected' list, and the 'Up' button is visible next to it. The background shows a table of incident logs with columns for Incident Type, Description, Date and Time (GMT), Sysplex, System, Problem Number, and Tracking ID. The table contains several rows of incident data, including 'User Initiated' incidents and 'ABEND S00C1' incidents.

Incident Type	Description	Date and Time (GMT)	Sysplex	System	Problem Number	Trac
Filter	Filter	Past 45 days	Filter	Filter	Filter	Filter
User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:38:29 PM	SHARPLEX	S1		
User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:32:31 PM	SHARPLEX	S1		
User Initiated						
User Initiated						
User Initiated						
User Initiated						
User Initiated						
User Initiated						
User Initiated						
ABEND S00C3						
ABEND S00D6						
ABEND S00C3						
ABEND S00C1						
ABEND S00C1	ZTT ZTTABND ABEND FOR PDW1,CAT=300DC7F8,JOB#=01000001	Jan 10, 2013 3:27:02 PM	SHARPLEX	S1		

Click the OK button. You now have only the columns you want displayed in the order you want them.

Incident Log

Match: All filters

Incident Type	Description ▲ 2	Date and Time (GMT) ▼ 1	Component Name	Problem Number	Tracking
Filter	Filter	Past 45 days	Filter	Filter	Filter
<input type="checkbox"/> User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:38:29 PM			
<input type="checkbox"/> User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:32:31 PM			
<input type="checkbox"/> User Initiated	** MFUSR15 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:55 PM			
<input type="checkbox"/> User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:22 PM			
<input type="checkbox"/> User Initiated	** MFUSR17 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:30:39 PM		12345,123,123	
<input type="checkbox"/> User Initiated	** MFUSR18 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:57 PM			
<input type="checkbox"/> User Initiated	** MFUSR19 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:18 PM			
<input type="checkbox"/> User Initiated	** MFUSR20 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:28:21 PM			
<input type="checkbox"/> ABEND S0EC3	COMPON=WEBSPPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORADMP,ABEND IN PC ROUTINE BBOOOUTP	Jan 17, 2013 2:54:15 AM			
<input type="checkbox"/> ABEND S00D6	COMPON=WEBSPPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Jan 11, 2013 2:13:53 PM		1234,123,123	
<input type="checkbox"/> ABEND S0EC3	COMPON=WEBSPPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Jan 11, 2013 2:13:53 PM			
<input type="checkbox"/> ABEND S00C1	ZTT TIENDUMP SVCDUMP DUMP FOR PROBLEM # 1,CAT=300DC7F8,JOB#=#01000002	Jan 10, 2013 3:27:51 PM			
<input type="checkbox"/> ABEND S00C1	ZTT ZTTABND ABEND FOR PDW1,CAT=300DC7F8,JOB#=#01000001	Jan 10, 2013 3:27:02 PM			

Total: 13, Filtered: 13, Selected: 0

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You have successfully customized your workspace! You are only viewing the columns you want, in the order you want, for a range of data that you filtered, in the sort order that you want.

Task 3: View the details of any given incident

Now that you've customized your workspace, let us dive deeper into an individual Incident:

- a. **Step 1:** Select any incident of type ABEND. Click on the Incident Type column value or you can Right click on the incident and from the popup context menu, select View Diagnostics Details

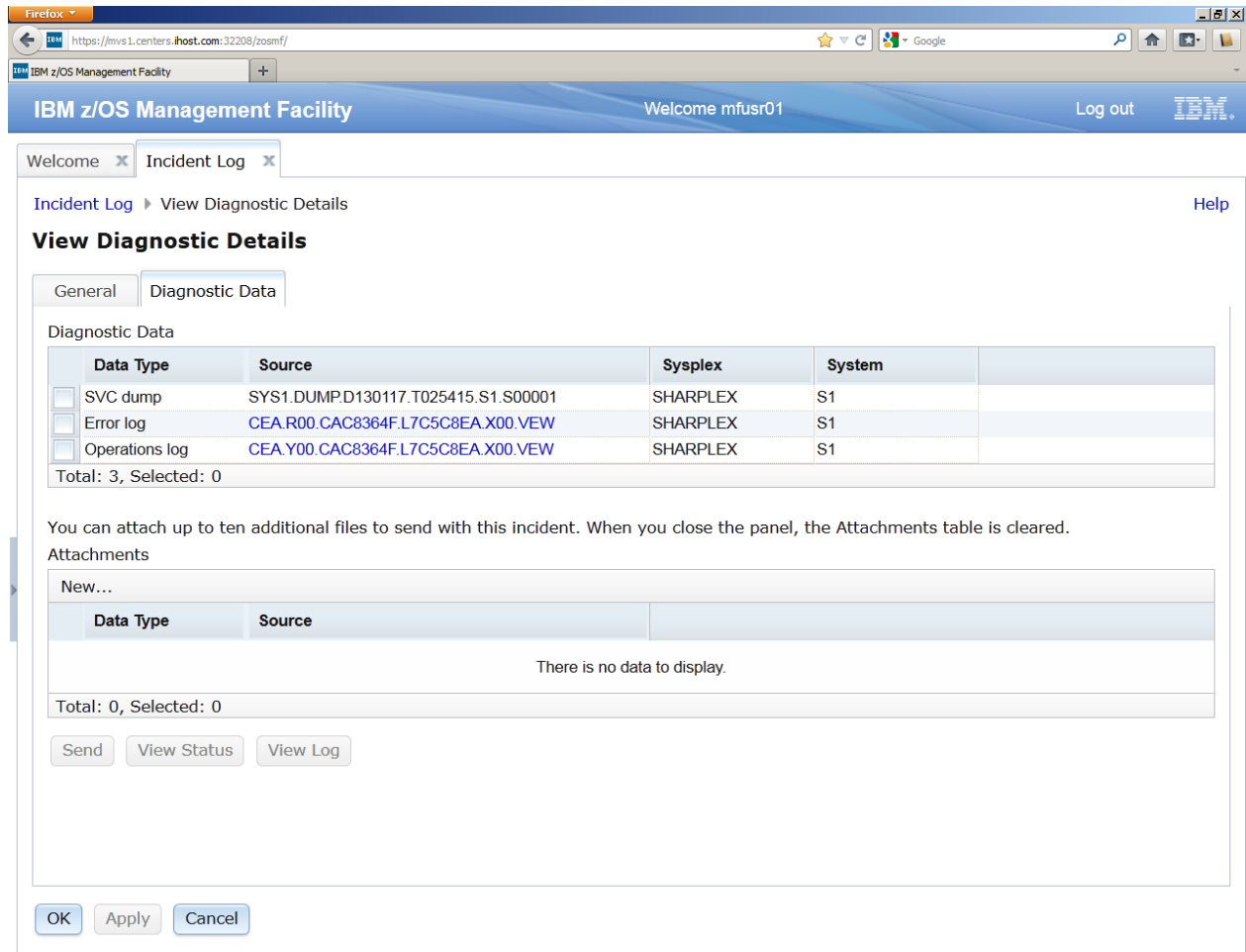
The screenshot displays the IBM z/OS Management Facility Incident Log. The table contains the following data:

Incident Type	Description	Date and Time (GMT)	Component Name	Problem
User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:38:29 PM		
User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:32:31 PM		
User Initiated	** MFUSR15 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:55 PM		
User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:22 PM		
User Initiated	** MFUSR17 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:30:39 PM		12345,123
User Initiated	** MFUSR18 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:57 PM		
User Initiated	** MFUSR19 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:18 PM		
User Initiated	** MFUSR20 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:28:21 PM		
ABEND S0EC3	COMPON=WEBSPPHERE Z/OS, 00,ISSUER=BBORADMP,ABEND IN PC JTP	Jan 17, 2013 2:54:15 AM		
ABEND S0C1	HERE Z/OS, 00,ISSUER=BBORLEXT,ABEND IN (MODULE N)	Jan 11, 2013 2:13:53 PM		1234,123
ABEND S0C1	HERE Z/OS, 00,ISSUER=BBORLEXT,ABEND IN (MODULE N)	Jan 11, 2013 2:13:53 PM		
ABEND S0C1	CDUMP DUMP FOR PROBLEM # JOB#=01000002	Jan 10, 2013 3:27:51 PM		
ABEND S0C1	END FOR PDW1,CAT=300DC7F8,JOB#=01000001	Jan 10, 2013 3:27:02 PM		

Total: 13, Filtered: 13, Selected: 1

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Step 2: It brings up the View Diagnostic Details panel:

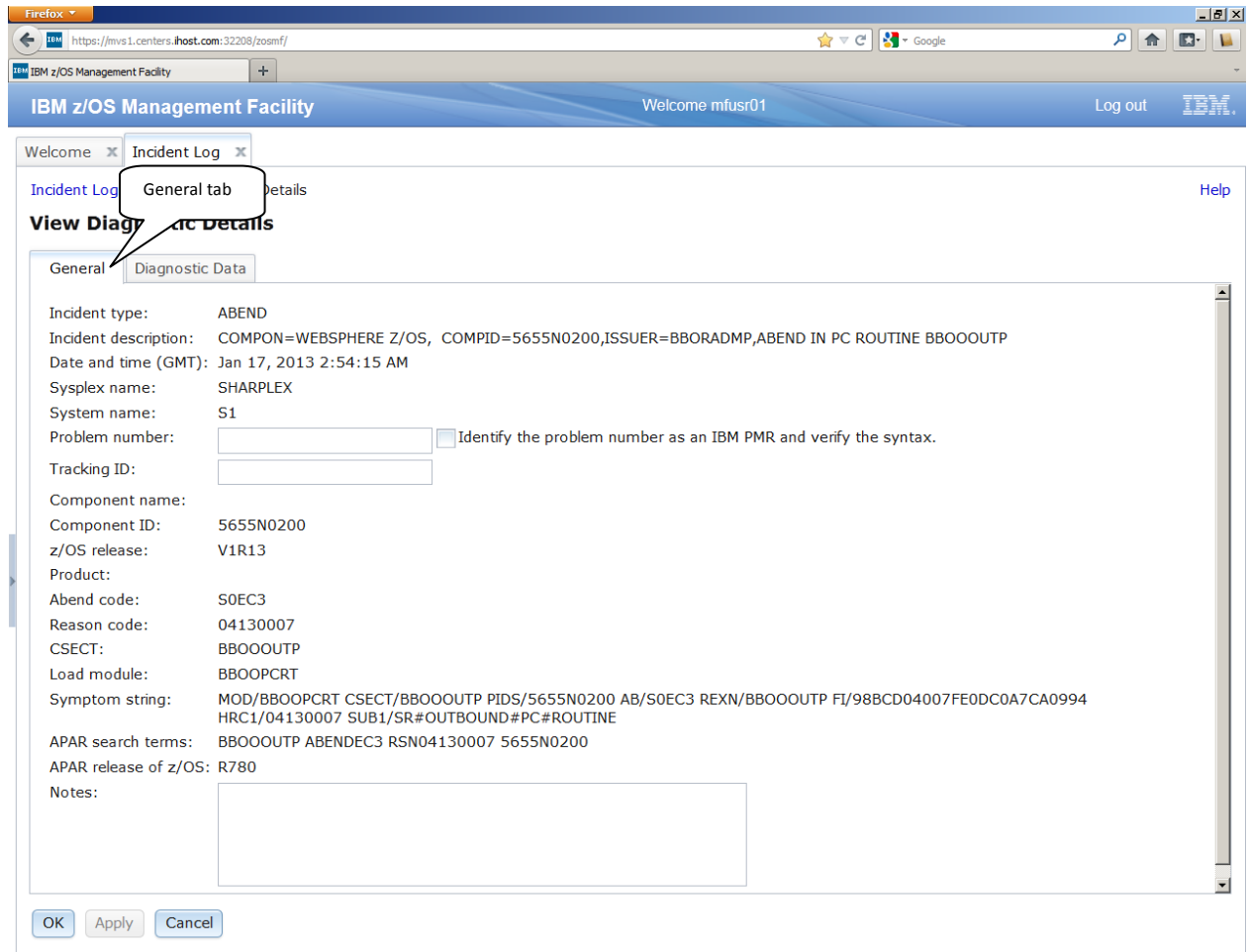


On this panel you can see all the pieces of diagnostic data that have automatically captured for this Incident by the backend instrumentation. Take some time to look at this.

Observe that you also have the ability to attach additional pieces of diagnostic data (for example a trace file)

Once you've finished with this tab, lets move on to the other tab - General

Step 3: Click on the General tab on top



You can now see additional information about the Incident - for example, the CSECT, Load module and symptom string, as well as the APAR Search String.

Step 4: Done, return to the main summary panel of the Incident Log

Click on the Incident Log link in the breadcrumbs at the top of the page to return, or click on the OK button

Task 4: FTP the diagnostic data captured for an incident to your service provider

Step 1: Select an Incident. Use the user initiated incident that has **your userid** in the description

(Hint: you can also 'filter' the incidents for a Description with your Userid!)

Right click (or click on the Actions button) and then select 'Send Diagnostic Data'

The screenshot shows the IBM z/OS Management Facility web interface. The 'Incident Log' section is active, displaying a table of incidents. A context menu is open over the selected incident, with 'Send Diagnostic Data...' highlighted in red. The table columns include Incident Type, Description, Date and Time (GMT), Component Name, Problem Number, and Tracking ID.

Incident Type	Description	Date and Time (GMT)	Component Name	Problem Number	Tracking ID
User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:38:29 PM			
User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:32:31 PM			
User Initiated	** MFUSR15 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:55 PM			
User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:22 PM			
User	Set Tracking ID... TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:30:39 PM		12345,123,123	
User	Set Problem Number... TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:57 PM			
User	Add Notes... TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:29:18 PM			
User	Delete Incident... TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:28:21 PM			
ABEND	EBSPPHERE Z/OS, 55N0200,ISSUER=BBORADMP,ABEND IN PC OOOOUP	Jan 17, 2013 2:54:15 AM			
ABEND	EBSPPHERE Z/OS, 55N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Jan 11, 2013 2:13:53 PM		1234,123,123	
ABEND S0EC3	COMPON=WEBSPPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE NAME NOT KNOWN)	Jan 11, 2013 2:13:53 PM			
ABEND S00C1	ZTT TIENDUMP SVCDUMP DUMP FOR PROBLEM # 1,CAT=300DC7F8,JOB#=01000002	Jan 10, 2013 3:27:51 PM			
ABEND S00C1	ZTT ZTTABND ABEND FOR PDW1,CAT=300DC7F8,JOB#=01000001	Jan 10, 2013 3:27:02 PM			

Total: 13, Filtered: 13, Selected: 1

Refresh Last refresh: Jan 22, 2013 2:31:59 PM local time (Jan 22, 2013 7:31:59 PM GMT)

You will now be able to work with a wizard that will guide you through the steps to FTP the diagnostic data for that incident

Step 2: Welcome.

The first panel you see is the Welcome page. Notice that it has the steps you will be guided through on its left pane. It shows you what steps have been completed and which one is your current one

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled "Send Diagnostic Data" and includes a "Welcome" section with instructions: "Use this wizard to prepare and send diagnostic data to an FTP server. To begin, review the selected diagnostic data and enter a problem number." Below this, there are two tables:

Incident Type	Description	Date and Time (GMT)
User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:22 PM

Data Type	Sysplex	System
SVC dump	SHARPLEX	S1
Error log	SHARPLEX	S1
Operations log	SHARPLEX	S1
Error log summary	SHARPLEX	S1

Below the tables, there is a "Problem number:" field with the value "12345,123,123" entered. A callout box points to this field with the text "Problem number 12345,123,123". There is also a checkbox labeled "Identify the problem number as an IBM PMR and verify the syntax." which is currently unchecked. At the bottom of the wizard, there are buttons for "< Back", "Next >", "Finish", and "Cancel".

The welcome page has the details about the Incident you are working with, plus it lists the pieces of diagnostic data that is going to be sent.

It also shows you the problem number associated with the Incident. If the incident does not have one already associated, it allows you to set one here itself. Go ahead and fill in one if it does not already exist.

For this exercise, you can enter 12345,123,123 as the problem number, and select the IBM PMR option.

The problem number is required to help identify the FTP-ed files at the destination.

Click on next once you are done.

Step 3: Select FTP Destination:

The next page in the wizard allows you to select where you want to send these files/datasets.

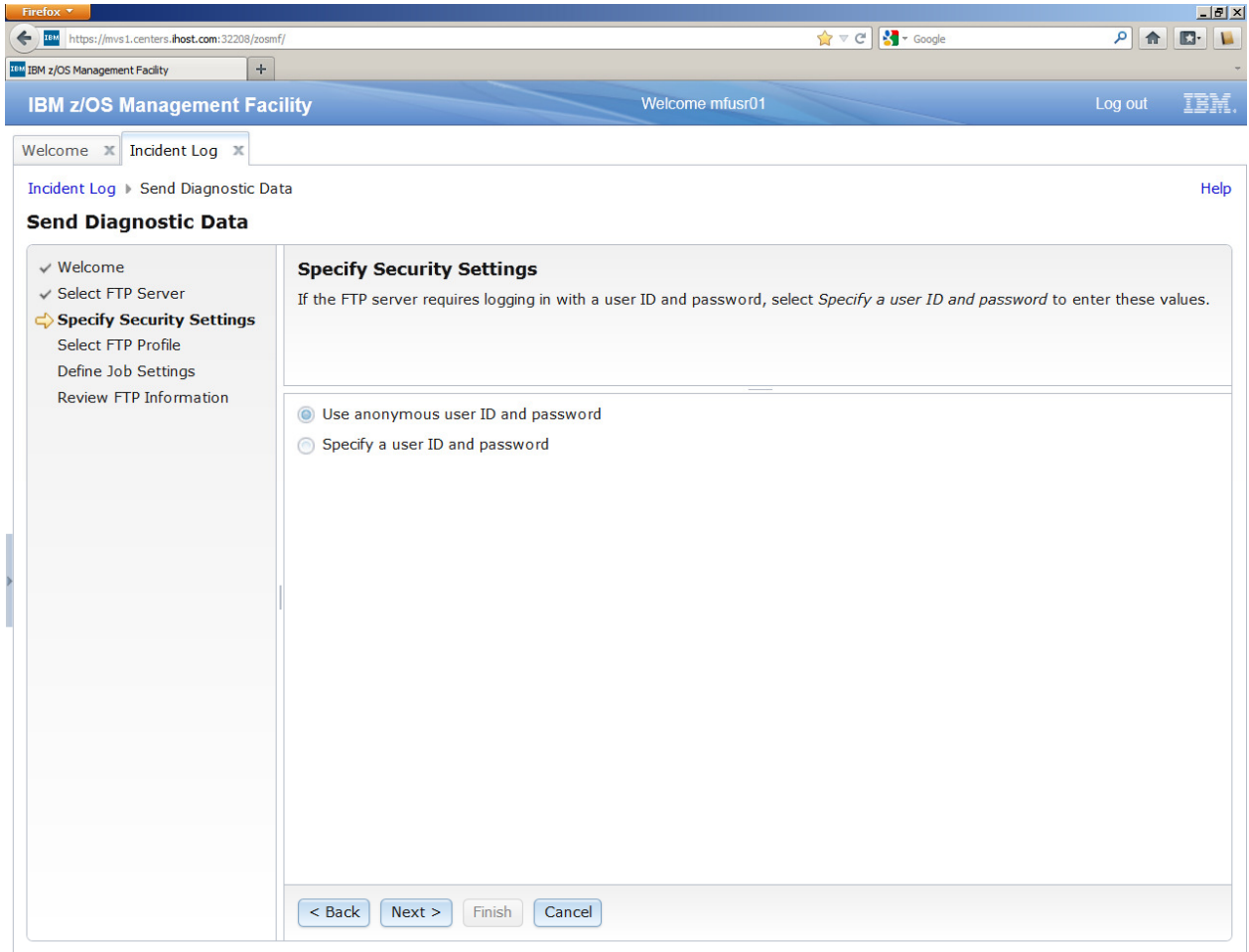
For this exercise, select the first one in the list and click on Next .

