

## **Asset Criticality Analysis**



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## Chapter 1

## Overview

### **Topics:**

- Overview of the Asset
   Criticality Analysis (ACA)
   Module
- Asset Criticality
   Analysis Workflow
- Access the ACA Overview Page
- Access the ACA Overview Page for a Hierarchy Level

## **Overview of the Asset Criticality Analysis (ACA) Module**

Asset Criticality Analysis (ACA) is a tool that you can use to define the criticality assets with APM. The ACA module enables users to define the criticality of assets based on the worst likely case consequence of failure of the asset to provide an overall criticality value. In other words, using an ACA, you can determine which of your systems, locations, and pieces of equipment are critical based on your organizations definition.

After you have determined which of your assets are critical, you can use APM modules to further analyze and safeguard those systems, locations, and pieces of equipment. For example, through an ACA, you might discover that if Equipment A were to fail, it could cause a catastrophic event in your facility, leading to personal injury. In this case, Asset A is considered critical, and you may want to use other tools and methodologies with APM to develop a maintenance, inspection or monitoring strategy for optimizing the performance or reliability of Equipment A.

These methodologies could include:

- Reliability Centered Maintenance (RCM)
- Failure Modes and Effects Analysis (FMEA)
- Asset Strategy Management (ASM)
- Risk Based Inspection (RBI)

ACA can leverage either the standard APM risk matrix or the combination of a Criticality Checklist and associated Family Policy as the assessment method used for the criticality assessment.

## **Asset Criticality Analysis Workflow**

This topic provides the basic, high-level steps for using ACA. The steps and links in this workflow do not necessarily reference every possible procedure.

- 1. Create an Asset Criticality Analysis (ACA).
- 2. Assign assets to the ACA.
- 3. Assess the criticality of the assets assigned to the ACA via the Criticality Checklist or via the Risk Matrix.
- 4. Approve the ACA.
- 5. Update SAP.

## Access the ACA Overview Page

#### **Before You Begin**

You can access the **ACA Overview** page only if you are a member of one of the following Security Groups:

- MI ACA Administrator
- MI ACA Member
- MI ACA Owner

#### **About This Task**

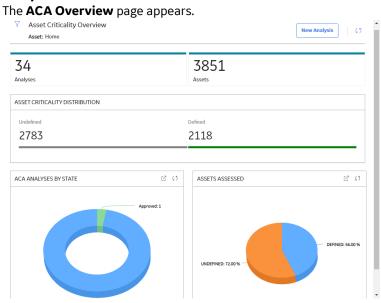
This topic describes how to access the **ACA Overview** page, on which you can view information and perform various tasks related to **Asset Criticality Analysis** of various Hierarchy Levels. If you want to

view ACAs associated with a particular Hierarchy Level, you can access the **ACA Overview** page for a Hierarchy Level.

You can perform various tasks on this page based on your membership in various Security Groups.

#### Procedure

In the **Applications** menu, navigate to the **STRATEGY** section, and then select **Asset Criticality Analysis**.



Note: The Asset Criticality Analysis Overview page is not updated automatically when you return to the previously opened tab. You can select  $\bigcirc$  to update the page.

By default, the hierarchy level is set to home. You can filter the hierarchy level by selecting  $\Upsilon$  in the page. By default, the ACA information on the page is related to an Asset.

## Access the ACA Overview Page for a Hierarchy Level

#### **Before You Begin**

- You can access the **ACA Overview** page only if you are a member of one of the following Security Groups:
  - MI ACA Administrator
  - MI ACA Member
  - MI ACA Owner

#### Procedure

- In the Hierarchy section, select the asset for which you want to access the analyses. The <Asset Name> workspace appears.
- 3. Select the **Strategy** tab.

In the **Strategy** section, you can view module-specific data for the asset, such as strategy actions, recommended actions, ACA analyses, strategies, and so on.

	X	MRD	~ Meridium, Ind			1 (5)
∑ Filter			Health	Reliability	Strategy	Integrity
Home > MRD ~ Meridium, Inc.			Action Management			10 Strategy Actions, 8 Recommended Actions
<ul> <li>MRD ~ Meridium, Inc.</li> <li>MRD-DUB ~ Meridium Dubai</li> </ul>	1	**	Asset Criticality Ana	lysis		5 ACA Analyses
Production			Asset Strategy Mana	rement		2 Strategies
<ul> <li>MRD-HOU ~ Meridium Houston Production</li> </ul>						2 Subreges
<ul> <li>MRD-MI ~ Meridium Mechanical Integrity</li> </ul>		*	Failure Modes and E	ffects Analysis		3 FMEA Analyses
MRD-PER ~ Meridium Perth		۲	Life Cycle Cost Analy	rsis		0 LCC Analyses
Production MRD-ROA ~ Meridium Roanoke	11	۲	Policy Designer			22 Policy Instances
MRD-ROA-ABC ~ ABC Unit		8	Reliability Centered	Maintenance		5 RCM Analyses
<ul> <li>MRD-ROA-CHEM ~ Meridium Roanoke Chemicals</li> </ul>						
✓ MRD-ROA-CHEM-CM101 ~ Meridium Roanoke Chemicals Unit CM101						
MRD-ROA-CHEM-CM101- FT101A ~ REACTOR COOLANT FLOW						
MRD-ROA-CHEM-CM101-						

4. In the row containing the number of ACA analyses, select the link.

The **Asset Criticality Overview** page for the selected asset appears, displaying the following information:

- The **Analyses** tab: Select to display a list of all existing ACAs for the selected asset. You can create a new ACA or access an existing one. The number in the **Analyses** tab indicates the number of existing ACA for all users related to the selected asset.
- The **Assets** tab: Select to display a list of the assets based on the asset filter. The number in the **Assets** tab indicates the number of existing assets based on the asset filter.

The workspace displays the following charts that correspond only to the selected hierarchy level:

- ACA ANALYSES BY STATE: The chart provides an overview of the number of analyses and the states of the analyses.
- **ASSETS ASSESSED**: Displays the number of pieces of equipment in the database that are ranked based on the risk.

☑ Asset Criticality Overview Asset: Home	New Analysis
34 Analyses	3851 <sub>Assets</sub>
ASSET CRITICALITY DISTRIBUTION	
Undefined 2783	Defined 2118
ACA ANALYSES BY STATE	ASSETS ASSESSED C2 (3
Approved 1	UNDEFINED: 72.00 %

While viewing any of the above charts, you can select  $\square$  to customize the appearance of the chart.

You can filter the hierarchy level by selecting  $\overrightarrow{V}$  in the page. By default, the Asset Criticality Analysis information on the page is related to an asset.

# Chapter

2

## Workflow

#### **Topics:**

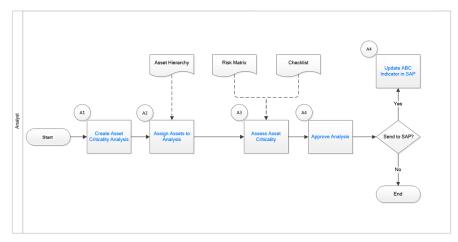
- Asset Criticality Analysis: Perform Asset Criticality Analysis Workflow
- Create Asset Criticality Analysis
- Assign Assets to Analysis
- Assess Asset Criticality
- Approve Analysis
- Update ABC Indicator in SAP

## Asset Criticality Analysis: Perform Asset Criticality Analysis Workflow

The ACA workflow provides the steps for establishing the criticality of assets with APM. The assessment is based on the worst-likely case consequence of failure of the asset to provide an overall criticality value. This provides a prioritization for asset strategy development, performance improvement efforts and day-to-day asset management activities.

In the following workflow diagram, the blue text in a shape indicates that the corresponding description has been provided in the sections that follow the diagram. For more information, refer to the Interpreting the Workflow Diagrams topic in the APM Product Workflows documentation.

**Note:** For information on the personas associated with a APM module, refer to the APM Product Workflows documentation.



## **Create Asset Criticality Analysis**

Persona: Analyst

Create an Asset Criticality Analysis to assess the criticality of the assets in the analysis.

## **Assign Assets to Analysis**

Persona: Analyst

Assign the assets to an analysis to assess criticality.

## **Assess Asset Criticality**

Persona: Analyst

Assess the criticality of the assets contained in the analysis.

## **Approve Analysis**

Persona: Analyst

Note: The SAP Criticality Interface license is required to approve an analysis.

After the criticality assessments are completed for the assets in an analysis, approve the analysis. Upon approval, the ABC Indicator field for the asset in SAP is automatically updated.

## **Update ABC Indicator in SAP**

Persona: Analyst

Note: The SAP Criticality Interface license is required to perform this operation.

If the send to SAP operation fails, you can manually update the ABC Indicator field for the asset in SAP.

# Chapter

# 3

## Asset Criticality Analyses (ACAs)

#### Topics:

- About Asset Criticality Analyses
- About the Asset Criticality
   Analysis Team
- About General Recommendation Records and ACA
- Access an ACA
- Access the Analyses Section
- Create an ACA
- Access Recommended Actions for an ACA
- Access the ACA Team Members
   Section
- Access the Assets Section
- Add an Asset
- Unlink an Asset
- Apply Assessment to other Assets in Analysis
- Assess an Asset Via the Risk
   Matrix
- Assess an Asset Via the Criticality Checklist
- View the Revision History of a Criticality Assessment via the Risk Matrix
- View the Revision History of a Criticality Assessment via the Criticality Checklist
- Send an Asset to a New ACA Analysis
- Send an Asset to an Existing ACA Analysis
- Send Assets to an Asset Strategy

- Send an Asset to a System Strategy
- Send an Asset to a New FMEA Analysis
- Send an Asset to an Existing FMEA Analysis
- Send an Asset to an FMEA Analysis using the Asset Template
- Send an Asset to a New RCM Analysis
- Send an Asset to an Existing RCM Analysis
- Send an Asset to the RBI Asset View
- Send an Asset to RBI Asset View from Analysis View
- Approve an Analysis
- Update SAP
- Access Reference Documents for an ACA
- Export an ACA from Analysis
   View
- Export Analyses from the Overview Page
- Remove an ACA from the ACA Overview Page
- Clear Assessment for an Asset

## **About Asset Criticality Analyses**

Asset Criticality Analysis (ACA) is a tool that you can use to define the criticality of a system and the individual locations and pieces of equipment that make up that system.

