

Version 25



Trapeze

Enterprise Asset Management

Asset Configuration Management

Administrator & User 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.

Asset Configuration Management - Administrator and User Guide

Version 25.x

February 2025

Contents

1. Overview.....	1
Requirements.....	1
Assumptions	1
ACM Process Setup Overview.....	2
2. Configuring ACM Screens.....	3
ACM: Models and Model Components Screens.....	3
ACM: Compliance Screen	5
ACM: Model Copy Screen	7
3. Configuring the ACM Portal	8
4. Gadgets in the ACM Portal	10
Gadget Settings	10
Available Gadgets	10
Single Instance Gadgets	11
Configuration Models Gadget.....	11
Model Compliance Gadget.....	11
Multiple-instance Gadgets	12
Ad hoc Query.....	12
Metrics.....	12
URL.....	13
5. Using the ACM Portal	14
ACM Main Page	14
Current Location Drop-down List.....	14
Layout.....	14
Refresh.....	14
New Configuration Model.....	14
Asset Search	17
Model Compliance Page	17
Model Compliance	17
Assets.....	18
Action for checked items	20
Asset Detail Page.....	22

Compliance Errors	25
Components	26
Attributes	27
Model Detail Page	27
Approve/Deny Model.....	28
Configuration Model Detail	28
Component Definitions.....	30
Component Relationships	30
Attributes	31
Serialized Parts.....	31
Files.....	31
Responsible Locations	31
Retire Model	31

1. Overview

Asset Configuration Management is the ability to specify the ideal configuration for an asset including the components, parts, and attributes, then use that configuration to validate or check if associated assets meet the expected configuration. These asset configurations are known as models within the system. Models are built, edited, and configured in the Asset Configuration Management Portal which requires a separate license to access.

Asset Configuration Management allows you to:

- Ensure that assets are operating within their pre-defined operating parameters.
- Perform any maintenance or follow-up action to get the asset back within its operating parameters.

Terminology	Definition
ACM	Asset Configuration Management
Model	Model configuration for an asset
Model Component	Represents an expected component in the model
Compliance	Process of verifying that assets comply with the model configuration

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 as unanticipated results may occur.
- ❗ Do not open or use the same instance of the Web Modules in multiple browser windows or tabs. This can cause errors or unexpected performance issues.

ACM Process Setup Overview

The following are high-level steps for initial setup and configuration of the Asset Configuration Management process.

1. Install ACM licenses into Web Modules environment.
2. Set up required screen rights and information for ACM.



Note: Models will be tied to maintenance class.

3. Create custom ACM Statuses as desired or use out-of-box ACM Statuses.



Note: Must load optional LACMMModelStatuses.sql to get out-of-box statuses.

4. Set options on the Asset Configuration Management - Options - Configuration screen.
5. Create ACM Module in web environment.
6. Configure options for ACM Portal.
7. Configure layout for ACM Portal.

Once the screens and portal have been set up, you can do the following:

- Create and configure models.
- Run compliance from those models.
- Create associated work from those model compliance runs.
- View an asset to look at more detailed asset and component tree compliance status and errors.

2. Configuring ACM Screens

The following information is for setup of Asset Configuration Management through Enterprise Portal which is usually performed by a system administrator. These screens are only accessible if the ACM module is licensed for your system. Please contact customer care or your sales representative for licensing information.

The following Enterprise Portal Screens are available for setup and configuration of ACM:

- Asset Configuration Management - Models
- Asset Configuration Management - Model Components
- Asset Configuration Management - Model Statuses
- Asset Configuration Management - Model Copy
- Asset Configuration Management - Compliance
- Asset Configuration Management - Options
- Asset Configuration Management - Model Associated Work

ACM: Models and Model Components Screens

ACM Models are used to represent a configuration for an asset that includes the components, attributes, and serialized parts expected to be present to be in compliance with the model. In the application there are two screens that are used to define a configuration model: ACM – Model Screen and ACM – Model Component screen.

Asset Configuration Management - Models

Search Reload Sort Select Filter Select Sort New Copy Delete Edit

Row #	Model ID	Version number	Description

Model ID: [13] Model unique ID: 13

Version number: []

Basic Info

Description: []

Model status ID: []

Equipment class for maintenance: []

Created: [] Date and time: [] Employee ID: []

Activated: []

Closed: []

Approved at: [] by employee ID: []

Notification template: []

Notification status: []

The ACM - Model screen is used to define the base model, component definitions, component relationships, serialized parts, attributes and other information for the base model record.

- Component definitions define components that can be used anywhere in the model (including the model components).
- Component relationships define the expected components attached to the primary asset of the model.
- Serialized Parts are used to define expected serialized parts (non-component) that are required to be installed or present in the model configuration.
- Attributes are used to define expected additional custom data points that are required to be associated with the model configuration.

The ACM Model - Component screen is used to define an individual component of the model, its component relationships, serialized parts, attributes and other information pertaining to that specific component for the model.

The models are ultimately used to build out a structure of expected components and details required for those components. This structure provides the basis to determine if a particular asset is in compliance with the expected components and details.

ACM: Compliance Screen

The screenshot shows the 'Asset Configuration Management - Compliance' screen. At the top, there's a header bar. Below it is a toolbar with icons for Search, Reload, Sort, Select Filter, Select Sort, New, Copy, Delete, and Edit. A table header is visible with columns: Row #, Run ID, Model ID, Version number, Model unique ID, and Model status ID. On the left, there's a sidebar with tabs for 'Basic Info', 'Results', and 'Compliance Errors'. The 'Basic Info' tab is selected, showing a form with input fields for Model ID, Version number, Model unique ID, Model status ID, and Equipment ID. There's also a search icon next to the Equipment ID field.

The ACM Compliance screen allows model information and an asset to be entered to check if the asset meets the expected configuration for the model. Models can be in any state other than CLOSED to check an asset's compliance to that specified model. Additionally, if the model is ACTIVE the results will be stored and will contain high-level compliance results for the latest active check of the asset.

