



GE VERNOVA

**Asset Performance Management**  
**On-Premises APM**  
**V5.2.2.0.0**

**Management of Change**

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# Chapter 1

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## Overview

### Topics:

- [Overview of the Management of Change \(MoC\) Module](#)
- [Access the MoC Overview Page](#)
- [MoC Workflow](#)

# Overview of the Management of Change (MoC) Module

Any organization in today's business environment must be ready to undergo changes almost constantly to have a competitive advantage. A change, when implemented after careful planning and impact analysis, can lead to improved business and safety performance.

Change Management is used extensively in industries to ensure that when changes are implemented, a thorough risk assessment has been done and all aspects of the change have been considered prior to implementation of the change.


## More Details

The APM Management of Change (MOC) module follows a systematic approach to delivering a change, taking into consideration all aspects of operations which will or could be impacted because of the change. Using MOC, changes are undertaken as Change Projects. In the Change Project, changes are formally introduced, approved, and implemented as tasks. The Management of Change module provides a flexible solution for creating and managing change projects, communicating changes to team members, and enforcing an approval system to provide accountability for the change. With MOC, you are able to comply with change management requirements by relating records from other APM entities to ensure that all impacted areas of the organization are recorded as changed elements in the Change Project. This in turn provides your organization with a greater degree of auditability, which is essential in industries that require Management of Change as a regulatory compliance requirement.

## Access the MoC Overview Page

### Procedure

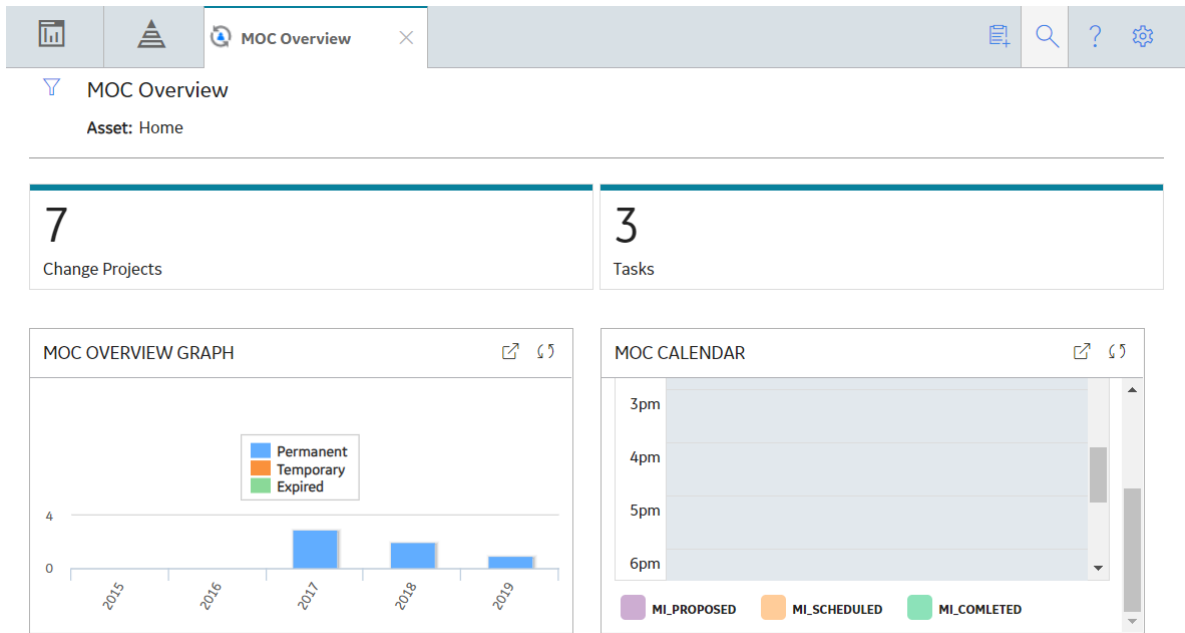
In the **Applications** menu, navigate to the **SAFETY** section, and then select **Management of Change**.

The **MOC Overview** page appears. By default, on the **MOC Overview** page, the hierarchy level is set to Home and the information (i.e., the list of records, the graph, and the calendar) related to all Hierarchy Levels, including Change Projects and tasks that are not associated with any asset, appears. You can filter the information that appears on the page, based on a specific asset by selecting  in the upper-left corner of the page. When you select an asset, the information related to the selected asset and all assets within the hierarchy level appears.

The following tabs appear on the page:


- **Change Projects:** Contains a list of Change Projects. The following columns of information appear in the section:
  - **Project ID:** Contains the value from the Change Project ID field of the Change Project. You can select the link in the **Project ID** column to access the Change Project.
  - **Description:** Contains the value that you entered in Description field to describe the Change Project.
  - **State:** Contains the current state of the Change Project.
  - **Project Type:** Contains the value that you entered in Change Type field to identify the type of Change Project.

- **Tasks:** Contains a list of tasks. The following columns of information appear in the section:
  - **Task ID:** Contains the value that identifies the task. You can select the link in the **Task ID** column to access the task in the Record Explorer.
  - **Description:** Contains the value that you entered in the Task Description field to describe the task.
  - **State:** Contains the current state of the Operations Task record.
  - **Assigned To:** Contains the value in the Task Assigned To field of the Operations Task record.
  - **Next Date:** Contains the value in the Next Date field of the Operations Task record.








The following graphs appear on the page:

- **MOC Overview Graph:** Contains a bar graph that displays the number of Change Projects in the selected hierarchy level, for the last five years including the current year. The x-axis represents years. The y-axis represents the number of Change Projects in each of the following categories:
  - Permanent: Represents the number of permanent Change Projects.
  - Temporary: Represents the number of temporary Change Projects whose Change Valid Until values are greater than the current date.
  - Expired: Represents the number of temporary Change Projects whose Change Valid Until values are lesser than the current date and the state of the project is not Finalized.

On the graph, you can pause on a section of the bar to view the number of projects for a specific change type in the specific year. In the upper-right corner of the graph, you can select  to modify the appearance of the graph using standard graph features.

- **MOC Calendar:** Contains a calendar that displays the tasks available for the selected hierarchy. The color of the horizontal bars representing the task on the calendar indicates the state of the task. The tasks are organized on the calendar based on the value in the Next Date field in the Operations Task records.

The following features are available in the calendar:

- You can select the horizontal bar for a task to access it in the Record Explorer.
- Next to the date, you can select  or  to view the schedule for other dates on the calendar. In the upper-right corner of the calendar, you can select the **Today** button to navigate to the current date.
- Below the calendar, the list of states assigned to the tasks and the color code used for the corresponding states appear. You can select the state to view the tasks that are in the selected state for the specified date.
- In the upper-right corner of the calendar, you can select  to view the calendar on a new page and access the following features:
  - In the upper-right corner of the page, you can select one of following buttons:
    - **Month:** The calendar for the current month appears, displaying tasks that are due for each day in the current month.
    - **Week:** The calendar for the current week appears, displaying tasks that are due for each day in the current week.
    - **Day:** The calendar for the current date appears, displaying tasks due for the day. By default, this option is selected.
  - In the left pane, the calendar for the current month appears. Above the calendar in the left pane, next to the month, you can select  or  to view the schedule for other months on the calendar.

## MoC Workflow

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

1. [Create a Change Project](#), which stores the details of the change that you want to manage, including the type of change.
2. [Create the Change Project team](#) that will manage the project.
3. [Add the Checklists](#) that can identify potential areas of impact of the changes.
4. [Respond to Questions](#) in each Checklist. Based on your response to the Questions, Exceptions are automatically created.
5. [Manage the Exceptions](#).
6. [Create tasks for Exceptions](#) and assign each task to a user.
7. As needed, [create recommendations](#) for Exceptions.
8. Use [state management for tasks](#) to record the progress of tasks.
9. Analyze [the Change Project Summary](#) to verify the percentage of Exceptions that are closed and the percentage of tasks that are in the Completed state.
10. Use [state management in Change Projects](#) to finalize the project.



# Chapter 2

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## Workflows

### Topics:

- [MOC Administration](#)
- [MOC Change Project](#)

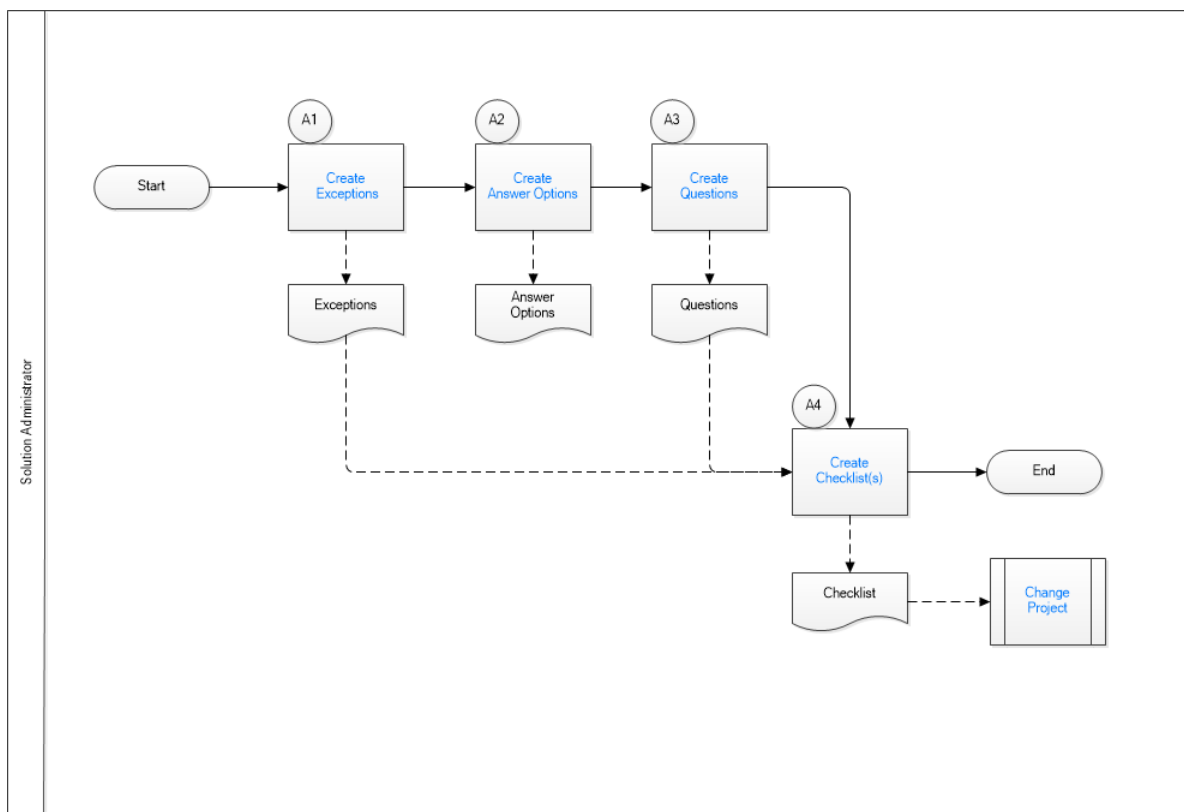
# MOC Administration

## Management of Change: MoC Administration

This workflow describes the process for creating Exceptions, Answer Options, Questions, and Checklists that can be used in a Change Project.

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.



1. [Create Exceptions](#) on page 6
2. [Create Answer Options](#) on page 7
3. [Create Questions](#) on page 7
4. [Create Checklists](#) on page 7
5. [Change Project](#) on page 7

## Create Exceptions

Persona: Solution Administrator

Create the Exceptions that represent the action items that will be created automatically when you select Answer Options in a Checklist in a Change Project.

## Create Answer Options

Persona: Solution Administrator

Create additional Answer Options that you want to use when you create Questions.

## Create Questions

Persona: Solution Administrator

Create the Questions that you can want to associate with Checklists. You must associate each Question with a minimum of two Answer Options. As needed, you can associate an Answer Option with an Exception.

## Create Checklists

Persona: Solution Administrator

Create Checklists by adding Questions as Checklist Items to each Checklist.

## Change Project

Persona: Analyst

Go to the [Change Project workflow](#).

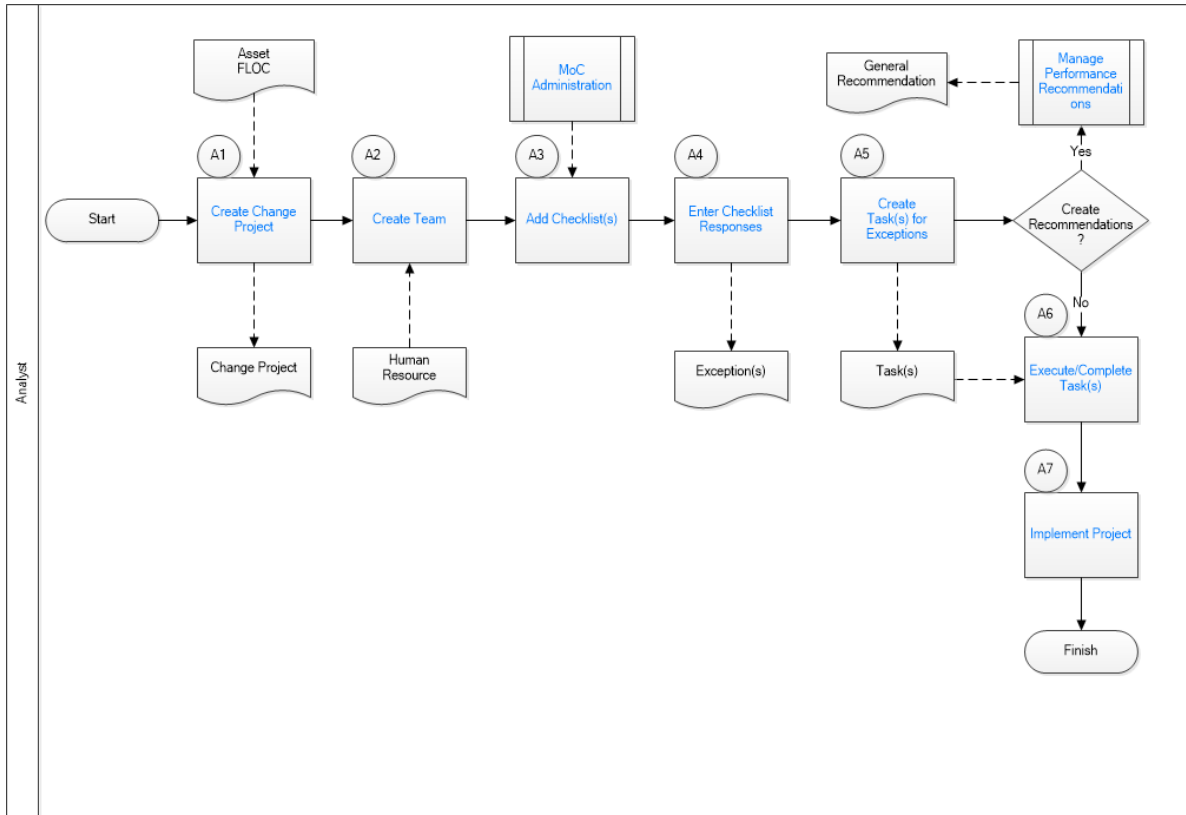
## MOC Change Project

### Management of Change: MoC Change Project

This workflow describes the process for creating Change Projects, adding Checklists, creating and managing Exceptions and Tasks, executing Tasks, and implementing the project.

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.



1. [Create Change Project](#) on page 8
2. [Create Team](#) on page 8
3. [Add Checklists](#) on page 9
4. [Enter Checklist Responses](#) on page 9
5. [Create Tasks for Exceptions](#) on page 9
6. [Manage Performance Recommendations](#) on page 9
7. [Execute or Complete Tasks](#) on page 9
8. [Implement Project](#) on page 9
9. [MoC Administration](#) on page 8

## Create Change Project

Persona: Analyst

Create a Change Project to store the details of the Change Project, such as the change type, duration, purpose, scope, and the owner of the project. If the project is a temporary project, you must specify the date until which the change is valid.

## Create Team

Persona: Analyst

Create a multi-disciplinary team that will perform various tasks in the Change Project.

## MoC Administration

Persona: Solution Administrator

Go to the [MoC Administration workflow](#).

## **Add Checklists**

Persona: Analyst

Based on the type of project and the project scope, add one or more Checklists to the Change Project. You can select from the Checklists that you created in the MoC Administration workflow. Copies of the selected Checklists are created and associated with the Change Project.

## **Enter Checklist Responses**

Persona: Analyst

For each Checklist that you added to the Change Project, respond to the Questions in the Checklist. If the Answer Option that you selected is configured to create an Exception, an Exception is automatically created and associated with the Change Project.

## **Create Tasks for Exceptions**

Persona: Analyst

For each Exception created for the Change Project, create one or more Tasks.

## **Manage Performance Recommendations**

Persona: Analyst

As needed, create General Recommendations for Exceptions to provide additional suggestions for effectively managing the change.

Go to the Action Management: Manage Recommended Actions Workflow.

## **Implement Project**

Persona: Analyst

Analyze the summary of the Change Project to verify the percentage of Exceptions that are closed and the percentage of Tasks that are in the Completed state. When all Exceptions are closed, use state management to finalize the project.

## **Execute or Complete Tasks**

Persona: Analyst

Record the progress of Tasks using the state management. For all completed Tasks, change the state of the Task to Complete. When all Tasks associated with an Exception are completed, modify the status of the Exception to Complete.

# Chapter 3

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## Change Projects

### Topics:

- [About Change Projects](#)
- [Access the Project Summary Workspace](#)
- [Access a Change Project](#)
- [Access the Team Members Section](#)
- [Access the Reference Documents Section](#)
- [Access a Recommended Actions Pane](#)
- [Create a Change Project](#)
- [Create a Recommendation](#)
- [Change the State of a Change Project](#)
- [Access a List of Assets associated with a Change Project](#)
- [Link an Asset with a Change Project](#)
- [Unlink an Asset from the Change Project](#)
- [Delete a Change Project](#)

## About Change Projects

Change Projects organize the proposed changes in an organization as a set of interrelated tasks that must be performed over a fixed period with [necessary approvals](#). This ensures that the change process is initiated, implemented, and delivered effectively to all stakeholders.

A Change Project in MOC stores all the details about a change. When you create a Change Project in MOC, you must provide details about the change. This includes details such as the scope of the project, the purpose of the project, the asset(s) that will be impacted by the change, and the type of change that is being implemented. You can also add team members who will approve and manage tasks proposed in the Change Project. You can associate related files as Reference Documents. A reference document can be any document that is relevant to implementing the change (e.g., a drawing or an equipment detail document).

After you define the Change Project, you can associate the Change Project to the following records:

- [Checklists](#)
- [Exceptions](#)

### Change Type

Change project types are used to describe the type of change which is being undertaken. In MOC, a Change Project can be of one of the following four types:

- **Temporary:** Indicates that the change is planned for a limited duration.
- **Permanent:** Indicates that the change is a major change that will remain unchanged for a longer duration.
- **Minor Instrument Change:** Indicates that the change includes minor modification to the process or equipment and does not significantly affect the workflow in the organization.
- **Personnel:** Indicates a change in the organizational structure, change in number of employees, change in the contractor for a site, or development of a new role in the organization.

**Note:** The change types described in the above list are available in APM by default. As needed, you can add or remove change types by modifying the MI\_Change\_Project\_Type System Code Table.

Based on the type of change, you can configure Checklists and use them to drive the efforts towards the implementation of change.

## Access the Project Summary Workspace

### Procedure

1. [Access the MOC Overview page](#).
2. Select the **Change Projects** tab.

A list of all Change Projects that belong to the site for which you have access appears.

The screenshot shows the 'MOC Overview' interface. At the top, there is a navigation bar with a 'MOC Overview' tab and a search icon. Below the navigation bar, the page title is 'MOC Overview' and the asset is 'Home'. The main content area is divided into two sections: 'Change Projects' and 'Tasks'. The 'Change Projects' section shows a count of 7 projects and a table with the following data:

PROJECT ID	DESCRIPTION	STATE	PROJECT TYPE
<a href="#">2017-0001</a>	Update Proof Test Frequency	New	Permanent
<a href="#">AX34</a>		New	
<a href="#">DEF Test</a>		New	Permanent
<a href="#">E0012A-097 MOC for Operating Pressure</a>		New	Temporary
<a href="#">Engineering metallurgical upgrade</a>	Metallurgical Assessment to improve resista...	New	Permanent
<a href="#">Heat Exchanger Metallurgical upgrade</a>	Upgrade HE S&T from CS to SS	New	Permanent
<a href="#">Redesign pump 101</a>		New	Permanent

3. In the **Project ID** column, select the link for the Change Project for which you want to view the summary.



The **Project Summary** workspace appears, displaying the **Summary** section.

Project Summary

2017-0001  
Modified by 3070...

New  
Not Assigned

Definition **Summary** 1 Linked Assets 2 Team Members 0 Reference Documents

Project ID : 2017-0001 No Of Assets : 1  
 Project Type : Permanent Site Name : Alexanderson Energy  
 Project Status : New Task Next Date : Tuesday, September 26, 2017  
 No Of Reference Documents : 0 Task End Date : Tuesday, September 26, 2017

3 Exceptions 1 Tasks

Exception Summary Graph  
 Not Started

Task Summary Graph  
 MLCOMPLETED

The following tabs appear in the workspace:

- **Definition:** Contains the datasheet for the selected Change Project.
- **Summary:** Contains a summary of the Exceptions and Tasks associated with the Change Project. This tab is selected by default. The following information appears in this section:
  - Project ID: Contains the value in the Change Project ID field of the Change Project.
  - Project Type: Contains the value in the Change Type field of the Change Project.
  - Project Status: Contains the current state of the Change Project.
  - No Of Reference Documents: Contains a value indicating the number of reference documents associated with the Change Project.
  - Number Of Assets: Contains a value indicating the number of assets associated with the Change Project.
  - Site Name: Contains a value indicating the Site to which the Change Project belongs.
  - Task Next Date: Contains the date that represents the earliest of all the dates in the Next Date field among all the Tasks associated with the Exceptions of the Change Project.


- **Task End Date:** Contains the date that represents the latest of all the dates in the Last Date field among all the Tasks associated with the Exceptions of the Change Project.
- **Exceptions:** Contains a value indicating the total number of Exceptions associated with the Change Project.
- **Tasks:** Contains a value indicating the total number of Tasks associated with the Exceptions in the Change Project.
- **Exception Summary Graph:** Contains a doughnut graph that shows the percentages of Exceptions in each of the following statuses:
  - Not Started
  - In Progress
  - Complete

You can pause on or select each section of the graph to view the number of Exceptions in each status.

