Asset Strategy Implementation

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Chapter

1

Overview

Topics:

Overview of Asset Strategy Implementation

The GE Digital APM Asset Strategy Implementation (ASI) module lets you build Implementation Packages, which are containers of actions to be implemented in SAP. By implementing these Implementation Packages, you can create the corresponding structure in SAP.

If you want to implement work via items in your SAP system, you can also use ASI to create items such as Maintenance Plans, Maintenance Items, and Task Lists.

Important: If you choose to track your work using SAP items, you must activate the ASI for SAP license, which allows for integration between GE Digital APM and an external SAP System.

Keep in mind that although ASI is highly configurable, the focus of this documentation is to explain how to perform tasks using the baseline ASI implementation.

Access the ASI Module Overview Page

Procedure

In the module navigation menu, select **Strategy** > **Asset Strategy Implementation**. The **ASI Overview** page appears.
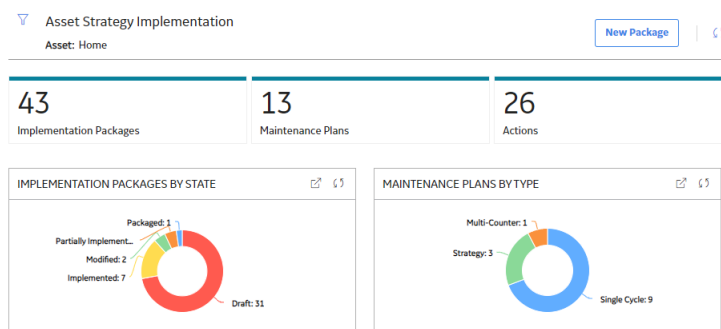
The tabs in the page summarize the number of items in various categories. You can select a tab to view one of the following:

- **Implementation Packages:** A list of all implementation packages.
- **Maintenance Plans:** A list of maintenance plans.
- **Actions:** A list of actions associated with the implementation packages.

The page contains the following charts:

- **Implementation Packages by State:** Plots the number of implementation packages in each state.
- **Maintenance Plans by Type:** Plots the number of maintenance plans of each type.

Note: The **Asset Strategy Implementation Overview** page is not updated automatically when you return to the previously opened tab. You can select ⟳ to update the page.

Select ▽ in the page to filter the information displayed in the **ASI Overview** page to a specific time range or asset. When you filter by an asset, the page displays information for the selected asset and the assets under it in the hierarchy. The Home level includes information not related to an asset or related to an asset not in the Asset Hierarchy.

ASI Workflow

The following workflow describes the basic tasks that you can perform within ASI and provides a general order in which you should perform them. This workflow assumes that all installation, upgrade, and configuration tasks have already been completed.

In general, you will need to perform the following tasks in ASI:

1. Create an Implementation Package.
2. Add Actions from a strategy.
3. Add Work Management Item (WMIs) to the Implementation Package.
4. Package the Implementation Package.
5. Implement the Implementation Package.

Chapter

2

Workflow

Topics:

APM Strategy: ASI for SAP Workflow

Important: In GE Digital APM, the functionality represented in the product workflow shown below is not supported.

This workflow describes the process of building Implementation Packages, which are containers of records that dictate the work that you want to perform and the Asset Strategies that contain the original work requests. Using ASI, you can determine where you want to track the physical work that needs to be performed, either on your GE Digital APM system or an external SAP system. Then, by implementing these Implementation Packages, you can create those physical work items (GE Digital APM records or SAP items).

In the following workflow diagram, the blue text in a shape indicates that a corresponding description has been provided in the sections that follow the diagram. For more information, refer to the topic Interpreting the Workflow Diagrams.
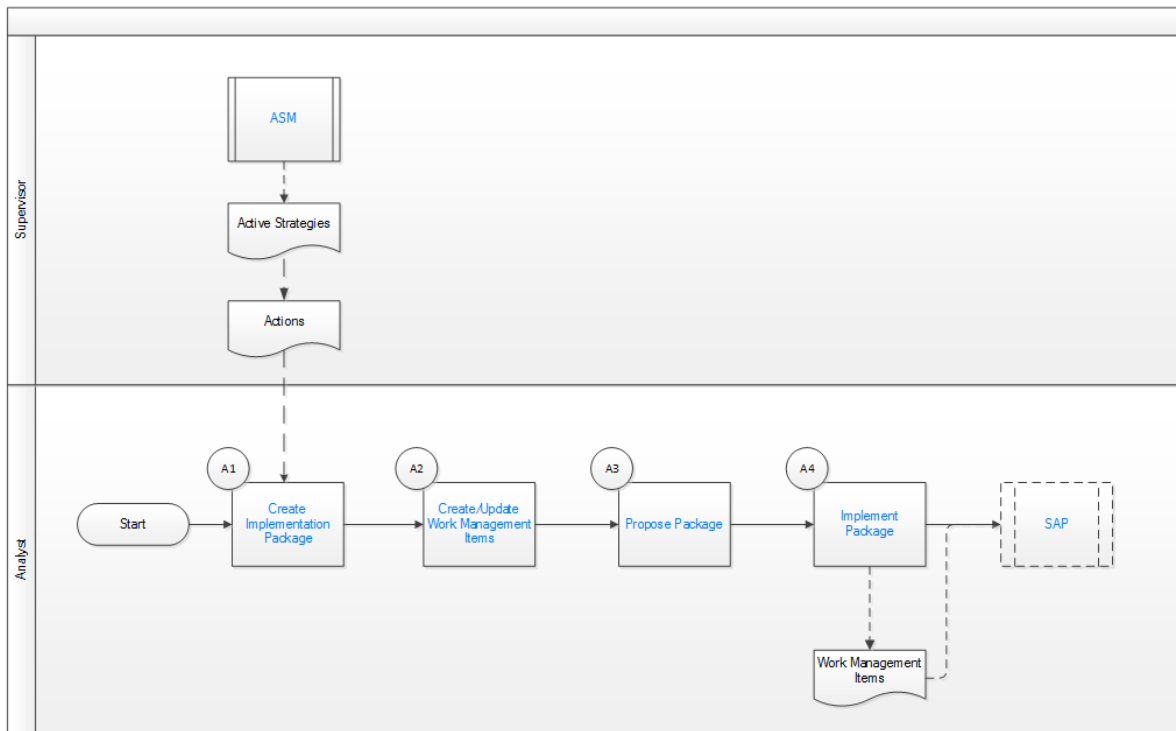
Asset Strategy Management (ASM)

Persona: Supervisor

Strategies approved in ASM can be sent to ASI for SAP where they are packaged as Work Management Items to export to SAP.

Go to the ASM Workflow.

Create Implementation Packages

Persona: Analyst

Create Implementation Packages, which will be containers for collections of Asset Strategies that can be implemented in groups.

Create/Update Work Management Items

Persona: Analyst

Create, Update, or Link Work Management Items for the Actions defined in the Asset Strategies. A Work Management Item is defined in a way that is meaningful for the Work Management System to which it is assigned.

Propose Package

Persona: Analyst

After all Work Management Items have been created, set the Implementation Package to the Packaged state. This indicates that it is ready for implementation and that no other changes can be made to its associated Work Management Items.

Implement Package

Persona: Analyst

Implement the package. When the Analyst implements a package, Work Management Items are sent to the Work Management System (for example, SAP EAM).

SAP

Persona: Analyst

Import data from your SAP system using the APM Connect EAM connection adapters. Strategy data imported from your SAP system can then be manipulated directly in the GE Digital APM ASM module.

Chapter

3

ASI Packages

Topics:

What is an Implementation Package?

