z/OS 3.2 IBM Education Assistant

Solution Name: z/OSMF WLM Policy Advisor enhancements

Solution Element(s): z/OSMF Workload Management

July 2025

Agenda

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Trademarks

- See url http://www.ibm.com/legal/copytrade.shtml for a list of trademarks.

- Additional Trademarks:

  - None

Objectives

- The WLM Policy Advisor uses SMF type 72 subtype 3 performance data to analyze the quality of a WLM policy and visualize possible weaknesses.

- Enhancements to the existing z/OSMF WLM Policy Advisor:

  - Improved **workflow** to select and load SMF data.

  - **Overview page** with summary of all relevant findings. Drill down options are available for detailed analysis.

  - Better **user experience** with improved navigation and charts to help users understand the findings.

  - **Suggestions** are generated for the analyzed service definition to help improve system performance and resilience.

Overview

- ## Who (Audience)
  - z/OS system programmers looking to simplify the definition of their WLM policy and adapt it to challenging performance situations.

- ## What (Solution)
  - User interface, workflow and analysis capabilities enhancements.

- ## Wow (Benefit / Value, Need Addressed)
  - The z/OSMF WLM Policy Advisor assists with proactive problem determination and prevention and therefore supports the simplification of the WLM policy definition task.
  - The enhancements in this release focus on pointing the user to the deficiencies of their WLM service definition.

- Invoke a new Policy Advisor view from the z/OSMF Workload Management task: Under "Service Definitions" select the WLM service definition you want to examine and select the action "Open Policy Advisor".
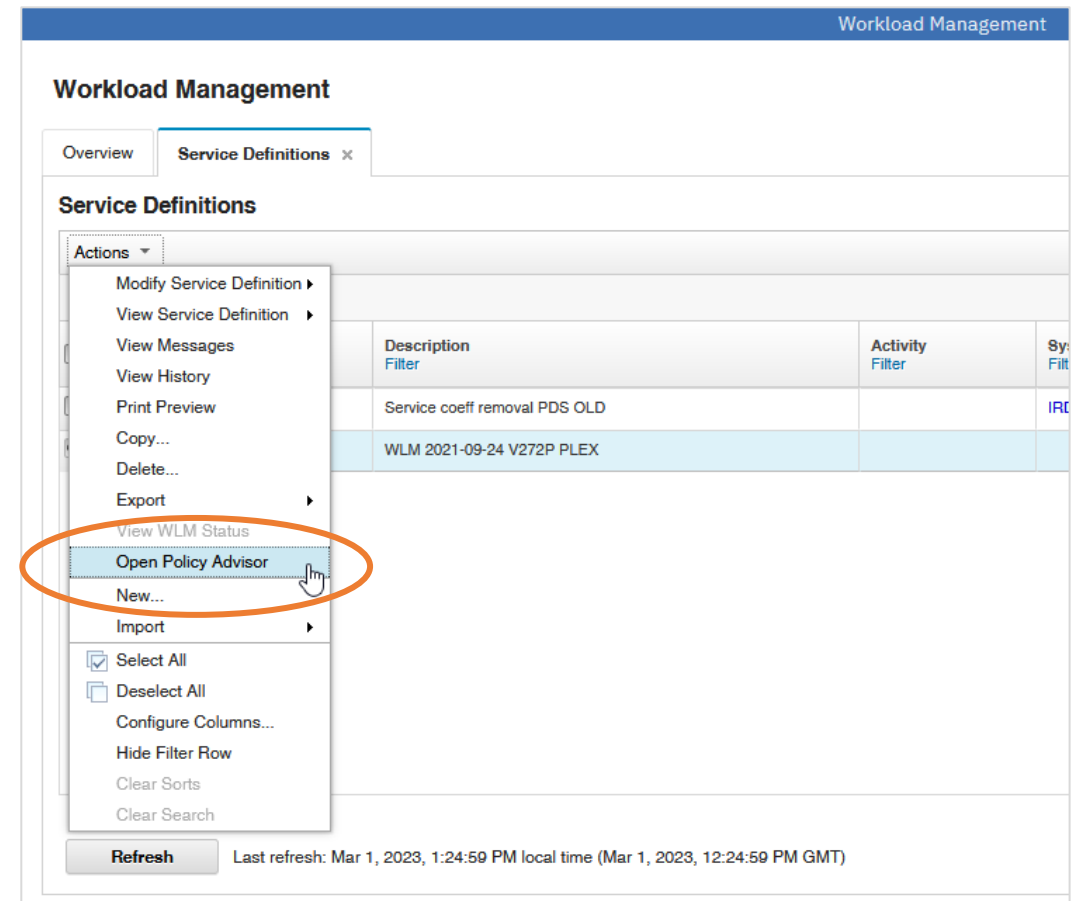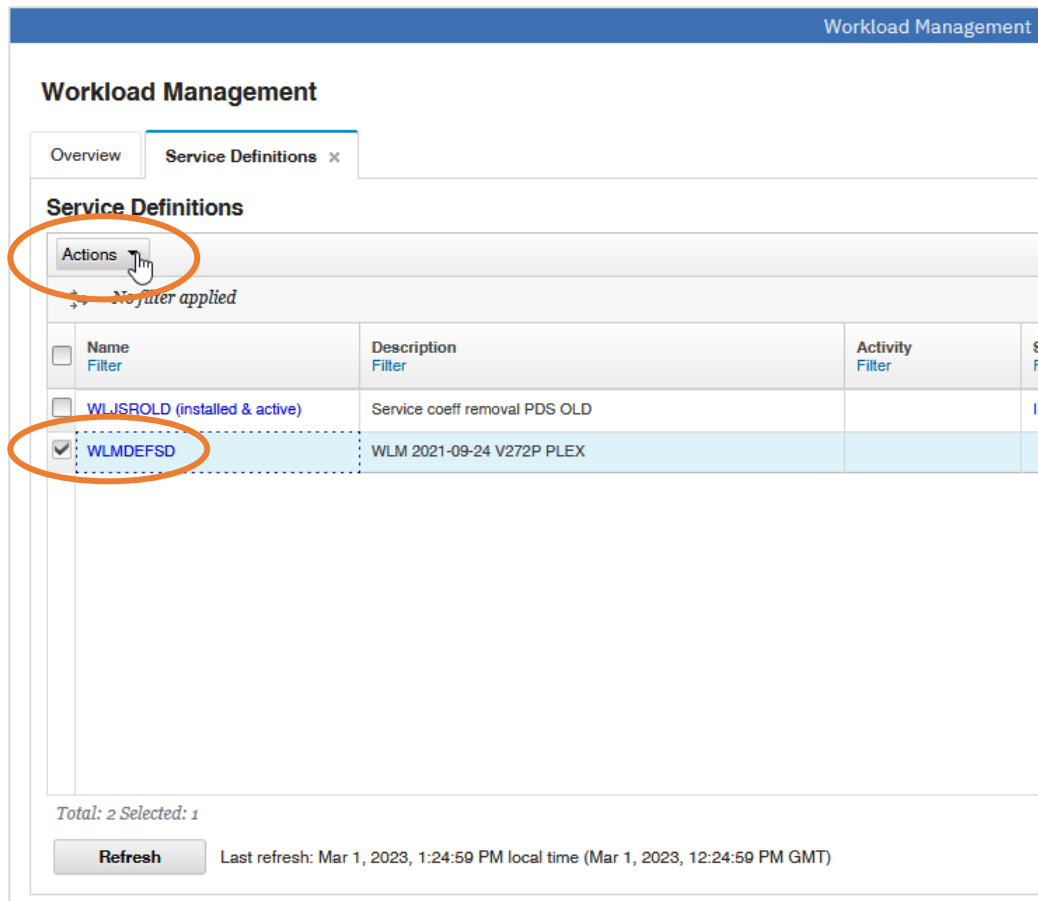
- Invoke a new Policy Advisor view from the z/OSMF Workload Management task: Under "Service Definitions" right click on the WLM service definition you want to examine and select the action "Open Policy Advisor".