The screenshot shows the IBM z/OS Management Facility interface. The breadcrumb trail is 'Incident Log > Send Diagnostic Data'. The main heading is 'Send Diagnostic Data'. A left-hand navigation pane shows the current step 'Select FTP Server' highlighted, with other steps: 'Welcome', 'Specify Security Settings', 'Select FTP Profile', 'Define Job Settings', and 'Review FTP Information'. The main content area is titled 'Select FTP Server' and contains the instruction: 'Select the FTP server to which you want to send the diagnostic data files.' Below this is a table with columns: Name, Activity, Host, and Path Name. The table lists five entries, with the first one selected. Below the table, it shows 'Total: 5, Selected: 1' and a 'Refresh' button with the text 'Last refresh: Jan 22, 2013 2:42:24 PM local time (Jan 22, 2013 7:42:24 PM GMT)'. At the bottom are buttons for '< Back', 'Next >', 'Finish', and 'Cancel'.

Name	Activity	Host	Path Name
:Filter	:Filter	:Filter	:Filter
<input checked="" type="radio"/> IBM-ecurep-mvs		ftp.ecurep.ibm.com	/toibm/mvs
<input type="radio"/> IBM-ecurep-tivoli		ftp.ecurep.ibm.com	/toibm/tivoli
<input type="radio"/> IBM-testcase-mvs		testcase.boulder.ibm.com	/toibm/mvs
<input type="radio"/> IBM-testcase-tivoli		testcase.boulder.ibm.com	/toibm/tivoli
<input type="radio"/> zosrft07-rchland-ibm-com_		zosrft07.rchland.ibm.com	/

Step 4: Specify Security Settings:

This is where you can enter the userid/password needed to access the FTP Destination server you selected in the previous step. In this exercise, we will use the anonymous sign on.

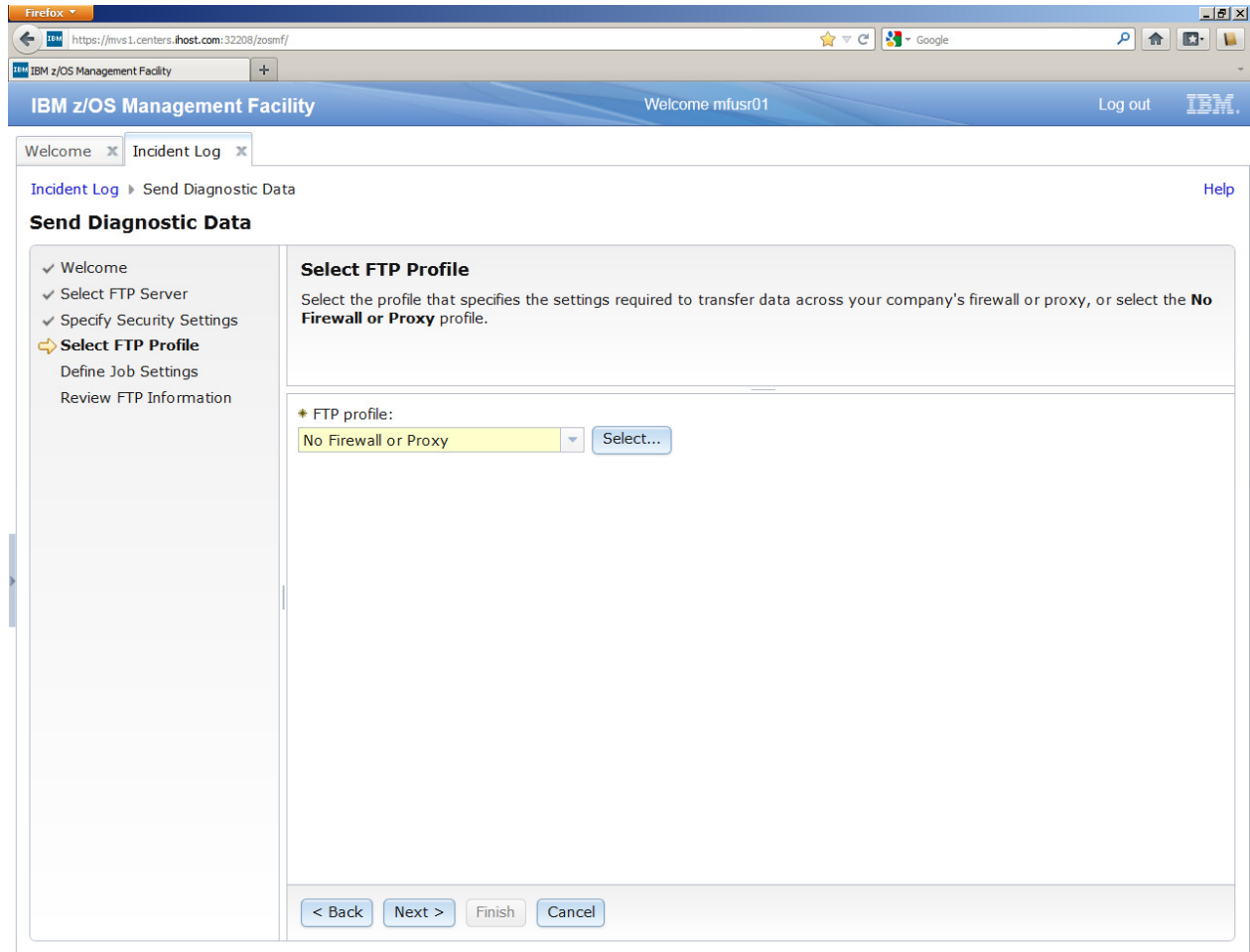


Click on Next to move on.

Step 5: Select FTP Profile

This is where you can specify your firewall or proxy information if needed. In this exercise, we do not have a firewall.

Make sure that the No firewall or proxy option is selected in the drop down.



Click on Next.

Step 6: Define Job Settings

At this stage you have the ability to edit/specify the job card information for the FTP Job that is being built in the background.

The screenshot shows a web browser window displaying the IBM z/OS Management Facility interface. The browser's address bar shows the URL `https://mvs1.centers.host.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "Welcome mfusr01".

The main content area is titled "Send Diagnostic Data" and contains a "Define Job Settings" section. On the left, a navigation pane lists the following steps:

- ✓ Welcome
- ✓ Select FTP Server
- ✓ Specify Security Settings
- ✓ Select FTP Profile
- ➔ **Define Job Settings**
- Review FTP Information

The "Define Job Settings" section includes the following text:

z/OSMF submits a separate FTP job for each file being sent and uses the same job settings for each. In the Job Settings field, enter any JCL statement, JES2 control statement, or JES3 control statement that can precede the first EXEC statement in a job. After you complete the steps within the wizard, z/OSMF generates the remaining JCL statements.

Below this text is a text area labeled "* Job settings:" containing the following JCL statements:

```
//PDWFTP JOB MSGLEVEL=(1,1)
/*JOBPARM SYSAFF=*
```

At the bottom of the text area are two buttons: "Undo Changes" and "Restore Defaults".

At the bottom of the wizard are four navigation buttons: "< Back", "Next >", "Finish", and "Cancel".

You can make changes if you'd like. The default entries will work for our lab session, so you can also just click on Next

Step 7: Review FTP Information

The wizard has walked you through collecting all the information needed to FTP the diagnostic data to your service provider. This page allows you to review all the data that you have provided. If you want to change any value, you can click the Edit JCL button to make changes.

Note: We do not recommend changing the JCL.

The screenshot shows the 'Review FTP Information' step in the 'Send Diagnostic Data' wizard. The left sidebar lists the steps: Welcome, Select FTP Server, Specify Security Settings, Select FTP Profile, Define Job Settings, and Review FTP Information (which is currently selected). The main content area is titled 'Review FTP Information' and contains the following information:

Review the FTP information. To make changes, return to the appropriate panel by clicking **Back**. When you are ready to send the data, click **Finish**.

Diagnostic Data: SVC dump SHARPLEX S1
 Error log SHARPLEX S1
 Operations log SHARPLEX S1
 Error log summary SHARPLEX S1

Problem number: 12345,123,123 Is not IBM PMR number

FTP server: Name: IBM-ecurep-mvs
 Host: ftp.ecurep.ibm.com
 Path name: /toibm/mvs
 Port number:

Transfer method: FTP

Security settings: User ID: anonymous
 Password: *****

FTP profile: Name: No Firewall or Proxy
 Firewall host:
 Firewall port:
 FTP.DATA file name:
 TCPIP.DATA file name:

Buttons: View JCL, Edit JCL, < Back, Next >, Finish, Cancel

Once you are okay with the values displayed, you are ready to finish.

Before that you do have the option to view the JCL that was generated based on your input. Click on the View JCL button if you'd like to take a look at the JCL built.

When you are ready to submit the FTP jobs, click on Finish (note your instructor might ask you not to!). This will submit jobs to ftp the selected pieces of diagnostic data over to the selected FTP Destination.

Step 8: FTP Jobs submitted

Once you click on the Finish button in the above step, z/OSMF will submit the jobs. You will get a confirmation window.

The screenshot shows the IBM z/OS Management Facility web interface. The main content area is titled "Send Diagnostic Data" and includes a "Review FTP Information" section. A "Results" dialog box is open, displaying a table of four submitted jobs. The table has columns for "Message ID" and "Message Text".

Message ID	Message Text
IZUP650I	Job "PDWFTP" (JOB07623) has been submitted. The diagnostic data "SVC Dump S1" is being sent in file "12345.123.123.USER.S1.2013.01.19T13.31.22.42Z.TRS"
IZUP650I	Job "PDWFTP" (JOB07624) has been submitted. The diagnostic data "Error Log" is being sent in file "12345.123.123.ERROR.S1.2013.01.19T13.31.22.42Z.TR:"
IZUP650I	Job "PDWFTP" (JOB07625) has been submitted. The diagnostic data "Operations Log" is being sent in file "12345.123.123.OPERATIONS.S1.2013.01.19T13.31.22.42Z.TRS"
IZUP650I	Job "PDWFTP" (JOB07626) has been submitted. The diagnostic data "..." is being sent in file "..."

The dialog box also shows "Total: 4" and a "Close" button. The main interface has a sidebar with navigation options and a bottom bar with "< Back", "Next >", "Finish", and "Cancel" buttons.

Click on Close. It will bring you back to wherever you invoked the Send wizard from.

Task 5: View the Job Status for the FTP jobs submitted

Step 1: Right click on the Incident you had just sent. Select the FTP Job Status from the context menu

The screenshot shows the IBM z/OS Management Facility web interface. The 'Incident Log' section is active, displaying a table of incidents. A context menu is open over the incident with ID 12345,123,123, and the 'FTP Job Status' option is highlighted with a red box.

Incident Type	Description	Date and Time (GMT)	Component Name	Problem Number	Tracki
Filter	Filter	Past 45 days	Filter	Filter	Filter
User Initiated	** MFUSR13 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:38:29 PM			
User Initiated	** MFUSR14 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:32:31 PM			
User Initiated	** MFUSR15 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:31:55 PM			
User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:31:22 PM		12345,123,123	
User Initiated	** MFUSR17 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:30:39 PM		12345,123,123	
User Initiated	** MFUSR18 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:29:57 PM			
User Initiated	** MFUSR19 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:29:18 PM			
User Initiated	** MFUSR20 - TEST DUMP FOR USE WITH INCIDENT LOG I/P **	Jan 19, 2013 1:28:21 PM			
ABEND S00C1	PHERE Z/OS, 200,ISSUER=BBORADMP,ABEND IN PC	Jan 17, 2013 2:54:15 AM			
ABEND S00C1	PHERE Z/OS, 200,ISSUER=BBORLEXT,ABEND IN (MODULE	Jan 11, 2013 2:13:53 PM		1234,123,123	
ABEND S00C3	COMPN=WEBSPPHERE Z/OS, COMPID=5655N0200,ISSUER=BBORLEXT,ABEND IN (MODULE	Jan 11, 2013 2:13:53 PM			
ABEND S00C1	ZTT TIENDUMP SVCDUMP DUMP FOR PROBLEM # 1,CAT=300DC7F8,JOB#=01000002	Jan 10, 2013 3:27:51 PM			
ABEND S00C1	ZTT ZTTABND ABEND FOR PDW1,CAT=300DC7F8,JOB#=01000001	Jan 10, 2013 3:27:02 PM			

Total: 13, Filtered: 13, Selected: 1

Refresh Last refresh: Jan 22, 2013 2:31:59 PM local time (Jan 22, 2013 7:31:59 PM GMT)

z/OSMF Lab

Step 2: FTP Job Status panel

This page shows you the job status for all the FTP jobs submitted for this incident.

Note you can click on the Refresh button to update the status of the jobs.

Incident Log > FTP Job Status

FTP Job Status

Incident

Incident Type	Description	Date and Time (GMT)
User Initiated	** MFUSR16 - TEST DUMP FOR USE WITH INCIDENT LOG IVP **	Jan 19, 2013 1:31:22 PM

FTP Job Status

Data Type	Source	Status	FTP Server Host	FTP Server Path
Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> Error log summary	CEA.S00.CACB4872.C02C62E8.X00.VEW	Send in progress	ftp.ecurep.ibm.com	/toibm/mvs
<input type="checkbox"/> Operations log	CEA.Y00.CACB4872.C02C62E8.X00.VEW	Send in progress	ftp.ecurep.ibm.com	/toibm/mvs
<input type="checkbox"/> Error log	CEA.R00.CACB4872.C02C62E8.X00.VEW	Failed. The diagnostic data was not gathered.	ftp.ecurep.ibm.com	/toibm/mvs
<input type="checkbox"/> SVC dump	SYS1.DUMPD130119.T133122.S1.S00006	Failed. An error occurred with the FTP client.	ftp.ecurep.ibm.com	/toibm/mvs

Total: 4, Selected: 0

[Refresh](#) Last refresh: Jan 22, 2013 3:49:41 PM local time (Jan 22, 2013 8:49:41 PM GMT)

[Close](#)

Click on Incident Log in the breadcrumb to get back to where you came from.