- **Task Summary Graph:** Contains a doughnut graph that shows the percentages of tasks in [each state defined for the Operations Task family](#):  
You can pause on or select each section of the graph to view the number of tasks in each state.
- **Linked Assets:** Contains a list of Assets that are associated with the Change Project.
- **Team Members:** Contains a list of team members who are associated with the Change Project.
- **Reference Documents:** Contains a list of Reference Documents that are associated with the Change Project.

The following tabs appear in the left pane:

- **Checklists:** Contains the list of Checklists that are associated with the Change Project.
- **Exceptions and Tasks:** Contains the list of Exceptions created for the Change Project and the list of Tasks associated with each Exception.
- **Changed Elements:** Contains the list of records with which the Change Project is associated.

**Note:** In the upper-right corner of the workspace, you can select 

## Access a Change Project

### Procedure

1. [Access the MOC Overview page](#).
2. Select the **Change Projects** tab.

A list of all Change Projects available in the database appears. The following columns of information appear in the section:

- **Project ID:** Contains the value from the Change Project ID field of the Change Project.
- **Description:** Contains the value that you entered in Description field to describe the Change Project.
- **State:** Contains the current state of the Change Project.
- **Project Type:** Contains the value that you entered in Change Type field to identify the type of Change Project.

MOC Overview

Asset: Home

7

Change Projects

+

PROJECT ID	DESCRIPTION	STATE	PROJECT TYPE
<a href="#">2017-0001</a>	Update Proof Test Frequency	New	Permanent
<a href="#">AX34</a>		New	
<a href="#">DEF Test</a>		New	Permanent
<a href="#">E0012A-097 MOC for Operating Pressure</a>		New	Temporary
<a href="#">Engineering metallurgical upgrade</a>	Metallurgical Assessment to improve resista...	New	Permanent
<a href="#">Heat Exchanger Metallurgical upgrade</a>	Upgrade HE S&T from CS to SS	New	Permanent
<a href="#">Redesign pump 101</a>		New	Permanent

3

Tasks


3. In the **Project ID** column, select the link for the Change Project that you want to access.

The **Project Summary** workspace of the Change Project appears.

The screenshot displays the Project Summary workspace for project 2017-0001. The interface includes a navigation menu on the left with options like Checklist, Exceptions and Tasks, and Changed Elements. The main content area shows project details under the 'Summary' tab, including Project ID, Project Type, Project Status, and No Of Reference Documents. Below this, there are sections for '3 Exceptions' and '1 Tasks', each with a corresponding donut chart. The 'Exception Summary Graph' shows 100% 'Not Started' (green). The 'Task Summary Graph' shows 100% 'MLCOMPLETED' (green).

4. Select the **Definition** tab.

The **Definition** section appears, displaying the details of the Change Project.

**Note:** As needed, in the **Definition** section, you can modify values in the [available fields](#), and then select  to save your changes.

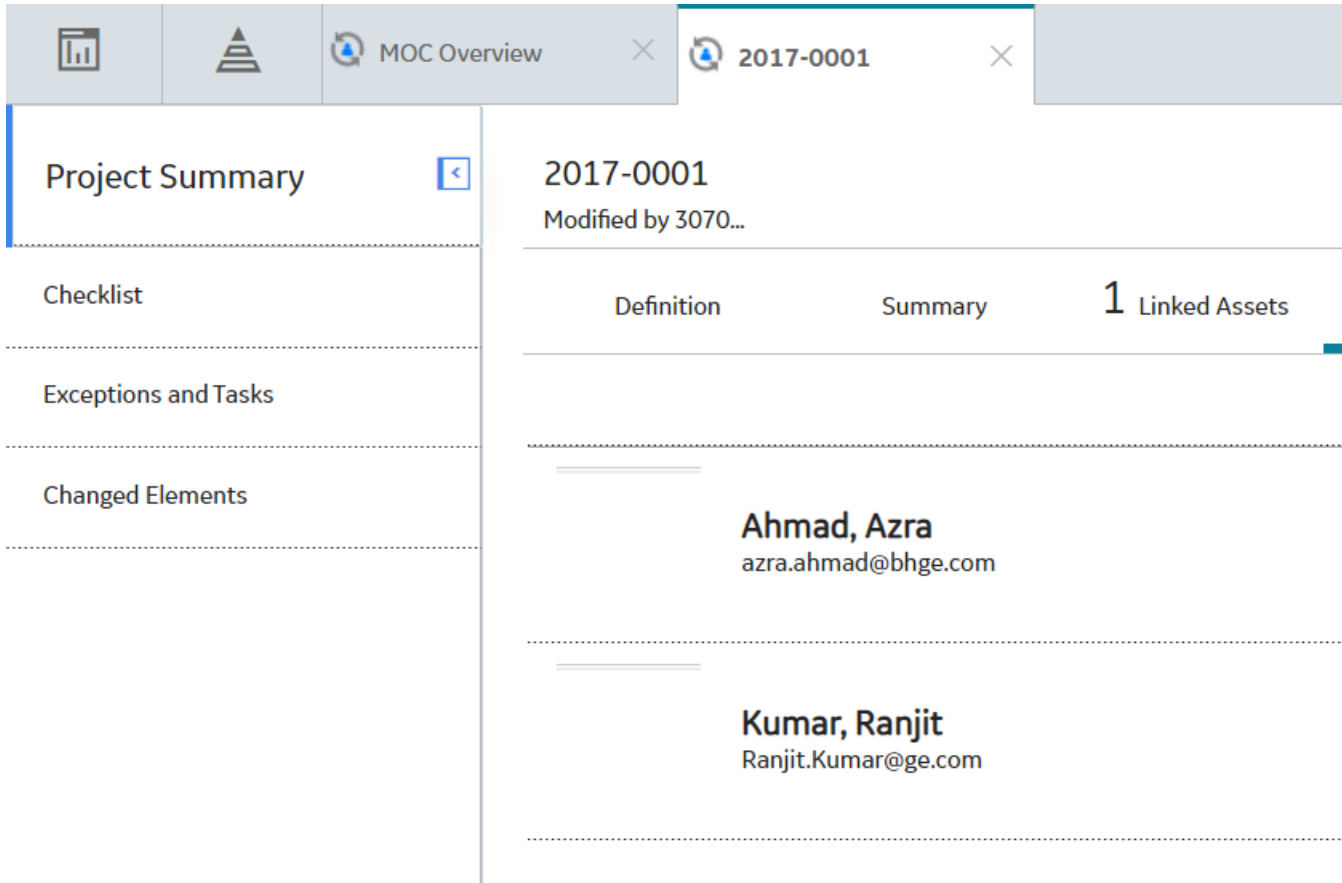
The screenshot displays a software interface for managing a project. On the left is a sidebar with a 'Project Summary' section and three sub-sections: 'Checklist', 'Exceptions and Tasks', and 'Changed Elements'. The main area is titled 'Engineer...pgrade' and shows a 'Definition' tab selected. Below the tabs, there are several input fields and dropdown menus for defining the project: 'Change Project ID' (Engineering metallurgical upgrade), 'Description' (Metallurgical Assessment to improve resistan), 'Change Type' (Permanent), 'Scope' (CS Material Replacement for current Vessel b), 'Owner' (Client), 'Purpose' (Extend Asset Remaining Life), 'Change Duration' (Permanent), 'Change Valid Until', and 'Start Date' (3/5/2019 11:41:18 PM). The interface also includes a top navigation bar with icons for home, search, and settings, and a right-hand navigation pane with a 'New' button and 'Not Assigned' status.

## Access the Team Members Section

### Procedure

1. [Access the Change Project](#) whose Team Members you want to access.
2. Select the **Team Members** tab.  
The **Team Members** section appears, displaying a list of Team Members in the Change Project.

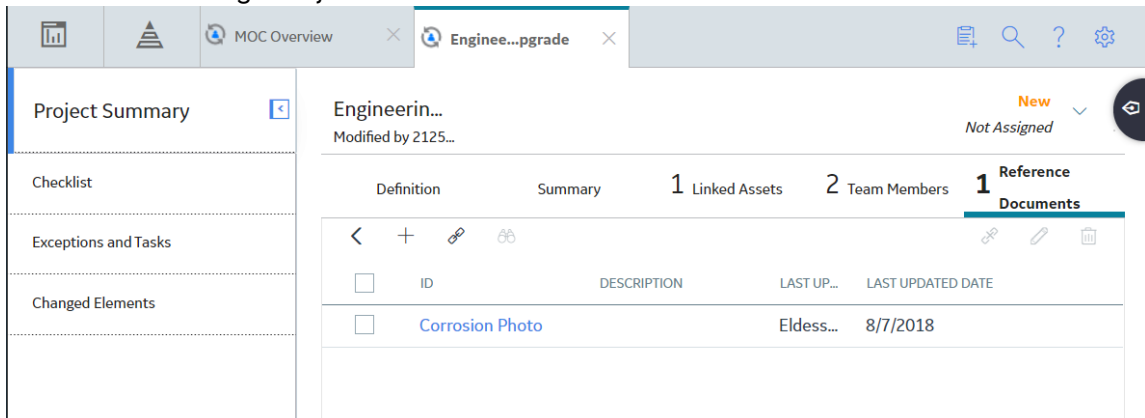
**Tip:** For details about working with teams and the **Team Members** section, refer to the Teams section of the documentation.



## Access the Reference Documents Section

### Procedure

1. [Access the Change Project](#) whose Reference Documents you want to access.
2. Select the **Reference Documents** tab.  
The **Reference Documents** section appears, displaying a list of Reference Documents linked to the Change Project.



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

## Access a Recommended Actions Pane

### About This Task

The recommendations that appear on the **Recommended Actions** pane are filtered based on your selection.

- If you access the **Recommended Actions** pane via the **Project Summary** workspace, the list of recommendations linked to all the Exceptions in the Change Project appears.
- If you access the **Recommended Actions** pane by selecting an Exception in the Change Project, the list of recommendations linked with the selected Exception appears.


**Note:** You can modify a recommendation only if you access the recommendation by selecting the Exception with which it is linked. You cannot create or modify a recommendation from [the Project Summary workspace of a Change Project](#).

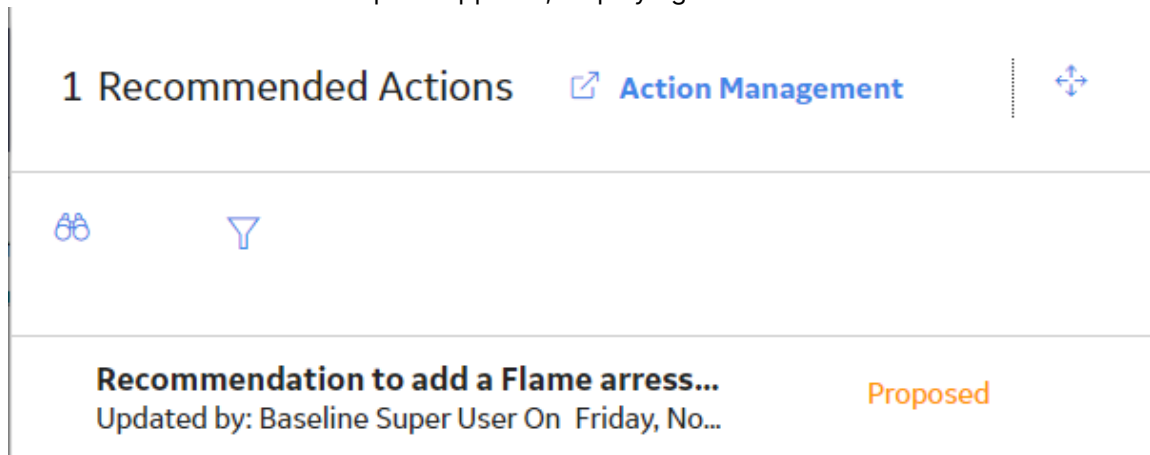
### Procedure

1. Access the [Project Summary workspace for the Change Project](#) whose recommendations you want to view.

-or-

[Access the Exception](#) whose recommendation you want to view.

2. In the upper-right corner of the page, select .  
The **Recommended Actions** pane appears, displaying a list of recommendations.



3. In the list, select the recommendation whose details you want to view.


The datasheet for the selected recommendation appears.

[←](#) Recommendation to add a Flame arresstor ... [+](#)

---

**Identification**      Linked Recommended Actions


---



---

Recommendation

Datasheet ID:

General Recommender [v](#)       **Site:**  
Roanoke, VA

---

**General Information**      Alert

---


**Recommendation ID**

REC-13416


**Recommendation Headline**

Recommendation to add a Flame arresstor

**Target Completion Date**

11/13/2019 15:44:46 

**Recommendation Description**

Text area 

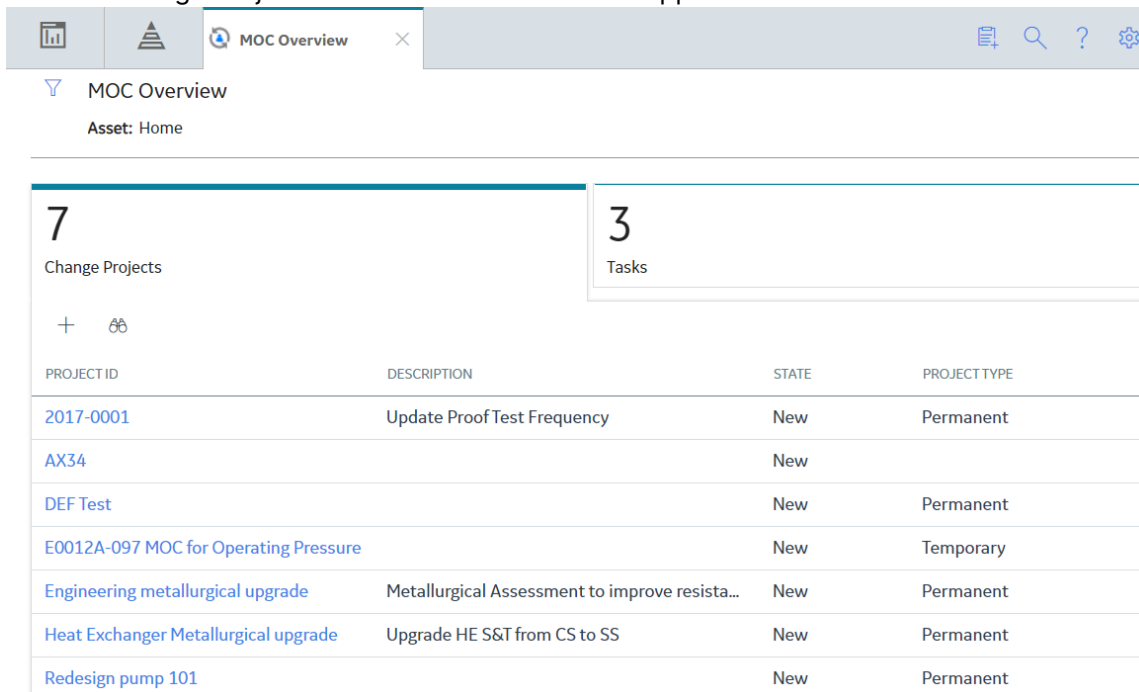
**Tip:** For information about additional options available when working with recommendation records, refer to the Recommended Actions section of the documentation.



# Create a Change Project

## Procedure

1. Access the [MOC Overview](#) page.
2. Select the **Change Projects** tab.  
A list of Change Projects available in the database appears.




The screenshot shows the MOC Overview page. At the top, there is a navigation bar with a tab labeled "MOC Overview" and a close button. Below the navigation bar, the page title "MOC Overview" and "Asset: Home" are displayed. The main content area is divided into two sections: "Change Projects" on the left and "Tasks" on the right. The "Change Projects" section has a large number "7" and a plus sign icon. Below this is a table with the following data:

PROJECT ID	DESCRIPTION	STATE	PROJECT TYPE
<a href="#">2017-0001</a>	Update Proof Test Frequency	New	Permanent
<a href="#">AX34</a>		New	
<a href="#">DEF Test</a>		New	Permanent
<a href="#">E0012A-097 MOC for Operating Pressure</a>		New	Temporary
<a href="#">Engineering metallurgical upgrade</a>	Metallurgical Assessment to improve resista...	New	Permanent
<a href="#">Heat Exchanger Metallurgical upgrade</a>	Upgrade HE S&T from CS to SS	New	Permanent
<a href="#">Redesign pump 101</a>		New	Permanent

3. In the upper-left corner of the **Change Projects** section, select **+**.

The **Project Summary** workspace appears, displaying a blank datasheet for the Change Project.

The screenshot shows a web application interface with a browser window titled 'New Cha...rojects'. The main content area is titled 'New Ch...' and contains a 'Definition' section. At the top of this section, there are tabs for 'Definition', 'Summary', '0 Linked Assets', '0 Team Members', and '0 Reference Documents'. Below the tabs, the 'Datasheet ID' is set to 'MI MOC Change Project'. The 'Definition' section includes several input fields: 'Change Project ID' (text input, highlighted with a red border and a red error message 'This field is required'), 'Description' (text input), 'Change Type' (dropdown menu), 'Scope' (text input), 'Owner' (text input), 'Purpose' (text input), 'Change Duration' (dropdown menu), 'Change Valid Until' (calendar icon), and 'Start Date' (calendar icon showing '11/8/2019 9:57:34 AM'). On the left side, there is a sidebar with a 'Project Summary' tab and a list of items: 'Checklist', 'Exceptions and Tasks', and 'Changed Elements'. The top of the browser window shows several tabs: 'Heat Ex...upgrade', 'Redesig...ump 101', and 'New Cha...rojects'. The right side of the browser window has a search bar and a settings icon.


4. As needed, enter values in the [available fields](#).
5. In the upper-right corner of the section, select . The Change Project is created.

### Next Steps

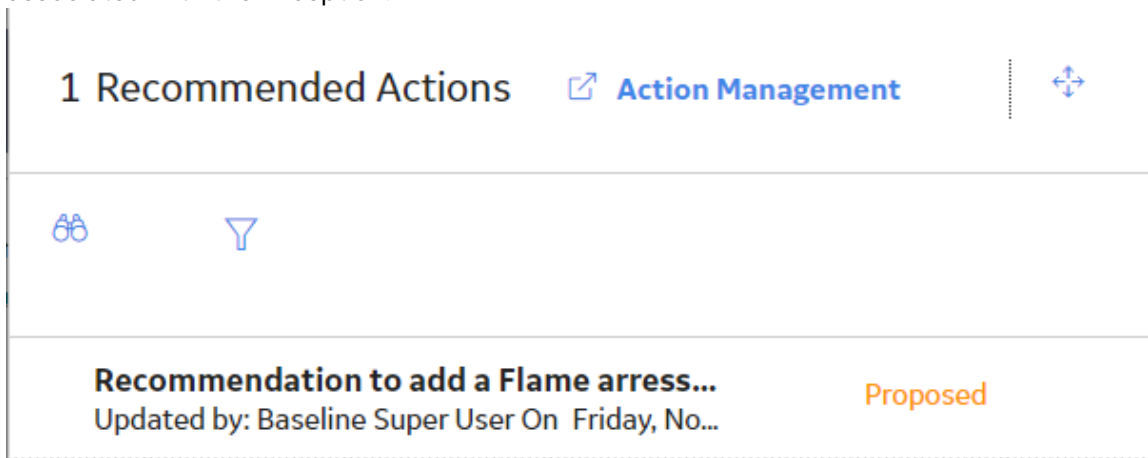
- [Add Team Members to the Change Project](#).


## Create a Recommendation

### Procedure


1. [Access the Exception](#) for which you want to create a recommendation.
2. In the upper-right corner of the page, select .

The **Recommended Actions** pane appears, displaying a list of recommendations associated with the Exception.



3. In the upper-left corner of the pane, select  .


A blank datasheet for Recommendation appears.




< New Recommendation: Draft 

**Identification** Linked Recommended Actions

Recommendation


Datasheet ID:

General Recommender 

 **Site:**  
Roanoke, VA  

General Information	Alert
<b>Recommendation ID</b>	
REC-13421	
<b>Recommendation Headline</b>	
<input type="text" value="Text input"/>	
<small>This field is required</small>	
<b>Target Completion Date</b>	
<input type="text"/>	
<small>This field is required</small>	

4. As needed, enter values in the [available fields](#).

5. Select .  
The recommendation is created.

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

## Results

- A General Recommendation record is created and linked with the Exception.

## Change the State of a Change Project

### About This Task

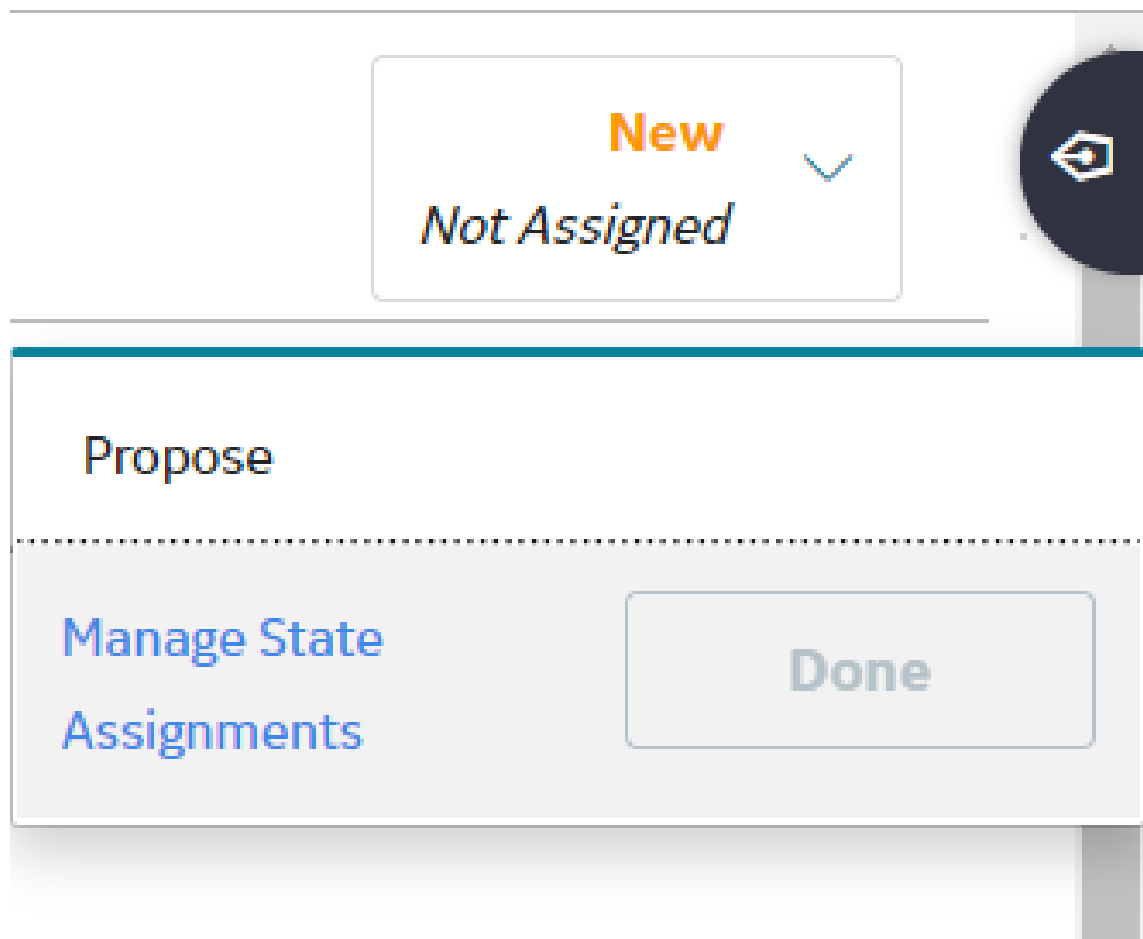
This topic describes how to change the state of a Change Project, while assigning the state of the project to the appropriate user.