- The new SMF data loading workflow consists of
  5 steps:
  1. Search and select datasets
  2. Select a service policy
  3. Select systems
  4. Select dates
  5. Verify your selected parameters

- On the "Search and select datasets" step, search for your datasets containing SMF type 72 subtype 3 performance data. From the list of datasets, you can select any number of datasets.

Search bar, can contain wildcards

List of search result

Overview of your current selected datasets

- In the next steps, select a service policy, systems and dates for which you want to load SMF data from your selected datasets.

Usage & Invocation: SMF data loading (4 of 4)

- The last step shows a summary of your selection.

- During the whole process you may go back to a previous step and change the selection made.

- After clicking "Load records", SMF type 72 subtype 3 data will be loaded from the selected datasets based on your selection.
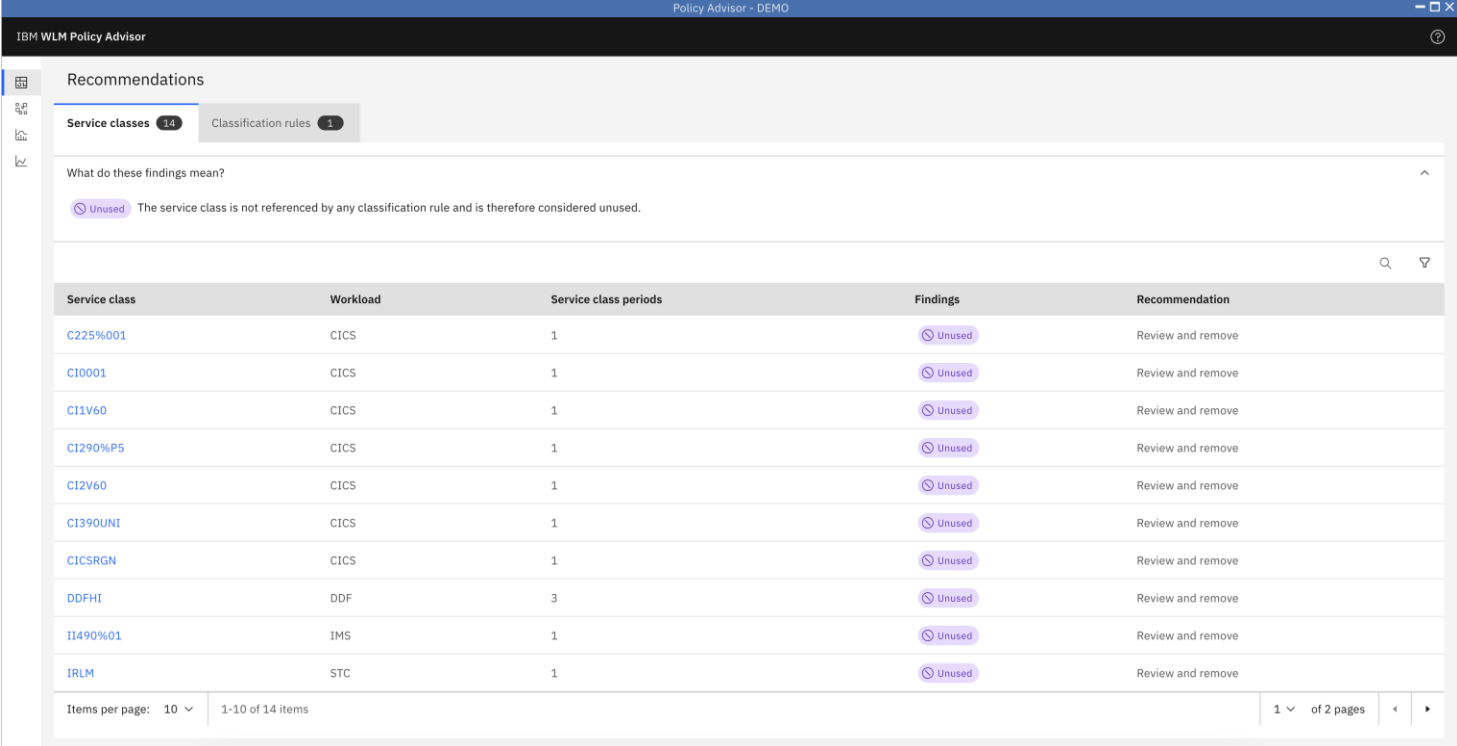
