

z/OS 3.1 IBM Education Assistant

Solution Name: z/OSMF Workload Management support for WLM Policy Advisor

Solution Element(s): z/OSMF Workload Management

July 2023



Agenda

- Trademarks
- Objectives
- Overview
- Usage & Invocation
- Interactions & Dependencies
- Upgrade & Coexistence Considerations
- Installation & Configuration
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- Appendix

Trademarks

- See url <http://www.ibm.com/legal/copytrade.shtml> for a list of trademarks.
- Additional Trademarks:
 - None.

Objectives

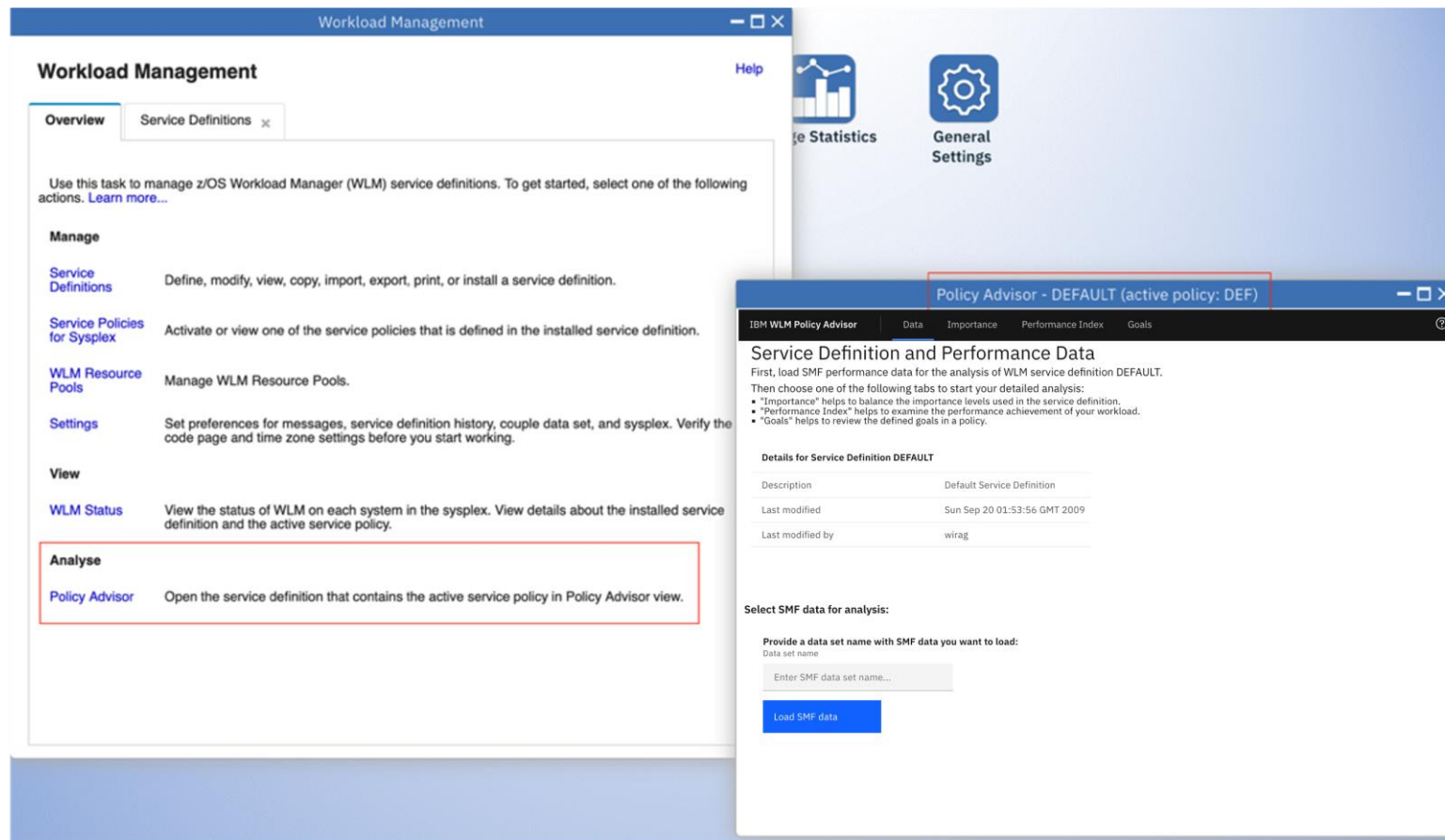
- This enhancement is a support for WLM Policy Advisor, which allows clients to:
 - Launch WLM Policy Advisor from z/OSMF Workload Management task.
 - Apply service policy overrides for service classes, resource groups and tenant resource groups to the base definitions of a WLM service definition with z/OSMF Workload Management task.
 - Be assisted with more best practice checks when managing a WLM service definition with z/OSMF Workload Management task.
 - Sort the service class periods by importance when managing a WLM service definition with z/OSMF Workload Management task.