Compliance runs for modules provide real-time checking of maintenance activities. If an assets changes status to in-service, it will check compliance for active models. Non-service errors will produce a warning and allow the user to continue. Service errors will validate when attempting to put an asset into service and display a compliance error.

The following table is a list of errors and their descriptions.

Compliance Error Code	Description
2674	Missing component
2675	Child components have compliance errors
2677	Serialized part missing
2678	Serialized part insufficient quantity installed
2679	Attribute missing
2680	Attribute text mismatch
2681	Attribute value is outside of minimum and maximum range
2682	Attribute missing

Compliance Error Code	Description
2684	Component position is not supported
2685	Serialized part position is not supported.

Compliance Checks:

- Model component expects that the asset has a component with a matching maintenance class that is installed at the specified position.
 - Components found with matching class but without matching the position will report 2684.
- Model reports a generic message when any of the child components have errors.
- Serialized part compliance checks that the asset (or component) has the specified number of serialized parts installed at the position.
 - Part suffix is not critical. A new, rebuilt, or used suffix installed for the part id-position will fulfill the requirement.
 - If there are some parts, but not enough to meet the required quantity, Error 2678 will display.
 - Part ID-suffix installed that matches model serialized part but is in a position not listed will report error 2685.
- Attribute compliance checks can be set up to ensure the following:
 - An attribute is present
 - An attribute of input type text matches the specified text value for the model
 - An attribute of input type date requires that a date has been entered for a specific attribute.
 - An attribute of numeric falls within the minimum or maximum range for a given component.
 - Example: Attribute can be used to track that a Firmware Version is at least at minimum revision 3.0 for the related component.

ACM: Model Copy Screen

Asset Configuration Management - Model Copy

Search Reload Sort Select Filter Select Sort New Copy Delete Edit

Copy Asset Configuration Models

Basic Info

Source

Model ID

Version number

Model unique ID

New

Model ID

Version number

Model unique ID

Model status ID

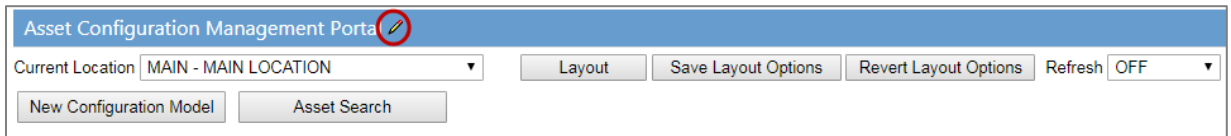
The ACM – Model Copy screen allows you to make copies of existing models by entering the Source model information and the New Model information and clicking **Save**.

3. Configuring the ACM Portal

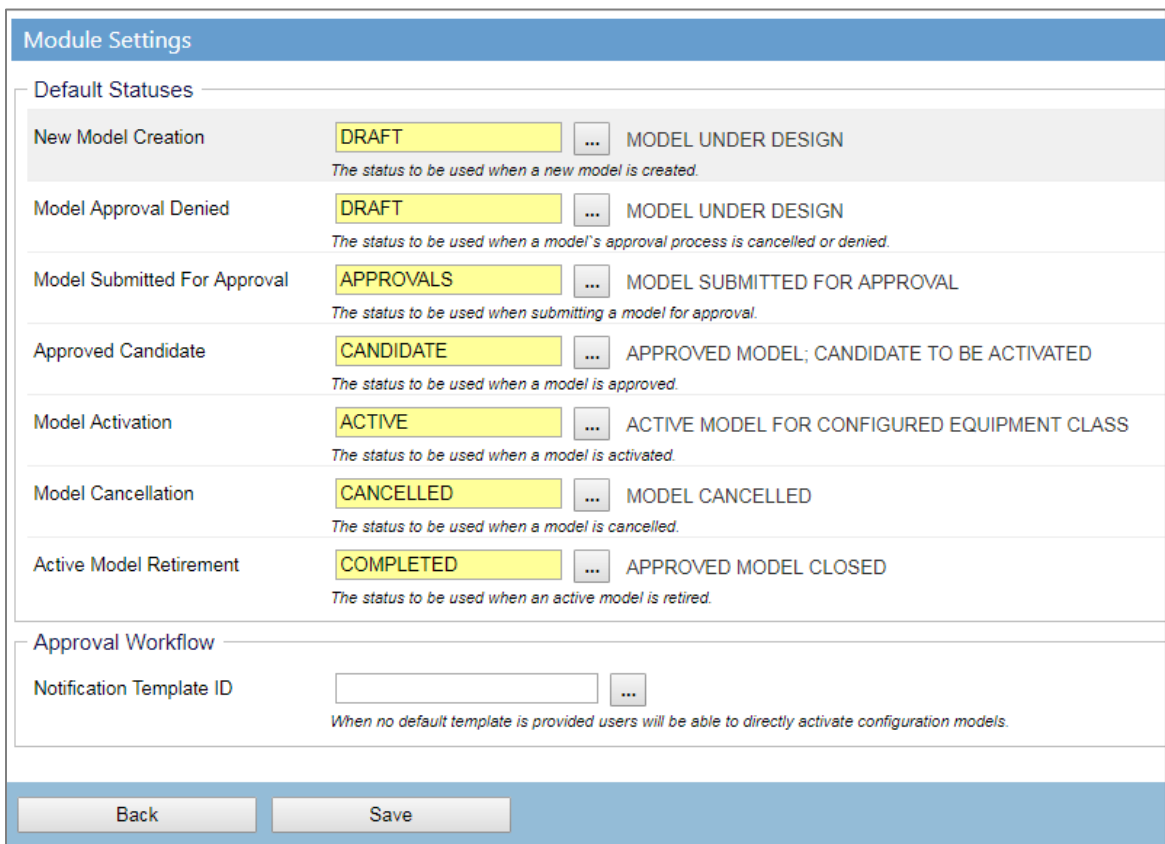
Once you have added the Asset Configuration Management Portal tab to Web Modules, log in to Web Modules as an Administrator and click on the Asset Configuration Management portal tab.

To configure the Asset Configuration Management Portal settings:

1. Click the edit pencil icon next to the Asset Configuration Management Portal title bar.



The Asset Configuration Management Portal Module Settings page displays.