Usage & Invocation: Overview page (1 of 3)

- First page after loading SMF performance data.

- In the upper section it provides information about the loaded SMF performance data.

- The main part of the page shows recommendations for the WLM service definition, presented in various tabs.

- On the "Service classes" tab a table lists all findings related to service classes.

- Service classes can have various findings:

  - **Unused** – No classification rule classifies work into those service classes.

  - **Duplicate** – One or more periods of this service class are very similar to those of another service class.

  - **Periods without activity** – Periods don't have any service consumption on any system loaded.

- On the "Classification rules" tab you can see various best practice checks:
  - No default service class defined for a subsystem
  - Workload running in default service class SYSOTHER
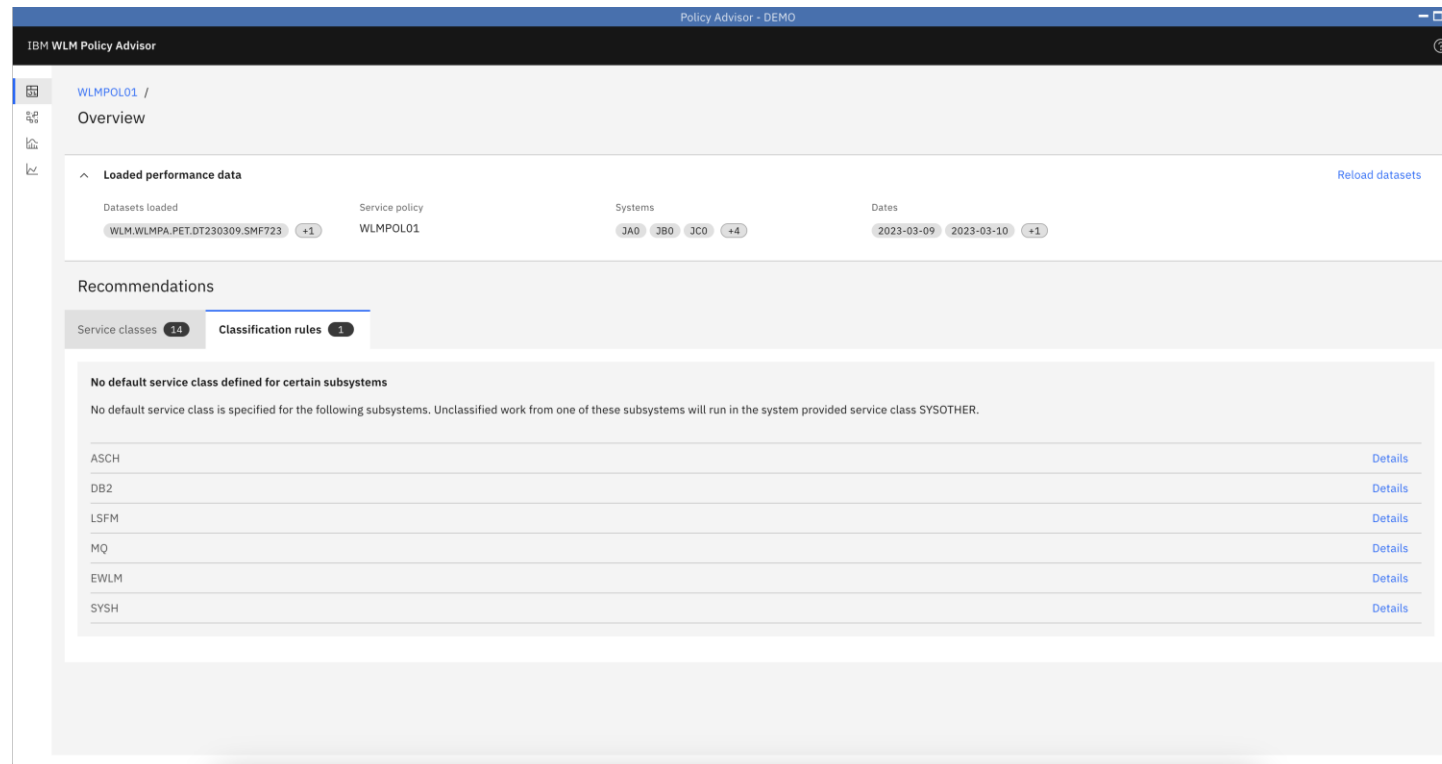
Usage & Invocation: Service class details (1 of 2)