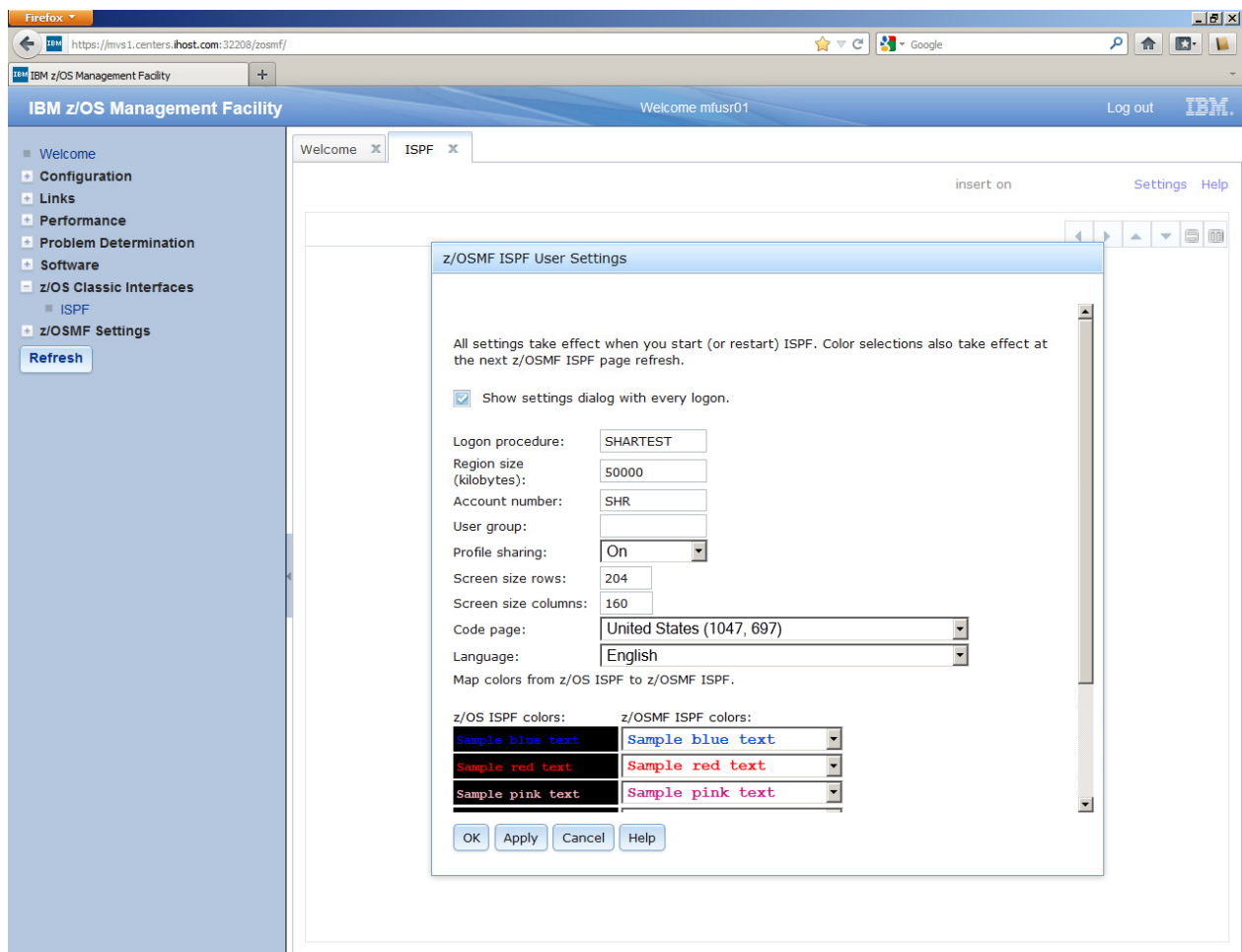
Note: If a log snapshot does not have any entries, the job might fail

Lab 2: z/OSMF ISPF, including Application Linking with Incident Log

Task 1. Starting with the ISPF task

Expand the z/OS Classic Interfaces category from the Navigation tree.
Click on the ISPF task

The settings panel will come up.
Set logon procedure to SHARTEST
Set Acct number to SHR



Make sure all settings are correct - notice color selection,

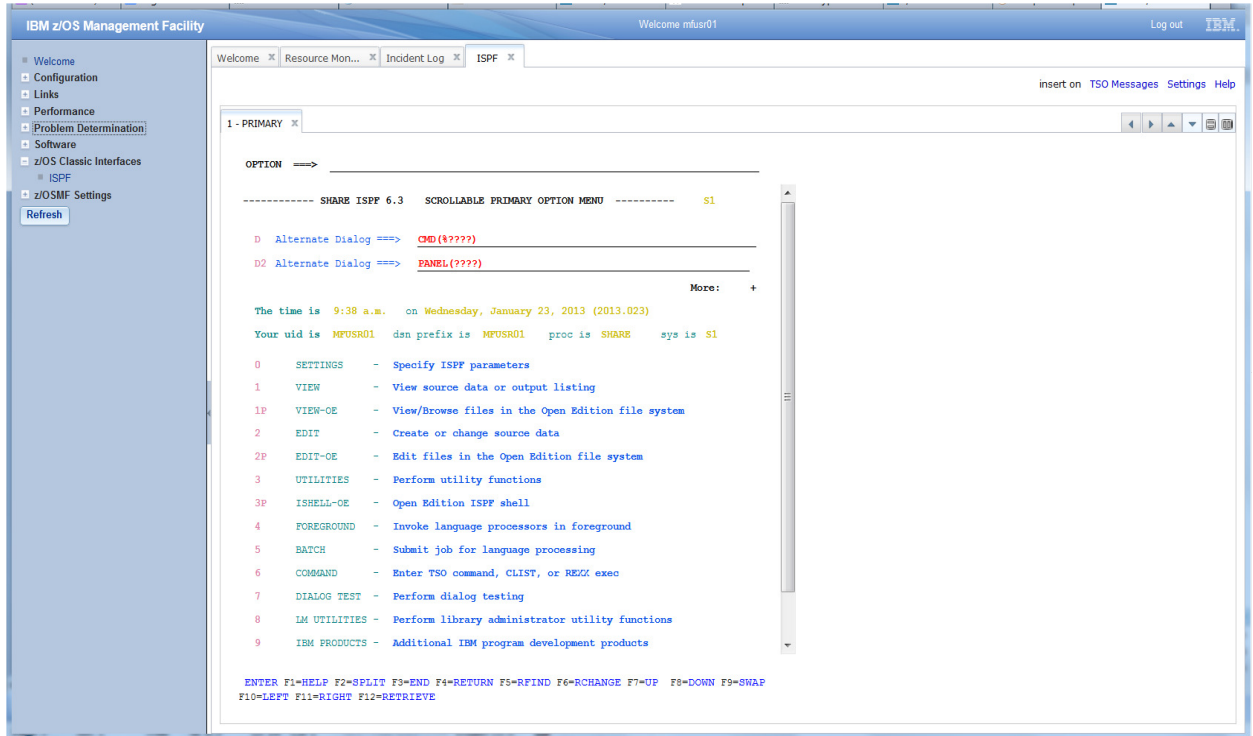
See the check box on top that will not open settings panel every time. If changes need to be made at a later time, can click on 'settings' on top right

Click OK after entering the new values.

z/OSMF Lab

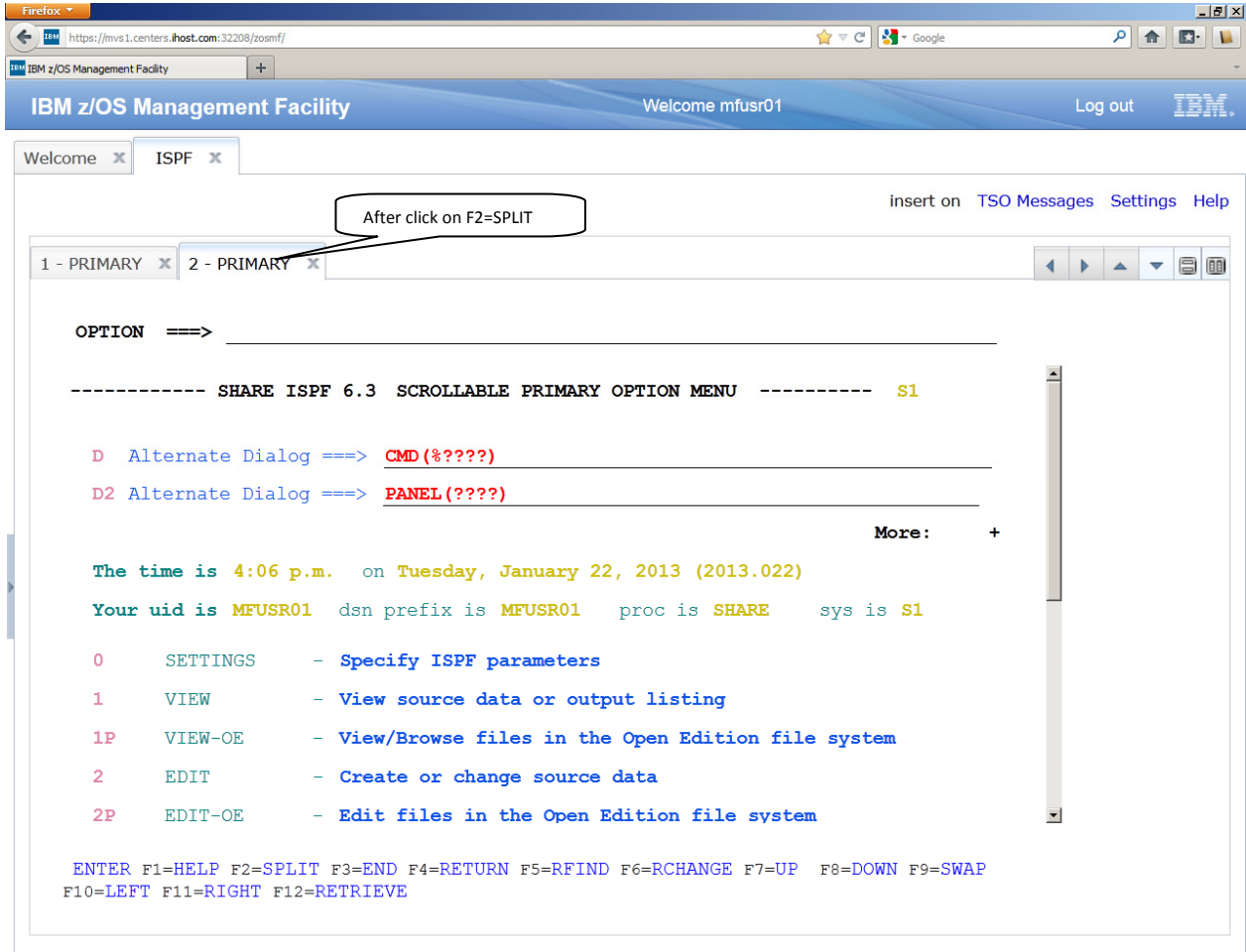
The ISPF main panel is now displayed. Note that if this has been customized for your installation, your customized panel comes up. Play around with some of the features.

Note specifically the point and shoot feature, support for PF keys, paging arrows, horizontal and vertical split icons, help, existing toolbars and TSO messages

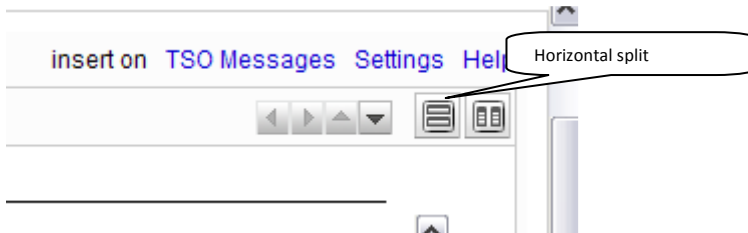


Task 2: Split screen and multiple panes

Click on F2=Split. A new tab is opened inside the ISPF task tab



Now click on the horizontal split icon on the top right:



z/OSMF Lab

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface in a Firefox browser. The browser address bar shows the URL `https://mvs1.centers.ihost.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01".

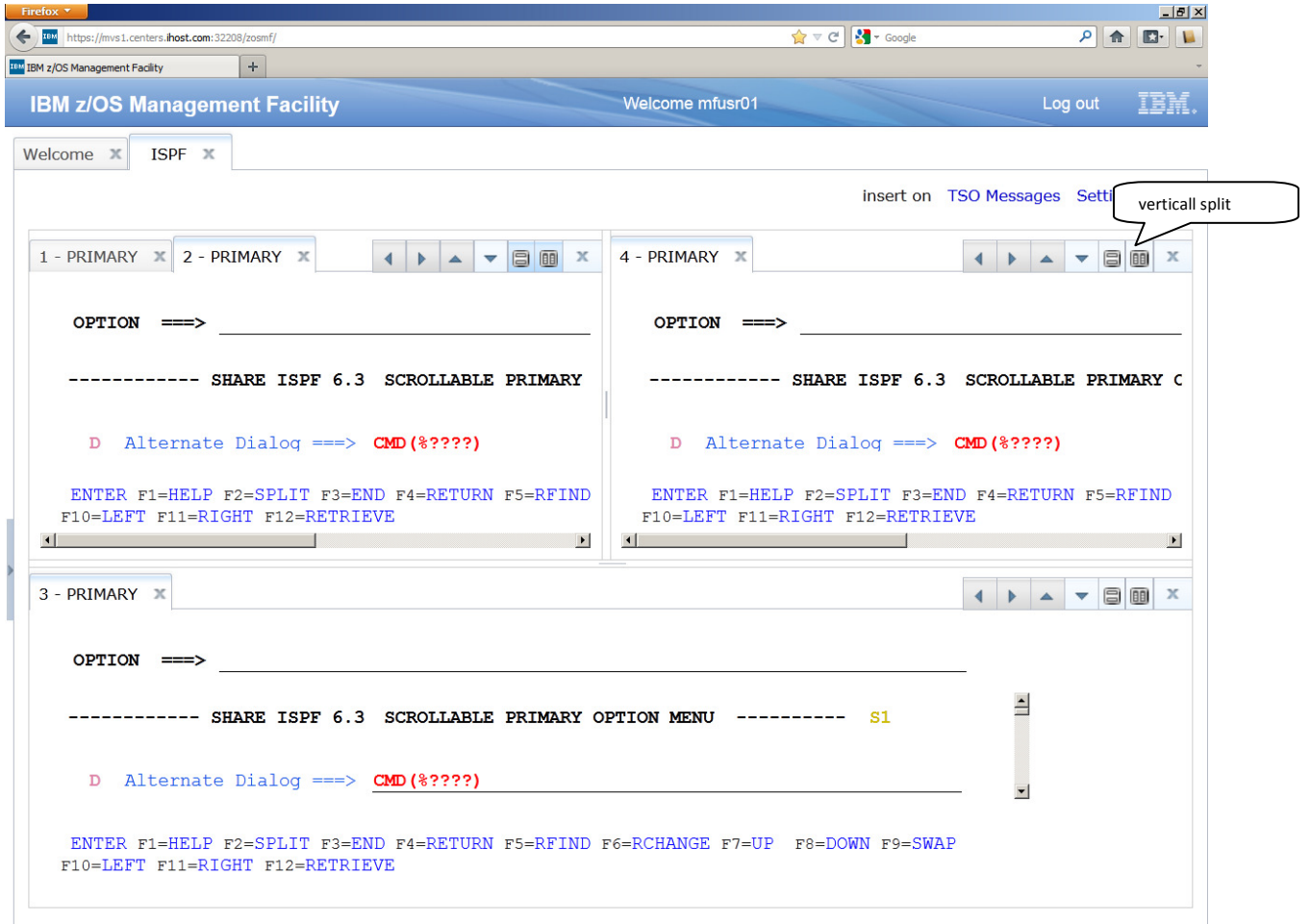
The main content area displays a terminal window with the following text:

```
OPTION ==> _____  
  
----- SHARE ISPF 6.3 SCROLLABLE PRIMARY OPTION MENU ----- S1  
  
D Alternate Dialog ==> CMD(%????)  
  
ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIN D F6=RCHANGE F7=UP F8=DOWN F9=SWAP  
F10=LEFT F11=RIGHT F12=RETRIEVE
```

The terminal window has a vertical scrollbar on the right side. The interface also includes a "Welcome" tab and an "ISPF" tab. The top right corner of the terminal window has a vertical split icon.

Now click on the vertical split icon on top right

z/OSMF Lab



Make the bottom pane the current panel by placing cursor in it and click on vertical split icon; notice another panel

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface in a Firefox browser. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The interface displays four primary panels, each titled "PRIMARY". Each panel contains the following text:

```
OPTION ==> _____  
----- SHARE ISPF 6.3 SCROLLABLE PRIMARY  
  
D Alternate Dialog ==> CMD(%????)  
  
ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND  
F10=LEFT F11=RIGHT F12=RETRIEVE
```

Two callout boxes are present:

- Top right: "Horizontal and vertical split bars disabled" (pointing to the top-right panel's toolbar).
- Bottom right: "Horizontal and vertical split bars disabled" (pointing to the bottom-right panel's toolbar).

Notice the horizontal or vertical split icons are now greyed out - max 4 panes allowed

z/OSMF Lab

Drag and drop the tab from bottom right pane to top pane.
Close the empty pane

The screenshot shows the IBM z/OS Management Facility interface in a Firefox browser window. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The interface features a top navigation bar with "Welcome", "Log out", and the IBM logo. Below this is a tabbed workspace with two tabs: "Welcome" and "ISPF". The "ISPF" tab is active and displays a multi-pane workspace with four panes, each titled "PRIMARY". The panes are arranged in a 2x2 grid. The top-left pane (1 - PRIMARY) and top-right pane (5 - PRIMARY) contain the same text: "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLABLE PRIMARY", "D Alternate Dialog ==> CMD(%????)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F10=LEFT F11=RIGHT F12=RETRIEVE". The bottom-left pane (3 - PRIMARY) contains the same text but with an additional line: "----- S1". The bottom-right pane (4 - PRIMARY) is empty. A callout bubble points to the split bars between the panes, stating "Horizontal and vertical split bars enabled".

Now the split icons are active again

Play around to get maximum 8 tabs and 4 panes

z/OSMF Lab

Sizing panes

Move the horizontal bar between panes up or down - Note only one horizontal bar

Move the vertical bars between panes left or right - note individual vertical bars

The screenshot displays the IBM z/OS Management Facility (z/OSMF) interface within a Firefox browser window. The browser address bar shows the URL `https://mvs1.centers.ihost.com:32208/zosmf/`. The page header includes the text "IBM z/OS Management Facility", "Welcome mfusr01", and "Log out" with the IBM logo.