## About the Asset Criticality Analysis Team

After you have defined the ACA that you want to conduct, you can define the ACA team by accessing the **ACA Team Members** section.

After you define the ACA team using these examples, the **Asset Criticality Analysis Team Members** page will look similar to the following image.

ACA 11 - Pr	omote to ACM			High In Progress Not Assigned	Ð
As	sessment	Analysis Definition	2 Team Members	0 Reference Documents	
				66	
0	Smith, James jsmith@ge.com				
	Smith, Richard rsmith@ge.com				

## **About General Recommendation Records and ACA**

At the Analysis level and Asset level, you can add General Recommendation records to the ACA by linking them to ACA records.

If you add to the ACA a record that is already linked to a General Recommendation record, that General Recommendation record will also be added to the ACA automatically.

You will know that a General Recommendation record is linked to an Asset Criticality Analysis System record when you access the **Recommended Actions** pane, which lists the number of Recommended Actions that are currently associated with that system.

For example, the following image shows the grid on the **Asset Criticality Analysis Systems** page. In the **Recommended Actions** column, the text Recommended Actions appears, indicating that the Asset Criticality Analysis System record that appears in that row is linked to one General Recommendation record.

1 R	ecommended Actions	☑ Action Management	¢‡⇒
+	<del>ά</del> γ	Proposed Not Assigned	$\sim$
	Tighten bearings Updated by: Meridium Adminis	Proposed trator On	

You can manage the General Recommendation records for individual records within an ACA via the **Recommended Actions** pane, or you can view a list of all the General Recommendation records for an ACA via Action Management.

**Tip:** For information about additional options available when working with the Recommendation records, refer to the Action Management section of the documentation.

## Access an ACA

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Analyses** tab. A grid appears containing a list of ACA analyses.
- 3. Select the link for the record you want to open. The **Analysis** workspace appears, displaying the **Assessment** section.

Note: If you want to modify the ACA, select the Analysis Definition tab, modify the available fields,

and then select 🛅 to save your changes.

## **Access the Analyses Section**

#### **Before You Begin**

You can access the **ACA Overview** page only if you are a member of one of the following Security Groups:

- MI ACA Administrator
- MI ACA Member
- MI ACA Owner

#### **About This Task**

This topic describes how to access the **Analyses** section, in which you can view information and perform various tasks related to analyses of various Asset Hierarchy levels. If you want to view analyses associated with a particular Asset Hierarchy level, you can access the **ACA Overview** page from that Asset Hierarchy level.

#### Procedure

- 1. Access the **ACA Overview** page.
- In the ACA Overview page, select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.

**Note:** By default, the Asset Hierarchy level is set to Home. You can modify the Asset Hierarchy level by selecting  $\mathcal{V}$ .

## **Create an ACA**

#### Procedure

- 1. Access the ACA Overview page.
- Select New Analysis. The Analysis Definition workspace appears.
- 3. As needed, enter values in the available fields.
- 4. In the upper-right corner of the workspace, select Site.

Note: By default, the site that the user is assigned to appears.

5. Select the site to which you want to assign the ACA record.

**Note:** If the ACA record is assigned to the default site, then it can be accessed only by users who have been assigned to the same site. The site selector component becomes read only after it is saved. You will need to log in as a Super User to modify the site. A Super User can change the site to any of the sites that the user has permission for OR choose to make the ACA record as a Global Record by selecting Global, so that all APM users can see it. See the Site Filtering section of the documentation for more information on using that feature.

6. Select 🛅. The new analysis is saved.

#### **Next Steps**

• Assign assets to the ACA.

## **Access Recommended Actions for an ACA**

#### Procedure

- 1. Access an ACA System.
- 2. In the workspace, select

The **Recommended Actions** pane appears, displaying a list of Recommendations associated with that ACA system.

**Note:** See the Overview of Recommended Actions section of the documentation for additional options when working with recommendations.

**Tip:** For information about additional options available when working with the Recommendation records, refer to the Action Management section of the documentation.

## **Access the ACA Team Members Section**

#### Procedure

1. Access the ACA for which you want to view team members.

#### 2. Select the Team Members tab.

The Team Members section appears.

**Tip:** For details about working with teams and the **Team Members** section, refer to the Teams section of the documentation.

## **Access the Assets Section**

#### **Before You Begin**

You can access the **ACA Overview** page only if you are a member of one of the following Security Groups:

- MI ACA Administrator
- MI ACA Member
- MI ACA Owner

#### **About This Task**

This topic describes how to access the **Assets** section, in which you can view information and perform tasks related to assets of various Asset Hierarchy levels. If you want to view assets associated with a particular Asset Hierarchy level, you can access the **ACA Overview** page from that Asset Hierarchy level.

#### Procedure

- 1. Access the **ACA Overview** page.
- In the ACA Overview page, select the Assets tab.
   The Assets section appears, displaying a list of available assets based on the current filter.

**Note:** By default, the Asset Hierarchy level is set to home. You can modify the Asset Hierarchy level by selecting  $\checkmark$ .

## Add an Asset

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Analyses** tab.

The **Analyses** section appears, displaying a list of available analyses based on the asset that is selected in the asset hierarchy.

- Select an analysis. The Assessment workspace for the selected analysis appears.
- 4. Select +.

The Enter Parameter Values window appears.

- 6. Select a hierarchy level, and then select **Done**. The assets associated with the hierarchy level appear in the **Add Assets** window.
- 7. Select the check boxes next to the assets that you want to add to the analysis, and then Select **Add**. The selected assets are added to the analysis.

Important: The selected assets must belong to the same site as the current analysis.

#### **Next Steps**

Assess the criticality of the assets assigned to the ACA via the Criticality Checklist or via the Risk Matrix.

## **Unlink an Asset**

This topic lists the steps required to unlink an asset from an analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.
- Select an analysis. The Assessment workspace for the selected analysis appears.
- 4. Select an asset row.
- 5. Select 🔆.

A window appears, asking you to confirm that you want to unlink the selected analysis.

 Select Yes. The selected assets are unlinked from the analysis.

## Apply Assessment to other Assets in Analysis

This topic lists the steps required to apply assessment of an asset to other assets in an analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.
- Select an analysis.
   The Assessment workspace for the selected analysis appears.
- 4. Select an asset row whose assessment needs to be applied to other assets.
- 5. Select . The **Apply Assessment To** window appears.
- 6. Select the assets on which the same assessment is to be applied and then select **Apply**. The selected assets have the same assessment from the analysis.

## Assess an Asset Via the Risk Matrix

This topic describes how to assess the criticality of an asset with the Risk Matrix. You can also assess asset criticality with the Criticality Checklist.

#### **Before You Begin**

There must be an available analysis that contains assets.

#### Procedure

1. Access the ACA Overview page.

2. Select the **Analyses** tab.

The Analyses section appears, displaying a list of available analyses based on the current filter.

- Select an analysis.
   The Assessment section for the selected analysis appears.
- 4. To assess a single asset, next to the asset you want to assess, select  $\oslash$ .

Note: To assess multiple assets simultaneously, next to each row containing an asset that you want to

assess, select the check box, and then select  $\checkmark$  above the grid.

#### The Criticality Assessment section appears.

5. Select the appropriate values in the Risk Matrix, and then select **Save**. The criticality values calculated by the assessment are updated in the grid.

#### **Next Steps**

Approve the ACA.

## Assess an Asset Via the Criticality Checklist

This topic describes how to assess the criticality of an asset with the Criticality Checklist. You can also assess asset criticality with the Risk Matrix.

#### **Before You Begin**

- There must be an available analysis that contains assets.
- Asset Criticality Analysis must be configured to measure criticality with the Criticality Checklist.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.
- Select an analysis.
   The Assessment section for the selected analysis appears.
- 4. To assess a single asset, next to the asset you want to assess, select  $\oslash$ .

Note: To assess multiple assets simultaneously, next to each row containing an asset that you want to

assess, select the check box, and then select  $\oslash$  above the grid.

#### The Criticality Assessment window appears.

Enter values in the available fields, and then select Save.
 The criticality values calculated by the assessment are updated in the grid.

#### **Next Steps**

Approve the ACA.

## View the Revision History of a Criticality Assessment via the Risk Matrix

This topic describes how to view the revision history of a criticality assessment for a given asset in the Risk Matrix. You can also view the revision history in the Criticality Checklist.

#### **Before You Begin**

There must be an available analysis that contains assets.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.
- Select an analysis.
   The Assessment section for the selected analysis appears.
- Select *O* against the asset for which you want to view the revision history. The **Criticality Assessment** section appears.
- Select Revision History. The Revision History section for the selected asset appears.
- 6. Select a link in the **REVISION DATE/TIME** column for the record that you want to view. The revision history of the criticality assessment for the selected asset appears in the grid.

## View the Revision History of a Criticality Assessment via the Criticality Checklist

This topic describes how to view the revision history of a criticality assessment for a given asset in the Criticality Checklist. You can also view the revision history in the Risk Matrix.

#### **Before You Begin**

- There must be an available analysis that contains assets.
- Asset Criticality Analysis must be configured to measure criticality with the Criticality Checklist.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Analyses** tab.

The **Analyses** section appears, displaying a list of available analyses based on the current filter.

- Select an analysis.
   The Assessment section for the selected analysis appears.
- 4. Select O against the asset for which you want to view the revision history. The **Criticality Assessment** section appears.
- Select Revision History. The Revision History section for the selected asset appears.
- Select a link in the REVISION DATE/TIME column for the record that you want to view. The revision history of the criticality assessment for the selected asset appears in the Criticality Checklist datasheet.

## Send an Asset to a New ACA Analysis

This topic provides the steps for sending an asset to a new ACA Analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Assets** tab.

The **Assets** section appears, displaying a list of available assets based on the current filter.

3. In the **Assets** section, select the check box in the row containing the asset you want to send to a new ACA Analysis.

The asset is highlighted.

- 4. In the section, select the Send To drop-down menu, and select ACA Analysis.
- 5. In the **Send to ACA Analysis** window, if it is not already selected, select **Create New**. The window displays options for you to create a new ACA Analysis.
- Complete the required fields, and select Send.
   Your asset is sent to a new ACA Analysis and will be connected to the ACA analysis when the linking process completes.