Module Settings			
Default Statuses			
New Model Creation	DRAFT	...	MODEL UNDER DESIGN The status to be used when a new model is created.
Model Approval Denied	DRAFT	...	MODEL UNDER DESIGN The status to be used when a model's approval process is cancelled or denied.
Model Submitted For Approval	APPROVALS	...	MODEL SUBMITTED FOR APPROVAL The status to be used when submitting a model for approval.
Approved Candidate	CANDIDATE	...	APPROVED MODEL; CANDIDATE TO BE ACTIVATED The status to be used when a model is approved.
Model Activation	ACTIVE	...	ACTIVE MODEL FOR CONFIGURED EQUIPMENT CLASS The status to be used when a model is activated.
Model Cancellation	CANCELLED	...	MODEL CANCELLED The status to be used when a model is cancelled.
Active Model Retirement	COMPLETED	...	APPROVED MODEL CLOSED The status to be used when an active model is retired.
Approval Workflow			
Notification Template ID		...	When no default template is provided users will be able to directly activate configuration models.
Back Save			

2. Change the settings as needed. The available settings include the following:

Default Statuses

- New Model Creation:** The status to be used when a new model is created.

- ii. **Model Approval Denied:** The status to be used when a model's approval process is cancelled or denied.
- iii. **Model Submitted for Approval:** The status to be used when submitting a model for approval.
- iv. **Approved Candidate:** The status to be used when a model is approved.
- v. **Model Activation:** The status to be used when a model is activated.
- vi. **Model Cancellation:** The status to be used when a model is cancelled.
- vii. **Active Model Retirement:** the status to be used when an active model is retired.

Approval Workflow

- i. **Notification Template ID:** When no default template is provided users will be able to directly activate configuration models.

4. Gadgets in the ACM Portal

Gadgets are customizable tools that provide data based on user defined filters. A gadget is either single-instance or multiple-instance depending on whether they can have one instance or more per layout.

Gadget Settings

This section only goes over the admin settings for the following gadgets.



To learn more about customizing your gadget layout and standard gadgets, refer to the *General Application Information* guide.

Available Gadgets

- **Single-instance Gadgets:** Gadgets with one instance per layout (location/user).
 - Configuration Models
 - Model Compliance
- **Multiple-instance Gadgets:** Gadgets that can have more than one instance per layout (location/user).
 - Metrics
 - URL
 - Ad hoc Query

Single Instance Gadgets

Configuration Models Gadget

Model ID - Version	Description	Qty Components	Status	
SP-2019-GI-PH - 2.0	CONFIGURATION FOR 2019 GILLIG PHANTOM BUSES	0	ACTIVE - CONFIGURATION IS ACTIVE	2019-GILLIG-PH BUSES
SP-2020-GI-PH - 2.0	CONFIGURATION FOR 2020 GILLIG PHANTOM BUSES	10	DRAFT - UNDER DESIGN	2020-GILLIG-PH BUSES
SP-2020-GI-PH - 1.0	CONFIGURATION FOR 2020 GILLIG PHANTOM BUSES	10	ACTIVE - CONFIGURATION IS ACTIVE	2020-GILLIG-PH BUSES
SP-2021-GI-PH - 2.0	CONFIGURATION FOR 2021 GILLIG PHANTOM BUSES	8	ACTIVE - CONFIGURATION IS ACTIVE	2021-GILLIG-PH BUSES

Showing 4 records

Filters

Location ID: SPO-MAINT

Define Filter Clear Filter

The Configuration Models gadget provides an overview of the models in the system and supports creating, saving, and using filters for the data displayed in the model table.

Model Compliance Gadget

	Run Datetime	Run ID	Is Compliant?	Error Count	Service Error Count	Model ID - Version	Run Model S
☐	31/05/2019 13:07	1	✓	0	0	SP-2019-GI-PH - 2.0	ACTIVE - CONFIGURATION
☐	31/05/2019 13:12	2	✗	9	1	SP-2020-GI-PH - 1.0	ACTIVE - CONFIGURATION

Showing 2 records

Filters

Define Filter Clear Filter

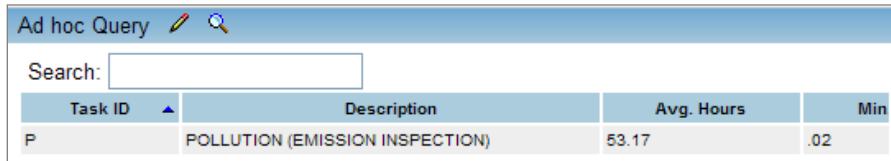
The Model Compliance gadget displays a list of ACM Compliance Runs. It summarizes the results of the run, including when it was run, who ran it, what it was for, and what its results were. From the Model Compliance gadget, the Model Compliance page can be accessed to review the results of compliance runs for a model across associated assets. Assets are associated via the maintenance class of the asset to the model's target maintenance class.

- This page will allow users to see the compliance status for each top-level asset.

- Each asset listed will give critical data points such as number of compliance violations, overall compliance status, and follow-up compliance work.
- Users can then perform several actions to address compliance issues.

Multiple-instance Gadgets

Ad hoc Query

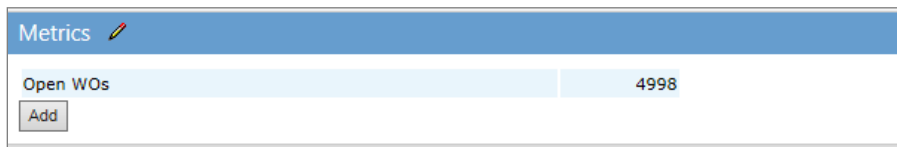


Task ID	Description	Avg. Hours	Min
P	POLLUTION (EMISSION INSPECTION)	53.17	.02

The Ad hoc Query gadget provides flexibility by allowing a saved Ad hoc Query report to be embedded in the gadget. Search and sort functions are included, as well as the ability to launch the report in a separate window.