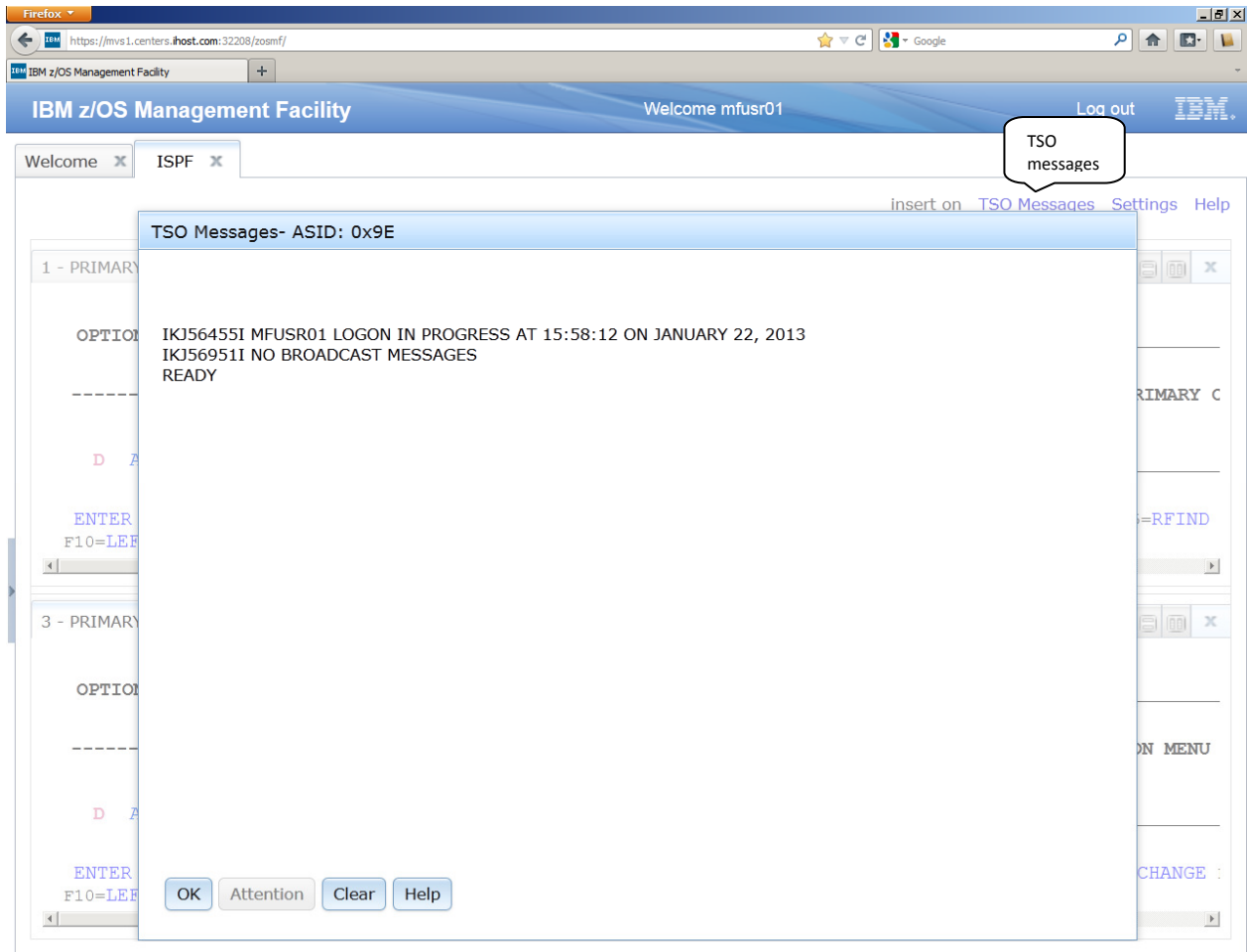
The main workspace contains six primary panes, each with a title bar and a set of navigation controls (back, forward, home, search, and close buttons). The panes are arranged in a 2x3 grid:

- 1 - PRIMARY**: Contains the text "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLABLE PRIMARY", "D Alternate Dialog ==> CMD(%???)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F10=LEFT F11=RIGHT F12=RETRIEVE".
- 2 - PRIMARY**: Contains the text "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLABLE PRIMARY", "D Alternate Dialog ==> CMD(%???)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F10=LEFT F11=RIGHT F12=RETRIEVE".
- 3 - PRIMARY**: Contains the text "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLAE", "D Alternate Dialog ==> CMD(%???)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETU F10=LEFT F11=RIGHT F12=RETRIEVE".
- 4 - PRIMARY**: Contains the text "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLABLE PRIMARY C", "D Alternate Dialog ==> CMD(%???)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F10=LEFT F11=RIGHT F12=RETRIEVE".
- 5 - PRIMARY**: Contains the text "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLABLE PRIMARY C", "D Alternate Dialog ==> CMD(%???)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F10=LEFT F11=RIGHT F12=RETRIEVE".
- 6 - PRIMARY**: Contains the text "OPTION ==> _____", "----- SHARE ISPF 6.3 SCROLLABLE PRIMARY OPTION MENU", "D Alternate Dialog ==> CMD(%???)", and "ENTER F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F6=RCHANGE : F10=LEFT F11=RIGHT F12=RETRIEVE".

Close the windows and tabs that you are no longer interested in

Task 3: View TSO Messages

-To View TSO messages, click on top right where it says TSO messages



You can see the running history of TSO messages. It keeps the last 1000 lines from your session. Click on OK to close.

Task 4: z/OSMF Application Linking : Launching into ISPF from the Incident Log

Browse a diagnostic data element automatically captured for an incident

You can browse the logs captured for an Incident. z/OSMF ISPF Browse is used for this, so this feature only will work if your installation has setup and configured z/OSMF ISPF.

Step 1: Select an incident and View its Diagnostic Data Elements. Refer to Incident Log Task 3, but stay on the View Diagnostic Details tab. Select the Incident which has your userid in its description. In the Diagnostic Details panel, you will see the diagnostic data elements captured for that Incident.

The screenshot shows the 'View Diagnostic Details' page in the IBM z/OS Management Facility. The page has two tabs: 'General' and 'Diagnostic Data'. The 'Diagnostic Data' tab is active, showing a table with the following data:

Data Type	Source	Data element - hyperlink	System
<input type="checkbox"/> SVC dump	SYS1.DUMP.D130117.T025415.S1.SP...		SHARPLEX S1
<input type="checkbox"/> Error log	CEA.R00.CAC8364F.L7C5C8EA.X00.VEW		SHARPLEX S1
<input type="checkbox"/> Operations log	CEA.Y00.CAC8364F.L7C5C8EA.X00.VEW		SHARPLEX S1

Below the table, there is an 'Attachments' section with a 'New...' button and a table with columns for 'Data Type' and 'Source'. The message 'There is no data to display.' is shown. At the bottom of the page, there are buttons for 'Send', 'View Status', and 'View Log'. The page also includes 'OK', 'Apply', and 'Cancel' buttons at the very bottom.

Note the Source name of the data element. It is a hyperlink. Let's browse the Operation Log snapshot. Click on the Source name to browse that data element.

You will see that it opens ISPF browse in context for you. Note: If you do not already have a z/OSMF ISPF session running, you will get prompted for the TSO Sign-on parameters.

If you do have a z/OSMF ISPF session running, z/OSMF ISPF preserves your existing ISPF window and open a new window for you, after prompting you.

z/OSMF Lab

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface in a Firefox browser. The browser address bar shows the URL `https://mvs1.centers.host.com:32208/zosmf/`. The z/OSMF header includes the text "IBM z/OS Management Facility", "Welcome mfusr01", and "Log out". Below the header, there are tabs for "Welcome", "Incident Log", and "ISPF". The main content area displays the ISPF interface with a menu bar (Menu, Utilities, Compilers, Help) and a "BROWSE" window. The window title is "2 - ISRBROBA". The data displayed in the window is as follows:

```
Menu  Utilities  Compilers  Help

BROWSE  CEA.Y00.CAC8364F.L7C5C8EA.X00.VEW          Line 00000000 Col 001 080
***** Top of Data *****
M 4040000 S1      13016 21:24:47.54 STC07139 00000090 ^HZS0003E CHECK(IBMRACT,R
D                                     272 00000090  IRRH204E The RACF_SENSIT
E                                     272 00000090  more potential errors in
N 4100000 S1      13016 21:27:33.55              00000090 *EZZ9308E UNRESPONSIVE NA
M 4100000 S1      13016 21:27:33.55 |            00000090  EZZ9310I NAME SERVER 32.
D                                     274 00000090              TOTAL NUMBER OF
D                                     274 00000090              TOTAL NUMBER OF
E                                     274 00000090              PERCENTAGE
N 0000000 S1      13016 21:29:47.32              00000290  IEE252I MEMBER BPXPRMSH

Command ==> _____ Scroll ==> PAGE
ENTER F1=Help F2=Split F3=Exit F5=Rfind F7=Up F8=Down F9=Swap F10=Left F11=Right
F12=Cancel
```

In both cases, you will ultimately find yourself using ISPF Browse on the diagnostic data element that you had clicked on from the Incident Log!!

LAB 3: z/OSMF Workload Management Lab

The lab consists of 4 main tasks that you should execute in the listed sequence:

1. Launching the Workload Management Task
2. View list of all Service Definitions
3. Creating a copy of an existing Service Definition
4. Fixing of a best practice Warning Indication for a Service Definition

This Lab focuses on the policy editing, review, and maintenance functions provided by the z/OSMF Workload Management task. Functions to install service definitions and activate service policies are also available, but not part of the Lab.

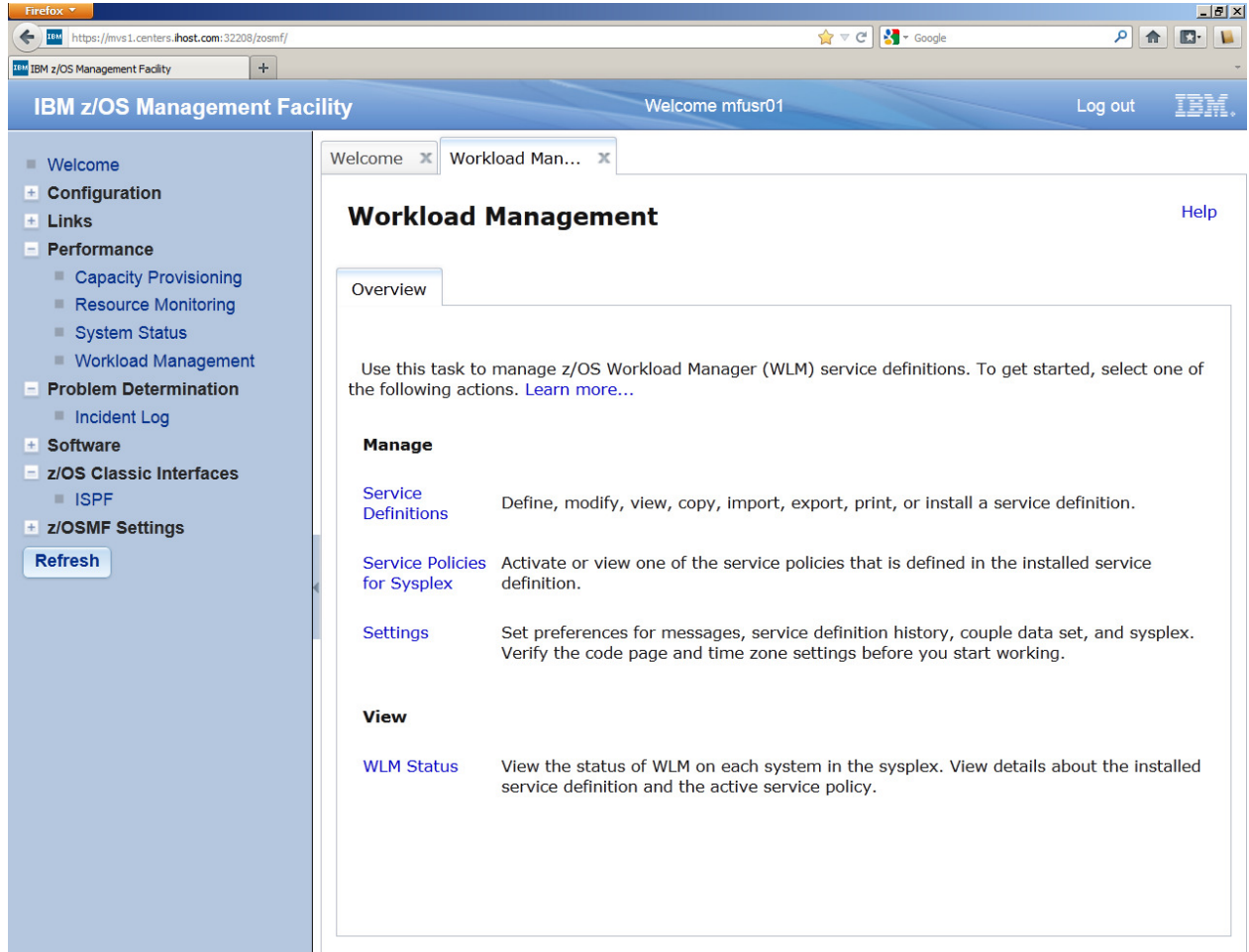
All Lab teams use the same z/OSMF instance. The z/OSMF Workload Management Task provides a service definition repository that is shared by all z/OSMF users. To prevent conflicts with other Lab teams each Lab team has to use a different service definition for task 4 and 8. Therefore, you have to specify in task 3 a unique service definition name. The service definition name should be 'WLMPrxx'. Substitute xx with your Lab userid suffix

If the descriptions and screen captures in this manual refer to service definition 'WLMPrOD' your service definition 'WLMPrxx' is meant.

Task 1: Launching the Workload Management Task

Open the workload management task by selecting 'Performance' → 'Workload Management' in the navigation tree.

The first panel that opens is the 'Workload Management' task tab displaying the 'Overview' panel listing the major tasks:



Task 2: View list of all Service Definitions

In the 'Overview' tab, press the 'Service Definitions' link. The following tab will be opened:

The screenshot displays the 'Service Definitions' tab in the IBM z/OS Management Facility. The page title is 'Workload Management' and the user is logged in as 'mfusr01'. The 'Service Definitions' section contains a table with the following data:

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)
SHARPLEX	WLM Policy for Share Systems			Warning	Nov 3, 2000 8:38:35 PM
WLMPROD	WLMPROD to use for z/OSMF lab			Warning	Jul 16, 2012 3:24:48 PM
WLMTEST	WLMTEST to use for z/OSMF lab			Information	Jul 16, 2012 3:25:14 PM

Below the table, the status bar indicates 'Total: 3, Selected: 0' and a 'Refresh' button is available. The last refresh time is 'Jan 22, 2013 4:30:50 PM local time (Jan 22, 2013 9:30:50 PM GMT)'.

The table lists all service definitions in the policy repository integrated in z/OSMF. The service definitions are shared between all z/OSMF users. Hence, you may notice changes of the panel which are caused by other users. Your table may show different service definitions than in the screen shot. Scroll right to view additional properties

Task 3: Creating a copy of an existing Service Definition

In this task we will create your own copy of an existing service definition. That copy will then be used in the following tasks.

To create a copy of service definition 'WLMPROD' check the checkbox for service definition 'WLMPROD'. Then select in the 'Actions' menu the action 'Copy'.

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface. The main content area is titled 'Workload Management' and contains a 'Service Definitions' table. The table has columns for Name, Description, Activity, Sysplex, Messages, and Last Modified (GMT). The 'WLMPROD' service definition is selected, and its context menu is open, with the 'Copy...' option highlighted.

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)
Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> SHARPLEX	WLM Policy for Share Systems			Warning	Nov 3, 2000 8:38:35 PM
<input checked="" type="checkbox"/> WLMPROD	WLM Policy for z/OSMF lab			Warning	Jul 16, 2012 3:24:48 PM
<input type="checkbox"/> WLMTEST	WLM Policy for z/OSMF lab			Information	Jul 16, 2012 3:25:14 PM

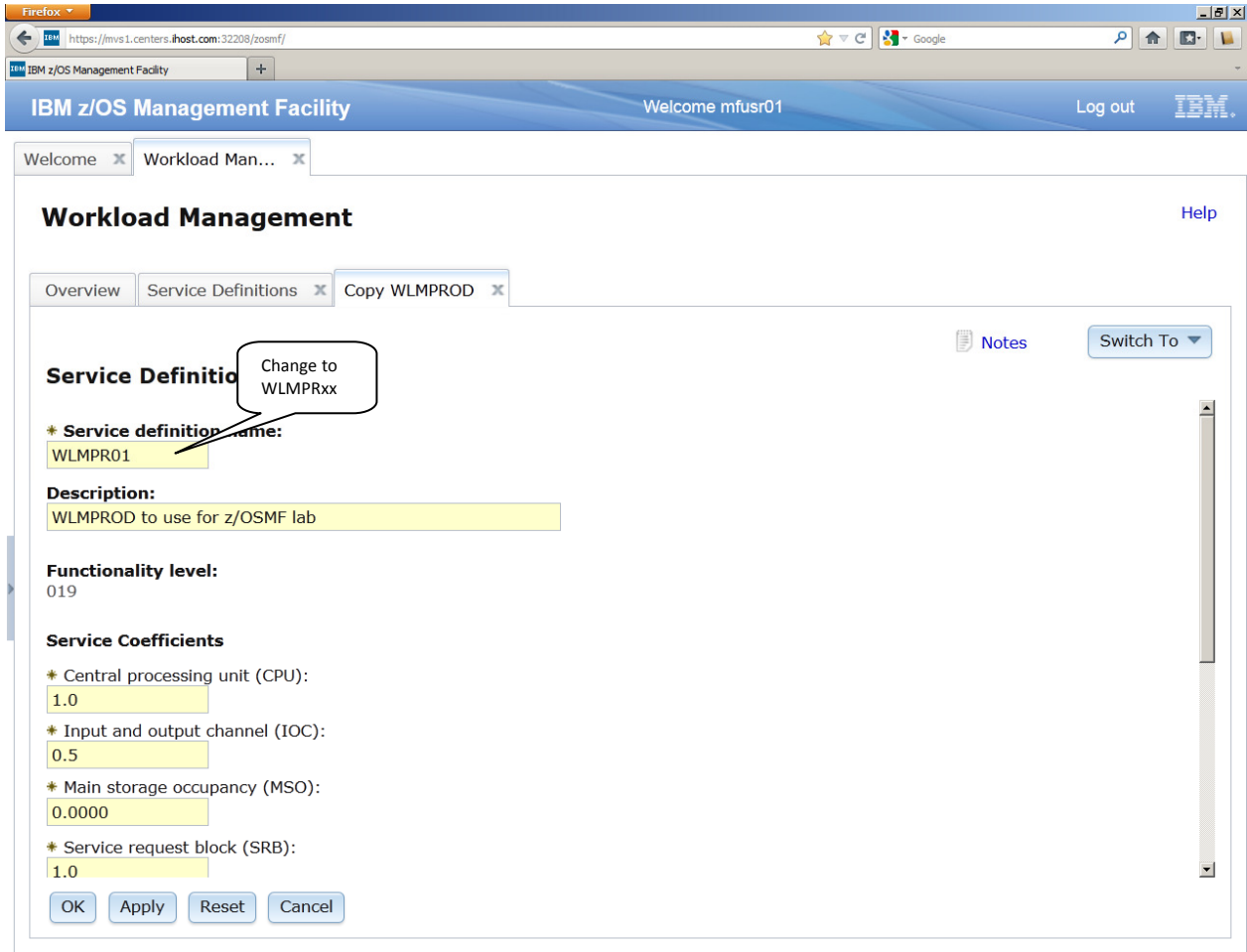
Context menu for WLMPROD:

- Modify Service Definition
- View Service Definition
- View Messages
- View History
- Print Preview
- Install and Activate...
- Copy...**
- Delete...
- Export
- View WLM Status

Total: 3, Selected: 1

Refresh Last refresh: Jan 22, 2013 4:30:50 PM local time (Jan 22, 2013 9:30:50 PM GMT)

A new tab opens with the following content:



Click with the left mouse button in the field 'Service definition name:' and change the name to WLMPRxx. Substitute xx with your Lab team number that you find on the first page of this manual.