Details

An Implementation Package is a collection of actions that are to be implemented in an SAP system. The implementation package defines the structure that the SAP system will use and defines how the actions map into that structure. An Implementation Package consists of the following:

- One Implementation Package that defines basic information about the purpose and content of the Implementation Package.
- One or more Actions representing the original work requests.

There are multiple records in ASI that represent work that you want to perform. These records are linked directly or indirectly to the root Implementation Package and can belong to different families, such as the Maintenance Item family. Because they can belong to different families throughout the GE Digital APM documentation, we refer to them generically as work items.

About State Configuration in ASI

ASI leverages State Configuration Roles, which you can assign to Security Users to manage who can transition strategies from one state to another.

Throughout ASI, some options will be disabled based on whether or not the current user is assigned to the State Configuration Role that is required to perform that action.

If no State Configuration Roles are specified for State Configuration, as in the baseline database, all options will be available to all users, and state changes will not be restricted. To take full advantage of the features in ASI, we recommend that you assign members of the ASI Security Groups to a corresponding State Configuration Role.

The following diagram shows the states and operations that exist in the baseline State Configuration for the Asset Strategy Implementation family. You can use this diagram to determine which operations will appear on the **Operations** menu when you are viewing an Implementation Package. The **Operations** menu will display any operation to which the current Asset Strategy Implementation record can be transitioned from its current state.

State Configuration
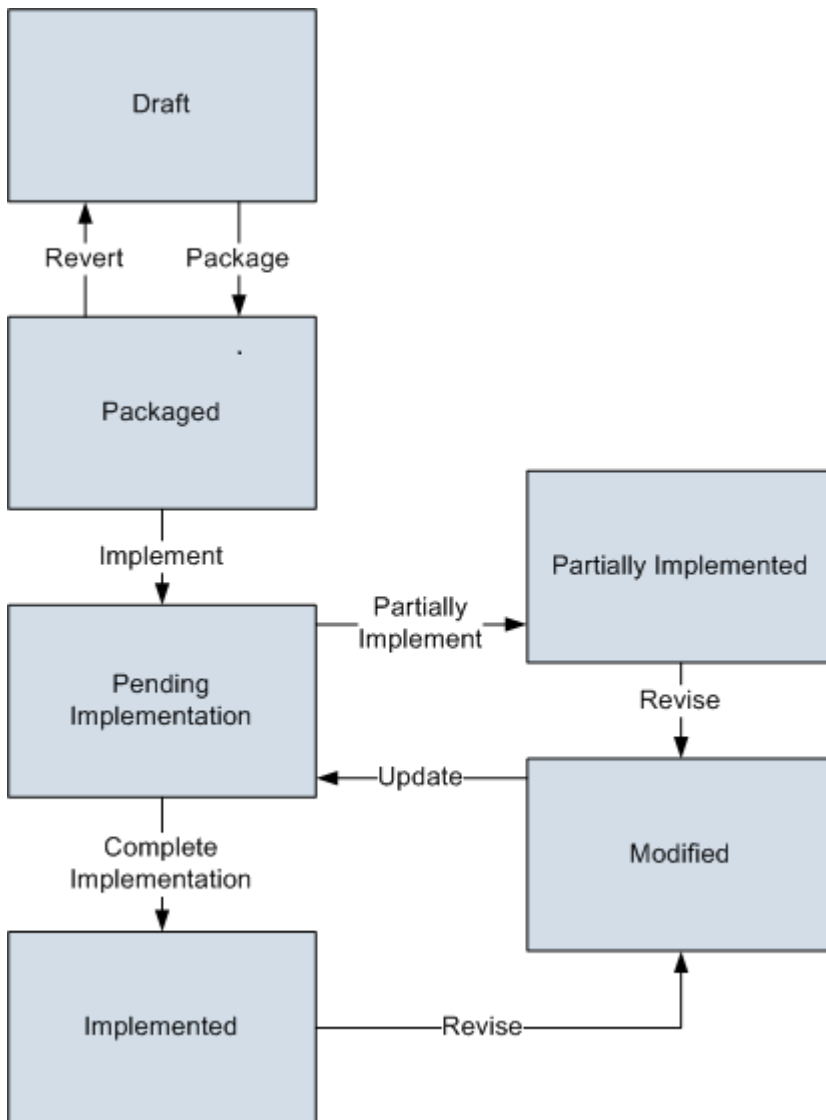
The Draft state is the initial state of all new Asset Strategy Implementation records.

- **Datasheet Configuration:** By default, states and operations will appear on the datasheet when you are viewing an Asset Strategy Implementation record in the Record Manager.
- **Reserved States and Operations:** Custom states and operations are only supported between the Draft and Packaged states. This means that you cannot remove or modify any of the other states or operations.
- **State Configuration Roles:** By default, the MI ASI User State Configuration Role is assigned to all states in the Implementation Package State Configuration. However, you can assign other State Configuration Roles. In addition, for each state, the Require a specific user to be assigned to a state check box is selected.

Reserved States and Operations

The following table lists the baseline states and operations and indicates which of these states and operations are reserved. You cannot remove or modify reserved states or operation. You can, however, add your own states and operations to the State Configuration.

Note: Custom states and operations are only supported between the Draft and Packaged states. This means that you cannot remove or modify any of the other states or operations.

States	States
State	Is Reserved?
Draft	No
Implemented	Yes
Modified	Yes
Packaged	No
Partially Implemented	Yes
Pending Implementation	Yes
Operations	
Operation	Is Reserved?
Complete Implementation	Yes
Implement	Yes
Package	No
Partially Implement	Yes
Revert	No
Revise	Yes
Update	Yes

About Site Filtering in ASI

While the families within ASI are not enabled for site filtering, many records within ASI use site assignments. A single implementation package can contain actions from multiple sites. If the package has actions from multiple sites and you as a user do not have permissions for all of the associated sites, the entire package will be view-only.

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

Example

Consider an organization that has three sites, Site X, Site Y, and Site Z. MPI Package is a global record and it contains the following action records:

- Action 1: Assigned to Site X
- Action 2: Assigned to Site Y
- Action 3: Assigned to Site Z

Scenario 1: User assigned to only Site X

When this user views the **Package Details** page, the package will be view-only for the user, because there are actions (Action 2 and 3) with a site assignment for which the user does not have permissions (Site Y and Z). The user will not see the actions for Sites Y or Z.

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

When this user views the **Package Details** page, the package will be view-only for the user, because there is an action (Action 3) with a site assignment for which the user does not have permissions (Site Z). The user will not see the action for Site Z.

Scenario 3: User assigned to Sites X, Y, and Z or Super User

When this user views the **Package Details** page, the user has modify privileges for the package, having full access and permissions for all of the associated actions.

Access an Existing Implementation Package

Procedure

1. Access the ASI Overview page.
2. Select the **Implementation Packages** tab, or the tab for the section that contains the package that you want to manage.
   The selected section appears, displaying a list of available packages.
3. Select the link for the package that you want to manage.
   The page for the selected package appears, displaying the **Manage Actions** section.
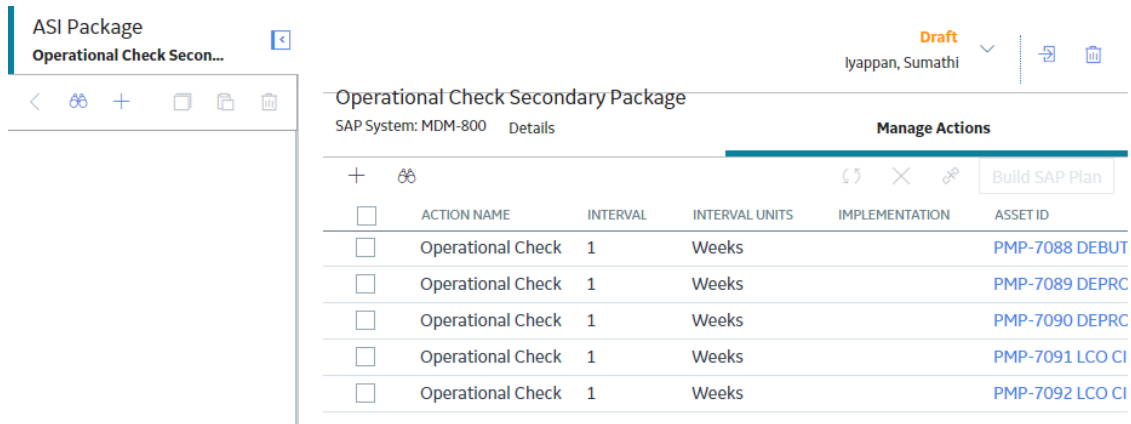
Create an Implementation Package

Procedure

1. Access the **ASI Overview** page.
2. In the page, select **New Package**.
   A page for the new ASI package appears.

3. As needed, enter values in the available fields.

4. Select ⊟.

A message appears, confirming that your ASI package has been created.

