



# Release Notes



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# Chapter 1

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## Overview

### Topics:

- [About Release Notes](#)

## About Release Notes

The APM Release Notes describe changes in the latest product. If you are using customized database content, the behavior that you see in your system may differ from what is described here. From Q1 2020, you can view the release notes sorted by quarter, and then by release dates. After you filter release notes by a release date, you can access the release notes for all the modules contributing to the release. You can view the modules that are released on a selected date in the **On this page** list. The following types of Release Notes are included, as applicable, for each release:

- **New Features and Enhancements:** A list of new features and improvements that are being introduced in each module in the release.
- **Resolved Issues:** A list of issues that existed in previous versions of APM that have been resolved in the release.
- **Obsolete Features:** A list of features that are now obsolete as a result of changes made in the release.
- **Known Issues and Limitations:** A list of issues that exist in the latest version of APM.
- **Deferred Features:** A list of functionally equivalent features that are not included in the release, but are planned for a future release.

# Chapter 2

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## What's New

### Topics:

- [V5.0.4.0.0](#)
- [End of Life Features](#)

## V5.0.4.0.0

This release does not include any new features. However, it includes fixes for issues that existed in one or more previous releases, and have been resolved in V5.0.4.0.0. For details, refer to the [release notes for this release](#).

## End of Life Features

Product support for following APM versions ended on December 31, 2023. Refer to GE Vernova's [product support policy](#) (KBA 000043438) for more information.

- 4.4
- 4.3.1
- 4.3.0.7
- 4.3.0.6.9
- 4.3
- 4.2



# Chapter 3

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## Upcoming End of Life Features

### Topics:

- [Inspection Field Data Collection](#)

## **Inspection Field Data Collection**

As part of the continuous improvement process, the next generation Integrity Mobile application is released with the APM V5.0.0.0.0. The new application provides a convenient user interface and is supported across all major platforms. As part of this enhancement, the existing APM Inspection Field Data Collection application feature will reach end of life and will be no longer available with the Q3 2024 release. We recommend all customers to migrate to the new Integrity Mobile application that provides similar functionalities in an intuitive way.

# Chapter 4

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## APM Release Notes for V5.0.0.0.X

### Topics:

- [V5.0.4.1.0](#)
- [V5.0.4.0.0](#)
- [V5.0.3.0.0](#)
- [V5.0.2.1.0](#)
- [V5.0.2.0.0](#)
- [V5.0.1.1.0](#)
- [V5.0.1.0.0](#)
- [V5.0.0.0.0](#)

## V5.0.4.1.0

### Queries

This topic provides a list of product changes released for this module in this version.

**Table 1: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you specified {n} as a custom hyperlink template in a query, when you selected the hyperlink, an error message appeared, indicating that the URL was not supported in the current version of APM. This issue has been resolved.	503065

## V5.0.4.0.0

### 360-View

This topic provides a list of product changes released for this module in this version.

**Table 2: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
Due to unexpected impact on other features, the capability to copy data from fields that are locked for editing has been removed.	DE210639

### APM Connect

This topic provides a list of product changes released for this module in this version.

**Table 3: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to load a large number of records using the Family Data Loader where a large number of Slices were created, loading the data failed, displaying the following error message: <code>Npgsql.PostgresException: Duplicate key value violates unique constraint "PK_slices_bundle_id_slice_id"</code> . This issue has been resolved.	DE211339

## Failure Modes and Effects Analysis

This topic provides a list of product changes released for this module in this version.

**Table 4: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you created a new RCM or FMEA analysis, and then performed any action on this page, the page would appear to freeze, and the spinner continued for an indefinite timespan. However, when you refreshed the browser or the page, performed the required changes, and then attempted to save the page, the changes were saved promptly. This issue has been resolved.	DE209747

## Foundation

This topic provides a list of product changes released for this module in this version.

**Table 5: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.


Description	Tracking ID
Previously, when you selected a link containing a query parameter, and this caused the dialog box with the message <code>Sorry, 8 Tab Limit Reached</code> to be displayed, the page was refreshed. This may have caused the page to display unexpected data. This issue has been resolved.	DE211135
Previously, due to a change in Edge browser, the <code>Feature not accessible</code> message was displayed when you accessed some APM pages, even though the device met screen width recommendations for APM. This issue has been resolved.  Now, for most pages, <code>Feature not accessible</code> will be displayed only if the effective browser window width is less than 768 pixels. Note however that the recommended minimum screen width for desktop devices remains at 1024 pixels.	DE210146
Previously, if the Entity ID field contained more than 255 characters, then the characters were truncated from the starting, instead of being truncated from the end. This issue has been resolved.	DE209211

## Inspection Management

This topic provides a list of product changes released for this module in this version.

**Table 6: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>Inspection Details</b> page, when editing a General Finding or a Sub-Inspection, if the datasheet contained a date field, you could not select a date using the calendar. This issue has been resolved.	DE212473
Previously, when you opened an existing Recommendation record in the Recommendations panel, you could modify field values without first selecting the  button. When you closed the datasheet, you could inadvertently save the modifications when the Unsaved Changes dialog was displayed. This issue has been resolved	DE210333

## Manage Translations

This topic provides a list of product changes released for this module in this version.

**Table 7: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if your APM culture was other than English, and a large amount of customized localized metadata strings were created for the culture, which resulted in performance issues. This issue has been resolved.	DE212349

## OT Connect

This topic provides a list of product changes released for this module in this version.

**Table 8: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when performing a Tag Sync, if you encountered a system exception, the error message only stated that one or more errors occurred. This issue has been resolved. Now, in this scenario, the underlying error and the associated details appear.	DE211482

## Queries

This topic provides a list of product changes released for this module in this version.

**Table 9: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, if you added a hyperlink in a Query, and a value returned by the query that was inserted into the hyperlink as a parameter included special characters that must be encoded (for example, ?, %, or &amp;), the hyperlink did not work as expected. This issue has been resolved.</p> <p>To enable the resolution of this defect, now, when you add a manual hyperlink definition in a Query that includes an explicit parameter value containing a special character, you must enter the URL encoded value of the parameter. For example, the manual hyperlink to open a record in record manager using a datasheet with the ID TEST?&amp;% must be entered as #record-manager/{1}?datasheetid= TEST%3F%26%25, assuming that the entity key of the record appears in column 1 of the query. However, if a parameter value used in a hyperlink appears in the query result, and is represented in the hyperlink definition by the column reference {n}, you do not need to encode it.</p> <p>Contact GE Vernova support if you require advice on updating existing query hyperlink definitions</p>	DE210004

## Reliability Centered Maintenance

This topic provides a list of product changes released for this module in this version.

**Table 10: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you created a new RCM or FMEA analysis, and then performed any action on this page, the page would appear to freeze, and the spinner continued for an indefinite timespan. However, when you refreshed the browser or the page, performed the required changes, and then attempted to save the page, the changes were saved promptly. This issue has been resolved.	DE209747

## Record Manager

This topic provides a list of product changes released for this module in this version.

**Table 11: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when using Record Manager to open a record with State Management enabled for the family or related families, there was a performance issue. This issue has been resolved.	DE212584
Previously, if you configured a tabular datasheet with four or five columns, when you opened the datasheet in the Bulk Data Form, the column headings were incorrect. This issue has been resolved.	DE211528
Previously, in the bulk data form, you were able to modify a disabled Boolean field. This issue has been resolved.	DE209843

Description	Tracking ID
Previously, in a multi-value field, the check box to select all the options was not properly formatted and was difficult to select. This issue has been resolved. Now, when you point to or select a multi-value field, the check box is correctly displayed.	DE209383
Previously, in a text or character field, certain valid characters, for example the € symbol, were removed from the value that was saved to the database. This issue has been resolved.	DE209491

**Table 12: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
Due to unexpected impact on other features, the capability to copy data from fields that are locked for editing has been removed.	DE210639

## Risk Based Inspection

This topic provides a list of product changes released for this module in this version.

### RBI 580 and RBI 581

**Table 13: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, <b>Consequence Evaluation</b> section in the <b>RBI Analysis</b> workspace was not expanding correctly after collapsing that section. This issue has been resolved.	DE210256
Previously, sometimes, the <b>Inspection Plan</b> link in the header of the <b>RBI Analysis</b> workspace did not work. This issue has been resolved. Now, the link always directs you to the <b>Inspection Plan</b> workspace.	DE210008

## Rounds Designer

This topic provides a list of product changes released for this module in this version.

**Table 14: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you were a secured user, you could not add an existing Measurement Location to a route. This issue has been resolved.	DE210444



## V5.0.3.0.0

### APM Connect

This topic provides a list of product changes released for this module in this version.

**Table 15: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when loading data into APM using the APM Family Data Loader where rules, policy, or any other application tried to reference the records or links that were just created as part of the current session (but not saved to the database), the consuming application was not able to reference the new records or links. This issue has been resolved.	DE209018

### Asset Hierarchy

This topic provides a list of product changes released for this module in this version.

**Table 16: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the Asset Hierarchy, the asset IDs were formatted incorrectly, resulting in unreadable display of the assets when you navigated to assets at the sixth level and lower. This issue has been resolved.	DE206204

### Asset Strategy Management

This topic provides a list of product changes released for this module in this version.

**Table 17: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when an asset strategy was controlled by a master template, you were not able to move it to a different master template. This issue has been resolved.	DE208744
Previously, if the Action family was changed to use VB Rules instead of a Policy in Family Management, when you attempted to delete a Secondary Action, an error occurred. This issue has been resolved.	DE208400

## Calibration Management

This topic provides a list of product changes released for this module in this version.

### Table 18: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you opened the <b>Calibration Management Overview</b> page with an asset context, when you switched between tabs, an error occurred. This issue has been resolved.	DE207912

## Family Policies

This topic provides a list of product changes released for this module in this version.

### Table 19: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you executed a Create Entity or Edit Entity node in policy, if the family rules were configured to create a relationship based on the values written to fields on the new or updated entity, for example, a related record ID or entity key, the relationship was not created. This issue has been resolved.	DE207111

## Foundation

This topic provides a list of product changes released for this module in this version.

### Table 20: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To improve product security, now, when the <i>Your session has expired</i> window is displayed, the current APM page content is hidden. Further, you can no longer cancel the dialog to return to APM; you may only proceed directly to the login page.	US607467

## Inspection Management

This topic provides a list of product changes released for this module in this version.

### Table 21: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when creating work order notifications if you had a customization rule in place for generating work orders, the rule was not being executed. This issue has been resolved.	US602862
Previously, when you transitioned the state of an Inspection to Draft state, the Inspection was not unlocked. This issue has been resolved. Now, when you transition from any state to Draft state, the Inspection is unlocked.	US602735

## Manage Translations

This topic provides a list of product changes released for this module in this version.

**Table 22: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, in the Manage Translations page, the following options were available for English language even though they were not applicable:</p> <ul style="list-style-type: none"> <li>• Update translations</li> <li>• Upload custom translations</li> </ul> <p>This issue has been resolved. These options no longer appear for English language now.</p>	US602672

## OT Connect

This topic provides a list of product changes released for this module in this version.

**Table 23: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
You can now configure the OT Connect HDA Adaptor to use either the End Aggregate values or the Raw reading values for Tag Subscriptions from the Historian.	DE208366

**Table 24: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the OT Connect HDA Adapter only supported a Historian Aggregate named OPCHDA_END. This issue has been resolved. Now, the OT Connect HDA Adapter supports any Historian Aggregate whose name ends with END.	DE208366

## Policy Designer

This topic provides a list of product changes released for this module in this version.

**Table 25: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you did not have an active license for Policy Designer in your GE Digital APM system, and you configured the R Server Connection to use the Machine Learning Server, an error occurred when you subsequently attempted to access the R Server Connection page. This issue has been resolved.	DE207777
Previously, when you executed a Create Entity or Edit Entity node in policy, if the family rules were configured to create a relationship based on the values written to fields on the new or updated entity, for example, a related record ID or entity key, the relationship was not created. This issue has been resolved.	DE207111
Previously, if you selected a language preference other than English, or if you customized the English captions for the Active and Locked columns in the Policies and ModuleWorkflow Policies lists, no values appeared in these columns. This issue has been resolved.	DE207109

## Record Manager

This topic provides a list of product changes released for this module in this version.

**Table 26: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when a record was locked for editing, you could not copy the text in the fields. This issue has been resolved.	DE208306
Previously, in a Bulk Data Form, when you entered a date value, it was displayed instead of AM or PM until you saved or refreshed the form. This issue has been resolved.	DE207924

## Reports

This topic provides a list of product changes released for this module in this version.

**Table 27: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in some reports, images, text, and tables overlapped. This issue has been resolved. To facilitate this fix, enter the names of such reports in the ReportsToFixUI list in the <code>applications.json</code> file.	DE208679

## Security Manager

This topic provides a list of product changes released for this module in this version.

**Table 28: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the function used for navigation generated a blank record every time the search was performed. As a result, the Home item appeared blank in the navigation pane. This issue has been resolved. Now, the function is no longer used; the logic for navigation is added in the UI element itself.	DE204567

## SIS Management

This topic provides a list of product changes released for this module in this version.

**Table 29: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if the Hazards Analysis and Management of Change licenses were inactive, and if you attempted to access the <b>Team Members</b> section of an SIL analysis, an error occurred. This issue has been resolved.	DE208481

## Thickness Monitoring

This topic provides a list of product changes released for this module in this version.

**Table 30: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you updated data of the Corrosion Analysis Setting of a TML, the TML Corrosion Analysis was not updated correctly during the calculation. This issue has been resolved.	DE209136
Previously, if you modified the Corrosion Analysis Settings of an Asset, some of the settings were not cascaded to the TMLs that were directly linked to the Asset. This issue has been resolved.	DE206378
Previously, when you configured <b>Use Minimum Measurement Interval for corrosion Rates</b> , the field values for <b>Near Measurement date</b> and <b>Near Measurement</b> were not updated correctly. This issue has been resolved.	DE205311
Previously, if you modified any settings under the Asset Corrosion Rate section of the <b>Corrosion Analysis Settings</b> page for an asset and chose not to spread those changes to any related TML Groups or TMLs, then the subsequent value was not updated correctly for the Controlling Corrosion Rate on the asset's Corrosion Analysis. This issue has been resolved.	DE205215

Description	Tracking ID
Previously, for a Thickness Measurement marked as Nominal with the same Measurement Taken Date as the first actual measurement, when the second actual measurement was added, the nominal measurement was not inactivated. This issue has been resolved.	DE205108
Previously, in the Global Preferences workspace, when the <b>Correct Measurements Based on Growth</b> check box is enabled, the Nominal Measurement was considered for correcting measurement based on growth.	DE205106

## V5.0.2.1.0

### Foundation

This topic provides a list of product changes released for this module in this version.

#### Table 31: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when trying to compile the database using the compile utility, an error occurred. This issue has been resolved.	DE205088

### Queries

This topic provides a list of product changes released for this module in this version.

#### Table 32: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, under certain scenarios, when you attempted to run a query that contained a right join query, incorrect results were returned. This issue has been resolved. Now the query returns the same results as APM V4.6.0.0.0.	DE204525

## Risk Based Inspection (RBI) 580

This topic provides a list of product changes released for this module in this version.

#### Table 33: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you activated the Risk Based Inspection license (which is used for RBI 580) without activating the RBI 581 license, you could not create or modify an alternative Inspection Plan for an RBI Asset. This issue has been resolved.	DE204578

## Thickness Monitoring

This topic provides a list of product changes released for this module in this version.

**Table 34: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you accessed the Bulk Edit TMLs window, you were unable to select a different datasheet. This issue has been resolved.	DE204705
Previously, if you tried to spread the Corrosion Analysis settings from an Asset to a TML Group or a TML, the default Inspection Interval was not updated in the Corrosion Analysis settings. This issue occurred only if the TML Group on the Asset did not contain TMLs. This issue has been resolved.	DE204579
Previously, in the <b>Bulk Edit TMLs</b> window, your datasheet preference for the Thickness Monitoring Location family was overwritten to use the TML Bulk Edit datasheet. This issue has been resolved. Now, your datasheet preference for the Thickness Monitoring Location family is changed only when you select a different datasheet in the <b>TML Details</b> section in Thickness Monitoring or Record Manager.	DE204533

## V5.0.2.0.0

### APM Connect

This topic provides a list of product changes released for this module in this version.

**Table 35: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, a new configurable option is added to chunk data and load data in sequence, such that there is no duplication. In the Data Loader Framework, to chunk the data in the given sheet, add a new column with following Caption and Name in the Configuration sheet: <ul style="list-style-type: none"><li>• Caption: Number of rows to be chunked together</li><li>• Name: OPTION_NUMBER_ROWS_TO_CHUNK</li></ul>	US581687

**Table 36: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in ADL, the GAA Event Data Loader folder name was spelled incorrectly, and this was causing an issue in the file upload. This issue has been resolved. Now, the folder name is corrected to GAA Events Data Loader to fix the file upload issue.	DE202907

### Table 37: Known Issues and Limitations

The following known issues and limitations exist.

Description	Tracking ID
When you attempt to create and update relationships for a Health Indicator through the APM Family data loader, the data loader does not move from the Ingest stage and data is not added into APM. For additional information and work around, refer to the KBA 000044251.	DE194409

## Asset Hierarchy

This topic provides a list of product changes released for this module in this version.

### Table 38: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability of the Asset Groups page: <ul style="list-style-type: none"><li>You can now search for assets within the group.</li><li>A summary of the number of assets that you have selected to add or remove from the groups appears until you save the group.</li></ul>	DE191165

## Calibration Management

This topic provides a list of product changes released for this module in this version.

### Table 39: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you enabled State Management functionality in Calibration Task family, the State Management component was not loaded on the Calibration Task datasheet. This issue has been resolved.	DE202053

## Data Loaders

This topic provides a list of product changes released for this module in this version.

### Table 40: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, a new configurable option is added to chunk data and load data in sequence, such that there is no duplication. In the Data Loader Framework, to chunk the data in the given sheet, add a new column with following Caption and Name in the Configuration sheet: <ul style="list-style-type: none"><li>Caption: Number of rows to be chunked together</li><li>Name: OPTION_NUMBER_ROWS_TO_CHUNK</li></ul>	US581687



**Table 41: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to load data into APM using a Batch Type Data Loader, no error message appeared if the Batch Key Field value was blank or null. This issue has been resolved. Now, an error message appears indicating that the Batch Key Field value is blank or null.	DE202169
Previously, when a user, whose time zone was set to International Date Line West, loaded a null data field values into APM using the Family Data Loader, then the date value for the field was displayed as July 5, 1776. This issue has been resolved. Now, all null date field values are loaded as null values, regardless of the user's time zone.	DE201838

**Table 42: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When you attempt to create and update relationships for a Health Indicator through the APM Family data loader, the data loader does not move from the Ingest stage and data is not added into APM. For additional information and work around, refer to the KBA 000044251.	DE194409

## Datasets

This topic provides a list of product changes released for this module in this version.

**Table 43: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you created a dataset using an Excel spreadsheet containing a period (.) in a column name, and if it was used as a header, the column name appeared blank in the preview and after saving the dataset. This issue has been resolved. Now, in this scenario, the period (.) is converted into an underscore (_).	DE200615

## Family Policies

This topic provides a list of product changes released for this module in this version.

**Table 44: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you executed a policy, the message "An unexpected error occurred when upgrading policy with key <...>" appeared in the execution log. This issue has been resolved.	DE200396

## Foundation

This topic provides a list of product changes released for this module in this version.

### Table 45: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
To address a known vulnerability in the third-party library, all references to JQueryUI have been removed from the APM code.	DE199928

## General Dashboards

This topic provides a list of product changes released for this module in this version.

### Table 46: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to open a query from the Query widget, if the percent (%) wildcard character was used in a query parameter, the parameter was incorrectly encoded, and the query results did not appear as expected. This issue has been resolved.	DE192480

## Import and Export

This topic provides a list of product changes released for this module in this version.

### Table 47: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, partial export of a file did not work. This issue has been resolved. You can now download partially exported files.	US585598

## Inspection Management

This topic provides a list of product changes released for this module in this version.

### Table 48: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when viewing an inspection in the APM web-client that was currently checked-out to an inspector, the state transition control on the Inspection page would allow you to still transition the state. This issue has been resolved. The state transition control will still allow management of assigned users, but you will be unable to change the current state of the inspection until it has been checked in.	DE201806
Previously, when viewing images using the image gallery available in the Inspection page, if the associated reference document referenced to a URL or a UNC path, the reference document failed to load. This issue has been resolved.	DE201352

## Integrity Mobile

This topic provides a list of product changes released for this module in this version.

**Table 49: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, when deploying Integrity Mobile as part of a corporate Mobile Device Management solution, it is now possible to pre-configure the desired Server URL and Datasource fields instead of providing the details manually. After configuration, the Server Settings screen appears momentarily but will automatically apply the settings and move on to the <b>Login</b> page. The ability to provide managed configurations is available for both Android and iOS apps.	<ul style="list-style-type: none"> <li>US587439</li> <li>US581716</li> </ul>
To enhance usability, you can now check out multiple inspections simultaneously. To download the Inspection History Report with the inspections, you can enable the Download Inspection History Report setting on the <b>Users Settings</b> page.	US569760
Language Localization support has been introduced in this release. All text will appear in the logged-in user's language within the Integrity Mobile application.	US527921
User Culture support has been introduced in this release. All culture-applicable fields will appear in the logged-in user's culture within the Integrity Mobile application.  <b>Note:</b> This feature is supported on the APM server 5.0.2 and later. Also, the language/culture of the mobile device must match the culture of the logged-in user.	US532352

**Table 50: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when logging into Integrity Mobile, if a space was to the end of the username, the login was stalled infinitely. This issue has been resolved.	DE202451
Previously, when you rotated the orientation of the device on an Android device, the application would restart. This issue has been resolved.	DE202440
Previously, if you were not assigned the Integrity Mobile User Security Role, or if the Integrity Mobile license was not applied, and if you attempted to log in using an on-premises SSO configuration, the correct error message did not appear. This issue has been resolved.	DE200552

Description	Tracking ID
Previously, if you installed a self-signed certificate issued by a trusted source such as your corporate CA, the Integrity Mobile application did not trust the certificate and you could not log in. This issue has been resolved.	DE200551
Previously, the full text for Inspection Task Details field was not displayed in the offline Inspection form. This issue has been resolved.	DE187211

## Policy Designer

This topic provides a list of product changes released for this module in this version.

### Table 51: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To ensure that content protection and revert to baseline features operate as expected, you can no longer modify the Name field in a baseline Policy record.  <b>Note:</b> If you have already modified the name of a baseline Policy, you can no longer edit the name. However, if you revert the policy to baseline, the name will be reverted to the original name.	US580861
To improve usability, the Rounds Pro module users can now access records from Measurement Step family and view information about related readings. The new Input Node is added that replicates the Measurement step node functionality.	US579505

### Table 52: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>Design</b> workspace of a policy, when you selected <b>Execute Now</b> , sometimes, the policy was not executed. This issue has been resolved.	US588802
Previously, if the ActiveMQ server failed over or was restarted, scheduled policy executions were not executed as expected. This issue has been resolved.	DE201020
Previously, when you executed a policy, the message "An unexpected error occurred when upgrading policy with key <...>" appeared in the execution log. This issue has been resolved.	DE200396
Previously, email notifications for policy executions and policy execution history were in English, with numbers and dates formatted according to US culture, regardless of the language and culture settings of the policy execution service user (that is, MIJOB). This issue has been resolved.	DE194065

### Table 53: Known Issues

The following known issues and limitations exist.

Description	Tracking ID
If you schedule a policy with a large number of instances, some of the policy instances are executed more than once at the same scheduled execution time.	US595325

## Production Loss Analysis

This topic provides a list of product changes released for this module in this version.

**Table 54: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>PLA Admin</b> page, if there were a large number of Event Code records, a timeout error occurred. This issue has been resolved. Now, pagination is available, such that you can access only 10 records per page, therefore, eliminating the timeout error.	US587515
Previously, for Production Data, Production Plan(s), Production Events, and Production Analyses, the PLA Overview Count took longer than expected to load. This issue has been resolved. Now, the tiles in the <b>PLA Overview</b> page load quickly.	DE201449
Previously, in a Production Event datasheet, if you attempted to select the Production Event Code without selecting the Unit, the record failed to load. This issue has been resolved.	DE200771

## Queries

This topic provides a list of product changes released for this module in this version.

**Table 55: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you executed a delete query, an incorrect error message appeared, whenever there was an error during the execution of the delete query. This issue has been resolved.	DE201345

## Record Manager

This topic provides a list of product changes released for this module in this version.

**Table 56: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you executed a Conditional Alert that used a query containing prompts, the query was not processed, and the Conditional Alert email was not sent. This issue has been resolved.	US585597
Previously, when the Format behaviour for the date field was set as ShortDate then the value in the Date field was shifted backward by one day. This issue has been resolved.	DE202705
Previously, if state management was enabled for a family, metadata created for the state field MI_SM_STATE_KEY_N was long. This issue has been resolved. Now, metadata for the state field MI_SM_STATE_KEY_N is created with character(50) (instead of long) and the IsKey flag.	DE202418

Description	Tracking ID
Previously, if you accessed a record assigned to the Global site, and then added a new related record, the newly created record was assigned to your default site. This issue has been resolved. Now, in this scenario, the new record is assigned to the Global site.	DE202055
Previously, when you selected <b>External Network</b> in the <b>Edit Document Path</b> window for a Reference Document, the list of folders and files appeared in random order. This issue has been resolved. Now, the folders and files are sorted alphabetically.	DE200025
Previously, if you opened a record using a hyperlink with the #record-manager/<key>?datasheetid=<id> format, modified the record, and then switched to a different module or application without saving your changes, your changes were not retained. This issue has been resolved.	DE198432
Previously, when you selected a detail record in a master/detail datasheet, the <b>Unlink</b> option was not always enabled as expected. This issue has been resolved. Now, the <b>Unlink</b> option is enabled if the <b>Allow for Unlinking</b> check box is selected in the master/detail datasheet definition and you have Delete privileges for the relationship between the master family and the detail family.	DE93826

## Risk Based Inspection

This topic provides a list of product changes released for this module in this version.

### RBI 580 and RBI 581

#### Table 57: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, while clicking on <b>+Create Inspection Plan</b> link an error occurred if the Asset had any inactive RBI Components and the RBI Admin Preference, Use Alternative Inspection Plan, was set to true. This issue has been resolved. Now, only active RBI Components are considered while creating an Alternative Inspection Plan.	DE200602
<p>Previously, RBI Components with Component Status field set to NULL were not considered as an active component in the following scenarios:</p> <ul style="list-style-type: none"> <li>• Suggest PDMs for Components option in Asset Summary and Corrosion Loop Summary page</li> <li>• Link Protected Components option for PRD Components related to Corrosion Loop</li> <li>• Component dropdown in Inspection plan Detail section in Inspection Plan page</li> <li>• RBI Component dropdown in Inspection confidence section in Inspection page</li> <li>• RBI Component dropdown in Inspection Profile datasheet</li> </ul> <p>This issue has been resolved.</p>	DE199690

### RBI 581

#### Table 58: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
The formula for calculating Final Corrosion Rate on RBI 581 External Damage Evaluations now adheres to API 581 3 <sup>rd</sup> Edition, Addendum 2. To facilitate this enhancement, all corrosion rate adjustment factors will only be applied when the Source of Calculated Corrosion Rate field is set to Calculated. You can override this option by selecting the <b>Use Corrosion Rate Adjustment Factors for External Corrosion Damage Mechanisms</b> option in the RBI Application Settings.	US590532
The Age calculation on RBI 581 Cracking Damage Evaluations and RBI 581 External Cracking Damage Evaluations only considers the effective inspections now. To facilitate this enhancement, if the Highest Effective Inspection Level is Poorly Effective or Ineffective(None), the Date in Service is used instead of the Target Inspection Date in the Age and the Time Since Last Inspection calculations.	US582724

## Rounds Designer

This topic provides a list of product changes released for this module in this version.

