

Version 25



Trapeze

Enterprise Asset Management

Performance Analysis Replacement Modeling

Administrator Guide

Trade Secret | February 2025

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Technical Support

Trapeze provides several ways to connect with the Customer Care team. Please provide detailed information to the representative. If you are reporting an issue by e-mail, include any error messages, screen shots of your problem, and steps to replicate the issue.

Customer Care is available Monday through Friday, 8:00 a.m. to 8:00 p.m., Eastern Standard Time.

Toll-Free Telephone: 1-877-411-8727

E-mail: cc@trapezegroup.com

FTP Site: <https://ftps.trapezegroup.com/>

Web Site: <https://collaborate.trapezegroup.com>

The website provides access to Trapeze Collaborate which offers resources to implement and operate the software, search knowledge, participate in communities, log/track service requests, sign-up for release alerts, view product health recommendations, and download updates or documentation. For secure access to Collaborate, contact Customer Care through the website or by calling the number above.

Product Compatibility

Refer to the latest [Product Compatibility](#) information on Trapeze Collaborate for requirements including operating system information, databases, Crystal reports, network protocol, HTTP servers and browsers that are supported.

Replacement Modeling: Performance Analysis - Administrator Guide

Version 25.x
February 2025

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1. Overview

The Replacement Modeling: Performance Analysis Module is designed as an easy to use, browser-based interface for creating replacement and performance analysis runs. It allows organizations to analyze the performance of vehicles compared to others in the same category. After analyzing the vehicles in a run, the status of the run can be changed to REPLACEMENT, so the run can then be viewed in the Asset Replacement Analysis Module.



Component equipment units are analyzed the same as any other equipment unit, based on the repair costs charged directly against the component unit. There are no limits on asset type for being able to analyze and score the data. The important distinction is that any equipment (component or otherwise) is analyzed based on its own costs and its own usage.

Requirements

Application 25.x

Web Modules 25.x

Assumptions

This guide assumes familiarity with workflows and configuration of the application.



User defined required fields that do not appear in the Web Modules will return validation messages.



Special characters cannot be placed into the Web Modules fields or unanticipated results may occur. This would include any character that cannot be typed with a standard keyboard.



Do not use the browser's **Back** button in the Web Modules as unanticipated results may occur.



Do not open or use the same instance of the web portals in multiple browser windows or tabs. This can cause errors or unexpected performance issues.

2. Install/Upgrade Performance Analysis

Please refer to the *Administrator Guide – Install/Upgrade Steps and Configuration, Adding Modules and Tabs* sections for instructions on installing and upgrading Web Modules.

3. Add an Asset Performance Analysis Tab to Web Modules

Once you have installed the Replacement Modeling: Performance Analysis module, you need to add a tab to your Web Modules installation for the Performance Analysis Module definition to make the functions of Asset Performance Analysis available to Web Modules users.

Please refer to the *Administrator Guide, Web Modules Configuration – Adding Modules and Tabs* section for detailed instructions on adding new tabs and configuring security access for those tabs.

After you have added the Performance Analysis tab, be sure to exit your browser and open a new browser window prior to using the tab to enter Performance Analysis.

- ✓ On the **Fleet Equipment** screen, **Authorization** tab, you may restrict equipment units from analysis with the **Exclude from replacement analysis modeling** flag as shown in the screenshot below.

The screenshot shows the 'Authorization' tab in the Fleet Equipment screen. It contains several checkboxes and input fields. The checkbox 'Exclude from replacement analysis modeling' is highlighted with a red circle. Other checkboxes include 'Work orders', 'Usage tickets', 'Fuel tickets', 'Off road use', 'Test equipment', 'Exclude from cost reports', 'Exclude from exception reports', 'Exclude from inventory lists', 'Track meter 1 of parent equipment unit', and 'Show in work management map'. Input fields are provided for 'Fuel card ID', 'Fuel card PIN', 'Off road pct', and 'Work order approval level'.

4. Understanding the Module

1. Open the Performance Analysis portal tab.

The initial Performance Analysis page appears.