- To get more details about a service class and its periods you can click on the service class name in the table on the services class tab.

- On the service class details page, you then find information about the defined attributes and classification rules of this service class.

Shows findings and recommendations related to that service class

- The "service class periods" tab lists all periods and their status on each system.

- Status is derived from the time a service class period has spent in a certain PI range.

- Statuses are:
  - Overachieved – PI less than 0.8
  - Goal met – PI between 0.8 and 1.2
  - Goal missed – PI more than 1.2
  - No activity – PI of zero and no usings

- On the Performance Index panel of the Policy Advisor, examine how service class periods are performing over time. Filter by time, importance and systems to investigate the performance of your workload.

- You can select multiple systems, to compare them directly next to each other.

- Click on any colored tile within the heatmap to drill down …
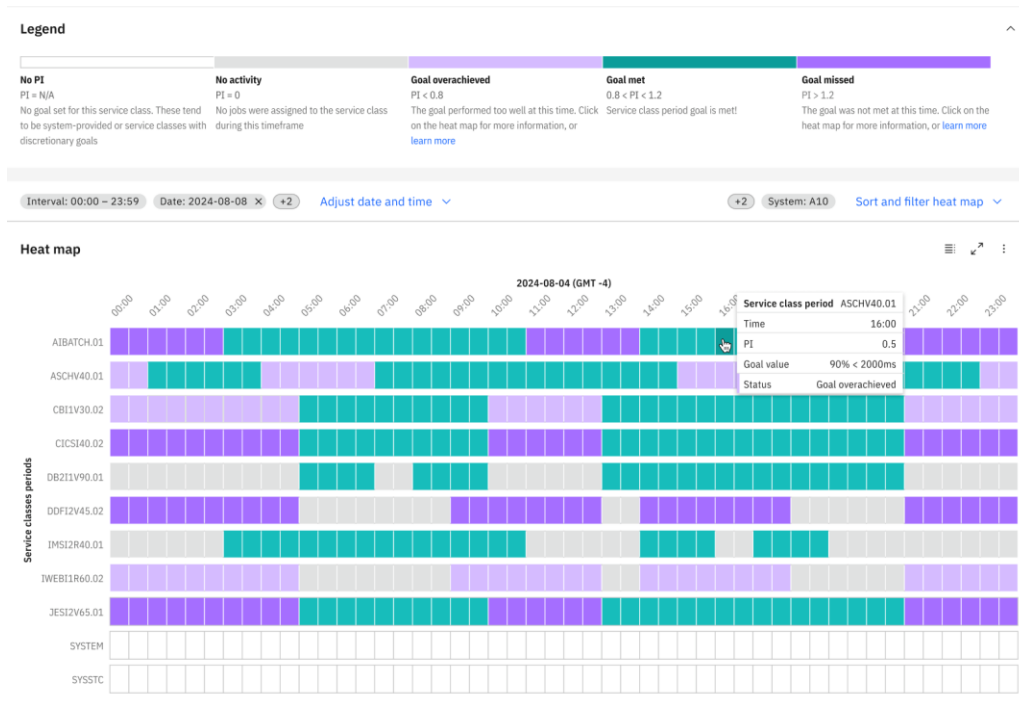
Usage & Invocation: Performance Index (2 of 2)