Next Steps

- Import SAP objects into ASI
- Package implementation packages

Import SAP Objects into ASI

About This Task

You can import items from an external SAP system to become actions to build out an existing implementation package in ASI.

Note: To use the Import from SAP feature, you must have active ASI and ASM licenses.

Procedure

1. Access an existing ASI package.

2. In the page, select ⤓.

The **Asset Strategy Builder (SAP Work Management)** window appears, displaying the **SAP Object(s)** section, which contains a list of assets with related SAP objects.

Asset Strategy Builder (SAP Work Management)

SAP Object(s)	Action Creation	SAP Item(s)

SAP Object Type : Maintenance Plans ⌄   ☐ Exclude Operations

🔍

☐	ASSET ID	SHORT DESCRIPTION	ASSET FAMILY
☐	ASSET SAFETY-03 ~ MB-EQUIPMENT-03 ...	MB-EQUIPMENT-03 ASSET SAFETY	Equipment
☐	ASSET SAFETY-04 ~ MB-EQUIPMENT-04 ...	MB-EQUIPMENT-04 ASSET SAFETY	Equipment
☐	ASSET SAFETY-05 ~ MB-EQUIPMENT-05 ...	MB-EQUIPMENT-05 ASSET SAFETY	Equipment
☐	ASSET SAFETY-06 ~ MB-EQUIPMENT-06 ...	MB-EQUIPMENT-06 ASSET SAFETY	Equipment
☐	ASSET SAFETY-07 ~ MB-EQUIPMENT-07 ...	MB-EQUIPMENT-07 ASSET SAFETY	Equipment
☐	ASSET SAFETY-08 ~ MB-EQUIPMENT-08 ...	MB-EQUIPMENT-08 ASSET SAFETY	Equipment
☐	ASSET SAFETY-09 ~ MB-EQUIPMENT-09 ...	MB-EQUIPMENT-09 ASSET SAFETY	Equipment
☐	ASSET SAFETY-10 ~ MB-EQUIPMENT-10 ...	MB-EQUIPMENT-10 ASSET SAFETY	Equipment
☐	FL INSRT GEN FIND W CMMS	FL INSRT GEN FIND W CMMS	Functional Location
☐	FL INSRT INSP W CMMS	FL INSRT INSP W CMMS	Functional Location
☐	FL INSRT INSPECTION W CMMS	FL INSRT INSPECTION W CMMS	Functional Location
☐	FL INSRT REF DOC W CMMS	FL INSRT REF DOC W CMMS	Functional Location

1 - 52 of 52 Results   ☐ Page 1 of 1 ☐

Cancel	Previous	Next	Finish

3. Select the check box for each asset whose SAP objects you want to import into the package.

   Note: If you want to search for a particular asset, select 🔍 to access search boxes in the grid. If you want to exclude operations and only import the Maintenance Plan, Maintenance Item, Object List, and Task List, select the **Exclude Operations** check box.

4. Select **Next**.

   The **Action Creation** screen appears.

Asset Strategy Builder (SAP Work Management)

SAP Object(s)	Action Creation	SAP Item(s)

Select How Actions Are Created

(●) Import Maintenance Items as Actions

( ) Import Operations as Actions

| Cancel | Previous | Next | Finish |

5. Choose whether you want to **Import Maintenance Items as Actions** or **Import Operations as Actions**, and then select **Next**.

The **SAP Item(s)** screen appears, displaying a list of SAP objects available to import based on the assets you selected.

Asset Strategy Builder (SAP Work Management)

	MAINTENANCE PLAN	MAINTENANCE PLAN CATEGORY	MAINTENANCE STRATEGY	MAINTENANCE PACKAGE CYCLE/OF
☐	000000001335	PM		2.0000000000000000E+00
☐	000000001336	PM		2.0000000000000000E+00
☐	000000001821	PM	2M2Y1Y	0.0000000000000000E+00
☐	000000001822	PM		2.4000000000000000E+01
☐	M99999945979	PM		2.4000000000000000E+01
☐	M99999945980	PM		2.4000000000000000E+01

Tabs: SAP Object(s) | Action Creation | **SAP Item(s)**

1 - 6 of 6 Results   ← Page 1 of 1 →

[Cancel] [Previous] [Next] [Finish]

6. Select the check box for the SAP objects that you want to import, and then select **Finish**.

   The **Import Results** section appears, and an import report runs, indicating the progress of importing the items. When finished, the status bar appears at 100%.

   Note: The status bar is color-coded. If the report completes with no errors, the status bar is green. If some SAP objects have been skipped, the bar is orange. If the report has failed, the status bar is red.

Results

- Existing SAP objects have been imported into ASI as WMIs in the implementation package and actions related to the strategy.
- A strategy and associated actions are created in ASM in Active state, and the actions are linked to the WMIs in the implementation package.

Package Implementation Packages

Before You Begin

- These steps assume that you have an implementation package that is in the Draft state.

Procedure

1. Access an existing ASI package.
2. In the page, select ∨.
3. Select **Package**.
4. Select **Done**.

   A message appears, asking you to confirm that you want to perform the package operation.
5. Select **Yes**.

   The package is now in the Packaged state.

Next Steps

- Implement a package

Revert a Package

Before You Begin

These steps assume that you are using an ASI package that is in the Packaged state, but has not yet been implemented.

Procedure

1. Access an existing ASI package.
2. Select ∨.
3. Select **Revert**, and then select **Done**.

   A window appears, asking you to confirm that you want to perform the operation.
4. Select **Yes**.
   A message appears, notifying you that the package was updated. The package is now in the Draft state.

Implement a Package

Before You Begin

- These steps assume that you have an implementation package in the Packaged state.
- There must be a user assigned for your package, so depending on state configuration settings, you may need to assign a user to perform the package operation.

Procedure

1. Access an existing ASI package.
2. Select ∨.
3. Select **Implement**, and then select **Done**.
   A window appears, asking your to confirm that you want to perform the implement operation.
4. Select **Yes**.
   A window appears, displaying a summary of all that has been implemented.
5. Select **Close**.

The package has been implemented.

Revise a Package

Before You Begin

- This documentation assumes that you have an ASI package in the Implemented state.
- There must be a user assigned for your package, so depending on state configuration settings, you may need to assign a user to perform the package operation.

Note: Revising a package takes an ASI package from the Implemented state back into a Modified state.

Procedure

1. Access an existing ASI package.
2. Select ∨.
3. Select **Revise**, and then select **Done**.
   A window appears, asking you to confirm that you want to perform the operation.
4. Select **Yes**.
   A notification appears, indicating that the operation was successful. The package is now in the Modified state.

Next Steps

- Update an ASI Package

Update an ASI Package

Before You Begin

- This topic assumes that you have an ASI package in a Modified state.