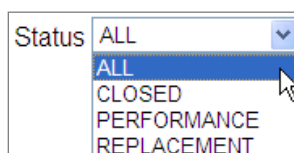
Performance Analysis
Analysis Runs: 5

Status: ALL

		Run ID	Description
View	Run Analysis	PAT	
View	Run Analysis	RA TEST RUN	
View	Run Analysis	TEST RUN 3	TEST RUN 3 DESCRIPTION
View	Run Analysis	AARONS RUN	AARONS RUN
View	Run Analysis	CBQA	TEST

This page lists the Performance Runs and includes the run ID, description, and status.

2. Filter the list by selecting a specific status from the drop-down.



3. You may also manage and view performance runs as well as run analysis from this page. The following sections outline how to use the Performance Analysis Module.

Manage Performance Runs

1. On the main Performance Analysis page, click **Manage Performance Runs**.

Performance Analysis
Analysis Runs: 5

Status: ALL

		Run ID	Description
View	Run Analysis	PAT	
View	Run Analysis	RA TEST RUN	
View	Run Analysis	TEST RUN 3	TEST RUN 3 DESCRIPTION
View	Run Analysis	AARONS RUN	AARONS RUN
View	Run Analysis	CBQA	TEST

You are taken to the Performance Runs page.

Performance Runs				
		Run ID	Description	Status
Edit		PAT		PERFORMANCE
Edit		RA TEST RUN		PERFORMANCE
Edit		TEST RUN 3	TEST RUN 3 DESCRIPTION	REPLACEMENT
Edit		AARONS RUN	AARONS RUN	REPLACEMENT
Edit		CBQA	TEST	PERFORMANCE

< >

What do you want to do?

Back Category List Model List Add Performance Run

2. You can then perform the following functions on the Performance Runs page.

- Edit an existing performance run.
- Create new performance runs.
- Open the Category and Model Lists.

Refer to the [Edit a Category](#), [Add a Category](#), and [Edit a Model](#) sections below for details regarding these lists.

Edit a Performance Run

Follow the steps below to edit a performance run.

1. On the Performance Runs page, click an **Edit** link to edit a specific performance run.

Performance Runs				
		Run ID	Description	Status
Edit		PAT		PERFORMANCE
Edit		RA TEST RUN		PERFORMANCE
Edit		TEST RUN 3	TEST RUN 3 DESCRIPTION	REPLACEMENT
Edit		AARONS RUN	AARONS RUN	REPLACEMENT
Edit		CBQA	TEST	PERFORMANCE

< >

What do you want to do?

Back Category List Model List Add Performance Run

The Performance Run ID page displays.

Performance Analysis

Run ID: RA TEST RUN

Model ID: RA TEST MODEL ... Edit Model

Description:

Status: PERFORMANCE ▾

Comment:

Save Delete Run Analysis View Analysis

Back

- If you need to make changes to the model ID, click the **Edit Model** button. See the [Edit a Model](#) section below for details about editing models.
- Make additional changes to the description, status, or comments as desired.
- Click **Save** to save your entries.
- Click **Delete** to delete the run. If it is deleted, and there are analysis results associated with the run, the **View Analysis** button is enabled. When you click **View Analysis**, the results page is displayed.
- Click **Run Analysis** to perform the analysis based on the new data or click the **View Analysis** button to see the data that is currently in the database for the Run ID.

*After clicking either the **Run Analysis** or the **View Analysis** button, you are taken to the Performance Analysis page.*

Performance Analysis

Run

Run ID: RA TEST RUN Description:

Model ID: RA TEST MODEL Status: PERFORMANCE

Edit Run Normal ▾ Run Export

Equipment Scores: 2

Category: ALL ▾

Equipment ID	Category ID	Total	Age	Capital	Condition	Fuel Used	Maint Cost	Score
AUTO001	RA TEST CAT	123.47	0.00	0.00	189.13	199.89	164.31	
AUTO002	RA TEST CAT	26.53	0.00	0.00	10.87	0.11	35.69	

Back

This page shows the results created by the equipment that match the Equipment Criteria for all Categories listed in the Model for the run. The results can be filtered by category. The results displayed are the scores for the equipment that were calculated during the run. They are sorted by the Total Score in descending order, because a higher score

means the equipment is not performing as well as the other equipment in the same category and is more likely a candidate for replacement.