- … and get further information about performance index and goal fulfillment. Click on "Edit service class in WLM task" to jump back to the z/OSMF WLM task, in case you want to modify this service class.
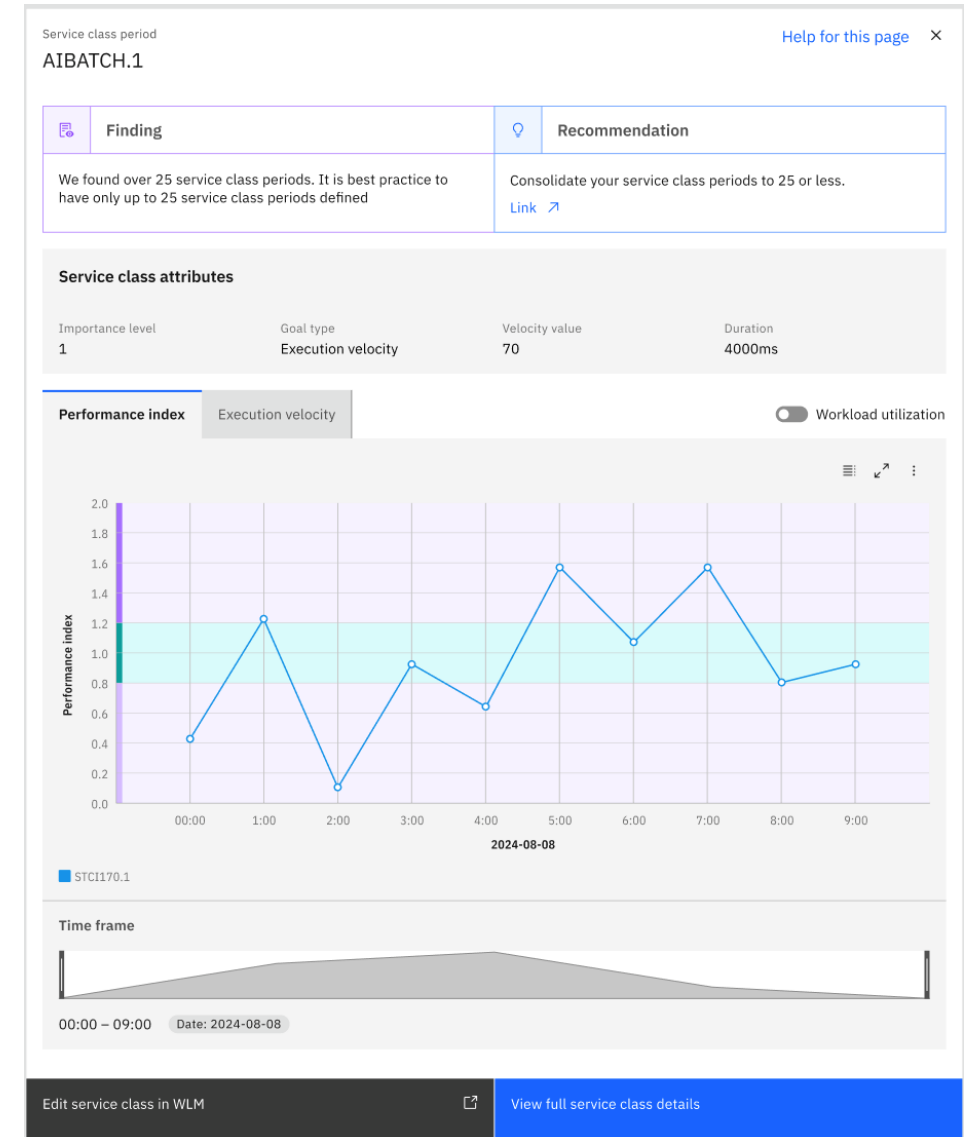