#### Note:

- The **Send To Status** process indicator appears in the workspace. When the process is completed, a notification appears.
- Upon successful completion, a link to the ACA Analysis appears in the ACA column for the asset.

## Send an Asset to an Existing ACA Analysis

This topic provides the steps for sending an asset to an existing ACA Analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Assets** tab.
  - The **Assets** section appears, displaying a list of available assets based on the current filter.
- In the Assets section, select the check box in the row containing the asset you want to send to an existing ACA Analysis.

The asset is highlighted.

Note: If an ACA is listed in the ACA column, you cannot send it to another ACA.

- In the section, select the Send To drop-down menu, and select ACA Analysis. A window appears, displaying a list of existing analyses that you can send to. The Link Existing option is selected by default.
- Select the System ID for an analysis, and select Send. The asset is sent to an existing ACA Analysis and will be connected to the ACA Analysis when the sending process completes.

#### Note:

- The Send To Status process indicator appears in the workspace. When the process completes, a
  notification appears.
- Upon successful completion, a hyperlink to the ACA Analysis appears in the **ACA** column for the asset.

## Send Assets to an Asset Strategy

This topic provides the steps for sending assets to an Asset Strategy or sending assets to an Asset Strategy and applying an Asset Strategy Template.

#### Procedure

- 1. Access the ACA Overview page.
- Select the Assets tab.
   The Assets section appears, displaying a list of available assets based on the current filter.
- In the Assets section, select the check boxes against the rows containing the assets that you want to send to an Asset Strategy. The selected assets are highlighted.

**Note:** You cannot send assets for which a strategy is already listed in the **Strategy** column to a different asset strategy.

- 4. Select **Send To**, and then select **Asset Strategy**. The **Send to Asset Strategy** window appears.
- To create an asset strategy for the selected assets, select Create. An Asset Strategy is created and the selected assets are sent to the Asset Strategy. The assets are connected to the Asset Strategy when the process is completed.

#### Note:

- The status of the process can be viewed from the **Send To Status** process indicator.
- Upon successful completion, a link to the Asset Strategy appears in the **Strategy** column for the asset.
- 6. To apply an Asset Strategy Template when creating an asset strategy for the selected assets, perform the following steps:
  - a) Select the option **Create Strategy From Template**. The **Select a Template** section appears.
  - b) Select a template that you want to apply and select Next. The Application Method section appears.
  - c) Select the application method and select **Next**. The **Confirmation** section appears.
  - d) Select Finish.

An Asset Strategy is created and the selected assets are sent to the Asset Strategy. The Asset Strategy Template is applied and the assets are connected to the Asset Strategy when the process is completed.

#### Note:

- The status of the process can be viewed from the Send To Status process indicator.
- Upon successful completion, a link to the Asset Strategy appears in the **Strategy** column for the asset.

## Send an Asset to a System Strategy

This topic provides the steps for sending an asset to a System Strategy.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Assets** tab.

The **Assets** section appears, displaying a list of available assets based on the current filter.

 In the Assets section, select the check box in the row containing the asset you want to send to a System Strategy.

The asset is highlighted.

Note: If a strategy is listed in the Strategy column, you cannot send it to another strategy.

- 4. In the section, select the **Send To** drop-down menu, and select **System Strategy**. The **Send to System Strategy** window appears.
- 5. Select **Yes**.

The asset is sent to a new System Strategy and will be connected to the System Strategy when the sending process completes.

#### Note:

- The **Send To Status** process indicator appears in the workspace. When the process competes, a notification appears.
- Upon successful completion, a hyperlink to the System Strategy appears in the **Strategy** column for the asset.

## Send an Asset to a New FMEA Analysis

This topic provides the steps for sending an asset to a new FMEA Analysis.

#### Procedure

- 1. Access the ACA Overview page.
- Select the Assets tab. The Assets section appears, displaying a list of available assets based on the current filter.
- 3. In the **Assets** section, select the check box in the row containing the asset you want to send to a new FMEA Analysis.

The asset is highlighted.

**Note:** If an FMEA Analysis is listed in the **Other Analyses** column, you cannot send it to another FMEA Analysis.

- 4. In the section, select the Send To drop-down menu, and select FMEA Analysis.
- 5. In the **Send to FMEA Analysis** window, if it is not already selected, select **Create New**. A window appears, allowing you to create a new FMEA Analysis.
- Complete the required fields, and select Send. The asset is sent to a new FMEA Analysis and will be connected to the FMEA analysis when the sending process completes.

#### Note:

The Send To Status process indicator appears in the workspace. When the process completes, a
notification appears.

• Upon successful completion, a hyperlink to the FMEA Analysis appears in the **Other Analyses** column for the asset.

## Send an Asset to an Existing FMEA Analysis

This topic provides the steps for sending an asset to an existing FMEA Analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Assets** tab.

The **Assets** section appears, displaying a list of available assets based on the current filter.

 In the Assets section, select the check box in the row containing the asset you want to send to an existing FMEA Analysis. The asset is highlighted.

**Note:** If an FMEA Analysis is listed in the **Other Analyses** column, you cannot send it to another FMEA Analysis.

- 4. In the section, select the **Send To** drop-down menu, and select **FMEA Analysis**. A window appears, displaying a list of existing analyses that you can send to.
- Select an Analysis ID, and select Send. The asset is sent to the existing FMEA Analysis and will be connected to the FMEA analysis when the sending process completes.

#### Note:

- The **Send To Status** process indicator appears in the workspace. When the process completes, a notification appears.
- Upon successful completion, a hyperlink to the FMEA Analysis appears in the **Other Analyses** column for the asset.

## Send an Asset to an FMEA Analysis using the Asset Template

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Assets tab.
   The Assets section appears, displaying a list of available assets based on the current filter.
- 3. In the **Assets** section, select the check box in the row containing the asset that you want to send to an FMEA Analysis using the Asset Template.

The asset is highlighted.

- 4. Select the Send To drop-down menu, and select FMEA Analysis.
- 5. In the Send to FMEA Analysis window, select Apply Template.
- 6. Select the **Asset Template** you want to apply to the analysis, and then select **Next**.
- 7. Select the FMEA Analysis that you want to send the assets, and then select Next.
- Review the template and the asset details, and then select Implement. The assets are sent to an FMEA Analysis and will be connected to the FMEA analysis when the sending process is completed.

#### Note:

• The **Send To Status** process indicator appears in the ACA workspace. When the process is completed, a notification appears.

• Upon successful completion, a hyperlink to the FMEA Analysis appears in the **Other Analyses** column for the asset.

## Send an Asset to a New RCM Analysis

This topic provides the steps for sending an asset to a new RCM Analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Assets tab. The Assets section appears, displaying a list of available assets based on the current filter.
- 3. In the **Assets** section, select the check box in the row containing the asset you want to send to a new RCM Analysis.

The asset is highlighted.

**Note:** If an RCM Analysis is listed in the **Other Analyses** column, you cannot send it to another RCM Analysis.

- 4. In the section, select the Send To drop-down menu, and select RCM Analysis.
- 5. In the **Send to RCM Analysis** window, if it is not already selected, select **Create New**. A window appears, allowing you to create a new RCM Analysis.
- Complete the required fields, and select Send. The asset is sent to a new RCM Analysis and will be connected to the RCM analysis when the sending process completes.

#### Note:

- The **Send To Status** process indicator appears in the workspace. When the process completes, a notification appears.
- Upon successful completion, a hyperlink to the RCM Analysis appears in the **Other Analyses** column for the asset.

## Send an Asset to an Existing RCM Analysis

This topic provides the steps for sending an asset to an existing RCM Analysis.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Assets** tab.

The Assets section appears, displaying a list of available assets based on the current filter.

 In the Assets section, select the check box in the row containing the asset you want to send to an existing RCM Analysis. The asset is highlighted.

**Note:** If an RCM Analysis is listed in the **Other Analyses** column, you cannot send it to another RCM Analysis.

- 4. In the section, select the **Send To** drop-down menu, and select **RCM Analysis**. The **Send to RCM Analysis** window appears, displaying a list of existing analyses that you can send to.
- 5. Select an Analysis ID, and select **Send**.

Note:

- A **Send To Status** process indicator appears in the workspace. When the process completes, a notification appears.
- Upon successful completion, a hyperlink to the RCM Analysis appears in the **Other Analyses** column for the asset.

## Send an Asset to the RBI Asset View

This topic provides the steps for sending an asset to an RBI Asset View.

#### **Before You Begin**

An asset must be a functional equipment asset to be sent to the RBI Asset View.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Assets tab.
   The Assets section appears, displaying a list of available assets based on the current filter.
- 3. In the **Assets** section, select the check box in the row containing the asset you want to send to an RBI Asset View.

The asset is highlighted.

Note: If an RBI Asset View is listed, you cannot view the asset in RBI Asset View.

4. In the section, select the **Send To** drop-down menu, and select **RBI Asset View**. A new section appears, displaying the Asset Summary of the asset.

## Send an Asset to RBI Asset View from Analysis View

This topic provides the steps for sending an asset to an RBI Asset View.

#### **Before You Begin**

An asset must be a functional equipment asset to be sent to the RBI Asset View.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Analyses** tab. A grid appears which contains a list of ACA analyses.
- Select the link for the analysis you would like to open. The Analysis workspace for the analysis you selected appears, displaying the Assessment section.
- In the Assessment section, select the check box in the row containing the asset you want to send to an RBI Asset View.
  - The asset is highlighted.
- 5. Select the **Send To** drop-down menu, and select **RBI Asset View**. A new section appears, displaying the Asset Summary of the asset.

## **Approve an Analysis**

This topic provides the steps to approve an analysis.

#### **Before You Begin**

You can access the **ACA Overview** page only if you are a member of one of the following Security Groups:

- MI ACA Administrator
- MI ACA Member
- MI ACA Owner

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.
- 3. Select the analysis you want to approve. The **Assessment** section appears.
- 4. Select the State Configuration button.
- 5. Select Approve.
- 6. Select **Done**. The **Approve** window appears.
- 7. Select **Yes**. The analysis is moved to the Approved state.

#### **Next Steps**

Update SAP.

## **Update SAP**

This topic describes how to update SAP from the Analysis View.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Analyses** tab.

The Analyses section appears, displaying a list of available analyses based on the current filter.