Press OK to save the copy of the service definition with the new name WLMPRxx in the Service Definitions table.

The screenshot displays the IBM z/OS Management Facility interface. The main heading is "Workload Management" with a "Help" link. Underneath, there are tabs for "Overview" and "Service Definitions". The "Service Definitions" section contains a table with the following data:

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)
Filter	Filter	Filter	Filter	Filter	Filter
SHARPLEX	WLM Policy for Share Systems			Warning	Nov 3, 2000 8:38:35 PM
<input checked="" type="checkbox"/> WLMPROD1	WLMPROD to use for z/OSMF lab			Warning	Jan 22, 2013 9:34:41 PM
WLMPROD	WLMPROD to use for z/OSMF lab			Warning	Jul 16, 2012 3:24:48 PM
WLMTEST	WLMTEST to use for z/OSMF lab			Information	Jul 16, 2012 3:25:14 PM

Below the table, there is a status bar indicating "Total: 4, Selected: 1" and a "Refresh" button. The last refresh time is shown as "Last refresh: Jan 22, 2013 4:34:41 PM local time (Jan 22, 2013 9:34:41 PM GMT)".

Note: If the descriptions and screen captures in the following sections of this manual refer to service definition 'WLMPROD' your copy of that service definition with the name 'WLMPRxx' is meant.

Task 4: Fixing of a best practice Warning Indication for a Service Definition

Warning messages exist for service definition 'WLMPrxx'. We will now check the warning message and fix the issue. In order to accomplish that, we open the service definition in a tab, navigate to the service definition item for which a warning message exists, and edit the service definition to fix the issue.

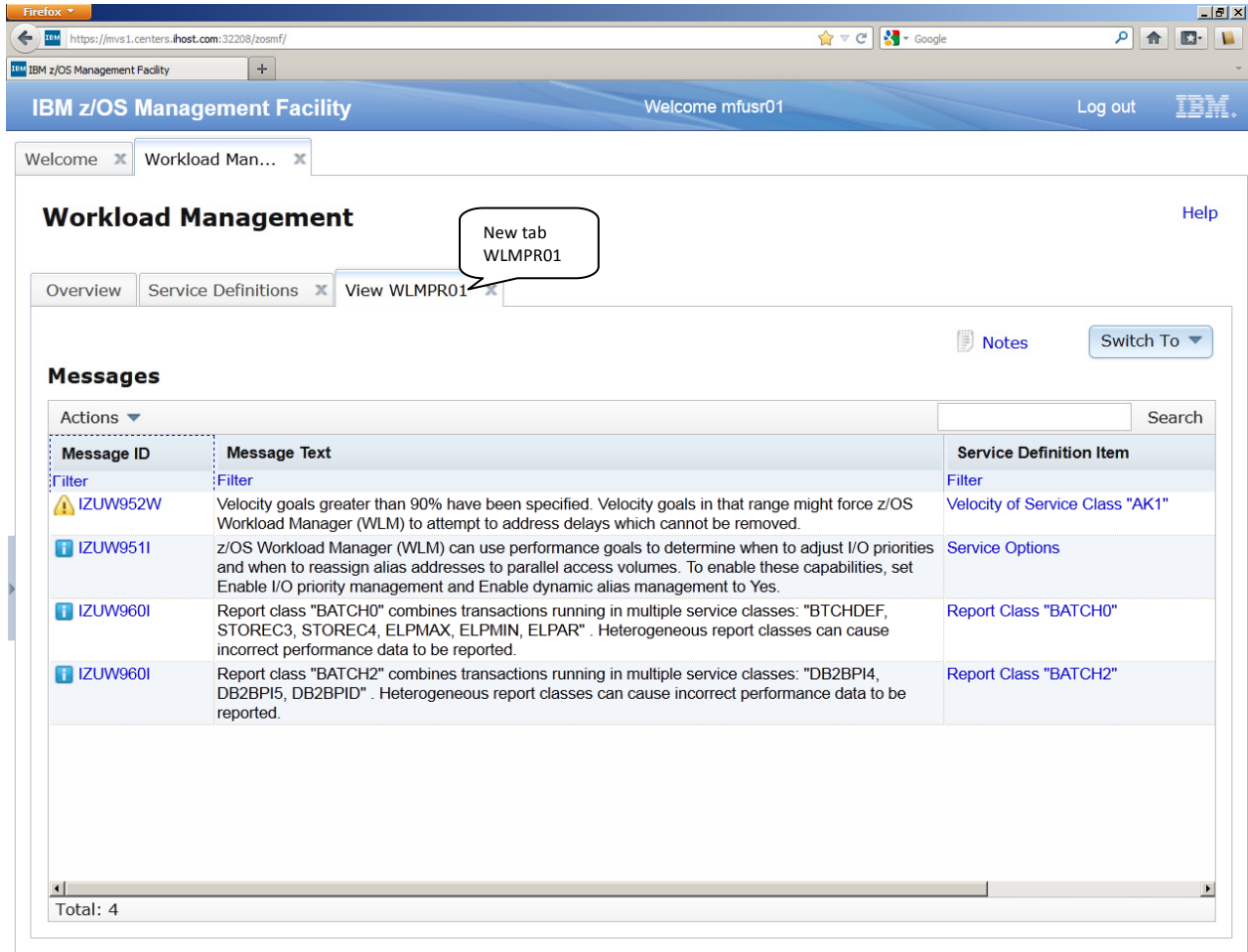
To open the service definition, click on the link in the 'Messages' column for the service definition with name 'WLMPrxx':

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled 'Workload Management' and contains a 'Service Definitions' section. A table lists several service definitions, with 'WLMPr01' selected. The 'Messages' column for 'WLMPr01' shows a yellow warning icon and the text 'Warning', which is highlighted with a red box. Below the table, it indicates 'Total: 4, Selected: 1' and a 'Refresh' button with the last refresh time.

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)
Filter	Filter	Filter	Filter	Filter	Filter
SHARPLEX	WLM Policy for Share Systems			Warning	Nov 3, 2000 8:38:35 PM
WLMPr01	WLMPrOD to use for z/OSMF lab			Warning	Jan 22, 2013 9:34:41 PM
WLMPrOD	WLMPrOD to use for z/OSMF lab			Warning	Jul 16, 2012 3:24:48 PM
WLMTEST	WLMTEST to use for z/OSMF lab			Information	Jul 16, 2012 3:25:14 PM

Total: 4, Selected: 1
 Refresh Last refresh: Jan 22, 2013 4:34:41 PM local time (Jan 22, 2013 9:34:41 PM GMT)

A new tab opens with the title 'View WLMPrxx':



A service definition consists of different sections. Each of the sections is displayed in one panel. You can watch one panel at a time in the opened tab and you can switch between the panels via the 'Switch to' menu. The panel that is currently displayed shows all best practice messages for service definition 'WLMPrxx': one warning message and three informational messages.

In order to navigate to the service class period referenced by the warning message click on the link 'Velocity of Service Class "AK1"' in the Messages table. The following panel is displayed:

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface. The browser address bar shows the URL `https://mvs1.centers.ihost.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main navigation bar includes "Welcome", "Workload Man...", and "Log out".

The "Workload Management" section is active, with sub-tabs for "Overview", "Service Definitions", and "View WLMPRO1". A "Messages" section is displayed, containing a table of messages. The table has three columns: "Message ID", "Message Text", and "Service Definition Item".

Message ID	Message Text	Service Definition Item
IZUW952W	Velocity goals greater than 90% have been specified. Velocity goals in that range might force z/OS Workload Manager (WLM) to attempt to address delays which cannot be removed.	Velocity of Service Class "AK1"
IZUW951I	z/OS Workload Manager (WLM) can use performance goals to determine when to adjust I/O priorities and when to reassign alias addresses to parallel access volumes. To enable these capabilities, set Enable I/O priority management and Enable dynamic alias management to Yes.	Service Options
IZUW960I	Report class "BATCH0" combines transactions running in multiple service classes: "BTCHDEF, STOREC3, STOREC4, ELPMAX, ELPMIN, ELPAR". Heterogeneous report classes can cause incorrect performance data to be reported.	Report Class "BATCH0"
IZUW960I	Report class "BATCH2" combines transactions running in multiple service classes: "DB2BPI4, DB2BPI5, DB2BPID". Heterogeneous report classes can cause incorrect performance data to be reported.	Report Class "BATCH2"

At the bottom of the message list, it indicates "Total: 4".

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled "Workload Management" and contains a "Service Classes" table. The table has columns for Name, Period, Importance, Duration, Goal Type, Response Time Goal, Percentile Goal, Velocity Goal, CPU Critical, and Resource Group. The "Velocity Goal" column for the "AK1" service class is highlighted with a red box and contains the value "93" next to a yellow warning triangle icon. The table is in "Tree" view, showing a hierarchy of service classes and their periods.

Name	Period	Importance	Duration	Goal Type	Response Time Goal (hh:mm:ss.ttt)	Percentile Goal	Velocity Goal	CPU Critical	Resource Group
AK1	1	1		Velocity			93	No	
AK2								No	
AK3								No	
BTCHEDEF								No	
DB2BPI4								No	
DB2BPI5								No	
DB2BPIID								No	
DISC								No	
ECP								No	ECP
ELPAR								No	ELPAR
ELPMAX								No	ELPMAX
ELPMIN								No	ELPMIN
JBERHIGH								No	
QUIESCE								No	QUIESCE
RTG1								No	
RTG4								No	
STCDEF								No	

The panel shows a tree table with all service classes in the service definition. The rows with the +/- icon represent service class items. The nested rows represent the periods of the service classes. The service class period with the warning message is already expanded. The warning message is displayed if you hover with the mouse cursor over the warning icon in the table cell.

To fix the issue correlated with the warning message we will change the Velocity Goal of the service class period to a value lower than 90. First, we have to switch from view mode to modify mode via the action 'Editable Version of Service Definition' in the 'Switch To' menu:

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled 'Workload Management' and contains a 'Service Classes' table. A context menu is open over the table, with the option 'Editable Version of Service Definition' highlighted in red. The table has the following columns: Name, Period, Importance, Duration, Goal Type, Response Time Goal (hh:mm:ss.ttt), Percentile Goal, and Velocity Goal. The row for 'AK1' is selected, showing a Velocity Goal of 1.

Name	Period	Importance	Duration	Goal Type	Response Time Goal (hh:mm:ss.ttt)	Percentile Goal	Velocity Goal
AK1	1	1		Velocity			1
AK2							
AK3							
BTCHDEF							
DB2BPI4							
DB2BPI5							
DB2BPID							
DISC							
ECP							
ELPAR							
ELPMAX							
ELPMIN							
JBERHIGH							
QUIESCE							
RTG1							
RTG4							
STCDEF							

The service definition is now editable. Editable table cells have an additional border around the value in the table cell:

The screenshot shows the IBM z/OS Management Facility interface in a Mozilla Firefox browser. The page title is "Workload Management" and the user is logged in as "mfusr01". The interface includes a navigation bar with tabs for "Overview", "Service Definitions", "View WLMPROD", and "Modify WLMPROD02". Below the navigation bar, there is a "Service Classes" section with a table view. The table has columns for Name, Period, Importance, Duration, Goal Type, Response Time Goal, Percentile Goal, Velocity Goal, CPU Critical, and Resource. The "Velocity Goal" column for the "AK1" service class is highlighted with a red border and contains the value "93" with a warning icon. The table also includes a search bar, a "Reapply Filter and Sort" button, and "OK", "Apply", "Reset", and "Cancel" buttons at the bottom.

Name	Period	Importance	Duration	Goal Type	Response Time Goal (hh:mm:ss.ttt)	Percentile Goal	Velocity Goal	CPU Critical	Resource
AK1	1	1		Velocity			93	No	
AK2								No	
AK3								No	
BTCHDEF								No	
DB2BP4								No	
DB2BP5								No	
DB2BPID								No	
DISC								No	

In order to change the Velocity Goal of the service class period with the warning indication double click on the table cell with the warning icon, then type in value 85 and press <Enter>. The warning icon is no longer shown:

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled 'Workload Management' and contains a 'Service Classes' table. The table has the following columns: Name, Period, Importance, Duration, Goal Type, Response Time Goal (hh:mm:ss.ttt), Percentile Goal, Velocity Goal, CPU Critical, and Resource Group. The 'AK1' row is selected, and the 'Velocity Goal' cell contains the value '85'. A warning icon (a star) is visible in the 'Velocity Goal' column for the 'AK1' row, indicating a goal that is being approached or violated. Below the table, there are buttons for 'OK', 'Apply', 'Reset', and 'Cancel'.

Name	Period	Importance	Duration	Goal Type	Response Time Goal (hh:mm:ss.ttt)	Percentile Goal	Velocity Goal	CPU Critical	Resource Group
AK1	1	1		Velocity			85	No	
AK2								No	
AK3								No	
BTCHDEF								No	
DB2BP14								No	
DB2BP15								No	
DB2BP1D								No	
DISC								No	
ECP								No	ECP
ELPAR								No	ELPAR
ELPMAX								No	ELPMAX
ELPMIN								No	ELPMIN
JBERHIGH								No	
QUIESCE								No	QUIESCE

Press the 'OK' button to save the modified service definition and to close the 'Modify WLMPROD' tab:

z/OSMF Lab

The screenshot shows the IBM z/OS Management Facility Workload Management Service Definitions table. The table has the following data:

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)	Modified By
SHARPLEX	WLM Policy for Share Systems			Warning	Nov 3, 2000 8:38:35 PM	tonyg1
WLMPR01	WLMPROD to use for z/OSMF lab			Information	Jan 22, 2013 9:47:13 PM	mfusr01
WLMPROD	WLMPROD to use for z/OSMF lab			Warning	Jul 16, 2012 3:24:48 PM	mfusr15
WLMTEST	WLMTEST to use for z/OSMF lab			Information	Jul 16, 2012 3:25:14 PM	mfusr15

Total: 4, Selected: 1
Refresh Last refresh: Jan 22, 2013 4:47:13 PM local time (Jan 22, 2013 9:47:13 PM GMT)

Notice that the 'Service Definitions' table shows no longer a warning indication for service definition 'WLMPRxx' since just informational messages exist for the service definition.

Lab 4: System Status

1. View the Performance status of the sysplex(es) being monitored
 - a. From the Performance category select -> System status
 - b. View fields
 - i. The Performance Index Status column is a quick indicator for the sysplex health. For each sysplex, the performance index by service class period metric is evaluated. If service classes periods are found, that have the $PI > 1$ and the importance of 1 or 2, the indicator is red. This means, there's some important workload which is not meeting the goals. If there are periods with $PI > 1$, but they have importance of 3 or bigger, the indicator is yellow. Otherwise it's green (that is, all service class periods meet their goals and have $PI \leq 1$).
 - ii. In the last two columns, some WLM information about the sysplex is displayed.

Note: From the SHARE Lab system, only one sysplex can be monitored. Typically you can add other sysplexes or Linux systems to be monitored.

The screenshot displays the IBM z/OS Management Facility System Status page. The page title is "System Status" and it includes a "Help" link. The main content area contains a table with the following data:

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

At the bottom of the page, there is a "Refresh" button and a checkbox for "Automatic refresh". The page also shows the total number of resources (1) and the number of selected resources (0).

Lab 5: Resource Monitoring

Task 1: View the performance metrics

- From the Performance category select -> Resource Monitoring,
- See the default metrics that are pre-defined,
- Select Execution Velocity and from Actions drop down, select 'Open'
- Take the default sysplex 'LOCALPLEX' when prompted
- View the execution velocity metrics

The screenshot displays the IBM z/OS Management Facility (z/OSMF) web interface. The browser window shows the URL `https://mvs1.centers.host.com:32208/zosmf`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01".

The left navigation pane includes the following categories:

- Welcome
- Configuration
- Links
- Performance
 - Capacity Provisioning
 - Resource Monitoring
 - System Status
 - Workload Management
- Problem Determination
 - Incident Log
- Software
- z/OS Classic Interfaces
 - ISPF
- z/OSMF Settings

A "Refresh" button is located below the navigation pane.

The main content area shows the "Resource Monitoring" dashboard. The breadcrumb trail is "Welcome > System Status > Resource Mon...". The "Dashboards" section contains a table of metrics:

Name	Actions
<input type="checkbox"/> Filter	
<input type="checkbox"/> Common Storage Activity	
<input type="checkbox"/> Coupling Facility Overview	
<input type="checkbox"/> Execution Velocity	
<input type="checkbox"/> General Activity	
<input type="checkbox"/> Overall Image Activity	
<input type="checkbox"/> Performance Index	
<input type="checkbox"/> Response Time	
<input type="checkbox"/> Using & Delays	
<input type="checkbox"/> XCF Activity	

At the bottom of the dashboard, it shows "Total: 9, Selected: 0" and a "Refresh" button. The last refresh time is "Jan 22, 2013 4:51:40 PM local time (Jan 22, 2013 9:51:40 PM GMT)".

The screenshot shows the IBM z/OS Management Facility interface. The browser address bar indicates the URL <https://mvs1.centers.host.com:32208/zosmf/>. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main navigation tabs include "Welcome", "System Status", and "Resource Mon...". The "Resource Monitoring" section is active, showing a dashboard for "Execution Velocity".