- To display details about a particular Equipment ID, hover over an equipment row.

The totals and averages for the category that equipment is under are displayed.

The screenshot shows the 'Performance Analysis' window. At the top, there's a 'Run' section with fields for 'Run ID', 'RA TEST RUN', 'Description', 'Model ID', 'RA TEST MODEL', 'Status', and 'PERFORMANCE'. Below this are buttons for 'Edit Run', a dropdown menu set to 'Normal', and buttons for 'Run' and 'Export'. The main section is titled 'Equipment Scores: 2' and includes a 'Category' dropdown set to 'ALL'. Below this is a table with columns: Equipment ID, Category ID, Total, Age, Capital, Condition, Fuel Used, Maint Cost, and Sho. The table lists two equipment IDs: AUTO001 and AUTO002. A tooltip is visible over the AUTO001 row, titled 'Equipment ID: AUTO001 - Totals and Averages'. This tooltip contains a table with the following data:

Totals and Averages	
Months In Service	0/0.00 AVG.
Condition Rank	87/46.00 AVG.
Shop Downtime Hours	11831.28/10021.36 AVG.
Oil Consumption	0.00/0.00 AVG.
Maintenance Cost per Usage	0.74/2.44 AVG.
Cost Capital	0.00/0.00 AVG.
Fuel Consumption	1626.70/813.80 AVG.
User Downtime Hours	0.00/0.00 AVG.
Breakdowns per Month	0/0.00 AVG.
Fuel per Usage	0.03/0.02 AVG.
Equipment Capital	0.00/0.00 AVG.
Maintenance Cost	35109.98/21368.28 AVG.
Cost per Usage	0.74/2.44 AVG.
Life Total Meter 1	47288/24564.00 AVG.

At the bottom of the window is a 'Back' button.

- Select **Regenerate** from the drop-down list and then click **Run** to rerun results where historical data may have changed.

This screenshot shows the 'Performance Analysis' window with the 'RA TEST MODEL' dropdown menu open. The 'Regenerate' option is highlighted with a red circle. The 'Run' button is also visible next to it.

- Click the **Edit Run** button to go back and edit the run.
- Click the **Run** button to rerun the analysis.
- Click the **Export** button to export the data to a Comma Separated Value (CSV) file.

The Export button sends all the data for the equipment record along with the scores and the average for the category that the equipment is associated with to the CSV file.

Add a Performance or Replacement Run

To add a performance or replacement run:

1. On the Performance Runs page, click the **Add Performance Run** button.

Performance Runs

	Run ID	Description	
Edit	PAT		PERFORMANCE
Edit	RA TEST RUN		PERFORMANCE
Edit	TEST RUN 3	TEST RUN 3 DESCRIPTION	REPLACEMENT
Edit	AARONS RUN	AARONS RUN	REPLACEMENT
Edit	CBQA	TEST	PERFORMANCE

< What do you want to do?

Back Category List Model List **Add Performance Run**

You are taken to a blank Run ID page.

Performance Analysis

Run ID

Model ID ...

Description

Status

Comment

2. Enter a **Run ID**.
3. Enter a **Model ID**, click the **Search** button to find a Model ID, or click the **Edit Model** button to create a new Model Definition. Refer to the [Edit a Model](#) section below for details about editing models.
4. Enter a **Description**.
5. Select a **Status** from the drop-down.

Performance Analysis

Run ID:

Model ID: ...

Description:

Status: CLOSED
PERFORMANCE
REPLACEMENT

Comment:

6. Enter **Comments**, if desired, and click **Save** to save the new Performance Run.

*The page returns with a **Save**, **Delete**, and **Run Analysis** buttons.*

7. Click the **Run Analysis** button to run the Performance or Replacement Analysis.

You are taken to the Performance Analysis page for the newly created run.

Edit a Category

To edit a category:

1. On the Performance Runs page, click **Category List**.

Performance Runs

	Run ID	Description	Status
Edit	PAT		PERFORMANCE
Edit	RA TEST RUN		PERFORMANCE
Edit	TEST RUN 3	TEST RUN 3 DESCRIPTION	REPLACEMENT
Edit	AARONS RUN	AARONS RUN	REPLACEMENT
Edit	CBQA	TEST	PERFORMANCE

What do you want to do?