- Select an analysis. The Assessment section for the selected analysis appears.
- 4. Select <sup>8</sup>/<sub>8</sub>, and then select **Update SAP**.
   A window appears, asking you to confirm that you want to update SAP.
- 5. Select **Yes**. SAP is updated.

**Note:** When the process is completed, you can select the completion date or the **View Error Logs** link to view the status and the status message in the **Update SAP Logs** page.

## **Access Reference Documents for an ACA**

This topic describes how to access reference document for an ACA.

#### Procedure

1. Access an ACA.

Select the Reference Documents tab.
 The Reference Documents section appears, displaying the list of available reference documents.

**Tip:** For more information, refer to the Manage Reference Documents section of the Record Manager module for additional options when working with reference documents.

## **Export an ACA from Analysis View**

This topic describes how to export an ACA from Analysis View.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. The Analyses section appears, displaying a list of available analyses based on the current filter.
- Select an analysis.
   The Assessment workspace for the selected analysis appears.
- Select <sup>8</sup>/<sub>8</sub>, and select Export. The Export to a File window appears.
- 5. In the **Please provide a File Name** box, enter a file name for the export.
- 6. Select **Export**. The selected analysis is exported and

The selected analysis is exported and appears in an Excel document.

## **Export Analyses from the Overview Page**

This topic describes how to export analyses.

#### Procedure

- 1. Access the ACA Overview page.
- 2. Select the **Analyses** tab.

The Analyses section appears.

- 3. Next to each analysis that you want to export, select the check box.
- Select , and then select Export. The Export to a File window appears.
- 5. In the **Please provide a File Name** box, enter a file name for the export.
- 6. Select **Export**.

The **Jobs Log** page appears, displaying a list of jobs in progress, including the export job that you have initiated just now. After the analyses are exported to an Excel workbook, the job appears in the **Successful** section.

Tip:

- You can also export an analysis by accessing the analysis.
- All Secondary Actions associated with the ACA analysis are also exported.
- Even if you close the Jobs Log page, the export will happen in the background. You can reopen the Jobs Log page by selecting due and then Export History.

## Remove an ACA from the ACA Overview Page

#### **About This Task**

You can remove an ACA record from the **ACA Overview** page using 🛄. When you remove an ACA record:

- The record is removed from the **ACA Overview** page.
- The links between that record and the other records associated with the ACA are deleted.

#### Procedure

- 1. Access the **ACA Overview** page.
- Select the Analyses tab. A grid appears, which contains all of the available ACA records.
- 3. Select the row for the record that you want to remove, and select III. The ACA record is removed.

**Note:** Though the record is removed from the **ACA Overview** page, it can still be accessed on the APM database in the search results under the name of the record itself, or a search under Asset Criticality Analysis.

## **Clear Assessment for an Asset**

This topic describes how to clear assessments associated with an asset. You can clear assessments associated with multiple assets at a time.

#### Procedure

- 1. Access the **ACA Overview** page.
- 2. Select the **Analyses** tab.

The Analyses section appears, displaying a list of available analyses based on the current filter.

3. Select an analysis.

The **Assessment** workspace for the selected analysis appears.

4. Select the check box next to the asset for which you want to clear the assessment.

**Tip:** If you want to clear assessments for multiple assets, select the check boxes next to all the required assets.

5. Select  $\overline{\bigcirc}$ .

The assessment associated with the assets is cleared.

# Chapter



## Admin

## Topics:

- Access the ACA Administrator
   Page
- System Criticality Lock-Down
   Options
- Criticality Definitions
- Lock the Risk Matrix
- SAP Criticality Assessment Interface

## Access the ACA Administrator Page

#### Access the ACA Administrator Page

#### **Before You Begin**

Ensure that you are either a member of the MI ACA Administrator Security Group or a Super User.

#### Procedure

In the module navigation menu, select Admin > Application Settings > Asset Criticality Analysis. The ACA Administrator page appears, displaying the System Criticality Lock-Down Options and Manage Criticality Definitions sections.

## System Criticality Lock-Down Options

### System Criticality Lock-Down Options

#### **About This Task**

Note: If **Risk Matrix** is being used for doing risk assessment in **ACA**, one can lock the **Probability Field**, **Consequence Field** and **Protection Level Field** in the Matrix.

## **Criticality Definitions**

#### **About Criticality Definitions**

Criticality Definitions determine the assessment mechanism used in a Criticality Assessment and its characteristics. Additional configurations can be managed to support the desired Criticality Assessment method.

## Modify or Configure a new Criticality Definition

#### **About This Task**

A default Criticality Definition is provided with the baseline product, additional Criticality Definition records can be added per Site as required.

- 1. Create a Criticality Definition
- 2. Modify a Criticality Definition
- 3. Delete a Criticality Definition
- 4. Associate a Criticality Definition with a Site

#### **Create a Criticality Definition**

#### Procedure

1. Access the ACA Admin page.

- 2. Select +.
- The Record Manager page appears, displaying a Criticality Definition datasheet.
- 3. As needed, enter values in the available fields.
- 4. Select 🛅.

The Criticality Definition record is created and appears in the **Manage Criticality Definitions** section.

#### **Modify a Criticality Definition**

#### Procedure

- 1. Access the **ACA Admin** page.
- 2. Select the Criticality Definition that you want to modify.
- The Record Manager page appears, displaying a Criticality Definition datasheet.
- 3. As needed, modify the values in the available fields.
- 4. Select 🛅.

The Criticality Definition is modified.

#### **Delete a Criticality Definition**

#### Procedure

- 1. Access the **ACA Admin** page.
- Select the Criticality Definition that you want to delete, and then select . The Confirm Delete window appears.
- 3. Select **Yes**. The Criticality Definition is deleted.

#### Associate a Criticality Definition with a Site

#### Procedure

- 1. Access the Criticality Definition record that you want to associate with a site.
- 2. In the Record Explorer pane, in the Related Families, select Site Reference.

Note: If Site Reference does not appear, select  $\checkmark$ , and then select All Possible Families.

- Select 3, and then select Link Existing Records. The Search window appears, displaying a list of entities of the family.
- 4. In the drop-down list boxes, select the required options to filter the entities from the list. Or, in the text

box, enter the name of the family or entity that you want to search, and then select  ${f Q}$  .

5. Select the record that you want to link, and then select **OK**. The records are linked.

#### Note:

- If the **Use Checklist** check box is not selected, a Risk Matrix will be used for Criticality Assessment for Analyses in the related Site.
- If the Use Checklist check box is selected, a Checklist will be used for Criticality Assessment for Analyses in the related Site, and the checklist family to be used must be selected. The MI\_CRIT\_CHKLST family is provided with baseline, additional subfamilies can be created to support configuring different checklists per Site.

For more information, refer to Criticality Definition Records on page 54

## **Configure Criticality Thresholds**

#### **About This Task**

Criticality Thresholds represents the categories (High, Medium and Low) that are displayed once Criticality has been assessed. The numerical Criticality value resulting from either a Risk Matrix or Checklist assessment falls within the range of one of the Criticality Thresholds defined. Based on this, the resulting category is displayed.

Criticality Thresholds are provided with the baseline product. These can be modified, or additional Criticality Definition records can be configured per Criticality Definition as required. Each Criticality Threshold has a Description, Value, and Color. The criticality value represents the lowest value in the range for the threshold. For more information, refer to Criticality Threshold Records on page 55.

#### Procedure

- 1. Access the Criticality Definition record that you want to modify.
- 2. In the Record Explorer pane, in the Related Families, select Criticality Threshold.

Note: If Criticality Threshold does not appear, select 📩 , and then select All Possible Families.

- Select 3, and then select Add New Record. The Record Manager page appears, displaying a Criticality Threshold datasheet.
- 4. As needed, enter values in the available fields.
- 5. Select 🛅. The Criticality Threshold gets added.

## **Configure Criticality Checklists**

#### **About This Task**

Criticality Checklists are the records that are used to assess Criticality for an asset. This method can be used if the **Use Checklist** check box is enabled for a Criticality Definition record. You must configure the fields, behaviors and the datasheet for the Criticality Checklist family to utilize the Criticality Checklist assessment method.

Fields are provided with the baseline product; these fields can be modified, or additional fields can be configured per Criticality Checklist as required. For more information, refer to Criticality Checklist Records on page 54.

- 1. Configure Criticality Checklist Family Fields
- 2. Configure Criticality Checklist Family Datasheet

	Entity		Relationship	
<	+	66	^	
critic	ality ch	e	×	
Criticality Checklist $$				

Entity: Criticality Checklist

Last Modified On 4/5/2019 4:21:52 AM Modified By Administrator,Meridium

				Family	Rule	es and	1	State	Asso	ciated
Information	Fields	Datasheets		Reports	s Policie		es Management		Pages	
ðð									+	$\diamond$
ID			CAPTION			DATA	TYPE	ACTIVE	STATUS	IS IE
MI_CRIT_CHKLS	T_ENVI_CON	S_CHR	Environ	ment Consequ	Jence	Cha	racter	Yes		No
MI_CRIT_CHKLS	T_OPER_CON	S_CHR	Operati	ons Conseque	nce	Chai	racter	Yes		No
MI_CRIT_CHKLS	T_PM_REQU_	FLG	PM Req	uired		Bool	ean	Yes		No
MI_CRIT_CHKLS	T_CRIT_VALU	NBR	Critical	ity Value		Num	neric	Yes		No
MI_CRIT_CHKLS	T_SAFE_CON	S_CHR	Safety (	Consequence		Chai	racter	Yes		No
MI_CRIT_CHKLS	T_BASI_ASSE	_TX	Basis fo	or Assessment		Text		Yes		No
1 - 6 of 6 Result	s							← Pa	ige 1 of 1	$\rightarrow$

#### **Configure Criticality Checklist Family Fields**

#### Procedure

- In the module navigation menu, select Admin > Configuration Manager > Family Management. The Family Management page appears, displaying the list of already existing families. Home is selected by default.
- 2. In the pane, in the **Entity** section, access the Criticality Checklist family that you want to modify. The Criticality Checklist datasheet appears.
- 3. In the workspace, select the **Fields** tab. A list of existing fields appears.
- 4. Add, modify or delete the family fields as required.