**Important:** You can modify the state for a Change Project only if you are an administrator or a user who belongs to [the State Configuration Role configured for that state](#).

### Procedure

1. [Access the Change Project](#) for which you want to change the state.
2. In the upper-right corner of the workspace, select the button that indicates the current state of the Change Project. For example, if the current state of the Change Project is Proposed, select **Proposed**.

A menu appears, displaying the operation that you can perform to change the state of the project.



3. Select the [necessary operation](#) that will change the state of the project, and then select **Done**. For example, if you want to change the state of the project from Proposed to Approved, select **Approve**, and then select **Done**.

**Note:** You can view the states assigned to various users by selecting the **Manage State Assignments** link. If not already done, you can assign the next state of the Change Project to the appropriate user, and then select **Done**.

The state of the Change Project is changed.

## Access a List of Assets associated with a Change Project

### Procedure

1. [Access the Change Project](#) for which you want to view the associated assets.
2. Select the **Linked Assets** tab.
 

The **Linked Assets** section appears, displaying the following columns of information for the list of assets associated with the Change Project.

  - **Asset ID:** Contains a link which you can select to view the details of the Asset in the Record Manager. Based on the type of asset, the link to the Asset appears in the following format:
    - **Functional Location:** <Functional Location> ~ <Description>
    - **Equipment:** <Equipment Technical Number> ~ <Description> ~ <Equipment ID>
  - **Asset Type:** Contains the value in the Description field of the Asset.
  - **Functional Location:** Contains the value in the Functional Location field of the Equipment. This column is blank if the asset is a Functional Location.

The screenshot shows a web application interface. On the left is a sidebar with a tree view containing 'Project Summary', 'Checklist', 'Exceptions and Tasks', and 'Changed Elements'. The main area is titled 'Engineerin...' and 'Modified by 2125...'. It features a navigation bar with '1 Linked Assets', '2 Team Members', and '1 Reference Documents'. Below this is a table with the following structure:

ASSET ID	ASSET TYPE	FUN
U1-PWR-TURB-1001 ~ 000000000453156808 ~ UNIT 1 TURBINE ~ ~	UNIT 1 TURBINE	MRI

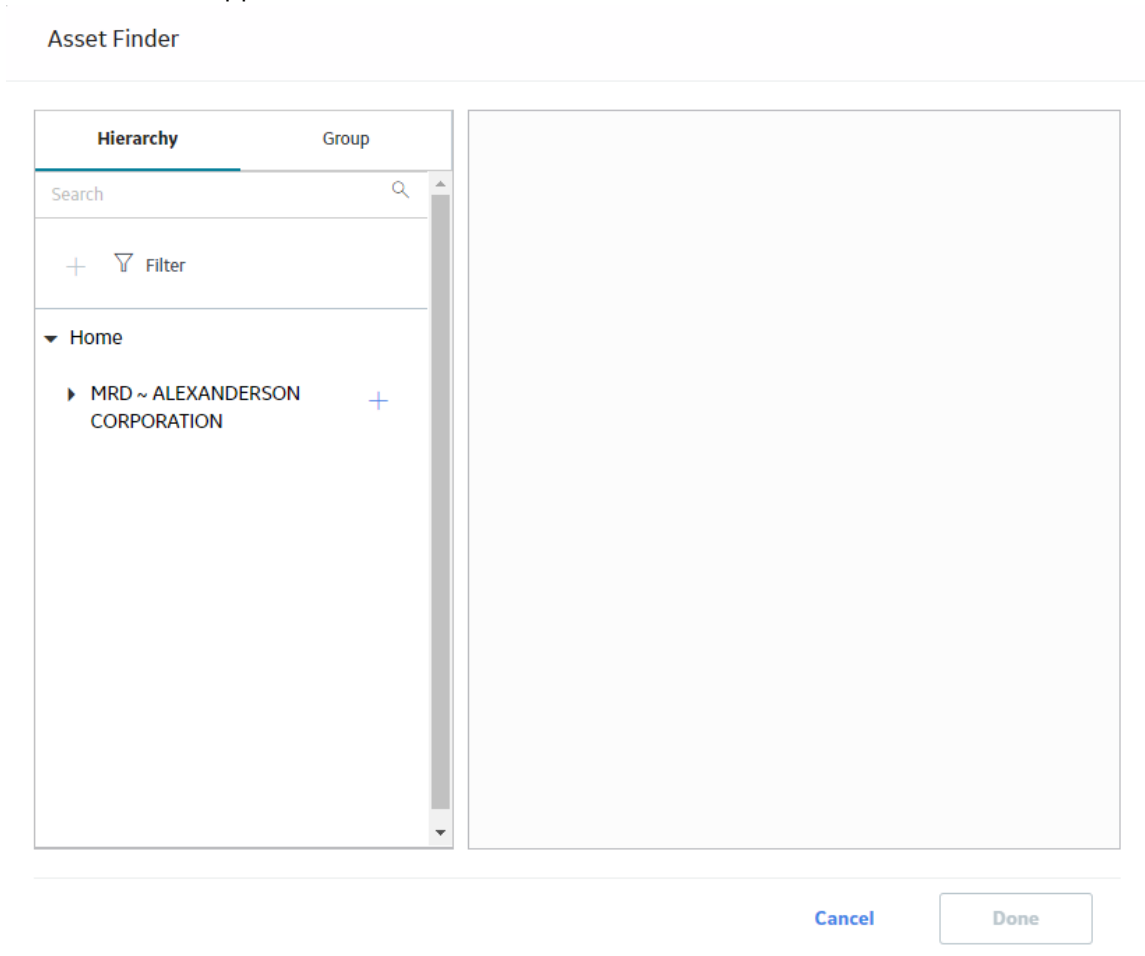
## Link an Asset with a Change Project

### About This Task

In MOC, you can associate an asset where changes are being implemented to the Change Project that is used to manage those changes.

## Procedure

1. Access the **Linked Assets** section for the Change Project with which you want to associate an asset.
2. In the upper-left corner of the section, select **+**.  
The **Asset Finder** window appears. In the left pane of the window, a list of assets available in the database appears.



3. For each asset that you want to associate with the Change Project, navigate to the asset, and then select **+** next to the Asset ID.

**Note:** In the left pane of the **Asset Finder** window, you can search within **Hierarchy** or **Group** by selecting the corresponding tabs on the window.


In the right pane of the window, each selected asset appears.

4. Select **Done**.  
Each selected asset is linked with the Change Project and the updated list of assets appears in the **Linked Assets** section.

**Note:** If you selected an asset group, then all the assets within the asset group are linked to the Change Project.

## Unlink an Asset from the Change Project

### Procedure

1. Access the **Linked Assets** section for the Change Project from which you want to unlink an asset.
2. In the row for each asset that you want to unlink from the project, select the check box.
3. In the upper-right corner of the section, select .

The **Delete Linked Assets** dialog box appears, asking you to confirm that you want to unlink each selected asset from the Change Project.

4. Select **OK**.


Each selected asset is unlinked from the Change Project and the updated list of assets appears in the **Linked Assets** section.

## Delete a Change Project

### Procedure

1. Access the Change Project that you want to delete.
2. Select the **Definition** tab.

The **Definition** section appears, displaying the datasheet for the Change Project.

3. In the upper-right corner of the datasheet, select , and then select **Delete**.

The **Confirm Delete** dialog box appears, asking you to confirm that you want to delete the Change Project.

**Note:** When you delete a Change Project, relationships with the associated Checklists and Exceptions are removed.

4. Select **Yes**.

The Change Project is deleted.



# Chapter 4

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## Checklists

### Topics:

- [About Checklists](#)
- [Access a Checklist](#)
- [Add a Checklist to a Change Project](#)
- [Respond to Questions in a Checklist](#)
- [Modify Response to a Question in a Checklist](#)
- [Delete a Checklist](#)

## About Checklists

In the Application Settings for MOC, you can [create Checklists](#) for various purposes. For example, you can create a checklist for temporary changes, a checklist for permanent changes, a checklist for planning, a checklist for post implementation assessment, and so on. In the Change Project, based on your needs, you can [add one or more of Checklists to the project](#). Checklists created in the Application Settings are used as a template when you add them to the Change Project.

When you add a Checklist to a Change Project, APM creates copies of the Checklist and the associated Questions and Answer Options. The Change Project is then associated with the copy of the Checklist. This ensures that any changes to the original Checklist do not affect the Change Project.

## Access a Checklist

### About This Task

This topic describes how to access a Checklist that is associated with a Change Project. You can also [access a Checklist that you created using the Application Settings for MOC](#).

### Procedure

1. [Access the Change Project](#) with which the Checklist you want to access is associated.
2. In the left pane, select the **Checklists** tab.  
A list of Checklists associated with the Change Project appears. The following columns of information appear in the workspace:
  - **Checklist ID:** Contains the value in the Checklist ID field of the Checklist.
  - **Description:** Contains the value in the Description field of the Checklist.
  - **Answered:** Contains a value indicating the number of Questions that you have answered.
  - **Unanswered:** Contains a value indicating the number of Questions that you have not answered.
  - **Exceptions Triggered:** Contains a value indicating the number of Exceptions that have been created based on your responses in the Checklist.

MOC Overview 2017-0001

Project Summary

Checklist

Exceptions and Tasks

Changed Elements

### Checklists

+ 🔍

<input type="checkbox"/>	CHECKLIST ID	DESCRIPTIO...	ANSW
<input type="checkbox"/>	<a href="#">Standard MOC Checklist 1</a>		19

3. In the row containing the Checklist that you want to access, in the **Checklist ID** column, select the link.

A list of Questions associated with the selected Checklist and the Answer Options associated with each Question appear.

Project Summary

**Checklist**

Exceptions and Tasks

Changed Elements

< C

Checkli...

20 Questions  
19 Answered | 1 Unanswered

Will the change modify processes or systems involving energy sources (steam) ?

No  N/A  Yes

Will the change generate a new type or increase the volume of solid waste?

No  N/A  Yes

Will the change necessitate revision of existing lockout tagout or job safety analysis?

No  N/A  Yes

Will ingress or egress be affected by the change project?

No  N/A  Yes

Will the change add or modify a discharge to a process sewer?

N/A  Yes  No

## Add a Checklist to a Change Project

### Before You Begin

- [Create a Checklist](#)

### Procedure

1. [Access the Change Project](#) to which you want to add the Checklist.

- In the left pane, select the **Checklists** tab.  
A list of Checklists associated with the Change Project appears.

The screenshot shows a software interface with a sidebar on the left and a main workspace on the right. The sidebar contains four tabs: 'Project Summary', 'Checklist', 'Exceptions and Tasks', and 'Changed Elements'. The 'Checklist' tab is selected, indicated by a blue bar on its left edge. The main workspace is titled 'Checklists' and contains a table with the following data:

<input type="checkbox"/>	CHECKLIST ID	DESCRIPTIO...	ANSW
<input type="checkbox"/>	Standard MOC Checklist 1		19

- In the upper-left corner of the **Checklists** workspace, select **+**

The **Add New Checklist** window appears, displaying the list of Checklists that you created using the [MOC Application Settings](#).

## Add New Checklist



CHECKLIST ID	CHANGE TYPE	ENTY_KEY
Standard MOC Checklist		548228
Test		189817

1 - 2 of 2 Results

Cancel

4. Select the Checklist that you want to add to the Change Project, and then select **OK**. A copy of the selected Checklist is created and associated with the Change Project.

### Results

- Copies of the Questions and Answer Options associated with the selected Checklist are created, and then associated with the copy of the Checklist.
- Copies of the Exceptions associated with Answer Options are also created.

## Next Steps

- [Respond to Questions in a Checklist](#)


# Respond to Questions in a Checklist

## Procedure

1. [Access the Checklist](#) for which you want to respond to Questions.
2. For each Question listed in the workspace, select an Answer Option.  
The Answer Options are selected.

The screenshot displays a software interface for MOC (Management of Change) Overview. The top navigation bar includes a 'MOC Overview' tab and a specific MOC instance '2017-0001'. The left sidebar contains a navigation menu with 'Project Summary', 'Checklist', 'Exceptions and Tasks', and 'Changed Elements'. The 'Checklist' section is active, showing a list of 20 questions, with 19 answered and 1 unanswered. The main workspace displays five questions with radio button answer options:

- Question 1: "Will the change modify processes or systems involving energy sources (steam) ?"  
Selected:  No,  N/A,  Yes
- Question 2: "Will the change generate a new type or increase the volume of solid waste?"  
Selected:  No,  N/A,  Yes
- Question 3: "Will the change necessitate revision of existing lockout tagout or job safety analysis?"  
Selected:  No,  N/A,  Yes
- Question 4: "Will ingress or Egress be affected by the change project?"  
Selected:  No,  N/A,  Yes
- Question 5: "Will the change add or modify a discharge to a process sewer?"  
Selected:  N/A,  Yes,  No

3. In the upper-right corner of the workspace, select .

Your response to each Question in the Checklist is saved.

## Results

- For each Question, if the selected [Answer Option is associated with an Exception](#), then an association is created between the Exception and the Change Project. The Exception appears in the **Exceptions and Tasks** workspace.

## Next Steps

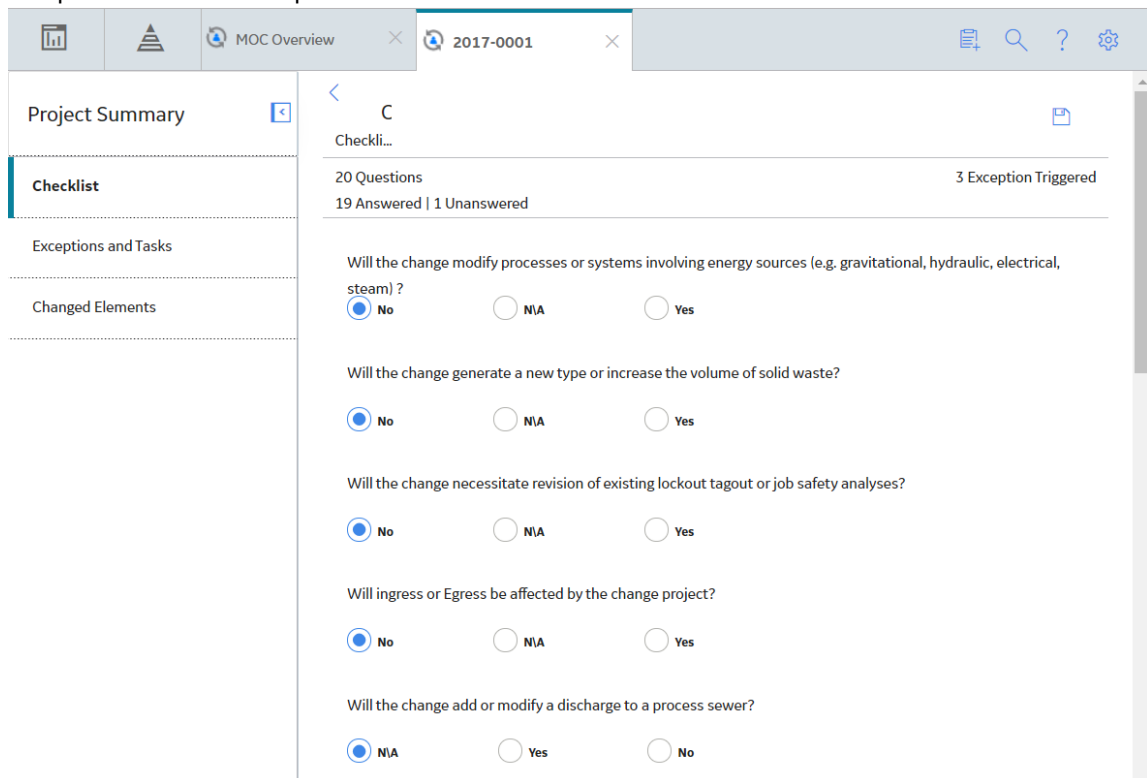
- [Create Tasks for Exceptions](#)

# Modify Response to a Question in a Checklist

## Procedure


- [Access the Checklist](#) containing the Question for which you want to modify the response.
- For the Question for which you want to modify the response, change your selection of Answer Option.

The **Change Answer** dialog box appears, indicating that changing the response will remove the association between the Change Project and the Exception created, if any, for the previous Answer Option.



The screenshot shows the MOC Overview interface for change project 2017-0001. The left sidebar contains a navigation menu with 'Project Summary', 'Checklist', 'Exceptions and Tasks', and 'Changed Elements'. The main workspace displays the 'Checklist' for 'C'. It shows 20 questions, 19 answered, and 1 unanswered. Three exceptions are triggered. The questions are:

- Will the change modify processes or systems involving energy sources (e.g. gravitational, hydraulic, electrical, steam)?  No  N/A  Yes
- Will the change generate a new type or increase the volume of solid waste?  No  N/A  Yes
- Will the change necessitate revision of existing lockout tagout or job safety analyses?  No  N/A  Yes
- Will ingress or Egress be affected by the change project?  No  N/A  Yes
- Will the change add or modify a discharge to a process sewer?  N/A  Yes  No

- Select **OK**, and then in the upper-right corner of the workspace, select . The Checklist is saved.



## Results

- Any association between an Exception, created as a result of the previously selected Answer Option, and the Change Project is removed. The Exception and the associated Tasks do not appear in the **Exceptions and Tasks workspace**.
- If the Answer Option you selected in step 2 is associated with an Exception, then an association is created between the Exception and the Change Project. The Exception appears in the **Exceptions and Tasks workspace**.

## Next Steps

- If an Exception has been associated with the Change Project, then [create Tasks for the Exception](#).

# Delete a Checklist

## Procedure

1. [Access the Change Project](#) with which the Checklist you want to delete is associated.
2. In the left pane, select the **Checklists** tab.  
A list of Checklists associated with the Change Project appears.

The screenshot shows a software interface with a top navigation bar containing icons for a list, search, help, and settings. Below the navigation bar, there are two tabs: 'MOC Overview' and '2017-0001'. The left sidebar has a 'Project Summary' section with a dropdown arrow, and under it, four tabs: 'Checklist' (selected), 'Exceptions and Tasks', 'Changed Elements', and an empty tab. The main workspace area is titled 'Checklists' and contains a table with the following data:

CHECKLIST ID	DESCRIPTIO...	ANSWERS...	UNANSWERS...	EXCEPTIONS TRIG
<input type="checkbox"/>	Standard MOC Checklist 1	19	1	3

3. In the row for each Checklist that you want to delete, select the check box.  
In the upper-right corner of the workspace, the button is enabled.
4. Select .
- The **Delete Checklist** dialog box appears, asking you to confirm that you want to delete each selected Checklist.
- Note:** When you delete a Checklist, the Questions associated with the Checklist, the Answer Options, the Exceptions associated with the Answer Options, and the Tasks associated with the Exceptions are also deleted.
5. Select **OK**.  
Each selected Checklist is deleted.

# Chapter 5

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## Exceptions and Tasks

### Topics:

- [About Exceptions and Tasks](#)
- [Access the List of Exceptions and Tasks Associated with the Change Project](#)
- [Access an Exception](#)
- [Access a Task](#)
- [Create a Task for an Exception](#)
- [Change the State of a Task](#)
- [Delete a Task](#)
- [Delete an Exception](#)

## About Exceptions and Tasks

Exceptions and tasks ensure that the change management process is formally documented and the duties for review, approval, and implementation are assigned to appropriate personnel.

In the Application Settings for MOC, you must [create Questions](#) such that one Answer Option for each Question is associated with an Exception, and then associate the Questions with a Checklist.

For a Question in a Checklist that you added to the Change Project, when the selected Answer Option is associated with an Exception, an association is created between the Exception and the Change Project.

The Exception records associated with a Change Project are action items required for the project to be implemented successfully. After you respond to all Questions in all the Checklists in the Change Project, you can [access the list of Exceptions](#) created for the Change Project from the **Exceptions and Tasks** workspace of the Change Project. You can [associate each Exception with tasks](#).

Tasks are used to break down Exceptions into smaller, more manageable pieces of work that consider all efforts required to complete the action item (i.e., the Exception). In APM, tasks are stored in [the Operations Task records](#). Each task can be assigned to an appropriate team member. You can track the progress of task by managing the [states of the task](#).

Based on the progress of the tasks associated with it, you can assign one of the following statuses to the Exceptions:

- **Not Started:** Indicates that the Exceptions and tasks have been created and requires further action.
- **In Progress:** Indicates that the assigned team members have started working on the tasks associated with the Exception.
- **Complete:** Indicates that all the tasks associated with the Exception have been successfully completed.

You can track the status of Exceptions in the Change Project to ensure that each task is successfully completed by the assigned team member(s). This makes the Change Project auditable.

### **Example: Exception and Task**

If the change being implemented results in revision of the operating or maintenance procedure, then you can create a task for updating the procedure and assign it to the appropriate team member. You can then create tasks for all involved team members to review the revised procedure. In this example, revision of the operating or maintenance procedure is an Exception.