You are taken to the Performance Categories page that lists all performance categories.

Performance Categories

	Category ID	Description
Edit	RA TEST CAT	TEST
Edit	F	
Edit	A	
Edit	D	
Edit	G	
Edit	H	
Edit	CQ310	CQ310 RAIL CARS
Edit	E	
Edit	B	
Edit	C	

2. Click the **Edit** link to the left of each category to open an existing category for editing.

You are taken to the specific Performance Category page.

Performance Category

Category ID

RA TEST CAT

Description

TEST

Estimated Replace Cost

0.00

Expected Life (months)

0

Expected Life Meter 1

0

Expected Life Meter 2

0

Inflation Factor

0.00

Save

Test

Delete

Equipment Criteria

	Criteria Item	Criteria value
Remove	EQUIPMENT ID	AUTO001
Remove	EQUIPMENT ID	AUTO002

Criteria Item

ACCOUNT ID

Add Criteria

Back

Model List

- Complete the fields as desired and click **Save** to save your entries.
- Click **Test** to verify that it returns information.

Performance Category

Category ID

RA TEST CAT

Description

TEST

Estimated Replace Cost

0.00

Expected Life (months)

0

Expected Life Meter 1

0

Expected Life Meter 2

0

Inflation Factor

0.00

Save

Test

Delete

Equipment Criteria

	Criteria Item	Criteria value
--	---------------	----------------

A message displays how many assets match the criteria.

Performance Category

⚠ There are 2 assets that match these criteria items

To add or remove Equipment Criteria, refer to the [Add Criteria](#) and [Remove Criteria](#) sections below.

Create a Category

To add a category:

1. On the Performance Runs page, click the **Add Category** button.

The screenshot shows a table titled "Performance Categories" with columns "Category ID" and "Description". The table contains several rows of data, including "RA TEST CAT", "F", "A", "D", "G", "H", "CQ310", "E", and "B". Below the table, there are two buttons: "Back" and "Add Category". The "Add Category" button is circled in red.

You are taken to a blank Performance Category page.

The screenshot shows a form titled "Performance Category". It has input fields for "Category ID", "Description", "Estimated Replace Cost", "Expected Life (months)", "Expected Life Meter 1", "Expected Life Meter 2", and "Inflation Factor". There are "Save" and "Test" buttons. Below this is a section titled "Equipment Criteria" which contains a "Criteria Item" dropdown menu (currently showing "ACCOUNT ID") and an "Add Criteria" button. At the bottom, there are "Back" and "Model List" buttons.

2. Complete the fields and click **Save** to save your entries.

*The page returns with a new **Delete** button and an empty Equipment Criteria section.*

The next section outlines how to add equipment criteria to the performance category.

Add Criteria

To add equipment criteria to the performance category:

1. Select the **Criteria Item** from the drop-down.
2. Enter a criteria value in the field on the right of the **Criteria Item** field.
3. Click **Add Criteria** to add the criteria to the performance category.

Performance Category

Category ID:
 Description:
 Estimated Replace Cost: Expected Life (months):
 Expected Life Meter 1: Expected Life Meter 2:
 Inflation Factor:

Equipment Criteria

Criteria Item	Criteria value
Criteria Item: ACCOUNT ID	Add Criteria

The criteria displays in the Equipment Criteria list.

Equipment Criteria

Criteria Item	Criteria value
Remove MODEL YEAR	2016

- Click **Save** to save the criteria to the performance category.
- Click **Test** to see how many assets match the criteria.

Expected Life Meter 1: Expected Life Meter 2:
 Inflation Factor:

Equipment Criteria

Criteria Item	Criteria value
Remove MODEL YEAR	2016

A message displays how many assets match the criteria.

Performance Category

⚠ There are 2 assets that match these criteria items

Category ID:
 Description:
 Estimated Replace Cost: Expected Life (months):
 Expected Life Meter 1: Expected Life Meter 2:
 Inflation Factor:

Equipment Criteria

Criteria Item	Criteria value
Remove MODEL YEAR	2016

Remove Criteria

To remove Equipment Criteria from the Performance Category:



Note: Be sure the criterion has been saved prior to removing it from the list.