#### **Configure Criticality Checklist Family Datasheet**

#### Procedure

- In the module navigation menu, select Admin > Configuration Manager > Family Management. The Family Management page appears, displaying the list of already existing families. Home is selected by default.
- 2. In the pane, in the **Entity** section, access the Criticality Checklist family that you want to modify. The Criticality Checklist datasheet appears.
- 3. In the workspace, select the **Datasheets** tab.
- 4. Add, modify or delete the family Datasheets as required.

## **Configure Family Policy**

#### Procedure

- In the module navigation menu, select Admin > Configuration Manager > Family Management. The Family Management page appears, displaying the list of already existing families. Home is selected by default.
- 2. In the pane, in the **Entity** section, access Criticality Checklist. The Criticality Checklist datasheet appears.

- 3. In the workspace, select the Rules and Policies tab.
- 4. Select **Edit** corresponding to the **Before Insert** option. The **Design** workspace appears.

**Note:** The **Before Insert Family Policy** is used to calculate the criticality value that will be saved to Criticality Family that gets translated to Criticality Threshold.

5. Select **Save**. A Family Policy is configured.

## **Configure Criticality Mappings**

Criticality mapping in ACA can optionally be configured if you are using SAP Criticality Assessment Interface.

#### About This Task

In SAP systems, each Equipment and Functional Location contains a criticality indicator value. If you have a SAP system and your ACA Analyses include Equipment and Functional Location records that were created from SAP (using the SAP interfaces), when you assess criticality in ACA, you can also update the corresponding criticality indicator values in SAP with the ACA values.

To enable this functionality, you must first create Criticality Mapping records, which identify the criticality indicator values in your SAP system (e.g., A, B, C). You will need to link each Criticality Mapping record to the Criticality Threshold record that represents the APM criticality value that should be mapped to the SAP criticality indicator values (e.g., High, Medium, Low). If you are using multiple SAP Systems, you can link one Criticality Mapping record for each system to the same Criticality Threshold record.

To create a Criticality Mapping record and link it to a Criticality Threshold record:

#### Procedure

- 1. Access the Criticality Definition datasheet of the record that is used by your ACA Analyses.
- 2. In the Record Explorer pane, expand the Criticality Threshold node.
- 3. Expand the node of the Criticality Threshold record for which you want to map criticality values (i.e., High, Low, Medium, or Very High).
- Right-click the Criticality Mapping family node, and then select Create a New Criticality Mapping to link to <Criticality Threshold record>.
   A new Criticality Mapping record appears.
- 5. In the **CMMS ID** list, select the SAP system to which you want to transfer criticality values. This list displays the value in the **System ID** field for each SAP System record in APM.
- 6. In the **Indicator** list, select the SAP criticality indicator value to which you want to map the criticality threshold that is represented by the criticality threshold record to which this Criticality Mapping record is linked.

The list displays the criticality indicator values in the SAP system that you selected.

- 7. Select OK.
- 8. Repeat steps 3 through 7 for each Criticality Threshold record defined for your Criticality Definition.
- 9. Select Save.

The new Criticality Mapping record is linked to the selected Criticality Threshold record.

## Lock the Risk Matrix

## **About Locking the Risk Matrix**

You can configure ACA to allow users to assign risk values to **Asset Criticality Analysis System**, **Equipment**, and **Functional Location** records using fields defined for the Asset Criticality Analysis System family. To do so, you will need to specify which Asset Criticality Analysis System fields will accept the risk values. You can optionally add these fields to the Asset Criticality Analysis System datasheet. If you add the fields to the datasheet, users will be able to specify risk values in those fields within ACA. If you do not add these fields to the datasheet, however, users will need to map values to them by importing the values from a Microsoft Excel file (when creating new analyses or updating risk values in existing analyses). After an Asset Criticality Analysis System record is saved with risk values in the specified fields, the appropriate Risk Assessment and Risk Rank records will be created automatically using the specified values. In the Risk Matrix, each section will contain the specified probability, consequence, and protection level. In addition, users will not be able to select a different probability, consequence, or protection level using the Risk Matrix. In other words, these properties of the Risk Matrix will be locked down.

**Note:** The risk values that are specified for an Asset Criticality Analysis System record will be inherited by any Equipment or Functional Location records that are linked to it.

Throughout this documentation, we refer to this functionality as locking the Risk Matrix. Keep in mind that you can lock any combination of the following Risk Matrix properties:

- Probability
- Consequence
- Protection Level

In other words, you might lock the probability and the consequence, only the probability, only the consequence, and so on. For any property that is locked, the corresponding item on the Risk Matrix will be disabled. For example, if you lock only the probability, when a user accesses the Risk Matrix, he will be able to select a consequence but not a probability. The probability must be set from the selected field in the Asset Criticality Analysis System family.

Note: Locking the Risk Matrix feature is now restricted to numerical fields.

## Lock the Risk Matrix

#### Procedure

- Access the ACA Admin page. The ACA Administrator workspace appears.
- 2. Set the **Probability**, **Consequence**, and **Protection Level** fields as desired, and then select 🛅. The **Risk Matrix** is locked.

## **Example: Locking the Risk Matrix**

#### **Before You Begin**

The Probability and the Consequences fields are added to the Asset Criticality Analysis System datasheet.

#### Procedure

1. Access the **ACA Admin** page.

The ACA Administrator workspace appears.

- 2. Select Probability from the drop-down for **Probability Field** and Consequence from the drop-down for **Consequence Field**.
- 3. Enter the value 1 against the Probability and the value 10 against the Consequence boxes on an **Asset Criticality Analysis System** datasheet.
- 4. Save the Asset Criticality Analysis System record.

The values will be mapped to each section of the Risk Matrix as shown in the image below:

	Consequence					
Probability	Very Low	Low	Medium	High	Very High	
- Tobability	1	10	100	500	1,000	
Frequent	5	50	500	2,500	5,000	
5						
Probable	1	10	100	500	1,000	
1			100		1,000	
Possible	0.3	3	30	150	300	
0.3	0.5		50	150	500	
Remote	0.1	1	10	50	100	
0.1	0.1	-	10	50	100	
Improbable	0.05		_	25	50	
0.05	0.05	0.5	5	25	50	
	Not Applicable  Mitigated Risk  Unmitigated Risk					

**Note:** All other cells on the Risk Matrix are disabled, or locked. You cannot use the Risk Matrix to select different risk values. Instead, to change the risk values, you will need to modify the values on the **Asset Criticality Analysis System** datasheet.

## **SAP Criticality Assessment Interface**

#### About the SAP Criticality Assessment Interface

Using the SAP Criticality Assessment Interface, you can perform the following tasks:

- Send the Criticality value in APM to update the ABC Indicator field in SAP.
- Specify a custom Function Module Name used in SAP to which you want to send additional or alternate information.
- Define the source field mappings between APM and SAP using a baseline Policy. You can change the default Policy to a different one.

## **Change the Function Module**

#### About This Task

This topic describes how to change the default SAP Function Module to a different one.

#### Procedure

- 1. Access the **ACA Administrator** page.
- 2. In the **SAP Criticality Assessment Interface** section, in the **Function Module Name** box, enter the name of the Function Module that you want to use.
- 3. Select **Save**. The Function Module is changed.

## **Change the Criticality Table Policy**

#### **About This Task**

A default Criticality Table Policy is used to specify the field mappings between APM and SAP. This topic describes how to change the default Policy to a different one.

#### Procedure

- 1. Access the ACA Administrator page.
- 2. In the **SAP Criticality Assessment Interface** section, in the **Criticality Table Policy** box, enter the name of the Policy that you want to use.
- 3. Select **Save**.

The Criticality Table Policy is changed and will now be used to specify the field mappings between APM and SAP.

# Chapter 5

## **Data Loader**

#### **Topics:**

- About the Asset Criticality Analysis (ACA) Data Loader
- About the Asset Criticality Analysis (ACA) Data Loader Requirements
- About the Asset Criticality Analysis (ACA) Data Loader Data Model
- About the Asset Criticality Analysis (ACA Checklist) Data Loader Workbook Layout and Use
- About the Asset Criticality Analysis (ACA) Data Loader General Loading Strategy
- About the Asset Criticality Analysis (ACA) Data Loader Workbook Layout and Use
- About the Asset Criticality Analysis (ACA) Data Loader Load Verification

## About the Asset Criticality Analysis (ACA) Data Loader

The ACA Data Loader allows existing or new Asset Criticality Analyses to be delivered to the ACA module in APM for further development, analysis or implementation. Customers will be able to load data from other external systems into the ACA module via the Excel workbook. They will be able to upload any existing analyses with updated risk assessment data that has been assessed outside the APM application. Sites assignments for the ACA records that are loaded with the ACA Data Loader are inherited from the related Assets that already exist in the APM system.

The ACA Data Loader is used in the following scenarios:

- Users conducting an initial data load of Asset Criticality Analyses containing Assets for the purpose of completing Criticality Assessments inside the APM application.
- Users updating existing Asset Criticality Analyses with Criticality Assessments completed outside the APM application.

The ACA module contains two data loaders. To determine which ACA Data Loader to use:

- Use the **Asset Criticality Analysis (ACA) Data Loader** if the Risk Matrix is your Criticality Assessment input method.
- Use the **Asset Criticality Analysis (ACA Checklist) Data Loader** if the Criticality Checklist is your Criticality Assessment input method.

**Note:** If you are using an export file generated from a version of APM prior to V4.3.0.7, then that Excel file needs to be modified to match the current ACA Data Loader template.

## About the Asset Criticality Analysis (ACA) Data Loader Requirements

To use the ACA Data Loader, your organization must have completed the deployment of the Asset Criticality Analysis module. The ACA Data Loader should only be used after the Asset Criticality Analysis module has been implemented, and you have defined Assets for your organization.

#### Mapping

The ACA Data Loader maps the datasheet columns in the Excel workbook to fields in APM families. As a minimum, the standard worksheets contain columns that match all fields in standard ACA datasheets.

Mapping exists for all standard family fields, if you have added custom fields to a family, you must ensure that mappings exist for those fields, or data may not be populated as expected following the data load. If you have a custom risk matrix, you must modify the data load worksheet to reflect the risk categories and risk values appropriate for your risk matrix.