Overview

- Who (Audience)
 - z/OSMF Workload Management users
- What (Solution)
 - z/OSMF Workload Management task is enhanced with the abilities to:
 - Open a WLM service definition in WLM Policy Advisor view.
 - Provide 3 new panels (“Apply Service Class Overrides”, “Apply Resource Group Overrides” and “Apply Tenant Resource Group Overrides”) when managing a WLM service definition.
 - Check unused service classes of a WLM service definition.
 - Support the action “Switch to Flat View (Sort All)” of Service Classes table when managing a WLM service definition.
- Wow (Benefit / Value, Need Addressed)
 - Assist z/OS system programmers with best practice recommendations to optimize WLM service definitions and reduce common errors.
 - Improve user experience to manage WLM service definitions.

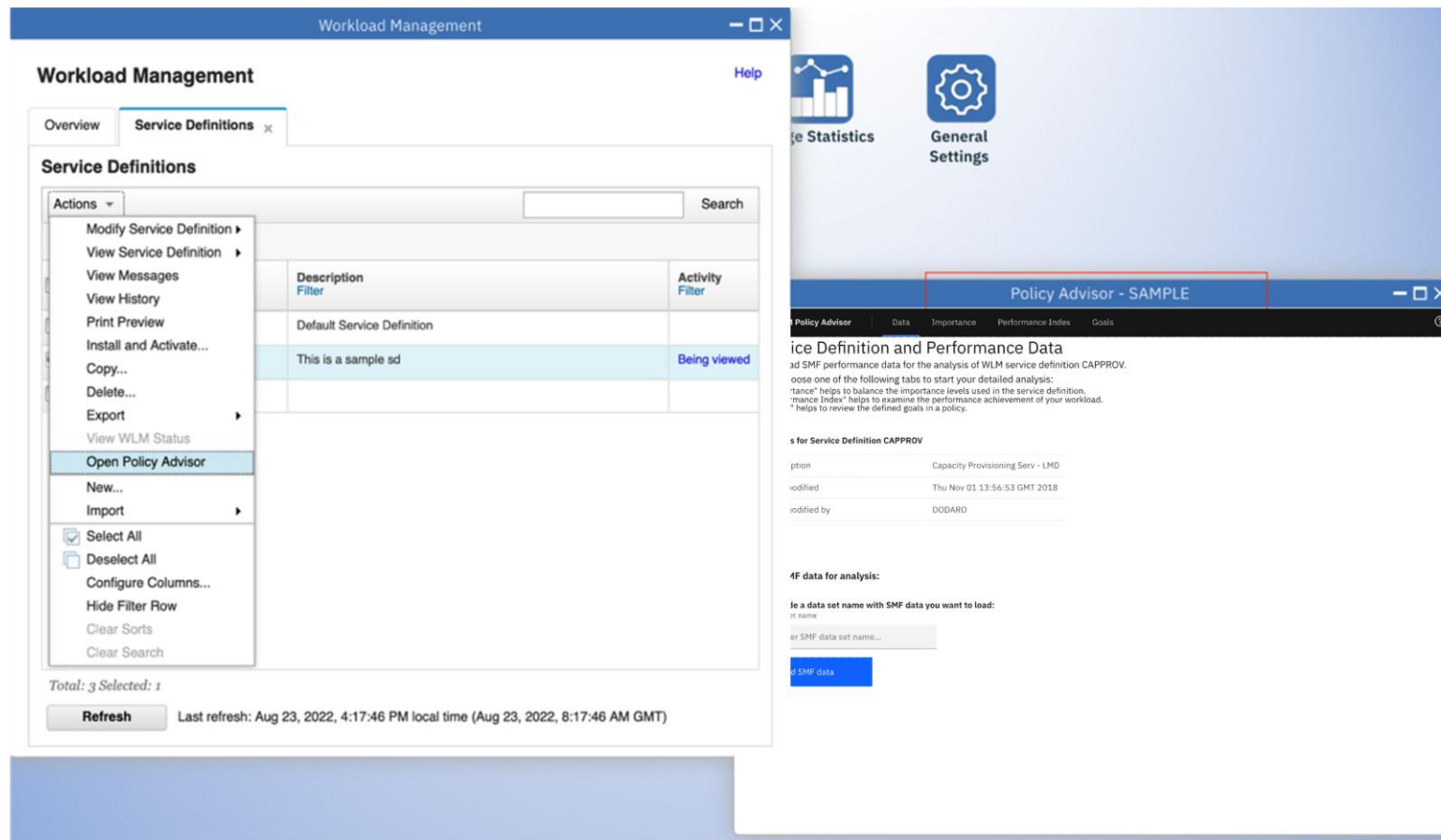
Usage & Invocation

- Open a service definition in WLM Policy Advisor view:
 - On “Overview” panel, you can click the link “Policy Advisor” to open the related service definition that contains the current active service policy in Policy Advisor view.