1. Click the **Remove** button next to the criteria to be removed.

The screenshot shows a window titled "Equipment Criteria". Inside is a table with two columns: "Criteria Item" and "Criteria value". There are two rows of data. The first row has "EQUIPMENT ID" and "AUTO001". The second row has "EQUIPMENT ID" and "AUTO002". To the left of each row is a "Remove" button. Both "Remove" buttons are circled in red. Below the table is a form with a dropdown menu labeled "Criteria Item" showing "ACCOUNT ID", an empty text field, and an "Add Criteria" button.

	Criteria Item	Criteria value
Remove	EQUIPMENT ID	AUTO001
Remove	EQUIPMENT ID	AUTO002

Criteria Item: ACCOUNT ID [v] [] Add Criteria

An x displays next to the criteria to be removed.

The screenshot shows the same "Equipment Criteria" window. The first row now has a red circle with an "x" inside next to it, indicating it is marked for removal. The "Remove" buttons are still present. The second row remains unchanged.

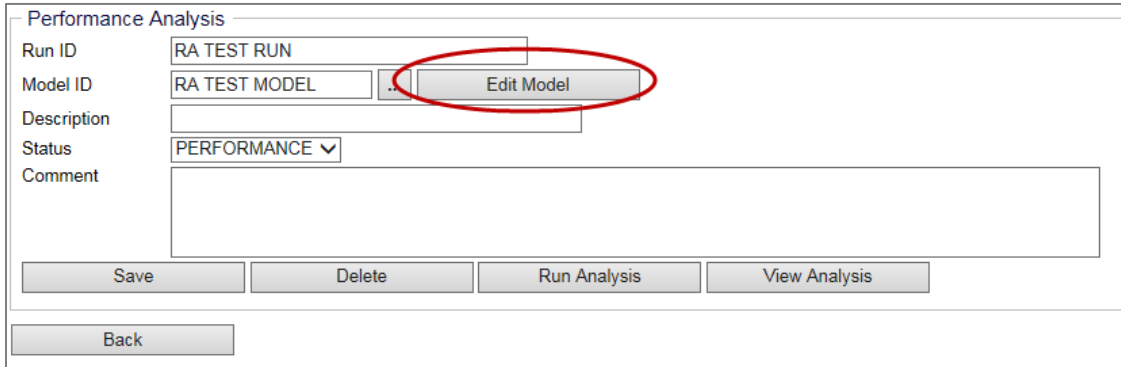
	Criteria Item	Criteria value
Remove	EQUIPMENT ID	AUTO001
Remove	EQUIPMENT ID	AUTO002

2. Click the **Save** button.

The item no longer displays in the list.