# Access the List of Exceptions and Tasks Associated with the Change Project

## Procedure

1. Access the [Project Summary workspace](#) for the Change Project containing the Exception that you want to view.
2. In the left pane, select **Exceptions and Tasks**.

The **Exceptions and Tasks** workspace appears, displaying the following sections:

- **Exceptions:** Contains a list of Exceptions that are associated with the Change Project. For each Exception listed in this section, the following information appears:
  - **<Exception ID>:** The value in the Exception ID field of the Exception appears as a link, which you can select to [access the selected Exception](#).
  - **Status:** The value in the Status field of the Exception.
  - **Reference Document:** The number of Reference Documents associated with the Exception.
  - **Source:** The value in the Question Text field of the Question, in response to which the Exceptions was created.

Above the **Exceptions** section, the number of Exceptions associated with the Change Project and the number of Exceptions in each Exception status appear.

- **Tasks:** Contains a list of tasks that are associated with the Exception that you select in the **Exceptions** section. For each task listed in this section, the following information appears:
  - **<Task ID>:** The value in the Task ID field of the Operations Task record appears as a link, which you can select to [access the selected Exception](#).
  - **Assigned To:** The value in the Task Assigned To field of the Operations Task record.
  - **Start Date:** The value in the Next Date field of the Operations Task record.
  - **Interval:** The value in the Desired Interval field of the Operations Task record.

Above the **Tasks** section, the total number of tasks associated with the Exception and the number of tasks in each task state appear.

The screenshot displays a software interface for MOC (Management of Change) Overview. The top navigation bar includes a home icon, a tree icon, and two active tabs: 'MOC Overview' and '2017-0001'. The left sidebar contains a menu with 'Project Summary', 'Checklist', 'Exceptions and Tasks' (highlighted with a blue bar and a left arrow icon), and 'Changed Elements'. The main content area is titled 'Exceptions & Tasks' and shows a summary: '3 Exceptions' and '3 Not Started |'. Below this is a table with two columns: 'Exceptions' and 'Tasks'. The 'Exceptions' column contains two entries: 'Update the process safety information 1' and 'Controls parameters 1'. Each entry has a status of 'Not Started', a 'Reference Document: 0', and a source question. The 'Tasks' column has a plus sign icon. The interface uses a light gray color scheme with blue accents for active elements and links.


## Access an Exception

### Procedure

1. [Access the list of Exceptions and Tasks associated with the Change Project.](#)
2. In the **Exceptions** section, select the link for the Exception that you want to access.

The workspace for the selected Exception appears, displaying the following tabs:

- **Definition:** Contains the datasheet for the Exception.

**Note:** As needed, in the **Definition** section, you can modify values in the [available fields](#), and then select  to save your changes.

- **Reference Documents:** Contains the list of reference documents associated with the Exception.

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

The screenshot shows a software interface with a sidebar on the left and a main content area on the right. The sidebar contains the following items: Project Summary, Checklist, Exceptions and Tasks (highlighted), and Changed Elements. The main content area has a header with a back arrow, the title 'Update the process safety information 1', and the creation date 'Created On Tuesday, September 26, 2017'. Below the header is a 'Definition' section with a 'Datasheet ID' dropdown menu set to 'MI MOC Exception'. A 'Details' button is visible. The main content area also includes fields for 'Exception' (containing 'Update the process safety information 1'), 'Description' (containing 'Update the process safety information'), 'Exception Type' (containing 'Process Safety Information'), and 'Status' (containing 'Not Started').

### Next Steps

- [Create a Task for an Exception](#)

# Access a Task

## About This Task

This topic describes how to access a task via the **Exceptions and Tasks** workspace. You can also access a task from [the MOC Overview page](#).

## Procedure


1. [Access the list of Exceptions and Tasks associated with the Change Project](#).
2. In the **Exceptions** section, select the Exception whose task you want to access. In the **Tasks** section, the Tasks associated with the selected Exception appear.

Exceptions	Tasks
<a href="#">Update the process safety information 1</a> Status: Not Started Reference Document: 0 Source: Does the change project affect process safety information?	
<a href="#">Controls parameters 1</a> Status: Not Started Reference Document: 0 Source: Does the change project affect Operating or Maintenance procedures?	

- In the **Tasks** section, select the link for the task that you want to access. The datasheet for the selected task appears.

The screenshot shows a web application interface. At the top, there are tabs for 'MOC Overview' and 'testproj'. On the left, a sidebar contains 'Project Summary', 'Checklist', 'Exceptions and Tasks' (highlighted), and 'Changed Elements'. The main content area is titled 'Controls parameters 1 / Update operational pro...' and 'Created On Thursday, 14 November 2019'. Below this is a 'Datasheet ID:' section with a dropdown menu set to 'Operations Task' and a 'Proposed Super User, Baseline' label. The task details are as follows:

Task ID	Task Assigned To
Update operational procedures	VIPIN
Max Date	Min Date
12/14/2019 05:26:25	11/14/2019
Next Date	Task State
11/14/2019 05:26:25	
Last Date	Desired Interval
11/14/2019 05:26:25	0
Max Interval	Min Interval
1	0
Task Type	Desired Interval UOM
	Months (MO
Max Interval UOM	Min Interval UOM
Months	Months

**Note:** As needed, you can modify values in the [available fields](#), and then select  to save your changes.

## Create a Task for an Exception

### Before You Begin

- [Respond to Questions in the Checklist](#) so that Exceptions are created.

### Procedure

- [Access the list of Exceptions and Tasks associated with the Change Project.](#)
- In the **Exceptions** section, select the Exception for which you want to create the task.



In the **Tasks** section, a list of tasks associated with the selected Exception appears.


The screenshot shows a software interface with a top navigation bar containing icons for a dashboard, a tree view, and two active tabs: 'Nav Config' and 'MOC Overview'. The user ID '2017-0001' is displayed on the right. The left sidebar has four menu items: 'Project Summary', 'Checklist', 'Exceptions and Tasks' (which is highlighted with a blue bar), and 'Changed Elements'. The main content area is titled 'Exceptions & Tasks' and shows a summary: '3 Exceptions' and '3 Not Started |'. Below this is a table with two columns: 'Exceptions' and 'Tasks'. The 'Exceptions' column contains two entries, each with a trash icon. The 'Tasks' column contains a plus sign icon. The first task entry is 'Update the process safety information 1' with a status of 'Not Started', 'Reference Document: 0', and source 'Does the change project affect process safety information?'. The second task entry is 'Controls parameters 1' with a status of 'Not Started', 'Reference Document: 0', and source 'Does the change project affect Operating or Maintenance procedures?'.

3. In the upper-left corner of the **Tasks** section, select **+**.

In the **Exceptions and Tasks** workspace, a new datasheet for Operations Task appears.

The screenshot shows a software interface with a top navigation bar containing icons for a dashboard, a pyramid, 'Nav Config', 'MOC Overview', and a user profile '2017-0001'. On the left is a sidebar with 'Project Summary', 'Checklist', 'Exceptions and Tasks' (highlighted), and 'Changed Elements'. The main area is titled 'Update the process safety information 1 / New T' and contains a form with the following fields:

- Datasheet ID: Operations Task (dropdown)
- Task ID: Text input (required, red border)
- Max Date: [Calendar icon]
- Next Date: 11/14/2019 6:38:38 AM (calendar icon)
- Last Date: 11/14/2019 6:38:38 AM (calendar icon)
- Max Interval: 0
- Task Type: [Dropdown]
- Task Assigned To: [Text input]
- MIn Date: [Calendar icon]
- Task State: [Text input]
- Desired Interval: 0
- MIn Interval: 0
- Desired Interval U: Months (MON)

4. As needed, enter values in the [available fields](#).
5. In the upper-right corner of the datasheet, select . The task is created.

### Results

- The task that you created is associated with the selected Exception.

## Next Steps

- [Change the state of the Task](#)

# Change the State of a Task

## About This Task

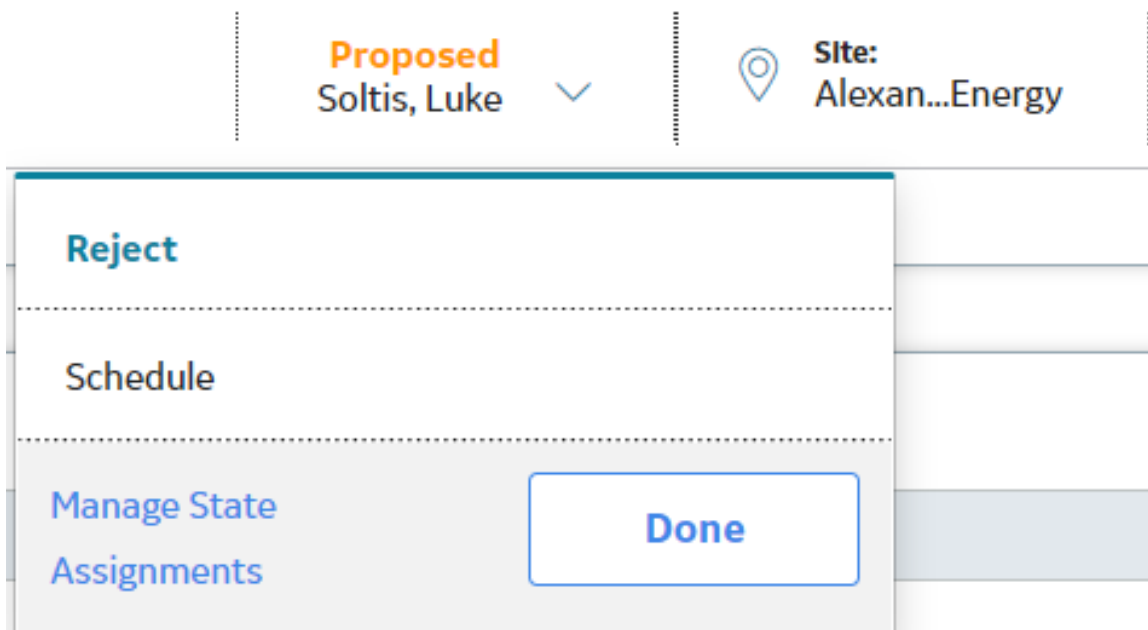
This topic describes how to change the state of a task, while assigning the state to the appropriate user.

**Important:** You can modify the state for a task only if you are an administrator or a user who belongs to [the State Configuration Role configured for that state](#).

## Procedure

1. [Access the task](#) for which you want to change the state.
2. In the upper-right corner of the datasheet, select the button that indicates the current state of the task. For example, if the current state of the task is Proposed, select **Proposed**.

A menu appears, displaying the operation that you can perform to change the state of the task.




3. Select the [necessary operation](#) that will change the state of the task, and then select **Done**. For example, if you want to change the state of the task from Proposed to Scheduled, select **Schedule**, and then select **Done**.

The state of the task is changed.

## Delete a Task

### Procedure

1. [Access the Exception](#) with which the task that you want to delete is associated.
2. In the **Tasks** section, select the task that you want to delete.
3. In the upper-right corner of the section, select .


The **Delete Task** dialog box appears, asking you to confirm that you want to delete the selected task.

4. Select **OK**.

The selected task is deleted and the updated list of tasks appears in the section.

## Delete an Exception

### Procedure

1. [Access the list of Exceptions and Tasks associated with the Change Project](#).
2. In the **Exceptions and Tasks** workspace, in the **Exceptions** section, select the Exception that you want to delete.
3. In the upper-right corner of the section, select .

The **Delete Exception** dialog box appears, asking you to confirm that you want to delete the selected Exception and the Tasks associated with it.

4. Select **OK**.

The association between the Change Project and the selected Exception is removed and the updated list of Exceptions appears in the section.

# Chapter 6

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## Changed Elements

### Topics:

- [About Changed Elements](#)
- [Access the List of Changed Elements Associated with a Change Project](#)
- [Add a Changed Element to the Change Project](#)
- [Remove a Changed Element from the Change Project](#)

## About Changed Elements

When a change is being implemented, it directly or indirectly has an impact on other families in APM. In MOC, you can associate a Change Project with records from other families in APM that are possibly impacted by the change. Such records are called Changed Elements.

For example, when the change involves replacing the existing pressure relief devices that were identified as Independent Protection Layers, with a different manufacturer's device, the LOPA assessment with which the equipment is associated may be impacted. In this case, the affected LOPA record is a changed element and you can associate the LOPA record with the Change Project.

Changed elements help keep track of all affected processes and records in one place, which you can then analyze to assess the advantages and disadvantages of implementing the change. An approver can review the changed elements to understand the impact of the change and make decisions on whether to approve or request rework of the Change Project. Changed elements provide your organization with a means of associating impacted areas as changed elements, thus making MOC a fully auditable tool.

### Associating Records from APM Families as Changed Elements

By default, you can associate SIL Analysis, Hazards Analysis, and LOPA records as changed elements to a Change Project. If you want to add records from other families, you must modify the Change Project Has Element relationship family by adding the families, whose records you want to add as changed element, as Successors to the MI MOC Change Project family. For more information, refer to the Create a Relationship Definition section of the documentation.

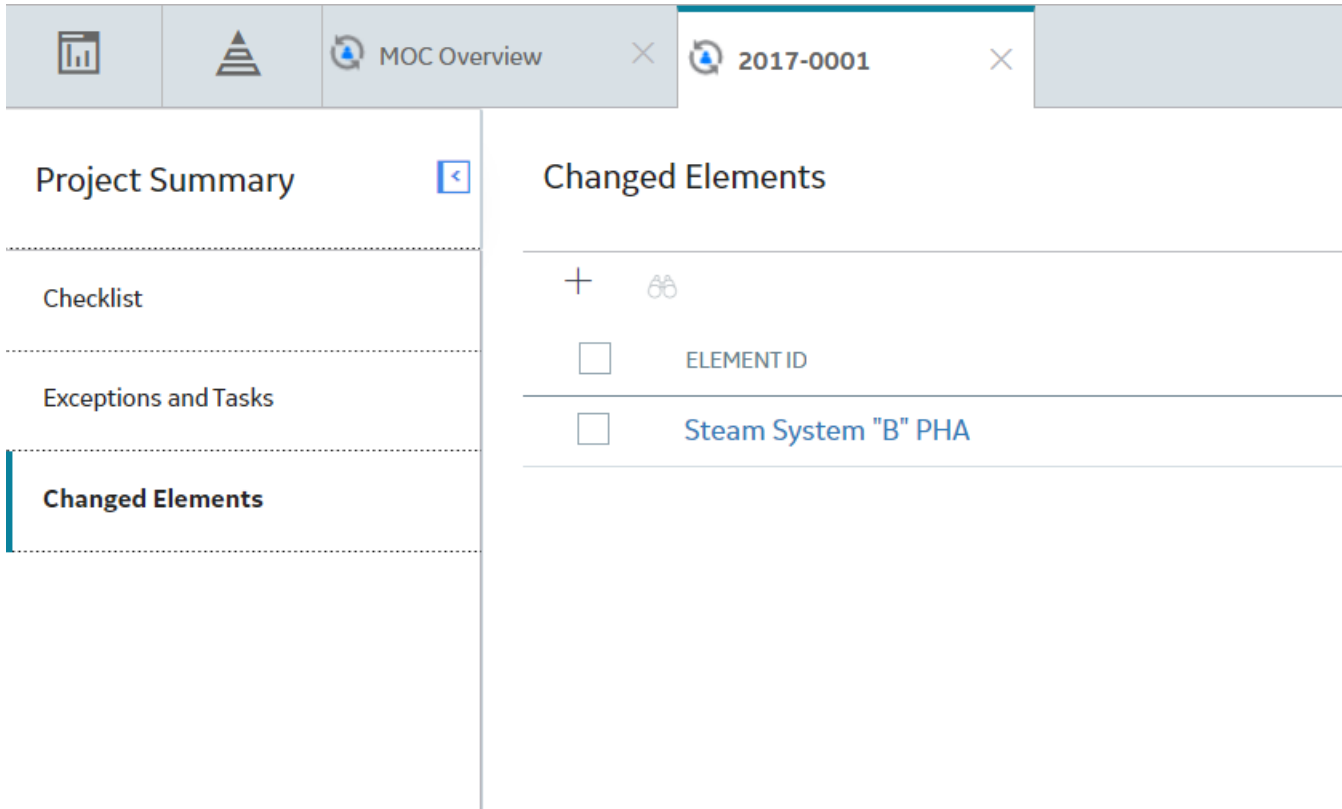
## Access the List of Changed Elements Associated with a Change Project

### Procedure

1. [Access the Change Project](#) for which you want to view the associated changed elements.
2. In the left pane, select the **Changed Elements** tab.

The **Changed Elements** section appears, displaying the following columns of information for the list of changed elements associated with the Change Project.

- **Element ID:** Contains the identification of the changed element that is associated with the Change Project. You can select the link in the **Element ID** column to view details about the selected record in the Record Manager.
- **Family:** Contains the name of the family to which the changed element belongs.




## Add a Changed Element to the Change Project

### Before You Begin

- [Modify the Change Project Has Elements relationship family](#) to include families, whose records you want to add as changed elements.

### Procedure

1. [Access the Changed Elements section](#) for the Change Project to which you want to associate a changed element.
2. In the upper-left corner of the section, select .

The **Search** window appears.

## Search

---

---

**Cancel**

3. In the **Look in** box, select the family to which the record you want to add as a changed element belongs.



The list of records belonging to the family appears.

Search

All Families

---

**Steam System "B" PHA**  
Hazards Analysis [Human Resource](#) [Site Reference](#) [Hazards Analysis Revision](#) [MI MOC Change Project](#)

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**Steam System "A" PHA**  
Hazards Analysis [Human Resource](#) [SIL Analysis](#) [Site Reference](#) [Hazards Analysis Revision](#)

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**B0007-009 Steam Boiler What-If Hazards Analysis**  
Hazards Analysis [Human Resource](#) [Hazards Analysis System/Node](#) [Hazards Analysis Revision](#)

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**FCCU Process Hazards Analysis**  
Hazards Analysis [Reference Document](#) [Human Resource](#) [Equipment](#) [Hazards Analysis System/Node](#) [Instrumented Function](#) [SIL Analysis](#) [Site Reference](#) [Hazards Analysis Revision](#)

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**#1 Crude PHA**  
Hazards Analysis [Human Resource](#) [Site Reference](#) [Hazards Analysis Revision](#)

---

**1000000111**  
LOPA [Risk Assessment](#)

---

**MAE-01 Loss of containment onshore pipelines**

[Cancel](#)


4. Select the record that you want to associate with the project as changed element, and then select **OK**.

The selected record is added as a changed element to the Change Project. In the **Changed Elements** section, the updated list of records appear.

## Remove a Changed Element from the Change Project

### Procedure

1. Access the **Changed Elements** section for the Change Project from which you want to remove a changed element.
2. In the row for each record that want to remove from the Change Project, select the check box.

In the upper-right corner of the section, the  button is enabled.

3. Select .

The **Delete Changed Element** dialog box appears, asking you to confirm that you want to remove the association between the Change Project and the changed element.

4. Select **OK**.

Each selected changed element is removed from the Change Project.

# Chapter 7

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## Admin

### Topics:

- [MOC Admin Page](#)
- [Exceptions](#)
- [Questions](#)
- [Checklists and Questions](#)

# MOC Admin Page

## Access the MoC Admin Page

### Procedure

In the **Applications** menu, navigate to **ADMIN > Application Settings > Management of Change**.

The **MoC Admin** page appears.

## Exceptions

### About Exceptions

Exceptions are action items that must be completed by the team before delivering a change. In the Application Settings for MOC, you can create Exception records to identify the type of Exception that must be created for an Answer Option. When you respond to Questions in a Checklist in the Change Project, Exceptions are automatically created by copying the Exceptions that you created.

### Default Exceptions in MoC

APM provides a set of Exceptions, by default. These Exceptions are associated with Answer Options of Questions. The following table lists the default Exceptions, which you can modify as needed:

Exception ID	Exception Type
Asset Change	Update EAM/CMMS records
Asset Removal	Update EAM/CMMS records
Chemical Change	Update facility chemical hazard storage documentation
Controls parameters	List all pre and post change controls parameters
Electrical load	Update electrical safe work plans
Energy Source	Update LOTO documentation and safe work plans
Exit Route	Revise or replace emergency exit route placards
Flare addition	Update flare usage documentation
Heights	Update safe work plans related to working above grade
Lock out Tag out	Update safe work plans, and applicable LOTO plans
Machine guarding	Revise existing or add new machine guarding as app
Material Storage	Update facility chemical hazard storage documentation
MSDS	Update material safety data sheet
Procedural	Update applicable Operating or Maintenance procedure

Exception ID	Exception Type
Process Sewer	Update sewer source and usage documentation
Solid Waste	Update facility chemical hazard storage documentation
Storm Drain	Notify local authorities, and update facility possible discharge documentation
Update and link all updated drawings and diagrams	Drawings/Diagrams
Update applicable emergency evacuation routing	Ingress/Egress
Update the process safety information	Process Safety Information

## Access an Exception

### Procedure

1. [Access the MoC Admin page.](#)
2. In the left pane, select **Exceptions**.

A list of available Exceptions appears.


The screenshot shows a web application interface with a top navigation bar containing icons for a dashboard, a tree view, and two tabs: "MOC Overview" and "MoC Admin". Below the navigation bar, the main content area is split into two columns. The left column, titled "Management of Change A...", contains a sidebar with three menu items: "Exceptions", "Questions", and "Checklists". The right column, titled "Exceptions", displays a list of 15 exception types, each with a checkbox and a link. The "Asset Removal" entry is highlighted with a light gray background. The list includes: EXCEPTION ID, Asset Change, Asset Removal, Chemical Change, Controls parameters, Electrical load, Energy Source, Exit Route, Flare addition, Heights, Lock out Tag out, Machine guarding, Material Storage, MSDS, and Procedural.

Exception ID	Exception Type
<input type="checkbox"/>	<a href="#">EXCEPTION ID</a>
<input type="checkbox"/>	<a href="#">Asset Change</a>
<input type="checkbox"/>	<a href="#">Asset Removal</a>
<input type="checkbox"/>	<a href="#">Chemical Change</a>
<input type="checkbox"/>	<a href="#">Controls parameters</a>
<input type="checkbox"/>	<a href="#">Electrical load</a>
<input type="checkbox"/>	<a href="#">Energy Source</a>
<input type="checkbox"/>	<a href="#">Exit Route</a>
<input type="checkbox"/>	<a href="#">Flare addition</a>
<input type="checkbox"/>	<a href="#">Heights</a>
<input type="checkbox"/>	<a href="#">Lock out Tag out</a>
<input type="checkbox"/>	<a href="#">Machine guarding</a>
<input type="checkbox"/>	<a href="#">Material Storage</a>
<input type="checkbox"/>	<a href="#">MSDS</a>
<input type="checkbox"/>	<a href="#">Procedural</a>

3. In the **Exception ID** column, select the link for the Exception that you want to access.

The datasheet for the selected Exception appears.