**Table 59: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you attempted to load Readings data using the Rounds Readings Data Loader without providing a value for MI_READING0_RELAT_ML_ENTIT_KEY_N, an error occurred. This issue has been resolved. Now, you can choose between providing any of the following values: <ul style="list-style-type: none"> <li>MI_READING0_RELAT_ML_ENTIT_KEY_N</li> <li>MI_CHECK_PT_CHEC_ID_C</li> </ul>	DE194630

## Rounds Pro

This topic provides a list of product changes released for this module in this version.

**Table 60: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, Round Pro now supports the following User Culture settings: <ul style="list-style-type: none"> <li>Numeric Values: You can now enter numeric values with decimal point or comma</li> <li>Date Values: You can now enter date values in dd/mm/yyyy or mm/dd/yyyy format</li> </ul>	US579664

**Table 61: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you scheduled route instance generation to end after $n$ occurrences, only $n-1$ route instances were created (for example, if you set the schedule to end after three occurrences, only two route instances were created). This issue has been resolved.	DE185702

**Table 62: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID						
<p>Some users cannot create Health Indicators from Measurement Steps.</p> <p>Workaround: For the Rounds Pro Security Groups, add permissions to the Analysis family as described in the following table.</p> <table> <tr> <th>Security Group</th><th>Permissions</th></tr> <tr> <td>MI Rounds-Pro Administrator</td><td> <ul style="list-style-type: none"> <li>View</li> <li>Insert</li> <li>Update</li> <li>Delete</li> </ul> </td></tr> <tr> <td>MI Rounds-Pro Mobile User</td><td>View</td></tr> </table> <p>For more information, refer to <a href="#">KBA 000068522</a>.</p>	Security Group	Permissions	MI Rounds-Pro Administrator	<ul style="list-style-type: none"> <li>View</li> <li>Insert</li> <li>Update</li> <li>Delete</li> </ul>	MI Rounds-Pro Mobile User	View	US583188
Security Group	Permissions						
MI Rounds-Pro Administrator	<ul style="list-style-type: none"> <li>View</li> <li>Insert</li> <li>Update</li> <li>Delete</li> </ul>						
MI Rounds-Pro Mobile User	View						
<p>When you attempt to import data into APM using Rounds Pro Data Loader, and if there is an error in the data, then the error message is not displayed row wise.</p> <p><b>Note:</b> Download the log file to view the errors.</p>	DE202474						

## Root Cause Analysis

This topic provides a list of product changes released for this module in this version.

**Table 63: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, in the RCA Recommendations, when you attempted to assign a target completion date that was in the past, an error message appeared that did not provide details on the error. This issue has been resolved. Now, a detailed informational error message appears.</p>	DE202039

## Rules Editor

This topic provides a list of product changes released for this module in this version.

**Table 64: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, the Rules Editor loaded slowly while opening Microsoft Visual Studio and loading Libraries. This issue has been resolved.</p>	DE198869



## SAP Adapters

This topic provides a list of product changes released for this module in this version.

**Table 65: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, during the Work Order generation, if the Task Details contained multiple blank lines (EOL), an error message appeared, and the Work Order was not generated. This issue has been resolved.	US591545
Previously, if text fields in the Work Order and Strategy interfaces contained special xml characters, an error occurred. This issue has been resolved.	DE189175

## Search

This topic provides a list of product changes released for this module in this version.

**Table 66: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you selected multiple records in the search results grid, then selected <b>View in Bulk</b> , when you returned to the <b>Advanced Search</b> page, the previous selection was retained, even though the checkmarks were not displayed in the results grid. This issue has been resolved. Now, when you return to the <b>Advanced Search</b> page, the previous selection is cleared.	DE199706

## Security Manager

This topic provides a list of product changes released for this module in this version.

**Table 67: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to create a new security user by copying and saving an existing security user, an error occurred. This issue has been resolved.	DE201852
Previously, while using the APM application installed on a non-English language OS like Japanese, when a user tried to change the default language or default culture from User Defaults page, the user encountered an error and could not change the default value. This issue has been resolved. Now, the user can change the user defaults without any error.	DE200206
Previously, on the <b>LDAP</b> page, if the <b>LDAP Sync Domain Settings</b> box was set to <b>Deactivate Unsynced Users</b> , after the LDAP synchronization was run, some of the synchronized users were incorrectly deactivated. This issue has been resolved. To facilitate this fix, the comparison between LDAP users and APM users is now case-insensitive.	DE199797

## SIS Management

This topic provides a list of product changes released for this module in this version.

**Table 68: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, you could update an SRS Template even if it was not in the initial state (that is, In Progress). This issue has been resolved.	DE203393
Previously, when you created a Safety Instrumented System and selected an SRS Project in the SRS Project ID field, the selected SRS Project was not populated until you saved the record. This issue has been resolved.	DE202905
Previously, when you tried to import an .exp file having custom devices, the import screen failed to load the list of Safety Instrumented Functions (SIFs). This issue has been resolved.	DE202855
Previously, if Calculation Engine for any Protective Instrument Loop was ExSILentia V4, then SFF and Base SFF values for Protective Instrument Loop Final Element and Protective Instrument Loop Sensor were not getting populated. This issue has been resolved. Now, only the SFF value is populated; the Base SFF value is not populated as this field is not applicable for ExSILentia V4.	DE202725
Previously, while printing an SRS report, you could not download the report. This issue has been resolved.	DE202621
Previously, when you attempted to import from Exida, if Protective Instrument loop included more than four Protective Instrument Loop groups, the import failed without a warning or an error message. This issue has been resolved.  Now, from the selected list of loops, the loops with four or lesser number of groups is imported, and a warning message is displayed for the loops with more than four groups.	DE199672

## Strategy Macros

This topic provides a list of product changes released for this module in this version.

**Table 69: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the strategy macro job was executed with the MIJOB user instead of the user selected in the <b>runAs</b> box when scheduling a strategy macro job. This issue has been resolved. Now, the user selected in the <b>runAs</b> box is considered during the execution of the strategy macro job.	DE203428

## Teams

This topic provides a list of product changes released for this module in this version.

**Table 70: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, as a Super User, when you specified a site for a Team, then added team members, the list of available users was not limited to users with access to the specified site. This issue has been resolved.	DE199660

## Thickness Monitoring

This topic provides a list of product changes released for this module in this version.

### Table 71: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if a TML group or an Asset contained a large number of TMLs, you could not spread the Corrosion Analysis Settings from the TML Group or Asset to the Thickness Measurement Location. This issue has now been resolved.	DE199214

## V5.0.1.1.0

### Data Loaders

This topic provides a list of product changes released for this module in this version.

### Table 72: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to harmonize or synchronize Work History records that were based on Notifications, all Work History records were not deleted, irrespective of the Work History record not being linked to a Work History Detail record in APM. This issue has been resolved.	DE200595
Now, all Work History and Work History Detail records that should be deleted are deleted, regardless of whether a Work History record is linked to a Work History Detail record in APM.	

## Production Loss Analysis

This topic provides a list of product changes released for this module in this version.

### Table 73: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you ingested the Production Loss Analysis (PLA) 2 – Event without specifying any value in the Work History Link column, an error message appeared, and the records were rejected. This issue has been resolved.  Now, the Data Loader ingests data without any errors, even if there are no values specified in the WorkHistory column.	DE200355
Previously, when you ingested the Production Loss Analysis (PLA) 3 – Plan without specifying any values in the Production Loss tab, the Data Loader fails with an error message. This issue has been resolved.  Now, the Data Loader ingests data without any errors, even if there are no values specified in the Production Loss tab.	DE200356

## V5.0.1.0.0

### Action Management

This topic provides a list of product changes released for this module in this version.

#### Table 74: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>Recommended Actions</b> section, if you selected a row in the grid, a Filter Applied indicator appeared. This issue has been resolved. Now, the Filter Applied indicator appears only if you apply a filter.	DE197508

### Activate Licenses

This topic provides a list of product changes released for this module in this version.

#### Table 75: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to apply an expired license or an invalid license where the license version did not match the application DB version, the expected error message did not appear. This issue has been resolved. An error message now appears indicating that the license is invalid.	DE180674

### Advanced Visualization

This topic provides a list of product changes released for this module in this version.

#### Table 76: Known Issues and Limitations

The following known issues and limitations exist.

Description	Tracking ID
You cannot upgrade Advanced Visualization directly from V5.0.0.0.0 to V5.0.1.0.0. You must first uninstall Advanced Visualization, and then install it again, to upgrade to the latest version. For more information, refer to the Upgrade guide.	US583234

## APM Connect

This topic provides a list of product changes released for this module in this version.

### Table 77: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, data was synchronized only for the records defined in a Relationship worksheet, which are loaded as part of the Equipment or Functional Location EAM interfaces. This issue has been resolved. Now, the records defined in an Entity worksheet are also considered for data synchronization.	DE194922

### Table 78: Known Issues and Limitations

The following known issues and limitations exist.

Description	Tracking ID
Currently, when loading data into APM, it is possible that the status of the Data Bundle remains as <b>Started</b> for a long time and never transitions to the next processing stage. In this scenario, the processing is stuck and requires resubmission of the file. For more information, refer to KBA 000068457.	DE199505

## Asset Criticality Analysis

This topic provides a list of product changes released for this module in this version.

### Table 79: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in an ACA Analysis, if an asset was inactive, the Update Criticality to SAP function did not work as expected. This issue has been resolved.	DE192189

## Asset Strategy Implementation

This topic provides a list of product changes released for this module in this version.

### Table 80: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, ASI Search for Importing Maintenance Plans did not return Maintenance Plans where the specified equipment or functional location was not in the Object List in the plan. This issue has been resolved. Now, ASI search will return Maintenance Plans for Equipment or Functional Location assigned at either the Header Level or Object List.	DE192239

## Asset Strategy Management

This topic provides a list of product changes released for this module in this version.

### Table 81: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to consolidate recommendations through the Recommendations window, after you selected <b>Merge Remaining Unselected</b> , and then selected <b>Consolidate</b> , the spinner continued for an indefinite time span. This issue has been resolved.	DE196297
Previously, when an asset strategy was linked to a large system strategy, activating the strategy took longer than expected. This issue has been resolved.	DE194756

## Catalog

This topic provides a list of product changes released for this module in this version.

### Table 82: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, you were able to create a catalog folder with leading or trailing spaces. This issue has been resolved. Now, you will receive a message to remove the leading or trailing spaces before you are allowed to save the catalog.	DE196838

## Calibration Management

This topic provides a list of product changes released for this module in this version.

### Table 83: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
You can now control the list of calibrators displayed when sending data to a calibrator, based on their certification status. To facilitate this enhancement, the <b>Show Certified Calibrators Only</b> preference setting has been added in the <b>Admin</b> section under the <b>Automated Calibration Settings</b> tab to filter and display the calibrators based on their current certification status.	US574877
To enhance the Calibration Management workflow, you can now link multiple <b>Calibration Task</b> records to a single <b>Calibration Template</b> using the Calibration Data Loader.	US558318
To enhance usability, background colour functionality is now added to the Functional Test Calibration Result fields to indicate if the results match with the Expected Response.	US529399

**Table 84: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to approve the Summary Event of an Instrumentation System, a new Calibration Task Scope was not created when the Calibration Task was recycled. This issue has been resolved.	DE197975

## Failure Modes and Effects Analysis

This topic provides a list of product changes released for this module in this version.

**Table 85: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, for an FMEA Analysis that has virtual assets, when you selected a virtual asset listed in the <b>Assets</b> pane, the error message "Either an entity or a family key will have to be provided" appeared. This issue has been resolved.	DE197785
Previously, when you accessed an FMEA Analysis or an FMEA Template, the search functionality did not work as expected. This issue has been resolved.	DE196992

## Family Management

This topic provides a list of product changes released for this module in this version.

**Table 86: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, even if you configured a field to appear in rich text format (RTF), it appeared in plain text on a datasheet. This issue has been resolved.	DE194892

## Family Policies

This topic provides a list of product changes released for this module in this version.

**Table 87: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To facilitate the upgrade process, when your APM system is upgraded, a log message is added indicating the APM product version at which the upgrade took place. In addition, when you delete upgrade logs, a similar action is performed.	US576960
To enhance the upgrade process, when your APM system is upgraded, any policies containing a create entity node or an edit entity node are upgraded, such that references to Policy GUID field on a Policy Instance family are changed to Policy Key. Similarly, any references to Policy Instance GUID field on a Policy Event family are changed to Policy Instance Key. If a value is assigned to one of these fields and has the field ID of CONTENT_GUID, those are also upgraded to ENTY_KEY.	US572648
To enhance traceability of Family Policy actions, when the Cancel Transaction node is executed, a policy execution history record is now created.	US525851
You can now write data into Predix Time Series using a policy. This will automate tag events and writes specific time series data across multiple assets and tags. To facilitate this enhancement, a new action node, Add Value to Time Series, has been created.	US183667

**Table 88: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you accessed the upgrade log of a policy directly (that is, using a URL), an error occurred. This issue has been resolved.	DE197833
Previously, when the <b>R Server Version</b> was set to <b>Rserve</b> and an R script contained an output parameter that was not used, an error occurred during execution. This issue has been resolved.	DE196834
Previously, when you executed a policy that called a sub policy that contained a Create Entity node, if the entity was not created due to an error on another node, the execution details in the Create Entity node were incorrect. This issue has been resolved.	DE196496
Previously, if your APM system used an Oracle database schema, an error occurred when you attempted to sort the <b>Summary</b> column in the execution history grid. This issue has been resolved. Now, in this case, a message is displayed indicating that sorting the <b>Summary</b> column is not supported.	DE191241

## Generation Availability Analysis

This topic provides a list of product changes released for this module in this version.

**Table 89: Enhancements and New Features**

The following enhancements and new features have been added.



Description	Tracking ID
To enhance usability, when you create a primary event of the U1 type (that is, Unplanned (forced) Outage - Immediate) for a unit that reports to NERC, the <b>Amplification Code</b> box contains only the following codes: <ul style="list-style-type: none"> <li>• T1</li> <li>• T2</li> <li>• 84</li> </ul>	US573747

#### Table 90: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you accessed a Primary Event, the total number of revisions made for the Primary Event was incorrect. This issue has been resolved.	DE198249

## Integrity Mobile Application

This topic provides a list of product changes released for this module in this version.

#### Table 91: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
The Integrity Mobile application is now available for Android phones and iPhone devices, in addition to Android tablets and iPad devices.  For more information on supported devices, see Integrity Mobile System Requirements.	US577997

#### Table 92: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

## Inspection Management

This topic provides a list of product changes released for this module in this version.

#### Table 93: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, Checklist Findings did not get created for the Checklist Inspection Template family through the Inspection Management (IM) Data Loaders. This issue has been resolved now.	DE196382
Previously, when a Risk Analyst (user) reviewed an Inspection Confidence record in the <b>Inspection Confidence</b> tab, the Risk Analyst name used to overlap. This issue has been resolved.	DE181350

## Installation and Upgrade

This topic provides a list of product changes released for this module in this version.

**Table 94: Known Issues and Limitations**

The following known issues and limitations exist.



Description	Tracking ID
You cannot upgrade Advanced Visualization directly from V5.0.0.0.0 to V5.0.1.0.0. You must first uninstall Advanced Visualization, and then install it again, to upgrade to the latest version. For more information, refer to the Upgrade guide.	US583234

## Manage Translations

This topic provides a list of product changes released for this module in this version.

**Table 95: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, on the <b>Manage Translations</b> page, the undo (  ) and save (  ) buttons are enabled only if you made changes in the <b>Translated Term</b> column.	US573439

## Management of Change

This topic provides a list of product changes released for this module in this version.

**Table 96: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance functionality and usability, you can now select multiple checklists while linking the checklists to a MOC Change Project.	US578386

## Metrics and Scorecards

This topic provides a list of product changes released for this module in this version.

**Table 97: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, for a KPI, if any of the recipients in the Alert Distribution List was not a Security User, you could not edit and save the KPI. This issue has been resolved.	DE197795

## Policy Designer

This topic provides a list of product changes released for this module in this version.

**Table 98: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To facilitate the upgrade process, when your APM system is upgraded, a log message is added indicating the APM product version at which the upgrade took place. In addition, when you delete upgrade logs, a similar action is performed.	US576960
To enhance the upgrade process, when your APM system is upgraded, any policies containing a create entity node or an edit entity node are upgraded, such that references to Policy GUID field on a Policy Instance family are changed to Policy Key. Similarly, any references to Policy Instance GUID field on a Policy Event family are changed to Policy Instance Key. If a value is assigned to one of these fields and has the field ID of CONTENT_GUID, those are also upgraded to ENTY_KEY.	US572648
You can now write data into Predix Time Series using a policy. This will automate tag events and writes specific time series data across multiple assets and tags. To facilitate this enhancement, a new action node, Add Value to Time Series, has been created.	US183667

**Table 99: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you accessed the upgrade log of a policy directly (that is, using a URL), an error occurred. This issue has been resolved.	DE197833
Previously, in the upgrade log of a sub policy, some messages referenced the Delete Entity node when the affected node was a Create Relationship or a Delete Relationship node. This issue has been resolved. For more information, refer to <a href="#">KBA 000068295</a> .	DE197203
Previously, when an active, scheduled policy was saved, it got triggered immediately and the defined schedule resumed from the next expected date and time. This issue has been resolved. Now, the policy is triggered only when the policy schedule or status is modified.	DE197194
Previously, when a session timed out, the policy was not executed. This issue has been resolved. Now, when a session times out, the policy execution is retried.	DE194998
Previously, when the <b>R Server Version</b> was set to <b>Rserve</b> and an R script contained an output parameter that was not used, an error occurred during execution. This issue has been resolved.	DE196834
Previously, when you executed a policy that called a sub policy that contained a Create Entity node, if the entity was not created due to an error on another node, the execution details in the Create Entity node were incorrect. This issue has been resolved.	DE196496


Description	Tracking ID
Previously, if your APM system used an Oracle database schema, an error occurred when you attempted to sort the <b>Summary</b> column in the execution history grid. This issue has been resolved. Now, in this case, a message is displayed indicating that sorting the <b>Summary</b> column is not supported.	DE191241
Previously, you were able to create a Policy with a name with leading spaces. This issue has been resolved. Now, any leading spaces will be removed from the name when you save the Policy. As a result of this change, if your APM system contains Policies whose names differ only by leading spaces, you must enter new names.	DE75965

## Record Manager

This topic provides a list of product changes released for this module in this version.

### Table 100: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the Bulk Data Form and the Master Detail datasheet, when you attempted to change the order of the columns using the <b>Table Settings</b> window, the order was not updated. This issue has been resolved.	DE197581
Previously, when you created a new user, and then accessed a record for the Conditional Alert family, the user did not appear in the <b>Alert Owner</b> drop-down list box. This issue has been resolved. Now, the More Options icon (  ) has been added in the <b>Alert Owner</b> field, which opens a window displaying all users for the Conditional Alert record site.	DE196146
Previously, if you downloaded an offline form that contained more than 10 rows, the sequence of the fields was incorrect. This issue has been resolved.	DE194444
Previously, if you created a customized dialog box, the <b>OK</b> and <b>Cancel</b> buttons were not translated. This issue has been resolved.	DE193286
Previously, in the Bulk Data Form and the Master Detail datasheet, when you modified the display of the columns using the <b>Table Settings</b> window, the setting was not saved as a user preference. This issue has been resolved.	DE183302
Previously, in a Record datasheet, when you entered a value that contained an anchor markup (For example, <a href="#dashboard/123456789">link text</a>) in any one of the text fields and saved it, you were unable to edit the field again. This issue has been resolved.	DE133621

## Reliability Centered Maintenance

This topic provides a list of product changes released for this module in this version.

### Table 101: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you accessed an RCM Analysis or an RCM Template, the search functionality did not work as expected. This issue has been resolved.	DE196992


## Risk Based Inspection

This topic provides a list of product changes released for this module in this version.

### RBI 580 and RBI 581

#### Table 102: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
As an RBI Analyst, you can now inactivate an RBI Component. To facilitate this enhancement, the RBI Tree now contains an Inactivate button (  ). After you inactivate an RBI Component, the Component Status field is set to Inactive.	US570780

#### Table 103: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>COMPONENT OVERVIEW</b> section of an RBI Component, the latest What-If Analysis did not appear in the graph if you hid and then showed the What-If Analysis. This issue has been resolved.	DE191315

### RBI 581

#### Table 104: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
<p>The formula for calculating Final Corrosion Rate in an RBI 581 External Damage Evaluation now adheres to API 581 3rd Edition, Addendum 2. To facilitate this enhancement, the following values will be used in the calculation only if the Source of Calculated Corrosion Rate field is set to <b>Calculated</b>:</p> <ul style="list-style-type: none"> <li>Corrosion rate adjustment factor for bad asset design/fabrication</li> <li>Corrosion rate adjustment factor for interface for soil and water</li> </ul>	US573668

## Rounds Designer

This topic provides a list of product changes released for this module in this version.

#### Table 105: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if your user culture was set to Slovenian (Slovenia), an error occurred when you attempted to access Rounds Designer. This issue has been resolved.	DE198608

## SAP Adapters

This topic provides a list of product changes released for this module in this version.

### Table 106: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, ASI Search for Importing Maintenance Plans did not return Maintenance Plans where the specified equipment or functional location was not in the Object List in the plan. This issue has been resolved. Now, ASI search will return Maintenance Plans for Equipment or Functional Location assigned at either the Header Level or Object List.	DE192239

## Single Sign-On

This topic provides a list of product changes released for this module in this version.

### Table 107: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To enhance security, if SSO is enabled and Single Logout is configured, when you log out of the APM mobile application, you are logged out of the third-party identity provider (IDP) application as well. Therefore, when you attempt to access the APM mobile application the next time, you are first redirected to the IDP login page where you must enter your SSO credentials again to log in.	US553861

### Table 108: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, an error message indicating Login failure appeared while signing out of SSO login. This issue has been resolved.	DE196136

## SIS Management

This topic provides a list of product changes released for this module in this version.

### Table 109: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you tried to open an existing Common Cause Failure record from a SILAssessment, an error occurred and failed to load the datasheet. This issue has been resolved.	DE196856
Previously, when you attempted to import a recently created Exida project file with the .exp extension into APM, an error occurred, and the import failed. This issue has been resolved.	DE195336
Previously, if you attempted to change the SRS Template that is defined for an SRS Category in an SRS Project, an error occurred. This issue has been resolved.	DE195287
Previously, in an Instrumented Function, if you navigated from one Protective Instrument Loop to another, an incorrect Protective Instrument Loop appeared. This issue has been resolved.	DE194970

## Teams

This topic provides a list of product changes released for this module in this version.

**Table 110: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you added users to a Team configured for All Users, the list of available users was incorrect. This issue has been resolved. Now, in this scenario, the list of available users includes all users associated with any site to which you have access.	DE198010

## Thickness Monitoring

This topic provides a list of product changes released for this module in this version.

**Table 111: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, calculation of large number of assets in Thickness Monitoring failed. This issue has now been resolved. Performance improvements have been incorporated for the bulk calculations.	DE194373
Previously, in the <b>Measurement Data Entry</b> workspace, the <b>Measurement Taken By</b> field did not populate the list of available users correctly. This issue has been resolved	DE197476
Previously, in the <b>TM Quick View</b> page, the columns displaying the measurement values for each month showed the abbreviated name of the month in the language assigned to the user's culture setting rather than the language assigned to the user's language setting. This issue has been resolved.	DE178380
Previously, in Piping Rotations, if more than one movement was done on the same day, and you attempted to undo the last movement (Undo Last Movement), it did not pick up the latest pipe movement. This issue has been resolved. For more information, refer to <a href="#">KBA 000068267</a> .	DE156096

## V5.0.0.0.0

### Action Management

This topic provides a list of product changes released for this module in this version.

**Table 112: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, when you select the job status component, job error details appear in a separate window on the same page.	US447214
To enhance usability, the catalog query has been redesigned for the Recommended Actions section. For more information on modifying the query, refer to KBA <a href="#">000039672</a> .	DE182275

**Table 113: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>Strategy Actions</b> workspace of the Action Management page, when you modified an action and selected <b>Apply Updates</b> , the action took longer than expected to load. This issue has been resolved.	DE187468
Previously, when you filtered the Performance Recommendations for a state, such as Completed, Cancelled, or Rejected, you were unable to view the <b>Manage State Assignments</b> option. This issue has been resolved.	DE180732
Previously, while implementing actions as EAM Maintenance Plan, the export file was named as EAM Action Mapping. Now, the export file has been renamed to Strategy Export.	DE179764
Previously, in the <b>Implement Actions</b> section, you were unable to implement an EAM Maintenance Plan when you selected actions from more than one asset. This issue has been resolved.	DE178356
Previously, when you attempted to supersede a Policy Recommendation, an error occurred. This issue has been resolved. The relationship definition between Policy Recommendation (predecessor) and Policy Recommendation (successor) entity families is now added to the Has Superseded Recommendations relationship family.	DE175274
Previously, in the recommendation datasheet for a Recommended Action, the column names in the <b>Select User</b> window for the following fields were not translated based on the language setting configured for your user account: <ul style="list-style-type: none"><li>• <b>Assigned to Name</b></li><li>• <b>Final Approver Name</b></li><li>• <b>Author Name</b></li><li>• <b>Reviewer Name</b></li></ul> This issue has been resolved.	DE155765



## Advanced Visualization

This topic provides a list of product changes released for this module in this version.

**Table 114: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
Advanced Visualization module has been introduced in APM and provides you a powerful way to visualize and collaborate on the data that is available within APM Classic by connecting, aggregating, and analyzing data through business intelligence (BI) like capability.  <b>Important:</b> APM requires the use of Webfocus software from TIBCO, which is provided as part of the installation of this product. TIBCO Webfocus is provided strictly for use within APM and is not licensed to you for any other use outside of this product. Any other use is prohibited without an additional license from TIBCO.	US561552

## API Documentation

This topic provides a list of product changes released for this module in this version.

**Table 115: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To maintain backward compatibility, all APIs will now have a version as part of the base URL. For example, <code>api/custdev/core/</code> will now be <code>/v1/api/custdev/core/</code> .	US562121

## APM Connect

This topic provides a list of product changes released for this module in this version.

**Table 116: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
The APM Connect EAM Jobs feature has been removed from the <b>Admin&gt;Operations Manager</b> page.	US557778

## APM Data Extraction

This topic provides a list of product changes released for this module in this version.

**Table 117: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if several rules were configured for a family, when you attempted to extract data with an OData request, the rules were triggered and the data extraction process took longer than expected. This issue has been resolved. Now, the rule execution has been disabled, resulting in improved performance.	DE182079

## APM Mobile Application

This topic provides a list of product changes released for this module in this version.

**Table 118: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, reference documents that were added to a checkpoint opened automatically on the GE Digital Mobile application for Windows. This issue has been resolved. Now, the GE Digital Mobile app prompts you to save the reference document on your device and then open it.	DE191615
Previously, a route that was marked done after you had cleared its values in the APM mobile application, entered into a locked state and a warning message appeared that all readings were not uploaded. This issue has been resolved now.	DE154583
Previously, when you entered readings for a route in the APM mobile application, and under certain conditions when you applied the <b>Only Incomplete Checkpoints</b> filter, the readings were not saved. This issue has been resolved. Now the APM mobile application retains the readings.	DE154392
Previously, when the APM mobile application was run on an iOS device and you used the drop-down data entry control to enter readings, the application would freeze sometimes. This issue has been resolved.	DE153730
Previously, in some cases, readings entered in the APM mobile application did not get saved to the APM database. This issue has been resolved.	DE146093
Previously, in Rounds Data Collection, the offline data forms did not display the default values. This issue has been resolved and the default values are now visible.	DE144483

**Table 119: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
Currently, Legacy APM Mobile app for Windows application does not support GeoLocation feature during data collection. This feature will be re-enabled in the future releases.	US561644

## APM System Monitoring

This topic provides a list of product changes released for this module in this version.