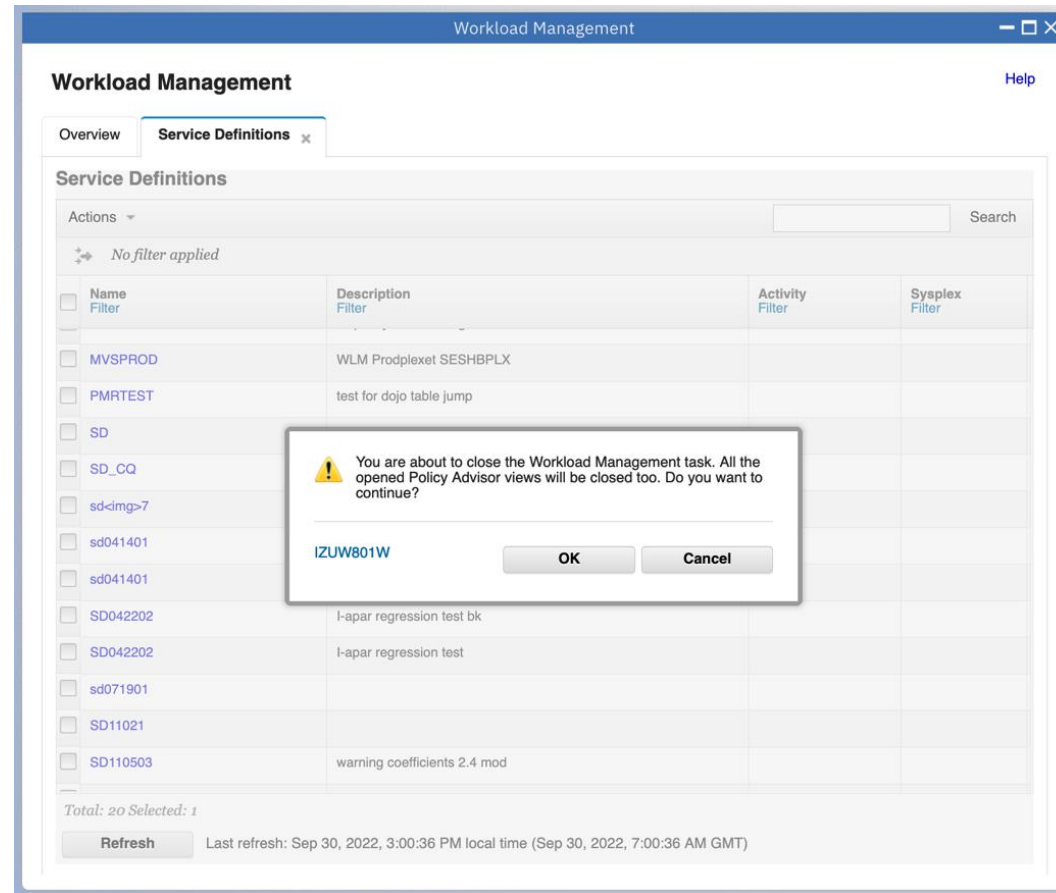
Usage & Invocation

- Open a service definition in WLM Policy Advisor view:
 - On “Service Definitions” panel, you can select a service definition and click