 Refer to the *Ad Hoc Query Administrator or User Guides* for information about using the Ad Hoc Query module, or the *General Application Information* guide for more information on the Ad hoc Query gadget.

Metrics



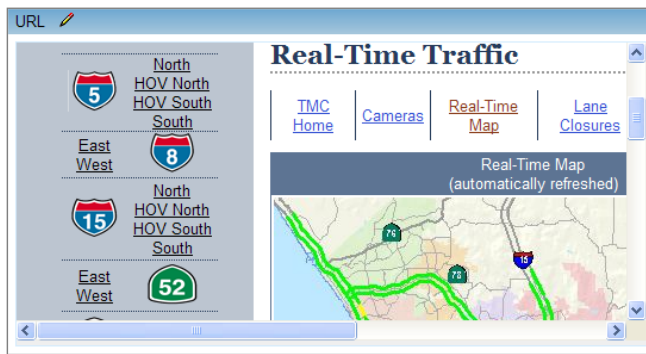
Open WOs	4998
----------	------

Add

The Metrics gadget displays user-defined metrics consisting of a single data value similar to a Dashboard gauge. This gadget uses the same data sources supported by Dashboard module gauges: saved Ad hoc Query reports (with category KPI only), and advanced key performance indicators (KPIs), including ad hoc SQL statements (requires Dashboard module administrator access).

 Refer to the *General Application Information* guide for more information on this gadget.

URL



The URL gadget allows you to embed any URL (images, news feeds, webcams, maps, etc.) into an iFrame.



Refer to the *General Application Information* guide for more information on this gadget.

5. Using the ACM Portal

The Asset Configuration Management Portal front page enables you to select a current working location with options to customize the layout and refresh data. Buttons include **New Configuration Model**, which launches the process to create a new configuration model, and **Asset Search**. The default gadgets include: Configuration Models and Model Compliance.

ACM Main Page

Current Location Drop-down List

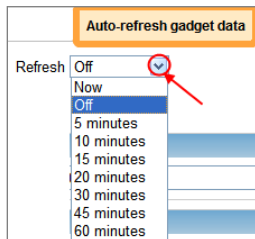
From the **Current Location** drop-down, select the shop in which you would like to view or manage. The location selection updates the current information on the page. The locations that appear in your drop-down selection box are limited based on your system access settings (Supported Locations area on the Employees – Primary Information screen).

Layout

Layout of the ACM portal is controlled with the **Layout**, **Save Layout Options** and **Revert Layout Options** buttons.

Refresh

Select the frequency you want to auto-refresh the gadget data from the drop-down list.



New Configuration Model

Models can be created by clicking the **New Configuration Model** button which collects basic information, creates the model, then launches the detail page for that model.

Creating a New ACM Model

New Configuration Model

Creation Type: New model

Model ID:

Version Number:

Description:

Equipment Class: ...

Reason Code: ...

Responsible Locations: ☒ Supports all locations

1. Create the Model by specifying information on the New Configuration Model pop-in and then clicking **Create**. The Configuration Model Detail will be displayed.

Configuration Model Detail

Model ID: NEW MODEL ID 🔗 Datetime Created: 05/19/2023 12:37 QA-EMP - QA AS

Version No: 32223 Datetime Activated:

Qty Components: 0 Datetime Closed:

Model Status ID: DRAFT

This model is not active.

Basic Info

Description: DESCRIPTION OF NEW MODEL

Equipment Class: RAIL-COMP ... RAIL COMPONENT

Reason Code: ...

Planned Active Date/Time:

Comments **Notes**

2. Add Component Definitions for any components in the Model by clicking the **Add Component Definition** button in the Component Definitions section and entering the details. Click **Save** to apply selections.
3. Define Relationships for the first level of components by clicking the **Define Relationships** button in the Component Relationship Rules section. Enter information by clicking **Add Component Rule** and click **Save** to apply selections.
4. Click on the **Component Name Hyperlink** after clicking save and you will be taken to the Model Component Detail where the next level of sub-components can be defined. Additional layers can be added by clicking the sub-component hyperlinks for each sub-

component created. Additional layers can also be created by expanding and clicking on the name of any component in the relationship from the Model detail page.

Component Definitions

Basic Info

Component Relationships

Component Definitions Add Component Definition

Delete	Name	Equipment Class	Part ID - Suffix	Manufacturer ID	Ma
☐	GEAR UNIT	D2-GEAR-UNIT	...	...	...
☐	BRAKE ASSEMBLY	D2-RC-BRAKE-ASM-MAINT	...	...	...
☐	BRAKE ROTORS	D2-RC-BRAKE-ROTOS	...	...	...
☐	WHEETSETS	D2-RC-WHEEL-SET-MAIN	...	...	...
☐	TRUCKS	D2-RC-TRUCK-MAIN	...	...	...

Showing 5 records

Component Relationships (10) Define Relationships Select action Search

TRUCKS Show More Position FRONT - FRONT Parts 0 Attributes 0

GEAR UNIT Show More Parts 0 Attributes 0

BRAKE ASSEMBLY Show More Parts 0 Attributes 0

BRAKE ROTORS Show More Parts 0 Attributes 0

WHEETSETS Show More Parts 0 Attributes 0

TRUCKS Show More Position BACK - BACK Parts 0 Attributes 0

GEAR UNIT Show More Parts 0 Attributes 0

Click to modify/add sub components

Model Component Detail

Model ID - Version D2 RAIL CAR - 1.0 Component ID 5

Parent Components D2 RAIL CAR - 1.0

Basic Info

Name TRUCKS

Description

Equipment Class D2-RC-TRUCK-MAIN DEMO RAILCAR TRUCK MAINTENANCE

Part ID - Suffix - 0

Manufacturer

Manufacturer Part ID

Comment

Dialog after clicking "Trucks" Link
* Add or modify sub-components

Sub-components Add Component

Delete	Model Component ID	Name	Position	Req for Svc?	Sequence
☐	1	GEAR UNIT	...	☐	10
☐	3	BRAKE ROTORS	...	☐	20

Click Gear Unit to focus in on that level of the tree and to add components to gear unit



If you have two Trucks, clicking in "Truck" and adding components under the Truck will affect all Trucks in the Model Tree to have the same definition of sub-components, attributes, or serialized parts.