**Table 120: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
The APM System Monitoring and Performance Monitoring features have been deprecated.	US458612

## APM Upgrade

This topic provides a list of product changes released for this module in this version.

**Table 121: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To use the APM Database Comparison Tool, you need to first copy all files from the Content Generation Utility (C:\Program Files\Meridium\upgrade\DBUpgrade\Utility) to the APM Database Comparison Tool (C:\Program Files\Meridium\upgrade\DBUpgrade\DatabaseReport).	DE193523

## Asset Criticality Analysis

This topic provides a list of product changes released for this module in this version.

**Table 122: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve the usability, export of multiple Asset Criticality Analyses will use background job infrastructure from the <b>Asset Criticality Analysis Overview</b> page.	US532282
To improve usability, in an ACA Analysis, when you select the job status component, send to job error details appear in a separate window on the same page.	US447208

**Table 123: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in an Asset Criticality Analysis, if an EAM configuration was used with multiple systems, sometimes an incorrect EAM system was targeted and a validation error occurred. This issue has been resolved.	DE152565
Previously, if you modified the criticality of an Analysis to a lower value, the modified value did not appear in the ACA Overview dashboard. This issue has been resolved.	DE150707
Previously, asset details and criticality distribution information did not respond properly to the asset filter. This issue has been resolved.	DE150118
Previously, when you accessed APM using a Chrome browser, there was a performance issue while saving records through the datasheet. This issue has been resolved.	DE149743
Previously, when using an EAM configuration with multiple systems, sometimes an incorrect EAM system was configured causing a validation error. This has been resolved.	DE146801

Description	Tracking ID
Previously, when using risk matrix in ACA, if a risk assessment was previously defined, when you attempted to set the risk assessment to Not Applicable in each risk category, the criticality of the asset did not change to Undefined or Not Applicable. Additionally, ACA retains the risk assessment value that was previously defined. This issue has been resolved.	DE145472
Previously, in an Asset Criticality Analysis you could add, link, unlink, edit, or delete the reference documents even in the Approved state. This issue has been resolved.	DE171592
Previously, when you changed a Risk Matrix that was associated with the site to a different Risk Matrix, you were still able to update the assessment using the old Risk Matrix. This issue has been resolved.	DE179424
Previously, when you created an Asset Criticality Analysis, you were able to access all the tabs. This issue has been resolved. Now, only the <b>Analysis Definition</b> tab is enabled until the new analysis is saved.	DE179929
Previously, when you attempted to add an asset, the Asset field in the <b>Enter Parameter Values</b> window displayed Home by default. This issue has been resolved. Now, it displays the asset hierarchy value.	DE184381


## Asset Hierarchy

This topic provides a list of product changes released for this module in this version.

**Table 124: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>The following columns are now required in the Query you use to define an Asset Group:</p> <ul style="list-style-type: none"> <li>• ENTY_KEY</li> <li>• ENTY_ID</li> <li>• FMLY_KEY</li> <li>• MI_SITE_KEY</li> </ul> <p><b>Note:</b> The new required columns will be added automatically to the query when you access an existing query-based asset group.</p>	<p>US521226</p> <p>US510070</p>
You can now see the asset type in the Asset <b>Hierarchy</b> page.	US510545
To improve usability, you can now view the options in the Asset Hierarchy <b>Filter</b> drop-down lists in alphabetical order.	US489034
You can now search the Asset Hierarchy with a search term containing at least two characters or alphanumeric values.	US476414
You can now set the number of assets to be displayed in asset hierarchy. To facilitate this enhancement, <b>Page Size</b> field has been added in the Asset Hierarchy Configuration workspace.	US472624

Description	Tracking ID
You can now define a priority between the parent-child relationship in the asset hierarchy configuration. This allows the hierarchy to be displayed when it includes assets related to more than one parent. To facilitate this enhancement, <b>Parent Priority</b> field has been included in the Asset Hierarchy Configuration workspace.	US444360
You can now view when the asset hierarchy was last built. To facilitate this enhancement, the Build Status of the last build and a refresh button  has been added in the Asset Hierarchy Configuration workspace.	US328150

**Table 125: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to create a query-based Asset Group using a query that returned a large number of results, an error occurred, and the group was not saved. This issue has been resolved.	US514053
Previously, you could only edit an Asset Group that you created. This issue has been resolved. <b>Note:</b> You can now edit any asset group if you are a super user or you are assigned to the MI Foundation Admin role.	DE154702
Previously, the scheduled Asset Hierarchy rebuild task failed and an error message appeared. This issue has been resolved.	DE145292

## Asset Strategy Implementation

This topic provides a list of product changes released for this module in this version.

**Table 126: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve the usability, when you select the job status component in ASI, the job error details now appear in a separate window on the same page.	US447211
To enhance usability and performance, you can now import multiple Object List Items for Equipment or Functional Location for a given Maintenance Item. This import functionality has been implemented to run as a background job.	US274702

**Table 127: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.


Description	Tracking ID
Previously, when you updated an ASI package with changes to a maintenance item, the <b>Last Changed Date</b> of its corresponding maintenance plan was also updated in SAP. This issue has been resolved. <b>Note:</b> For this change to take effect, SAP notes 3062714 and 3071508 are also required.	US501490
Previously, when you implemented an ASI Implementation Package, the associated WMIs were updated in SAP even if the corresponding WMIs were not modified in APM. This issue has been resolved.	US469281
Previously, in the child work management item hierarchy for an ASI Package, you could not see the full item description when it was long. This issue has been resolved. Now, a hover text is added to display the full description text.	US467480
Previously, when you sent the operation data from ASI to SAP, the long text value in SAP was not aligned properly. This issue has been resolved.	DE172198
Previously, when you accessed APM using a Chrome browser, there was a performance issue while saving records through the datasheet. This issue has been resolved.	DE149743
Previously, when updating the Interval for ASI maintenance packages directly in the package, for some of the intervals, it was not updated appropriately in SAP after implementing the package. This issue has been resolved.	DE149596
Previously, when you updated the intervals for the actions in ASM that were linked to the respective operations in an ASI package, and then activated the strategy, the updates were not visible in the maintenance package linked to the operations or in the Maintenance packages screen in the Tasklist level. This issue has been resolved.	DE140099
Previously, when you attempted to implement a package with Process Resource Tool (PRT) linked to the operations, an error occurred. This issue has been resolved. Now, you can only import the document type PRT from SAP. You cannot modify or push the PRT records to SAP.	DE174208
Previously, when you deleted an operation associated with an ASI maintenance package and the package was implemented, an error occurred. This issue has been resolved.	DE179078

## Asset Strategy Management

This topic provides a list of product changes released for this module in this version.

**Table 128: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, you can now perform a bulk edit on actions from the <b>Manage</b> workspace of the <b>System Strategy</b> page.	US559870
To improve usability, the Implement Action as EAM Work Request option is renamed to Implement as Recommendation and you can now select the <b>Create EAM Work Request</b> as an optional functionality.	US559429
To improve usability, you can now bulk edit the Risks and Actions of the ASM Strategy and ASM Template. To facilitate this enhancement, a new icon (  ) , has been added to the Risks and Actions section.	US555736

Description	Tracking ID
To improve usability, when you apply the template as a master or as a copy, the Strategy Description and Note field values are now copied to the Controlled Asset Strategy record.	US526085
To improve usability, in an Asset Strategy, you can now optimize the ASM Template.	US525440
To improve usability, when you select the asset strategy and save it as a template, the selected ASM template appears in a new window with the Asset Strategy Template datasheet.	US523633
To improve the usability, export of multiple asset strategies will use background job infrastructure from the <b>Asset Strategy Management Overview</b> page.	US513337
To improve user experience, you can now directly access the promotional information and know more about purchasing Asset Strategy accelerator templates from the <b>ASM Overview</b> page.	US513028
To improve usability, in ASM, when you select the job status component, job error details appear in a separate window on the same page.	US447223
To improve usability, in an Asset Strategy or Template Activation and Apply Template, when you select the job status component, background error details appear in a separate window on the same page.	US447222
To improve usability, in the <b>ASM Overview</b> page, when you select the job status component, Import from EAM and Import from Rounds job error details appear in a separate window on the same page.	US447215
To enhance usability, you can now move controlled asset strategies from one template to another.	US414703

**Table 129: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the size of the <b>Implement as EAM Maintenance Plan</b> window was smaller and therefore you could not view all columns in the window. This issue has been resolved. Now, the size of the <b>Implement as EAM Maintenance Plan</b> window has been increased and you can view all the columns without scrolling.	US539759
Previously, when an Asset Strategy was part of a large System Strategy, the APM application took longer than expected to save Actions. This issue has been resolved.	US452194
Previously, there were performance issues when deleting a strategy. The issue has been resolved.	US445909
Previously, in the <b>Implement Actions</b> workspace of the <b>Asset Strategy</b> page, when you modified an action and selected <b>Apply Updates</b> , the action took longer than expected to load. This issue has been resolved.	DE187468
Previously, when you promoted an RCM or FMEA template to ASM, it appeared in both the <b>Templates</b> and <b>Asset Strategies</b> sections of the <b>Asset Strategy Overview</b> page. This issue has been resolved. Now, the promoted template appears only in the <b>Templates</b> section.	DE186588

Description	Tracking ID
Previously, when you attempted to apply an ASM template as master to the asset, new action IDs were generated based on the strategy ID. This issue has been resolved. Now, when you apply an ASM template as a master to the asset, you can configure if you want to copy the action ID from the template or generate new action IDs. To facilitate this change, you must delete the Action ID from the <b>Excluded Action Fields while applying Template As Master</b> field from the <b>ASM Preferences</b> tab in the <b>ASM Admin</b> page.	DE182095
Previously, while implementing an action as an EAM Maintenance Plan, if the action record included special characters, the CSV file did not generate correctly. This issue has been resolved.	DE181834
Previously, while implementing actions as EAM Maintenance Plan, the export file was named as EAM Action Mapping. Now, the export file has been renamed to Strategy Export.	DE179764
Previously, in the Recommendation section, if your culture setting had a culture other than English, the State fields were not translated to the specific language selected in the culture setting. This issue has been resolved.	DE166047
Previously, when you accessed APM using a Chrome browser, there was a performance issue while saving records through the datasheet. This issue has been resolved.	DE149743
Previously, when you make a strategy Active after unconsolidating the consolidated actions, an error occurred. This issue has been resolved.	DE148009
Previously, if you deleted the Actions associated with a deleted risk, and then activated the strategy, the deleted risk appeared twice with the same ID. This issue has been resolved.	DE147606
Previously, if a Security Role was assigned to a state associated with the Asset Strategy family, when you attempted to create a System Strategy, an error occurred. This issue has been resolved.	DE145463
Previously, if the minimum threshold value for a risk matrix was not set to zero, the risk values in the risk card for a given strategy were not correct. This issue has been resolved.	DE141584
Previously, in the <b>Implement Actions</b> workspace, when an action was linked to an EAM plan with multiple maintenance items associated to the maintenance plan, an incorrect EAM work order was displayed. This issue has been resolved.	DE173400
Previously, in the <b>Templates</b> tab of an <b>Asset Strategy Overview</b> page, when you attempted to save the <b>Risk Matrix</b> values for a Risk with multiple mitigated actions linked to an asset template, an error occurred, and the <b>Risk Matrix</b> values were not saved. This issue has been resolved.	DE173755
Previously, when you attempted to make a copy of an <b>Asset Strategy</b> template with the custom fields or any baseline fields that were set as the Required Behavior, an error occurred. This issue has been resolved.	DE173627
Previously, when you attempted to query the Risk Rank table, a Risk value with a lengthy decimal was returned. This issue has been resolved.	DE171050
Previously, in a Controlled Strategy, when you created an action, the Action ID that was generated was not unique. This issue has been resolved.	DE174879
Previously, when the ITS URL in an EAM System record was not configured, the value in the ID field of the EAM Plan record was displayed incorrectly.	DE175483
Previously, when you attempted to export the ASM template from an ASM Overview page, it contained an incorrect field ID column in the Risks worksheet. This issue has been resolved.	DE175323



Description	Tracking ID
Previously, when you changed a Risk Matrix that was associated with the site to a different Risk Matrix, you were still able to update the assessment using the old Risk Matrix. This issue has been resolved.	DE179424
Previously, when the ITS URL in an EAM System record was not configured for the SAP system, the hyperlink to navigate to the EAM Plan or EAM Plan Details records from the Implement Actions section displayed incorrectly. This issue has been resolved.	DE180918
Previously, when you attempted to create a strategy, the Asset field in the <b>Enter Parameter Values</b> window displayed Home by default. This issue has been resolved. Now, it displays the asset hierarchy value.	DE184381

**Table 130: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When the Asset Strategy is a part of a System Strategy, an activation of an Asset Strategy may take longer than the expected time.	DE194756

## Asset Strategy Optimization

This topic provides a list of product changes released for this module in this version.

**Table 131: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the simulation for optimizing an asset strategy did not get completed if custom rules were defined in the strategy. This issue has been resolved.	DE173565

## Calibration Management

This topic provides a list of product changes released for this module in this version.

**Table 132: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>You can now have more control on handling the unsaved results and unfinished tasks while performing <b>Send to Calibrator</b> using <b>Fluke 74x- 75x or Fluke 729 FC</b> Calibrators and also after performing Receive from Calibrator. To facilitate this enhancement:</p> <ul style="list-style-type: none"> <li>• A new preference setting <b>Enable Fluke Task Management</b> has been added in the <b>Admin</b> section under <b>Automated Calibration Settings</b> tab to activate the enhanced workflow on handling the unsaved results and unfinished tasks.</li> <li>• A new option is added in <b>Send to Calibrator</b> screen to save the results to APM and to reload the unfinished tasks back to Calibrator.</li> <li>• A new option is added in <b>Receive from Calibrator</b> screen to erase the results from Calibrator after saving the results to APM.</li> </ul>	F62318
<p>To improve efficiency in managing calibration data for a group of assets, the <b>Instrumentation System</b> functionality has been added in the Calibration Management module. Instrumentation Systems can be created for a high-level Functional Location such that you can add assets beneath that Functional Location. The Instrumentation System functionality helps you define, manage, and review the calibration schedule (tasks) and reporting (events) at a system or an instrumentation loop level.</p>	US554245
<p>The Work Management Interface functionality is now enabled to support notification creation in addition to work order generation when tasks are created in the application. Additionally, you can select <b>EAM Object</b>, <b>User Status</b>, and <b>Type</b> while creating tasks.</p>	US523942

**Table 133: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, when you created a Calibration Profile record and selected the site as Global, you were unable to link assets from different sites. This issue has been resolved. Now, you can link assets based on user-assigned sites.</p>	US555755
<p>Previously, in a Functional Test Template datasheet, when you selected the <b>Refresh Equipment Data</b> check box and saved the datasheet, the Equipment or Functional Location values were not copied to the template. This issue has been resolved.</p>	DE184459
<p>Previously, in <b>Has Reference Documents</b> relationship family, when you attempted to add the relationship definition between safety related families and reference document, the <b>Reference Document</b> option was not available in the respective family datasheet. This issue has been resolved.</p>	DE172444
<p>Previously, when you created a Calibration Event record using a Calibration Template whose Detail records were in a random order, Calibration Result records were displayed in random order. This issue has been resolved. Now, irrespective of the order of the Detail records, the Calibration Result records appear in the correct order based on the test sequence numbers.</p>	DE157282
<p>Previously, when you ran Calibration Data Model Upgrade Utility as part of the database upgrade activity, when processing large number of records, the utility stopped responding. In addition, system ran out of memory space during the upgrade. This issue has been resolved.</p>	DE155590
<p>Previously, after you created a calibration event and selected a value in the <b>Test Equipment ID</b> box, you could not clear the value. This issue has been resolved. Now, the <b>Clear</b> button has been added to the <b>Test Equipment ID</b> box.</p>	DE155551

Description	Tracking ID
Previously, in a multi-component Calibration Event record, when you selected a value for the Cylinder ID field and saved the record, only the cylinder expiry date was recorded, while the Laboratory Number field was not populated in the multi-component identification datasheet. This issue has been resolved.	DE154985
Previously, when you attempted to update Desired Interval, Min Interval and Max Interval values in the Calibration Task datasheet, an error occurred. This issue has been resolved.	DE121496

**Table 134: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
You can no longer customize the code to generate a work order because the work order generation for tasks created in APM has been moved into the product code.	
Previously, the Associated Pages functionality for Calibration Event, Calibration Results, Calibration Template, Calibration Template Detail, Standard Gas Cylinder, and Standard Gas Components families was not working as expected. This functionality can be achieved using the normal Calibration workflow. So, the Associated Pages functionality has been removed for these families.	DE152310

## Catalog

This topic provides a list of product changes released for this module in this version.

**Table 135: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, you can now include leading and trailing spaces in a Catalog folder name.	US529221

**Table 136: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.


Description	Tracking ID
Previously, when you selected your personal folder in the Catalog, the workspace displayed "Personal" instead of your name. This issue has been resolved.	DE170888

## Compliance Management

This topic provides a list of product changes released for this module in this version.

**Table 137: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve usability, you can now view the Inspection Task datasheet in a Datasheet window instead of a new tab, when you select the <b>Task ID</b> hyperlink in the existing tasks section of the <b>Inspection Plan</b> page.	US547779
To improve usability, in the <b>Compliance Configuration</b> section of the Inspection Management <b>Admin</b> page, when linking assets to Compliance Strategy Templates using the <b>Add Assets Via Finder</b> option, the finder window has been updated to <b>Asset Finder</b> . Now to select an asset, you can select the checkbox next to the asset in the tree.	US521250
<p>To improve usability, you can now view the Asset info summary in the <b>Compliance</b> inspection page. To facilitate this enhancement, a new button  for Asset info summary has been added to the header of the <b>Inspection Plan</b> page. You can now get a high-level view of the health of an asset which consists of the following information:</p> <ul style="list-style-type: none"> <li>• Asset health indicator counts by alert level</li> <li>• RBI risk</li> <li>• Thickness Monitoring remaining life</li> <li>• Open Inspection recommendations</li> <li>• Work history</li> </ul> <p>You can also use hyperlinks to navigate to the assets of the Thickness Monitoring, Inspection Management, and Risk Based Inspection modules.</p> <p>If you have Risk Based Inspection licensed, you can configure all the fields and values displayed on the Asset info summary in the <b>Asset Info Configuration</b> workspace under the <b>RBI Admin Preferences</b> page.</p>	US516051

**Table 138: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the Integrity section of the <b>&lt;Asset Name&gt;</b> workspace, the Compliance Management hyperlink displayed both the count of Assets without Inspection Plans and the count of Inspection Plans. Compliance Management supports both RBI Assets and Inspection Assets, and the count of Assets without Inspection Plans does not apply to RBI. This issue has been resolved. Now, the Compliance Management hyperlink has been updated to show only the count of Inspection Plans.	US547778
Previously, in the <b>Assets without Inspection Plans</b> section, when you created or updated an Inspection plan, if the selected asset is already part of another executing job, no error message was displayed. This issue has been resolved.	DE168448
Previously, when you approved a modified <b>Inspection Plan</b> that already had Compliance Recommendations in the Implemented state, and RBI Recommendations in the Proposed state, the Compliance Recommendations were reverted to the Approved state. This issue has been resolved.	DE153651
Previously, the Build Suggested Templates workflow in Compliance Management failed when you attempted to delete large datasets. This issue has been resolved.	DE149423

Description	Tracking ID
Previously, when creating an Inspection Plan, if an Asset did not meet the policy criteria of the assigned template, no error message was added to the log file, and the log file incorrectly indicated that the Inspection Plan was created successfully. This issue has been resolved.	DE145734
Previously, when creating Inspection Plans or updating Compliance Recommendations for Inspection Plans in bulk from the <b>Compliance Management Overview</b> page, if the job did not complete successfully for a certain Asset, subsequent Assets were not processed until the datasource was made offline and then online. This issue has been resolved.	DE145733

## Content Change Management

This topic provides a list of product changes released for this module in this version.

**Table 139: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
The Content Change Management module has been deprecated.	US533582

## Data Loaders

This topic provides a list of product changes released for this module in this version.

**Table 140: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when using the APM Family Data Loader to define the value of a long text field, if the text contained lines that end with a comma and a linefeed, the commas were being removed. This issue has been resolved.	DE179432
Previously, when you attempted to load analysis with large number of assets contained in a single Excel sheet, the ACA data loader timed out. This issue has been resolved.	DE142694

**Table 141: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
Currently, in the <b>TOOLS</b> section, <b>Data Loaders</b> appears as <b>Data Loaders V2</b> . This will be updated to <b>Data Loaders</b> in a future release.	US568652
When you attempt to create and update the relationships for a Health Indicator through the APM Family data loader, the data loader will appear to be stuck in the "Ingest" stage and data will not be inserted into APM. For additional information and workaround, review the <a href="https://digitalsupport.ge.com/communities/en_US/Article/Unable-to-Create-and-Update-Relationships-for-a-Health-Indicator-Record-through-APM-Family-Data-Loader">https://digitalsupport.ge.com/communities/en_US/Article/Unable-to-Create-and-Update-Relationships-for-a-Health-Indicator-Record-through-APM-Family-Data-Loader</a>	DE194409

## Datasets

This topic provides a list of product changes released for this module in this version.

### Table 142: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you imported a dataset using an Excel file, if the file contained formula field, the values in the field were imported as formulas instead of computed values. This issue has been resolved.	DE145579

## eLog

This topic provides a list of product changes released for this module in this version.

### Table 143: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, when you refresh the <b>eLog Overview</b> page, the result grid for the <b>Sign-in/ Sign-out Logs</b> section is now sorted according to the last modified date and time, instead of the sign-in date and time.	US545834
To enhance functionality, when you select the Create Notification field in an eLog Recommendation, the notification is now carried across to the eLog Record. As a result, notification alerts to linked EAM systems will now show populated Work Request field values for Equipment and Functional Location.	US516335
The following fields have been added to the eLog Recommendation family: <ul style="list-style-type: none"><li>Equipment Key: Stores the key for the asset associated with an eLog Recommendation record in the APM database.</li><li>Functional Location Key: Stores the key for the functional location associated with an eLog Recommendation record in the APM database.</li></ul>	US474385
You can now hide the <b>Edit</b> button from the <b>Shift Log</b> workspace in the <b>Shift Summary</b> page, so Shift Members cannot modify a log entry that is saved.	US462244

### Table 144: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you accessed the <b>Shifts</b> workspace of the <b>eLog Administrator</b> page, the functional locations hierarchy in the functional locations pane took longer than expected to load, and then the process timed out. This issue has been resolved.	DE157056
Previously, in the <b>Shift Log</b> workspace, if you selected <b>Show History</b> corresponding to a log entry, the history of the entry appeared in the workspace due to which you could not close the history after viewing it. This issue has been resolved. Now, the history of the entry appears in a separate window.	DE139459
Previously, in the STATUS OF ASSIGNMENTS chart, if you used the child families or the state management was enabled for the assignments, the chart did not capture all the data from the query. This issue has been resolved. Now, the chart displays <b>Assignments by Priority</b> .	US522314
Previously, if the <b>Hide Edit Button in Shift Log Entries</b> checkbox was not selected in the <b>Settings</b> of the <b>eLog Administrator</b> page, all signed-in users of an active shift log were able to edit the current log entries; to view the previous shift log entries, users were also able to see the <b>Edit</b> option but without the edit permissions. This issue has been resolved. Now, if the <b>Hide Edit Button in Shift Log Entries</b> checkbox is not selected, only originators can edit the log entries in an active shift; to view the previous shift log entries, you should select the <b>View</b> option.	US516201

## Email Settings

This topic provides a list of product changes released for this module in this version.

**Table 145: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
You will now receive email notifications from the email ID configured in the <b>From</b> field in the <b>Email Settings</b> page. <b>Note:</b> The subject of the email notification for Conditional Alert, KPI, and LDAP feature will now be prefixed by Predix APM.	US459672

## Failure Modes and Effects Analysis

This topic provides a list of product changes released for this module in this version.

**Table 146: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve the usability, export of multiple Failure Mode and Effects Analyses will use background job infrastructure from the <b>Failure Mode and Effects Analysis Overview</b> page.	US513337
To improve user experience, you can now directly access the promotional information and know more about purchasing Asset Strategy accelerator templates from the <b>FMEA Overview</b> page.	US513028
To improve the usability, when you select the job status component in FMEA, the job error details now appear in a separate window on the same page.	US447209

**Table 147: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you added a recommendation to a failure effect in RCM or FMEA, duplicate recommendation IDs were created. This issue has been resolved.	DE185427
Previously, when loading an FMEA Analysis Template that has multiple virtual assets, the data did not load correctly. This issue has been resolved.	DE182684
Previously, the Asset ID of a consolidated recommendation was incorrect. This issue has been resolved.	DE181288
Previously, when you attempted to apply an FMEA asset template to a new FMEA analysis, only the global asset templates appeared in the list of templates. This issue has been resolved.	DE180243
Previously, when loading data through dataloader, financial details were not getting updated as per the dataloader worksheet. This issue has been resolved.	DE152522
Previously, when you accessed APM using a Chrome browser, there was a performance issue while saving records through the datasheet. This issue has been resolved.	DE149743
Previously, if your culture setting was set to a culture other than Invariant Language, when you attempted to export FMEA analyses from the <b>FMEA Overview</b> page, an error occurred. This issue has been resolved.	DE147986
Previously, when you reset the value of a mitigated risk to a value less than that of the unmitigated risk, unmitigated risk was not updated with the change in mitigated risk. This issue has been resolved.	DE143700
Previously, if you are not an administrator, when creating a failure effect, the risk assessment record was not copied from ACA. This issue has been resolved.	DE143493
Previously, as a non-English language user, you were unable to view the Template Type column in the FMEA Overview page. This issue has been resolved.	DE174354
Previously, when you changed a Risk Matrix that was associated with the site to a different Risk Matrix, you were still able to update the assessment using the old Risk Matrix. This issue has been resolved.	DE179424
Previously, when you attempted to link an asset to an analysis, the Asset field in the <b>Enter Parameter Values</b> window displayed Home by default. This issue has been resolved. Now, it displays the asset hierarchy value.	DE184381

## Family Management

This topic provides a list of product changes released for this module in this version.

**Table 148: Enhancements and New Features**

The following enhancements and new features have been added.



Description	Tracking ID
To enhance readability, you can enable rich text formatting for a field with the text data type (from the <b>Fields</b> section of the family). When you do so, a toolbar appears next to the field in a datasheet, which you can use to format the text in the field.	F64567
The usability of the Master/Detail Datasheet Builder has been enhanced. To facilitate this enhancement, you can now select the values required to define the datasheet using drop-down list boxes. Additionally, you can edit existing datasheet definitions.	US515838
To improve usability, while creating a new family field, you can now select from additional data types. To facilitate this enhancement, in the <b>Information</b> section of the new field workspace, the <b>Data Type</b> drop-down list box now displays four new options: <ul style="list-style-type: none"> <li>• Integer</li> <li>• Long</li> <li>• Double</li> <li>• Decimal</li> </ul>	US282205

**Table 149: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, an administrator was able to change the cardinality of an existing relationship definition, which could lead to data integrity being compromised. This issue has been resolved. Now, modifying the cardinality of relationship definitions is no longer supported.	US568224
Previously, when you used a Security Group Query as a condition for Field Behavior, an error occurred. This issue has been resolved.	DE182353
Previously, in the <b>Picklist</b> behavior, when you exported and then imported a query that contained prompts, the query was imported without the prompts. This issue has been resolved.	DE178521
Previously, when you attempted to modify a datasheet that has the Tabular layout, you could insert a new field only at the bottom of the datasheet. This issue has been resolved. Now, you can add a field anywhere in the datasheet.	DE176264
Previously, when you were connected to an Oracle Datasource, and if the Field ID or Physical Column name contained lowercase characters, the field values in the Physical Column were ignored. This issue has been resolved. Now, the Field IDs and the Physical Column names are auto corrected to uppercase characters.	DE166611


## Family Policies

This topic provides a list of product changes released for this module in this version.