the action “Open Policy Advisor” to open the selected service definition in Policy Advisor view.



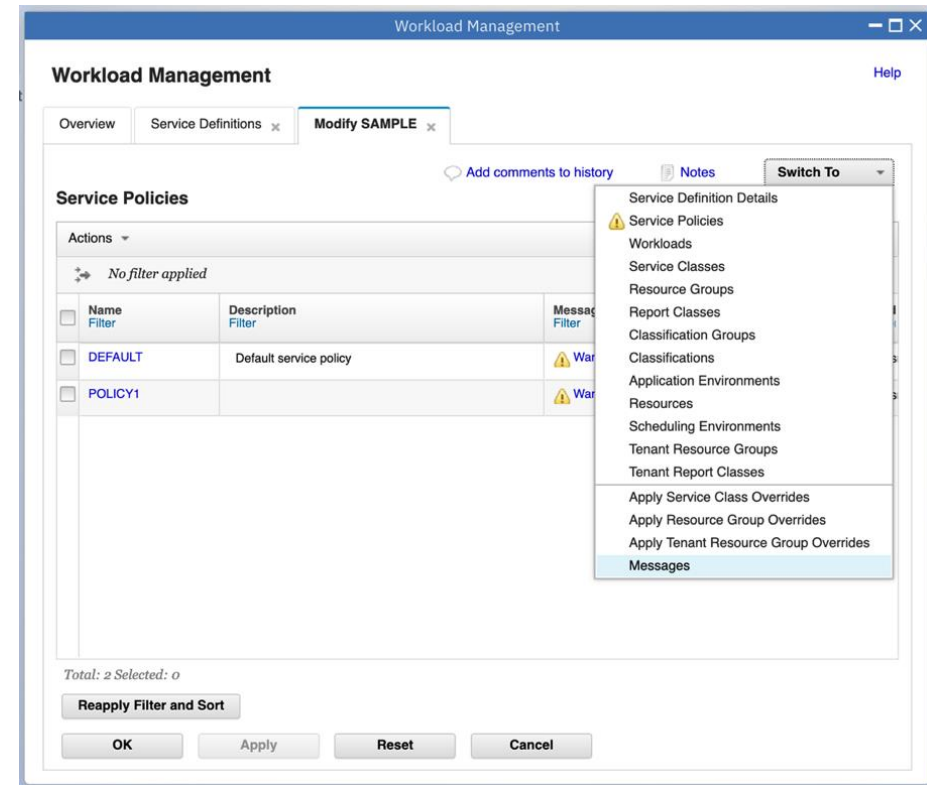
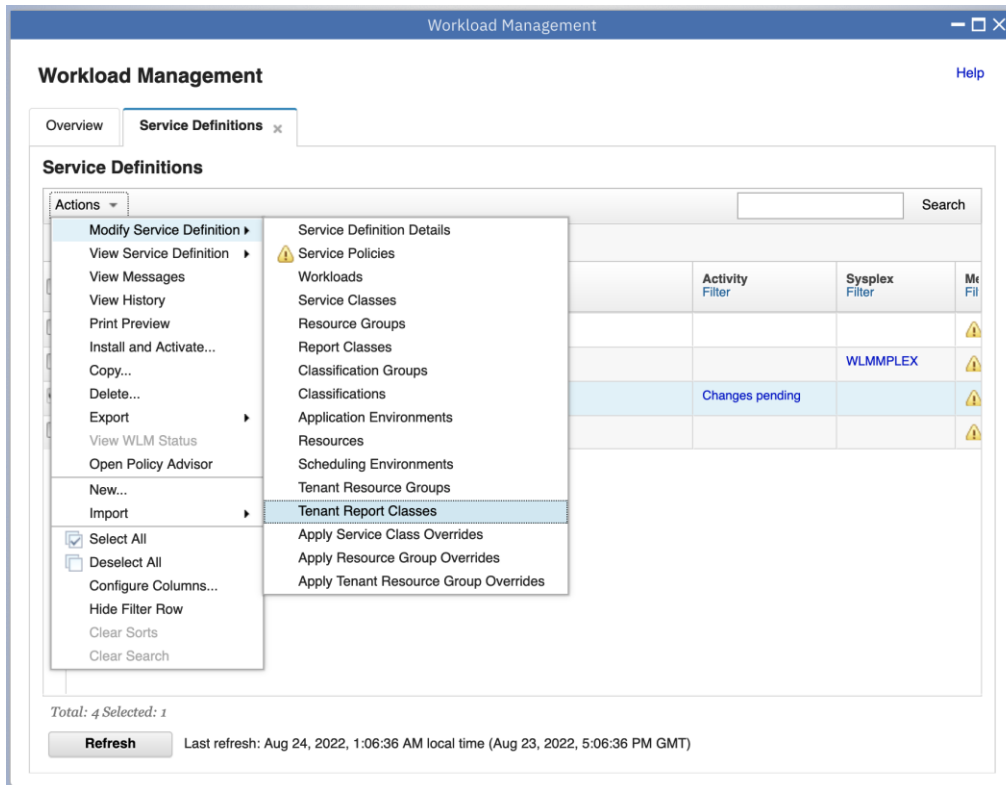
Usage & Invocation