Please refer to the [Model Detail Page](#) section for additional information about configuring models.

Asset Search

The Asset Search button allows you to search assets using the Asset Chooser. Upon selecting an asset, you will be redirected to the Asset Detail where details about the asset can be reviewed.

Model Compliance Page

Model Compliance

Model Compliance

Model ID	LINEAR 3-22-2022	Datetime Created	08/12/2022 14:19 LM-EMP	View Compliance Work
Version No	3	Datetime Activated	08/12/2022 14:21 LM-EMP	View Model
Model Approval	Y	Datetime Approved	08/12/2022 14:21 LM-EMP	View Model History
Model Status ID	ACTIVE	Datetime Closed		
Maintenance Class	QA-L-01			
Description	DESCRIPTION			

Assets

All Compliance | Governed By This Model | All Compliance Items

Search...

☐	Asset ID	Description	Compliant	Compliance Items	Compliance Work
☐	-TEST-ASSET1	-TEST-ASSET1	⚠	4	
☐	BL-TRK-EB-CIR6	BLUE LINE EASTBOUND TRACK CIRCUIT 6	⚠	4	
☐	BL-TRK-WB	BLUE LINE WESTBOUND TRACK	⚠	4	

Showing 61 of 77 records

Back | Action for checked items: Add to Work Order | Process

The Model Compliance page allows you to review the results of compliance runs for a model across associated assets. Assets are associated via the maintenance class of the asset to the model's target maintenance class.

- This page will allow users to see the compliance status for each top-level asset.
- Each asset listed will give critical data points such as number of compliance violations, overall compliance status, and follow-up compliance work.
- Users can then perform several actions to address compliance issues.

From the Model Compliance page, work that has been created from the current model can also be viewed. There are two ways to view this information: asset-specific work and model-specific work.

- **View Compliance Work** - Model-specific work may be viewed by clicking this button. Associated work for all assets in the model will be displayed. You will also be able to edit comments and remove the association from this workflow as well.
- **View Model** – Configuration details for the model may be viewed by clicking this button. The Configuration Model Detail page will be displayed where you can Run and View Compliance, Copy the Model, and add or edit configuration of the model. See the [Model Detail Page](#) section for additional information.
- **View Model History** – Model history may be viewed by clicking this button. Datetime of last run, Model ID Version changes, and more history will be displayed on the Model History page.

Assets

Asset-specific work may be viewed in the Assets section. Associated work records can be edited to change the comment or remove the association.



Note: If a user removes the association, it is not actually removing the work object (multi-unit project, multi-asset work order, or work order). It is only removing the association of it to the model. If you would like to remove the work object, go to the responsible screen and edit it there.

Compliance Filters

The asset table can be configured using the compliance filters directly above the table. Filters exist for Compliance, Governance, and Attributes.

Compliance

- All Compliance
- Compliant With This Model
- Not Compliant With This Model
- Compliance Unknown

Governance

- All Governance
- Governed By This Model
- Not Governed By this Model

Attributes

- All Compliance Items
- Attribute Missing
- Attribute value cannot be greater than the target numeric value
- Attribute value cannot be less than the target numeric value
- Attribute numeric value mismatch
- Attribute numeric value outside of minimum and maximum range

Asset Table

The Assets table displays the following information:

- Asset ID – ID and link of asset.
- Description – Description of asset.
- Compliant – A check in this box indicates the asset is in compliance.
- Compliance Items – Shows the count of compliance items.
- Compliance Work – Work being done for compliance issues.
- Availability – Indicates the state of availability for the asset.
- Department – Department doing the compliance work.
- In Service Date – Date asset was put in service.
- Manufacturer – Asset's manufacturer.
- Manuf. Model – Model of the asset assigned by the manufacturer.
- Work Orders Authorized – A check in this box indicates that work orders are authorized.

Action for checked items

Assets can be selected from the table and actioned by selecting from the **Action for checked items** choice-list, then clicking **Process**. The following actions are available. See below for additional information:

- Add to Work Order
- Add to Multi-asset Work Order
- Add to Multi-unit Project
- Govern Selected Assets
- Pull from Service

Action for checked items

Model Compliance

Model ID

LINEAR 3-22-2022

Datetime Created

08/12/2022 14:19 LM-EMP

View Compliance Work

Version No

3

Datetime Activated

08/12/2022 14:21 LM-EMP

View Model

Model Approval

Y

Datetime Approved

08/12/2022 14:21 LM-EMP

View Model History

Model Status ID

ACTIVE

Datetime Closed

Maintenance Class

QA-L-01

Description

DESCRIPTION HERE

Assets

All Compliance

Governed By This Model

All Compliance Items

Search...

☐	Asset ID	Description	Compliant	Compliance Items	Compliance Work
☒	BL-TRK-EB-CIR6	BLUE LINE EASTBOUND TRACK CIRCUIT 6		4	
☒	BL-TRK-EB-CIR7	BLUE LINE EASTBOUND TRACK CIRCUIT 7		4	
☒	BL-TRK-EB-CIR8	BLUE LINE EASTBOUND TRACK CIRCUIT 8		4	
☐	BL-TRK-WB	BLUE LINE WESTBOUND TRACK		4	
☐	BL-TRK-WB-CIR5	BLUE LINE WESTBOUND TRACK CIRCUIT 5		4	

Showing 61 of 77 records

Back

Action for checked items

Add to Work Order

Process

Add to Work Order

Assets can be selected from the table and then a new work order can be generated for each asset. A reason for creating the work can be specified, which will generate a related associated work record for that asset. It will be visible when viewing associated work for the asset or the model.

Add to Multi-asset Work Order

Assets can be selected and added to an existing multi-asset work order or a work order can be created where the assets are added.

Add to Multi-unit Project

This functionality supports adding the assets to both new and existing projects.

- Select assets from Asset table.
- Select **Add to Multi-unit Project** from **Action for checked items** drop-down list.