Execution Velocity (Running)

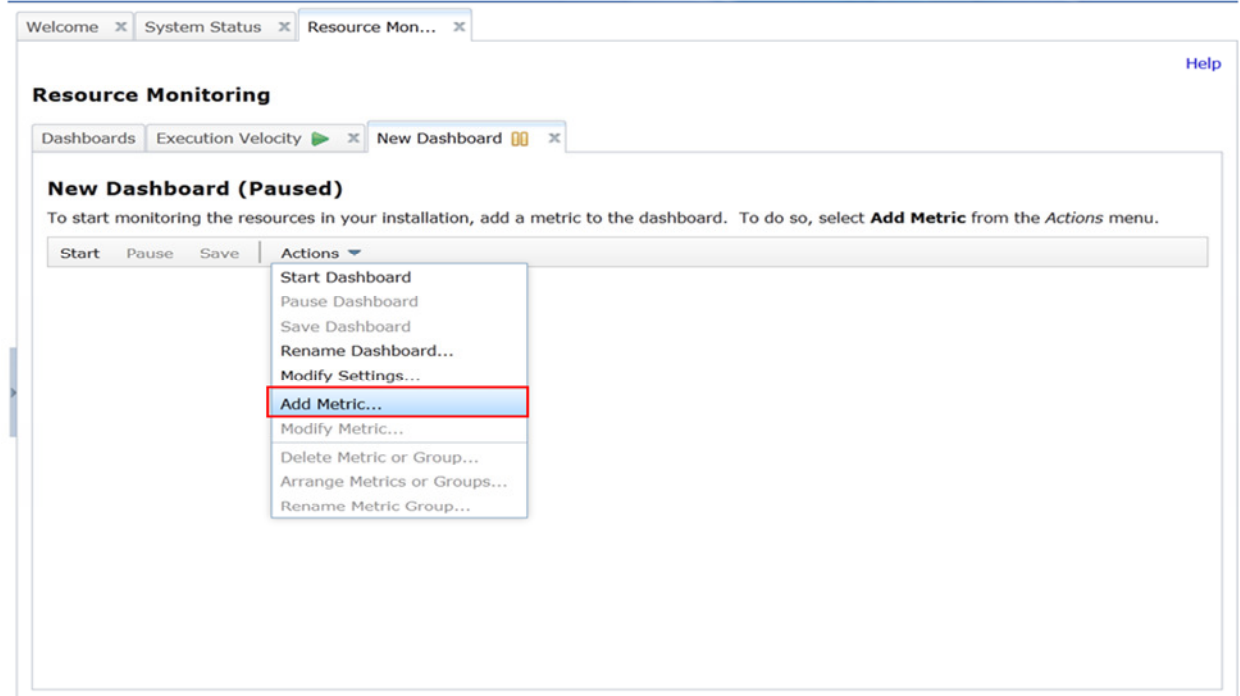
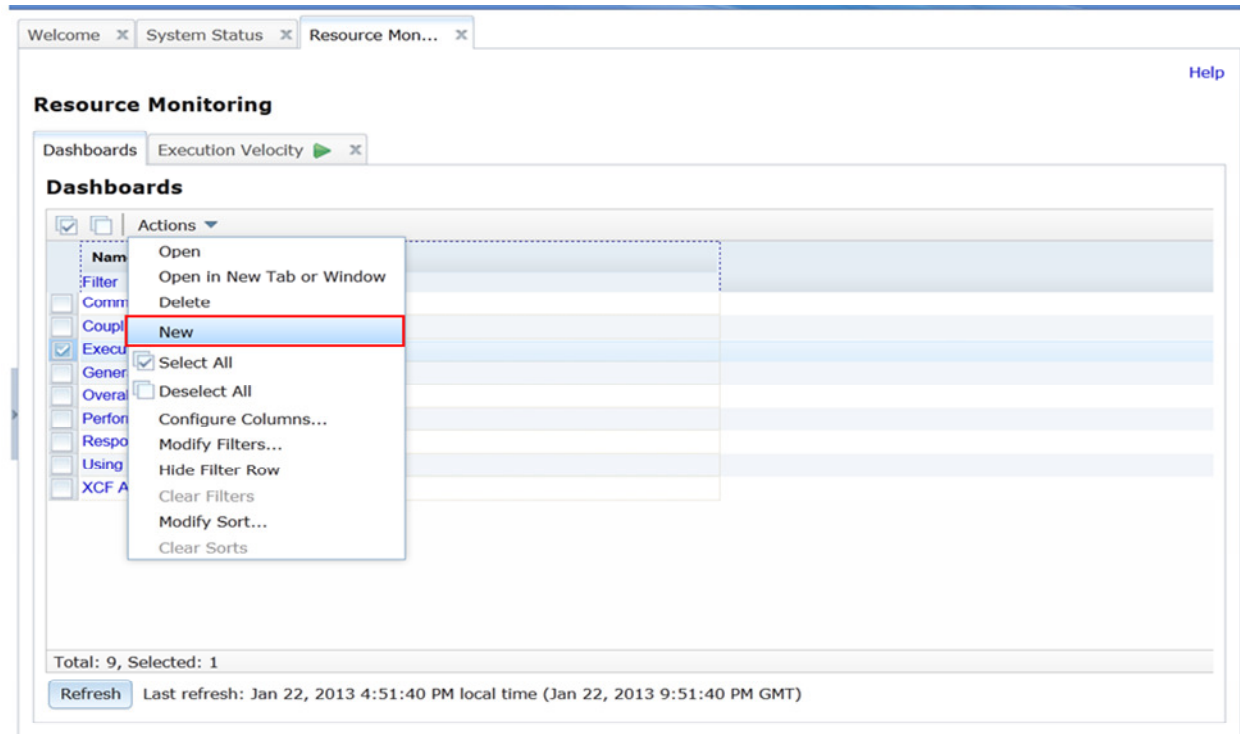
Start | Pause | Save | Actions

Service Class Periods	Report Class Periods
OMVS.2 0 30	VOOQCRN3.1 0
OMVS.3 0 15	VOSSLR.1 0
SHRMQ.1 0 N/A	VOOQCRN1.1 0
WEBMED.2 0 60	VOOQCH11.1 0
WEBNDATA.1 0 20	VOOQCH13.1 0
STCMD.1 0 50	VOSSOEPR.1 0
	VOS019T1.1 0
	VOSSLRLR.1 0
	VOSSLRCR.1 0
	VOSSLRL.1 0

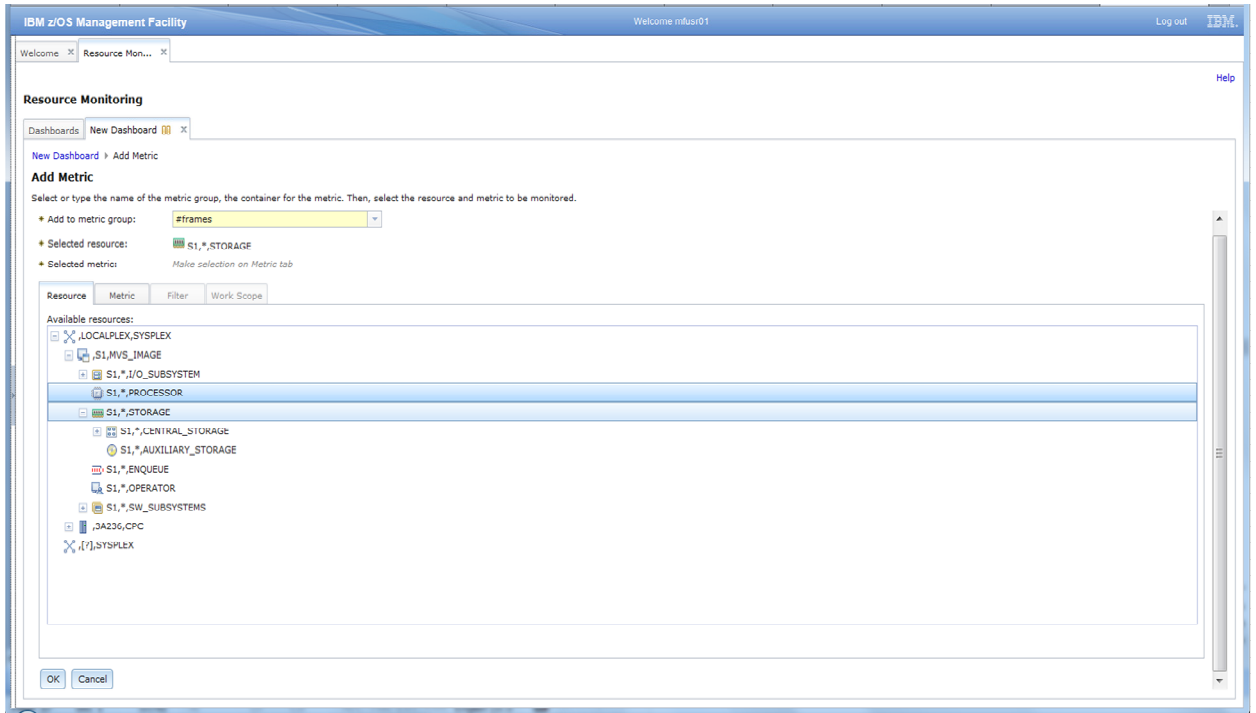
Task 2: Add new metrics to monitor

- a. From Resource Monitoring task, Actions -> NEW
- b. From New Desktop panel , from Actions pull down, select Add Metric

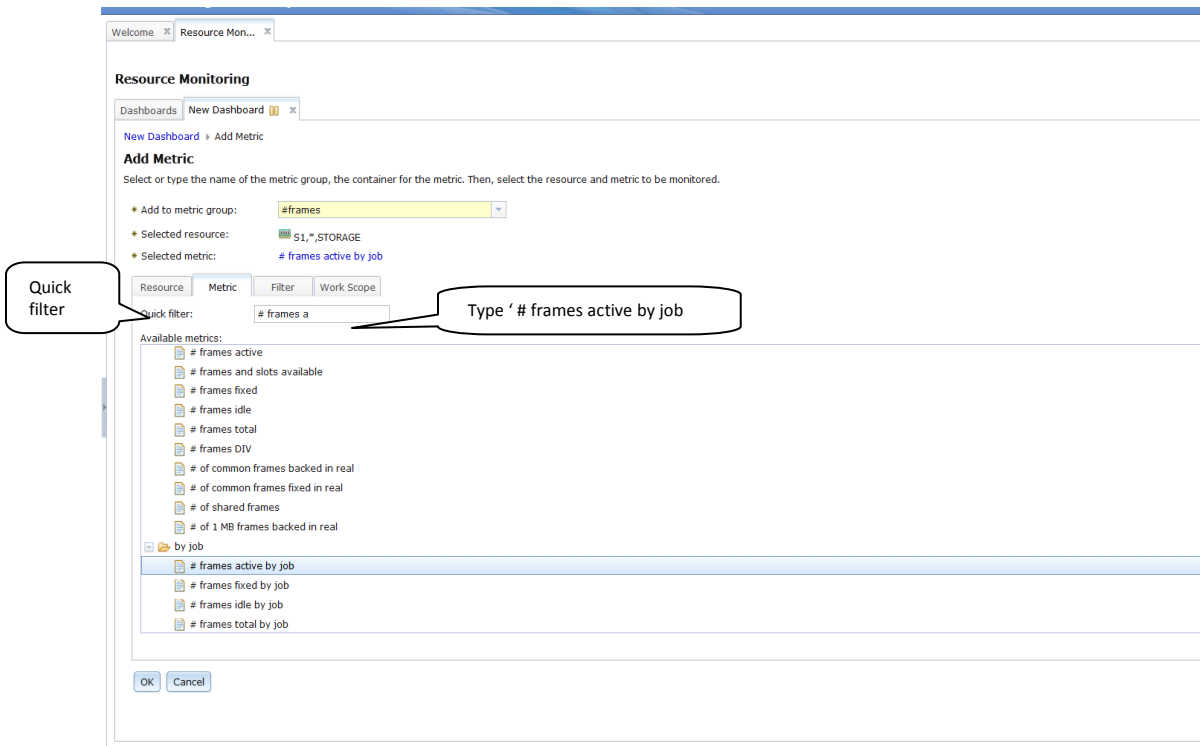
Hint: if something is not clear, click on 'Help' on top right of every panel!!



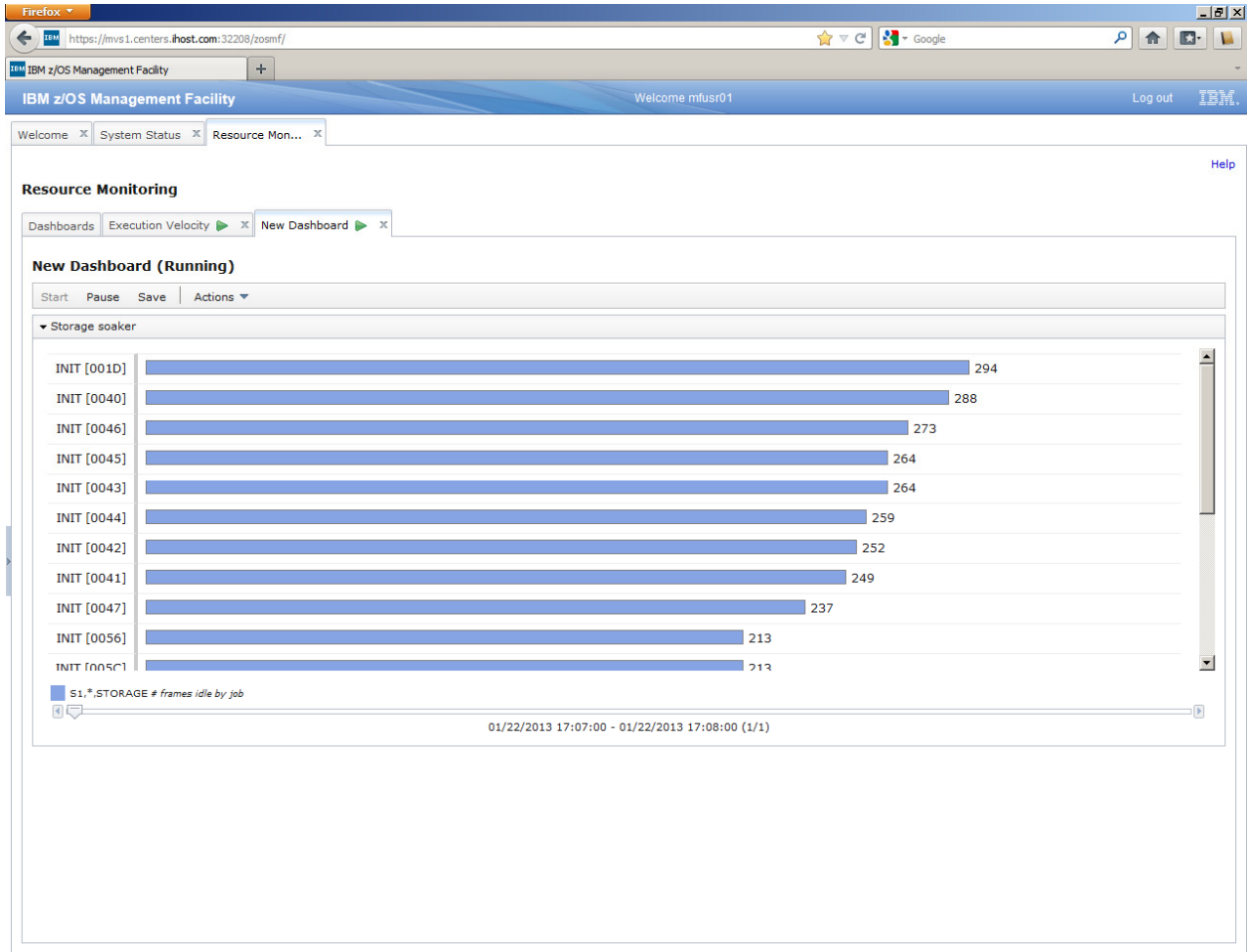
Set metric group - # frames
Select Resource – in tab below – select/expand first image, select **storage**



Go to Metric tab – use quick filter for '# frames by job' -> select - # frames active by job



Press 'OK' button



From New Dashboard click on 'Save'
Type name 'Storage soaker' into field and press OK button
Storage soaker is added to the Resource Monitoring task

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface. The browser address bar shows the URL `https://mvs1.centers.host.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main content area is titled "Resource Monitoring" and contains a "New Dashboard (Running)" section. This section displays a horizontal bar chart for "Storage soaker" with the following data:

Job ID	Value
INIT [001D]	294
INIT [0040]	288
INIT [0046]	273
INIT [0045]	264
INIT [0043]	264
INIT [0044]	259
INIT [0042]	252
INIT [0041]	249
INIT [0047]	237
INIT [0056]	213
INIT [005C]	213

A "Save Dashboard As" dialog box is overlaid on the chart, with the following fields and buttons:

- Dashboard name: Storage Soaker
- Buttons: OK, Cancel, Help

At the bottom of the dashboard, there is a legend for the bar chart: `S1,*_STORAGE # frames idle by job`. The time range for the data is `01/22/2013 17:10:00 - 01/22/2013 17:11:00 (4/4)`.

The screenshot shows the IBM z/OS Management Facility interface. At the top, there is a browser window with the URL <https://mvs1.centers.host.com:32208/zosmf/>. The page header includes "IBM z/OS Management Facility" and "Welcome mfu01". The main content area is titled "Resource Monitoring" and contains a "Dashboards" section. This section has two active dashboard tabs: "Execution Velocity" and "Storage Soaker". Below the tabs is a "Dashboards" list with a search filter and a table of dashboard options. The "Storage Soaker" option is highlighted, and a callout box labeled "New Storage Soaker" points to it. At the bottom of the dashboard list, it says "Total: 10, Selected: 0" and "Refresh Last refresh: Jan 22, 2013 5:12:58 PM local time (Jan 22, 2013 10:12:58 PM GMT)".

IBM z/OS Management Facility

Welcome mfu01

Log out

Resource Monitoring

Dashboards Execution Velocity Storage Soaker

Dashboards

Actions

Name
Common Storage Activity
Coupling Facility Overview
Execution Velocity
General Activity
Overall Image Activity
Performance Index
Response Time
Storage Soaker
Using & Delays
XCF Activity

Total: 10, Selected: 0

Refresh Last refresh: Jan 22, 2013 5:12:58 PM local time (Jan 22, 2013 10:12:58 PM GMT)

Lab 6: Software Management

To invoke the Software Management task, click on Software Management from the Software category on the navigation tree.

The screenshot shows the IBM z/OS Management Facility (z/OSMF) web interface. The browser address bar shows the URL <https://mvs1.centers.host.com:32208/zosmf/>. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01".

The navigation tree on the left includes the following items:

- Welcome
- Configuration
- Links
- New/Renamed software Management Selection (highlighted by a callout bubble)
- Software
 - Software Management (selected)
- z/OS Classic Interfaces
- z/OSMF Settings

A "Refresh" button is located below the navigation tree.