The screenshot shows a web application interface with a top navigation bar containing icons for a dashboard, a tree view, and a refresh button. The main content area is split into two panes. The left pane has a sidebar with four menu items: 'Project Summary', 'Checklist', 'Exceptions and Tasks' (which is highlighted with a blue bar), and 'Changed Elements'. The right pane displays the details for a selected exception. At the top of the right pane, there is a title 'Update the process safety information 1' and a subtitle 'Created On Tuesday, September 26, 2017'. Below this, the section 'Definition' is shown, followed by a 'Datasheet ID' dropdown menu set to 'MI MOC Exception'. A 'Details' tab is active, showing the following fields: 'Exception' (Update the process safety information 1), 'Description' (Update the process safety information), 'Exception Type' (Process Safety Information), and 'Status' (Not Started).

**Note:** As needed, you can modify the values in the [available fields](#), and then select  to save your changes. The changes made to Exceptions in the administrative settings for MOC will not affect the Change Projects that have used the Exceptions prior to modification.

## Create an Exception

### Procedure

1. [Access the MoC Admin page](#).
2. In the left pane, select **Exceptions**.

A list of available Exceptions appears.


The screenshot shows a software interface with a top navigation bar containing icons for a dashboard, a tree view, and two tabs: "MOC Overview" and "MoC Admin". Below the navigation bar, the main workspace is titled "Management of Change A..." and is divided into two sections. On the left is a sidebar menu with three items: "Exceptions", "Questions", and "Checklists". On the right is a list titled "Exceptions" with a plus sign and a refresh icon at the top. The list contains 15 items, each with a checkbox and a label: "EXCEPTION ID", "Asset Change", "Asset Removal" (highlighted), "Chemical Change", "Controls parameters", "Electrical load", "Energy Source", "Exit Route", "Flare addition", "Heights", "Lock out Tag out", "Machine guarding", "Material Storage", "MSDS", and "Procedural".

3. In the upper-left corner of the workspace, select **+**.



A blank datasheet for an Exception appears in the workspace.

The screenshot shows the MoC Admin interface. At the top, there are two tabs: 'MOC Overview' and 'MoC Admin'. Below the tabs, the main header reads 'Management of Change A...' followed by a back arrow and 'Machine guarding'. On the left side, there is a sidebar with three menu items: 'Exceptions', 'Questions', and 'Checklists'. The main content area is titled 'Datasheet ID:' and contains a dropdown menu with 'MI MOC Exception' selected. Below this, there is a 'Details' tab. The 'Exception' field contains 'Machine guarding'. The 'Description' field also contains 'Machine guarding'. The 'Exception Type' field contains 'Revise existing or add new machine guarding as applicable'. The 'Status' field is currently empty.

4. As needed, enter values in the [available fields](#).
5. In the upper-right corner of the workspace, select . The Exception is created.

#### Next Steps

- [Create a Question](#)

# Delete an Exception

## Procedure

1. Access the **MoC Admin** page.
2. In the left pane, select **Exceptions**.  
A list of available Exceptions appears.

The screenshot shows a web application interface with a top navigation bar containing icons for a dashboard, a tree view, and two active tabs: "MOC Overview" and "MoC Admin". Below the navigation bar is a left-hand navigation pane titled "Management of Change A..." with a back arrow icon. The pane contains three menu items: "Exceptions", "Questions", and "Checklists". The "Exceptions" menu item is selected, and its content is displayed in the main area of the page. The main area shows a list of exceptions, each with a checkbox on the left and the exception name on the right. The "Asset Removal" exception is highlighted with a grey background. At the top of the list, there are two icons: a plus sign and a refresh symbol.

Exception ID
<input type="checkbox"/> EXCEPTION ID
<input type="checkbox"/> Asset Change
<input checked="" type="checkbox"/> Asset Removal
<input type="checkbox"/> Chemical Change
<input type="checkbox"/> Controls parameters
<input type="checkbox"/> Electrical load
<input type="checkbox"/> Energy Source
<input type="checkbox"/> Exit Route
<input type="checkbox"/> Flare addition
<input type="checkbox"/> Heights
<input type="checkbox"/> Lock out Tag out
<input type="checkbox"/> Machine guarding
<input type="checkbox"/> Material Storage
<input type="checkbox"/> MSDS
<input type="checkbox"/> Procedural

3. In the row for each Exception that you want to delete, select the check box.

In the upper-right corner of the workspace, the  button is enabled.

4. Select .

The **Delete MOC Exception** dialog box appears, asking you to confirm that you want to delete each selected Exception and its relationship with the associated Answer Options.

**Note:** Deleting Exceptions in the administrative settings for MOC will not affect the Change Projects that have used the Exceptions prior to deletion.

5. Select **OK**.

The selected Exception is deleted and the updated list of Exceptions appears in the workspace.

## Questions

### About Questions

In MOC, a Checklist is presented as a list of questions. These questions must be designed such that they identify all relevant impact areas of the change and action items that must be completed for a smooth implementation of the change. Questions must take into consideration various aspects of the change, such as the technical feasibility of the change and its impact on safety.

In the Application Settings for MOC, you can configure a Question with two or more [Answer Options](#). Each Question can be configured to have only one [Exception](#). The Checklist Questions that you created in the Application Settings for MOC are used as a template when adding a Checklist to a Change Project. When you respond to Questions in MOC, based on your configuration for Answer Options, Exceptions are created automatically.

### Default Questions in MoC

By default, APM provides a set of Questions. These Questions are also associated with Answer Options that are linked to the default Exceptions. The following table lists the default Questions and the associated Answer Options, which you can modify as needed:

MI MOC Checklist Question Records		MI MOC Answer Option Records	
Checklist Question ID	Question Text	Answer	Exception
Asset Change	Does the change involve the installation of new or different assets?	Yes	Asset Change
Asset Removal	Does the change require demolition or destruction of existing assets?	Yes	Asset Removal
Chemical Change	Does the change require the use of a toxic, hazardous or ozone depleting chemical?	Yes	Procedural

MI MOC Checklist Question Records		MI MOC Answer Option Records	
Checklist Question ID	Question Text	Answer	Exception
Controls parameters	Will controls parameters (setpoints, alarm limits, ranges) be impacted by the change project?	Yes	Controls parameters
Drawings/Diagrams	Does the change project affect any drawings or diagrams?	Yes	Update and link all updated drawings and diagrams
Electrical load	Does the change increase electrical loading such that additional PPE or physical barriers would be needed?	Yes	Electrical load
Energy Source	Will the change modify processes or systems involving energy sources (e.g. gravitational, hydraulic, electrical, steam) ?	Yes	Energy Source
Exit Route	Does the change involve changes to existing emergency exit routes, muster areas, etc?	Yes	Exit Route
Flare addition	Will the change result in the possible discharge to a flare, or other destructive mechanism?	Yes	Flare addition
Heights	Will the change add or change working at heights?	Yes	Heights
Ingress/Egress	Will ingress or Egress be affected by the change project?	Yes	Update applicable emergency evacuation routing
Lock out Tag out	Will the change necessitate revision of existing lockout tagout or job safety analyses?	Yes	Lock out Tag out
Machine guarding	Will the change add or modify equipment or machinery requiring physical guarding?	Yes	Machine guarding
Material Storage	Will the change introduce new chemicals or significantly increase the usage or storage of an existing chemical?	Yes	Material Storage

MI MOC Checklist Question Records		MI MOC Answer Option Records	
Checklist Question ID	Question Text	Answer	Exception
MSDS	Will process chemistry be changed as a result of the change project?	Yes	MSDS
Procedural	Does the change project affect Operating or Maintenance procedures?	Yes	Controls parameters
Process Safety Information	Does the change project affect process safety information?	Yes	Update the process safety information
Process Sewer	Will the change add or modify a discharge to a process sewer?	Yes	Process Sewer
Solid Waste	Will the change generate a new type or increase the volume of solid waste?	Yes	Solid Waste
Storm Drain	Will the change result in a possible discharge to an "outside" storm drain system?	Yes	Storm Drain

## Access a Question

### About This Task

Before You Begin

- As needed, modify the [MI\\_MOC\\_ANS\\_OPT System Code table](#), which contains a list of values that populates the **Answer** box in the **Question** workspace.

### Procedure

- Access the [MoC Admin page](#).
- In the left pane, select **Questions**.

A list of available Questions appears.

The screenshot shows the MoC Admin interface. At the top, there are tabs for 'MOC Overview' and 'MoC Admin'. The main content area is titled 'Management of Change A...' and contains a sidebar with 'Exceptions', 'Questions', and 'Checklists'. The 'Questions' section is active, displaying a table of available questions. Each row in the table has a checkbox in the 'Checklist Question ID' column and a corresponding question text in the 'Question Text' column.

<input type="checkbox"/>	CHECKLIST QUESTION ID	QUESTION TEXT
<input type="checkbox"/>	<a href="#">Asset Change</a>	Does the change inv
<input type="checkbox"/>	<a href="#">Asset Removal</a>	Does the change rec
<input type="checkbox"/>	<a href="#">Chemical Change</a>	Does the change rec
<input type="checkbox"/>	<a href="#">Controls parameters</a>	Will controls param
<input type="checkbox"/>	<a href="#">Drawings/Diagrams</a>	Does the change pro
<input type="checkbox"/>	<a href="#">Electrical load</a>	Does the change inc
<input type="checkbox"/>	<a href="#">Energy Source</a>	Will the change mod
<input type="checkbox"/>	<a href="#">Exit Route</a>	Does the change inv
<input type="checkbox"/>	<a href="#">Flare addition</a>	Will the change resu
<input type="checkbox"/>	<a href="#">Heights</a>	Will the change add
<input type="checkbox"/>	<a href="#">Ingress/Egress</a>	Will ingress or Egres
<input type="checkbox"/>	<a href="#">Lock out Tag out</a>	Will the change nec
<input type="checkbox"/>	<a href="#">Machine guarding</a>	Will the change add
<input type="checkbox"/>	<a href="#">Material Storage</a>	Will the change intro

3. In the **Checklist Question ID** column, select the link for the Question that you want to access.

The page for the selected Question appears.

The screenshot shows the MoC Admin interface. At the top, there is a navigation bar with tabs for 'MOC Overview', 'testproj', and 'MoC Admin'. Below this, the main content area is titled 'Management of Change A...' and 'Controls parameters'. On the left, there is a sidebar with 'Exceptions', 'Questions', and 'Checklists'. The 'Questions' section is active, showing a 'Details' tab. The 'Details' section includes a 'Datasheet ID' dropdown menu set to 'MI MOC Checklist Question'. Below this, there are three sections: 'Question' with the text 'Controls parameters', 'Description' with a 'Text area', and 'Question Text' with the text 'Will controls parameters (setpoints, alarm limits, ranges) be impacted'. At the bottom, there is a table for 'Answer Options' with columns for 'Answer' and 'Exception Trig'. The table has three rows: 'N/A', 'No', and 'Yes'. The 'Yes' row has 'Controls para' in the 'Exception Trig' column. A '+ Add Answer Option' link is at the bottom.

The following information appears on the page:

- **Details:** This section contains the datasheet for the selected Question.

**Note:**


If you want to modify values in the **Details** section:

- a. In the upper-right corner of the **Questions** workspace, select . The fields on the datasheet are enabled.
- b. As needed, modify the values in the [available fields](#), and then select . Your changes are saved.

- **Answer Options:** This subsection contains a row for each Answer Option. Each row contains the following columns of information:
  - **Answer:** Contains the answer that you selected for the Question.
  - **Exception Triggered:** Contains the Exception that you selected for the answer in the **Answer** column.

**Note:**

In the **Answer Options** subsection, you can perform the following tasks:

- You can modify the values in the **Answer** and **Exception Triggered** boxes. If you want to change the Answer Option to which the Exception is associated, you must first delete the Answer Option with which an Exception is currently associated, and then associate another Answer Option with the Exception.
- You can select  to delete the Answer Option.

**Note:** The changes made to Questions in the administrative settings for MOC will not affect the Change Projects that have used the Questions prior to modification.

## Create a Question

### About This Task

Before You Begin

- As needed, modify the [MI\\_MOC\\_ANS\\_OPT System Code table](#), which contains a list of values that populates the **Answer** box in the **Question** workspace.
- [Create the Exception](#) that you want to link to an Answer Option in the Question.

### Procedure

1. [Access the MoC Admin page](#).
2. In the left pane, select **Questions**.



A list of available Questions appears.

The screenshot shows a web application interface for 'MoC Admin'. At the top, there are two tabs: 'MOC Overview' and 'MoC Admin'. The 'MoC Admin' tab is active. Below the tabs, there is a navigation menu on the left with three items: 'Exceptions', 'Questions', and 'Checklists'. The 'Questions' item is selected and highlighted. To the right of the navigation menu, the main content area is titled 'Questions'. It features a table with a header row and several data rows. Each row starts with a checkbox, followed by a 'CHECKLIST QUESTION ID' (in blue text) and a 'QUESTION TEXT'. The table is currently empty of data rows.

<input type="checkbox"/>	CHECKLIST QUESTION ID	QUESTION TEXT
<input type="checkbox"/>	Asset Change	Does the change inv
<input type="checkbox"/>	Asset Removal	Does the change rec
<input type="checkbox"/>	Chemical Change	Does the change rec
<input type="checkbox"/>	Controls parameters	Will controls param
<input type="checkbox"/>	Drawings/Diagrams	Does the change pro
<input type="checkbox"/>	Electrical load	Does the change inc
<input type="checkbox"/>	Energy Source	Will the change mod
<input type="checkbox"/>	Exit Route	Does the change inv
<input type="checkbox"/>	Flare addition	Will the change resu
<input type="checkbox"/>	Heights	Will the change add
<input type="checkbox"/>	Ingress/Egress	Will ingress or Egres
<input type="checkbox"/>	Lock out Tag out	Will the change nec
<input type="checkbox"/>	Machine guarding	Will the change add
<input type="checkbox"/>	Material Storage	Will the change intro

3. In the upper-left corner of the workspace, select **+**.


A blank datasheet for Question appears in the workspace, displaying the **Details** section and **Answer Options** subsection.

The screenshot shows the MoC Admin interface. On the left is a sidebar with a navigation menu containing 'Exceptions', 'Questions' (highlighted), and 'Checklists'. The main content area is titled 'Management of Change A...' and shows a 'Details' section for a question. At the top of this section is a 'Datasheet ID' dropdown menu currently set to 'MI MOC Checklist Questic'. Below this are three required text input fields: 'Question', 'Description', and 'Question Text', each with a red border and the text 'This field is required' underneath. The 'Answer Options' section is partially visible at the bottom, showing an 'Answer' field and a '+ Add Answer Option' button. The right edge of the interface shows the start of an 'Exception Trig' column.

4. In the **Question** box, enter a unique name for the Question.
5. In the **Description** box, enter a description for the Question.
6. In the **Question Text** box, enter the text for the Question.
7. In the **Answers Options** subsection, select **Add Answer Option**.


A new row for adding an Answer Option appears, displaying a drop-down list box in the **Answer** column and a box in the **Exception Triggered** column.

The screenshot shows the 'New Question' form in the MoC Admin interface. The form is titled 'Management of Change A...' and 'New Question'. It includes a sidebar with 'Exceptions', 'Questions', and 'Checklists'. The main form fields are: Datasheet ID (MI MOC Checklist Question), Site (Roanoke), Question (Instrument Caibrations), Description (Instrument Calibrations done and documented), and Question Text (Have the Instrument calibrations done and documented?). The Answer Options section shows a table with columns for Answer and Exception Triggered. A new row is added with a drop-down box in the Answer column and an empty box in the Exception Triggered column. A '+ Add Answer Option' button is visible below the table.

8. In the **Answer** box, select a value for the answer.
9. If you want to associate the Answer Option with an Exception, complete the following steps:
  - a. In the row containing the Answer Option, next to the **Exception Triggered** box, select .

The **Exceptions** window appears, displaying the list of Exceptions that are available in the database.

### Exceptions



EXCEPTION ID	DESCRIPTION
Asset Removal	Asset Removal
Chemical Change	Chemical Change
Controls parameters	Controls parameters
Electrical load	Electrical load
Energy Source	Energy Source
Exit Route	Exit Route
Flare addition	Flare addition
Heights	Heights
Lock out Tag out	Lock out Tag out
Machine guarding	Machine guarding
Material Storage	Material Storage
Procedural	Procedural
Process Sewer	Process Sewer
ref	ef
Solid Waste	Solid Waste



1 - 19 of 19 Results

[Cancel](#)


- b. Select the Exception that you want to associate with the Answer Option, and then select **Link**.

In the **Exception Triggered** box, the Exception ID of the selected Exception appears.


#### Answer Options

Answer	Exception Triggered		
Yes	Electrical load	...	
No		...	

[+ Add Answer Option](#)

**Note:** For a Question, you can associate only one Answer Option with an Exception. When you associate an Exception with an Answer Option, the  button next to the **Exception Triggered** box is disabled for other Answer Options in the Question.

10. If you want to add more Answer Options to the Question, repeat steps 8 through 10.

11. In the upper-right corner of the workspace, select .  
The Question is created.

**Note:** If you save the Question without associating it with at least two Answer Options, the **Add Answer Option** dialog box appears, asking you to associate the Question with a minimum of two Answer Options.

#### Results

- For each answer that you have included for the question, an [Answer Option record](#) is created and associated with the Question.

#### Next Steps

- [Create a Checklist](#)

## Delete a Question

#### Procedure

1. [Access the MoC Admin page.](#)
2. In the left pane, select **Questions**.

A list of available Questions appears.

The screenshot shows the MoC Admin interface. At the top, there are two tabs: 'MOC Overview' and 'MoC Admin'. The 'MoC Admin' tab is active. Below the tabs, there is a navigation menu with three items: 'Exceptions', 'Questions', and 'Checklists'. The 'Questions' item is selected and highlighted. To the right of the navigation menu, the main content area displays a list of Questions. At the top of this list, there are two icons: a plus sign and a trash can. Below these icons is a table with two columns: 'CHECKLIST QUESTION ID' and 'QUESTION TEXT'. The table contains 15 rows, each with a checkbox in the first column and a question text in the second column. The questions listed are: Asset Change, Asset Removal, Chemical Change, Controls parameters, Drawings/Diagrams, Electrical load, Energy Source, Exit Route, Flare addition, Heights, Ingress/Egress, Lock out Tag out, Machine guarding, and Material Storage.

<input type="checkbox"/>	CHECKLIST QUESTION ID	QUESTION TEXT
<input type="checkbox"/>	Asset Change	Does the change inv
<input type="checkbox"/>	Asset Removal	Does the change rec
<input type="checkbox"/>	Chemical Change	Does the change rec
<input type="checkbox"/>	Controls parameters	Will controls param
<input type="checkbox"/>	Drawings/Diagrams	Does the change pro
<input type="checkbox"/>	Electrical load	Does the change inc
<input type="checkbox"/>	Energy Source	Will the change mod
<input type="checkbox"/>	Exit Route	Does the change inv
<input type="checkbox"/>	Flare addition	Will the change resu
<input type="checkbox"/>	Heights	Will the change add
<input type="checkbox"/>	Ingress/Egress	Will ingress or Egre
<input type="checkbox"/>	Lock out Tag out	Will the change nec
<input type="checkbox"/>	Machine guarding	Will the change add
<input type="checkbox"/>	Material Storage	Will the change intro

3. In the row for each Question that you want to delete, select the check box.

In the upper-right corner of the workspace, the  button is enabled.

4. Select .

The **Delete MOC Question** dialog box appears, asking you to confirm that you want to delete each selected Question and its association with Checklists.

**Note:** Deleting Questions in the administrative settings for MOC will not affect the Change Projects that have used the Questions prior to deletion.

5. Select **OK**.  
The selected Question is deleted and the updated list of Questions appears in the workspace.

## Checklists and Questions

### About Checklists and Questions

For successful implementation of a change, a comprehensive checklist must be created, which includes but is not limited to the following aspects of the change:

- Prerequisites that must be fulfilled before the implementation of change. For example, if the change involves replacing an equipment model, the impacted personnel in the organization must be trained on the new equipment.
- Factors that will be affected by the change (i.e., people, processes, assets, and data).
- Factors that may affect the safety of a plant. For example, requirements for an effective emergency response.

In MOC, you can group Questions together to form a Checklist. For a Change Project, you can configure many types of Checklists and use them at different phases of the project. For example, you can create a Checklist for change planning, a Checklist for change implementation, and a checklist for change communication.

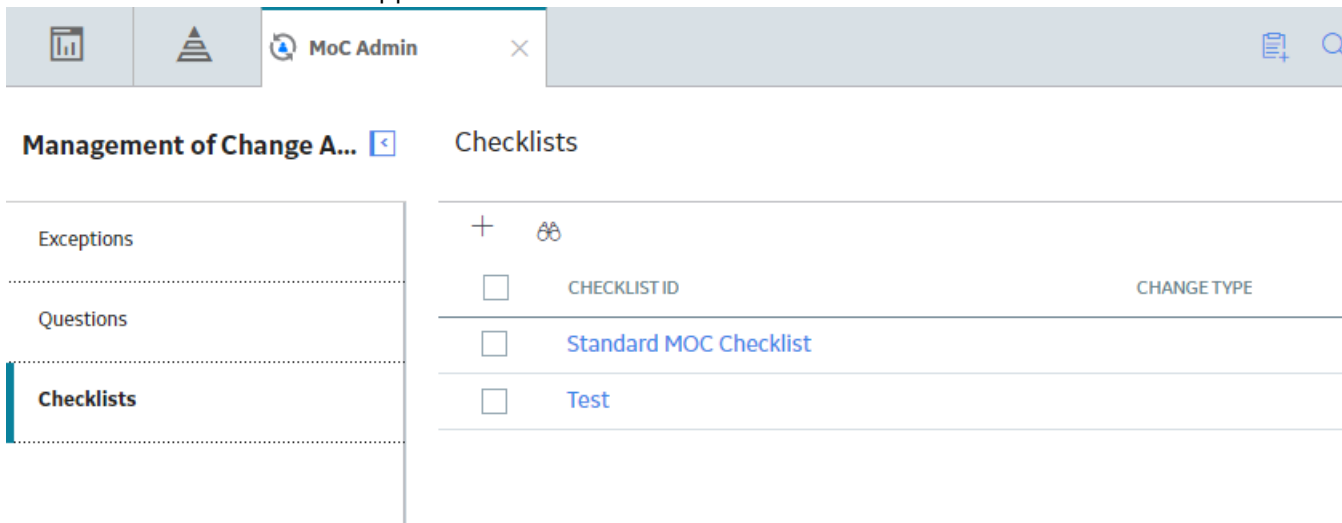
### Access a Checklist

#### Before You Begin

As needed, modify the [MI\\_MOC\\_ANS\\_OPT System Code table](#), which contains a list of values that populates the **Answer** box in the **Question** workspace.