Page 20 of 31

Asset Configuration Management - Administrator and User Guide
Version 25.x

7. Click **Process**.

Add Assets to Multi-unit Project

Add to new or existing
☒ New
☐ Existing

Project ID

Description

Originator

Campaign Number

Repair Reason ID

Comments

Reason for creating associated work

Assets

Asset ID	Description
GI-PH-2019-0001	2019 GILLIG PHANTOM==Meters: 1-0 MILES; 2-0 NONE==2019 GILLIG PHANTOM
GI-PH-2019-0002	2019 GILLIG PHANTOM==Meters: 1-0 MILES; 2-0 NONE==2019 GILLIG PHANTOM
GI-PH-2019-0003	2019 GILLIG PHANTOM==Meters: 1-0 MILES; 2-0 NONE==2019 GILLIG PHANTOM

Showing 3 records

Cancel

Save

Govern Selected Assets

Assets can be selected and promoted to a model by selecting Govern Selected Assets. A Confirmation Required pop-in will be displayed confirming that the selected assets will now be governed by the new model.

Confirmation Required

2 asset(s) will now be governed by LINEAR 3-22-2022 - 3.

i These asset(s) will no longer be governed by:

- LINEAR 3-22-2022 - 4
- 9-2-2022-LINEAR - 1

Continue with update of LINEAR 3-22-2022 - 3?

Cancel

Continue

Pull from service

Assets can be selected from the table and pulled from service. A note can also be entered that will be added to the asset record directly. This is intended for allowing users to quickly pull assets from service that may have critical violations.

1. Select assets from Asset table.
2. Select **Pull from service** from the **Action for checked items** drop-down list.
3. Click **Process**.

Pull Assets From Service

New Note

Assets

Asset ID	Availability Status	Description
APM-LR-2018-1000	IN SHOP	2010 BOMBARDIER-TRAN INN-APM-100==Meters: 1-0 KI NONE==INNOVIA APM 100 RAILCAR
APM-LR-2018-1001	OUT OF SERVICE	2010 BOMBARDIER-TRAN INN-APM-100==Meters: 1-0 KI NONE==INNOVIA APM 100 RAILCAR
APM-LR-2018-1002	IN SERVICE	2010 BOMBARDIER-TRAN INN-APM-100==Meters: 1-0 KI NONE==INNOVIA APM 100 RAILCAR

Showing 3 records

Cancel Save

Asset Detail Page

The Asset Detail page allows user to review details on an asset. Changes to a model can also be tracked and viewed on this page. It can be accessed by clicking the Asset Search button on the dashboard page or clicking the Asset ID link on the gadget tables.

Asset Detail
Header
Compliance Violations
Components
Attributes



Asset Number	1000	Repair Location	MAIN - CENTRAL LOCATION	
--------------	------	-----------------	-------------------------	--

Compliance Violations

Run ID	Required for Service	Asset ID	Rule Type	Error Description	System	Attribute
9		APM-LR-2018-1000	SERIALIZED PART	Serialized part missing		
9		APM-LR-2018-1000	ATTRIBUTE	Attribute value mismatch	APM-CON-RADIO	COMPLIANCE STANDARD
9		APM-LR-2018-1000	COMPONENT	Child components have compliance errors		
9		APM-LR-2018-1000	ATTRIBUTE	Attribute value mismatch	OPERATION	TYPE

Showing 4 records

Components

Attributes

Add
Edit

System	Attribute	Value	Description
APM-CON-RADIO	FREQUENCY-KHZ	42.0000	CBTC RADIO FREQ
APM-CON-RADIO	COMPLIANCE STANDARD	2016-LR-FTA	CBTC COMP. STANDARD
APM-CON-RADIO	ENGINEER INSPECTION	20/06/2017	CBTC INSPECTION DATE
OPERATION	TYPE	AUTOMATED	

Showing 4 records

Back

View Compliance History

Asset Detail



Asset ID	APM-LR-2018	2010 BOMBARDIER-TRAN INN-APM-100			View Compliance History
Asset Number	1000	Repair Location	MAIN - CENTRAL LOCATION		
Configuration Compliance		Configuration Model	BOMBT-INNOVIA		
Failed Compliance For Service					
Latest Compliance Check	14/06/2019 13:40				

[Run Compliance](#)

Compliance history can be viewed by clicking the **View Compliance History** button. When a model is configured to the maintenance class of an asset and is **ACTIVE**, this button allows you to see the results of compliance runs relevant to the asset and the outcome.

Compliance Run History ×					
Search...					
Datetime ▼	Run ID	Model ID - Version	Model Status	Compliance Status	Compliance Items
08/11/2020 14:56	348	1 - 1	ACTIVE	✓	
02/10/2020 15:22	313	1 - 1	ACTIVE	✓	
09/10/2019 17:02	294	AA MODEL 2.0 - 2.0	ACTIVE	✓	2
09/10/2019 16:52	293	AA MODEL 2.0 - 2.0	ACTIVE	✓	3

Showing 4 records

Close

Run Compliance Button

Clicking the Run Compliance Button starts a compliance check for an asset against a configuration model to ensure it meets all required rules to match the model.



Users must have access rights to screen 2516 (ACM - Compliance screen) to see the button.

The compliance run defaults to current ACTIVE model for an asset based on its maintenance class but you can select a different model or model version if desired.



Model must be in a non-CLOSED state and target the current asset's maintenance class.