Procedure

1. Access an existing ASI package.
2. Select ∨ **Update**, and then select **Done**.
   A window appears, asking if you want to perform the operation.
3. Select **Yes**.
   A window appears, confirming the implementation results.
4. Select **Close**.
   The package is now in the Implemented state.

Delete ASI Packages

Procedure

1. Access the **ASI Overview** page.
2. Select the **Implementation Packages** tab, or the tab for the section that contains the package that you want to manage.

The **Implementation Packages** section appears, displaying a list of available packages.

3. Select the package that you would like to delete.
   The package is highlighted.

4. Select 🗑.
   A message appears, asking you to confirm that you want to delete the package.
5. Select **Yes**.
   The package has been deleted.

Remove an Action from a Package

About This Task

If you need to remove an action from a package, that package cannot yet be implemented. If you want to remove an action that is implemented, you must first unlink the implementation from the action, and then you can remove the action from the package.

Procedure

1. Access an existing ASI package.

2. Select the check box for each action that you want to remove from the package, and then select ✕.
   The action is removed from the package.

Results

- The action is removed from the implementation package, but not deleted from the GE Digital APM database. If you want to add the action back to the package, you can do so from the **Implement Actions** workspace in ASM.

Build SAP Plan from Actions
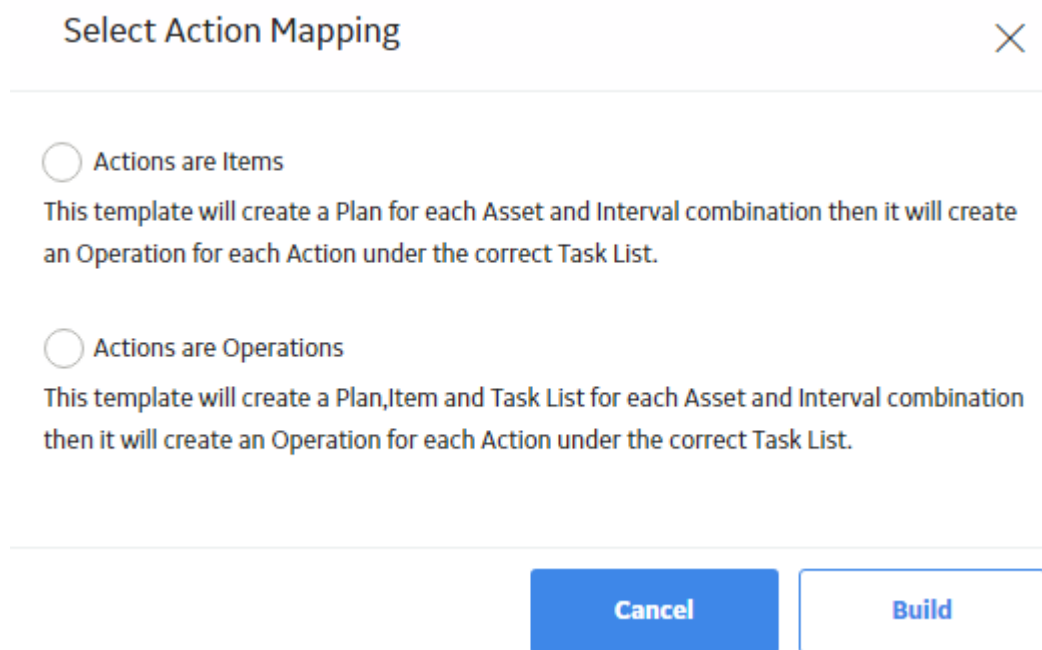
About This Task

You can implement actions in ASM to manage their execution in GE Digital APM. Or, if you want to manage the execution in SAP, you can implement them in the **Manage Actions** section of ASI, as described in the following steps. Alternatively, you could create WMIs and link actions to WMIs manually. Or, you could import SAP objects into ASI as WMIs.

Procedure

1. Access an existing ASI package.
2. Select the row containing the action to which you want to link an implementation method, and then select **Build SAP Plan**.
   The **Select Action Mapping** window appears.

   Select Action Mapping   ✕

   ◯ Actions are Items

   This template will create a Plan for each Asset and Interval combination then it will create an Operation for each Action under the correct Task List.

   ◯ Actions are Operations

   This template will create a Plan, Item and Task List for each Asset and Interval combination then it will create an Operation for each Action under the correct Task List.

   [**Cancel**]   [**Build**]

3. Select one of the following options:
   - **Actions are Items**: This option creates a plan for each asset's intervals, and it creates an operation for each action under the correct task list.
   - **Actions are Operations**: This option creates a plan, item, and task list for each asset's intervals, and it creates an operation for each action under the correct task list.
4. Select **Build**.
   The actions are now associated with WMIs. Now, when this package is implemented, you can manage the actions in SAP.

Apply Updates to Implemented Actions

About This Task

If you modify actions after they have been implemented, you must apply those updates to the implemented actions, which can be done in ASI or in ASM.

Note: For actions that require updates to synchronize their implementations, the text Requires Update appears in the **Implementation** column for the actions in the **Manage Actions** section in ASI or in the **Implementation** column in the **Implement Actions** page in ASM.

Important: Depending on the Unit of Measure employed by your organization, customization of ASI may be required to support strategy plan interval updates.

Procedure

1. Access an existing implementation package.
2. In the **Manage Actions** section, select each row containing an action whose WMI you want to update, and then select ⟳.

Results

- The updates are applied to the WMIs associated with the actions.
- The corresponding SAP Maintenance Plans or Maintenance Packages are updated:

Plan type	Value update by Maintenance Plan interval
Single Cycle Plans	Cycle for the corresponding Maintenance Plan
Multiple Counter Plans	Cycle for the corresponding time-based Maintenance Plan
Strategy Plans	Cycle in the corresponding Maintenance Package

- If any updates were unsuccessful, the **Errors** window appears, which contains a list of the unsuccessful updates.

Chapter
4

Work Management Items (WMIs)

Topics:

About Work Management Items (WMI)

Work Management Items (WMIs) represent the work that should be completed when the Implementation Package is implemented. Throughout the documentation, we refer to them as work management items (WMIs) because they can belong to any family. Before you can create work items in a particular family, the corresponding Work Management Item Definition records and Work Management Item Child Definition records must exist. Each Work Management Item Definition record contains a family ID, which identifies a family to which work items can belong.

GE Digital APM delivers a baseline set of Work Management Item Definition and Work Management Item Child Definitions to allow you to create work items in certain baseline families. For example, GE Digital APM delivers a Work Management Item Definition whose family ID is Maintenance Item, which allows you to add Maintenance Items to an Implementation Package. You can also create your own Work Management Item Definitions so that you can create work items in other families.

After you add a work item to an Implementation Package, the work item is linked either directly or indirectly to the root Implementation Package record. Work items can also be linked to one another and arranged hierarchically in the tree on the **Packaging <Package ID>** page according to these relationships. Beyond defining the family of the work items that you want to create, you will, therefore, need to define where in this hierarchy they can exist. To do so, you will need to:

- Configure the appropriate relationship definitions via the Configuration Manager.
  -and-
- Create the appropriate Work Management Item Definition and Work Management Item Child Definition records via the GE Digital APM Framework.

On the **Packaging <Package ID>** page, the options that appear in the tree and on the **Packaging Tasks** menu are dynamic, meaning that they change based upon the current selection in the tree. The options that are available are based upon the way in which you have configured the hierarchy.

Throughout this documentation, we describe the hierarchy that appears on the **Packaging <Package ID>** page using the terms predecessor record and successor record. In this context:

- A predecessor is any work item to which another work item can be linked.
- A successor is any work item that is linked to a predecessor work item.