#### Procedure

1. Access the [MoC Admin](#) page.
2. In the left pane, select **Checklists**.  
A list of available Checklists appears.




3. In the **Checklist ID** column, select the link for the Checklist that you want to access.

The datasheet for the selected Checklist appears, displaying the **Definition** and **Checklist Items** sections.

The screenshot shows the 'MoC Admin' interface. The main content area is titled 'Standard MOC Checklist' and is divided into two tabs: 'Definition' (selected) and 'Checklist Items'. Under the 'Definition' tab, there are several input fields: 'Datasheet ID' (a dropdown menu showing 'MI MOC Checklist'), 'Site' (a location pin icon followed by 'Alexan...Energy'), 'Checklist' (a text input field containing 'Standard MOC Checklist'), 'Description' (a text area), and 'Change Type' (a text input field containing 'Text input'). A 'Details' button is located below the 'Datasheet ID' field. On the left side, there is a sidebar with three menu items: 'Exceptions', 'Questions', and 'Checklists' (which is highlighted with a blue bar).

The following information appears in these sections:

- **Definition:** Contains the datasheet for the Checklist. This tab is selected by default.  
**Note:** As needed, in the **Definition** section, you can modify the values in the [available fields](#), and then select  to save your changes.
- **Checklist Items:** Contains the list of Questions that are associated with the Checklist.  
**Note:** As needed, you can [add](#) or [unlink](#) Questions from the Checklist.  
**Note:** The changes made to Checklists in the administrative settings for MOC will not affect the Change Projects that have used the Checklists prior to modification.

## Create a Checklist

### Before You Begin

- [Create the Questions](#) that you want to add in the Checklist.

### Procedure

1. [Access the MoC Admin page](#).
2. In the left pane, select **Checklists**.



A list of available Checklists appears.

The screenshot shows the MoC Admin interface. On the left, there is a navigation menu with three items: 'Exceptions', 'Questions', and 'Checklists'. The 'Checklists' item is highlighted with a blue bar. On the right, the 'Checklists' section is displayed. It features a table with the following columns: 'CHECKLIST ID' and 'CHANGE TYPE'. The table contains three rows of data:


CHECKLIST ID	CHANGE TYPE
<input type="checkbox"/>	Standard MOC Checklist
<input type="checkbox"/>	Test

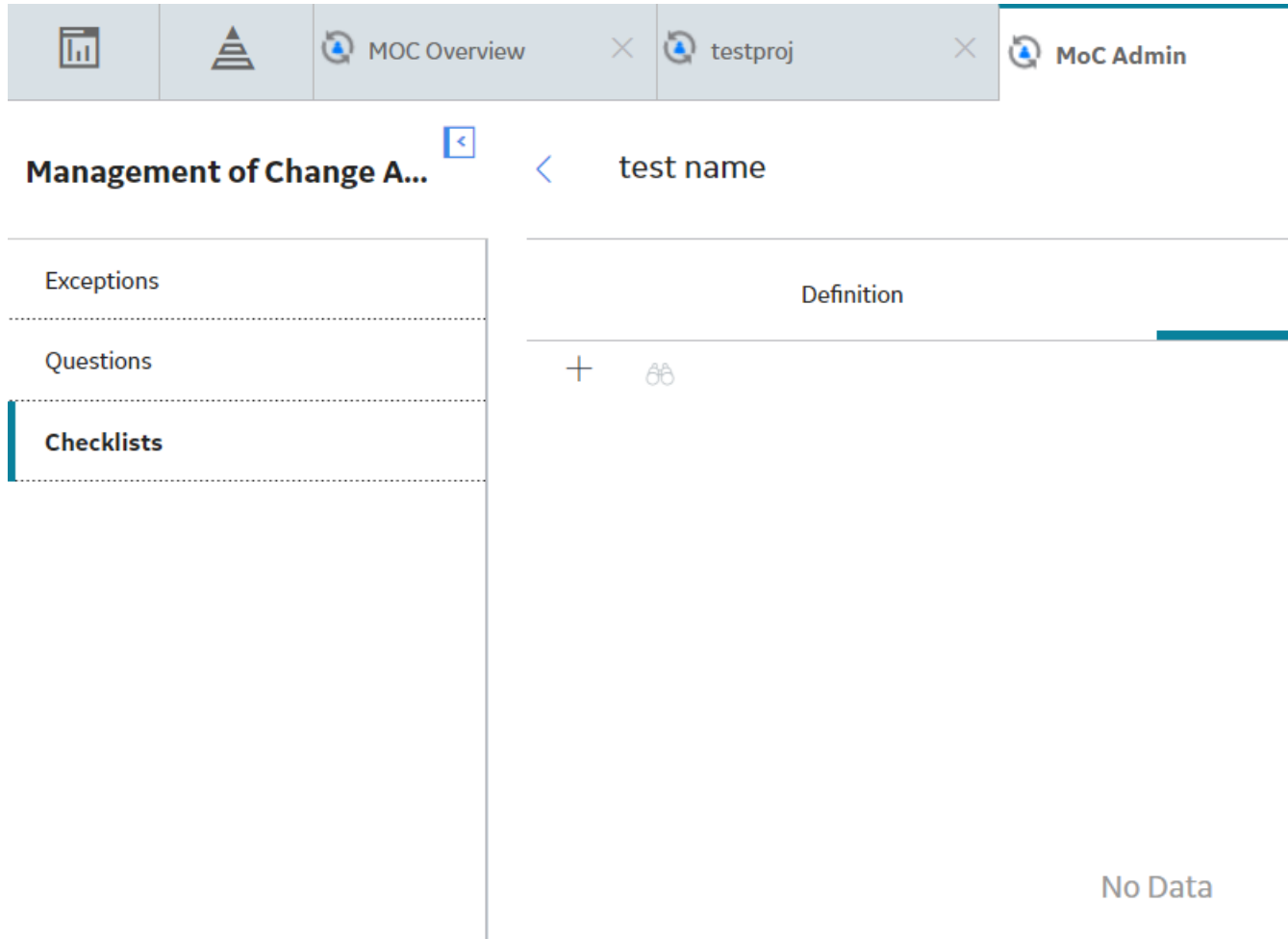
3. In the upper-left corner of the workspace, select **+**.  
The **Definition** section appears in the workspace, displaying a blank datasheet for Checklist.

The screenshot shows the MoC Admin interface with the 'New Checklist' form open. The navigation menu on the left remains the same. The main workspace is titled 'New Checklist' and is divided into two sections: 'Definition' and 'Checklist Items'. The 'Definition' section is currently active and contains the following fields:


- Datasheet ID:** A dropdown menu with 'MI MOC Checklist' selected.
- Site:** A location pin icon followed by the text 'Alexan...rines'.
- Details:** A section header with a blue underline.
- Checklist:** A text input field with the placeholder text 'Text input'. Below the field, a red error message reads 'This field is required'.
- Description:** A text area with the placeholder text 'Text area'.
- Change Type:** A text input field with the placeholder text 'Text input'.

4. As needed, enter values in the **available fields**.

- In the upper-right corner of the **Checklists** workspace, select . The Checklist is saved.
- In the workspace, select **Checklist Items**. The **Checklist Items** section appears, displaying a list of Questions associated with the Checklist.



The screenshot shows the MoC Admin interface. At the top, there is a navigation bar with icons for a dashboard, a tree view, and two tabs: "MOC Overview" and "testproj". The "testproj" tab is active. Below the navigation bar, the page title is "Management of Change A..." with a back arrow icon. The breadcrumb trail shows "test name". The main content area is divided into two sections. On the left, there is a sidebar with three items: "Exceptions", "Questions", and "Checklists". The "Checklists" item is selected and highlighted with a blue bar. On the right, there is a section titled "Definition" with a plus sign and a refresh icon. The text "No Data" is displayed at the bottom right of the page.

- In the upper-left corner of the section, select .

The **Select questions to add** window appears, displaying a list of Questions that are available in the database.

## Select questions to add

0/0

<input type="checkbox"/>	CHECKLIST QUESTION ID	QUESTION TEXT
<input type="checkbox"/>	Electrical load	Does the change increase electrical loading such that additional
<input type="checkbox"/>	Energy Source	Will the change modify processes or systems involving energy
<input type="checkbox"/>	Exit Route	Does the change involve changes to existing emergency exit
<input type="checkbox"/>	Flare addition	Will the change result in the possible discharge to a flare, or o
<input type="checkbox"/>	Heights	Will the change add or change working at heights?
<input type="checkbox"/>	Ingress/Egress	Will ingress or Egress be affected by the change project?
<input type="checkbox"/>	Lock out Tag out	Will the change necessitate revision of existing lockout tagou
<input type="checkbox"/>	Machine guarding	Will the change add or modify equipment or machinery requi
<input type="checkbox"/>	Material Storage	Will the change introduce new chemicals or significantly incr
<input type="checkbox"/>	MSDS	Will process chemistry be changed as a result of the change
<input type="checkbox"/>	Procedural	Does the change project affect Operating or Maintenance pro
<input type="checkbox"/>	Process Safety Information	Does the change project affect process safety information?
<input type="checkbox"/>	Process Sewer	Will the change add or modify a discharge to a process sewer
<input type="checkbox"/>	Solid Waste	Will the change generate a new type or increase the volume
<input type="checkbox"/>	Storm Drain	Will the change result in a possible discharge to an "outside"

1 - 20 of 20 Results

Cancel

- For each Question that you want to add to the Checklist, next to the row containing the Question, select the check box.
- In the lower-right corner of the window, select **Link**.

The Checklist is created and the Questions are added to the Checklist.

The screenshot shows the MoC Admin interface. At the top, there are tabs for 'MOC Overview' and 'testproj'. The main content area is titled 'Management of Change A...' and 'test name'. On the left, there is a sidebar with 'Exceptions', 'Questions', and 'Checklists' (which is selected). The main area displays a table with the following data:

Definition			
	CHECKLIST QUESTION ID	ANSWER	EX
<input type="checkbox"/>	Electrical load	Yes	Ele
<input type="checkbox"/>	Energy Source	Yes	En
<input type="checkbox"/>	Exit Route	Yes	Ex
<input type="checkbox"/>	Heights	Yes	He
<input type="checkbox"/>	Lock out Tag out	Yes	Lo
<input type="checkbox"/>	Material Storage	Yes	Ma

## Add Questions to a Checklist

### Before You Begin

- [Create the Questions](#) that you want to add in the Checklist.

### About This Task

This topic describes how to add Questions to an existing Checklist.

### Procedure

1. [Access the Checklist](#) to which you want to add Questions.
2. In the **Checklists** workspace, select **Checklist Items**.

The **Checklist Items** section appears, displaying a grid containing **Question** and **Exception Triggered** columns.

The screenshot shows a web application interface. At the top, there is a navigation bar with several tabs: a bar chart icon, a pyramid icon, a refresh icon labeled "MOC Overview", a refresh icon labeled "testproj", and a user profile icon labeled "MoC Admin". Below the navigation bar, the main content area is titled "Management of Change A..." with a back arrow and "test name". On the left side, there is a vertical navigation menu with three items: "Exceptions", "Questions", and "Checklists". The "Checklists" item is highlighted with a blue bar. The main content area is currently empty, displaying "No Data".

3. In the upper-left corner of the section, select **+**.

The **Select questions to add** window appears, displaying a list of Questions that are available in the database.

## Select questions to add

0/0

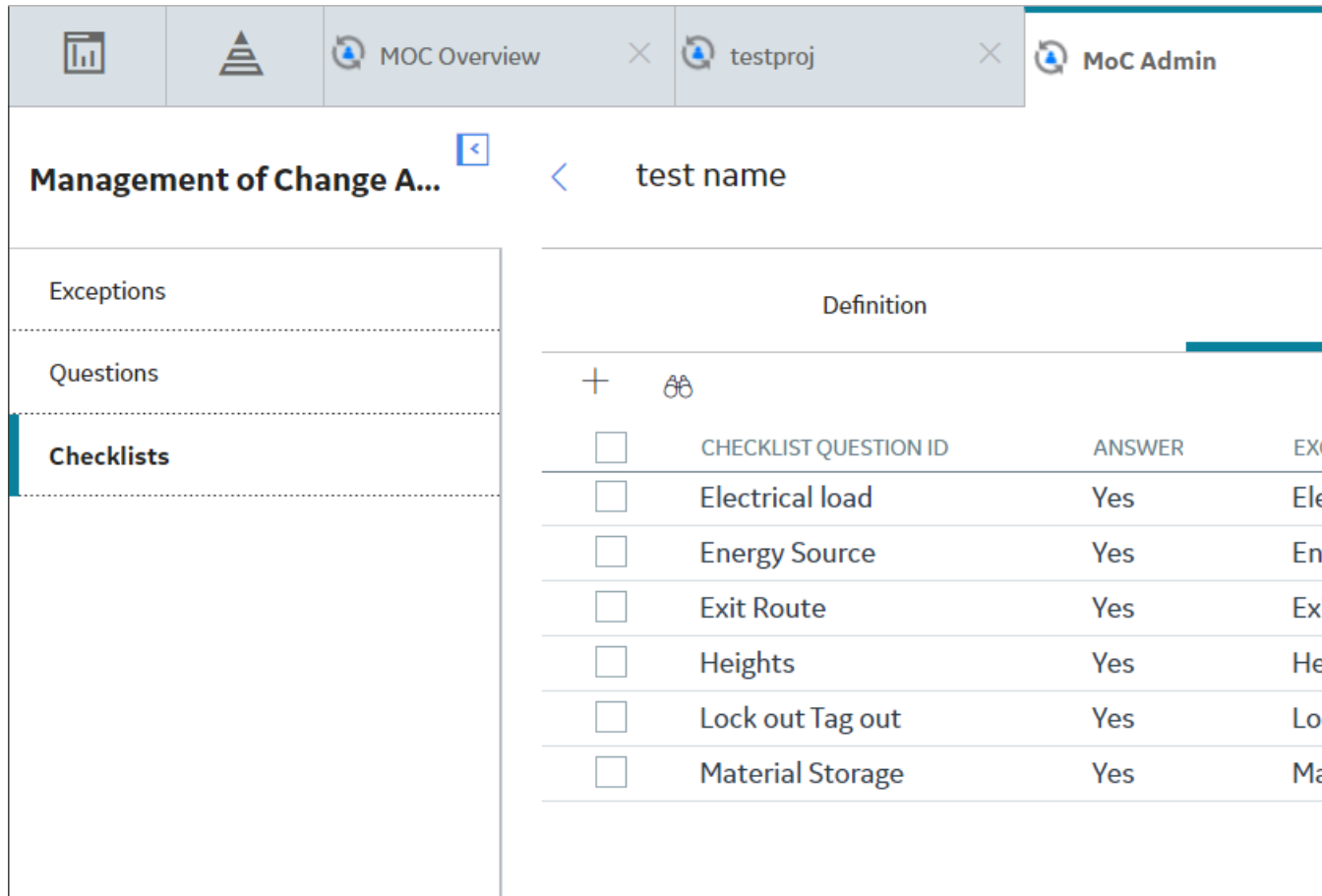
<input type="checkbox"/>	CHECKLIST QUESTION ID	QUESTION TEXT
<input type="checkbox"/>	Electrical load	Does the change increase electrical loading such that additional
<input type="checkbox"/>	Energy Source	Will the change modify processes or systems involving energy
<input type="checkbox"/>	Exit Route	Does the change involve changes to existing emergency exit
<input type="checkbox"/>	Flare addition	Will the change result in the possible discharge to a flare, or o
<input type="checkbox"/>	Heights	Will the change add or change working at heights?
<input type="checkbox"/>	Ingress/Egress	Will ingress or Egress be affected by the change project?
<input type="checkbox"/>	Lock out Tag out	Will the change necessitate revision of existing lockout tagou
<input type="checkbox"/>	Machine guarding	Will the change add or modify equipment or machinery requi
<input type="checkbox"/>	Material Storage	Will the change introduce new chemicals or significantly incr
<input type="checkbox"/>	MSDS	Will process chemistry be changed as a result of the change
<input type="checkbox"/>	Procedural	Does the change project affect Operating or Maintenance pro
<input type="checkbox"/>	Process Safety Information	Does the change project affect process safety information?
<input type="checkbox"/>	Process Sewer	Will the change add or modify a discharge to a process sewer
<input type="checkbox"/>	Solid Waste	Will the change generate a new type or increase the volume
<input type="checkbox"/>	Storm Drain	Will the change result in a possible discharge to an "outside"

1 - 20 of 20 Results

Cancel

4. For each Question that you want to add to the checklist, in the row containing the Question, select the check box.
5. In the lower-right corner of the window, select **Link**.

The Questions are added to the Checklist.



The screenshot shows the MoC Admin interface. At the top, there are tabs for 'MOC Overview' and 'testproj', and a user profile for 'MoC Admin'. The main content area is titled 'Management of Change A...' and 'test name'. On the left, there is a sidebar with three tabs: 'Exceptions', 'Questions', and 'Checklists'. The 'Checklists' tab is selected. The main area displays a table with the following data:

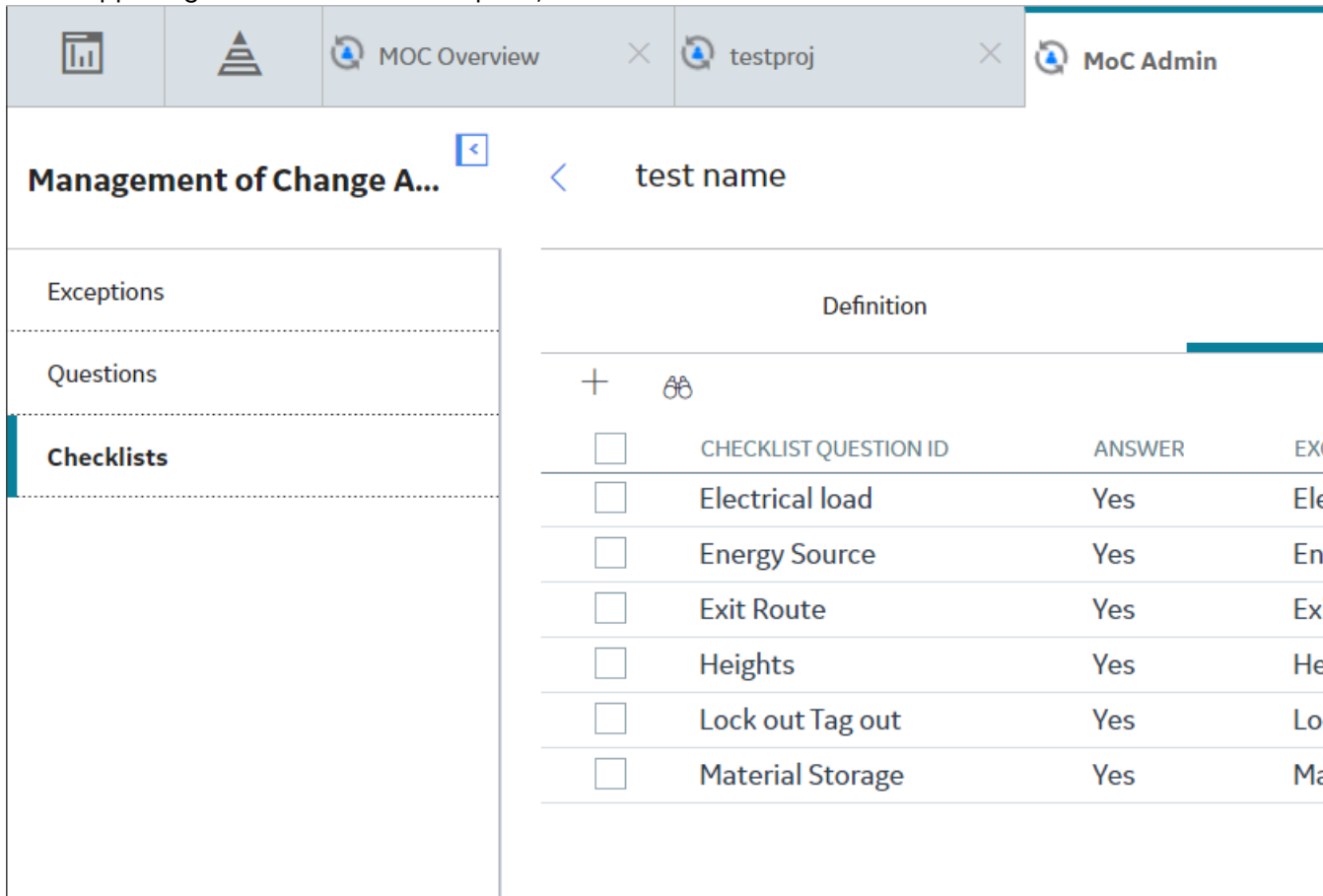
Definition			
	CHECKLIST QUESTION ID	ANSWER	EX
<input type="checkbox"/>	Electrical load	Yes	Ele
<input type="checkbox"/>	Energy Source	Yes	En
<input type="checkbox"/>	Exit Route	Yes	Ex
<input type="checkbox"/>	Heights	Yes	He
<input type="checkbox"/>	Lock out Tag out	Yes	Lo
<input type="checkbox"/>	Material Storage	Yes	Ma

## Unlink Questions From a Checklist

### Procedure


1. [Access the Checklist](#) from which you want to unlink Questions.
2. Select the **Checklist Items** tab.  
The **Checklist Items** section appears, displaying the list of Questions that are associated with the Checklist.
3. For each Question that you want to remove from the Checklist, next to the row containing the Question, select the check box.

In the upper-right corner of the workspace, the  button is enabled.