**Table 150: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>A new catalog query, <code>Public\Meridium\Modules\Policy Manager\Queries\Family Policies with Upgrade Issues</code>, is provided to identify any family policies that could not be successfully upgraded to V5.0.0.0.0. You should review the upgrade logs for any family policy that could not be successfully upgraded and modify the policy model as appropriate.</p> <p><b>Important:</b> Failure to modify family policies that were not successfully upgraded may result in unexpected system behaviour when inserting, updating, or deleting records in the relevant families. For more information, refer to Upgrade or Update Policy Designer. Please contact <a href="#">GE Vernova Support</a> in case of any difficulty with family policy modifications.</p>	US533620
<p>You can now review warnings and errors that occur during the post-upgrade processing of family policy records in the Family Policy UI. To facilitate this enhancement, you can now select the <b>Upgrade Logs</b> tab in the module navigation menu and view or delete the log information for a family policy that is upgraded from an earlier version.</p>	US525819
<p>You must now specify the family ID or family key(s) for relationships that you want to delete in a family policy. To facilitate this enhancement, the <b>Predecessor Family ID</b>, <b>Predecessor Family Key(s)</b>, <b>Successor Family ID</b>, and the <b>Successor Family Key(s)</b> sections are added in the Delete Relationship node properties window of Family Policies.</p> <p><b>Note:</b> When your APM system is upgraded, family policies containing the Delete Relationship node will be upgraded only where the family of the entities to be created can be determined automatically. For more information, refer to Upgrade or Update Policy Designer.</p>	US520092
<p>To enhance usability, additional output system fields have been added to the Current Relationship node. Now, the node contains the following output system fields:</p> <ul style="list-style-type: none"> <li>• Created By User Key</li> <li>• Created Date</li> <li>• Entity Key</li> <li>• Entity ID</li> <li>• Family Key</li> <li>• Last Updated By User Key</li> <li>• Last Updated Date</li> <li>• Predecessor Family Key</li> <li>• Predecessor Key</li> <li>• Relationship Definition Key</li> <li>• Site Key</li> <li>• Successor Family Key</li> <li>• Successor Key</li> </ul>	US518099
<p>To improve usability, the following output system fields have been added to the Current Entity node:</p> <ul style="list-style-type: none"> <li>• Created By User Key</li> <li>• Created Date</li> <li>• Last Updated By User Key</li> <li>• Last Updated Date</li> </ul>	US518098

Description	Tracking ID
You can now use a new Collection output from the Sub Policy node. To facilitate this enhancement, now, when you execute a family policy containing a sub policy node that is not operating on a collection, the values returned from the sub policy are accessible in a collection output containing two columns, (Name and Value) in addition to the single-value outputs.	US511936
<p>To enhance functionality, the Family Key is now included in the outputs of the following entity and relationship family nodes:</p> <ul style="list-style-type: none"> <li>• Add Value to Health Indicator</li> <li>• Current Entity</li> <li>• Current User</li> <li>• Create Entity</li> <li>• Create Event</li> <li>• Create Production Event</li> <li>• Create Recommendation</li> </ul>	US481771
<p>You must now specify the family ID or family keys for relationships that you want to create in a family policy. To facilitate this enhancements, the <b>Predecessor Family ID</b>, <b>Predecessor Family Key(s)</b>, <b>Successor Family ID</b>, and the <b>Successor Family Key(s)</b> sections are added in the Create Relationship node properties window in Family Policies.</p> <p><b>Note:</b> When your APM system is upgraded, family policies containing the Create Relationship node will be upgraded only where the entity keys and the family of the entities to be created can be determined automatically. For more information, refer to <a href="#">Upgrade or Update Policy Designer</a>.</p>	US454314
<p>You must now specify the family for entities that you want to delete in a family policy. To facilitate this enhancement, the <b>Family Key(s)</b> section is added in the Delete Entity node properties window of Family Policies.</p> <p><b>Note:</b> When your APM system is upgraded, family policies containing the Delete Relationship node will be upgraded only where the family of the entities to be created can be determined automatically. For more information, refer to <a href="#">Upgrade or Update Policy Designer</a>.</p>	<ul style="list-style-type: none"> <li>• US452099</li> <li>• US397521</li> </ul>
<p>You can now configure the catalog path input of the Query node to accept the output from a predecessor node. To facilitate this enhancement, select the <b>switch to field input</b> button (  ) under query path to choose an input from another node.</p> <p><b>Note:</b> When the query path is sourced from a predecessor node, the results collection output from the query node can be used only when you do not need to select a specific column in the collection.</p>	US414721
You can now configure the maxSubPolicyDepth. This setting limits the number of levels of sub policy calls and ensures that recursive policy executions cannot occur. The default maximum sub policy depth is set to 10.	US374957
<p>The Email node has been enhanced. You can now:</p> <ul style="list-style-type: none"> <li>• Define a collection (for example, the output from a Query node) to be displayed as a table in the email body.</li> <li>• Configure the email to be sent as plain text.</li> <li>• Define the subject line of the email.</li> <li>• Suppress the automatic email text that shows details of the policy logic.</li> </ul>	<ul style="list-style-type: none"> <li>• US293858</li> <li>• US293856</li> </ul>

**Table 151: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you defined an R Script to use an input parameter of type Matrix of Values - Numeric, Matrix of Values - Boolean, or Matrix of Values - Character, the matrix of values passed to the R server was transposed. This may have resulted in unexpected results from the R Script node. This issue has been resolved.  <b>Note:</b> If you have existing R Scripts using Matrix input parameters, the behavior of these scripts will change. Contact GE Vernova Support for assistance with identifying and correcting the impacted R Scripts.	US540206
Previously, if you configured a family policy for a relationship family that included a Cancel Transaction node, when the Cancel Transaction node was executed, the alert message was not displayed. This issue has been resolved.	DE188184
Previously, when you attempted to export family policies for custom relationship families from the <b>Configuration Manager</b> , an error occurred, and the export was not successful. This issue has been resolved.	DE183424
Previously, if your APM system used an Oracle schema, when you configured a Query node to run a query containing an Entity Key column, and mapped the Entity Key output from the Query node into the first input of a comparison node (for example, an Equal node), regardless of the type of value mapped to the second input of the comparison node, the error message, "Please specify fields with valid types for this condition" appeared in the notification bar and the policy could not be activated. This issue has been resolved. Now, the notification message appears only when the second input value mapped into the comparison node does not have a defined type. If you use a Constant node or Point Value node as the source for the second input value, you must configure the node as String, Numeric, or Decimal data type.	DE180113
Previously when you attempted to copy and paste a Case node, its predecessor node and the link between the nodes, the pasted Case node did not retain the configuration of the copied Case node. This issue has been resolved.	DE158704

**Table 152: Known Issues**

The following known issues and limitations exist.

Description	Tracking ID
If a Query node references a query with column aliases containing quotation marks, the policy model may not be upgraded correctly when your APM system is upgraded. You will need to modify and reactivate the policy.	DE195101
When you create a Policy Recommendation using the Create Entity node, the recommendation is not linked to the equipment record automatically, even though the Equipment ID is provided.	DE194635

Description	Tracking ID
When your APM system is upgraded, if the policy model contains multiple Sub Policy nodes that reference the same sub policy, the policy is not upgraded correctly and a warning appears in the Upgrade Log indicating that sub policy recursion was encountered. You will need to modify and reactivate the policy.	DE194299
When your APM system is upgraded, if an entity key in a Delete Entity, Create Relationship, or Delete Relationship node is defined in a Point Value node in an instance, you may need to modify and reactivate the policy instance and the policy. This is as-designed; however, the product documentation does not cover this upgrade step.	DE194296

**Table 153: Obsolete Features**

The following features are no longer available.


Description	Tracking ID
<p>The Content GUID output has been removed from all nodes in family policies.</p> <p><b>Note:</b> When your APM system is upgraded, any existing family policies that use the Content GUID output from any nodes will be upgraded to use the Entity Key output, and the behavior of the family policy may change. For more information, refer to Upgrade or Update Policy Designer.</p>	<ul style="list-style-type: none"> <li>US460179</li> <li>US424533</li> </ul>

## Foundation

This topic provides a list of product changes released for this module in this version.

**Table 154: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>To improve usability, the main navigation menu in the application has been enhanced. The new menu provides a clear hierarchical structure and it lists all the selectable modules within each category. In addition, with an improved visual styling, the screen width available for the application is also increased.</p> <p>You can access the new <b>Applications Menu</b> by selecting the  button in the main navigation bar. You can now:</p> <ul style="list-style-type: none"> <li>Search for a module by entering the module name in the Search box.</li> <li>Sort modules by folder or alphabetically.</li> <li>Add a module to your Favorites section.</li> <li>Expand All or Collapse All menu options to fully expand or collapse the menu with a single click.</li> </ul>	F51334

## General Dashboards

This topic provides a list of product changes released for this module in this version.

**Table 155: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to export Public\Workflows\Equipment Health Tracking Workflow\Dashboards\EHW Evaluate Health Baseline Dashboard, an error occurred. This issue has been resolved.	DE186518

#### Table 156: Obsolete Features

The following features are no longer available.

Description	Tracking ID
<p>The APM Foundation dashboard design has been modified. The Recommendations Created and Approved - 12 Months graph is no longer displayed.</p> <p>If you have previously modified this dashboard, this update will not be automatically applied. If your APM system uses an Oracle schema, an error may occur when you access the dashboard. Contact GE Vernova Support for assistance.</p>	DE189442

## Generation Availability Analysis

This topic provides a list of product changes released for this module in this version.

#### Table 157: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, in the HEADER and TRAILER fields of the CEA Event Report, value from the Primary Utility Code field is included instead of value from the Company Name field.	US489817
To enhance usability in the <b>GAA Unit</b> page, the CEA reporting format has been improved when you enter a single digit for the <b>Primary Unit Code</b> instead of two digits. To facilitate this enhancement, the single digit entered in the <b>Primary Unit Code</b> is now prefixed with 0 and appears as two digits in the CEA Event Report.	US473682


#### Table 158: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, if the time zone associated with your user account was different than the time zone of the plant, and you created an event, calculations in the performance record did not consider events in the following scenarios:</p> <ul style="list-style-type: none"> <li>• An event for which the start or end date was the last date of the year.</li> <li>• An event for which the start or end date was the first date of the year.</li> </ul> <p>This issue has been resolved. Now, when you create an event, the event <b>Start Date</b> and <b>End Date</b> fields are automatically adjusted according to the time zone of the plant while creating a Performance record.</p>	US474413
<p>Previously, in the <b>Breakdown of Period Hours</b> section of the <b>Unit Summary</b> workspace, when you accessed the Planned Outage details for a GAA unit, the events associated with PE Event Type were not displayed even though the events were created for the GAA unit. This issue has been resolved.</p>	DE143051

**Table 159: Obsolete Features**

The following features are no longer available.


Description	Tracking ID
<p>In the <b>Unit Summary</b> workspace, in the <b>Performance &amp; Reports</b> workspace, the Performance for a Year button (  ) is no longer available to generate Performance records for a year. However, you can generate Performance records using the Bulk Generation feature.</p>	US453226

## Generation Availability Analysis Wind

This topic provides a list of product changes released for this module in this version.

**Table 160: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>To improve performance, the jobs in the Import Events Workspace and Report Generation Workspace are now automatically refreshed every 10 minutes. You can also manually refresh the data in these workspaces. To facilitate this enhancement, a new button, Refresh (  ), has been added to the workspace. You can either specify the interval at which the jobs must be refreshed automatically, or turn off the automatic refresh feature by selecting the appropriate option from the drop-down list box.</p>	US546163

## Hazards Analysis

This topic provides a list of product changes released for this module in this version.

**Table 161: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>You can now retrieve the <b>IPL Subtype</b> values in the Hazards Analysis Safeguard record using the following catalog queries that are configurable:</p> <ul style="list-style-type: none"> <li>• Active IPL List Query</li> <li>• Passive IPL List Query</li> <li>• Human IPL List Query</li> </ul>	US555917

**Table 162: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in Hazard Analysis, when you updated Cause and Consequence records, various fields in the linked LOPA were not updated. This issue has been resolved. Now, the LOPA record for the related fields syncs when you update a Cause or Consequence record.	US560135
Previously, when you attempted to update the <b>CCPS Cause Type</b> field in Hazard Analysis cause datasheet, the new value in the Linked LOPA was not updated in the related consequence. This issue has been resolved.	US553999
Previously, in the Hazard Analysis Datasheet, the Node IDs in the title and the left navigation panel appeared in an abbreviated form when the Node ID was longer than 24 characters. The title and left navigation panel did not display the complete ID when you mouse-over the abbreviated ID. This issue has been resolved. Now, the limit for abbreviating the Node ID in the title is increased from 24 to 90 characters. The Search issue is also fixed in the left navigation panel.	DE186962
Previously, while updating a Cause in a Hazards Analysis, if you cleared the value in the <b>CCPS Cause Type</b> field, an error occurred. This issue has been resolved.	DE186956
Previously, in Hazard Analysis team members section users you could only update one team member's role at a time. This issue has been resolved.	DE186955
Previously, when you copied nodes in the Hazards Analysis, custom fields were not copied. This issue has been resolved.	DE184532
Previously, if the datasheet for the Hazop Deviation/What-If, HazardsAnalysis Cause, Hazards Analysis Consequence, or Hazards Analysis Safeguard was open and you attempted to delete the record, the screen did not refresh and there was no message displayed after the operation. This issue has been resolved.	DE184026
Previously, in the Risk Assessment Recommendation datasheet, when you selected a functional location from the Asset Finder, the Functional Location ID field was not populated with the selected value. This issue has been resolved.	DE183773
Previously, in <b>Has Reference Documents</b> relationship family, when you attempted to add the relationship definition between safety related families and reference document, the <b>Reference Document</b> option was not available in the respective family datasheet. This issue has been resolved.	DE172444
Previously, when you logged in as a secured user and attempted to select an APM query from the catalog in the admin section, an error occurred. This issue has been resolved.	DE152664



## Import and Export

This topic provides a list of product changes released for this module in this version.

**Table 163: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you exported the Family Rule Project for the Has Recommendations family rule, and then imported the same file, the import failed and an error message appeared. This issue has been resolved.	DE184891
Previously, as a German user, when you attempted to export a dataset containing decimal numbers, an error occurred. This issue has been resolved.	DE156429
Previously, if the status of a Security User account in APM was inactive, when you imported the user account details using an XML file that had the user account in active state, the status of the user account in APM was not changed. This issue has been resolved.	DE149054
Previously, when date functions were applied to date fields, the UTC time zone was applied by default instead of the user time zone. This issue has been resolved. Now, all date functions display the user time zone.	US533350

**Table 164: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When you export a family from a previous version to V5, if any field in the family was changed to a <b>Key</b> field, the family is not imported and must be manually created in V5. Also, the State Management is not imported to V5.	US556701
<p>When you attempt to create a Catalog folder with a leading or trailing space, and then import that folder, an error message appears indicating that the folder name cannot have leading or trailing spaces.</p> <p>To work around this issue, modify the folder path in the exported file and then import it:</p> <ol style="list-style-type: none"><li>1. Unzip the exported file.</li><li>2. Open the .xml pr .xlsx and remove the leading or trailing space from &lt;QUERY_CATALOG_PATH&gt; and save.</li><li>3. Zip the contents and then import the file.</li></ol>	DE192736

## Inspection Field Data Collection

This topic provides a list of product changes released for this module in this version.

**Table 165: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>Inspection Field Data Collection Overview</b> page, when you attempted to delete a downloaded inspection that was already deleted on the server from a device, an error occurred, and the inspection was not deleted. This issue has been resolved.	DE173508
Previously, if you added a system code to a drop-down list box associated with the Checklist Finding family, and then added the drop-down list box to an offline form associated with the family, when you accessed an inspection for the family in the <b>Inspection Field Data Collection</b> page, the system code value did not appear in the drop-down list box. This issue has been resolved.	DE167899
Previously, when a field in an offline datasheet had a configured picklist behavior dependent on the value of another field, if an error occurred when syncing the offline inspection data, the list of valid values for that field no longer appeared in the datasheet. This issue has been resolved.	DE144870

**Table 166: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
You can no longer download an inspection for Inspection Field Data Collection from the Inspection Details page. You must use the <b>My Inspection</b> tab in the Inspection Field Data Collection Overview page.	US545003






## Inspection Management

This topic provides a list of product changes released for this module in this version.

**Table 167: Enhancements and New Features**






The following enhancements and new features have been added.

Description	Tracking ID
To improve performance, the Inspection Management (IM) Assets and the Inspection Management (IM) Functional Location Data Loaders have been enhanced such that you can upload Inspection Recommendations even if there are a large number of users in the Author Name column.	US561867
To enhance usability, the MIExecutionService is now available in the APM server. It processes jobs in the Inspection Management, Integrity Mobile, Risk Based Inspection, and Thickness Monitoring module queues. The MIExecutionService uses a single shared ActiveMQ queue service across APM.	US554741

Description	Tracking ID
<p>To improve usability, the following changes have been made in the <b>Inspection Overview</b> page:</p> <ul style="list-style-type: none"> <li>The complete <b>Inspection Overview</b> pane containing Inspections and related findings/Sub-Inspections are moved as subsections in the <b>Inspection Overview</b> page under a new section (<b>Details</b>).</li> <li>The Create (  ), Link (  ), Unlink (  ), and Delete (  ) icons have been added for related records in the respective subsections in the <b>Inspection Overview</b> page.</li> <li>A new section (<b>Scope</b>) has been added under the <b>Inspection Overview</b> page with the following subsections: <ul style="list-style-type: none"> <li><b>Linked Inspection Tasks</b> subsection: It provides a grid view of all the tasks selected in the <b>Tasks Addressed</b> field of the Inspection record.</li> <li><b>Scope Details</b> subsection: It provides a read-only text box with the combined Task Details of all tasks selected in the <b>Tasks Addressed</b> field of the Inspection.</li> </ul> </li> </ul> <p><b>Note:</b> The <b>Inspection Task Details</b> field of the Inspection is updated only with the values on Inspections that have been created or had the <b>Tasks Addressed</b> field updated in V5.0.0.0 or higher versions.</p> <ul style="list-style-type: none"> <li>You can now create recommendations for General Findings and Checklist Findings. To facilitate this enhancement, the Create Recommendation icon (  ) has been added in the <b>General Finding</b> and <b>Checklist Finding</b> subsections in the <b>Inspection Overview</b> page.</li> </ul>	US546443
<p>To improve usability, the MI Inspection Pre-Approver security role has been added that can be used to transition state for an Inspection if required.</p>	US543837
<p>To improve usability, the State Management functionality is now enabled for review and approval process for the Inspection families. This feature provides the following functionalities:</p> <ul style="list-style-type: none"> <li>You can now approve an inspection through State machine and assign specific users for updating a specified state.</li> <li>The review and approval process are not dependent on a single user. Users with appropriate security roles can review and approve the Inspections.</li> <li>The <b>Inspection Report Owner</b> field within an inspection is populated by default with the name of the user who created the inspection with an Inspector security role.</li> <li>The <b>Inspection Reviewers Name</b> field within an inspection is populated automatically with the name of the user who transitions the state from Pending Approval to Approved, and has been removed from the datasheets.</li> <li>The Inspection and Final Inspection Locks are set automatically based on the state update, which reduces the steps to approve an Inspection.</li> <li>A utility is provided to configure the existing statuses to states, to support customer upgrades. If you want to skip the baseline upgrade and use the upgrade utility from the application, refer to the KBA 000039706.</li> <li>State management functionality is supported through data loaders.</li> </ul> <p><b>Note:</b> To enable State Management for custom inspection families, refer to the KBA 000039742.</p>	US543067

Description	Tracking ID
<p>To enhance usability, the following queries have been modified to support State Management approval for Inspection events:</p> <ul style="list-style-type: none"> <li>• Modules\Inspection\Report Queries\MI_INSPFULL</li> <li>• Modules\Inspection\Report Queries\MI_INSP_GEN</li> <li>• Modules\Inspection\Report Queries\MI_INSPPTST</li> <li>• Modules\Inspection\Report Queries\MI_INSPBUND</li> <li>• Modules\Inspection\Work Pack Queries\All Inspections in a Work Pack</li> <li>• Modules\Inspection\Overview Queries\Open Inspections for Unit</li> <li>• Modules\Inspection\Review Queries\All Inspections for Reviewer</li> <li>• Modules\Inspection\Overview Queries\My Open Inspections</li> <li>• Modules\Inspection\Report Queries\Inspection History Details</li> <li>• Modules\Risk Based Inspection -581\Report Queries\RBI 581 Asset Risk-Inspection History</li> <li>• Modules\Inspection\Overview Queries\Users Open Inspections (Including Team Members)</li> <li>• Modules\Inspection\Overview Queries\Users Open Inspections</li> </ul>	US532505

Description	Tracking ID
<p>To enhance the usability, the following Inspection Families Baseline datasheet have been redesigned:</p> <ul style="list-style-type: none"> <li>• Full Visual Inspection</li> <li>• Visual Inspection</li> <li>• Visual Inspection SAP Integration</li> <li>• EU Inspection Report</li> <li>• General Inspection - Default</li> <li>• General Inspection</li> <li>• General Inspection SAP Integration</li> <li>• API 510 External Checklist - Default</li> <li>• API 510 Internal Checklist - Default</li> <li>• API 510 Internal Exchanger Checklist - Default</li> <li>• API 570 External Checklist - Default</li> <li>• API 653 External Checklist - Default</li> <li>• API 653 Internal Checklist - Default</li> <li>• Checklist Inspection Template</li> <li>• External PRD Checklist</li> <li>• PRD Pop Test Checklist</li> <li>• ILI Checklist - Default</li> <li>• Third Party Damage Checklist - Default</li> <li>• Bundle Inspection - Default</li> <li>• Bundle Inspection</li> <li>• Bundle Inspection SAP Integration</li> <li>• Pressure Test Inspection - Default</li> <li>• Pressure Test Inspection</li> <li>• Pressure Test Inspection SAP Integration</li> <li>• Bundle Sub-Inspection</li> <li>• Findings</li> </ul>	US528303
<p>Work Management Interface functionality is enabled to support the notification creation in addition to the existing work order generation when the tasks are created in the application. Additionally, you can select <b>EAM Object</b>, <b>User Status</b>, and <b>Type</b> while creating the tasks.</p>	US523941

Description	Tracking ID
<p>To improve usability, the following changes have been made in the <b>Inspection Management Overview</b> Page:</p> <ul style="list-style-type: none"> <li>The Asset View icon () has been added to view the list of Inspections, Inspection Tasks, and Recommendations that are directly linked to the selected Functional Location.</li> <li>The <b>Open Inspections</b> and <b>My Open Inspections</b> subsections are moved as new sections in place of <b>Underlying Open Inspections</b> section in the <b>Inspection Management Overview</b> Page. The <b>All Inspections for this Location</b> subsection is removed and the data can now be accessed from the Asset View icon ()</li> <li>The <b>Underlying Inspection Tasks</b> section has been renamed as <b>Inspection Tasks</b> in the <b>Inspection Management Overview</b> Page. The <b>Inspection Tasks for this Location</b> subsection is removed and the data can now be accessed from the Asset View icon ()</li> <li>The <b>All Recommendations for this Location</b> subsection is removed from the <b>Underlying Recommendations</b> section and the data can now be accessed from the Asset View icon ()</li> </ul>	US523253
<p>To improve usability, the following changes have been made in the <b>Bulk Review Inspection</b> page:</p> <ul style="list-style-type: none"> <li>The <b>Bulk Review Inspections</b> page now displays a list of Inspections that are in the Draft, Pending Approval, or Rework state and for the underlying assets.</li> <li>The Edit filter icon () has been added to filter the inspections for the underlying assets.</li> <li>The state control has been added to change the state of the selected inspection.</li> </ul>	US523245
<p>To improve usability, you cannot delete an inspection task that appears in the <b>Tasks Addressed</b> drop-down list box of an Inspection record.</p>	US438691
<p>The Integrity Mobile app is now available for Android and iOS devices. You can download the app from Google Play Store or Apple App Store. Using this app, you can perform the following functionalities:</p> <ul style="list-style-type: none"> <li>Review and check out inspections that are assigned to you as the inspector or as a team member. This workflow requires a network connection.</li> <li>Perform data entry for checked out inspections either in a connected or disconnected state.</li> <li>Review overdue or upcoming tasks and create or check out inspections that are required while in the field. This workflow requires a network connection.</li> <li>Capture images as supporting documentation for findings and sub-inspections.</li> <li>Annotate Images with free-hand drawing, formatted text, or shapes.</li> <li>Upload completed inspections back to the APM database.</li> </ul> <p><b>Note:</b> The app is currently available only for Android tablets and iPad devices. A version that supports phone form-factors will be released soon.</p> <p>In addition, the APM web client has been enhanced with the ability to revoke inspections that are downloaded from the app by a super-user or user with the Inspection Administrator Resource role. This can be done from the <b>Inspection Management Overview</b> within the <b>Open Inspections</b> section.</p>	US551133

**Table 168: Resolved Issues**



The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, you could set null values in the <b>Inspection Report Owner</b> and <b>Reviewers Name</b> fields while creating inspection using dataloader. This issue has been resolved. The null values will not be set in both these fields while creating inspection using dataloader in the future releases.	US546458
Previously, when you attempted to search a task list from the Inspection or Calibration task, the functional location ID was not displayed correctly. This issue has been resolved.	DE184549
<p>Previously, in the Inspection Management Overview dashboard, the records for an asset selected at the root level in the asset hierarchy were not displayed. This issue has been resolved.</p> <p>The following queries have been modified to resolve the issue:</p> <ul style="list-style-type: none"> <li>• Modules\Inspection\Overview Queries\Open Inspections for Unit</li> <li>• Modules\Inspection\Overview Queries\Overdue Inspection Recommendations for Unit (State Management)</li> <li>• Modules\Inspection\Overview Queries\Open Inspection Recommendations for Unit (State Management)</li> <li>• Modules\Inspection\Overview Queries\All Tasks for Unit</li> <li>• My Open Inspections</li> </ul>	DE183947
Previously, you were able to update the Item ID field of the Inspection Profile family through the datasheet or data loader even when the Item ID field was auto populated by default with selected value for Item Category field. This issue has been resolved. Now, the Item ID field is disabled and removed from the baseline datasheet and data loader Excel template, so that you cannot update the field manually.	DE183234
Previously, if you had MI Inspection group privileges and attempted to delete an Inspection Task, an error occurred, indicating that you did not have the delete privilege on the Has Task Revision relationship family. This issue has been resolved.	DE181963
Previously, when you generated the Findings automatically from profiles during Inspection creation, if the length of the profile name exceeded 100 characters, an error occurred, and the Inspection was not created. This issue has been resolved.	DE181568
Previously, Inspection Profile Item field in General Finding Datasheet was not displayed in a formatted mode. This issue has been resolved.	DE181345
Previously, users with the MI Inspection group permissions added to their security roles were unable to create an Asset Technical Data. This issue has been resolved.	DE178133
Previously, when you accessed the <b>Linked Tasks</b> section under Inspection, the Inspection task hyperlink was not displayed. This issue has been resolved.	DE174597
Previously, when you deleted an inspection that had Inspection Health Evaluation records, the associated records were not deleted. This issue has been resolved. Now, all the records that include Inspection Health Evaluations and any Inspection Recommendations that are directly linked to those Inspection Health Evaluations are deleted.	DE166471

Description	Tracking ID
Previously, in the <b>Inspection Overview</b> workspace, when you attempted to create the Inspection Confidence Evaluation records and then switched to the <b>Team Members</b> section or created the Inspection Team Member records and switched to the <b>Inspection Confidence Evaluation</b> section without saving, the <b>Unsaved Changes</b> window appeared. When you attempted to save the changes, it failed, and the records were not displayed. This issue has been resolved.	DE163752
Previously, when viewing an Inspection Checklist, if you resized the split view of the checklist section to full-page, or from full-page to half-page, the columns within the data grids of the checklist categories were misaligned. This issue has been resolved.	DE153307
Previously, when you selected the <b>Enable Inspection Grouping</b> option in the <b>RBI Admin Preferences</b> page, the <b>Inspection</b> section in the <b>Inspection Management Overview</b> page, did not display the Inspection records associated with a Functional Location as an Asset. This issue has been resolved.	DE149644
Previously, when creating an Inspection Event record that has additional fields defined as required either through field behaviour or field level rules, and if the record is not new, an error occurred and the Inspection Event was not created. This issue has been resolved.	DE146250
Previously when you implemented Compliance Recommended Actions to existing Inspection Tasks in bulk, the data for the Recommended Inspection Task appeared only for the first Recommended Action. This issue has been resolved. Now, the Recommended Inspection Task data appears for each Recommended Action.	DE144641
Previously, in certain cases, when you modified a checklist inspection and checklist finding record, an error occurred when you attempted to save the record. This issue has been resolved.	DE144425

**Table 169: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
<p>The Reports button () is no longer available in an Inspection. To print an NR13 Full Inspection Report, select the more options button () in the datasheet, and then select <b>Print</b>.</p> <p><b>Note:</b> If you have not activated the NR13 license, we recommend that you remove the NR13 Full Inspection Report and the NR13 General Inspection Report from the Full Inspection and the General Inspection families respectively using Family Management. For instructions, refer to Remove the Reports Linked to a Family.</p>	US528872
You can no longer customize the code to generate a work order as the work order generation for the tasks created in APM moved into the product code.	US523941



Description			Tracking ID
The following fields that were available in the General Finding family are no longer used in the application:			US457583
Family	Field	ID	
General Finding	Asset ID	MI_FIND_001_ASSET_ID_C	
General Finding	Inspection Reference ID	MI_FIND_001_INSP_REF_ID_C	
The fields have been made inactive and the captions have been changed to mark the fields as deprecated. If these fields are added to the datasheet, you must remove it.			