The main content area displays the "Software Management" task. The task description is: "Use this task to view details about your software inventory, including related products, features, FMIDs, data sets, deployments, and SYSMODS. [Learn more...](#)"

The task includes the following sub-tasks:

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

The Software Management task, previously named the Deployment task, contains the software deployment functions along with additional software management functions. The Software Management task helps you streamline the software management process by providing a centralized location that you can use to manage your z/OS software.

IBM z/OS Management Facility Welcome mfusr01 [Log out](#)

Welcome x Software Man... x

Select Software Instances to view details about software instances

Software Management [Help](#)

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

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

IBM z/OS Management Facility Welcome mfusr01 [Log out](#)

Welcome x Software Man... x

[Software Management](#) > Software Instances [Help](#)

Software Instances Switch To: ▼

Actions ▼

Name	System	Messages	Description	Activity	Global Zone CSI
Filter	Filter	Filter	Filter		Filter
<input type="checkbox"/> MASTER_SMPEV3.6_WITH_PTFS	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product with PTFs.		ZOSMF.SWDEPLOY.GLOB
<input type="checkbox"/> MASTER_SMPEV3.6_WITHOUT_PTFS	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains the SMP/E V3.6 product without any PTFs.		ZOSMF.SWDEPLOY.GLOB
<input type="checkbox"/> MASTER_ZOSV1.12	LOCAL		Source Software Instance for the z/OSMF Software Deployment Lab. This instance contains z/OS V1R12 at RSU1105.		ZOSMF.SWDEPLOY.GLOB
<input type="checkbox"/> DEMO_SMPEV3.6_WITH_PTFS	LOCAL	IZUD809I	Completed demo software instance, of SMP/E V3.6 with PTFs.		ZOSMF.SWDEPLOY.GLOB
<input type="checkbox"/> MASTER_zOS_R13_w/Other_Pr	LOCAL		z/OS V1.13 with over 20 other		SMLAB01.GLOBAL.CSI

Total: 5, Selected: 0

[Refresh](#) Last refresh: Jan 22, 2013 5:21:57 PM

[Close](#)

IBM z/OS Management Facility Welcome mfusr01 [Log out](#)

Welcome Software Man... [Help](#)

Software Management
 Use this task to view details of software instances and their related products, features, FMIDs, data sets, deployments, and SYSMODs.
[Learn more...](#)

Select product to view a list of products included in each software instance

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

IBM z/OS Management Facility Welcome mfusr01 [Log out](#)

Welcome Software Man... [Help](#)

[Software Management](#) > [Products](#)

Products

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

[Switch To:](#) ▼

Product ▲	Release	Product ID	Messages	General Availability	Vendor	End c
Filter	Filter	Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/> AFP FONT COLLECTION FOR S/390	02.01.01	5648-B33		Oct 27, 2000	IBM	✔
<input type="checkbox"/> DITTO/ESA FOR MVS	01.03.00	5655-103		Jun 25, 1999	IBM	✔
<input type="checkbox"/> Debug Tool V12	12.01.00	5655-W70		May 11, 2012	IBM	✔
<input type="checkbox"/> Debug Tool V9	09.01.00	5655-U27		Sep 26, 2008	IBM	✘
<input type="checkbox"/> Enterprise COBOL V4	04.02.00	5655-S71		Aug 28, 2009	IBM	✔

Total: 27, Selected: 0

[Refresh](#) Last refresh: Jan 22, 2013 5:26:48 PM

[Close](#)

IBM z/OS Management Facility Welcome mfusr01 [Log out](#)

Welcome x Software Man... x [Help](#)

Software Management

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

Software Instances	Deploy software; generate reports about your software.
Products	View the products included in each software instance.
Deployments	Deploy a software instance, and manage existing deployments.
Categories	Create new categories for your software instances and deployments, and manage existing categories.
Settings	Select the time zone in which to display date and time data. Indicate whether to display or suppress information messages.

Note: A callout bubble points to the 'Deployments' link with the text: 'Select Deployments to view the different properties and reports on a sample deployment'

IBM z/OS Management Facility Welcome mfusr01 [Log out](#)

Welcome x Software Man... x [Help](#)

[Software Management](#) > [Deployments](#)

Deployments

To deploy a software instance, create a new deployment by selecting **New** or **Copy** from the Actions menu. [Switch To:](#) ▼

Name	Description	Activity	Categories	Source Software Instance	Source System
<input type="checkbox"/> DEMO_Deployment_Sample	This is a sample deployment that may be used for demos.	Completed		MASTER_SMPEV3.6_WITH_PTFS	LOCAL

Total: 1, Selected: 0

[Refresh](#) Last refresh: Jan 22, 2013 5:27:42 PM local time (Jan 22, 2013 10:27:42 PM GMT)

[Close](#)

Please attend Software Management Lab for detail information.

Optional Labs:

Lab 7: Capacity Provisioning

Summary:

This lab shows you how to connect to a Provisioning Manager and to display reports about the active configuration and active policy.

Click Performance – Capacity Provisioning

The screenshot displays the IBM z/OS Management Facility web interface. The browser window shows the URL <https://mvs1.centers.ihost.com:32208/zosmf/>. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main navigation menu on the left includes sections for Welcome, Configuration, Links, Performance (with sub-items: Capacity Provisioning, Resource Monitoring, System Status, Workload Management), Problem Determination, Software, z/OS Classic Interfaces, and z/OSMF Settings. A "Refresh" button is located below the menu. The main content area is titled "Capacity Provisioning" and includes an "Overview" tab. The overview text states: "z/OS Capacity Provisioning helps you manage additional processor capacity of System z servers. The Provisioning Manager monitors the workload on a set of z/OS systems and organizes the allocation of On/Off Capacity on Demand. Define the systems to be observed in a domain configuration and the rules for additional capacity allocation in a policy." Below this, it instructs the user to "Use this task to work with Capacity Provisioning. To get started, select one of the following actions." The actions are listed in a table:

View Status and Define Connections	
Provisioning Manager	View the status of your Provisioning Manager. Use this link to define connections to your Provisioning Manager.
Manage	
Domain Configurations	Define, modify, view, import, export, or install and activate a domain configuration.
Policies	Define, modify, view, import, export, or install and activate a provisioning policy.
Settings	
Settings	Set preferences for the time zone settings before you start working.

If not already done, create a connection to your Provisioning Manager (follow optional steps in section Task 1) and use this connection to view one of the following reports (see section Task 2):

1. Domain status report
2. Active configuration report

3. Active policy report

Task 1– View Status of Provisioning Manager

Click on Provisioning Manager

The screenshot shows the IBM z/OS Management Facility web interface. The browser address bar shows the URL `https://mvs1.centers.host.com:32208/zoemf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main content area is titled "Capacity Provisioning" and has a sub-tab "Provisioning Manager".

The "Provisioning Manager" section contains a description: "The Provisioning Manager is the component of Capacity Provisioning that controls the domain based on the active policy and domain configuration. Connections describe how to connect to a Provisioning Manager. The connections table shows connection definitions which can be used to access a Provisioning Manager."

Below the description is a table with columns "Host", "Protocol", and "Port". The "Host" column has a "Filter" button. The "Protocol" and "Port" columns also have "Filter" buttons. The table is currently empty, displaying "There is no data to display." An "Actions" menu is open over the table, with the "New..." option highlighted by a red box. Other options in the menu include "View", "Modify", "Delete...", "Select All", "Deselect All", "Configure Columns...", "Modify Filters...", "Hide Filter Row", "Clear Filters", "Modify Sort...", and "Clear Sorts".

At the bottom of the table, it says "Total: 0," and there is a "Refresh" button. The last refresh time is "Jan 22, 2013 5:42:50 PM local time (Jan 22, 2013 10:42:50 PM GMT)".

The screenshot shows a web browser window displaying the IBM z/OS Management Facility interface. The browser's address bar shows the URL `https://mvs1.centers.ihost.com:32208/zosmf/`. The page header includes the text "IBM z/OS Management Facility", "Welcome mfusr01", and a "Log out" link. The main content area is titled "Capacity Provisioning" and contains a "New Connection" dialog box. The dialog box has two tabs: "Overview" and "Provisioning Manager". The "Provisioning Manager" tab is active, showing a "New Connection" section with the following text: "To create a new connection to the Provisioning Manager you must define three elements: - The host address where the Provisioning Manager is running. - The protocol to be used. - The port on the system where the Provisioning Manger runs on which the CIM server listens on the defined protocol." Below this text are two radio button options: "Use same system as z/OSMF." (which is selected) and "Use the following connection properties." The second option includes three input fields: "Host address:" (a text box), "Protocol:" (a dropdown menu set to "HTTP"), and "Port:" (a spinner box set to "5988"). At the bottom of the dialog box are "OK" and "Cancel" buttons.

The screenshot shows the IBM z/OS Management Facility web interface. The browser address bar displays `https://mvs1.centers.ihost.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main navigation bar includes "Welcome", "Capacity Pro...", and "Log out". The "Capacity Provisioning" section is active, with sub-tabs for "Overview" and "Provisioning Manager".

Provisioning Manager

The Provisioning Manager is the component of Capacity Provisioning that controls the domain based on the active policy and domain configuration. Connections describe how to connect to a Provisioning Manager. The connections table shows connection definitions which can be used to access a Provisioning Manager.

Host Address	Protocol	Port
Filter	Filter	Filter
<input type="checkbox"/> Same system as z/OSMF		

Total: 1, Selected: 0

[Refresh](#) Last refresh: Jan 22, 2013 5:44:11 PM local time (Jan 22, 2013 10:44:11 PM GMT)

Task 2 – View reports about your Provisioning Manager

1. To view the domain status report, click on the link **Same system as z/OSMF** in the *Connections* table.
2. Right click **Same system as z/OSMF**, *Select view domain status*, *Select domain for domain report* window opens. Select the domain you want to retrieve the reports for and click **OK**.

The screenshot shows the IBM z/OS Management Facility web interface in a Firefox browser. The page title is "Capacity Provisioning" and the user is logged in as "mfusr01". A modal dialog titled "Select domain for domain status report" is open, displaying a warning: "You are about to connect to the target system using the same system as z/OSMF. Select a capacity provisioning domain to connect to." Below the warning is a dropdown menu for "Domain" with "DOMAIN1" selected. The background interface shows a table with one entry checked under the "Host Address" column, and a "Refresh" button at the bottom.

IBM z/OS Management Facility Welcome mfusr01 Log out

Welcome x Capacity Pro... x

Capacity Provisioning

Overview Provisioning Manager x

Provisioning Manager

The Provisioning Manager is the component of Capacity Provisioning that controls the domain based on the active policy and domain configuration. Connections describe how to connect to the Provisioning Manager. The connections table shows connections of Provisioning Managers which can be used to access a Provisioning Manager.

Actions

Host Address
Same system as z/OSMF

Total: 1, Selected: 1

Refresh Last refresh: Jan 22, 2013 5:44:11 PM local time (Jan 22, 2013 10:44:11 PM GMT)

- The *Domain Status* page opens and shows a quick overview of the configuration of your domain.

The screenshot shows the IBM z/OS Management Facility web interface. The browser address bar displays the URL `https://mvs1.centers.host.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main content area is titled "Capacity Provisioning" and has tabs for "Overview" and "Provisioning Manager". The "Provisioning Manager" tab is active, showing the "Domain Status" page for "Domain DOMAIN1".

The page content includes the following information:

- Domain name:** DOMAIN1
- Provisioning Manager start time:** Jan 11, 2013 2:23:39 PM
- Processing mode:** Manual
- Processing mode activation time:** Feb 16, 2012 5:05:54 PM
- Configuration name:** SHARECFG
- Configuration activation time:** Feb 16, 2012 5:22:01 PM
- Policy name:** SHAREPOL
- Policy activation time:** Feb 16, 2012 5:12:47 PM
- Code level:** 12020

At the bottom of the page, there is a "Refresh" button and a timestamp: "Last refresh: Jan 22, 2013 5:46:45 PM local time (Jan 22, 2013 10:46:45 PM GMT)". On the right side, there is a "Report" button with a dropdown arrow, and a callout box pointing to it with the text "Report button".

- A click on the **Refresh** button lets you update the data.
- On the top right corner, you can see the *Report* button. It allows you to change the report for the same domain. Click on it and select the **Active Configuration** menu item to switch to the active configuration report.

The screenshot shows the IBM z/OS Management Facility web interface. The browser is Firefox, and the URL is https://mvs1.centers.host.com:32208/zosmf/. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main content area is titled "Capacity Provisioning" and has a sub-tab "Provisioning Manager". The current view is "Domain Status" for "Domain DOMAIN1". The page displays the following information:

Domain name:	DOMAIN1
Provisioning Manager start time:	Jan 11, 2013 2:23:39 PM
Processing mode:	Manual
Processing mode activation time:	Feb 16, 2012 5:05:54 PM
Configuration name:	SHARECFG
Configuration activation time:	Feb 16, 2012 5:22:01 PM
Policy name:	SHAREPOL
Policy activation time:	Feb 16, 2012 5:12:47 PM
Code level:	12020

At the bottom of the page, there is a "Refresh" button and the text "Last refresh: Jan 22, 2013 5:52:51 PM local time (Jan 22, 2013 10:52:51 PM GMT)".

6. The *Active Configuration* page is shown and you can view details about the active configuration.

The screenshot shows the IBM z/OS Management Facility web interface. The main heading is "Capacity Provisioning" with a sub-heading "Active Configuration for Domain DOMAIN1". Below this, there is a table with the following data:

CPC Name	Correlation Status	Record ID	Active MSU	Active zAAPs	Active zIIPs	Status
SHARECPC	Matched	Any (automatic)	0	0	0	Enabled

A callout bubble with the text "Click on CPC" points to the "SHARECPC" link in the table. Below the table, it says "Total: 1, Selected: 0". At the bottom, there is a "Refresh" button and a timestamp: "Last refresh: Jan 22, 2013 5:55:03 PM local time (Jan 22, 2013 10:55:03 PM GMT)".

- To show details about one of the CPCs or systems, use the name link of a CPC or system to open it. Click on the name of the first CPC to open the *CPC Details* page.

The screenshot shows the IBM z/OS Management Facility web interface. The browser address bar indicates the URL is `https://mvs1.centers.host.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main content area is titled "Capacity Provisioning" and has tabs for "Overview" and "Provisioning Manager". The "Provisioning Manager" tab is active, showing a breadcrumb trail: "Provisioning Manager > Active Configuration > CPC Details". The "CPC Details" section provides information about the selected CPC, including configuration, serial, machine type, correlation status, and status. A "Configuration" section contains a table comparing current and permanent settings.

General

Configuration: SHARECFG
 CPC: SHARECPC
 Serial: 1FA2362817
 Machine type - model: M96 - 2097
 Correlation status: Matched
 Correlation status since: Jan 11, 2013 2:23:40 PM
 Status: Enabled
 Default status: Enabled
 Power save mode: Disabled
 Error status: No Error

Configuration

	Current	Permanent
Model	505	505

Close

8. Click on the **Close** button to go back to the *Active Configuration* page.
9. Use again the *Report* button and click on the **Active Policy** menu item.

The screenshot shows the IBM z/OS Management Facility interface. The browser address bar displays `https://mvs1.centers.host.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main navigation bar includes "Welcome" and "Capacity Pro...".

The "Capacity Provisioning" section is active, with sub-tabs for "Overview" and "Provisioning Manager". The current view is "Active Configuration" for "Domain DOMAIN1". A warning icon indicates the configuration is "Disabled".

The active configuration is "SHARECFG" with a status of "Disabled". A "Report" dropdown menu is open, showing options: "Domain Status", "Active Configuration", and "Active Policy" (highlighted with a red box).

Below the report menu, there are tabs for "CPCs" and "Systems". An "Actions" dropdown is visible. The main content area displays a table with the following data:

CPC Name	Correlation Status	Record ID	Active MSU	Active zAAPs	Active zIIPs	Status
SHARECPC	Matched	Any (automatic)	0	0	0	Enabled

At the bottom of the table, it says "Total: 1, Selected: 1". A "Refresh" button is present, with the text "Last refresh: Jan 22, 2013 5:55:03 PM local time (Jan 22, 2013 10:55:03 PM GMT)".

10. The Active Policy page is opened and shows the active policy in a tree representation.

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled "Active Policy for Domain DOMAIN1". Below the title, it states "This page shows information about the active policy. All timestamps below are shown in GMT." The active policy is identified as "SHAREPOL" with a status of "Disabled". A "Report" button is visible in the top right of this section.

The table below displays the policy elements in a tree view:

Type	Name	Status	Details
Filter	Filter	Filter	Filter
Policy	SHAREPOL	⚠ Disabled	
Maximum processor scope			
Maximum processor limit	SHARECPC		MSU limit: 1; zAAP limit: 0; zIIP lir
Rule	RULE1	✅ Enabled	Default status: Enabled
Processor scope			
Processor limit	SHARECPC		MSU limit: 1; zAAP limit: 0; zIIP lir
Condition	COND1	✅ Enabled	Default status: Enabled
Nonrecurring time condition	TC1	Inactive	Start: Feb 16, 2012 4:50:00 PM; E

At the bottom of the table, it indicates "Total: 8, Selected: 0". A "Refresh" button is present, along with the text "Last refresh: Jan 22, 2013 5:57:00 PM local time (Jan 22, 2013 10:57:00 PM GMT)".

11. To view more details for a policy element, click on its type link and the *Policy Element Details* page is opened. Click on the first **Processor Limit** in the maximum provisioning scope to open the details page for it.

Firefox | https://mvs1.centers.host.com:32208/zosmf/ | Google

IBM z/OS Management Facility | Welcome mfusr01 | Log out

Welcome x Capacity Pro... x

Capacity Provisioning

Overview x Provisioning Manager x

Provisioning Manager > Active Policy

Active Policy for Domain DOMAIN1

This page shows information about the active policy.
All timestamps below are shown in GMT.