Asset Detail	Header						
Header	Asset ID Repair Location MAIN - CENTRAL LOCATION						
Compliance Violations	Components						
Components	Attributes						
Attributes	Add Edit Linear Attributes Search...						
	Defined By	System	Attribute	Value	Description	Asset Type	Maintenance Class
	Asset ID	OPERATION	TYPE	LEVEL 1 AUTOMATION			

Showing 1 record

Compliance Errors

Compliance Errors							
					Search...		
Datetime Found	Run ID	Model Status	Required for Service	Asset ID	Rule Type	Error Description	Error Subject
15/02/2020 19:18	115	DRAFT		GWA-I107	SERIALIZED PART	Serialized part missing	APM-GW-00001
15/02/2020 19:18	115	DRAFT		GWA-I107	SERIALIZED PART	Serialized part missing	APM-GW-00001
15/02/2020 19:18	115	DRAFT		GWA-I107	SERIALIZED PART	Serialized part missing	APM-GW-00001
15/02/2020 19:18	115	DRAFT		GWA-I107	SERIALIZED PART	Serialized part missing	APM-GW-00001

Showing 4 records

Close

The Compliance Errors section allows you to view a selected asset's compliance status and errors if any. The table includes the description of the errors with additional context included in the following columns:

- **Datetime Found** – Datetime the compliance result was discovered.
- **Run ID** – Compliance run in which the result was discovered.
- **Model Status** – Status of the model.
- **Required for Service** – Identifies if the asset is required for service.
- **Asset ID** - ID of the asset.
- **Rule Type** – Rule being applied to the asset.
- **Error Description** – Description of the error.
- **Error Subject** - Identifies the attribute field, part ID, component ID, or Model Component Name relevant to the violation.
- **Expected Value** - Generally will attempt to show the expected value if relevant to the error. For example, this would show the expected quantity for serialized parts or the expected value for an attribute defined by the model.
- **Actual Value** - Generally will attempt to show the actual value if relevant to the error. For example, this would be the actual attribute value currently on an asset that is mismatched with the model.

The information in the columns is intended to show additional context to be used with the error description so it is clear what follow-up work needs to be done to bring an asset or underlying component into compliance with a model.

A Compliance Error dialog has also been added to the Work Order Create page. The Work Order Create page will show compliance status via the compliance icon next to the Equipment ID. Clicking this icon will open the compliance error dialog if any violations exist.



Note: You must have ACM licensed and the selected equipment must have an active model configured to see this dialog.

Components

The Asset Detail page includes a component hierarchy that shows basic summary information for each component. It includes indications of a component's current compliance status and the datetime compliance was last checked.

Components (4) Select action Search			
APM-LR-2018 Show Less Description 2010 BOMBARDIER-TRAN INN-APM-100==Meters: 1-0 KILOMETERS; 2-0 NONE Maintenance Class APM-LR-RAILCAR - APM LIGHT RAIL CAR Part ID Position Compliance ✗ Compliance Datetime 11/07/2019 13:06			
	System	Attribute	Value
	APM-CON-RADIO	FREQUENCY-KHZ	42.0000
	APM-CON-RADIO	COMPLIANCE STANDARD	2018-LR
	APM-CON-RADIO	ENGINEER INSPECTION	20/06/2017
	OPERATION	APM CALLSIGN	
Showing 4 records			
GUIDE CHASSIS UNDER RAIL CAR			
BGCH-B-I-APM Show More	Position LR-FRONT - FRONT SIDE	Compliance ✗	
CAR FRAME			
BR-I-100-C Show More		Compliance ✓	
BR-I-100-E Show More		Compliance ✓	

Notes on Components

The primary differences between assets and components in terms of how ACM handles them are the following:

- Components need to be parts when the business case requires:
 - Tracking position
 - Enforcing during part install that a component currently fits the model
- Components can be assets if there is no concern for the above. When a component is an asset, the system still will report issues via:
 - Compliance runs
 - Component attribute changes
 - Parent asset going to in-service
- ACM Component configuration does not have a quantity field like serialized parts. So, component configuration only reports:

- If a component is missing but does not stop or enforce any min/max number of that component installed.
 - This can be more tightly restricted if position is added for each component and those components are tracked as parts. The system will then enforce that the components are only issued into supported ACM component positions.

Attributes

An Attributes view is shown when selecting an asset directly from an ACM module. The table allows you view, add, or edit base attributes on the asset.



If the asset is linear, clicking the linear asset button will launch the Linear Attributes dialog which allows users to view and add attributes based on a linear area and datetime.

Model Detail Page

Model Detail		Configuration Model Detail	
Configuration	Model ID	SP-2020-GI-PH	Datetime Created
Model Detail		2022-08-09 11:13 SYSADMIN - SYSADMIN STEVE	
Basic Info	Version No	12.6	Datetime Activated
Comments	Qty Components	5	Datetime Closed
Notes	Model Status ID	APPROVALS	
Component Definitions	Run Compliance View Compliance Asset List Copy Model View Model History		
Component Relationship Rules	Basic Info Description CONFIGURATION FOR 2020 GILLIG PHANTOM BUSES		
Attribute Rules	Equipment Class	2020-GILLIG-PHANTOM	CLASS FOR 2020 GILLIG PANTOM BUSES
Serialized Part Rules	Reason Code		
Files	Planned Active Date/Time		
Responsible Locations	Comments	Notes	
Back		Save	
		Approve / Deny	

When a user is creating or updating a model on the Configuration Model Detail page, they may create child components of the Configuration Model. These model components represent the configurations for what child components of the related assets will be tested against. These components may be configured to relate to a child component based off the following: Equipment Class, Part ID / Suffix, Manufacturer / ManufacturerPartID, and Position criteria. It also supports being flagged as "Required for service".

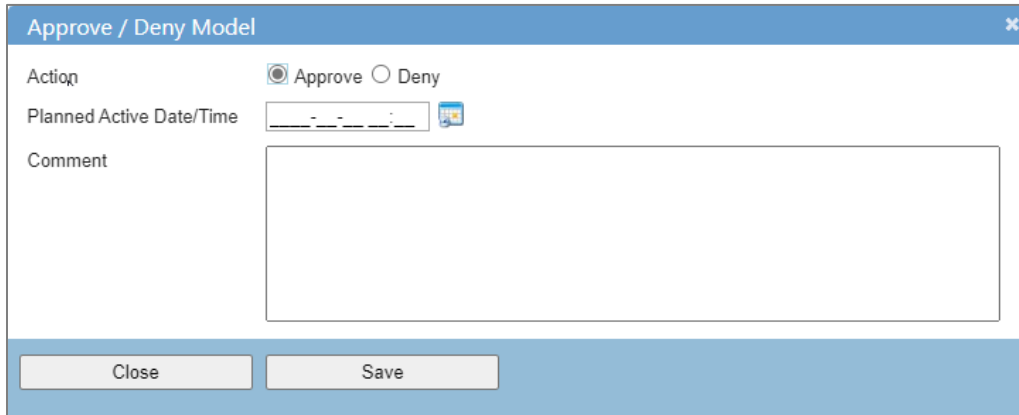
These components allow you to create a parent-child relationship to other components for the model and will allow you to create a complex configuration hierarchy to mimic the same hierarchy you would see in an asset.