The screenshot shows the MoC Admin interface. At the top, there is a navigation bar with tabs for 'MOC Overview', 'testproj', and 'MoC Admin'. Below the navigation bar, the main content area is titled 'Management of Change A...' and 'test name'. On the left side, there is a sidebar with three sections: 'Exceptions', 'Questions', and 'Checklists'. The 'Checklists' section is currently selected and highlighted. The main content area displays a table with the following data:

Definition			
	CHECKLIST QUESTION ID	ANSWER	EX
<input type="checkbox"/>	Electrical load	Yes	Ele
<input type="checkbox"/>	Energy Source	Yes	En
<input type="checkbox"/>	Exit Route	Yes	Ex
<input type="checkbox"/>	Heights	Yes	He
<input type="checkbox"/>	Lock out Tag out	Yes	Lo
<input type="checkbox"/>	Material Storage	Yes	Ma

4. Select .  
The **Unlink Checklist Question** dialog box appears, asking you to confirm that you want to unlink the selected Questions from the Checklist.
5. Select **OK**.  
The selected Questions are unlinked from the Checklist and the updated list of Questions appears in the section.

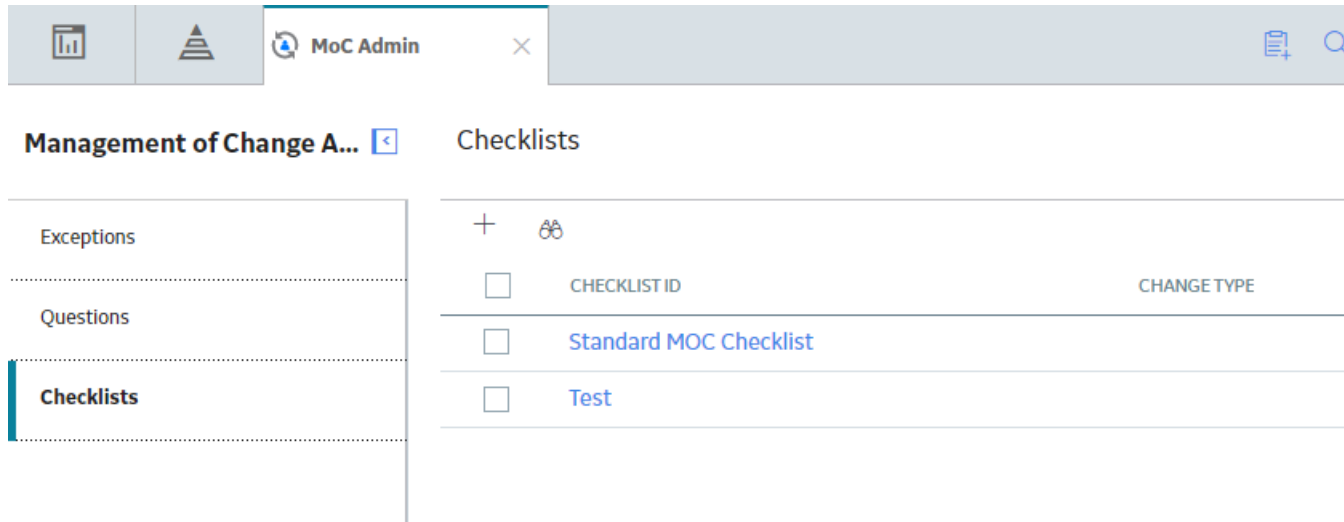
## Delete a Checklist

### Procedure


1. [Access the MoC Admin page.](#)
2. In the left pane, select **Checklists**.



The **Checklists** workspace appears, displaying a list of Checklists that are available in the database.



3. In the row for each Checklist that you want to delete, select the check box.

In the upper-right corner of the workspace, the  button is enabled.

4. Select .

The **Delete MOC Checklist** dialog box appears, asking you to confirm that you want to delete the selected Checklist.

**Note:** Deleting Checklists in the administrative settings for MOC will not affect the Change Projects that have used the Checklists prior to deletion.

5. Select **OK**.

The selected Checklist is deleted and the updated list of Checklists appears in the workspace.

# Chapter 8

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## Deployment and Upgrade

Topics:

- [Deployment](#)
- [Upgrade](#)

## **Deployment**

### **Deployment**

Refer to the deployment information here [Deploy MoC for the First Time](#).

## **Upgrade**

### **Upgrade**

Refer to the upgrade information here: Upgrade Management of Change.

# Chapter 9

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## Reference

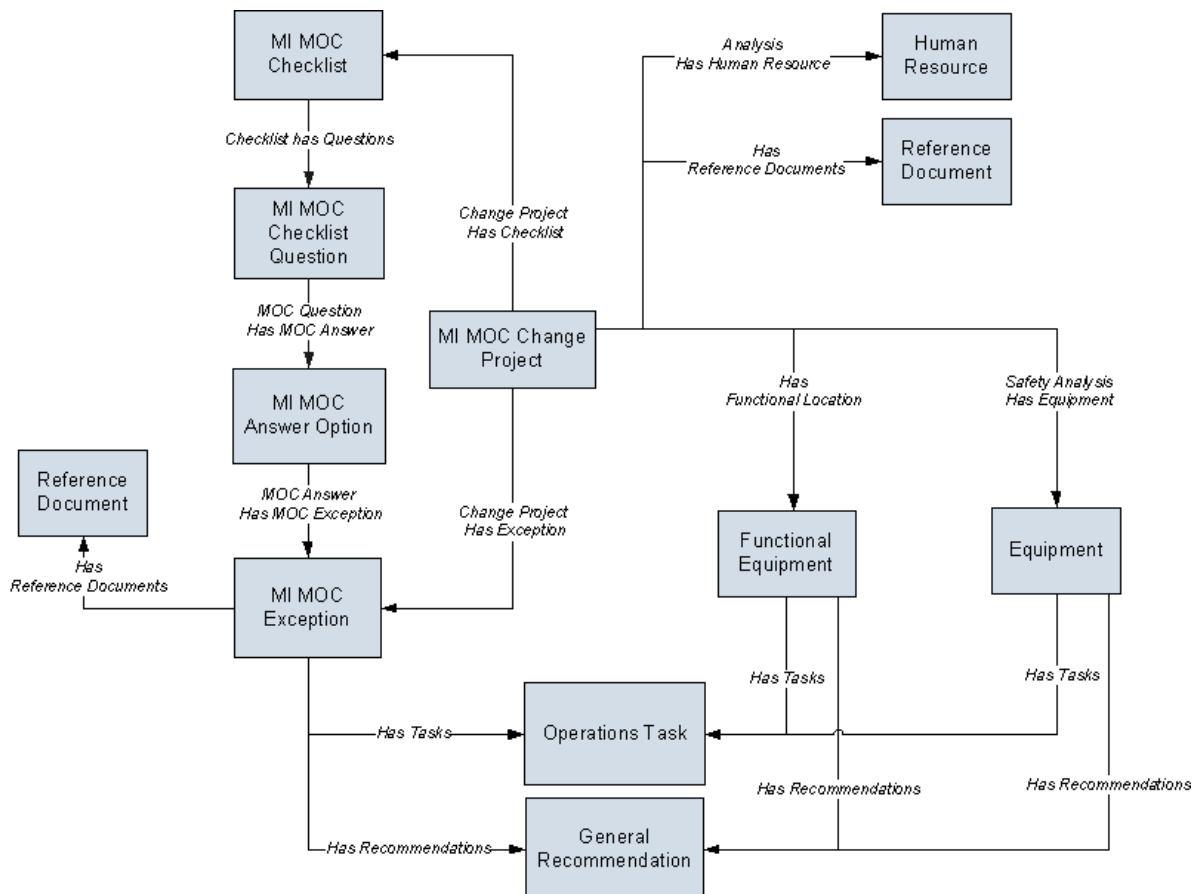
### Topics:

- [General Reference](#)
- [Family Field Descriptions](#)
- [Catalog Items](#)

# General Reference

## MoC Data Model

The following diagram shows how the families used in Management of Change are related to one another.



**Note:** In the diagram, boxes represent entity families and arrows represent relationship families that are configured in the baseline database. You can determine the direction of each relationship definition from the direction of the arrow head: the box from which the arrow originates is the predecessor, and the box to which the arrow head points is the successor.

The following records in MOC are created in the Application Settings for MOC and copies of these records are used in Change Projects:

- MI MOC Exception
- MI MOC Answer Option
- MI MOC Checklist Question
- MI MOC Checklist

A Change Project can be linked to:

- One or more Equipments or Functional Locations.
- One or more Human Resource records.

- One or more Reference Documents.
- One or more Checklists.
- One or more Exceptions.

Each Exception can be linked to one or more General Recommendations.

## MoC Security Groups

The following table lists the baseline Security Groups available for users within this module, as well as the baseline Roles to which those Security Groups are assigned.

**Important:** Assigning a Security User to a Role grants that user the privileges associated with all of the Security Groups that are assigned to that Role. To avoid granting a Security User unintended privileges, before assigning a Security User to a Role, be sure to review all of the privileges associated with the Security Groups assigned to that Role. Also, be aware that additional Roles, as well as Security Groups assigned to existing Roles, can be added via Security Manager.

Security Group	Roles
MI MOC Administrator	MI MOC Administrator MI Safety Admin
MI MOC Approver	MI MOC Approver MI Safety Power
MI MOC User	MI MOC User MI Safety User
MI MOC Viewer	MI MOC Viewer MI Safety User MI Safety Power MI Safety Admin MI APM Viewer

The baseline family-level privileges that exist for these Security Groups are summarized in the following table.

Family	MI MOC Administrator	MI MOC Approver	MI MOC User	MI MOC Viewer
Entity Families				
General Recommendation	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
MI MOC Answer Option	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
MI MOC Change Project	View, Update, Insert, Delete	View, Update	View, Update, Insert, Delete	View
MI MOC Checklist	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View

Family	MI MOC Administrator	MI MOC Approver	MI MOC User	MI MOC Viewer
MI MOC Checklist Question	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
MI MOC Exception	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Operation Tasks	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Reference Document	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Relationship Families				
Analysis Has Human Resource	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Change Project Has Checklist	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Change Project Has Elements	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Change Project Has Exception	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Checklist has Questions	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Has Functional Location	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Has Reference Documents	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Has Tasks	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
MOC Answer Has MOC Exception	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
MOC Question Has MOC Answer	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Has Recommendations	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View
Safety Analysis Has Equipment	View, Update, Insert, Delete	View	View, Update, Insert, Delete	View

## MoC URLs

There is one URL route associated with MOC: **asset-safety/moc**. 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
<b>asset-safety/moc/admin</b> : Displays the <b>MoC Admin</b> page.			
<b>asset-safety/moc/overview</b> : Displays the <b>MOC Overview</b> page.			
<b>asset-safety/moc/&lt;EntityKey&gt;</b> : Displays the <b>Project Summary</b> workspace of the Change Project with the specified Entity Key.			
<b>&lt;EntityKey&gt;</b>	Specifies the Entity Key of the Change Project that you want to access.	Any numeric Entity Key that corresponds to an existing Change Project.	This value is required to access an existing Change Project and its related records (i.e., Checklists, Exceptions, and Changed Elements) from a URL.
<b>asset-safety/moc/overview/&lt;AssetKey&gt;</b> : Displays the <b>MOC Overview</b> page. The information on the page is filtered by the asset specified by the Asset Key.			
<b>&lt;AssetKey&gt;</b>	Specifies the Asset Key of the asset based on which you want to filter information on the <b>MOC Overview</b> page.	Any numeric Asset Key that corresponds to an existing asset.	None

URLs	
Example URL	Destination
asset-safety/moc/2996501	The <b>Project Summary</b> workspace of the Change Project with the Entity Key 2996501.
asset-safety/moc/overview/64251832823	The <b>MOC Overview</b> page appears. In the <b>Change Projects</b> and <b>Tasks</b> section, the list of Change Projects and tasks associated with the asset whose Asset Key is 64251832823 and with all assets within the hierarchy level of the specified asset appears. The results on the <b>MOC Overview Graph</b> and the <b>MOC Calendar</b> are also filtered based on the specified Asset Key.

## MoC System Code Tables

The following table lists the System Code Tables that are used by MOC.



Table ID	Table Description	Function
MI MOC ANS OPT	MOC Answer Options	<p>Populates the Answer field in <a href="#">MI MOC Answer Option records</a>. By default, this table contains the following values:</p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> <li>• NA</li> </ul> <p>A user with administrator privileges can modify this table to include additional answer options.</p>
MI EXCEPTIONS STATE	Exception States	<p>Populates the Status field in the <a href="#">MI MOC Exception records</a>. By default, this table contains the following values:</p> <ul style="list-style-type: none"> <li>• Not Started</li> <li>• In Progress</li> <li>• Complete</li> </ul>
MI Change Project Duration	Change Project Duration Type	<p>Populates the Change Duration field in the <a href="#">MI MOC Change Project records</a>. By default, this table contains the following values:</p> <ul style="list-style-type: none"> <li>• Permanent</li> <li>• Temporary</li> </ul>
MI Change Project Type	Change Project Type	<p>Populates the Change Type field in the <a href="#">MI MOC Change Project records</a>. By default, this table contains the following values:</p> <ul style="list-style-type: none"> <li>• Temporary</li> <li>• Permanent</li> <li>• Minor Instrument Change</li> <li>• Personnel</li> </ul> <p>A user with administrator privileges can modify this table to include additional change types.</p>

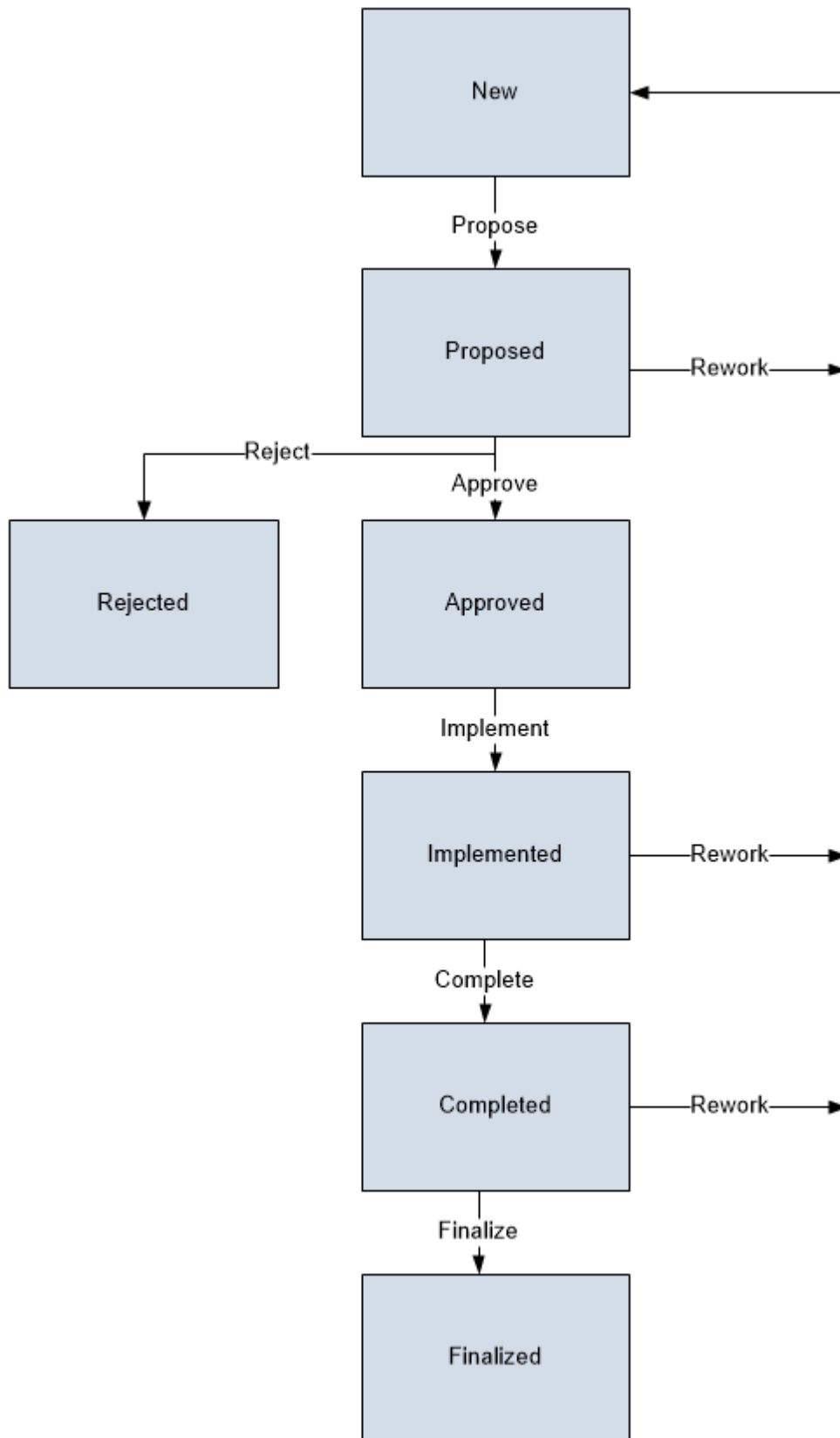
## MoC State Management for Change Projects

When you are working with Change Projects, you can use state management to track the progress of the projects. When you [access a Change Project](#), options to manage the states for the project appear. You can follow the standard procedure to manage record states. The following baseline record states are configured for the Change Project family:

- **New:** Indicates that a new Change Project is created.
- **Proposed:** Indicates that the Change Project is proposed for review and approval.
- **Approved:** Indicates that the Change Project has been approved and is ready to be implemented.

- Rejected: Indicates that the Change Project has been rejected and the change will not be implemented.
- Implemented: Indicates that all the tasks created for the Change Project have been completed and the Change Project is ready to be approved for completion.
- Completed: Indicates that the results of all the tasks associated with the Change Project have been reviewed and approved for completion. For a temporary change, if you want to change the date up to which the changes will be valid, you can select the Rework operation to modify the date in the Change Valid Until field of the Change Project.
- Finalized: Indicates that the change has been delivered successfully and all affected personnel have been communicated about the change.

### Illustration of Change Project State Configuration



## State Configuration Roles

The following table lists the baseline states, the operation that can be performed on each state, and the State Configuration Roles assigned to each state:

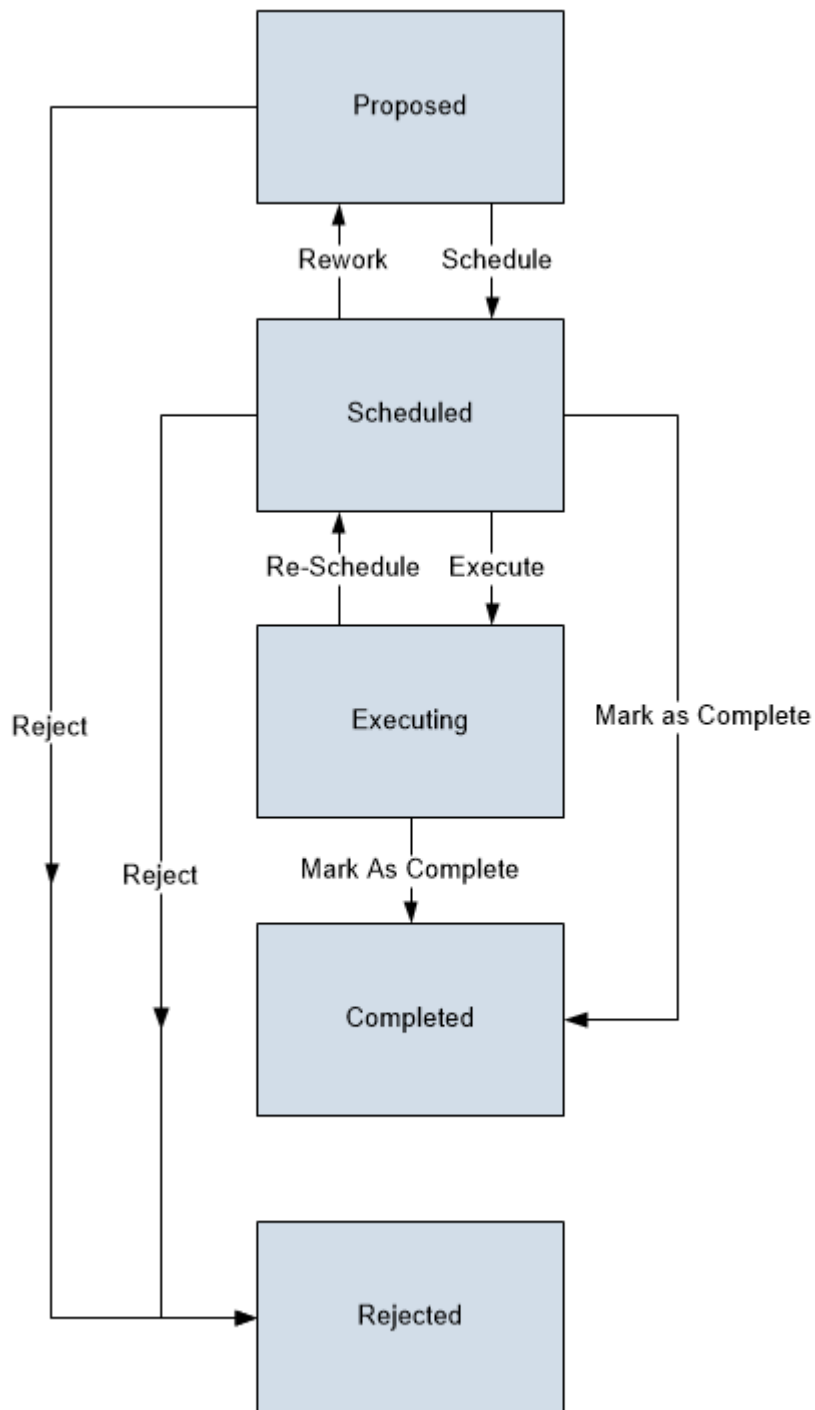
State	Operation	User Role
New	Propose	MI Safety User, MI Safety Admin
Proposed	Rework	MI Safety Power, MI Safety Admin
	Approve	
	Reject	
Rejected	None	None
Approved	Implement	MI Safety User, MI Safety Power, MI Safety Admin
Implemented	Rework	MI Safety Power, MI Safety Admin
	Complete	
Completed	Rework	MI Safety Power, MI Safety Admin
Completed	Finalize	
Finalized	None	None

## About State Management for Tasks

When you are working with tasks in MOC, you can use state management to facilitate a workflow that tracks the progress of the task. When you [access a task](#), options to manage the states for the task appear. You can follow the standard procedure to manage record states. The following record states are configured for the Operations Task family:

- **Proposed:** Indicates that the task is proposed to the appropriate user for review and approval.
- **Scheduled:** Indicates that the task has been approved and scheduled for execution. If you want to modify the task further before approving, you must select the Rework operation to change the state of the task to Proposed.
- **Rejected:** Indicates that the task has been rejected and will not be implemented.
- **Executing:** Indicates that the user to whom the task has been assigned has started work for the task. If you want to re-schedule the task, you must select the Re-schedule operation to change the state of the task to Scheduled.
- **Completed:** Indicates that the assigned user has completed the task.