Description	Tracking ID
<p>The following Inspection Management queries are no longer used in the application and have been removed:</p> <p>Folder: Public/Meridium/Modules/Inspection/Document Queries</p> <ul style="list-style-type: none"> <li>• All Equipment That Can Have API 510 External Checklist Inspections</li> <li>• All Equipment That Can Have API 510 Internal Checklist Inspections</li> <li>• All Equipment That Can Have API 510 Internal Exchanger Checklist Inspections</li> <li>• All Equipment That Can Have API 570 External Checklist Inspections</li> <li>• All Equipment That Can Have API 653 External Checklist Inspections</li> <li>• All Equipment That Can Have API 653 Internal Checklist Inspections</li> <li>• All Equipment That Can Have Bundle Inspections</li> <li>• All Equipment That Can Have External PRD Checklist Inspections</li> <li>• All Equipment That Can Have Full Inspections</li> <li>• All Equipment That Can Have General Inspections</li> <li>• All Equipment That Can Have Inspections</li> <li>• All Equipment That Can Have Pressure Test Inspections</li> <li>• All Inspection Records</li> <li>• All Inspection Records for selected equipment</li> <li>• Get Inspections by Asset Key</li> <li>• Get Inspections by Function Location Key</li> </ul> <p>Folder: Public/Meridium/Modules/Inspection/Work Pack Queries</p> <ul style="list-style-type: none"> <li>• All Inspections in a Work Pack</li> <li>• All Work Packs</li> <li>• Number of Inspections in a Work Pack</li> <li>• Status of All Bundle Inspections</li> <li>• Status of All Full Inspections</li> <li>• Status of All General Inspection</li> <li>• Status of All Inspections</li> <li>• Status of All Pressure Test Inspections</li> <li>• Task Status Chart Query</li> <li>• Union of all Inspection Status</li> </ul> <p>Folder: Public/Meridium/Modules/Inspection/Task Queries</p> <ul style="list-style-type: none"> <li>• All Equipment That Can Have Tasks</li> </ul> <p>Folder: Public/Meridium/Modules/Inspection/Resources Queries</p> <ul style="list-style-type: none"> <li>• Human Resources with certification</li> <li>• Human Resources with roles</li> </ul> <p>Folder: Public/Meridium/Modules/Inspection/Manage Report Queries</p> <ul style="list-style-type: none"> <li>• Bundle Inspection - formatted reports for all equipment</li> <li>• Bundle Inspection - formatted reports with prompt for equipment</li> <li>• Checklist Inspections - formatted reports for all equipment</li> <li>• Checklist Inspections - formatted reports with prompt for equipment</li> <li>• Full Inspection - formatted reports for all equipment</li> <li>• Full Inspection - formatted reports with prompt for equipment</li> <li>• General Inspection - formatted reports for all equipment</li> <li>• General Inspection - formatted reports with prompt for equipment</li> <li>• Pressure Test Inspection - formatted reports for all equipment</li> </ul>	US445953

## Integrity Mobile Application

This topic provides a list of product changes released for this module in this version.

**Table 170: Enhancements and New Features**

The following enhancements and new features have been added.


Description	Tracking ID
<p>The Integrity Mobile app is now available for Android and iOS devices. You can download the app from Google Play Store or Apple App Store. Using this app, you can perform the following functionalities:</p> <ul style="list-style-type: none"><li>• Review and check out inspections that are assigned to you as the inspector or as a team member. This workflow requires a network connection.</li><li>• Perform data entry for checked out inspections either in a connected or disconnected state.</li><li>• Review overdue or upcoming tasks and create or check out inspections that are required while in the field. This workflow requires a network connection.</li><li>• Capture images as supporting documentation for findings and sub-inspections.</li><li>• Annotate images with free-hand drawing, formatted text, or shapes.</li><li>• Upload completed inspections back to the GE Vernova database.</li></ul> <p><b>Note:</b> The app is currently available only for Android tablets and iPad devices. A version that supports phone form-factors will be released soon.</p> <p>In addition, the GE Vernova web client has been enhanced with the ability to revoke inspections that are downloaded from the app by a super user or a user with the Inspection Administrator Resource role. This can be done from the <b>Inspection Management Overview</b> within the <b>Open Inspections</b> section.</p>	US551133

## Layers of Protection Analysis

This topic provides a list of product changes released for this module in this version.

**Table 171: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
You can now link any protective instrumented loop in the Hazards Analysis Safeguard. To facilitate this enhancement, you can now select the protective instrumented loops from the linked instrumented function in the hazard analysis safeguard datasheet.	US555929
You can now copy a LOPA analysis. To facilitate this enhancement, the Copy icon (  ) has been added in the <b>Under Review</b> and <b>Approved</b> tabs of the <b>LOPA Overview</b> page. This Copy option is also added in the <b>LOPA summary</b> page.	US523074

**Table 172: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in <b>Has Reference Documents</b> relationship family, when you attempted to add the relationship definition between safety related families and reference document, the <b>Reference Document</b> option was not available in the respective family datasheet. This issue has been resolved.	DE172444
Previously, when you logged in as a secured user and attempted to select an APM query from the catalog in the admin section, an error occurred. This issue has been resolved.	DE152664
Previously, you could delete the <b>Initiating Events</b> in the <b>LOPA Admin Preferences</b> page in <b>Application Settings</b> , even though the <b>Initiating Events</b> were linked to a LOPA analysis. This issue has been resolved. Now, you can delete only those <b>Initiating Events</b> which are not linked to any LOPA analysis.	DE174777

## Manage Translations

This topic provides a list of product changes released for this module in this version.

**Table 173: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>To improve user experience, Translation Management module has been redesigned. The user interface has been updated to a grid view where you can:</p> <ul style="list-style-type: none"> <li>• View the current and original translations.</li> <li>• Filter the translations.</li> <li>• Edit the translations.</li> </ul> <p>Translation downloads now run in the background.</p>	US552405

**Table 174: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if your language setting was set to a language that had Cyrillic script, the system messages contained question marks instead of the actual text. This issue has been resolved.	DE145359

## Management of Change

This topic provides a list of product changes released for this module in this version.

**Table 175: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you created a user in <b>Security Manager</b> with the MOC User role, and then attempted to access the Management of Change module as this new user, the <b>MOC Overview</b> page did not load. This issue has been resolved.	DE176302
Previously, in <b>Has Reference Documents</b> relationship family, when you attempted to add the relationship definition between safety related families and reference document, the <b>Reference Document</b> option was not available in the respective family datasheet. This issue has been resolved.	DE172444

## Maps

This topic provides a list of product changes released for this module in this version.

**Table 176: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
The Geographic Information System (GIS) Data Loader requirements have changed. Now, you must specify the Family ID of the record to which the GIS data must be linked, in addition to the Entity Key or Entity ID of the record.	US458351

**Table 177: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.



Description	Tracking ID
Previously, when you navigated away from Maps page and then returned to the page, the map did not reload correctly. This issue has been resolved. Now, the Maps page refreshes automatically when you return to the page. You can select the Refresh button to retrieve data that has changed since the last reload.	DE173585

## Metrics and Scorecards

This topic provides a list of product changes released for this module in this version.

**Table 178: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in KPI details page, when you selected the Update Measures icon (  ) , some of the measurements were duplicated and data values in the trend line chart displayed incorrectly. This issue has been resolved.	DE183137
Previously, in the <b>Schedule, Alerts, and Privileges</b> section, when you attempted to define alerts for KPIs and you selected the Add Recipients icon (  ) the list of security users included both active and inactive users. This issue has been resolved. Now, only active users are displayed.	DE180188

## Policy Designer


This topic provides a list of product changes released for this module in this version.

**Table 179: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>In order to simplify the module deployment, the existing query, <code>Public\Meridium\Modules\Policy Manager\Queries\Time In Queue (SQL)</code>, has been modified to work on all database types and is renamed <code>Public\Meridium\Modules\Policy Manager\Queries\Time In Queue</code>. This query is used in the <b>Time In Queue</b> graph on the <b>Policy Designer Overview</b> and the <b>Recent Policy Executions</b> dashboard.</p> <p>As a result, the following items which are no longer required have been removed from the catalog:</p> <ul style="list-style-type: none"> <li>Public\Meridium\Modules\Policy Manager\Queries\Time In Queue (Oracle)</li> <li>Public\Meridium\Modules\Policy Manager\Dashboards\Graphs\Average and Max Wait Times in Queue for 15 min Intervals in Last 4 Hours (Oracle)</li> </ul> <p><b>Note:</b> If you have previously modified any of the above mentioned catalog items, you have to copy the updated item from the baseline folders to the public folders and then, re-apply your changes.</p>	US557648
<p>The Policy Designer data model has been enhanced and the following queries have been modified:</p> <ul style="list-style-type: none"> <li>Public\Meridium\Modules\Policy Manager\Queries\Policy Overview - Policies</li> <li>Public\Meridium\Modules\Policy Manager\Queries\Policy Overview - Policies Alternate Query</li> <li>Public\Meridium\Modules\PLA\Queries\GetAllPLAPolicyInstances</li> <li>Public\Meridium\Modules\AHI\Queries\Policy Integration (Deprecated)</li> </ul> <p>If you previously modified any of these queries, you must copy the relevant query from the baseline folder to the public folder and reapply your modifications.</p>	US551776
<p>Policy Instance records are now linked to Policy records by the new Policy Has Policy Instance relationship family. To facilitate this change, the Policy Key field has been added in the Policy Instance family and the Policy GUID field has been removed.</p> <p><b>Note:</b> Do not configure Family Policies or VB Rules to be triggered when the Policy Has Policy Instance records are deleted.</p>	US551771
<p>Policy Event records are now linked to Policy Instance records by the new Policy Instance Has Policy Event relationship family. To facilitate this change, the Policy Instance Key field has been added in the Policy Event family and the Policy Instance GUID field has been removed.</p> <p><b>Note:</b> Do not configure Family Policies or VB Rules to be triggered when the Policy Has Policy Event records are deleted.</p>	US551770

Description	Tracking ID
<p>The Policies list on the Policy Designer Overview is updated to show any policies that have been inactivated during the upgrade.</p> <p><b>Note:</b> Review the upgrade logs for any policy that has been inactivated and modify the policy as appropriate before re-activating it. For more information, refer to Upgrade or Update Policy Designer. Contact <a href="#">GE Vernova Support</a> in case of any difficulty with policy modifications.</p>	US542244
<p>You can now view an updated Average and Max Wait Times graph in the Policy Overview page. To minimize configuration effort, the graph now displays queue times in seconds for all database types.</p>	US528386
<p>You must now specify the family ID or family key(s) for relationships that you want to delete in a policy. To facilitate this enhancement, the <b>Predecessor Family ID</b>, <b>Predecessor Family Key(s)</b>, <b>Successor Family ID</b>, and <b>Successor Family Key(s)</b> sections are added in the Delete Relationship node properties window of Policy Designer.</p> <p><b>Note:</b> When your APM system is upgraded, policies containing the Delete Relationship node will be upgraded only where the entity keys and the family of the entities to be created can be determined automatically. For more information, refer to Upgrade or Update Policy Designer.</p>	US520092
<p>You can now review warnings and errors that occur during the post-upgrade processing of policy records in Policy Designer. To facilitate this enhancement, you can now select the <b>Upgrade Logs</b> tab in the module navigation menu and view or delete the log information for a policy that is upgraded from an earlier version.</p>	US519063
<p>You can now use a new Collection output from the Sub Policy node. To facilitate this enhancement, now, when you execute a policy containing a sub policy node that is not operating on a collection, the values returned from the sub policy are accessible in a collection output containing two columns, (Name and Value) in addition to the single-value outputs.</p>	US511936
<p>To enhance functionality, the Family Key is now included in the output of the following nodes:</p> <ul style="list-style-type: none"> <li>• Add Value to Health Indicator</li> <li>• AMS Asset</li> <li>• Create Entity</li> <li>• Create Event</li> <li>• Create Production Event</li> <li>• Create Recommendation</li> <li>• Entity</li> <li>• GE Tag</li> <li>• Health Indicator</li> <li>• Measurement Location</li> <li>• OT Connect Tag</li> <li>• User</li> </ul>	US481771
<p>You must now specify the family ID or family Keys(s) for relationships that you want to create in a policy. To facilitate this enhancement, the Predecessor Family ID, Predecessor Family Key(s), Successor Family ID, Successor Family Key(s) sections are added in the Create Relationship node properties window of Policy Designer.</p> <p><b>Note:</b> When your APM system is upgraded, policies containing the Create Relationship node will be upgraded only where the entity keys and the family of the entities to be created can be determined automatically. For more information, refer to Upgrade or Update Policy Designer.</p>	US454314

Description	Tracking ID
<p>You must now specify the family for entities that you want to delete in a policy. To facilitate this enhancement, the Family Key(s) section is added in the Delete Entity node properties window of Policy Designer.</p> <p><b>Note:</b> When your APM system is upgraded, policies containing the Delete Entity nodes will be upgraded only where the entity keys and the family of the entities to be deleted can be determined automatically. For more information, refer to Upgrade or Update Policy Designer.</p>	<ul style="list-style-type: none"> <li>US452099</li> <li>US397521</li> </ul>
<p>You can now configure the catalog path input of the Query node to accept the output from a predecessor node. To facilitate this enhancement, select the <b>switch to field input</b> button (  ) under query path to choose an input from another node.</p> <p><b>Note:</b> When the query path is sourced from a predecessor node, the results collection output from the query node can be used only when you do not need to select a specific column in the collection.</p>	US414721
<p>You can now set the time or number of occurrences by when a scheduled execution should end in a policy. To facilitate this enhancement, the End Repeat option is added to the Scheduled Execution section of the Details workspace in the Policy Designer page.</p>	US402265
<p>You can now configure the maxSubPolicyDepth. This setting limits the number of levels of sub policy calls and ensures that recursive policy executions cannot occur. The default maximum sub policy depth is set to 10.</p>	US374957

**Table 180: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, if you defined an R Script to use an input parameter of type Matrix of Values - Numeric, Matrix of Values - Boolean, or Matrix of Values - Character, the matrix of values passed to the R server was transposed. This may have resulted in unexpected results from the R Script node. This issue has been resolved.</p> <p><b>Note:</b> If you have existing R Scripts using Matrix input parameters, the behavior of these scripts will change. Contact GE Vernova Support for assistance with identifying and correcting the impacted R Scripts.</p>	US540206
<p>Previously, when you attempted to delete a policy instance with large number of execution history records, an error occurred. This issue has been resolved.</p>	US459366
<p>Previously, if your APM system used an Oracle schema, when you configured a Query node to run a query containing an Entity Key column, and mapped the Entity Key output from the Query node into the first input of a comparison node (for example, an Equal node), regardless of the type of value mapped to the second input of the comparison node, the error message, "Please specify fields with valid types for this condition" appeared in the notification bar and the policy could not be activated. This issue has been resolved. Now, the notification message appears only when the second input value mapped into the comparison node does not have a defined type. If you use a Constant node or Point Value node as the source for the second input value, you must configure the node as String, Numeric, or Decimal data type.</p>	DE180113



Description	Tracking ID
Previously when you attempted to copy and paste a Case node, its predecessor node and the link between the nodes, the pasted Case node did not retain the configuration of the copied Case node. This issue has been resolved.	DE158704
Previously, when you executed a policy with two or more levels of sub-policies, and the second or lower level of sub-policies had an error, the execution status of the policy did not indicate that an error had occurred. This issue has been resolved.	DE143955

**Table 181: Known Issues**

The following known issues and limitations exist.

Description	Tracking ID
If a Query node references a query with column aliases containing quotation marks, the policy model may not be upgraded correctly when your APM system is upgraded. You will need to modify and reactivate the policy.	DE195101
If the policy execution service experiences a session time out, the policy execution is not retried. This may result in skipped policy executions.	DE194998
When you create a Policy Recommendation using the Create Entity node, the recommendation is not linked to the equipment record automatically, even though the Equipment ID is provided.	DE194635
When your APM system is upgraded, if the policy model contains multiple Sub Policy nodes that reference the same sub policy, the policy is not upgraded correctly and a warning appears in the Upgrade Log indicating that sub policy recursion was encountered. You will need to modify and reactivate the policy.	DE194299
When your APM system is upgraded, if an entity key in a Delete Entity, Create Relationship, or Delete Relationship node is defined in a Point Value node in an instance, you may need to modify and reactivate the policy instance and the policy. This is as-designed; however, the product documentation does not cover this upgrade step.	DE194296
If you set the culture and language of the policy execution service user to other than English (US), policy execution results and emails sent by the policy will appear in English (US) instead of the configured language and culture.	DE194065

**Table 182: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
<p>The following catalog queries, which were used to determine the status of the scheduled policy trigger jobs, are no longer used and have been removed from the catalog:</p> <ul style="list-style-type: none"> <li>Public\Meridium\Modules\Policy Manager\Last Scheduled Execution Status</li> <li>Public\Meridium\Modules\Policy Manager\Last Scheduled Execution Status (Oracle)</li> <li>Public\Meridium\Modules\Policy Manager\Policy Job Status</li> </ul> <p>The Public\Meridium\Modules\Policy Manager\Recent Policy Execution Results dashboard has been updated to remove widgets that reference the queries listed above.</p> <p>The Public\Meridium\Modules\Policy Manager\Recent Policy Execution Results (Oracle) dashboard has been removed.</p> <p><b>Note:</b> If you have previously modified these queries or the dashboards, an error will occur when you access the content. You must copy the updated query, Baseline\Meridium\Modules\Policy Manager\Recent Policy Execution Results dashboard to the public folder and then reapply your modification.</p>	US557590
<p>The <b>Modified From Baseline</b> column is no longer displayed in the Module Workflow Policies section of the Policy Designer Overview page.</p> <p><b>Note:</b> If you have previously modified the Public\Meridium\Modules\Policy Manager\Queries\Policy Overview - Module Workflow Policies Tile query, an error will occur when you access the Policy Designer Overview page. You must copy the updated query, Baseline\Meridium\Modules\Policy Manager\Queries\Policy Overview - Module Workflow Policies Tile, to the public folder and then reapply your modification.</p>	US556297
<p>The Content GUID output has been removed from all nodes in Policy Designer.</p> <p><b>Note:</b> When your APM system is upgraded, any existing policies that use the Content GUID output from any nodes will be upgraded to use the Entity Key output, and the behavior of the policy may change. For more information, refer to Upgrade or Update Policy Designer.</p>	<ul style="list-style-type: none"> <li>US460179</li> <li>US424533</li> </ul>

## Production Loss Analysis

This topic provides a list of product changes released for this module in this version.

### Table 183: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
You can now select multiple Production Events from the Module Overview Result Grid and delete the selected Events in bulk. To facilitate this enhancement, there are checkboxes added in the result grid.	US539439
To enhance usability, you can now delete multiple Production Plans and all associated Production and Loss data. To facilitate this enhancement, check boxes are added corresponding to the Production plans under the <b>Production Plans</b> section in the <b>Production Loss Analysis</b> page.	US539206
To enhance usability, the PLA Data Loader now supports custom fields for datasheets of all families except the Production Plan and Production Data families.	US532882
<p>To improve usability, the PLA Data Loader now allows you to create custom fields in the three baseline data loader templates for the following families:</p> <ul style="list-style-type: none"> <li>• Production Units</li> <li>• Production Profiles</li> <li>• Profile Margins</li> <li>• Production Event</li> <li>• Production Data</li> <li>• Production Losses</li> </ul> <p><b>Note:</b> Custom fields are not supported for Product and Production Plan families</p>	US532870
To improve usability, if your culture setting has a culture other than English, the column headers in the <b>Data Grid</b> on the <b>Production Data</b> page are now translated to the language based on your culture setting.	US472217
You can now create copies of the existing Events in the <b>Production Events</b> workspace.	US311647
To improve usability, the definition and descriptions for the Event Codes that are provided in the baseline database for PLA are now included in the product documentation.	US530175
To enhance usability, you can now create Production Analyses based on any of the available production margins from a Production Profile for the associated production unit. To facilitate this enhancement, you can select a margin value from the <b>Choose Margin</b> drop-down list box in the <b>Production Analysis Builder</b> page.	US515583

**Table 184: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you attempted to update the <b>Headline</b> field value for a Production Event that contained a ~ (tilde) character, an error occurred, and the previous and updated <b>Headline</b> values were appended together. This issue has been resolved.	DE174230
Previously, when you accessed a Production Event Code, you were unable to select a child code in the production event code hierarchy. This issue has been resolved.	US543251
Previously, in the PLA Event Data Loader, you were required to use the baseline format of the ID Template for the Causing Asset field. This issue has been resolved. Now, the Entity ID field of the respective family is used.	US271623

### Table 185: Known Issues and Limitations

The following known issues and limitations exist.

Description	Tracking ID
When you enable the State Management functionality, the State ID column does not appear in the <b>Production Event</b> and <b>Production Plan</b> sections.	DE190908

## Queries

This topic provides a list of product changes released for this module in this version.

### Table 186: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID																						
Since Oracle databases do not support date math by year ('yy') or month ('mm') with time stamps enabled, the DateAdd function for Oracle databases will now use 365.25 days for years and 30 days for months.	US563265																						
<p>The following changes have been made to the <b>Advanced</b> section of the <b>Expression Builder</b> window:</p> <ul style="list-style-type: none"> <li>To improve usability when creating query expressions, the functions unique to the databases are no longer displayed in the <b>Functions</b> section. Irrespective of the type of database that you use to access APM, you can now access all the supported functions from the <b>Functions</b> section.</li> <li>The following functions have been added: <ul style="list-style-type: none"> <li>Case: Evaluates the conditions (that are, If, Then, and Else) in a query expression and returns results when a condition is met.</li> <li>Rank: Assigns a rank to each row within a partition of query result.</li> <li>Reverse: Reverses a query string and returns the result.</li> </ul> </li> </ul>	US457466																						
<p>The following parameters are now supported for creating expression syntax for the MI DatePart and DATEPART functions:</p> <table border="1"> <thead> <tr> <th>Date Component</th><th>Parameter</th></tr> </thead> <tbody> <tr> <td>Day</td><td>d, dd, day</td></tr> <tr> <td>Day of year</td><td>y, dy, dayofyear</td></tr> <tr> <td>Hour</td><td>hh, hour</td></tr> <tr> <td>Minute</td><td>n, mi, minute</td></tr> <tr> <td>Month</td><td>m, mm, month</td></tr> <tr> <td>Quarter</td><td>q, qq, quarter</td></tr> <tr> <td>Second</td><td>s, ss, second</td></tr> <tr> <td>Week</td><td>wk, ww, week</td></tr> <tr> <td>Weekday</td><td>dw, weekday</td></tr> <tr> <td>Year</td><td>yy, yyyy, year</td></tr> </tbody> </table>	Date Component	Parameter	Day	d, dd, day	Day of year	y, dy, dayofyear	Hour	hh, hour	Minute	n, mi, minute	Month	m, mm, month	Quarter	q, qq, quarter	Second	s, ss, second	Week	wk, ww, week	Weekday	dw, weekday	Year	yy, yyyy, year	DE143708
Date Component	Parameter																						
Day	d, dd, day																						
Day of year	y, dy, dayofyear																						
Hour	hh, hour																						
Minute	n, mi, minute																						
Month	m, mm, month																						
Quarter	q, qq, quarter																						
Second	s, ss, second																						
Week	wk, ww, week																						
Weekday	dw, weekday																						
Year	yy, yyyy, year																						

**Table 187: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you deleted a query column that was included in the query clause, and then attempted to run and export the query results, an error occurred. This issue has been resolved.	DE184300
Previously, when you created a query with several parameters, which included single-value and multi-value parameters, the query sometimes did not return any data, and the graph using the query did not display any results. This issue has been resolved.	DE181800

Description	Tracking ID
Previously, when you used a hyperlink in a query to build links using multi-value parameters, the first two parameters were incorrectly encoded. Due to this, the parameter values were not passed as expected. This issue has been resolved.	DE180641
Previously, while creating a query, when you added a family, and selected the Fields filter button in the Design workspace, the filter options were always visible, even if you navigated back to the previous page. This issue has been resolved.	DE180619
Previously, when you attempted to select a query in the Asset Group page, if the query path contained any special characters, an error occurred. This issue has been resolved.	DE180782
Previously, if you attempted to run a crosstab query using a conditional alert, an error occurred. This issue has been resolved.	DE179635
Previously, if a column in your query result contained special characters, such as the equal sign (=), percent (%), or ampersand (&), and you ran the subquery associated with that column via a hyperlink, the subquery did not return any result. This issue has been resolved.	DE177644
Previously, if you ran a query containing a union operator and a column having null values, and then applied a filter on the query results, an error occurred. This issue has been resolved.	DE154094
Previously, if the results of a crosstab query contained only one column, and you attempted to export the results, an error occurred. This issue has been resolved.	DE147190
Previously, when you attempted to run a query that contained a DATENAME function, an error occurred. This issue has been resolved.	DE145048
Previously, when you created a query that uses another query as its source, and if the source query had another query at the parent level, an error occurred in the following scenarios: <ul style="list-style-type: none"> <li>You added a field to the query</li> <li>There was a space in the column alias name</li> </ul> These issues have been resolved.	DE108925
Previously, in the <b>Results</b> workspace, when you right clicked the column header and then selected the sort order to sort multiple columns in the query results, the sort order was not displayed. This issue has been resolved.	DE176433

**Table 188: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When a value in your query result contains the ampersand (&) and equal (=) characters (for example, "A&B=C"), and you use that value as a parameter in a hyperlink, the hyperlink may not work as expected.	DE180641

**Table 189: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
<p>In the <b>Expression Builder</b> window, the following redundant functions are no longer available to create query expressions:</p> <ul style="list-style-type: none"> <li>• ACOS</li> <li>• ASCII</li> <li>• ASIN</li> <li>• ATAN</li> <li>• ATAN2</li> <li>• CEIL</li> <li>• CEILING</li> <li>• CHAR</li> <li>• CHARINDEX</li> <li>• CONVERT</li> <li>• COS</li> <li>• COSH</li> <li>• COT</li> <li>• EXP</li> <li>• GREATEST</li> <li>• INITCAP</li> <li>• INSTR</li> <li>• LAST_DAY</li> <li>• LEAST</li> <li>• LN</li> <li>• LOG</li> <li>• LOG10</li> <li>• LPAD</li> <li>• MI_DateAdd</li> <li>• MI_DatePart</li> <li>• MOD</li> <li>• MONTHS_BETWEEN</li> <li>• NEW_TIME</li> <li>• NEXT_DAY</li> <li>• NVL</li> <li>• PATINDEX</li> <li>• POWER</li> <li>• RAND</li> <li>• REPLICATE</li> <li>• REPLACE</li> <li>• RPAD</li> <li>• SIN</li> <li>• SOUNDEX</li> <li>• SPACE</li> <li>• SQRT</li> <li>• STDEV</li> <li>• STUFF</li> <li>• TAN</li> <li>• TANH</li> <li>• TRANSLATE</li> <li>• TRUNC</li> <li>• VARIANCE</li> <li>• VAR</li> </ul>	<p>US457466</p>

## R Scripts

This topic provides a list of product changes released for this module in this version.