Active policy: SHAREPOL Status: ⚠ Disabled Report ▾

Actions ▾ | Table view: Tree

Type	Name	Status	Details
Filter	Filter	Filter	Filter
Policy	SHAREPOL	⚠ Disabled	
Maximum processor scope			
Maximum processor limit	SHARECPC		MSU limit: 1; zAAP limit: 0; zIIP lir
Rule	RULE1	✔ Enabled	Default status: Enabled
Processor scope			
Processor limit	SHARECPC		MSU limit: 1; zAAP limit: 0; zIIP lir
Condition	COND1	✔ Enabled	Default status: Enabled
Nonrecurring time condition	TC1	Inactive	Start: Feb 16, 2012 4:50:00 PM; E

Total: 8, Selected: 0

Refresh Last refresh: Jan 22, 2013 5:57:00 PM local time (Jan 22, 2013 10:57:00 PM GMT)

The screenshot shows a web browser window displaying the IBM z/OS Management Facility interface. The browser's address bar shows the URL `https://mvs1.centers.host.com:32208/zosmf/`. The page header includes the text "IBM z/OS Management Facility", "Welcome mfusr01", and a "Log out" link. The main content area is titled "Capacity Provisioning" and contains a breadcrumb trail: "Provisioning Manager > Active Policy > Policy Element Details". Below this, the section "Policy Element Details" is displayed, with a sub-section "Policy Hierarchy" showing "Policy: SHAREPOL", "Rule: RULE1", and "Processor scope". Another sub-section, "Processor Limit Details", lists "CPC name: SHARECPC", "MSU limit: 1", "zAPP limit: 0", and "zIIP limit: 0". A "Close" button is located at the bottom left of the main content area.

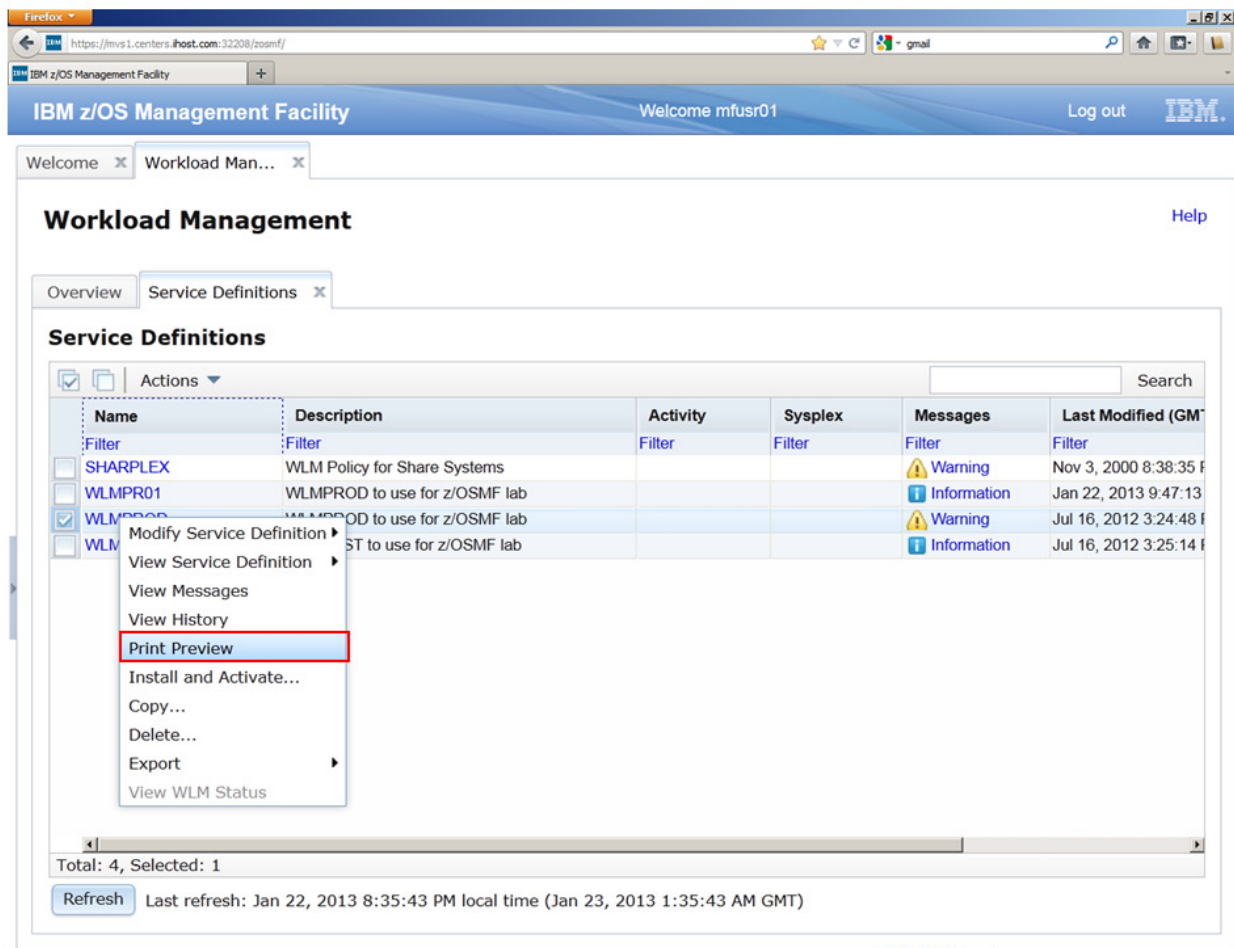
Workload manager: These are optional tasks that can be performed if there is time and interest.

1. Print Preview of Service Definition (optional)
2. View the History of a Service Definition (optional)
3. View the WLM Status in the Sysplex (optional)

Lab 8: Print Preview of Service Definition

The Print Preview panel displays a service definition or service policy in one panel. The service definition / service policy can be printed.

In the Service Definitions tab select the row with service definition 'WLMPRxx'. Right click to open the context menu and select 'Print Preview'.



A tab opens with the 'Print Preview' panel for the service definition:

The screenshot shows the IBM z/OS Management Facility web interface. The browser is Firefox, and the URL is https://mvs1.centers.ihost.com:32208/zosmf/. The page title is 'IBM z/OS Management Facility' and the user is logged in as 'mfusr01'. The main content area is titled 'Workload Management' and has a 'Help' link. There are three tabs: 'Overview', 'Service Definitions', and 'Print Preview WLMPROD'. The 'Print Preview WLMPROD' tab is active. The content is organized into sections: 'z/OS Workload Manager Service Definition WLMPROD', 'Service Parameters', 'Guest Platform Management Provider (GPMP) Settings', and 'Resource Groups'. A 'Filter' link is highlighted with a callout box, and a 'Switch To' dropdown menu is visible. A scrollbar is on the right side of the content area.

z/OS Workload Manager Service Definition WLMPROD

Service definition name: WLMPROD
Description: WLMPROD to use for z/OSMF lab
Functionality level: 019

Service Parameters

Service coefficients: CPU: 1, IOC: 0.5, MSO: 0, SRB: 1
Enable I/O priority management: Yes
Enable dynamic alias management: No

Guest Platform Management Provider (GPMP) Settings

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

Resource Groups

Name	Details
CPMAV	Description: Used for Cap.Provisioning Last Modified (GMT): Jun 22, 2007 3:07:44 PM Modified By: thal

Use the scrollbar on the right side of the panel and check how the print preview is structured.

Press the 'Filter' link to open the 'Filter Formatted Service Definition' dialog:

The screenshot shows the IBM z/OS Management Facility web interface. The browser address bar shows `https://mvs1.centers.ihost.com:32208/zosmf/`. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01". The main content area is titled "Workload Management" and has tabs for "Overview", "Service Definitions", and "Print Preview WLMPROD". A dialog box titled "Filter Formatted Service Definition" is open, allowing users to filter the display of service definition elements. The dialog includes a "Display:" section with radio buttons for "All" (selected) and "Selection", and a list of checkboxes for various elements: Service parameters, Resource groups, Workloads, Service policies, Report classes, Classification groups, Classifications, Application environments, Resources, Scheduling environments, Notes, and Messages. Below this list is a question: "Do you want to include the description and modification details for the service definition elements?" with radio buttons for "Yes" (selected) and "No". The dialog also has "OK", "Cancel", and "Help" buttons.

z/OS Workload Management

Service definition name:
Description:
Functionality level:

Service Parameters

Service coefficients:
Enable I/O priority management:
Enable dynamic alias management:

Guest Platform Management

Enable dynamic GPMP management:
Excluded systems:

Resource Groups

Name	Details
CPMAV	Description: Used for CapMan monitoring Last Modified (GMT): Jun 22, 2007 3:07:44 PM Modified By: thal

z/OSMF Lab

Check 'Selection', then check the checkboxes 'Service parameter', 'Resource groups', 'Workloads', 'Service Policies', 'Report Classes', 'Classifications'. Press 'OK'. Use the scrollbar to review the displayed elements. Notice that only the service definition items you selected in the filter dialog are displayed.

Open the 'Switch To' menu and select 'NSHIFT':

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface in a Firefox browser. The page title is "Workload Management" and the user is logged in as "mfusr01". The main content area displays the "z/OS Workload Manager Service Definition WLMPROD" details, including service definition name, description, functionality level, service parameters, guest platform management provider settings, and resource groups. A "Switch To" dropdown menu is open in the top right corner, showing three options: "Formatted Service Definition WLMPROD", "Formatted Service Policy NSHIFT" (highlighted with a red box), and "Formatted Service Policy WLMSTAV".

z/OS Workload Manager Service Definition WLMPROD

Service definition name: WLMPROD
Description: WLMPROD to use for z/OSMF lab
Functionality level: 019

Service Parameters

Service coefficients: CPU: 1, IOC: 0.5, MSO: 0, SRB: 1
Enable I/O priority management: Yes
Enable dynamic alias management: No

Guest Platform Management Provider (GPMP) Settings

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

Resource Groups

Name	Details
CPMAV	Description: Used for Cap.Provisioning Last Modified (GMT): Jun 22, 2007 3:07:44 PM Modified By: that

z/OSMF Lab

The panel shows now the service definition with the applied service class overrides and resource group overrides of service policy 'NSHIFT':

The screenshot displays the IBM z/OS Management Facility (z/OSMF) interface. The browser window shows the URL <https://mvs1.centers.ihost.com:32208/zosmf/>. The page title is "IBM z/OS Management Facility" and the user is logged in as "mfusr01".

The main content area is titled "Workload Management" and includes a navigation bar with tabs for "Overview", "Service Definitions", and "Print Preview WLMPROD". A "Print" button is visible in the top right corner.

The "Print Preview" section displays the following information:

z/OS Workload Manager Service Policy NSHIFT

Service policy name: NSHIFT
Description: Night shift

Service definition name: WLMPROD
Description: WLMPROD to use for z/OSMF lab
Functionality level: 019

Service Parameters

Service coefficients: CPU: 1, IOC: 0.5, MSO: 0, SRB: 1
Enable I/O priority management: Yes
Enable dynamic alias management: No

Guest Platform Management Provider (GPMP) Settings

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

Resource Groups

Name	Details
CPMAV	Description: Used for Cap.Provisioning Last Modified (GMT): Jun 22, 2007 3:07:44 PM Modified By: the1

z/OSMF Lab

Press the 'Print' link in the upper right corner of the panel. A new web browser tab or window opens with the same content:

Firefox
ihost.com https://mvs1.centers.ihost.com:32208/zosmf/zwlm/PrintSd.jsp?sdId=d32f755e-4172-4d3e-b8ee-dfe05fd69f47&sdName=WLMPROD&sdDesc=WLMF
IBM z/OS Management Facility Print Service Definition

[Send to Printer](#)

z/OS Workload Manager Service Policy NSHIFT

Service policy name: NSHIFT
Description: Night shift

Service definition name: WLMPROD
Description: WLMPROD to use for z/OSMF lab
Functionality level: 019

Service Parameters

Service coefficients: CPU: 1, IOC: 0.5, MSO: 0, SRB: 1
Enable I/O priority management: Yes
Enable dynamic alias management: No

Guest Platform Management Provider (GPMP) Settings

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

Resource Groups

Name	Details
CPMAV	Description: Used for Cap.Provisioning Last Modified (GMT): Jun 22, 2007 3:07:44 PM Modified By: the1 Type: NumberCPsTimes100 Capacity Minimum: 30 Capacity Maximum: 90
ECP	Description: AVT RG CPbased min 200% max 300% Last Modified (GMT): Feb 6, 2007 2:53:07 PM Modified By: bmor Type: NumberCPsTimes100 Capacity Minimum: 200 Capacity Maximum: 300
ECPE	Description: AVT RG CPbased min 100% max 100% Last Modified (GMT): Feb 6, 2007 2:53:17 PM Modified By: bmor Type: NumberCPsTimes100 Capacity Minimum: 100 Capacity Maximum: 100
ECPMAX	Description: AVT CPbased max 80% Last Modified (GMT): Feb 6, 2007 2:53:24 PM Modified By: bmor Type: NumberCPsTimes100 Capacity Minimum: Capacity Maximum: 80

You may print the service definition / service policy by pressing the 'Send to Printer' link. (Note: will not work for this lab. FYI only)

Close the 'Print Service Definition' web browser tab by clicking the X in the tab header.

Close the 'Print Preview' tab by clicking the X in the tab header.

Lab 9: Workload management: View the History of a Service Definition

The History panel displays the operation history for a service definition.

In the 'Service Definition' tab select service definition 'WLMPRx'. Right click to open the context menu for 'WLMPRx' and select 'View History':

The screenshot shows the IBM z/OS Management Facility Workload Management console. The 'Service Definitions' tab is active, displaying a table of service definitions. A context menu is open over the 'WLMPRx' row, with 'View History' highlighted. The table contains the following data:

Name	Description	Activity	Sysplex	Messages	Last Modified (GMT)	Modified By
SHARPLEX	WLM Policy for Share Systems			Warning	Nov 3, 2000 8:38:35 PM	tonyg1
WLMPRx	to use for z/OSMF lab			Information	Jan 22, 2013 9:47:13 PM	mfusr01
WLMPRx	to use for z/OSMF lab			Warning	Jul 16, 2012 3:24:48 PM	mfusr15
WLMTES	to use for z/OSMF lab			Information	Jul 16, 2012 3:25:14 PM	mfusr15

At the bottom of the console, it shows 'Total: 4, Selected: 1' and a 'Refresh' button. The last refresh time is 'Jan 22, 2013 8:48:04 PM local time (Jan 23, 2013 1:48:04 AM GMT)'.

The history panel displaying the operation history of the service definition is opened in a new tab:

The screenshot shows the IBM z/OS Management Facility interface. The main content area is titled "Workload Management" and contains a sub-panel for "History for WLMR01". The sub-panel shows "Data from past 2 months" and a table of actions. The table has four columns: "Sysplex", "Action", "Date and Time (GMT)", and "User ID". There are two rows of data in the table. Below the table, there is a "Total: 2" summary and a "Refresh" button. The last refresh time is "Jan 22, 2013 8:48:37 PM local time (Jan 23, 2013 1:48:37 AM GMT)".

Sysplex	Action	Date and Time (GMT)	User ID
Filter	Filter	Filter	Filter
	Modify	Jan 22, 2013 9:47:13 PM	mfusr01
	Create	Jan 22, 2013 9:34:41 PM	mfusr01

The service definition history shows the operations you have performed so far on the service definition 'WLMRxx'.

Lab 10: View the WLM Status of the Sysplex

The WLM status of the Sysplex can be viewed.

If not already displayed, switch to the 'Overview' tab by clicking on the tab header. Then, click the link 'WLM Status'. The 'Status for Sysplex' tab opens:

The screenshot shows the IBM z/OS Management Facility (z/OSMF) interface. The main content area is titled "Workload Management" and has three tabs: "Overview", "Service Definitions", and "WLM Status". The "WLM Status" tab is active, displaying the "WLM Status for Sysplex SHARPLEX from System S1".

Active Service Policy (View performance of active policy)

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

Systems (View performance of systems)

Name	Used Service Policy	Activated (GMT)	WLM Status	GPMP Status	WLM Version Level
S1	SHAREPOL	Jul 16, 2012 2:18:22 PM	Active	Inactive	25

Total: 1

Installed Service Definition

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

The 'Status for Sysplex' panel shows the Active Service Policy in the Sysplex and on each system in the Sysplex as well as the service definition installed in the WLM couple data set.

Press the X in the tab header to close the 'Status for Sysplex' panel.

Lab 11 – Monitoring Desktops: Add additional metrics to dashboard

The scenario repeats steps b to e from the previous lab for adding a metric for the 2nd metric:

- From the list of Dashboards in the Resource Monitoring home page, open the dashboard you had created in the previous Lab. (the 'Storage soaker').
- From Actions pull down, select Add Metric
- Set metric group (as the metric group already exists, you can use the drop-down list) - # frames
- resource – in tab below – select/expand first image, select **storage**
- go to Metric tab – use quick filter for '# frames by job' -> select - # frames **fixed** by job
- see the desktop – Save/ or action drop down

The screenshot shows the IBM z/OS Management Facility interface in Mozilla Firefox. The main window displays the 'Resource Monitoring' section with a dashboard titled 'Storage soaker (Running)'. The dashboard shows a bar chart of '#frames' for various jobs. The 'Add Metric...' option is highlighted in the Actions menu.

Job Name	#frames
BBNS001S [002A]	175000
MQS1MSTR [0095]	150000
ZFS [003A]	106000
BBNS001 [0098]	
OMVS [000E]	
DBS9DBM1 [0023]	34991
DFSKERN [0099]	21603
RMF [002F]	19724

Resource Monitoring

Dashboards: Storage soaker

Storage soaker > Add Metric

Add Metric

Select or type the name of the metric group, the container for the metric. Then, select the resource and metric to be monitored.

- * Add to metric group: #frames
- * Selected resource: S1.*,STORAGE
- * Selected metric: # frames fixed by job

Resource Metric Filter Work Scope

Quick filter: # frames by job

Available metrics:

- by job
 - # frames active by job
 - # frames fixed by job
 - # frames idle by job
 - # frames total by job
 - # frames DIV by job
 - # of 1 MB frames backed in real by job

Resource Monitoring

Dashboards: Storage soaker

Storage soaker (Running)

Start Pause Save Actions

#frames

Job Name	Active Frames	Fixed Frames
BBNS001S [002A]	175000	1206
MQS1MSTR [0095]	150000	919
ZFS [003A]	106000	828
BBNS001 [0098]	57134	698
OMVS [000E]	36652	454
DBS9DBM1 [0023]	34991	596
DFSKERN	21607	

■ S1.*,STORAGE # frames active by job
■ S1.*,STORAGE # frames fixed by job