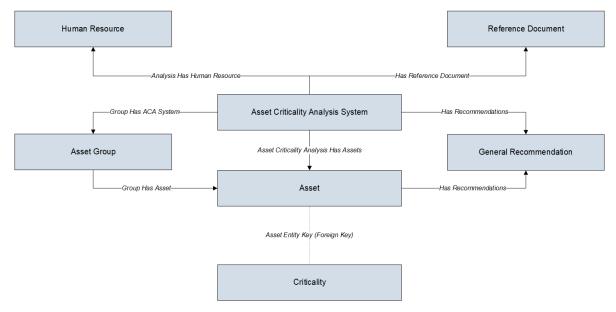
If you have a custom risk matrix, you must modify the data load worksheet to reflect the risk categories and risk values appropriate for your risk matrix.

#### **Security Settings**

The Security User performing the data load operation must be associated with either the MI Data Loader. User or MI Data Loader Admin Security Role, and must also be associated with the MI ACA Administrator Security Group or a Security Role that is associated with this Security Group

## About the Asset Criticality Analysis (ACA) Data Loader Data Model

The data for an ACA Analysis is loaded from a single Excel workbook <code>Asset Criticality Analysis</code> (ACA) .xlsx containing multiple worksheets. This includes Analysis, Asset and Criticality Assessment data. These elements are highlighted with a red box around the relevant functional areas from the ACA data model extract shown below. Elements shown without a red border are data model elements that will not need to be loaded by the data loader. If using a Criticality Checklist, the data for an ACA Analysis is loaded from a single Excel workbook <code>Asset Criticality Analysis</code> (ACA Checklist).xlsx containing multiple worksheets.



Note: Asset Group is created internally and is not loaded by the data loader.

## About the Asset Criticality Analysis (ACA Checklist) Data Loader Workbook Layout and Use

This section provides a high-level overview and explanation of how the data loader workbook is constructed if using the Checklist to assess criticality.

In order to import data using the ACA Data Loader, APM provides an Excel workbook, Asset Criticality Analysis (ACA Checklist).xlsx, which supports baseline Asset Criticality Analysis in APM. This workbook must be used to perform the data load. You can modify the Excel template to include custom fields used by your organization.

The master Excel workbook contains one worksheet for each node that will be populated in the data model.

The following table lists the worksheets that are included in the **Asset Criticality Analysis (ACA Checklist)** workbook.

#### **Worksheet Description**

Worksheet	Description
Analysis	This worksheet is used to specify data for import to the Asset Criticality Analysis System family.
Asset	This worksheet is used to specify data for import as Assets related to the ACA Analysis as well as criticality assessment data for each asset.

Each worksheet in the ACA Data Loader Template workbook contains field values that must be mapped to the appropriate APM family/field combination. The individual sections in this document specify the source and target fields and relationships required between predecessor and successor.

The list of fields tabulated is not exhaustive. The user can add additional field columns to the worksheets and still perform a successful upload, provided:

- Column fields are properly mapped within the worksheet
- Equivalent fields exist in ACA

#### **Analysis Worksheet**

On the Analysis worksheet, you will specify the Analysis ID to which you want to link the Assets. The Analysis ID column that appears on this worksheet also appear on the Assets worksheet, and is used to identify the records that will be linked to the analysis.

**Note:** Each row in this worksheet represents a unique analysis. You should not include the same analysis more than once.

Field Caption	Field ID	Data Type (Length)	Comments
Site Name	MI_SITE_NAME	Character (255)	This field is required and must be unique.
System Description	MI_ASCRTSYS_SYSTEM_DESCR _T	Text	A brief description of the analysis.
System ID	MI_ASCRTSYS_SYSTEM_ID_C	Character (50)	This field is required and must match an existing Site name. <b>Note:</b> If you want to set the site reference to be a Global Site Reference, enter the constant '*Global*' in the MI_SITE_NAME column on the spreadsheet.

#### **Asset Worksheet**

On the Asset worksheet, you will specify the assets that will be created and linked to an analysis.

**Note:** Each row in this worksheet represents a unique Asset. You should not include the same asset more than once to the same analysis.

Field Caption	Field ID	Data Type (Length)	Comments
Asset ID	ASSET_ID	Character (255)	This field displays the value that identifies the asset.
Asset Field ID	ASSET_FIELD_ID	Character (255)	This field displays the identification of the field of an asset.
Asset Family ID	ASSET_FAMILY	Character (255)	This field is populated automatically.
Basis for Assessment	MI_CRIT_CHKLST_BASI_ASSE_T X	Text	This field is populated based on the Criticality Checklist of the Site.
Environment Consequence	MI_CRIT_CHKLST_ENVI_CONS_ CHR	Numeric	This field is populated based on the Criticality Checklist of the Site.
Operations Consequence	MI_CRIT_CHKLST_OPER_CONS_ CHR	Numeric	This field is populated based on the Criticality Checklist of the Site.
Safety Consequence	MI_CRIT_CHKLST_SAFE_CONS_ SHR	Numeric	This field is populated based on the Criticality Checklist of the Site.
System ID	MI_ASCRTSYS_SYSTEM_ID_C	Character (255)	The System ID must be unique with respect to other systems that belong to the same analysis.

## About the Asset Criticality Analysis (ACA) Data Loader General Loading Strategy

This section describes any prerequisites to loading the data and the order in which the data will be loaded.

Note: Before reading this section, refer to the Data Model section.

#### Prerequisite

• The sites to which ACA records are to be assigned have been created.

#### Load Sequence

**Note:** If you want to set the site reference to be a Global Site Reference, enter the constant '\*Global\*' in the MI\_SITE\_NAME column on the spreadsheet.

The ACA data load must be performed in a specific sequence to successfully populate fields, create records and link them to the predecessor and/or successor records:

- 1. Create the ACA Analysis.
- 2. Create and link one or more Assets to the ACA Analysis through the Asset Criticality Analysis Has Assets relationship.

3. Create Criticality records by populating the fields for the Risk Matrix associated with the Site of the Asset. If using a criticality Checklist, then you will create criticality records by populating the fields for the Checklist associated with the Site of the Asset.

## About the Asset Criticality Analysis (ACA) Data Loader Workbook Layout and Use

This section provides a high-level overview and explanation of how the data loader workbook is constructed if using the Risk Matrix to assess criticality.

In order to import data using the ACA Data Loader, APM provides an Excel workbook, Asset Criticality Analysis (ACA).xlsx, which supports baseline Asset Criticality Analysis in APM. This workbook must be used to perform the data load. You can modify the Excel template to include custom fields used by your organization.

The master Excel workbook contains one worksheet for each node that will be populated in the data model.

The following table lists the worksheets that are included in the **Asset Criticality Analysis (ACA)** workbook.

Worksheet	Description
Analysis	This worksheet is used to specify data for import to the Asset Criticality Analysis System family.
Asset	This worksheet is used to specify data for import as Assets related to the ACA Analysis as well as criticality assessment data for each asset.

Each worksheet in the ACA Data Loader Template workbook contains field values that must be mapped to the appropriate APM family/field combination. The individual sections in this document specify the source and target fields and relationships required between predecessor and successor.

The list of fields tabulated is not exhaustive. The user can add additional field columns to the worksheets and still perform a successful upload, provided:

- Column fields are properly mapped within the worksheet
- Equivalent fields exist in ACA

#### **Analysis Worksheet**

On the Analysis worksheet, you will specify the Analysis ID to which you want link the Assets. The Analysis ID column that appears on this worksheet also appear on the Assets worksheet, and is used to identify the records that will be linked to the analysis.

**Note:** Each row in this worksheet represents a unique analysis. You should not include the same analysis more than once.

Field Caption	Field ID	Data Type (Length)	Comments
Analysis ID	MI_AN_ANALY_ID_CHR	Character (255)	This field is required and must be unique.
Site Reference Name	MI_SITE_NAME	Character (50)	This field is required and must match an existing Site name. <b>Note:</b> If you want to set the site reference to be a Global Site Reference, enter the constant '*Global*' in the MI_SITE_NAME column on the spreadsheet.
Analysis Description	MI_AN_SHORT_DESCR_CHR	Character(255)	This field contains a brief description about the Asset Criticality Analysis.

#### **Asset Worksheet**

On the Asset worksheet, you will specify the assets that will be created and linked to analysis.

**Note:** Each row in this worksheet represents a unique asset. You should not include the same asset more than once to the same analysis.

**Note:** When you enter N/A in the column for any of the Safety, Environment, Operations, or Financial values in the Data Loader, the associated Unmitigated Risk is set as Not Applicable.

Field Caption	Field ID	Data Type (Length)	Comments
Analysis ID	MI_AN_ANALY_ID_CHR	Character (255)	This field is required and must be unique.
Asset ID	ASSET_ID	Character (255)	This field displays the value that identifies the Asset.
Asset Family ID	ASSET_FAMILY	Character (255)	Based on the ID, this field is populates either an Equipment or a Functional Location.
Asset Field ID	ASSET_FIELD_ID	Character (30)	This field is the ID of the field that is used to identify the Asset.
(ENVIRONMENT) Consequence	ENVIRONMENT MI_CONSE_N	Numeric	Must be filled based on the risk matrix of the site.
(ENVIRONMENT) Probability	ENVIRONMENT MI_PROB_N	Numeric	Must be filled based on the risk matrix of the site.
(ENVIRONMENT) Protection Level	ENVIRONMENT MI_PROT_N	Numeric	Must be filled based on the risk matrix of the site.
(ENVIRONMENT) Risk Rank	ENVIRONMENT-RISK_RANK	Numeric	Must be filled based on the risk matrix of the site.