About Deleting a WMI

When you delete a WMI from an implementation package:

- The following objects in SAP are deleted:

    ◦ Operations
    ◦ Maintenance package
    ◦ Object lists under maintenance items
- The following objects in SAP are not deleted:

    ◦ Maintenance plan
    ◦ Maintenance item
    ◦ Task lists

    These objects are not deleted because SAP does not support deleting these objects via the ABAP code. SAP, however, allows objects to be flagged as deleted.

About the Maintain Object List

When using the Maintain Object List feature, the GE Digital APM system searches the Actions that are associated with the selected Maintenance Item record and any Operation record to which it is linked. If those Actions belong to an underlying Asset Strategy that is linked to an Equipment record, one Object List Item record will be created for each of those underlying Equipment records.

This feature ensures that your Object List Item records are always in sync with the actions that are currently part of the Implementation Package. In general, you should use this feature before packaging any Implementation Package.

For example, suppose an Implementation Package contains the following Asset Strategies with the following Actions.

Asset Strategy	Equipment	Action
Asset Strategy 1	Equipment 100	Overhaul every 5 years
		Inspect every 1 month
Asset Strategy 2	Equipment 200	Overhaul every 2 years
		Inspect every 1 month
Asset Strategy 3	Equipment 300	Overhaul every 3 years
		Inspect every 1 month

If you were to associate all of these Actions with a Maintenance Item record, when you selected that Maintenance Item record and then selected the **Maintain** button, the following Object List Item records would be created automatically:

- Equipment 100
- Equipment 200
- Equipment 300

In other words, one Object list Item record is created for each unique underlying Equipment record.

Note: When you select the **Maintain** button, the GE Digital APM system not only creates Object List Item records but also deletes Object List Item records when appropriate (e.g., an Action has been disassociated from a Maintenance Item record since the Object List Item record was last created).

Create a Work Management Item (WMI)

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the parent item under which you want to add the new WMI.

   The datasheet for the selected WMI appears.

   Note: The options for which WMI types can be added depend on which node you have selected in the tree. Any WMI type can be added at the root node (for example, the **ASI Package** tab).

3. Select $+$, and then select the WMI type that you want to add under the parent you selected.
   The datasheet for the new WMI appears.

4. As needed, enter values in the available fields, and then select ⊟.

The WMI is created and added to the package, and it appears in the WMI tree. The ⊕ icon appears next to the WMI to signify that it was added since the package was last implemented.

Copy and Paste a Work Management Item (WMI)

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the WMI that you want to copy.
   The workspace for the selected WMI appears.
3. In the WMI tree, select ⧉.
   The WMI is copied.
4. Select the root node or the node in the tree to which you want to pasted the WMI, and then select ⧉.

A message appears, confirming that the WMI has been pasted, and the WMI appears in the WMI tree. The ⊕ icon appears next to the WMI to signify that it was added since the package was last implemented.

Note: There are limitations on which WMI types can be added at certain locations in the tree. Any WMI type can be added at the root node (for example, the **ASI Package** tab).

Link Actions to a Work Management Item (WMI)

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the WMI to which you want to link an action.

The workspace for the selected WMI appears, displaying the **Details** section for the WMI.

3. Select the **Linked Actions** section.
   The **Linked Actions** section appears.

4. Select ╋ .
   The **Link Actions** window appears.
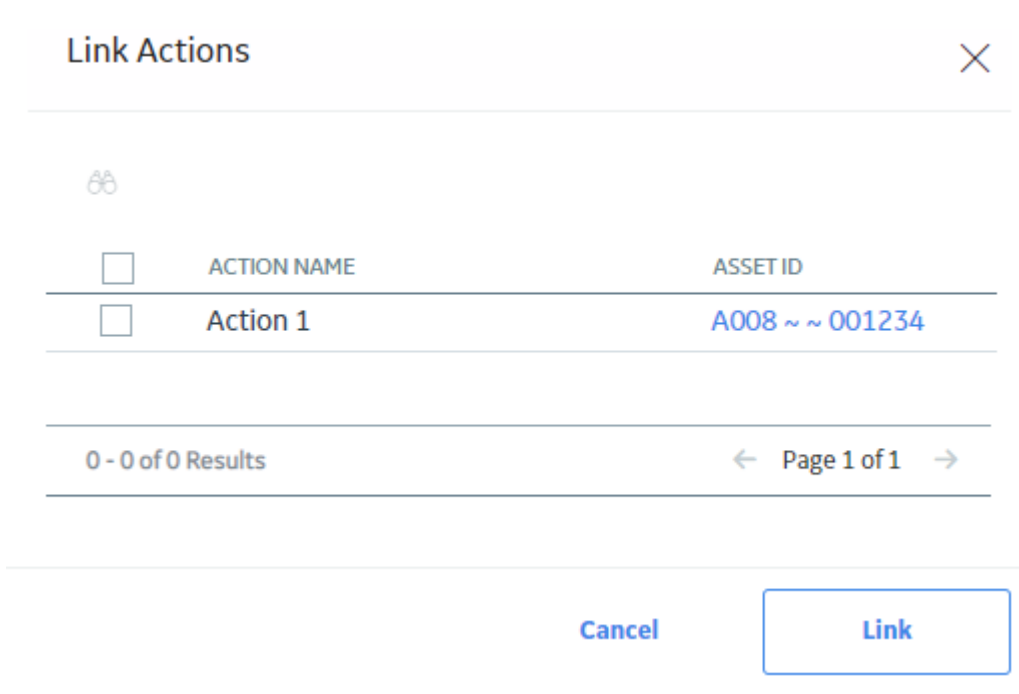
5. Select the action that you want to link to the WMI, and then select **Link**.

   The actions are now associated with WMIs. Now, when this package is implemented, you can manage the actions in SAP.

Unlink an Action from a Work Management Item (WMI)

Procedure

1. Access an existing ASI package.
2. In the Manage Actions section, select the check box next to the actions that you want to unlink, and then select ⚭.
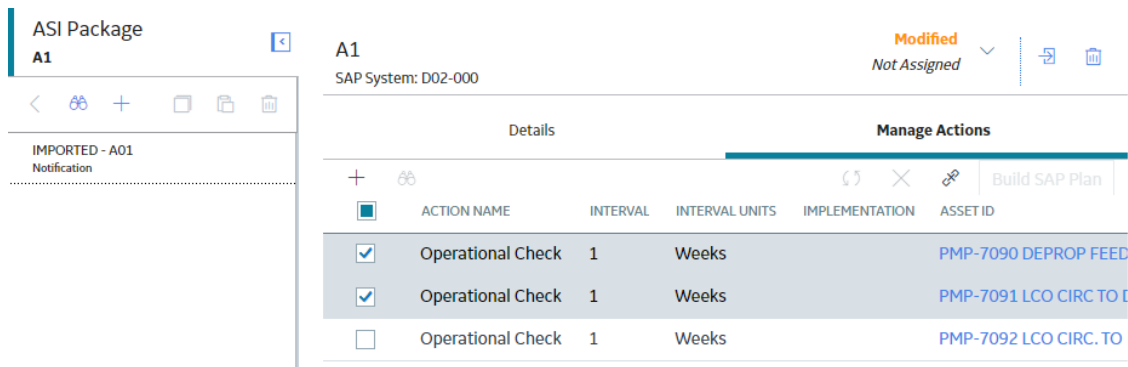
The action is unlinked from the WMI.

Link an Existing Task List in SAP to a Maintenance Item

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the maintenance item to which you want to link a task list from SAP.
   The workspace for the selected maintenance item appears, displaying the **Details** section.
3. In the WMI tree, select ╋.
   The workspace for the selected maintenance item appears, displaying the **Details** section.
4. Enter the search criteria in one or more of the fields, and then select **Search**.
   The **Locate Task List** window appears, displaying the search results.