### Illustration of Task State Configuration



### State Configuration Roles

The following table lists the default states, the operations that can be performed on each state, and the State Configuration Roles assigned to each state:

State	User Role
Proposed	MI Safety Admin, MI Safety Power, MI Safety User
Scheduled	MI Safety Admin, MI Safety Power, MI Safety User
Rejected	None
Executing	MI Safety Admin, MI Safety Power, MI Safety User
Completed	None

## MoC Site Filtering

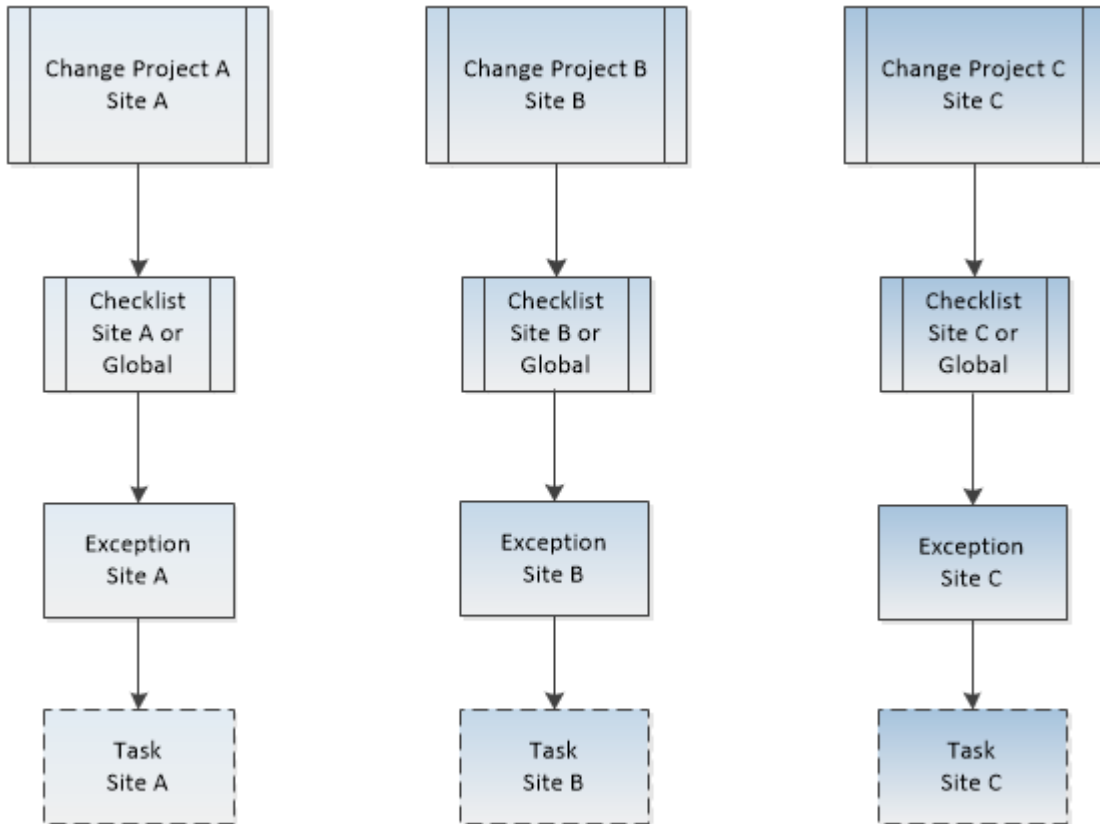
Site filtering in MOC is achieved by specifying a site on the datasheet of the Change Project and that site assignment is applied to all the related records. Users must have privileges for the relevant site to access records for the specified site. Users can be assigned to one or many sites. They will be able to see only the records that are assigned to their site(s) or those that are global records.

Site filtering is enabled for the following families:

- MI MOC Change Project:** When you create a Change Project, you can assign it to any site. After you save the changes, you cannot modify the site of the Change Project. You can link assets to a Change Project only if the asset is a Global record or a record that belongs to the same site as that of the Change Project. Also, you can associate only Global records or records that belong to the same site as that of the Change Project, as changed elements to the project.
- MI MOC Checklist:** When you create a Checklist, you can assign it to any site. After you save the changes, you cannot modify the site for the Checklist. You can add a Checklist to a Change Project, only if the Checklist belongs to the same site as that of the Change Project. If you associate a Change Project with a copy of the Checklist whose site is set to Global, then the copy of the Checklist and all the records associated with it will inherit the site of the Change Project.
- MI MOC Checklist Question:** When you create a Question, you can assign it to any site. The Answer Options that you create in a Question will inherit the site of the Question. You can add a Question to a Checklist only if the site assigned to the Question and the Checklist are the same.
- MI MOC Exception:** When you create an Exception, you can assign it to any site. After you save the changes, you cannot modify the site for the Exception. You can associate an Answer Option in a Question with an Exception only if the site assigned to the Exception and to the Question are the same.
- Operations Task:** The tasks created for Exceptions associated with the Change Project will inherit the site from the associated Change Project.

### Illustration

The following image shows an illustration of site filtering in MOC:



Users assigned to Site A will be able to view data related to Site A or Global data. Users assigned to Site A and Site B will be able to view data related to Site A, Site B, and Global. Users assigned to Site A, Site B, and Site C will be able to view data related to Site A, Site B, Site C, and Global.

**Example**

Consider an organization that has three sites, Site X, Site Y, and Site Z and contains the following records:

- Change Project 1: Assigned to Site X
- Change Project 2: Assigned to Site Y
- Change Project 3: Assigned to Site Z
- Checklist 1: Assigned to Site X
- Checklist 2: Assigned to Site Y
- Checklist 3: Assigned to Global

**Scenario 1: User assigned to only Site X**

When this user accesses the **MOC Overview** page, the user will be able to see the records that are assigned to Site X and Global:

- Change Project 1: Assigned to Site X
- Checklist 1: Assigned to Site X
- Checklist 3: Assigned to Global

To Change Project 1, the user can add Checklists that belong to Site X and Global.

Suppose that the user adds Checklist 3 to Change Project 1, then Checklist 3\_1 is created as a copy of Checklist 3 and associated with Change Project 1. The site assigned to Checklist 3\_1 will be Site X. The copies of Questions and Exceptions created will also be assigned to Site X. The tasks that the user creates for Change Project 1 will also belong to Site X.

### **Scenario 2: User assigned to both Site X and Site Y**

When this user accesses the **MOC Overview** page, the user will be able to see the records that are assigned to Site X, Site Y, and Global:

- Change Project 1: Assigned to Site X
- Change Project 2: Assigned to Site Y
- Checklist 1: Assigned to Site X
- Checklist 2: Assigned to Site Y
- Checklist 3: Assigned to Global

The user will also be able to access and manage the Checklists, Exceptions, and tasks associated with Change Project 1 and Change Project 2.

The user can add only Checklist 1 and Checklist 3 to Change Project 1 since the project belongs to Site X. Similarly, the user can add only Checklist 2 and Checklist 3 to Change Project 2, which belongs to Site Y.

### **Scenario 3: Super User**

When this user accesses the **MOC Overview** page, the user will be able to view the records that are assigned to any of the sites:

- Change Project 1: Assigned to Site X
- Change Project 2: Assigned to Site Y
- Change Project 3: Assigned to Site Z
- Checklist 1: Assigned to Site X
- Checklist 2: Assigned to Site Y
- Checklist 3: Assigned to Global

The user will also be able to access and manage the Checklists, Exceptions, and tasks associated with Change Project 1, Change Project 2, and Change Project 3.

The user can add only Checklist 1 and Checklist 3 to Change Project 1 since the project belongs to Site X. Similarly, the user can add only Checklist 2 and Checklist 3 to Change Project 2, which belongs to Site Y. The user can add only Checklist 3 to Change Project 3.

## **Family Field Descriptions**

### **MI MOC Change Project Records**

MI MOC Change Project records store information about the Change Project. This topic provides an alphabetical list and description of the fields that exist for the MI MOC Change Project family and appear on the MI MOC Change Project datasheet. 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.

Field	Data Type	Description	Behavior and Usage
Change Duration	Character	Indicates whether the change is a permanent change or a temporary change.	This field appears as a list that is populated by the MI_Change_Project_Duration System Code Table.
Change Project ID	Character	The identification for the Change Project.	This field is required. You must enter a unique value in this field.
Change Type	Character	Indicates the type of change managed by the Change Project.	This field appears as a list that is populated by the MI_Change_Project_Type System Code Table.
Change Valid Until	Date	The date up to when the change is valid.	This field is enabled only if the value in the Change Duration field is Temporary.  You can select a date in this field.
Description	Character	A description for the Change Project.	You can enter a value manually.
End Date	Date	Indicates the date when the Change Project was completed.	You can select a date in this field. The date that you select in this field must be later than the date specified in the Start Date field.
Owner	Character	The name of the team member who is responsible for managing the Change Project.	You can enter a value manually.
Purpose	Character	A description of the goal of the Change Project.	You can enter a value manually.
Scope	Character	A description of the intended scope of change to be accomplished through the Change Project.	You can enter a value manually.
Start Date	Date	Indicates the date when the Change Project was started.	By default, this field contains the date on which the Change Project was created. You can <a href="#">modify the date</a> .

## MI MOC Checklist Records

MI MOC Checklist records store information about Checklists associated with Change Projects. The MI MOC Checklist family is also used to store information about the [Checklists that you created using the Application Settings for MOC](#). This topic provides an alphabetical list and description of the fields that exist for the MI MOC Checklist family and appear on the MI MOC Checklist datasheet. 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.

Field	Data Type	Description	Behavior and Usage
Checklist ID	Character	The identification for the Checklist.	This field is automatically populated with a unique value.
Description	Character	The description of the Checklist.	This field is populated with the value in the Description field of the MI MOC Checklist record whose copy is being created.
Is Admin Setting	Boolean	Indicates whether the Checklist represents a record created in the Application Setting.	<p>This field does not appear on the datasheet.</p> <p>This field is True if you <a href="#">create the record using the Application Settings for MOC</a>.</p> <p>This field is False if APM automatically created the record as a copy of the Checklist that you created.</p>

## MI MOC Checklist Question Records

MI MOC Checklist Question records store information about the Checklist Questions that are associated with a Checklist of a Change Project. When you [add a Checklist to a Change Project](#), MI MOC Checklist Question records are created automatically by copying [the Checklist Question records that you created in the application Settings for MOC](#). This topic provides an alphabetical list and description of the fields that exist for the MI MOC Checklist Question family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

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.

Field	Data Type	Description	Behavior and Usage
Checklist Question ID	Character	The identification for the Checklist Question.	This field is automatically populated with a unique value.
Description	Character	The text of the Checklist Question.	This field is populated with the value in the Description field of the MI MOC Checklist Question record whose copy is being created.
Is Admin Setting	Boolean	Indicates whether the Checklist Question represents a record created in the Application Setting.	<p>This field does not appear on the datasheet.</p> <p>This field is True if you created the record using the Application Settings for MOC.</p> <p>This field is False if APM automatically created the record as a copy of the Checklist Question that you created.</p>
Question Text	Character	The text for the Checklist Question.	This field is populated with the value in the Question Text field of the MI MOC Checklist Question record whose copy is being created.

## MI MOC Answer Option Records

MI MOC Answer Option records store information about an Answer Option for a Question and the corresponding Exception that must be created for the Answer Option. When MI MOC Checklist Question records are created by copying the Checklist Question records that you [created in the Application Settings for MOC for the Checklist](#), the associated Answer Option records are also copied. This topic provides an alphabetical list and description of the fields that exist for the MI MOC Answer Option family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

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.

Field	Data Type	Description	Behavior and Usage
Answer	Character	Identifies the response that triggers an Exception.	This field is populated with the value in the Answer field of the MI MOC Answer Option record whose copy is being created.
Exception ID	Character	The identification of the Exception that will be triggered on selection of the response indicated in the Answer field.	This field is populated with the value in the Exception ID field of the MI MOC Answer Option record whose copy is being created.
Exception Key	Numeric	The Entity Key of the Exception indicated in the Exception ID field.	This field is populated with the value in the Exception Key field of the MI MOC Answer Option record whose copy is being created.  This field does not appear on the datasheet.
Is Admin Setting	Boolean	Indicates whether the Answer Option represents a record created in the Application Setting.	This field does not appear on the datasheet.  This field is True if you created the record using the Application Settings for MOC.  This field is False if APM automatically created the record as a copy of the Answer Option that you created.

## MI MOC Exception Records

MI MOC Exception records store information about the Exceptions. For a Checklist added to the Change Project, when the selected Answer Option for a Question is associated with an Exception, a copy of the [Exceptions created in MOC Application Settings](#) is created. This topic provides an alphabetical list and description of the fields that exist for the MI MOC Exception family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

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.

Field	Data Type	Description	Behavior and Usage
Description	Character	Contains a description about the Exception.	This field is populated with the value in the Description field of the MI MOC Exception record whose copy is being created.
Exception ID	Character	The identification of the Exception.	This field is automatically populated with a unique value.
Exception Type	Character	The type of Exception.	This field is populated with the value in the Exception Type field of the MI MOC Exception record whose copy is being created.
Is Admin Setting	Boolean	Indicates whether the Exception represents a record created in the Application Setting.	This field does not appear on the datasheet.  This field is True if you created the record using the Application Settings for Management of Change.  This field is False if APM automatically created the record as a copy of the Exception that you created.
Status	Character	Indicates the status of the exception.	This field appears as a list that is populated by the MI_EXCEPTIONS_STATE System Code Table.

## Operations Task Records

Operations Task records store information about the tasks that are associated with Exceptions in a Change Project. This topic provides an alphabetical list and description of the fields that exist for the Operations Task family. The information in the table reflects the baseline state and behavior of the fields. This list is not comprehensive.

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.

Field	Data Type	Description	Behavior and Usage
Asset ID	Character	The identification of the Asset to which the task is associated.	You can search and select an asset to associate with the task.
Desired Interval	Numeric	A number indicating how often the task should be performed.	By default, this field contains the value 0.  You must enter a value between the Min Interval and Max Interval values.  The value in this field is used in calculating the value in the Next Date field.
Desired Interval UOM	Character	The unit of measurement for the value in the Desired Interval field.	This field contains a list of the following values: <ul style="list-style-type: none"> <li>• Days (DAYS)</li> <li>• Months (MON)</li> <li>• Weeks (WEEKS)</li> <li>• Years (YEARS)</li> </ul> By default, the value Months (MON) is selected.  The units that you select for the desired interval are also applicable to the Max Interval UOM and Min Interval UOM fields.
Last Date	Date	Date on which the task is completed.	By default, this field contains the date on which the task was created. You can, however, modify the date.  The date that you select in this field is used in determining the values in the Next Date, Min Date, and Max Date fields.
Max Date	Date	The date by which the task must be performed. You can compare this date with the current date to determine by the overdue period for the task.	This field is disabled and populated automatically with a value calculated as follows:  Max Date = Last Date + Max Interval

Field	Data Type	Description	Behavior and Usage
Max Interval	Numeric	The maximum interval to perform the task.	<p>If the value in this field is 0, and you entered a value in the Desired Interval field, this field is automatically populated with the value in the Desired Interval field.</p> <p>If the value you enter in this field is lesser than the value in the Desired Interval field, an error message appears, indicating that the maximum interval must be greater than the desired interval.</p>
Max Interval UOM	Character	The unit of measurement for the value in the Max Interval field.	This field is disabled and populated automatically with the value in the Desired Interval UOM field.
Min Date	Date	The earliest date by which you must perform the task next time.	<p>This field is disabled and populated automatically with a value calculated as follows:</p> <p>Min Date = Last Date + Min Interval</p>
Min Interval	Numeric	The minimum interval to perform the task next time.	<p>By default, this field contains the value 0.</p> <p>You must enter a value lesser than the value in the Max Interval field.</p>
Min Interval UOM	Character	The unit of measurement for the value in the Min Interval field.	This field is disabled and populated automatically with the value in the Desired Interval UOM field.
Next Date	Date	The date when you must perform the task next time.	<p>This field is disabled and calculated as follows:</p> <p>Next Date = Last Date + Desired Interval</p>

Field	Data Type	Description	Behavior and Usage
Reoccurring	Boolean	Indicates whether the task is recurring.	This field contains a check box. <ul style="list-style-type: none"> <li>If the task is a recurring task, select the check box.</li> <li>If the task is a not a recurring task, clear the check box.</li> </ul> By default, this field is selected.
Task Assigned To	Character	The team member to whom the task has been assigned.	This field contains a list of Security Users who belong to the Security Group MI MOC User or the Security Role MI Safety User.
Task Description	Character	A description for the task.	You can enter a value manually.
Task Details	Character	The details of the task.	You can enter a value manually.
Task ID	Character	The identification of the task.	This field is required. You must enter a unique value in this field.
Task State	Character	The state associated with the task.	This field is disabled and is automatically populated with the current state of the task.
Task Type	Character	Indicates the type of task.	This field contains a list of values defined in the Task Types records.

## Catalog Items

### Catalog Items

The Management of Change Catalog folders contain queries, graphs, and reports that appear throughout MOC and display information contained in the records that make up a Change Project.

### Queries Folder

The Catalog folder `\\Public\Meridium\Modules\Management Of Change\Queries` contains the following items.



Query Name	Behavior and Usage
All Change Projects	Returns the list of Change Projects. This query is used when you select the <b>Change Projects</b> tab on the <b>MOC Overview</b> page.
All MOC Tasks	Returns the list of Operations Tasks. This query is used when you select the <b>Tasks</b> tab on the <b>MOC Overview</b> page.
All Exceptions Admin Query	Returns the list of Exceptions available in the database. This query is used when you select the <b>Exceptions</b> tab on the <b>MoC Admin</b> page.
Change Project Checklist Query	Returns the list of Checklists associated with a Change Project. This query is used when you select the <b>Checklists</b> tab in the pane to the left of the <b>Project Summary</b> workspace.
Checklist Questions Query	Returns the list of Questions associated with a Checklist. This query is used when you select the <b>Checklist Items</b> tab for a Checklist on the <b>MoC Admin</b> page.
Exception Graph Query	This query is used to create the <b>Exception Summary Graph</b> , which appears in the <b>Summary</b> section in the <b>Project Summary</b> workspace of a Change Project.
Exceptions Admin Query	Returns the list of Exceptions assigned to a specific site. This query is used while creating Questions, when you search for an Exception to associate with an Answer Option.
MOC All Checklist Admin Query	Returns the list of Checklists available in the database. This query is used when you select the <b>Checklists</b> tab on the <b>MoC Admin</b> page.
MOC Checklists Admin Query	Returns the list of Checklists assigned to a specific site. This query is used when you add Checklists to a Change Project.
MOC Questions Admin Query	Returns the list of Checklist Questions available in the database. This query is used when you select the <b>Questions</b> tab on the <b>MoC Admin</b> page.
Remaining Questions	Returns the list of Questions that belong to the same site as that of the Checklist and that are not associated with any Checklist. This query is used to display results on the <b>Select questions to add</b> window, which appears when you <a href="#">add Questions to a Checklist</a> .
Task states count query	This query is used to display the number of tasks in each state available for the Operations Task family.
Task Summary Graph Query	This query is used to create the <b>Task Summary Graph</b> , which appears in the <b>Summary</b> section in the <b>Project Summary</b> workspace of a Change Project.

Query Name	Behavior and Usage
Answered Count by Checklist	This query is used to calculate the number of Questions that are answered in a Checklist.
Unanswered Count by Checklist	This query is used to calculate the number of Questions that have not been answered in a Checklist.
Exceptions Triggered by Change Project	This query is used to calculate the number of Exceptions that have been created based on your responses in a Checklist for a Change Project.

## Graphs Folder

The Catalog folder \\Public\Meridium\Modules\Management Of Change\Graphs contains the following items.

Graph Name	Behavior and Usage
Exception Summary Graph	<p>Displays the percentages of Exceptions in each of the following statuses:</p> <ul style="list-style-type: none"> <li>• Not Started</li> <li>• In Progress</li> <li>• Complete</li> </ul> <p>The graph appears in the <b>Project Summary</b> workspace of a Change Project.</p>
Task Summary Graph	<p>Displays the percentages of Tasks in each state defined for the Operations Task family.</p> <p>The graph appears in the <b>Project Summary</b> workspace of a Change Project.</p>

## Dashboards Folder

The Catalog folder \\Public\Meridium\Modules\ManagementOfChange\Dashboards contains the following items:

Name	Behavior and Usage
MOC Overview Dashboard	Displays the dashboard, which contains the MOC Overview Graph and the MOC Calendar Query, for the Management of Change module.

The Catalog folder \\Public\Meridium\Modules\ManagementOfChange\Dashboards\Charts contains the following items:

Graph Name	Behavior and Usage
MOC Overview Graph	<p>Displays the number of Change Projects in each year, for the last five years including the current year, in the following categories:</p> <ul style="list-style-type: none"> <li>• Permanent</li> <li>• Temporary</li> <li>• Expired</li> </ul> <p>The Change Projects are filtered based on the selected hierarchy level.</p>

The Catalog folder \\Public\Meridium\Modules\ManagementOfChange\Dashboards\Queries contains the following items:

Query Name	Behavior and Usage
MOC Calendar Query	Returns the list of Operations Tasks available for the selected hierarchy level. This query is used to populate the tasks in the calendar that appears <a href="#">on the MOC Overview page</a> .
MOC Last 5 Years	Returns the last five years including the current year.
MOC Overview Chart Query	This query is used to create the MOC Overview Graph, which appears <a href="#">on the MOC Overview page</a> .
MOC Permanent Projects	Returns a list and number of permanent Change Projects.
MOC Temporary Expired Projects	<p>Returns a list and number of temporary Change Projects that satisfy the following criteria:</p> <ul style="list-style-type: none"> <li>• The value in the Change Valid Until field is less than the current date.</li> <li>• The state of the project is not Finalized.</li> </ul>
MOC Temporary Projects	Returns a list and number of temporary Change Projects whose value in the Change Valid Until field is greater than the current date.