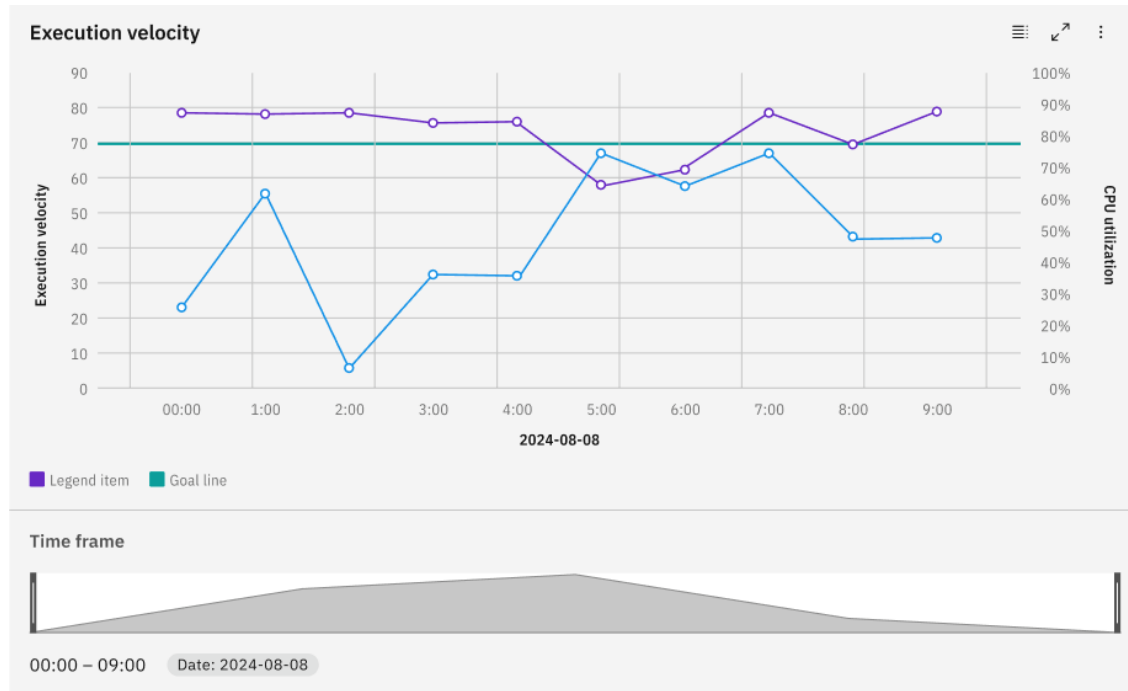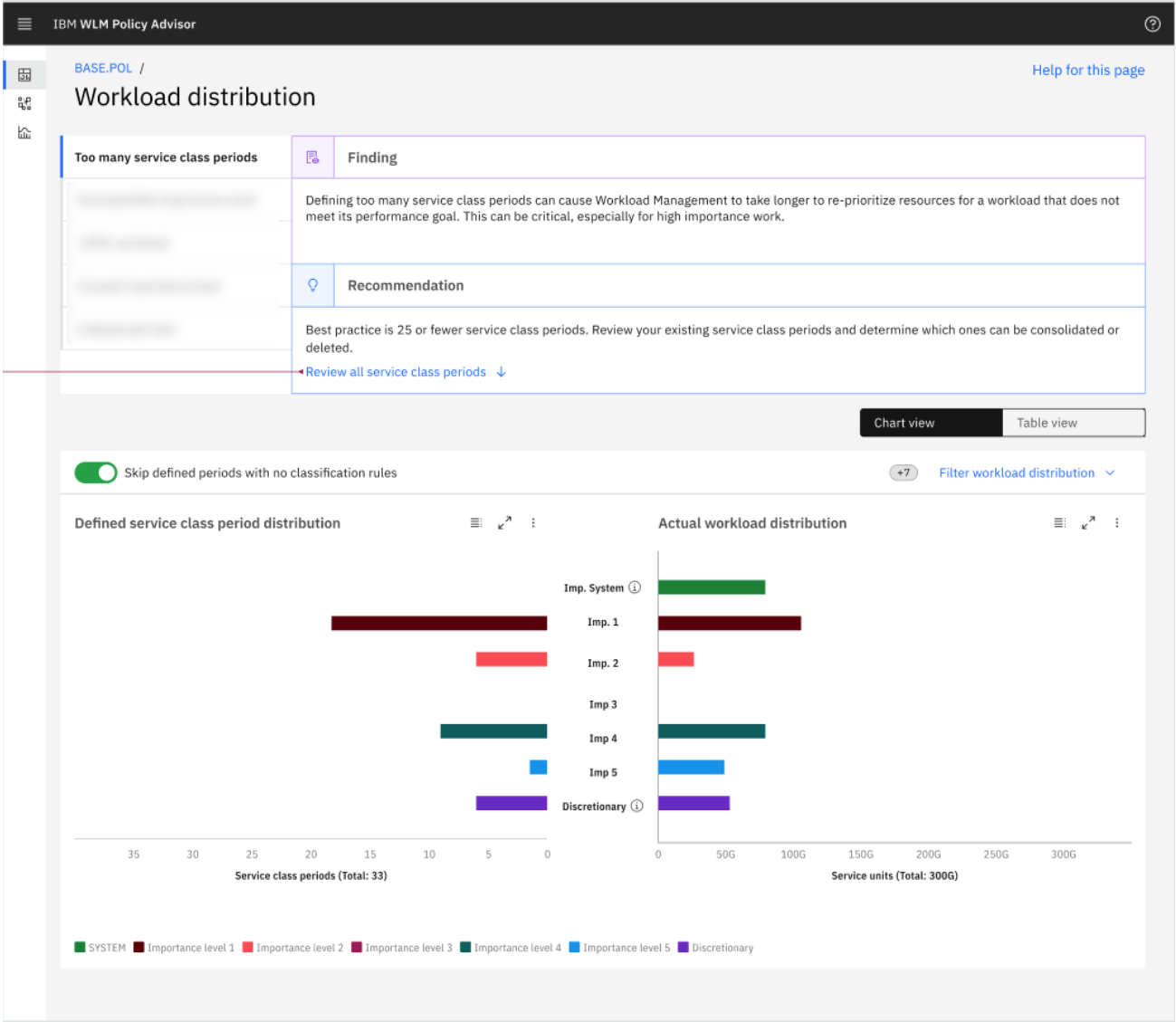
- On the Importance panel of the Policy Advisor, examine the distribution of service class periods and workload across importance levels displayed as chart or table.