Field Caption	Field ID	Data Type (Length)	Comments
(FINANCIAL) Consequence	FINANCIAL MI_CONSE_N	Numeric	Must be filled based on the risk matrix of the site.
(FINANCIAL) Maintenance Cost	FINANCIAL  MI_RISK_MAIN_COST_N	Numeric	Must be filled based on the risk matrix of the site.
(FINANCIAL) Probability	FINANCIAL MI_PROB_N	Numeric	Must be filled based on the risk matrix of the site.
(FINANCIAL) Production Loss	FINANCIAL  MI_RISK_PROD_LOSS_N	Numeric	Must be filled based on the risk matrix of the site.
(FINANCIAL) Protection level	FINANCIAL MI_PROT_N	Numeric	Must be filled based on the risk matrix of the site.
(FINANCIAL) Risk Rank	FINANCIAL-RISK_RANK	Numeric	Must be filled based on the risk matrix of the site.
(OPERATIONS) consequence	OPERATIONS MI_CONSE_N	Numeric	Must be filled based on the risk matrix of the site.
(OPERATIONS) Probability	OPERATIONS MI_PROB_N	Numeric	Must be filled based on the risk matrix of the site.
(OPERATIONS) Protection Level	OPERATIONS MI_PROT_N	Numeric	Must be filled based on the risk matrix of the site.
(OPERATIONS) Risk Rank	OPERATIONS-RISK_RANK	Numeric	Must be filled based on the risk matrix of the site.
(SAFETY) Consequence	SAFETY MI_CONSE_N	Numeric	Must be filled based on the risk matrix of the site.
(SAFETY) Probability	SAFETY MI_PROB_N	Numeric	Must be filled based on the risk matrix of the site.
(SAFETY) Protection Level	SAFETY MI_PROT_N	Numeric	Must be filled based on the risk matrix of the site.
(SAFETY) Risk Rank	SAFETY-RISK_RANK	Numeric	Must be filled based on the risk matrix of the site.
Basis for Assessment	MI_RISKASSE_BASIS_T	Text	Must be filled based on the risk matrix of the site.

## About the Asset Criticality Analysis (ACA) Data Loader Load Verification

#### About This Task

A successful data import will have the same effect as creating a new Asset Criticality Analysis in APM. Following a successful data load, if the data loader created a new asset criticality analysis, it will appear in the Analyses section on the Asset Criticality Analysis Overview page. A successful import can also be defined as an event in which partial data on a worksheet was loaded into APM, and where the user was given appropriate messaging that enabled him or her to identify and correct issues resulting from the import.

# Chapter 6

## **Deployment and Upgrade**

Topics:

- Deployment
- Upgrade

## Deployment

## Deployment

Refer to the deployment information here Deploy ACA for the First Time.

## Upgrade

## Upgrade

Refer to the upgrade information here: Upgrade Asset Criticality Analysis.

## Chapter 7

## Reference

### **Topics:**

- General Reference
- Family Field Descriptions
- Catalog Items

## **General Reference**

### **ACA Data Model**

An Asset Criticality Analysis (ACA) is composed of entity families, relationship families, and business rules. The workspaces in the ACA interface provide you with a custom view of ACA records that exist in the database.

The ACA Data Model uses families to represent the various ACA records and leverages the APM fundamental entity and relationship family infrastructure to store data related to an ACA. The ACA interface is simply a customized view of individual records that make up an ACA.

All ACAs begin with an ACA record. Each ACA record is linked to:

- One or more Human Resource records
- One or more Reference Document records

Each ACA System record is linked to:

- One or more assets
- One or more General Recommendation records

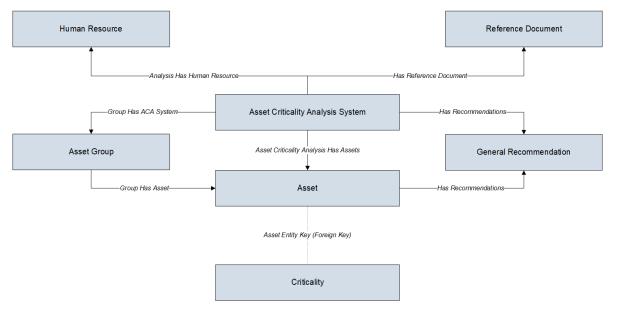
The ACA System family contains Asset Groups that are made up of Equipment and Functional Location records, and they can participate in additional relationships when integrated with modules within the Asset Strategy work process.

#### ACA Data Model

The following diagram illustrates the families that participate in an ACA.

The boxes represent entity families, and the arrows represent relationship families. You can determine the cardinality of a relationship from the direction of the arrow (for example, the arrow points to the successor family).

For example, ACA System records are linked to Risk Assessment records through the Has Risk relationship, where the ACA System family is the predecessor.



#### ACA Data Model Integrated with Asset Strategy

Depending on the licenses that have been activated in your database, you can promote records from ACA to the following modules in the Asset Strategy work process:

- Reliability Centered Maintenance (RCM)
- Failure Modes and Effects Analysis (FMEA)
- Asset Strategy Management (ASM)

Throughout the ACA documentation, we assume that the ASM, RCM, and FMEA modules are active.

The following diagrams illustrate the families that participate in the integration between ACA and RCM, FMEA, and ASM.

#### ACA URLs

There is one URL Route associated with accessing the Asset Criticality Analysis module: **aca**. The following table describes the various paths that build on the route, and the elements that you can specify for each.

**Tip:** For more information, refer to the URLs section of the documentation.

Element	Description	Accepted Value(s)	Notes
aca/overview: Opens the <b>ACA C</b>	<b>Overview</b> page.		
aca/ <entitykey>/<sectionname< td=""><td>e&gt;: Opens a specific Asset Critical</td><td>ity analysis on the <b>Analysis Sum</b>i</td><td>mary page.</td></sectionname<></entitykey>	e>: Opens a specific Asset Critical	ity analysis on the <b>Analysis Sum</b> i	mary page.
<entitykey></entitykey>	Specifies the analysis that you want to view	Any Entity Key that corresponds to an analysis.	NA
		0	Opens a new analysis.
<sectionname></sectionname>	Specifies the section in which you want to open the analysis.	definition	Opens the <b>Analysis</b> <b>Definition</b> section for the specific ACA.
		member	Opens the <b>Team Members</b> section for the specific ACA.

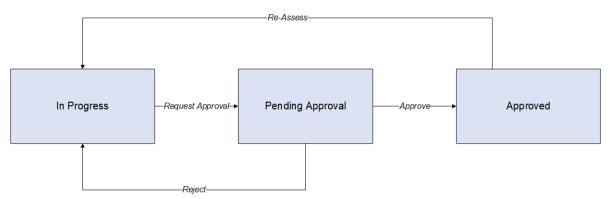
#### **Example URLs**

Example URL	Destination
/aca	The <b>ACA Overview</b> page
aca/ <entitykey>/assessment</entitykey>	The Asset Criticality analysis with the Entity Key 123456.
aca/ <entitykey>/definition</entitykey>	The <b>ACA Definition</b> page for an Asset Criticality Analysis.
aca/ <entitykey>/team-members</entitykey>	The <b>Team Members</b> page for an Asset Criticality Analysis 123456.
aca/@analysisKey/assessment/@assetKey	The Criticality Assessment of a given Asset within an ACA Analysis of a given Asset within an ACA Analysis.

## ACA State Configuration

#### **States and Operations**

The following diagram illustrates the baseline State Configuration workflow that is defined for the ACA family. The boxes represent states, and the arrows represent operations. You can determine the cardinality of an operation from the direction of the arrow (that is, the state to which the arrow points is the successor state).



The following baseline State Configurations and operations exist for the ACA family:

- The Planning state is the initial state of all new ACA records.
- **Datasheet Configuration:** By default, states and operations will appear in the datasheet when you are viewing an ACA record.
- **Reserved States and Operations:** By default, all states and operations displayed in the diagram are reserved. This means that you cannot remove or modify any of these states or operations. You can, however, add your own states and operations to the State Configuration.
- State Configuration Roles: By default, the MI ACA Owner State Configuration Role is assigned to all predecessor and successor states in the ACA State Configuration. You can assign other State Configuration Roles to any state. In addition, for each state, the **Require a specific user to be assigned to a state** check box is selected.

The Approved state is the terminal state of all new ACA records.

- Once an analysis is in the Approved state, all functionalities will be disabled, except:
  - Export
  - Send to Asset Strategy
  - Send to FMEA Analysis
  - Send to RBI Asset View
  - Send to RCM Analysis
  - Send to SAP
  - Send to System Strategy

## **ACA Site Filtering**

Tip: For more information, refer to the Site Filtering section of the documentation.

Site filtering in ACA is achieved by specifying a value in the Site Reference Key for a record. Users must have privileges for the relevant site to access records with a specified site. Users can be assigned to one or many sites. They will be able to view global data, as well as view data for each of the sites to which they are assigned.

Site filtering behavior is applied to all areas where data is handled in ACA including data loaders, asset hierarchy, global search, and queries throughout the ACA module.

In ACA, site filtering affects the following records:

- ACA Record: If an ACA record is assigned to the default site, only by users who have been assigned to the same site can access the record.
- Asset Records: The records are filtered and displayed based on the site value inherited from the user.

**Important:** A Super User can change the site to any of the sites that the user has permission for or choose to make the ACA record as a Global Record, so that all the APM users can see it.

## **Family Field Descriptions**

#### **ACA Records**

The following table provides an alphabetical list and description of the fields that exist in the ACA family. The information in the table reflects the baseline state and behavior of these fields.

This family is enabled for site filtering, which means that records in this family can be assigned to a specific site and will only be accessible to users who are assigned to the same site and have the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

**Note:** Only members of the MI ACA Administrator Security Group can modify the layout of the ACA datasheet.

Field	Data Type	Description	Behavior and Usage
Analysis Description	Character	A description of the ACA.	None
Analysis End Date	Date	The date on which the ACA will end.	None
Analysis ID	Character	The ID for the ACA.	This field is required, and the value must be unique.
Analysis Owner	Character	The name of the team member who is specified as the Process Owner for the ACA.	This field is disabled and populated automatically with the value in the Process Owner field.
Analysis Scope	Text	A description of the ACA that you want to conduct.	None
Analysis Start Date	Date	The date on which the ACA will begin.	None
Analysis Type	Character	N/A	By default, this field does not appear on the ACA datasheet.

Field	Data Type	Description	Behavior and Usage
Facilitator	Character	The name of the team member who is specified as the Facilitator for the ACA.	By default, this field does not appear on the ACA datasheet. This field is populated automatically with the name of the ACA team member specified as the Facilitator in the ACA <b>Team Members</b> section.
Imported By	Character	The user ID of the Security User who created or last updated the analysis from a Microsoft Excel file.	This field is disabled and populated automatically when you create an analysis or update the risk values by importing data from an Excel file.
Import Date	Date	The date on which the analysis was created or last updated from a Microsoft Excel file.	This field is disabled and populated automatically when you create an analysis or update the risk values by importing data from an Excel file.
Import Status	Character	The status of the import process that was last used to create or update the analysis.	<ul> <li>This field is disabled and populated automatically when you create an analysis or update the risk values by importing data from an Excel file.</li> <li><b>Tip:</b> For more information, refer to the Data Loaders section of the documentation.</li> <li>The value will be set to one of the following: <ul> <li>Successful</li> <li>Incomplete</li> <li>Failed</li> <li>Skipped</li> </ul> </li> <li>The status is also displayed in the grid on the <b>ACA Import</b> page.</li> </ul>
Last Modified By	Character	The name of the user who last modified the record.	This field is disabled and populated automatically with the name of the user who was logged in when the record was last modified.
Last Modified Date	Date	The date on which the record was last modified.	This field is disabled and populated automatically.