- Open a service definition in WLM Policy Advisor view:
 - A confirm dialog will be displayed if one or more Policy Advisor views exist when trying to close z/OSMF Workload Management task, clicking “OK” will also close all the opened Policy Advisor views.



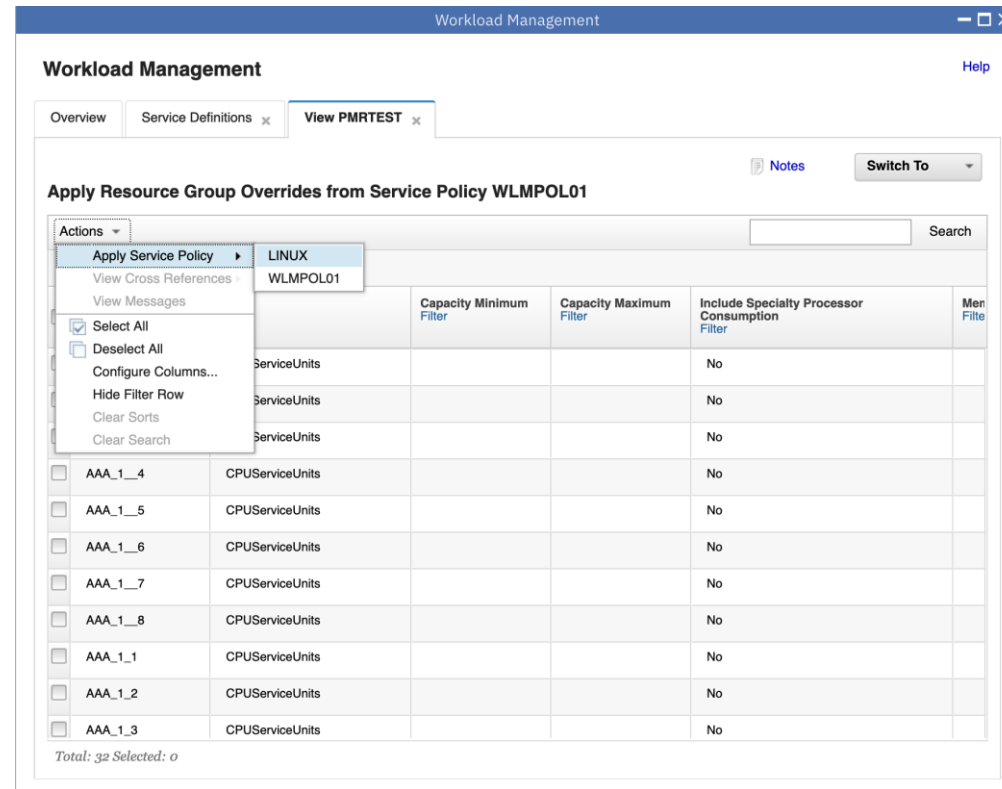
Usage & Invocation

- Apply service policy overrides for service classes, resource groups and tenant resource groups to the base definitions:
 - On “Service Definition” panel, you can open “Apply...Overrides” panel either from the action “Modify/View Service Definition”, or from “Switch To” menu.



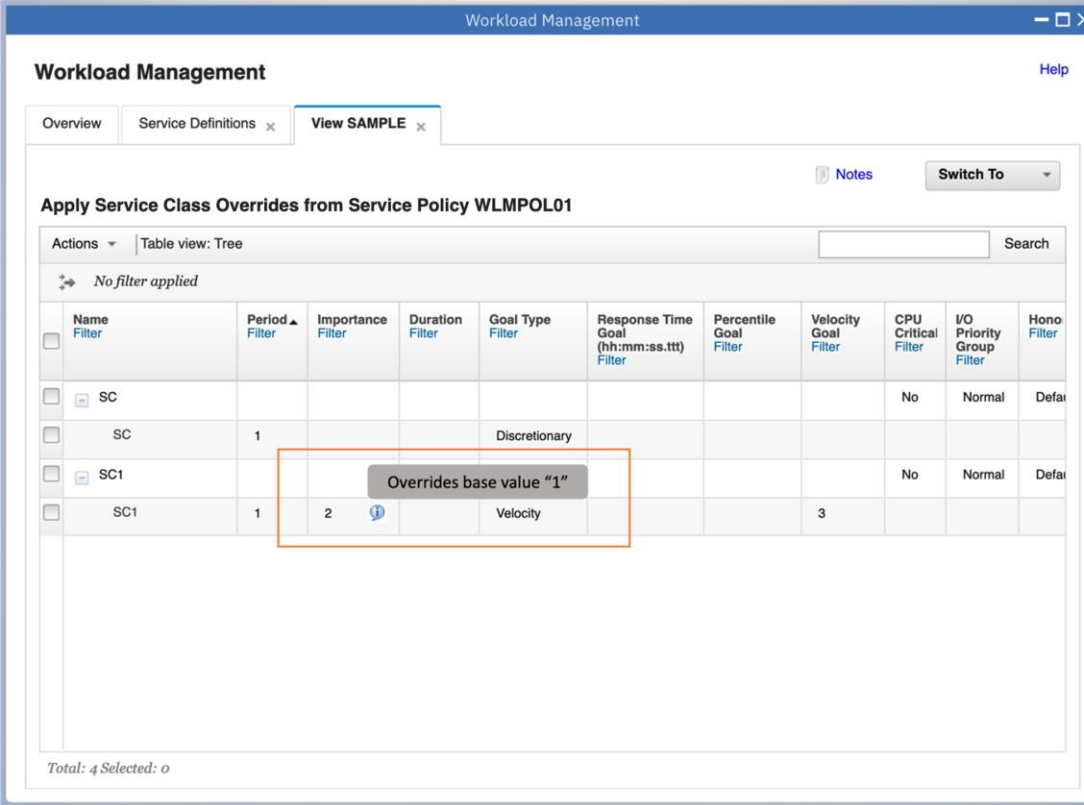
Usage & Invocation

- Apply service policy overrides for service classes, resource groups and tenant resource groups to the base definitions:
 - Switch to “Apply...Overrides” panel, you can select a service policy from the action “Apply Service Policy” to apply its overrides for service classes, resource groups or tenant resource groups to the base definition.