**Table 190: Enhancements and New Features**

The following enhancements and new features have been added.


Description	Tracking ID
APM now supports Rserve ( <a href="http://rforge.net/Rserve/">http://rforge.net/Rserve/</a> ), used with an open-source R Server distribution, for execution of R Scripts in Policy Designer and Family Policies, in addition to the previously supported R server options.	US529924

## Record Manager

This topic provides a list of product changes released for this module in this version.

**Table 191: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>The process for storing files associated with a Reference Document record in the APM database is changed. Reference Document files are now stored in the MI_REF_DOCUMENTS_BINARY system table.</p> <p>The MI_REF_DOCUMENTS_DOC_B field in the Reference Document family is no longer used. Now, to retrieve binary data in a query, you must join with the new system table.</p> <p>When your APM system is upgraded, existing document files will be moved to the new system table during the database upgrade. You must update any non-baseline queries that retrieve reference document binary data. For more information on how to query binary data, refer to the KBA <a href="#">000040031</a>.</p>	DE543293
To enhance readability, you can now format the text in text fields. To facilitate this enhancement, a toolbar for formatting appears next to each text field for which rich text formatting is enabled.	F64567
<p>To enhance performance and usability, you can now perform the following tasks in the Bulk Data Form, which displays related records in a Master/Detail datasheet:</p> <ul style="list-style-type: none"><li>• Search, filter, and sort the list of records.</li><li>• Set the rows per page.</li><li>• Adjust the width of each column.</li><li>• Select the display order for the columns.</li><li>• Update the State of the records in bulk.</li></ul> <p>In addition, the default rows per page have been increased from 25 to 50 records.</p>	F51961 US525665
To enhance the configurability of APM, when using the <b>!datasheet-dialog</b> URL, you can now specify the window title and hide the Edit button in the window.	US550781
You can now enter the localized values for a field group heading in a custom datasheet or the column headings in a tabular datasheet. To facilitate this enhancement, the  icon has been included in the datasheet builder.	US515836



Description	Tracking ID
<p>The following enhancements have been made to the Record Manager URLs and the Datasheet Dialog action route.</p> <ul style="list-style-type: none"> <li>You must now include the family ID or the family key in the Record Manager URLs.</li> <li>For a family using an asset, you can now use the asset record manager URL in the Record Manager URLs to load any existing asset.</li> </ul>	<p>US456821</p> <p>US540957</p>
To enhance the usability of Record Manager, the width of the <b>Record Explorer</b> pane has been increased. To facilitate this enhancement, the width of the pane is now responsive to the width of the browser window.	US443206
You can now specify the datasheet to use in the URL to open records in the Bulk Data Form.	US437595
<p>To improve usability, you can now add the following file formats as reference documents to a record from the Add Reference Document window:</p> <ul style="list-style-type: none"> <li>JSON (.json)</li> <li>Drawing (.dwg)</li> <li>Scaled vector graphics (.svg)</li> </ul>	US526646
To improve security, you are no longer able to specify the APM Server in the UNC Path when configuring shared Reference Document folders.	DE178037

**Table 192: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the Document Path field, you could not specify the network path for a folder. This issue has been resolved.	US460298
Previously, if you selected a master detail datasheet for a record in a family using a state machine and attempted to change the state of the record, incorrect values were displayed in the datasheet and you could not save the record. This issue has been resolved.	DE192787
Previously, when you opened a record in Record Manager and hovered over the application tab, the tooltip displayed the record ID in truncated format. This issue has been resolved.	DE176906
Previously, when you attempted to link multiple reference documents to the same entity in a single transaction, relationships were not created for some of the selected documents. This issue has been resolved.	DE163821
Previously, when you attempted to update a record with an external hyperlink in the <b>TEXT</b> field or saved the record with an external hyperlink, an error occurred, and the datasheet did not load. This issue has been resolved.	DE155394
Previously, in a record containing a drop-down list box, if you selected a value in the drop-down list box, and then attempted to save the record, an error occurred. This issue has been resolved.	DE146300
Previously, when you tried to view the data copied from the datasheet through the result grid, the multiple spaces between the words were reduced to a single white space. This issue has been resolved.	DE144840
Previously, in a shared network, if you selected a hyperlink that was referenced to a document to be downloaded using Google Chrome or the Microsoft Edge browser, the file was downloaded with an invalid name and extension. This issue has been resolved.	DE141659

Description	Tracking ID
Previously, if the browser zoom level was set to less than 80%, the rows in the Bulk Data Form were misaligned. This issue has been resolved.	DE122725
Previously, the Email Subject Line field did not appear in the Conditional Alert datasheet layout. This issue has been resolved.	US528252

**Table 193: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When you print the Bulk Data Form, only the columns that are visible on the screen are printed, instead of the entire form.	DE192562

**Table 194: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
The <b>Send Query Link</b> check box on the Conditional Alert datasheet is redundant and has been removed. Now, the <b>Send Web Query Link</b> check box is selected by default and can be cleared if required.	DE183846

## Reliability Analytics

This topic provides a list of product changes released for this module in this version.

**Table 195: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, you can now link the analysis to one or more assets or functional locations for the <b>Spares Analysis</b> section. To facilitate this enhancement, the <b>Linked Assets</b> tab has been added in the <b>Analysis Summary</b> workspace.	US540477

**Table 196: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in a System Reliability Analysis, when you specified values for a <b>New TTF Distribution</b> and saved them, the Beta and Eta values would default to zero and not reflect the values from the new distribution. This issue has been resolved.	DE186012
Previously, in a Reliability Distribution Analysis, when you adjusted the X-axis range, the setting was not retained between the plot tabs. This issue has been resolved.	DE183604
Previously, the Probability Distribution workflow in the documentation was incorrect. This issue has been resolved.	DE182309

Description	Tracking ID
Previously, in Automation Rules, when you attempted to merge two or more analyses, the values in the <b>Number of Assets</b> column were incorrectly displayed as the sum of number of assets and number of failures. This issue has been resolved.	DE176522
Previously, in System Reliability Analysis, when a planned resource was linked to a risk, if the same risk was then linked to an unplanned resource, the resource would be removed from the planned resource list and could not be added back. This issue has been resolved.  Now, the planned resource is not removed from the correct resource list.	DE162457
Previously, in a Reliability Distribution for a Probability plot, the x and y coordinates continued to be displayed and were updated even for the Show data view of the chart component. This issue has been resolved.	DE153062
Previously, in System Reliability Analysis, the value on the Resource Time graph was incorrect if the resource time was being rounded to three decimal places. This issue has been resolved.	DE146552
Previously, if you did not have delete permission and when you attempted to delete a Reliability Analysis, an error occurred. This issue has been resolved. Now, in this scenario, a message appears indicating that you do not have delete permission.	DE138241
Previously, in System Reliability, the Monte Carlo Simulation included the detection of failures even when the PF interval value was set to zero which slowed down the performance. This issue has been resolved.	DE126740

## Reliability Centered Maintenance

This topic provides a list of product changes released for this module in this version.

**Table 197: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To improve the usability, export of multiple Reliability Centered Maintenance Analyses will use background job infrastructure from the <b>Reliability Centered Maintenance Overview</b> page.	US513337
To improve the usability, when you select the job status component in RCM, the job error details now appear in a separate window on the same page.	US447209

**Table 198: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you exported an RCM analysis, the Asset information was not available in the Failure Effects, Recommendations, and Secondary Actions pages. This issue has been resolved.	US549693
Previously, if you added a recommendation to a failure effect in RCM or FMEA, duplicate recommendation IDs were created. This issue has been resolved.	DE185427
Previously, when you attempted to link an asset to an analysis, the Asset field in the <b>Enter Parameter Values</b> window displayed Home by default. This issue has been resolved. Now, it displays the asset hierarchy value.	DE184381

Description	Tracking ID
Previously, if you linked a failure mode to an asset and subsequently linked it to a different asset, when the RCM recommendations were promoted to ASM, the asset strategy was updated only for the first asset. This issue has been resolved.	DE182351
Previously, the Asset ID of a consolidated recommendation was incorrect. This issue has been resolved.	DE181288
Previously, when you changed a Risk Matrix that was associated with the site to a different Risk Matrix, you were still able to update the assessment using the old Risk Matrix. This issue has been resolved.	DE179424
Previously, as a non-English language user, you were unable to view the Template Type column in the RCM Overview page. This issue has been resolved.	DE174354
Previously, when loading data through dataloader, financial details were not getting updated as per the dataloader worksheet. This issue has been resolved.	DE152522
Previously, when you accessed APM using a Chrome browser, there was a performance issue while saving records through the datasheet. This issue has been resolved.	DE149743
Previously, if your culture setting was set to a culture other than Invariant Language, when you attempted to export RCM analyses from the <b>RCM Overview</b> page, an error occurred. This issue has been resolved.	DE147986
Previously, if you are not an administrator, when creating a failure effect, the risk assessment record was not copied from ACA. This issue has been resolved.	DE143493

## Reports

This topic provides a list of product changes released for this module in this version.

**Table 199: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if Bulk Reports were not configured in Report Configuration, the reports were not generated, and the SSRS report viewer returned an error. This issue has been resolved.	DE183908

**Table 200: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
The scheduled job for Bulk Reports (SSRS) is causing a deadlock when the job is triggered under high load conditions. This is leading to the JobExecution Service becoming non-responsive. ActiveMQ unsubscribes all non-responsive consumers and this causes all jobs handled by the JobExecution Service to stop processing. This results in all jobs handled by the JobExecution Service (SSRS bulk report, Export & Import, Strategy Macros, and KPI update jobs) being in queued state and not processed. To reset this state you can restart the JobExecution Service to clear the deadlock, and the queues will then continue to process.	DE195077


## Risk Based Inspection

This topic provides a list of product changes released for this module in this version.

### RBI 580 and 581

**Table 201: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, the MIExecutionService is now available in the APM server. It processes jobs in the Inspection Management, Integrity Mobile, Risk Based Inspection, and Thickness Monitoring module queues. The MIExecutionService uses a single shared ActiveMQ queue service across APM.	US554741
To improve usability, you can now view the Inspection Task datasheet in a Datasheet window instead of a new tab, when you select the <b>Task ID</b> hyperlink in the existing tasks section of the <b>Inspection Plan</b> page.	US547779
<p>To enhance usability, the Suggest Potential Degradation Mechanisms (PDMs) feature has been introduced. This feature provides the following functionalities:</p> <ul style="list-style-type: none"><li>• Suggests Potential Degradation Mechanisms along with the basis for an RBI Component.</li><li>• Ability to suggest PDMs in bulk for RBI Components from the <b>RBI Asset</b> workspace and <b>Corrosion Loop</b> workspace.</li><li>• Enables you to decide whether to link suggested PDMs to the RBI Component or not.</li><li>• Provides flexibility to add or update suggestion criteria by modifying the RBI Degradation Mechanism Screening Policy through Policy Manager.</li></ul> <p>To facilitate this enhancement, select the Enable Suggestion of Potential Degradation Mechanism option in the <b>RBI Admin Preferences</b> workspace.</p> <p>For more information on modifying the policy, refer to KBA <a href="#">000039240</a>.</p>	US519095
<p>To improve usability, you can now view the Asset info summary in the RBI <b>Asset View</b> page. To facilitate this enhancement, a new button  for Asset info summary has been added next to the Asset ID in the RBI <b>Asset View</b> page. You can now get a high-level view of the health of an asset which consist of the following information:</p> <ul style="list-style-type: none"><li>• Asset health indicator counts by alert level</li><li>• RBI risk</li><li>• Thickness Monitoring remaining life</li><li>• Open Inspection recommendations</li><li>• Work history</li></ul> <p>You can also use hyperlinks to navigate to the Thickness Monitoring and Inspection Management modules of the asset. You can configure all the fields and values displayed on the Asset info summary in the <b>Asset Info Configuration</b> workspace under the <b>RBI Admin Preferences</b> page.</p>	US518766

Description	Tracking ID
<p>Risk Based Inspection pages have been enhanced to improve usability:</p> <ul style="list-style-type: none"> <li>• Analysis Page: <ul style="list-style-type: none"> <li>◦ RBI 580 and RBI 581 Analysis page now displays Analysis Details, related Degradation Mechanisms, and Consequence Evaluations in a single page as collapsible sections. This allows you to view relevant data related to RBI Analysis in the same page, which improves readability.</li> <li>◦ RBI 580 or 581 Risk Matrix summary is now available in the Analysis header. On selection, the detailed RBI and ASM Risk Matrix appears in a separate window.</li> </ul> </li> <li>• RBI Component page: <ul style="list-style-type: none"> <li>◦ Now displays Component Overview, Component Details, and related Potential Degradation Mechanisms in a single page as collapsible sections. This allows you to view relevant data related to the RBI Component in the same page, which improves readability.</li> </ul> </li> <li>• RBI Corrosion Loop page: <ul style="list-style-type: none"> <li>◦ RBI Corrosion Loop datasheet has been reorganized to enhance usability.</li> <li>◦ RBI Corrosion Loop page now displays two tabs, <b>Corrosion Loop Overview</b> and <b>Corrosion Loop Details</b>. The <b>Corrosion Loop Details</b> section displays Corrosion Loop Details and related Potential Degradation Mechanisms as collapsible sections. This allows you to view relevant data in the same page, which improves readability.</li> </ul> </li> <li>• Enhanced Search functionality for Potential Degradation Mechanisms: <ul style="list-style-type: none"> <li>◦ Search functionality when adding Potential Degradation Mechanisms to RBI Corrosion Loops or RBI Components has been enhanced to retain previous selections when using the search filter option.</li> </ul> </li> <li>• Enhanced left pane tree navigation for RBI Asset and RBI Process Unit: <ul style="list-style-type: none"> <li>◦ RBI Asset navigation tree displays all its RBI Component and related RBI Analyses when loaded initially, regardless of the selected level in the left navigation pane. This allows you to navigate directly to any tree item without the need to first navigate to an intermediary level.</li> <li>◦ RBI Process Unit navigation trees display all Corrosion loops, related RBI Components and its related RBI Analyses when loaded initially, regardless of selected level in the left navigation tree. This allows you to navigate directly to any tree item without the need to first navigate to an intermediary level.</li> <li>◦ RBI Asset and RBI Process Unit navigation trees now include RBI 580 and RBI 581 Analyses. This allows you to navigate directly to an Analysis without needing to first navigate to an RBI Component.</li> <li>◦ RBI Asset and RBI Process Unit navigation trees now include search and analysis filter capabilities. This allows you to focus the tree results.</li> <li>◦ RBI Asset and RBI Process Unit navigation trees now include action buttons which are available depending on the tree selection. This allows you to perform relevant actions directly from the navigation tree.</li> <li>◦ RBI Analysis buttons: <b>Duplicate Analysis</b>, <b>Apply Analysis</b>, and <b>Create What-If Analysis</b> have been added to the RBI Asset and RBI Process Unit navigation trees for better visibility and ease of use.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• US461868</li> <li>• US467251</li> <li>• US447347</li> </ul>

Description	Tracking ID
<p>When creating an RBI Component from the <b>Asset Summary</b> or <b>Unit Summary</b> workspace, the Component Types in the <b>Component Type</b> drop-down list are now populated based on the Component Family selected in the <b>Create New RBI Component</b> window. To facilitate this enhancement, a new system code table, MI RBI COMPONENT FAMILIES, has been added to the <b>System Codes and Tables</b> page. The system code table contains the Component Families and the supported Component Types associated with the MI RBI COMPONENT TYPES system code table.</p> <p><b>Note:</b> For more information on the baseline Component Families and the Component Types that are supported for each Component Family, refer to the topic.</p>	US446310
<p>To improve usability, the following changes have been made to the <b>Component:&lt;name&gt;</b> workspace:</p> <ul style="list-style-type: none"> <li>• The <b>Component Overview</b> tab has been removed and replaced with the <b>COMPONENT OVERVIEW</b> sub-section.</li> <li>• The <b>Potential Degradation Mechanisms</b> tab has been removed and replaced with the <b>POTENTIAL DEGRADATION MECHANISMS</b> sub-section.</li> <li>• The <b>Component Details</b> tab has been removed and replaced with the <b>COMPONENT DETAILS</b> sub-section.</li> </ul>	US446303
<p>To improve usability, the <b>Potential Degradation Mechanisms</b> tab has been removed from the <b>Corrosion Loop: &lt;name&gt;</b> workspace. You can now select the <b>Corrosion Loop Details</b> tab, and then expand the <b>POTENTIAL DEGRADATION MECHANISMS</b> sub-section to view the list of Potential Degradation Mechanisms (PDMs) that are linked to a Corrosion Loop.</p>	US443994

Description	Tracking ID
<p>To improve usability, the following changes have been made to the left pane tree navigation for RBI Asset and RBI Process Unit:</p> <ul style="list-style-type: none"> <li>• RBI Asset navigation tree displays all its RBI Component and related RBI Analyses when loaded initially, regardless of the selected level in the left navigation pane. This allows you to navigate directly to any tree item without the need to first navigate to an intermediary level.</li> <li>• RBI Process Unit navigation trees display all Corrosion loops, related RBI Components and its related RBI Analyses when loaded initially, regardless of selected level in the left navigation tree. This allows you to navigate directly to any tree item without the need to first navigate to an intermediary level.</li> <li>• RBI Asset and RBI Process Unit navigation trees now include RBI 580 and RBI 581 Analyses. This allows you to navigate directly to an Analysis without the need to first navigate to an RBI Component.</li> </ul>	US443991
<p>To enhance usability, a new inspection planning methodology, Alternative Inspection Plan, has been introduced. Using this feature, you can perform the following functionalities:</p> <ul style="list-style-type: none"> <li>• Create inspection tasks from the inspection plan details without generating RBI recommendations.</li> <li>• Review critical information related to damage mechanisms, inspection strategies, and schedule parameters within inspection plan details before implementing the tasks</li> <li>• Add inspection plan details manually for damage mechanisms or update the system-generated inspection plan details.</li> <li>• Implement multiple inspection plan details together.</li> <li>• Edit or update the approved inspection plan and capture the revision history.</li> <li>• View the entire equipment summary by accessing newly introduced Asset Info functionality within an inspection plan.</li> </ul> <p>To facilitate this enhancement, enable the <b>Alternative Inspection Plan</b> option from the application settings.</p> <p><b>Note:</b> This is an optional functionality. The Alternative Inspection Plan does not support the following workflows:</p> <ul style="list-style-type: none"> <li>• RBI Recommendation</li> <li>• Compliance Management</li> <li>• Promotion to Asset Strategy Management</li> <li>• RBI Inspection Grouping</li> </ul>	US528269

**Table 202: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the Desired Interval Basis field on Inspection Tasks implemented from Risk Based Inspection was set to RBI Recommendation or RBI 581 Recommendation. This issue has been resolved. Now, the Desired Interval Basis field on Inspection Tasks implemented from Risk Based Inspection is set to RBI 580 or RBI 581 respectively. The Desired Interval Basis field on Inspection Tasks implemented from manually created Inspection Plan Details is set as User Designed.	US537338
Previously, when searching for Potential Degradation Mechanisms from the <b>Component Overview</b> section or the <b>Corrosion Loop Overview</b> section, previously selected Potential Degradation Mechanisms were not retained. This issue has been resolved.	US439611



Description	Tracking ID
Previously, when you accessed an RBI Component, the analysis table in the Component Overview section sometimes failed to load, resulting in a blank screen. You had to refresh the browser to view the related analyses. This issue has been resolved.	DE189291
Previously, when you attempted to delete an RBI Analysis, there was no indication that the delete process had started, and you selected the Delete icon multiple times, resulting in an error. This issue has been resolved. Now, a busy cursor is displayed when you select Delete on an RBI Analysis.	DE183466
Previously, when you attempted to link the protected components to a Pressure Relief Device component on a Corrosion Loop, components which were not eligible to be linked were displayed in the list. This issue has been resolved.	DE154170
Previously, when the RBI Evergreening Preference was set to RBI 581, hyperlinks for the Asset ID, Component, and Analysis ID columns in the <b>Pending Evergreening</b> tab of the RBI Bulk Evergreening workspace were not displayed. This issue has been resolved.	DE152646


Description	Tracking ID
Previously, the RBI Corrosion Loop table in the <b>Unit Summary</b> workspace took a long time to load. Now, performance improvements have been made to reduce the time to load the table.	DE141412

Description	Tracking ID																				
<p>Previously, the field captions of the following family fields contained extra spaces, special characters, or spelling mistakes. This issue has been resolved. Now, the field captions have been corrected to the captions listed in the following table.</p>	DE101745																				
<table> <tr> <th data-bbox="261 384 691 430">Family Name</th><th data-bbox="691 384 1122 430">Field Captions</th></tr> <tr> <td data-bbox="261 430 691 1056">RBI 581 Consequence Evaluation</td><td data-bbox="691 430 1122 1056"> <ul style="list-style-type: none"> <li>Allow Override of Total Financial Consequence</li> <li>Component Area Damage AINL -CONT Large</li> <li>Component Area Damage AINL -CONT Medium</li> <li>Component Area Damage AINL -CONT Rupture</li> <li>Component Area Damage AINL -CONT Small</li> <li>Component Area Damage AIL -CONT Large</li> <li>Component Area Damage AIL -CONT Medium</li> <li>Component Area Damage AIL -CONT Rupture</li> <li>Component Area Damage AIL -CONT Small</li> <li>Damage Cost Small</li> <li>Personnel Injury Area AINL INST Large</li> <li>Result of Serious Injury</li> <li>Soil Type Under Tank Bottom</li> <li>Time to Release Small</li> <li>Time to Release Medium</li> <li>Time to Release Large</li> <li>Time to Release Rupture</li> </ul> </td></tr> <tr> <td data-bbox="261 1056 691 1144">RBI Plan</td><td data-bbox="691 1056 1122 1144"> <ul style="list-style-type: none"> <li>Dmg Type 1</li> <li>Dmg Type 2</li> </ul> </td></tr> <tr> <td data-bbox="261 1144 691 1194">RBI Recommendation</td><td data-bbox="691 1144 1122 1194"> <ul style="list-style-type: none"> <li>Estimated Cost</li> </ul> </td></tr> <tr> <td data-bbox="261 1194 691 1694">RBI 581 External Damage Evaluation</td><td data-bbox="691 1194 1122 1694"> <ul style="list-style-type: none"> <li>Corrosion Rate Adjustment for Bad Design/ Fabrication</li> <li>Corrosion Rate Adjustment Factor for Insulation Condition</li> <li>Corrosion Rate Adjustment Factor for Bad Equipment Design/Fabrication</li> <li>Corrosion Rate Adjustment Factor for Complexity</li> <li>Corrosion Rate Adjustment Factor for Insulation Type</li> <li>Corrosion Rate Adjustment Factor for Interface for Soil and Water</li> <li>Component Area Damage AIL -CONT Medium</li> <li>Component Area Damage AIL -CONT Rupture</li> <li>Component Area Damage AIL -CONT Small</li> </ul> </td></tr> <tr> <td data-bbox="261 1694 691 1782">RBI 581 Brittle Fracture Damage Evaluation</td><td data-bbox="691 1694 1122 1782"> <ul style="list-style-type: none"> <li>Is Equipment Or Circuit Subject to Shock Chilling</li> <li>Is Equipment Or Circuit Subject to EVN Cracking</li> </ul> </td></tr> <tr> <td data-bbox="261 1782 691 1904">RBI 581 Risk Analysis</td><td data-bbox="691 1782 1122 1904"> <ul style="list-style-type: none"> <li>Total POF -RBI Date</li> <li>Total SHE Risk -RBI Date</li> <li>Financial Risk -Injury</li> </ul> </td></tr> <tr> <td data-bbox="261 1904 691 1955">Potential Degradation Mechanisms</td><td data-bbox="691 1904 1122 1955"> <ul style="list-style-type: none"> <li>Degradation Mechanism ID</li> </ul> </td></tr> <tr> <td data-bbox="261 1955 691 2043">Criticality Calculator RBI Components</td><td data-bbox="691 1955 1122 2043"> <ul style="list-style-type: none"> <li>Deadleg Flag</li> <li>Injection Point Flag</li> </ul> </td></tr> <tr> <td data-bbox="261 2043 691 2089">Criticality Degradation Mech Evaluation</td><td data-bbox="691 2043 1122 2089"> <ul style="list-style-type: none"> <li>Cyanides</li> </ul> </td></tr> </table>	Family Name	Field Captions	RBI 581 Consequence Evaluation	<ul style="list-style-type: none"> <li>Allow Override of Total Financial Consequence</li> <li>Component Area Damage AINL -CONT Large</li> <li>Component Area Damage AINL -CONT Medium</li> <li>Component Area Damage AINL -CONT Rupture</li> <li>Component Area Damage AINL -CONT Small</li> <li>Component Area Damage AIL -CONT Large</li> <li>Component Area Damage AIL -CONT Medium</li> <li>Component Area Damage AIL -CONT Rupture</li> <li>Component Area Damage AIL -CONT Small</li> <li>Damage Cost Small</li> <li>Personnel Injury Area AINL INST Large</li> <li>Result of Serious Injury</li> <li>Soil Type Under Tank Bottom</li> <li>Time to Release Small</li> <li>Time to Release Medium</li> <li>Time to Release Large</li> <li>Time to Release Rupture</li> </ul>	RBI Plan	<ul style="list-style-type: none"> <li>Dmg Type 1</li> <li>Dmg Type 2</li> </ul>	RBI Recommendation	<ul style="list-style-type: none"> <li>Estimated Cost</li> </ul>	RBI 581 External Damage Evaluation	<ul style="list-style-type: none"> <li>Corrosion Rate Adjustment for Bad Design/ Fabrication</li> <li>Corrosion Rate Adjustment Factor for Insulation Condition</li> <li>Corrosion Rate Adjustment Factor for Bad Equipment Design/Fabrication</li> <li>Corrosion Rate Adjustment Factor for Complexity</li> <li>Corrosion Rate Adjustment Factor for Insulation Type</li> <li>Corrosion Rate Adjustment Factor for Interface for Soil and Water</li> <li>Component Area Damage AIL -CONT Medium</li> <li>Component Area Damage AIL -CONT Rupture</li> <li>Component Area Damage AIL -CONT Small</li> </ul>	RBI 581 Brittle Fracture Damage Evaluation	<ul style="list-style-type: none"> <li>Is Equipment Or Circuit Subject to Shock Chilling</li> <li>Is Equipment Or Circuit Subject to EVN Cracking</li> </ul>	RBI 581 Risk Analysis	<ul style="list-style-type: none"> <li>Total POF -RBI Date</li> <li>Total SHE Risk -RBI Date</li> <li>Financial Risk -Injury</li> </ul>	Potential Degradation Mechanisms	<ul style="list-style-type: none"> <li>Degradation Mechanism ID</li> </ul>	Criticality Calculator RBI Components	<ul style="list-style-type: none"> <li>Deadleg Flag</li> <li>Injection Point Flag</li> </ul>	Criticality Degradation Mech Evaluation	<ul style="list-style-type: none"> <li>Cyanides</li> </ul>	
Family Name	Field Captions																				
RBI 581 Consequence Evaluation	<ul style="list-style-type: none"> <li>Allow Override of Total Financial Consequence</li> <li>Component Area Damage AINL -CONT Large</li> <li>Component Area Damage AINL -CONT Medium</li> <li>Component Area Damage AINL -CONT Rupture</li> <li>Component Area Damage AINL -CONT Small</li> <li>Component Area Damage AIL -CONT Large</li> <li>Component Area Damage AIL -CONT Medium</li> <li>Component Area Damage AIL -CONT Rupture</li> <li>Component Area Damage AIL -CONT Small</li> <li>Damage Cost Small</li> <li>Personnel Injury Area AINL INST Large</li> <li>Result of Serious Injury</li> <li>Soil Type Under Tank Bottom</li> <li>Time to Release Small</li> <li>Time to Release Medium</li> <li>Time to Release Large</li> <li>Time to Release Rupture</li> </ul>																				
RBI Plan	<ul style="list-style-type: none"> <li>Dmg Type 1</li> <li>Dmg Type 2</li> </ul>																				
RBI Recommendation	<ul style="list-style-type: none"> <li>Estimated Cost</li> </ul>																				
RBI 581 External Damage Evaluation	<ul style="list-style-type: none"> <li>Corrosion Rate Adjustment for Bad Design/ Fabrication</li> <li>Corrosion Rate Adjustment Factor for Insulation Condition</li> <li>Corrosion Rate Adjustment Factor for Bad Equipment Design/Fabrication</li> <li>Corrosion Rate Adjustment Factor for Complexity</li> <li>Corrosion Rate Adjustment Factor for Insulation Type</li> <li>Corrosion Rate Adjustment Factor for Interface for Soil and Water</li> <li>Component Area Damage AIL -CONT Medium</li> <li>Component Area Damage AIL -CONT Rupture</li> <li>Component Area Damage AIL -CONT Small</li> </ul>																				
RBI 581 Brittle Fracture Damage Evaluation	<ul style="list-style-type: none"> <li>Is Equipment Or Circuit Subject to Shock Chilling</li> <li>Is Equipment Or Circuit Subject to EVN Cracking</li> </ul>																				
RBI 581 Risk Analysis	<ul style="list-style-type: none"> <li>Total POF -RBI Date</li> <li>Total SHE Risk -RBI Date</li> <li>Financial Risk -Injury</li> </ul>																				
Potential Degradation Mechanisms	<ul style="list-style-type: none"> <li>Degradation Mechanism ID</li> </ul>																				
Criticality Calculator RBI Components	<ul style="list-style-type: none"> <li>Deadleg Flag</li> <li>Injection Point Flag</li> </ul>																				
Criticality Degradation Mech Evaluation	<ul style="list-style-type: none"> <li>Cyanides</li> </ul>																				