Locate Task List

Search Criteria			**Search Results**

🔍

TASK LIST GROUP KEY	GROUP COUNTER	TASK LIST TYPE	TASK LIST DESCRIPTION
00000204	01	A	Startegy Plan
00000204	01	Q	Glühlampe 80W klar/ Light Bulb 80

1 - 2 of 2 Results   ← Page 1 of 1 →

Cancel   OK

5. Select the task list that you want to link, and then select **OK**.
   A message appears, asking you to specify how you want to link the task list.

Add as Link or Copy?

Select Link to add a new Task List that is linked to the
Task List in SAP. Select Copy to create a copy of the
Task List in SAP.

Link	Copy	Cancel
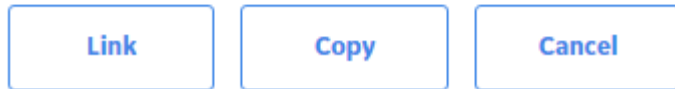
6. If you want to add a task list that is linked to the original task list in SAP, select **Link**.
   -or-

   If you want to create an exact copy of the task list from SAP, select **Copy**.

   The task list is added.

Manage a Maintenance Package from a Task List

About This Task

You can manage maintenance packages in bulk from their related Task List records and the **Maintenance Packages** window.

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the task list whose related maintenance packages you want to manage.
   The workspace for the selected task list appears.

3. In the workspace, select **Manage Maintenance Packages**.
   The **Maintenance Packages** window appears, displaying the maintenance packages in a bulk data grid.

4. Select the check box for each interval that you want to associate with the corresponding operation.

Maintenance Package records are created in the WMI tree under the corresponding operation for each interval that you selected.

Note: If you clear a check box, the corresponding Maintenance Package record will disappear from the WMI tree.

Delete a Work Management Item (WMI)

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the WMI that you want to delete.
   The workspace for the selected WMI appears.
3. In the WMI tree for the package, in the pane, select 🗑.

   Note: For WMIs that have been deleted, the ↺ button appears instead of the 🗑 button. Selecting the ↺ button will undo deletion of the WMI.

   A message appears, asking you to confirm that you want to delete the WMI.
4. Select **Yes**.
   The WMI is deleted.

   Note: In the tree, the ⊖ icon appears next to the WMI to signify that it has been deleted. When the package is implemented again, the WMI will be deleted, and the corresponding item in the SAP system will be deleted.

Results

• The following objects in SAP will be deleted:

   ◦ Operations
   ◦ Maintenance package
   ◦ Object lists under maintenance items
• The following objects in SAP will not be deleted:

   ◦ Maintenance plan
   ◦ Maintenance item
   ◦ Task lists

Synchronize Equipment or Functional Location Field in a Task List

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the maintenance item node representing the record that is linked to the task list whose equipment or functional location field you want to synchronize.
   The workspace for that maintenance item appears, displaying the datasheet in the **Details** section of the record.

3. In the workspace, select **Synchronize**.
   The reference objects are synchronized.

Results

- If the maintenance item contains a value in the Functional Location or Equipment field, the value is copied to the Functional Location or Equipment field in the task list.
- The field in the Task List record, to which the value was copied, is disabled, ensuring that the two values will never be different.

Note: If you later decide to create a general task list from this task list, you can remove the value from the Equipment or Functional Location field in the maintenance item, which will cause it to be removed automatically from the task list.

Maintain Object Lists

The Maintain Object List feature insures that Object List Item records are always in sync with the actions that are currently part of the Implementation Package.

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the maintenance item node representing the record whose object list item you want to maintain.
   The workspace for that maintenance item appears, displaying the datasheet in the **Details** section of the record.

3. In the workspace, select **Maintain**.
   The selected object list is maintained.

Chapter

5

Process Resource Tool (PRT) Report

Topics:

Process Resource Tool (PRT) Report

The PRT report contains a set of actions that you must perform during a maintenance activity. You must perform the following actions to create a PRT report:

- Link an action to multiple maintenance items or operations
- Sequence actions associated with a WMI
- Create a PRT report

Link an Action to Maintenance Item or Operation

Before You Begin

- Make sure that the **Enable PRT** check box is selected in the **Asset Strategy Implementation Admin** page.

Procedure

1. Access an ASI package.
2. In the pane that contains the Work Management Item (WMI) tree, select the maintenance item or operation to which you want to link the action.

   The workspace for the selected WMI appears, displaying the **Details** section for the WMI.

3. Select the **Linked Actions** tab.

The **Linked Actions** section appears.

4. Select ✛.

   The **Link Actions** window appears, displaying a list of actions that are available for linking to the selected WMI.

5. Select the action that you want to link to the WMI, and then select **Link**.

   The actions are associated with the WMI and displayed in the **Linked Actions** section.

   Note: If **Enable PRT** check box is selected, an action can be linked to multiple maintenance items or operations. If **Enable PRT** check box is cleared, one action can be linked to only one maintenance item or operation.

Sequence Actions Associated With a WMI

Procedure

1.
2. In the <WMI Name> workspace, select **Sequence**.
   The **Sequence Actions** window appears.

3. In the row that contains the action to which you want to assign a sequence value, select the cell in the **SEQUENCE** column, and then enter the sequence value.
4. Select **Save**.
   The actions are sequenced.

Create a Process Resource Tool (PRT) Report

About This Task

You can create a report for the PRT to view the list of maintenance items and operations associated with the corresponding ASI package. This task describes how to create a report for PRT.

Procedure

1.
2. In the **Linked Action** tab, select the check boxes next to the actions for which you want to generate a report, and then select **Create PRT**.

The PRT Report appears in a new tab.

Chapter

6

Cycles

Topics:

Access the Manage Cycles Window

About This Task

In GE Digital APM, you can manage cycles for a maintenance plan that does not have a maintenance strategy.

Procedure

1. Access an existing ASI package.
2. In the pane, in the WMI tree for the package, select the maintenance plan for which you want to manage cycles.
   The workspace for the selected maintenance plan appears.

3. Select **Manage Cycles**.
   The **Manage Cycles** window appears.

Create a New Cycle

Procedure

1. Access the **Manage Cycles** window.
2. Select +.
   A blank cycle datasheet appears.

Manage Cycles

Create/Edit Cycles

Cycle	Cycle UOM	Cycle Description
Numeric inp	∨	Text input
This field is required	This field is required	

New Cycle

Counter ID	Offset	Cycle Set Seque...	Start Counter
... •••	Numeric inp	Numeric inp	Numeric inp

Assign Cycle Set Sequence

CYCLE SET SEQUENCE	MAINTENANCE ITEM	MAINTENANCE ITEM TEXT	FUNCTIONAL LOCATION	EQUIPMENT
	M000000000000004	6 Month Oil analysis PdM Route		PUMP-NHT-FE
	M000000000000005	6 Month Oil analysis PdM Route		

Cancel   **Done**

3. As needed, enter the values in the available fields, and then select **Done**.
   The cycle is created and saved.

Next Steps

Assign a Cycle Set Sequence

Assign a Cycle Set Sequence

Before You Begin

Add at least one cycle to a Maintenance Plan.

Procedure

1. Access the **Manage Cycles** window for the maintenance plan to which you want to assign a cycle set sequence, and then select the tab for the cycle set that you want to manage.
2. In the Assign Cycle Set Sequence section, in the **Cycle Set Sequence** column, enter a value or modify the existing value.

   Note: The **Cycle Set Sequence** column is the only column in the grid that can be modified.

   Tip: Use a simple, consecutive numbering scheme.