Usage & Invocation

- Apply service policy overrides for service classes, resource groups and tenant resource groups to the base definitions:
 - On “Apply...Overrides” panel, you can put the mouse over the info icon to show an overview of the changed values.



The screenshot shows the 'Workload Management' application window. The 'View SAMPLE' tab is active, displaying a table titled 'Apply Service Class Overrides from Service Policy WLMPOL01'. The table has columns for Name, Period, Importance, Duration, Goal Type, Response Time Goal, Percentile Goal, Velocity Goal, CPU Critical, I/O Priority Group, and Honor. The 'Importance' column for the 'SC1' service class is highlighted with an orange box, and a tooltip indicates it overrides the base value of '1'.

Name	Period	Importance	Duration	Goal Type	Response Time Goal (hh:mm:ss.ttt)	Percentile Goal	Velocity Goal	CPU Critical	I/O Priority Group	Honor
SC								No	Normal	Default
SC	1			Discretionary						
SC1								No	Normal	Default
SC1	1	2		Velocity			3			

Overrides base value "1"

Usage & Invocation

- Check unused service classes of a service definition:
 - In “Service Classes” table, you can identify the unused service classes from the column “Rules” which counting the number of associated classification rules. If a service class is not used by any classification rule, an information message is also added in the column “Messages” of current row.

Name	Period	Import	Duration	Goal Type	Response Time Goal (hh:mm:ss)	Percentile Goal	Velocity	CPU Critical	I/O Priority Group	Honor Priority	Resource Group	Workload	Rules	Messages	Last Modified
STCI3V40								No	Normal	Default		STC	3		Mar 10, 2007
STCI3V40	1	3		Velocity			40					STC	0	Information	Mar 9, 2007
STCI3V50								No	Normal	Default		STC	5		Nov 10, 2010
STCI3V70								No	Normal	Default		STC	1		Mar 9, 2007
STCI5V05								No	Normal	Default		STC	0	Information	Mar 9, 2007
STCI5V10	1	2	30000	Velocity			30					STC			
STCI5V10	2	3	50000	Velocity			20					STC			
STCI5V10	3	5		Velocity			10					STC			
STCI5V70								No	Normal	Default		STC	2		Nov 10, 2010
STCI5V70	1	5		Velocity			70					STC			

Total: 159 Selected: 4

Message ID	Message Text	Service Definition Item
IZUW620I	The service class "STCI1V40" is unused. A service class which is not referenced by any classification rule has no effect on workload management.	Service Class "STCI1V40"

Total: 1

Close

Usage & Invocation

- Sort the service class periods by importance:
 - In “Service Classes” table, you can click the action “Switch to Flat View (Sort All)” to transfer the tree table into flat table (i.e., the data from service class row will be replicated into each period row) to perform the overall sorting function, including sorting periods by importance.
 - You can switch among flat view, tree view and non-tree view, the selected items will be re-selected again after switching so that you will not lose where it is.

Workload Management

Overview Service Definitions View PMRTEST

Notes Switch To

Service Classes

Actions Table view: Tree Search

Copy to Clipboard
View Cross References
View Messages
View Performance of Selected
Expand
Collapse
View Performance of All
☒ Select All
☐ Deselect All
Configure Columns...
Hide Filter Row
Clear Sorts
Clear Search
Expand All
Collapse All
Switch to Non-Tree View
Switch to Flat View (Sort All)

	Importance Filter	Duration Filter	Goal Type Filter	Response Time Goal (hh:mm:ss.ttt) Filter	Percentile Goal Filter
			Discretionary		
	4		Velocity		
	2		Percentile Response Time	00:00:00.001	25
	3		Average Response Time	00:00:00.001	
<input type="checkbox"/> C1190%P5					
<input type="checkbox"/> C1190%P5	1	1	Percentile Response Time	00:00:00.300	90