On each component, you may specify a list of attributes and serialized parts that will specify what the component's configuration should be. There is a files tab, but that will not be taken into consideration when running compliance checks against this model for an asset.

Multiple Models can be activated for a single equipment class. Users can choose which assets to promote to the newer model when activating a new model.

Approve/Deny Model

The ability to approve or deny an ACM model can be launched from the Model Detail page by clicking the **Approve / Deny** button in the lower right corner. This launches the Approve / Deny Model pop-in where approvals or denials can be initiated.



The screenshot shows a pop-in window titled "Approve / Deny Model" with a close button (X) in the top right corner. The form contains the following fields:

- Action:** Two radio buttons, "Approve" (selected) and "Deny".
- Planned Active Date/Time:** A date and time picker field.
- Comment:** A large text area for entering a comment.

At the bottom of the form are two buttons: "Close" and "Save".

Configuration Model Detail

The Configuration Model Detail page allows you to view, edit and action a specific configuration model.

Model Detail	Configuration Model Detail			
Configuration Model Detail	Model ID	2022 UX 020 BUS	Datetime Created	Run Compliance
	08/15/2022 12:42 LM-EMP			View Compliance
Basic Info	Version No	3.0	Datetime Activated	Asset List
	08/15/2022 12:43 LM-EMP			Copy Model
Comments	Qty Components	6	Datetime Closed	View Model History
Notes	Model Status ID	ACTIVE		
Component Definitions	Basic Info			
Component Relationship Rules	Description	2022 UX 020 BUS CONFIGURATION		
Attribute Rules	Equipment Class	QA-02	...	EQ CLASS 2 - FULL SERVICE 2 METERS
Serialized Part Rules	Reason Code		...	
Files	Planned Active Date/Time	08/15/2022 12:43		
Responsible Locations	Comments	Notes		
	GENERATE FROM EXISTING ASSET - UX-FLEET-020			
Back		Save		Retire Model

Run Compliance

Clicking **Run Compliance** will run ACM compliance for each active asset in the system that has a Maintenance Class equal to the Equipment Class on the model. A sub-set of assets may be selected by checking the box next to the desired assets. If there are many assets, status updates on the progress will be provided. Once the process has completed, you will be redirected to the Model Compliance Detail page where results can be viewed.



If the current Configuration Model is not active, the results will not be stored on the assets. This allows engineers / asset managers who are building these Configuration Models to do test runs to better understand how their models compare to existing assets in the system.

When a model is activated by clicking the "Activate Model" button, the same compliance process noted above will automatically run.

View Compliance

Clicking **View Compliance** will take you to the Model Compliance page where you can view the details of compliance and assets associated with the model.

Asset List

This button will display the active assets in the system that have the model's equipment class as their maintenance class. This list shows you the assets that will be controlled by the current model. The list will not be loaded by default. To load the list, click the **Load Assets** button.

Copy Model

The **Copy Model** button will create a complete copy of the model that is being viewed, including its components, attributes, and parts. The copies are created in DRAFT state so that changes can be made to it. Active configurations may not be changed. They are locked in the system since they are part of the audit history of asset configurations.

View Model History

Clicking **View Model History** launches the Model History dialog where the history of the model can be viewed.

Component Definitions

All components that will be used on a Configuration Model are defined on the Model Detail page in the Component Definitions table. When you are building out relationships, you will be able to select from this list of already created components from this section.

The System Grouping ID column allows you to specify a System Group for a given component. This is used when visualizing the model component hierarchy to group related components together.

The Sub-components Table – Sequence column allows you to specify a sequence for the components to appear when visualizing the component hierarchy. This sequence is relative to the system grouping of the component.

Component Relationships

Component Relationships (5) Define Relationships Select action Search			
ATC ENCLOSURE Show More	Position	BACK - BACK	Parts 0 Attributes 1
ATC CARDFILE Show More			Parts 0 Attributes 1
ATC I/O PCB Show More	Position	LEFT - LEFT	Parts 0 Attributes 3
ATC CAB TEST PCB Show More	Position	LFT - LEFT SIDE OF ASSET	Parts 0 Attributes 3
ATC DECODER PCB Show More	Position	R1S1 - RACK 1 - SHELF 1	Parts 0 Attributes 3

The Component Relationships hierarchy viewer uses the System Grouping IDs and Sequences from the Component definition and relationship records to group and order the components in the hierarchy. These children will also be sorted in order of the Sequence number specified on the relationship record.

Attributes

Attributes can be added by clicking the **Add Attribute** button. This will add a new row to the table. Based off of the data type specified on the subsystem's property, appropriate input fields will be displayed for the user to configure. Support data types include:

- Text: A normal textbox. When checking compliance, this will be an equality check.
- Numeric: Two number-only textboxes will display. They will allow you to configure a numerical range of supported revisions, up to 4 decimal places.
- Date: A date field. When checking compliance, this will be an equality check.

Serialized Parts

Parts can be added by clicking the **Add Part** button. This will add a new row to the table. The parts that are allowed for this table are Serialized Parts. The serialized part, its suffix, how many there should be and what position (optional) they should be in will need to be specified.

Both Attributes and Parts will be taken into consideration to determine if a component is in compliance or not.

Files

Click **Add File** to add relevant files to the model detail. Existing files can be deleted or edited by clicking the  or  icons.

Responsible Locations

Certain assets will have multiple components that are maintained by different groups so there will be multiple responsible locations. This section displays those locations.

Retire Model

Clicking the Retire Model button at the bottom of the page allows you retire the selected model. A Confirmation Required pop-in will display confirming the action.