Manage Cycles

Create/Edit Cycles

+	66	🗑

3 Days (Cycle Set: 1)

Cycle
3

Cycle UOM
Days ⌄

Cycle Description
3 Days

Counter ID
... •••

Offset
1

Cycle Set Seque...
1

Start Counter
Numeric inp

Assign Cycle Set Sequence

CYCLE SET SEQUENCE	MAINTENANCE ITEM	MAINTENANCE ITEM TEXT	FUNCTIONAL LOCATION	EQUIPMENT
1	M000000000000049	Item for counter 1	?0100000000000113848	000000000010000
2	M000000000000042	Item for counter 2	?0100000000000113848	000000000010000

Cancel   **Done**

3. Select **Done**.
   The cycle set sequence assignment is saved.

Update a Cycle

Procedure

1. Access the **Manage Cycles** window.
2. In the **Manage Cycles** window, in the **Create/Edit Cycles** section, select the tab for the cycle that you want to update.
   The datasheet for the selected cycle appears.
3. As needed, modify the values in the available, and then select **Done**.
   The cycle is updated.

Delete a Cycle

Procedure

1. Access the **Manage Cycles** window.
2. On the **Manage Cycles** window, in the **Create/Edit Cycles** section, select the tab for the cycle that you want to update.
   The datasheet for the selected cycle appears.
3. Select 🗑.

A message appears, asking you to confirm that you want to delete the cycle.
4. Select **Yes**.
   The cycle is deleted.

Chapter
7

Administration

Topics:

Access ASI Admin Settings

Procedure

In the module navigation menu, select **Admin** > **Application Settings** > **Asset Strategy Implementation**.
The **Asset Strategy Implementation Admin** page appears, displaying the **Work Management Item Definitions** workspace.

Create Work Management Item Definitions

Procedure

1. Access the ASI admin settings.

2. In the workspace, select ✛ .
   A blank datasheet appears.

3. In the **Master** section, select the appropriate option from the **Family ID** drop-down menu.
4. In the **Detail** section, select the Child Definitions from the **Child Family ID - Value(s)** and **Child Family Relationship ID - Value(s)** drop-down menus.
5. Select 💾 .
   The Work Management Item Definition is created.

Create ASI Admin Configuration

Procedure

1. Access ASI admin settings.
2. Select **Create**.
   The datasheet associated with your configuration appears.
3. Modify the appropriate fields, and when you are finished, select 💾 .
   Your configuration has been created and saved.

Modify ASI Admin Configuration

Procedure

1. Access ASI admin settings.
2. Select the hyperlink associated with the setting that you want to modify.
   The datasheet associated with your selected configuration appears.
3. Make the necessary changes, and when you are finished, select 💾 .
   Your configuration has been saved.

Set Implementation Location Preferences

Procedure

1. Access ASI admin settings.
2. Select the **Asset Strategy Implementation Preferences** tab.
   The **Asset Strategy Implementation Preferences** workspace appears.

3. In the **Query to Locate Implementation Package** box, select **Browse.**
   The **Select a query from the catalog** window appears.

Select a APM Query from the catalog

Catalog

Home

Public

Meridium

Modules

Administrative Tools

Security Queries

Name	^	Caption	Description	Type
Family Security Assignments by Group ID		Family Security Assignments by Group ID		Query
Group Security Assignments by Family ID		Group Security Assignments by Family ID		Query
Group Security Assignments by User ID		Group Security Assignments by User ID		Query
Public Folders Group Security Assignments		Public Folders Group Security Assignments		Query
User Security Assignments by Group ID		User Security Assignments by Group ID		Query

Open   Cancel

4. Select the appropriate query from the list.
   The query is highlighted.
5. Select **Open**.
   The **Asset Strategy Implementation Preferences** workspace reappears.
6. Select **Save**.
   Your preferences have been saved.

   Note: If you want to change your Paste Options, select either **Yes** or **No** from the **Display Asset and Action Assignment Dialog...** drop-down menu.

Configure the Import from SAP Feature

In the **Asset Strategy Implementation Preferences** workspace, you can customize the Import from SAP feature to utilize custom SAP Function Modules for Maintenance Plans, Maintenance Items, Task Lists, and Notifications.

Procedure

1. Access ASI admin settings.
2. Select the **Asset Strategy Implementation Preferences** tab.

   The **Asset Strategy Implementation Preferences** workspace appears.

3. As needed, enter values in the **Maintenance Plan Function Module**, **Maintenance Item Function Module**, **Task List Function Module**, and **Notification Function Module** boxes.

   Note: Values should be entered in the following format: *<Function Group> /<Function Module Name>* (for example; MIAPM/GET_MAINT_ITEMS).

4. In the **Maintenance Package UOM codes** box, modify the value to specify the valid interval values for implemented actions associated with Asset Strategies.

   Only valid interval values of implemented actions are updated in the corresponding Maintenance Packages in SAP. The default value in this box is *{"MONTHS":{"IntervalCode":"M","IntervalValues": [1,3,6]},"YEARS":{"IntervalCode":"Y","IntervalValues":[1]}}*.

   Example: You can configure 2 months to be a valid interval value so that when you specify an interval of 2 months for an implemented action, the corresponding Maintenance Package in SAP is updated with the same value. To configure 2 months as a valid value, modify the value in this box as follows:

   {"MONTHS":{"IntervalCode":"M","IntervalValues":[1,2,3,6]},"YEARS":{"IntervalCode":"Y","IntervalValues": [1]}}

5. Select **Save**.

Results

The Import from SAP feature preferences have been updated to use your custom SAP Function Modules.

Configure the PRT Settings

Before You Begin

- Create a Rules Library Rule Project

About This Task

You can generate a customized report for PRT to view the list of maintenance items and operations associated with the corresponding ASI package. This topic describes how to configure the settings to customize a PRT report.

Procedure

1. Access ASI Admin Settings on page 45.
2. Select the **Asset Strategy Implementation Preferences** tab.
   The **Asset Strategy Implementation Preferences** workspace appears.
3. Select **Enable PRT** check box.
4. In the **PRT Report Builder Project Path** box, enter the new rule path.
5. In the **PRT Report Builder Class Name** box, enter the class name.
6. Select **Save**.
   The settings to generate a customized PRT report are configured.

   For more information on how to customize a PRT report, refer to https://digitalsupport.ge.com/communities/en_US/Article/PRT-Technical-Guide-how-to-customize-PRT-Report.

Chapter
8

Deployment

Topics:

Deploy Asset Strategy Implementation (ASI) for the First Time

Before You Begin

The following table outlines the steps that you must complete to deploy and configure this module for the first time. These instructions assume that you have completed the steps for deploying the basic system architecture.

These tasks may be completed by multiple people in your organization. GE Digital recommends, however, that the tasks be completed in the order in which they are listed.

Note: This GE Digital APM module is not available in the APM Now environment.

Results

Step	Task	Notes
1	Install the ASI for SAP ABAP add-on on your SAP System.	This step is required.
2	Verify ASI ABAP Add-On.	This step is required.
3	Review the ASI data model to determine which relationship definitions you will need to modify to include your custom equipment and location families. Via Configuration Manager, modify the relationship definitions as needed.	Required only if you store equipment and location information in families other than the baseline Equipment and Functional Location families.
4	Assign Security Users to one or more of the ASI Security Groups and Roles.	This step is required.
5	Configure SAP for external numbering. Configure SAP for external numbering.	This step is required.
6	Configure SAP permissions.	This step is required.
7	Create a Work Management Item (WMI) on page 23via the ASI Application Settings.	This step is required only if you want to use Work Management Item Definition records beyond those provided with the baseline database.

Upgrade or Update Asset Strategy Implementation (ASI) to V4.5.0.0.0

Before You Begin

The following tables outline the steps that you must complete to upgrade this module to V4.5.0.0.0. These instructions assume that you have completed the steps for upgrading the basic GE Digital APM system architecture.