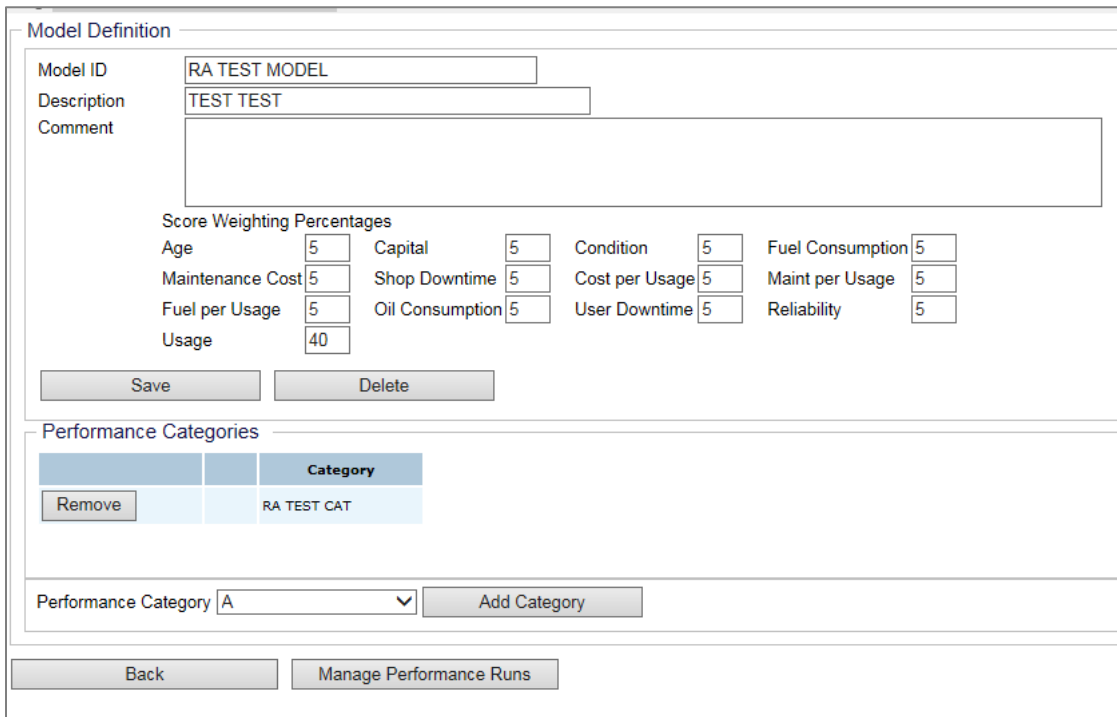
Edit a Model

1. On the Performance Analysis page, click the **Edit Model** button to open the Model Definition page.



The screenshot shows the 'Performance Analysis' page. It contains fields for 'Run ID' (RA TEST RUN), 'Model ID' (RA TEST MODEL), 'Description', 'Status' (PERFORMANCE), and 'Comment'. Below these fields are buttons for 'Save', 'Delete', 'Run Analysis', and 'View Analysis'. At the bottom is a 'Back' button. The 'Edit Model' button, located next to the 'Model ID' field, is circled in red.

The Model Definition page displays.



The screenshot shows the 'Model Definition' page. It contains fields for 'Model ID' (RA TEST MODEL), 'Description' (TEST TEST), and 'Comment'. Below these fields is a section for 'Score Weighting Percentages' with input fields for Age (5), Capital (5), Condition (5), Fuel Consumption (5), Maintenance Cost (5), Shop Downtime (5), Cost per Usage (5), Maint per Usage (5), Fuel per Usage (5), Oil Consumption (5), User Downtime (5), Reliability (5), and Usage (40). Below this section are 'Save' and 'Delete' buttons. The 'Performance Categories' section shows a table with a 'Category' column and a 'Remove' button. The table contains one row with the category 'RA TEST CAT'. Below the table is a 'Performance Category' dropdown menu set to 'A' and an 'Add Category' button. At the bottom are 'Back' and 'Manage Performance Runs' buttons.

2. On this page, edit the Model description, comments, and score weighting percentages as needed. The Score Weighting Percentages must add to 100.
3. After making edits, click **Save** to save your entries.
4. Click **Delete** to delete the model.

Continue to the next section for information about the Performance Categories portion of the page.

Add a Performance Category to a Model Definition

The bottom half of the Model Definition page lists the performance categories for the Model Definition.

To add a performance category to a model definition:

1. Select the desired performance category from the drop-down list and click the **Add Category** button.

The new category is added to the list.

	Category
Remove	RA TEST CAT
Remove	BS-MULTICLASS

2. Click **Save** to save the category in the system.

Remove a Category from a Model Definition

Follow the steps below to remove a performance category from the model definition.



Note: Make sure the category has been saved to the model definition prior to removing it.

1. Click the **Remove** button next to the category to be removed.

	Category
Remove	RA TEST CAT
Remove	BS-MULTICLASS

An x is placed in the column next to the category.

Performance Categories		
		Category
Remove		RA TEST CAT
Remove	X	BS-MULTICLASS

2. Click **Save**.

The performance category no longer displays in the list.



To remove more than one category at a time, click the **Remove** button for the other categories.

3. Finally, click **Save** again to save your removals.
4. Click **Back** to go to the Performance Run ID page.
5. Click **Manage Performance Runs** to go to the Performance Runs page.