## RBI 580

**Table 203: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID				
<p>You can now update What-If RBI Criticality Analyses using the RBI 580 Data Loader. To facilitate this enhancement, the RBI 580 Data Loader template is updated to include the <b>Event Type</b> column on the RBI Criticality Analysis worksheet and all Consequence Evaluation, Degradation Mechanism Evaluation, and Damage Mechanism worksheets. When the Event Type is set to <b>W</b>, the system updates the analysis with the matching Analysis Unique Identifier.</p> <p><b>Note:</b> If the What-If Analysis does not exist, an error appears, indicating that the What-If Analysis cannot be created using data loaders.</p>	US554368				
When calculating an RBI PRD Criticality Analysis and the leakage rate for minor and moderate leaks, the calculations are now based on API 581, third edition.	US513966				
<p>You can now correctly reference the RBI Component and Equipment of an RBI Criticality Analysis and its related RBI Degradation Mechanisms that are related to from their respective datasheets after applying or copying the analysis. To facilitate this enhancement, the following fields have been updated to match the Component and Equipment you are applying or copying to.</p> <table border="1"> <thead> <tr> <th>Family Name</th><th>Field Names</th></tr> </thead> <tbody> <tr> <td>RBI Degradation Mechanisms</td><td> <ul style="list-style-type: none"> <li>Component ID</li> <li>Equipment ID</li> </ul> </td></tr> </tbody> </table>	Family Name	Field Names	RBI Degradation Mechanisms	<ul style="list-style-type: none"> <li>Component ID</li> <li>Equipment ID</li> </ul>	US453121
Family Name	Field Names				
RBI Degradation Mechanisms	<ul style="list-style-type: none"> <li>Component ID</li> <li>Equipment ID</li> </ul>				
<p>You can now select and link a Protected RBI Component to a PRD component from the navigation pane in RBI Asset workspace. To facilitate this enhancement, the  button has been added to the navigation pane in the RBI Asset workspace.</p>	US453094				
<p>You can now export RBI Criticality Analyses to an excel format from either of the below workspaces:</p> <ul style="list-style-type: none"> <li>The RBI Evergreening workspace</li> <li>The RBI Analysis Export workspace</li> </ul> <p>The exported file will be in the Risk Based Inspection (RBI) Data Loader template format. This will provide the ability to modify the exported analysis data and re-import for easy bulk editing. To facilitate this enhancement, Export Analyses feature has been introduced.</p>	US450061				
<p>You can now select the field displaying the Inspection Priority and Risk Category data in the page heading to view the Risk Matrix. To facilitate this enhancement, the <b>Risk Matrix</b> section has been removed from the <b>Asset Summary</b> workspace for RBI Criticality Analyses.</p>	US530725 US443989				

**Table 204: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID								
<p>Previously, the following fields in the RBI Criticality Analysis family displayed the Unit of Measure (UOM) incorrectly as Pounds Force per Square Inch Absolute (PSIA):</p> <table border="1"> <thead> <tr> <th>Field Id</th><th>Field Caption</th></tr> </thead> <tbody> <tr> <td>MI_CRITANAL_TB_OP_PRES_CHL_N</td><td>Tube Operating Press - Channel</td></tr> <tr> <td>MI_CRITANAL_TB_OP_PRES_SHL_N</td><td>Tube Operating Pressure Shell</td></tr> <tr> <td>MI_CRITANAL_TB_DELTA_PRES_C</td><td>Tube Delta Pressure</td></tr> </tbody> </table> <p>This Issue has been resolved. Now, the UOM value is displayed as Pounds/Sq Inch Gage.</p> <p><b>Note:</b> You must enter the value in the Analysis for Tube Press - Channel field with unit of measurement as PSIG.</p>	Field Id	Field Caption	MI_CRITANAL_TB_OP_PRES_CHL_N	Tube Operating Press - Channel	MI_CRITANAL_TB_OP_PRES_SHL_N	Tube Operating Pressure Shell	MI_CRITANAL_TB_DELTA_PRES_C	Tube Delta Pressure	DE179745
Field Id	Field Caption								
MI_CRITANAL_TB_OP_PRES_CHL_N	Tube Operating Press - Channel								
MI_CRITANAL_TB_OP_PRES_SHL_N	Tube Operating Pressure Shell								
MI_CRITANAL_TB_DELTA_PRES_C	Tube Delta Pressure								
<p>Previously, if you cleared the <b>Toxic Mixture Shell</b> check box on the Criticality Consequence Evaluation of an RBI Criticality Analysis, the values in the <b>Toxic Fluid Shell Side</b> and <b>Percent Toxic Shell</b> boxes did not get cleared as expected. This issue has been resolved. Now, the existing values in the <b>Toxic Fluid Shell Side</b> and <b>Percent Toxic Shell</b> boxes get cleared and the boxes are also disabled.</p>	DE175499								
<p>Previously, when re-implementing an Inspection Group on a Process Unit, the previous Inspection Group's recommendations were not archived if the related Inspection Plan was in the modified state. This issue has been resolved. Now, when re-implementing a new Inspection Group, the previous Inspection Group's recommendations will be archived, and only the newly created Inspection Group Recommendations will be linked to the modified inspection plan.</p>	DE156821								
<p>Previously, in the RBI Criticality Analysis, the <b>Allowable Stress</b> field was populated based on the <b>Material Specification</b> and <b>Material Grade</b> fields in the Tank Stress table. This issue has been resolved. Now, the <b>Design Code</b> and <b>Code Year</b> fields are also considered for populating the <b>Allowable Stress</b> field.</p>	DE156070								
<p>Previously, when you attempted to execute the RBI 580 Dataloader, if the value provided in the fields on the <b>Analysis</b>, <b>Consequence Evaluation</b>, or <b>Degradation Mechanism Evaluation sheets</b> were null, the field value was updated as null. This issue has been resolved. Now, if the value provided for the fields are null, the field is skipped and the default value or any mapped value is displayed.</p>	DE154518								
<p>Previously, when duplicating an RBI PRD Criticality Analysis, when at least one related Degradation Mechanism was not selected, an error occurred, and the RBI PRD Criticality Analysis was not copied. This issue has been resolved.</p>	DE145892								
<p>Previously, if the PV Stress or Piping Stress reference tables contained multiple records with the same combination of Design Code, Code Year, Material Specification, Material Grade and Metal Temperature, the Allowable stress field in RBI Criticality Analysis was populated arbitrarily with one of the records returned. This issue has been resolved. Now, the record with the lowest Allowable stress value from the records returned is used to populate the Allowable Stress field.</p>	DE145435								
<p>Previously when you implemented RBI 580 Recommended Actions to existing Inspection Tasks in bulk, the data for the Recommended Inspection Task appeared only for the first Recommended Action. This issue has been resolved. Now, the Recommended Inspection Task data appears for each Recommended Action.</p>	DE144641								

Description	Tracking ID
Previously, when calculating an RBI Criticality Analysis, the toxic evaporation rate was calculated using an incorrect wind speed factor. This issue has been resolved. Now, the toxic evaporation rate is calculated correctly, and will be used in populating the Toxic Mixed Release Rate field and in the RBI Criticality Analysis calculation.	DE120477
Previously, if the Design Temperature value was less than the minimum value of Metal Temperature in the Piping Stress or PV Stress table records, the Allowable Stress field in RBI Criticality Analysis was calculated incorrectly. This issue has been resolved. Now, if the Design Temperature value is less than the minimum value of Metal Temperature, then the Allowable Stress field is calculated based on the minimum value of Metal Temperature.	DE84703

**Table 205: Obsolete Features**

The following features are no longer available.

Description	Tracking ID																
<p>The following catalog queries are no longer used and have been removed from APM.</p> <table> <tr> <th>Query</th><th>Path</th></tr> <tr> <td>Environmental Consequence</td><td>Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries</td></tr> <tr> <td>Flammable Consequence</td><td>Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries</td></tr> <tr> <td>Production Loss Consequence</td><td>Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries</td></tr> <tr> <td>Toxic Consequence</td><td>Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries</td></tr> <tr> <td>Assets In Hierarchy</td><td>Public\Meridium\Modules\Mechanical Integrity\Queries\Navigation Bar Queries</td></tr> <tr> <td>Recommendations by Asset</td><td>Public\Meridium\Modules\Risk Based Inspection\Queries</td></tr> <tr> <td>Select Unit for Grouping</td><td>Public\Meridium\Modules\Risk Based Inspection\Queries</td></tr> </table>	Query	Path	Environmental Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries	Flammable Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries	Production Loss Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries	Toxic Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries	Assets In Hierarchy	Public\Meridium\Modules\Mechanical Integrity\Queries\Navigation Bar Queries	Recommendations by Asset	Public\Meridium\Modules\Risk Based Inspection\Queries	Select Unit for Grouping	Public\Meridium\Modules\Risk Based Inspection\Queries	US461310
Query	Path																
Environmental Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries																
Flammable Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries																
Production Loss Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries																
Toxic Consequence	Public\Meridium\Modules\Mechanical Integrity\Queries\Dashboard Queries																
Assets In Hierarchy	Public\Meridium\Modules\Mechanical Integrity\Queries\Navigation Bar Queries																
Recommendations by Asset	Public\Meridium\Modules\Risk Based Inspection\Queries																
Select Unit for Grouping	Public\Meridium\Modules\Risk Based Inspection\Queries																

## RBI 581

**Table 206: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>You can now update What-If RBI 581 Risk Analyses using the RBI 581 Data Loader. To facilitate this enhancement, the RBI 581 Data Loader template is updated to include the <b>Event Type</b> column on the RBI 581 Analysis worksheet and all Consequence Evaluation, Degradation Mechanism Evaluation, and Damage Mechanism worksheets. When the Event Type is set to <b>W</b>, the system updates the analysis with the matching Analysis Unique Identifier.</p> <p><b>Note:</b> If the What-If Analysis does not exist, an error appears, indicating that the What-If Analysis cannot be created using data loaders.</p>	US554368
<p>To improve usability, the following changes have been made in the <b>RBI 581 ISO Risk Plot</b> page:</p> <ul style="list-style-type: none"> <li>The Analysis Overview and the Component Overview has been updated to concurrently plot the RBI Date, Without Plan, and With Plan risk data.</li> <li>The RBI 581 ISO Risk Plot on the Asset Overview, the Corrosion Loop Overview, and the Unit Overview will only display the RBI Date risk data by default. You can now select the option to display Without Plan, and With Plan risk data. To facilitate this enhancement, each risk plot will be displayed by its respective icon defined in the legend of the graph.</li> <li>You can now hide or unhide the risk data by selecting or deselecting the respective Risk Plot icon in the legend of the graph.</li> <li>You can now zoom-in the risk plots on a section of the graph by selecting that area of the graph using cursor.</li> </ul>	US533000
<p>You can now view the risk calculated on the Target Inspection Date. To facilitate this enhancement, the following changes have been made:</p> <ul style="list-style-type: none"> <li>A new column is added in the Risk Results section of the RBI 581 Risk Analysis to display risk calculated on the Target Inspection Date.</li> <li>A new row is added in the RBI-581 DM Results section of the RBI Degradation Mechanisms to display the risk calculated for the Degradation Mechanism on the Target Inspection Date.</li> </ul>	US528300
<p>To improve usability, RBI Analysts, can now manage Inventory Groups. To facilitate this enhancement, the <b>Inventory Groups</b> workspace has been moved from the <b>RBI Admin Preferences</b> page to the <b>Risk Based Inspection</b> workspace. It is accessible from the RBI Component workspace and also from the <b>Risk Based Inspection Overview</b> workspace.</p>	US518223
<p>You can now export RBI Criticality Analyses to an excel format from either of the below workspaces:</p> <ul style="list-style-type: none"> <li>The RBI Evergreening workspace</li> <li>The RBI Analysis Export workspace</li> </ul> <p>The exported file will be in the Risk Based Inspection (RBI) 580 Data Loader template format. This will provide the ability to modify the exported analysis data and re-import for easy bulk editing. To facilitate this enhancement, Export Analyses feature has been introduced.</p>	US450061
<p>The Final Damage Factor for RBI 581 External Cracking Damage Evaluations now adheres to API 581 3rd Edition, Addendum 1. The Final Damage Factor will now have a maximum value of 5000.</p>	US470511

Description	Tracking ID						
<p>You can now correctly reference the RBI Component and Equipment of an RBI 581 Risk Analysis and its related RBI Degradation Mechanisms that are related to from their respective datasheets after applying or copying the analysis. To facilitate this enhancement, the following fields have been updated to match the Component and Equipment you are applying or copying to.</p> <table> <tr> <th>Family Name</th><th>Field Names</th></tr> <tr> <td>RBI 581 Risk Analysis</td><td> <ul style="list-style-type: none"> <li>Component Description</li> <li>Component Comments</li> </ul> </td></tr> <tr> <td>RBI Degradation Mechanisms</td><td> <ul style="list-style-type: none"> <li>Component ID</li> <li>Equipment ID</li> </ul> </td></tr> </table>	Family Name	Field Names	RBI 581 Risk Analysis	<ul style="list-style-type: none"> <li>Component Description</li> <li>Component Comments</li> </ul>	RBI Degradation Mechanisms	<ul style="list-style-type: none"> <li>Component ID</li> <li>Equipment ID</li> </ul>	US453121
Family Name	Field Names						
RBI 581 Risk Analysis	<ul style="list-style-type: none"> <li>Component Description</li> <li>Component Comments</li> </ul>						
RBI Degradation Mechanisms	<ul style="list-style-type: none"> <li>Component ID</li> <li>Equipment ID</li> </ul>						
<p>You can now select the field displaying the Total SHE Risk – RBI Date, SHE Risk Category – RBI Date, and Total Financial Risk – RBI Date data in the page heading to view the RBI 581 ISO Risk Plot and the default Risk Matrix. To facilitate this enhancement, the <b>Risk Matrix</b> section has been removed from the <b>Asset Summary</b> workspace for RBI 581 Risk Analyses.</p>	US530725 US443989						
<p>The Final Damage Factor for RBI 581 Cracking Damage Evaluations now adheres to API 581 3rd Edition, Addendum 1. The Final Damage Factor will now have a maximum value of 5000.</p>	US439316						
<p>The Coefficient Y Material field in the RBI 581 Risk Analysis is now localized. To facilitate this enhancement, the RBI 581 Coefficient Y Materials List system code table will be used to populate the values for the Coefficient Y Material field in the RBI 581 Risk Analysis.</p>	US351000						

**Table 207: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, the <b>Deg Mech Comments</b> field was disabled in <b>Degradation Mechanism Details</b> page when the RBI 581 Risk Analysis was set to <b>Created</b> state. Now, you are allowed to enter the comments in the <b>Deg Mech Comments</b> field until the RBI 581 Risk Analysis is set to <b>Complete</b> state. This issue has been resolved.</p>	DE192230
<p>Previously, when the Operating Temperature field of an RBI 581 External Damage Evaluation was greater than 90 degrees Fahrenheit, the Calculated Corrosion Rate field was not set to the most conservative value from Table 15.2 (Corrosion Rates for Calculation of the DF-External Corrosion) of the RBI 581 Specification. This issue has been resolved.</p>	DE190649
<p>Previously, when you attempted to calculate an RBI 581 Risk Analysis with a Representative Fluid that satisfied the following conditions, an error occurred:</p> <ul style="list-style-type: none"> <li>The Initial Fluid Phase was set to Liquid.</li> <li>The Toxic Model was set to EO.</li> <li>The Toxic Leak Duration was between 3 and 4.</li> </ul> <p>This issue has been resolved.</p>	DE189199
<p>Previously, the susceptibility calculations for the 581-Chloride Stress Corrosion Cracking degradation mechanism evaluation were not updated as per API 581 Specification, Third Edition. This issue has been resolved. To facilitate this fix, the RBI 581 Calculate Susceptibility - CISCC policy has been updated. For information, refer to <a href="#">KBA 000039983</a>.</p>	DE188760



Description	Tracking ID
Previously, when the Operating Temperature field of an RBI 581 Risk Analysis was set to a value 100, 200 or greater than 300 degrees Fahrenheit, the Cracking Susceptibility field was calculated incorrectly on the 581-Chloride Stress Corrosion Cracking degradation mechanism evaluations. This issue has been resolved.	DE188760
Previously, when calculating an RBI 581 Risk Analysis with a 581-Atmospheric Tank Bottom Corrosion degradation mechanism evaluation where the Highest Effective Inspection Level field is set to <b>Highly Effective</b> , the Recommended Inspection Effectiveness field on the related Damage Mechanism was not set. This resulted in no recommendations being generated. This issue has been resolved. Now, the system will attempt mitigation on 581-Atmospheric Tank Bottom Corrosion degradation mechanism evaluations regardless of the highest effective inspection level.	DE187364
Previously, when you created an RBI 581 Admin option from the <b>RBI 581 Admin Options</b> workspace and switched between tabs, the newly created option did not appear on the page. This issue has been resolved.	DE183593
Previously, when calculating a Thinning and Lining Damage Mechanism Evaluation where the Cladding field was set to true in the parent RBI 581 Risk Analysis, the Expected Metal Loss Fraction (Art) field was calculated using the incorrect cladding corrosion rate based on the Selected Base Material Corrosion Rate field. This issue has been resolved. Now, the Expected Metal Loss Fraction (Art) field is calculated using the cladding corrosion rate based on the Selected Cladding Material Corrosion Rate field.	DE181240
Previously, when you calculated an RBI 581 Risk Analysis with a related 581-Internal Component Lining Damage degradation mechanism, the damage factor was set to Zero if the age was less than 0.5. This issue has been resolved. Now, if the age is less than 0.5, the Damage Factor is populated based on the updated content in the following tables: <ul style="list-style-type: none"> <li>• Inorganic Lining Damage Factors</li> <li>• Organic Lining Damage Factors</li> </ul>	DE179908
Previously, as a multiple site user, when you created an RBI 581 Inventory group, the site was set based on the user's default site instead of the Process Units site. This issue has been resolved. Now, a newly created RBI 581 Inventory Groups site is set based on the Process Units site.	DE179048
Previously, in the <b>RBI 581 Admin Options</b> workspace under the <b>RBI Admin Preferences</b> page, the <b>Character Field Value</b> drop-down list was not populated for some of the Target Family and Target Field combinations. This issue has been resolved.	DE178900
Previously, when you navigated to the <b>Inventory Groups</b> workspace from the <b>Unit Summary</b> workspace, the Create New Group button (  ) was not enabled for the Process Unit. This issue has been resolved.	DE176641
Previously, when you logged in with the MI RBI Viewer permissions, the Link (  ) icon was displayed in the <b>Linked Components</b> section of the <b>Inventory Group</b> workspace. This issue has been resolved.	DE175357

Description	Tracking ID
<p>Previously, when calculating an RBI 581 Risk Analysis with a toxic mixture, if one of the following values was selected in the Toxic Model field, the Weighted Toxic Consequence Area field on the related RBI 581 Consequence Evaluation was calculated incorrectly using release mass:</p> <ul style="list-style-type: none"> <li>• ALCL3</li> <li>• CO</li> <li>• EE</li> <li>• EO</li> <li>• HCl</li> <li>• Nitric Acid</li> <li>• NO2</li> <li>• Phosgene</li> <li>• Propylene Oxide</li> <li>• TDI</li> </ul> <p>This issue has been resolved. Now, in this scenario, the Weighted Toxic Consequence Area field considers the release rate. For more information access the <a href="#">KBA 000037566</a>.</p>	DE155372
<p>Previously, when you attempted to execute the RBI 581 Dataloader, if the value provided in the fields on the <b>Analysis, Consequence Evaluation, or Degradation Mechanism Evaluation sheets</b> were null, the field value was updated as null. This issue has been resolved. Now, if the value provided for the fields are null, the field is skipped and the default value or any mapped value is displayed.</p>	DE154518
<p>Previously, when calculating an RBI 581 Risk Analysis that had the Component Type set to Storage Tank and a related RBI 581 Thinning Degradation Mechanism Evaluation or RBI 581 External Degradation Mechanism Evaluation, the Strength Ratio field was calculated incorrectly. This issue has been resolved.</p>	DE152192
<p>Previously, if an RBI 581 Risk Analysis was linked to an RBI Component with the component type set to Air Cooled Exchanger Tubes, the recommendations were erroneously generated. This issue has been resolved. To facilitate this fix, the below two baseline queries are updated:</p> <ul style="list-style-type: none"> <li>• Public\Meridium\Modules\Risk Based Inspection - 581\Queries\Component Type filter for Ext and Thin</li> <li>• Public\Meridium\Modules\Risk Based Inspection - 581\Queries\Component Type filter query</li> </ul>	DE152190
<p>Previously, the Calculated T-min field on 581 Risk Analyses was calculated incorrectly when Geometry Type field value was Piping. This issue has been resolved. Now, the Calculated T-min field on 581 Risk Analyses is calculated using the formula from the reference, ASME B31.3, 2014 Edition. For more information about the formula, refer to <a href="#">KBA 000036403</a>.</p>	DE151334
<p>Previously, when calculating an RBI 581 Risk Analysis, the Final Damage Factor field for the RBI 581 Thinning and Lining Evaluation family was incorrectly calculated in the following scenarios:</p> <ul style="list-style-type: none"> <li>• The analysis was associated with an RBI 581 Thinning Degradation Mechanism Evaluation.</li> <li>• The Component Type field associated with the analysis was set to Storage Tank.</li> </ul> <p>This issue has been resolved.</p>	DE150440
<p>Previously, the Calculated T-min field on 581 Risk Analyses was calculated incorrectly when Geometry Type field value was Spherical Head or Hemispherical Head. This issue has been resolved. Now, the Calculated T-min field on 581 Risk Analyses is calculated using the updated formula. For more information about the formula, refer to <a href="#">KBA 000037009</a>.</p>	DE149068

Description	Tracking ID
Previously, when duplicating an RBI 581 Risk Analysis, when at least one related Degradation Mechanism was not selected, an error occurred, and the RBI 581 Risk Analysis was not copied. This issue has been resolved.	DE145892
Previously, if the PV Stress or Piping Stress reference tables contained multiple records with the same combination of Design Code, Code Year, Material Specification, Material Grade and Metal Temperature, the Allowable stress and Flow stress fields in 581 Risk Analysis were populated arbitrarily with one of the records returned for each field. This issue has been resolved. Now, the record with the lowest Allowable stress value from the records returned is used to populate the Allowable Stress and Flow stress fields.	DE145435
<p>Previously, in the picklist tab of RBI 581 data loader template, the following process fluids were not available:</p> <ul style="list-style-type: none"> <li>• Acid-HP</li> <li>• Acid-LP</li> <li>• Acid-MP</li> <li>• C1</li> <li>• C10(Kerosene)</li> <li>• C11</li> <li>• C12</li> <li>• C2</li> <li>• C3</li> <li>• C4</li> <li>• C5</li> <li>• C6</li> <li>• C7</li> <li>• C8(Gasoline)</li> <li>• C9</li> <li>• NH3</li> </ul> <p>This issue has been resolved.</p>	DE145420
Previously when you implemented RBI 581 Recommended Actions to existing Inspection Tasks in bulk, the data for the Recommended Inspection Task appeared only for the first Recommended Action. This issue has been resolved. Now, the Recommended Inspection Task data appears for each Recommended Action.	DE144641
Previously, if the Design Temperature value was less than the minimum value of Metal Temperature in the Piping Stress or PV Stress table records, the Allowable Stress and Flow Stress fields in 581 Risk Analysis were calculated incorrectly. This issue has been resolved. Now, if the Design Temperature value is less than the minimum value of Metal Temperature, then the Allowable Stress and Flow Stress fields are calculated based on the minimum value of Metal Temperature.	DE84703

Description	Tracking ID
Previously, when creating an RBI 581 Risk Analysis, the Measured External Corrosion Rate field in the RBI Component family was not mapped to the Base Material Measured Rate field in the related RBI 581 External Damage Evaluation family. This issue has been resolved.	DE83359
Previously, when you calculated an RBI 581 Risk Analysis with Component Type set to Storage Tank Bottom, the Base Damage Factor on RBI 581 Thinning and Lining Datasheet was not retrieving the most conservative value from Thinning Damage Factors of the AST Bottom table in the API 581 Specification. This issue has been resolved. For more information, refer to KBA 000038729.	DE83086

## Risk Matrix

This topic provides a list of product changes released for this module in this version.