Field	Data Type	Description	Behavior and Usage
Process Owner	Character	The name of the Process Owner for the ACA.	By default, this field does not appear on the ACA datasheet. It is populated automatically with the name of the ACA team member specified as the Process Owner in the ACA <b>Team Members</b> section. When a user creates a new ACA record, this value defaults to the name of the user who created the record. After a team member has been assigned to the role of Process Owner, this field will be updated automatically with that team member's name.
Visual Attributes	Text	N/A	By default, this field does not appear on the ACA datasheet.

## **Criticality Records**

Criticality records store assessment data to allow future expanded criticality options and assessment features. This topic provides an alphabetical list and description of the fields that exist for the Criticality family. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage
Assessment	Text	Stores a serialized JSON representation of criticality that has been assessed using the Risk Matrix or Criticality Matrix tool.	This is a system field.
Assessment Method	Text	Describes how criticality was assessed.	<ul><li>A system field that contains one of the following values:</li><li>Checklist</li><li>Matrix</li></ul>
Asset Key	Numeric	The Entity Key of the asset.	None
Basis for Assessment	Character	A brief summary of the rationale used to assess criticality.	This field is automatically populated with the value you enter in the Basis for Assessment field.
EAM Criticality	Character	The asset criticality value in SAP.	This field displays the asset criticality value in SAP.
Threshold Key	Numeric	The numeric key indicating the label and color associated with the threshold value.	A numeric key that determines the label and color associated with the Criticality record. It is also a foreign key to the Criticality Threshold family.
Value	Numeric	Stores the canonical criticality value for a given asset.	The value in this field is used as the basis for computing the Criticality Definition threshold.

## **Criticality Checklist Records**

This family is a template for assessing criticality with the Criticality Checklist. This topic provides an alphabetical list and description of the fields that exist for the Criticality family. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage
Basis for Assessment	Text	Provides details about the Criticality Assessment.	This field is automatically populated with the value you enter in the Basis for Assessment field.
Environment Consequence	Character	Assesses the environmental consequence of the Criticality Checklist item.	Populated automatically from the criticality value assessed from the environmental effects of an asset.
Operations Consequence	Character	Assesses the operations consequence of the Criticality Checklist item.	Populated automatically from the criticality value assessed from the operational effects of an asset.
PM Required	Boolean	Indicates whether or not preventive maintenance is required.	If the value in this field is true, then the asset requires preventive maintenance.
Safety Consequence	Character	Assesses the safety consequence of the Criticality Checklist item.	Populated automatically from the criticality value assessed from the safety effects of an asset.

## **Criticality Definition Records**

Criticality Definition records store references to the criticality thresholds and assessment options. It also enables the user to modify assessment methods. This topic provides an alphabetical list and description of the fields that exist for the Criticality Definition family. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage
Checklist Family	Character	The family ID of the Criticality Checklist family used for assessment.	If the <b>Use Checklist</b> check box is selected, then the family indicated in this field will be required.
Default	Boolean	Indicates whether or not this is the default Criticality Definition.	You can specify only one Criticality Definition record as the default. In the Standard Practice Criticality Definition record, the <b>Default</b> check box is cleared. In the Default Criticality Definition record, the <b>Default</b> check box is selected.
Name	Character	The name of the Criticality Definition.	This value is used to identify the record and must be unique. In the baseline Criticality Definition record, the Criticality Definition name is Default.
Use Checklist	Boolean	Indicates whether or not to use the Criticality Checklist Assessment method.	If this check box is selected, then this will be used, and this will be required.

## **Criticality Threshold Records**

Criticality Threshold records store the threshold bands that define a criticality definition. This topic provides an alphabetical list and description of the fields that exist for the Criticality Threshold family. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage
Color	Character	The color of the criticality badge.	None
Description	Character	The description of the criticality value.	None
Value	Numeric	A number that represents the threshold level associated with the criticality value.	This value is the lower limit for a given threshold.

## **Catalog Items**

## **Catalog Folder Structure**

The ACA Catalog folders contain dashboards, queries, graphs, and reports that appear throughout the ACA module and display information contained in the records that make up ACAs. The Catalog folder  $\setminus$ 

\Public\Meridium\Modules\Asset Criticality Analysis contains the following subfolders:

- Dashboards: Contains the dashboard ACA Overview.
- Graphs: Contains the graph Asset Criticality Analysis Unmitigated Risk Graph and one subfolder, Subgraphs, which contains the supporting graphs for the ACA Unmitigated Risk Graph.
- Queries: Contains queries that are used by ACA to display information such as the list of existing ACA records and to support the reports stored in the folder \\Public\Meridium\Modules\Asset Criticality Analysis\Reports.
- Reports: Contains the report Asset Criticality Analysis Report and one subfolder, Subreports, which contains the supporting subreports for the ACA Report.

The topics in this section of the Help system describe the content of each Catalog folder in this list. You should not modify the names of these Catalog folders or the names of the items that exist in these folders or move the items to another Catalog folder.

#### **Dashboards Folder**

The dashboard listed in the following table is provided in the Catalog folder \\Public\Meridium \Modules\Asset Criticality Analysis\Dashboards. In the following table, the value listed in the Dashboard column refers to the dashboard name.

Dashboard	Behavior and Usage
ACA Overview	Displays the <b>ACA Overview</b> page, which features graphs representing the ACAs according to their state and the Asset Criticality Distribution, as well as links to the individual ACAs.

## **Graphs Folder**

The graph listed in the following table is provided in the Catalog folder \\Public\Meridium \Modules\Asset Criticality Analysis\Graphs. In the following table, the value listed in the Graph column refers to the graph name.

Graph	Behavior and Usage
ACA Analyses by State	Displayed on the <b>ACA Overview</b> page.
Asset Criticality Distribution	Displayed on the <b>ACA Overview</b> page.

The Subgraphs folder is a level below the Graphs folder in the Catalog folder \\Public\Meridium \Modules\Asset Criticality Analysis\Subgraphs. The following table gives the names of the subgraphs as well as their use.

Subgraph	Behavior and Usage
ACA Equipment Lists	Supports Asset Criticality Analysis Unmitigated Risk Graph.
ACA Location Equipment Unmitigated Risk	Supports Asset Criticality Analysis Unmitigated Risk Graph.

Important: Graphs that you are unable to view in APM are viewable in the Catalog folder.

## **Queries Folder**

The queries listed in the following table are provided in the Catalog folder \\Public\Meridium \Modules\Asset Criticality Analysis\Queries. In this table, the values listed in the Query column refer to the query names. The baseline captions are the same as the names.

Query	Behavior and Usage
ACA	After displaying a prompt for an Entity Key, returns the Asset Criticality Analysis record with the specified Entity Key. This query supports the report Asset Criticality Analysis Report, which is stored in the Reports folder.
ACA All Assets	After displaying a prompt for an Entity Key, returns the assets that are defined in the specified Asset Hierarchy. The results of this query appear when you access the <b>Assets</b> section in the <b>Asset Criticality Overview</b> page.
ACA Analysis Assets	After displaying a prompt for an analysis key, displays a list of assets in the analysis.
ACA Analysis Criticality	After displaying a prompt for a criticality value, returns the assessed criticality value linked to the Asset Criticality Analysis record. The results of this query appear when a Risk Assessment has completed.
ACA Recommendations	After displaying a prompt for an Entity Key, returns the General Recommendation records that are linked to the Asset Criticality Analysis record with the specified Entity Key. The results of this query appear when you select the <b>ACA Recommendations</b> page.
ACA Reference Document Query	After displaying a prompt for an Entity Key, returns the Reference Document records that are linked to the Asset Criticality Analysis record with the specified Entity Key. This query supports the report Asset Criticality Analysis Report that is stored in the Reports folder.
ACA Search	After displaying a prompt for a state value, returns the Asset Criticality Analysis records that are set to the specified state. The results of this query appear when you access the <b>ACA</b> <b>Search</b> page.

Query	Behavior and Usage
ACA System Search	Displaying a prompt for an Analysis Key and ID, where the Analysis Key is the Analysis Key for an Asset Criticality Analysis record and ID is the System ID of an Asset Criticality Analysis System record. The query returns the Asset Criticality Analysis System record with the specified ID that is linked to the Asset Criticality Analysis record with the specified Analysis Key. The results of this query appear when you access the <b>ACA System</b> page.
ACA Team Member Query	After displaying a prompt for an Entity Key, returns the Human Resource records that are linked to the Asset Criticality Analysis record with the specified Entity Key. This query supports the report Asset Criticality Analysis Report stored in the Reports folder.

### **Reports Folder**

The report listed in the following table is provided in the Catalog folder \\Public\Meridium \Modules\Asset Criticality Analysis\Reports. In this table, the values listed in the Report column refer to the report name. The baseline caption is the same as the name.

Report	Behavior and Usage
ACA Report	After displaying a prompt for an Entity Key, displays a summary of the information related to the Asset Criticality Analysis record with the specified Entity Key.

The reports listed in the following table are provided in the Catalog folder \\Public\Meridium \Modules\Asset Criticality Analysis\Reports\Subreports. In this table, the values listed in the Report column refer to the report names. The baseline captions are the same as the names.

Report	Behavior and Usage
ACA Reference Documents Report	After displaying a prompt for an Entity Key, displays the Reference Document records that are linked to the Asset Criticality Analysis record with the specified Entity Key.
ACA System Lists Report	After displaying a prompt for an Entity Key, displays the Asset Criticality Analysis System records that are linked to the Asset Criticality Analysis record with the specified Entity Key.
ACA Team Members Report	After displaying a prompt for an Entity Key, displays the list of team members whose Human Resource record is linked to the Asset Criticality Analysis record with the specified Entity Key.