Total: 159 Selected: 0

Workload Management

Overview Service Definitions View PMRTEST

Notes Switch To

Service Classes

Actions Table view: Flat Search

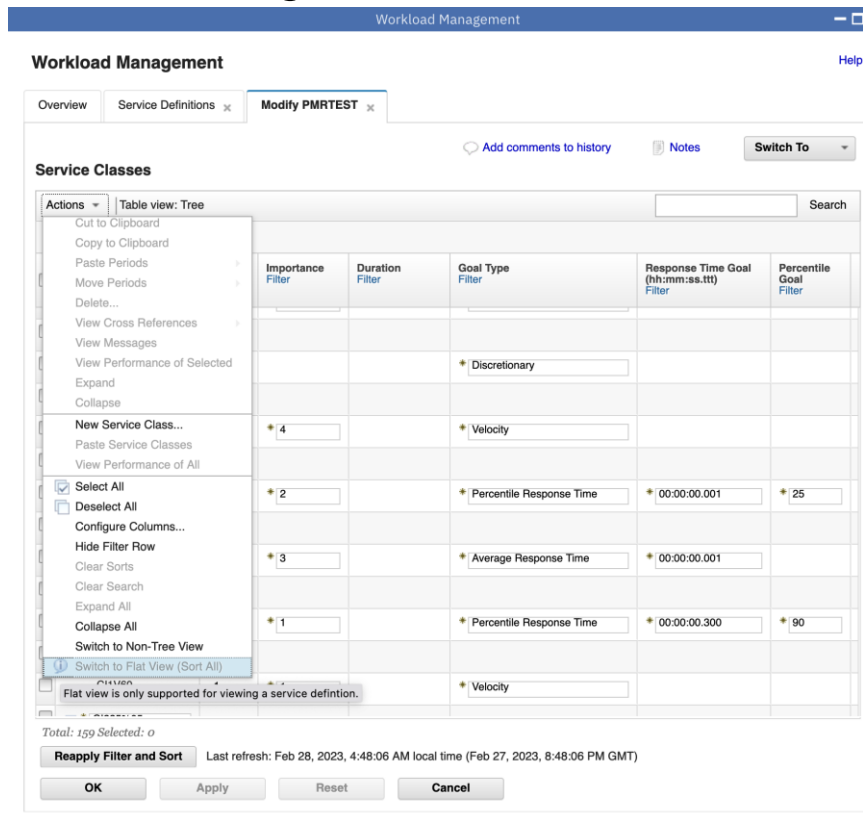
No filter applied

	Name Filter	Period Filter	Importance Filter	Duration Filter	Goal Type Filter	Response Time Goal (hh:mm:ss.ttt) Filter	Percentile Goal Filter
<input type="checkbox"/>					Velocity		
<input type="checkbox"/>	C1225%05	1	2		Percentile Response Time	00:00:00.500	25
<input type="checkbox"/>	C1225%10	1	2		Percentile Response Time	00:00:10.000	25
<input type="checkbox"/>	C1280%P6	1	2		Percentile Response Time	00:00:00.600	80
<input type="checkbox"/>	C1290%P5	1	2		Percentile Response Time	00:00:00.500	90
<input type="checkbox"/>	C12V60	1	2		Velocity		
<input type="checkbox"/>	C12V70	1	2		Velocity		
<input type="checkbox"/>	C1350%10	1	3		Percentile Response Time	00:00:10.000	50
<input type="checkbox"/>	C1390%01	1	3		Percentile Response Time	00:00:01.000	90
<input type="checkbox"/>	C1390UNI	1	3		Percentile Response Time	00:00:01.000	90

Total: 94 Selected: 0

Usage & Invocation

- Sort the service class periods by importance:
 - The action “Switch to Flat View (Sort All)” is enabled only with view mode. With editing mode, an info icon will be displayed beside the disabled action to hint user. If you are in flat view and try to switch to editing mode, the table view will be changed back to tree view and the selected items will be re-selected again after switching.



Interactions & Dependencies

- Software Dependencies
 - None
- Hardware Dependencies
 - None
- Exploiters
 - z/OSMF Workload Management users

Upgrade & Coexistence Considerations

- None

Installation & Configuration

- None

Summary

- The following z/OS V3R1 z/OSMF Workload Management enhancement has been explained:
 - z/OSMF Workload Management support for WLM Policy Advisor

Appendix

- Book updates
 - IBM z/OS Management Facility Online Help