**Table 208: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, you can now change the label of the protection level slider in a Risk Matrix. To facilitate this enhancement, a new System Code Table named Protection Level Label has been added.	US514864

**Table 209: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the Risk Rank was not displayed even when the <b>Hide Numeric Risk Rank?</b> checkbox in the Risk Matrix was not selected. This issue has been resolved.	DE183690

## Root Cause Analysis

This topic provides a list of product changes released for this module in this version.

**Table 210: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, the text fields for 5 Whys Analysis are now expanded across the complete width of the page.	US552064
To increase usability, in the RCA Definition datasheet, the filed name <b>Frequency</b> is renamed <b>Number of Related Failures</b> .	US541077

Description	Tracking ID
To enhance usability, while creating an RCA Verification, you can now assign the verification to any team member, instead of only the Principal Analyst.	US501284
The <b>Configure System Email</b> section has been removed from the <b>Email Settings</b> workspace in the <b>RCA Administrator</b> page. You will now receive root cause analysis alert notifications from the email address that is configured in the <b>Email Settings</b> page in Operations Manager.	US459248

**Table 211: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, when you published an RCA Analysis and enabled the option to send an email, and if any of the email recipient was incorrect, then the publishing failed with an incorrect error message. This issue has been resolved. Now, in this scenario, a warning message appears indicating that you must validate the email recipients.	US536521
Previously, in the <b>Preserve Records</b> section, the fields appeared in English and not in the language based on your language settings. This issue has been resolved.	US463186
Previously, for all categories of Root Cause Analyses in the RCA Overview page, the Analysis Type column contained an incorrect spelling. This issue has been resolved.	DE189077
Previously, when you created an RCA using a template that was loaded through the RCA Data Loader, you were unable to edit the analysis. This issue has been resolved.	DE186407
Previously, when you attempted to access the Logic Tree in an RCA Analysis and while the page was still loading, you attempted to switch to the Event Timeline, an error occurred. This issue has been resolved.	DE181425
Previously, the RCA Analysis verification email did not contain any reference to the source analysis. This issue has been resolved.	DE175885
Previously, in the RCA Recommendations, when you attempted to assign a target completion date that was in the past, an incorrect message appeared. This issue has been resolved. Now, you receive a message indicating that the target date must be set as a future date.	DE170361
Previously, when you created a copy of an RCA Analysis, the copied analysis did not display the secondary events in the Event Timeline. This issue has been resolved.	DE164706
Previously, in the design canvas of the RCA Event Diagram, you were unable to drop icons from the Palette section to the top left corner of the start node. This issue has been resolved. Now, the available workspace to add nodes has been extended to include the far corners of the design canvas.	DE162460
Previously, if your Language setting was not English, and you accessed the Event Timeline diagram for an analysis, the event types were not translated to the language corresponding to your Language setting. This issue has been resolved.	DE155403
Previously, in an RCA Event Timeline that has multiple events, when you modified a primary event and attempted to save it, an incorrect message was displayed. This issue has been resolved.	DE153555
Previously, if State Management was enabled for a Root Cause Analysis and the analysis was in any state except Not Started, when you attempted to save the analysis as a template, an error message appeared. This issue has been resolved.	DE145612

Description	Tracking ID
Previously, when you deleted an RCA Hypothesis from RCA Logic Tree, the child verifications were not deleted in the database record and appeared in Record Explorer when you did a global search. This issue has been resolved.	DE143298
Previously, when you added an event to the RCA Event Timeline, and then attempted to add another event, the datasheet for the event added previously was loaded instead of a blank Event Datasheet. This issue has been resolved.	DE143055
Previously, when you selected the notification checkbox for an RCA Verification Record, the notification was sent to the first Team Member instead of the current assigned user. This issue has been resolved.	DE131253

## Rounds Data Collection

This topic provides a list of product changes released for this module in this version.

**Table 212: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, you were not able to log in or change user accounts within APM without clearing the application cache on a shared work surface. This issue has been resolved.	DE176004
Previously, when you selected the <b>Reference Documents</b> section and attempted to open the associated reference document, you were unable to download documents that were added from a UNC path. This issue has been resolved.	DE175078
Previously, in Rounds Data Collection and the GE Digital APM Mobile Application, the <b>Additional Instructions</b> section for the Measurement Location did not wrap text or allow scrolling to show all information, and you were not able to view text that exceeded the width of the screen. This issue has been resolved.	DE132407

**Table 213: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When you load Readings data into APM through <b>Rounds Readings</b> Data Loader, you will encounter a <code>DataValidationError</code> if the <code>MI_READING0_RELAT_ML_ENTIT_KEY_N</code> is not supplied. For additional information and workaround, review the <a href="https://digitalsupport.ge.com/communities/CC_Login?startURL=%2Fcommunities%2Fen_US%2Farticle%2FLoading-the-Data-Through-Rounds-Readings-Data-Loader-Results-in-DataValidationError">https://digitalsupport.ge.com/communities/CC_Login?startURL=%2Fcommunities%2Fen_US%2Farticle%2FLoading-the-Data-Through-Rounds-Readings-Data-Loader-Results-in-DataValidationError</a> .	DE194630

## Rounds Designer

This topic provides a list of product changes released for this module in this version.

**Table 214: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, in the <b>Routes</b> section, when you completed all the readings on the Measurement Locations, the subsequent conditional Measurement Locations were not triggered. This issue has been resolved.	DE181629
Previously, some queries that supported data loaders were not functioning as expected. This issue has been resolved. The specific queries have now been updated to improve performance for the supported data loaders.	DE157060
Product documentation is now updated to define more clearly when a route is due and when it is overdue.	DE153348
Previously, when you added a checkpoint using a checkpoint template, the Equipment Technical Number did not appear when you accessed the checkpoint record. This issue has been resolved.	DE149996
Previously, in the <b>Recommendations</b> section of the RDC Overview page, the Node Pin Board icon overlapped the Recommendations icon. This issue has been resolved.	DE136885
Previously, when you entered a long category name in the <b>Allowable Values</b> section, the application did not display a warning message and the name was also not added to the Allowable Values list. However, the application allowed you to create an allowable value with a blank category name. This issue has been resolved. Now, you can add a maximum of 50 characters in the category name and if you do not enter a category name, a notification message will be displayed when you attempt to save the table.	DE136915
Previously, when you attempted to create a Template Group and did not enter an ID in the <b>ID</b> text box, the application did not indicate that the ID is a required field, and you could create the Template Group. This issue has been resolved.	DE136916

## Rounds Pro

### Important:

- Rounds Pro is currently not available for APM V5.0.0.0.0. The module will be available in subsequent APM V5.x releases.
- The Rounds Pro mobile app currently does not support APM V5.0.0.0.0.

Please contact GE Support if you have any questions.

## Rules

This topic provides a list of product changes released for this module in this version.

### Table 215: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
A new parameter for family key (fmly_key) is now added to the <b>ExistingEntity(enty_key)</b> function. <b>Note:</b> You must update the custom rules containing the <b>ExistingEntity(enty_key)</b> function with the new parameter <b>ExistingEntity(enty_key, fmly_key)</b> .	US465532
The datatype for <b>ENTY_KEY</b> variable is now changed to string. <b>Note:</b> You must update the datatype of all the variables that refer to <b>ENTY_KEY</b> and are assigned the value of <b>ENTY_KEY</b> to the string datatype.	US465532

**Table 216: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if the application server was not installed in the C : drive, and you attempted to open the Rules Library rule project, an error occurred, and you were unable to edit the rules. This issue has been resolved.	DE177742

**Table 217: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When you upgrade APM from any older version to 45000, it takes notably longer since there are significant changes made to the database during the upgrade.	US465532

**Table 218: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
The <b>MI_ENTITIES</b> table is no longer available in the database. You can now access the system fields from the family table. <b>Note:</b> You must update all the queries and Visual Basic rules that refer to <b>MI_ENTITIES</b> to allow the system fields to be pulled from the family table.	US465532

## SAP Adapters

This topic provides a list of product changes released for this module in this version.

**Table 219: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.



Description	Tracking ID
Previously, in the SAP Interface, when a Long Text and FLOC Label with a large count was extracted, if the ARC folder was not specified, some data was not processed into APM. This issue has been resolved.	DE184932
Previously, when using an alternate unit of measure for the numerical values in the <b>Technical Characteristics</b> section, the conversions to the base unit of measure was incorrect. This issue has been resolved.	DE147449
Previously, the SAP Deployment authorization chart was not complete for use for WMI interface. This issue has been resolved.	DE140397

## Search

This topic provides a list of product changes released for this module in this version.

**Table 220: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, you can now update the search index for a specific family. To facilitate this enhancement, you can now select the <b>Reindex Family</b> button in the Search Configuration page.	US518022
You can now find a link to the advanced search in the global search window. From there you can search selected <b>Family</b> and the <b>Linked To</b> information through the advanced search.	US186116

## Security Manager

This topic provides a list of product changes released for this module in this version.

**Table 221: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>You can now configure State Management using the following newly introduced user roles:</p> <ul style="list-style-type: none"> <li>• SM_Initiator</li> <li>• SM_Owner</li> <li>• SM_Planner</li> <li>• SM_Team Leader</li> <li>• SM_Coordinator</li> <li>• SM_Facilitator</li> <li>• SM_Assessor</li> <li>• SM_Approver</li> <li>• SM_Analyst</li> <li>• SM_Implementor</li> </ul> <p>Users assigned to these roles can then transition states.</p>	US541632
Security of cookies has been improved with advanced attributes in APM.	DE142479

**Table 222: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.



Description	Tracking ID
Previously, a user associated with MI Foundation Admin role could not view or open Policy Designer. This issue has been resolved.	DE178355
Previously, if you removed multiple Security Users from a Microsoft Active Directory Group, and then ran the LDAP synchronization process, the Security Users were not dissociated from the corresponding Security Role in APM. This issue has been resolved.	DE143330
Previously, in the <b>User Defaults</b> page, when you attempted to assign a Russian site to Security Users, an error occurred. This issue has been resolved.	DE142239

## SIS Management

This topic provides a list of product changes released for this module in this version.

**Table 223: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
The Work Management Interface functionality is now enabled to support notification creation in addition to work order generation when tasks are created in the application. Additionally, you can select <b>EAM Object</b> , <b>User Status</b> , and <b>Type</b> while creating tasks.	US523942
In an SIL Analysis, you can now copy a Risk Assessment Recommendation to multiple Instrumented Functions. To facilitate this enhancement, the Copy icon (  ) has been added in the <b>Recommendations</b> pane of SIL Analysis.	US518255
You can now unlink one or more Proof Test Tasks from an Instrumented Function or a Logic Solver. To facilitate this enhancement, the Unlink the selected Tasks button (  ) has been added to the <b>Proof Test Tasks</b> section of the Instrumented Function and Logic Solver workspaces.	DE153712

**Table 224: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, the SIS Management Overview page took a long time to load due to the complexity of the SIL_Analysis_Asset_Overview and SIL_Distribution_for_Graph queries. This issue has been resolved.	US564147
Previously, if a Protective Instrument Loop contained more than one device in an identical Sensor or Final Element Group, and if you updated a device, the Device ID was changed in the remaining devices in the group as well. This issue has been resolved.	DE191397
Previously, in the <b>SIL Verification</b> section, when you selected multiple Protective Instrument Loops and attempted to delete the loops, the application did not respond as expected. This issue has been resolved.	DE190830

Description	Tracking ID
Previously, when you navigated between multiple SIL Analyses, and attempted to create an Instrumented Function, the application stopped responding and you had to refresh the page to continue. This issue has been resolved.	DE189891
Previously, the Proof Test workflow did not function as expected when only the Functional Location was selected at the Instrumented Function level. This issue has been resolved.	DE188701
Previously, the Protective Instrument Loop Sensor System records were not included in the search results. This issue is now resolved.	DE186408
Previously, in SIL Analysis, the <b>Team Members</b> section did not load when you selected the <b>Team Members</b> tab after navigating from the <b>Definition</b> tab. This issue has been resolved.	DE178101
Previously, in the <b>Proof Test Tasks</b> section, when you selected <b>Perform Proof Test</b> for a task, the Task ID field was not populated automatically. This issue has been resolved.	DE177405
Previously, when you performed a proof test, if the Trip point was defined as negative value in the <b>Proof Test Template Detail</b> , the result was calculated as Fail. This issue has been resolved.	DE172467
Previously, in <b>Has Reference Documents</b> relationship family, when you attempted to add the relationship definition between safety related families and reference document, the <b>Reference Document</b> option was not available in the respective family datasheet. This issue has been resolved.	DE172444
Previously, when you tried to link a Sensor, Final Element, Sensor Group, Final Element Group, Sensor System, Final Element System, or a Logic Solver in a Protective Instrument Loop, an error occurred. Also, the success or failure message did not appear after the operation. This issue has been resolved.	DE154988
Previously, when you added an existing proof test task to a record, an error occurred and the task list in the <b>Proof Test Tasks</b> section was not refreshed. This issue has been resolved.	DE153707
Previously, when you selected a device or calculated a Protective Instrument Loop, if there was a device configuration error, no error message was displayed. This issue has been resolved.  <b>Note:</b> A warning message now appears in the <b>Loop Diagram and Calculation</b> page or when you select an incompatible device.	DE153164
Previously, when you logged in as a secured user and attempted to select an APM query from the catalog in the admin section, an error occurred. This issue has been resolved.	DE152664
Previously, when importing an .exp file, if a custom device was present in the Protective Instrument Loop, an error occurred in the calculation of the loop. This issue has been resolved.	DE152634
Previously, when you created Revision Record for an SIL Analysis, the Revision Record was not created for few Instrumented Functions that were linked to the SIL Analysis. This issue has been resolved.	DE150911
Previously, if the Hazards Analysis license was not active in APM, when you attempted to add a team member to the team associated with a Safety Integrity Level (SIL) Analysis, an error occurred. This issue has been resolved.	DE145949

Description	Tracking ID
Previously, when same asset was linked to more than one predecessor record using the Safety Analysis has Equipment relationship, the template field was not populated while performing proof test. This issue has been resolved.	DE162253
Previously, in the Risk Assessment Recommendation datasheet, when you selected a functional location from the Asset Finder, the Functional Location ID field was not populated with the selected value. This issue has been resolved.	DE183773

**Table 225: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
When you attempt to import a recently created Exida project file with the .exp extension into APM, an error occurs and the import fails.	DE195336
When you attempt to copy a LOPA and Hazards Analysis license is not active, an error occurs and copy functionality fails.	DE192842
When you attempt to copy a LOPA, the original LOPA site doesn't get copied to the copied LOPA.	DE192841

**Table 226: Obsolete Features**

The following features are no longer available.

Description	Tracking ID
You can no longer customize the code to generate a work order because the work order generation for tasks created in APM has been moved into the product code.	US523942
APM no longer supports the exSILentia v3 calculation engine for calculating loop results for SIL analyses. You can only use the exSILentia v4 calculation engine for calculating loop results for SIL analyses.	US459479

## Single Sign On

This topic provides a list of product changes released for this module in this version.

**Table 227: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
You can now configure SSO without providing the host name. To facilitate this enhancement, the <b>Host Names</b> in <b>Operations Manager</b> page has been replaced by <b>SSO Configuration</b> .	US538282

**Table 228: Known Issues and Limitations**

The following known issues and limitations exist.

Description	Tracking ID
SSO login fails on an iOS mobile app for an SSO-enabled on-prem application. Recent security enhancements made in iOS blocks cookies that are used for authentication, resulting in login failure. The LDAP user has the option to login to APM mobile app without SSO, by entering username and LDAP password on the login page and clicking the <b>Sign-in</b> button. After signing out of the app, the user will have to re-enter the credentials to sign-in again.	DE194611

## State Management

This topic provides a list of product changes released for this module in this version.

### Table 229: Enhancements and New Features

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
You can now query the State fields at the level of the State Management configuration of the family as the State management fields are no longer spread down a family hierarchy.	US567083

### Table 230: Resolved Issues

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
Previously, if you modified the time zone settings, and then viewed the state history of a record in the <b>History</b> tab, the time stamp was not updated. This issue has been resolved.	DE139798

### Table 231: Obsolete Features

The following features are no longer available.

Description	Tracking ID
The State Management field, mi_sm_states.smst_stat_ind, in the MI_SM_STATES table is no longer used. Therefore, when you upgrade, ensure that you remove any references to the State Management field in queries.	US567083

## Strategy Macros

This topic provides a list of product changes released for this module in this version.

### Table 232: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
To enhance usability, when scheduling conditional alerts in the <b>Strategy Macros</b> page, you can now schedule multiple Active Alerts at a time.	US447592

## Teams

This topic provides a list of product changes released for this module in this version.

**Table 233: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>To improve usability, the following functionalities have been added in the <b>Teams</b> page:</p> <ul style="list-style-type: none"><li>You can now search for team members to add to the team by entering few characters of the team member's first name, last name, job title, phone number, or email address.</li><li>You can now search for team members to add to the team using multiple filter terms in the Advanced Search grid.</li><li>You can now filter the existing team members using multiple filter terms to find the team members to remove or update their assignments.</li><li>You can now update the team members' assignments in bulk.</li></ul>	US528506

## Thickness Monitoring

This topic provides a list of product changes released for this module in this version.

**Table 234: Enhancements and New Features**

The following enhancements and new features have been added.

Description	Tracking ID
<p>To enhance usability, the MIExecutionService is now available in the APM server. It processes jobs in the Inspection Management, Integrity Mobile, Risk Based Inspection, and Thickness Monitoring module queues. The MIExecutionService uses a single shared ActiveMQ queue service across APM.</p>	US554741
<p>To enhance usability and improve contextual awareness, Schematic View (2D Visualization) has been introduced within Thickness Monitoring.</p> <p>This capability will allow you to:</p> <ul style="list-style-type: none"><li>Map the TMLs over a schematic image and dynamically monitor them</li><li>Visualize the health of TMLs using color coding</li><li>View critical information about TMLs</li><li>Download the schematic image</li><li>Change the source schematic image</li></ul> <p>You will be able to render industrial drawing formats (.svg, .dwg, .jpeg, .pdf, and so on) to plot TMLs. An active Mechanical Integrity 2D Visualization license will be required to access this functionality.</p>	US539882

Description	Tracking ID
<p>To improve usability when sending TMLs to the Olympus 38DL Plus Ultrasonic Thickness Gage datalogger device, the following enhancements have been made:</p> <ul style="list-style-type: none"> <li>When you send TMLs for piping assets, and if all the selected TMLs belong to the same Piping Band, the file name is displayed as the Piping Band ID. If the TMLs do not belong to the same Piping Band, the file name is displayed as the Asset ID.</li> <li>When you send TMLs for non-piping assets, and if all the selected TMLs belong to the same TML Group, the file name is displayed as the TML Group ID. If the TMLs do not belong to the same TML Group, the file name is displayed as the Asset ID.</li> </ul>	US526329
<p>To enhance usability, the T-Min Calculator now works in accordance with the <b>Override Minimum Thickness Type</b> field on the Thickness Measurement Location. If the <b>Override Minimum Thickness Type</b> field is already set, the Minimum Thickness on the Thickness Measurement Location is not updated from the <b>T-Min Calculator</b> screen. A warning message lists the TMLs that are not updated.</p>	US522002
<p>To enhance usability, in the <b>Measurement Data Entry</b> workspace, the width of the <b>TML ID</b> column is now automatically adjusted based on the length of the <b>TML ID</b>. To facilitate this enhancement, the following changes have been made:</p> <ul style="list-style-type: none"> <li>For TML IDs up to 80 characters, the ID is displayed as is in the <b>TML ID</b> column.</li> <li>For TML IDs greater than 80 characters in length, first 80 characters are displayed in the <b>TML ID</b> column. To view the complete value of the <b>TML ID</b>, you can hover over the TML ID field.</li> </ul>	US518505
<p>To enhance usability, when inserting or updating Thickness Measurements, you can now have APM automatically correct the measurement based on growth. If the measurement value indicates a growth over a previous measurement, the system will automatically update its value with the value of the previous measurement. The originally entered value will be retained in the Uncorrected Measurement field. To support this functionality the following enhancements have been made:</p> <ul style="list-style-type: none"> <li>The Correct Measurements Based on Growth option has been added to the <b>TM Admin Preferences</b> page on the <b>Global Preferences</b> workspace. When you enable this preference, you can select site(s) that you want to exclude from this operation.</li> <li>A new field, Check for Growth has been added to the Thickness Measurement family. You must set this field to true in the Thickness Measurement datasheet when updating a measurement for the system to apply corrections to the current and the subsequent measurements on the Thickness Measurement Location based on the measurement updates.</li> <li>A new field, Basis for Measurement Correction has been added to the Thickness Measurement family. This field is set to Growth automatically when the system determines that the measurement contains a growth and needs correction.</li> </ul>	US514853
<p>To enhance usability, Thickness Monitoring is configured to use the TML Group family as the only way to group thickness measurement locations. To facilitate this enhancement, the <b>Family Preferences</b> workspace in the <b>TM Admin Preferences</b> page has been redesigned. You can now select the TML Asset ID for each family using the drop-down list boxes under the TML Asset ID Field column.</p>	US445607

**Table 235: Resolved Issues**

The following issues, which existed in one or more previous versions, have been resolved.

Description	Tracking ID
<p>Previously, the catalog queries that populated the Corrosion Rate Distribution and Remaining Life charts on the Thickness Monitoring Overview had poor performance in large databases. This issue has been resolved.</p> <p>Now, the Corrosion Rate Distribution query has criteria limiting to assets with corrosion rates greater than or equal to 10 Mils/Year and the remaining life query has criteria limiting to assets with remaining life of less than or equal to 5 Years.</p>	US457578
Previously, in the <b>T-Min Calculator</b> workspace, when you modified the User Defined field, the T-Min Selected field was not updated. This issue has been resolved.	DE191127
Previously, users with MI Thickness Monitoring User security group permissions were unable to create a Piping Band. This issue has been resolved.	DE181965
<p>Previously, when multiple Thickness Measurement Location (TML) records had a Measurement Not Taken (MNT) record as the last active measurement, and the TMLs Controlling Corrosion Rate was less than the assets Controlling Corrosion Rate, the following fields were populated and displayed as expected in the <b>Analysis Output</b> section:</p> <ul style="list-style-type: none"> <li>• <b>Asset Average Corrosion Rate</b></li> <li>• <b>Asset Average Corrosion Rate Next Inspection Date</b></li> <li>• <b>Asset Average Corrosion Rate Remaining Life</b></li> <li>• <b>Asset Average Corrosion Rate Retirement Date</b></li> </ul> <p>However, if the data for other TML records in the asset were updated such that the assets Controlling Corrosion Rate was less than at least one of the previously mentioned TMLs while still being greater than the Controlling Corrosion rate on other TMLs with MNT drivers, the fields listed above were not cleared and the <b>Analysis Output</b> section displayed the old data. This issue has been resolved.</p> <p><b>Note:</b> It is recommended that you use the TM Bulk Analysis feature to recalculate assets that have MNT records as the last measurement on any TMLs. For more information on how to identify these assets, refer to the KBA <a href="#">000037654</a>.</p>	DE181172
Previously, in TM Dataloggers page, when you attempted to search for TMLs in the <b>Select TMLs</b> pane, that were already displayed, the search did not return the correct values. This issue has been resolved.	DE179521
Previously, when you attempted to view Thickness Monitoring Locations (TMLs) in the <b>Datalogger</b> page, or if you attempted to send TMLs to the Datalogger, the inactive TMLs were not excluded by APM. This issue has been resolved.	DE175250
<p>Previously, in the <b>Thickness Monitoring Datalogger</b> page, when you sent the Thickness Measurement Locations to the 38DL+ device, the TML IDs were formatted incorrectly if:</p> <ul style="list-style-type: none"> <li>• The Number of Readings field in the device was set to a value greater than zero.</li> <li>• The Location field was not set to any value.</li> </ul> <p>Additionally, when you attempted to receive the file back in APM, an error occurred. This issue has been resolved.</p> <p><b>Note:</b> To resolve this issue, you must install the latest Meridium Devices Service.</p>	DE174874
Previously, when you navigated to the <b>T-Min Calculator</b> workspace for an asset that had been enabled for Piping Rotation, an error message appeared when you attempted to load the TMLs. This issue has been resolved.	DE172811



Description	Tracking ID
Previously, if you were assigned the Metric UOM Conversion Set, when entering values in a Thickness Measurement Location record to determine Allowable Stress that had the Tank Type field set to Welded Shell, the Minimum Yield Strength and Minimum Tensile Strength fields were incorrectly populated with Imperial values. However, the value of the Allowable Stress field appeared correctly. This issue has been resolved.	DE156721
Previously, if the PV Stress or Piping Stress reference tables contained multiple records with the same combination of Design Code, Code Year, Material Specification, Material Grade, and Metal Temperature, the Allowable Stress field of the Thickness Measurement Location was populated arbitrarily with one of the records that was returned. This issue has been resolved. Now, the record with the lowest value of Allowable Stress will be used to populate the Allowable Stress field.	DE155129
Previously, when flipping or rotating a Piping Component, if a calculated measurement value created for a TML was negative, even if the operation of flipping or rotating the component failed, the operation was in progress in the APM database due to which APM stopped responding. This issue has been resolved.	DE153950
Previously, if you were assigned to the Thickness Monitoring Inspector security group and granted additional delete privileges, you could not delete a TML. This issue has been resolved. <b>Note:</b> If you do not have delete privileges, when you attempt to delete a TML, an error message will appear.	DE149731
Previously, when using Column Chooser from the <b>Measurements</b> section of the <b>Analysis Overview</b> workspace, you could add a field to the <b>Display Fields</b> section multiple times. Due to this, the data in the Measurement Table did not load. This issue has been resolved.	DE147750
Previously, when you logged in to APM as a metric user and accessed the TML Trends graph, the values for Alert Level 1 and Alert Level 2 were incorrectly plotted based on their imperial equivalents. This issue has been resolved.	DE146040
Previously, when you attempted to send data to the Olympus 38DL Plus Ultrasonic Thickness Gage datalogger device multiple times, an out of memory error message appeared, and the data was not sent to the device. This issue has been resolved. <b>Note:</b> To implement the update, you must install the latest version of the Meridium Device Service.	DE144901
Previously, for an Asset that contained multiple TML Groups linked to it, when the Corrosion Analysis Settings for the Asset were spread to the TML Group level, an error occurred when you attempted to modify the settings for the Asset. This issue has been resolved.	DE144873
Previously, a secured user who was not assigned to any of the Thickness Monitoring security groups - MI Thickness Monitoring Inspector, MI Thickness Monitoring User, or MI Thickness Monitoring Administrator was able to view the <b>Create Settings</b> button for an asset with no related Corrosion Analysis Setting. This issue has been resolved.	DE142333
Previously, in the <b>Measurement Data Entry</b> workspace, when you saved the data for Thickness Measurement, and attempted to navigate to the next page, the data was not saved successfully. This issue has been resolved.	DE172724
Previously, in the <b>Bulk Edit TMLs</b> window, if you selected a single TML, the <b>Design Code</b> column was too narrow to display the values completely. This issue has been resolved.	DE117841

### Table 236: Obsolete Features

The following features are no longer available.

Description	Tracking ID
The query, Measurements Near or Less than T-Min, is no longer used in APM. The query has been removed from the Catalog folder <code>Public/Meridium/Modules/Thickness Monitoring/Queries</code> .	US445954

## Workflow Solutions

This topic provides a list of product changes released for this module in this version.

### Table 237: Enhancements and New Features

The following enhancements and new features have been added.

Description	Tracking ID
Workflow Solutions Content has been updated in the latest version of APM.	US562494