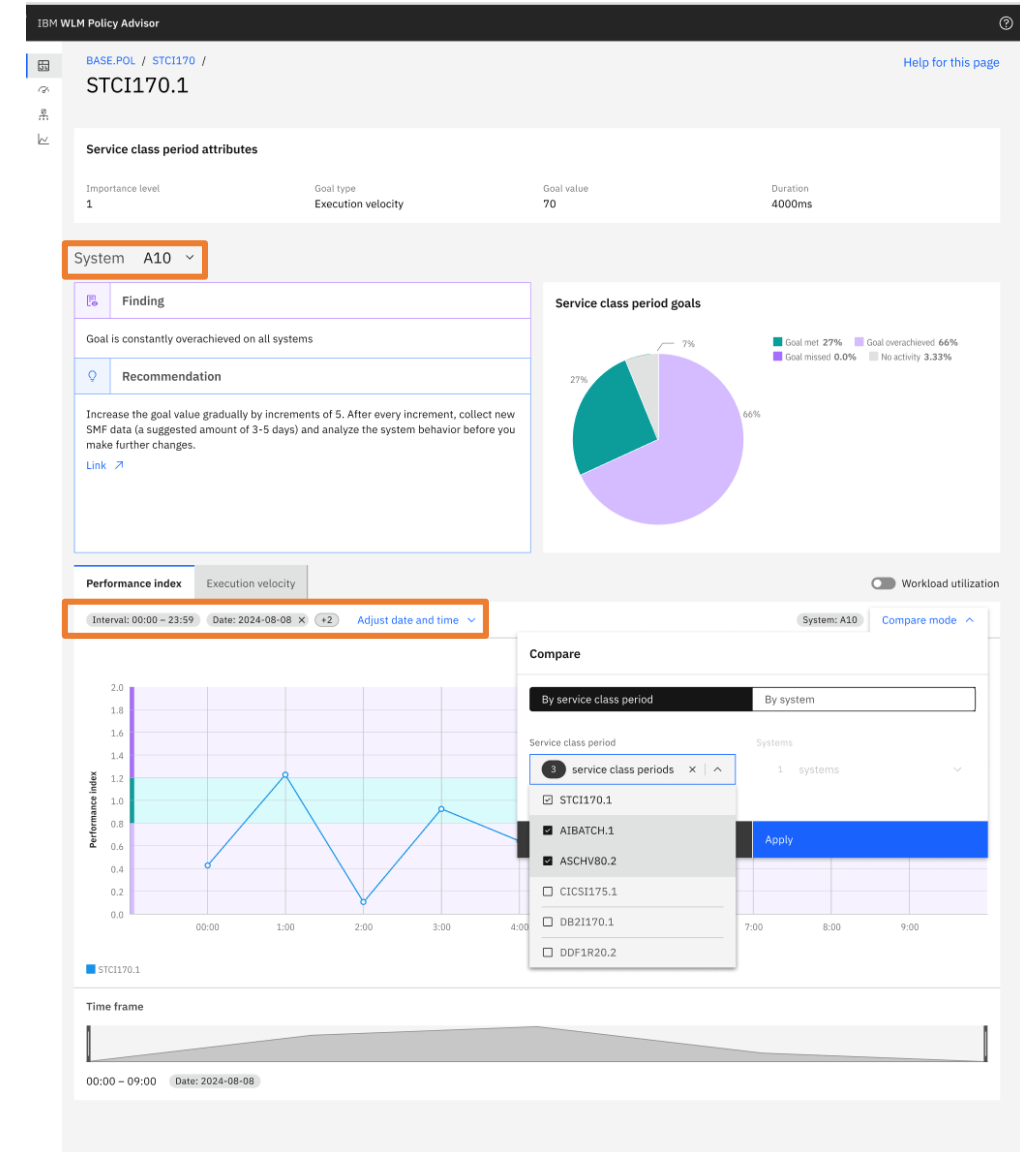- Select an importance level to show the workload distribution across service class periods on that level.
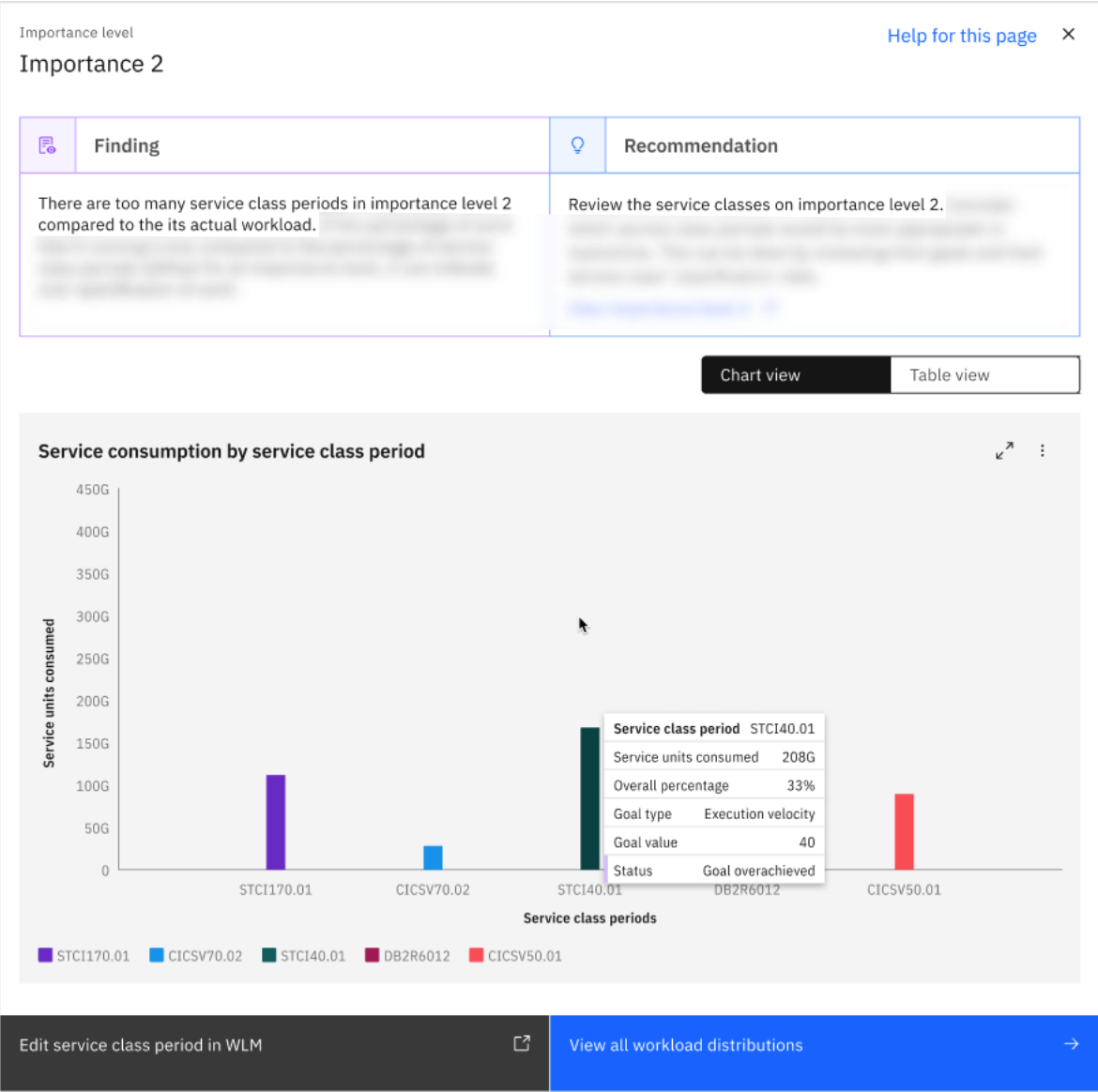
- On the service class period details panel, examine individual service class periods and their performance.

- Filter by systems or days to get detailed insights into goal fulfillment for different goal types on interval level.

Usage & Invocation: Service class period details (2 of 2)

- Compare how your service class period performs:
  - on other systems
  - against other service class periods on the same system
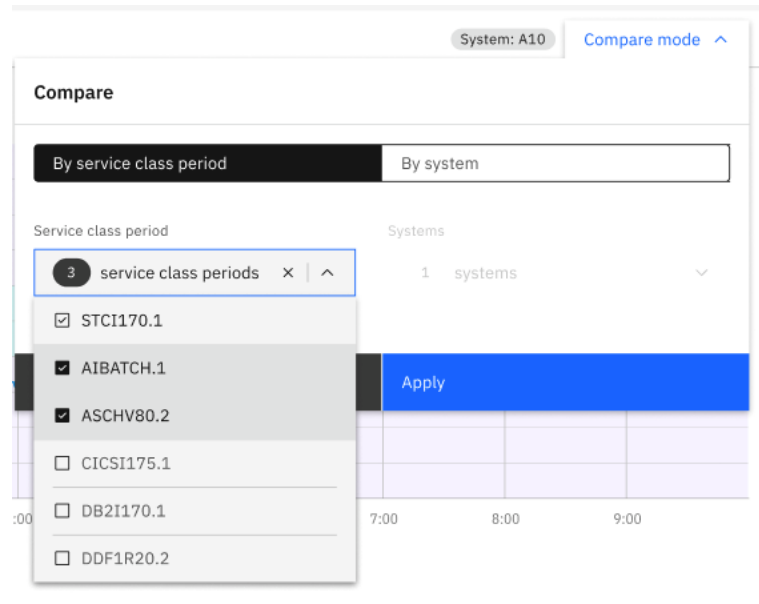
- Shows finding and recommendation next to each other.

- Recommendations can contain simple best practices or a step-by-step guide of what else need to be checked before concluding.

- Multiple findings are divided into tabs.

Interactions & Dependencies

- Software Dependencies
  - None

- Hardware Dependencies
  - None

- Exploiters
  - None

Upgrade & Coexistence Considerations

- To exploit this solution, all systems in the Plex must be at the new z/OS level: No

Installation & Configuration

- None

Summary

- "z/OSMF WLM Policy Advisor enhancements" has been introduced.

- It showcases the new workflow for loading SMF performance data and the new overview page as a place for all the findings and recommendations.

- Adds new best practices and findings.

- Several improvements made to the UI and user experience for an easier understanding and interaction.

- This functionality can be invoked from the z/OSMF Workload Management task and examines the selected WLM service definition.

- It helps a z/OS system programmer to analyze the quality of a WLM policy based on key SMF 72 performance data.

Appendix

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