These tasks may be completed by multiple people in your organization. We recommend, however, that the tasks be completed in the order in which they are listed.

Procedure

- Upgrade from any version V4.4.0.0.0 through V4.4.0.0.4

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.

- Upgrade from any version V4.3.0.0.0 through V4.3.1.0.6

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.

- Upgrade from any version V4.2.0.0 through V4.2.0.9.4

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V4.1.0.0 through V4.1.7.4.0

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V4.0.0.0 through V4.0.1.0

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V3.6.1.0.0 through V3.6.1.7.5

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V3.6.0.0.0 through V3.6.0.12.9

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V3.5.1 through V3.5.1.12.3

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V3.5.0 SP1 LP through V3.5.0.1.10.1

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V3.5.0 through V3.5.0.0.7.1

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

- Upgrade from any version V3.4.5 through V3.4.5.0.1.4

Step	Task	Notes
1	Upgrade the ASI for SAP ABAP add-on in your SAP System.	This step is required.
2	Remove rule projects that inherit MeasurementLocation_AM or MeasurementLocation_EM rule projects.	This step is required only if you have customized the baseline rule projects MeasurementLocation_AM and MeasurementLocation_EM. The baseline rules for the MeasurementLocation_AM and MeasurementLocation_EM rule projects have been removed. Therefore, the customized rule projects that inherit these rule projects do not run.

Asset Strategy Implementation (ASI) Security Groups and Roles

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 ASI Administrator	MI Strategy Admin
MI ASI User	MI Strategy Admin MI Strategy Power MI Strategy User
MI ASI Viewer	MI APM Viewer MI Strategy Admin MI Strategy Power MI Strategy User

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

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Entity Families			
Action	None	View, Update	View
Action Mapping	View, Update, Insert, Delete	View	View
Active Strategy	None	View	View
Asset Strategy	None	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Calibration Task	None	View, Update, Insert, Delete	View
Consequence	None	View	View
Cycle	None	View, Update, Insert, Delete	View
Equipment	View, Update, Insert, Delete	View, Update, Insert	View
Execution Mapping	View, Update, Insert, Delete	View	View
Functional Location	View, Update, Insert, Delete	View, Update, Insert	View
Health Indicator	None	View	View
Health Indicator Mapping	None	View	View
Hierarchy Item Child Definition	None	View	View
Hierarchy Item Definition	None	View	View
Implementation Authorization	View, Update, Insert, Delete	View	View
Implementation Package	None	View, Update, Insert, Delete	View
Inspection Task	None	View, Update, Insert, Delete	View
KPI	None	View	View
KPI Measurement	None	View	View
Maintenance Item	None	View, Update, Insert, Delete	View
Maintenance Package	None	View, Update, Insert, Delete	View
Maintenance Plan	None	View, Update, Insert, Delete	View
Material	None	View, Update, Insert, Delete	View
Measurement Location	None	View, Update, Insert, Delete	View
Measurement Location Group	None	View, Update, Insert, Delete	View
Measurement Location Template	View, Update, Insert, Delete	View, Update, Insert	View
Notification	None	View, Update, Insert, Delete	View
Object List Item	None	View, Update, Insert, Delete	View
Operation	None	View, Update, Insert, Delete	View
Operator Rounds Allowable Values	None	View	View
Probability	None	View	View
Proposed Strategy	None	View	View
Protection Level	None	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
PRT	None	View, Update, Insert, Delete	View
PRT Template	View, Update, Insert, Delete	View	View
RCM FMEA Asset	None	View	View
RCM FMEA Recommendation	None	View	View
Risk	None	View	View
Risk Assessment	None	View	View
Risk Category	None	View	View
Risk Matrix	None	View	View
Risk Rank	None	View	View
Risk Threshold	None	View	View
SAP System	View, Update, Insert, Delete	View	View
Site Reference	View	View	View
System Strategy	None	View	View
Task List	None	View, Update, Insert, Delete	View
Task Types	None	View	View
Thickness Monitoring Task	None	View, Update, Insert, Delete	View
Unit Strategy	None	View	View
Work Management Item Child Definition	View, Update, Insert, Delete	View	View
Work Management Item Definition	View, Update, Insert, Delete	View	View
Work Management Item Definition Configuration	View, Update, Insert, Delete	View	View
Relationship Families			
Authorized to Implement	View, Update, Insert, Delete	View	View
Documents Action	View, Update, Insert, Delete	View, Update, Insert, Delete	View
Has Actions	None	View	View
Has Action Mapping	View, Update, Insert, Delete	View	View
Has Action Revisions	None	View	View
Has Active Strategy	None	View	View
Has Asset Strategy	None	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Has Associated Recommendation	None	View	View
Has Checkpoint	None	View, Insert	View
Has Child Hierarchy Item	None	View	View
Has Child Work Management Item	View, Update, Insert, Delete	View	View
Has Cycles	None	View, Update, Insert, Delete	View
Has Driving Recommendation	None	View	View
Has Execution Mapping	View, Update, Insert, Delete	View	View
Has Health Indicators	View, Update, Insert, Delete	View, Update, Insert, Delete	View
Has KPI Measurement	None	View	View
Has Maintenance Item	None	View, Update, Insert, Delete	View
Has Maintenance Package	None	View, Update, Insert, Delete	View
Has Material	None	View, Update, Insert, Delete	View
Has Measurement Location Group	None	View, Update, Insert, Delete	View
Has Mitigation Revisions	None	View	View
Has Object List Item	None	View, Update, Insert, Delete	View
Has Operation	None	View, Update, Insert, Delete	View
Has Proposed Strategy	None	View	View
Has PRT	None	View, Update, Insert, Delete	View
Has Reference Values	None	View	View
Has Risk	None	View	View
Has Risk Category	None	View	View
Has Risk Revisions	None	View	View
Has SAP System	None	View, Update, Insert, Delete	View
Has Strategy	None	View	View
Has Strategy Revision	None	View	View
Has System Strategy	None	View	View
Has Tasks	None	View, Update, Insert, Delete	View
Has Task List	None	View, Update, Insert, Delete	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Has Task Revision	None	View, Update, Insert, Delete	View
Has Work Management Item	None	View, Update, Insert, Delete	View
Has Work Management Item Definition Configuration	View, Update, Insert, Delete	View	View
Health Indicator Has Mapping	None	View, Update, Insert	View
Health Indicator Has Source	None	View, Update, Insert, Delete	View
Implements Action	None	View, Update, Insert, Delete	View
Implements Strategy	None	View, Update, Insert, Delete	View
Implements Secondary Strategy	None	View, Update, Insert, Delete	View
Is Mitigated	None	View	View
Master Template Has Asset Strategy	None	View	View
Mitigates Risk	None	View	View
Was Applied to Asset Strategy	View, Update, Insert, Delete	View, Update, Insert, Delete	View
Was Applied to PRT	View, Update, Insert, Delete	View, Update, Insert, Delete	View

Security Group	Roles
MI ASI Administrator	MI Strategy Admin
MI ASI User	MI Strategy Admin MI Strategy Power MI Strategy User
MI ASI Viewer	MI APM Viewer MI Strategy Admin MI Strategy Power MI Strategy User

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Action Mapping	View, Update, Insert, Delete	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
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Asset Strategy	None	View	View
Calibration Task	None	View, Update, Insert, Delete	View
Consequence	None	View	View
Cycle	None	View, Update, Insert, Delete	View
Equipment	View, Update, Insert, Delete	View, Update, Insert	View
Execution Mapping	View, Update, Insert, Delete	View	View
Functional Location	View, Update, Insert, Delete	View, Update, Insert	View
Health Indicator	None	View	View
Health Indicator Mapping	None	View	View
Hierarchy Item Child Definition	None	View	View
Hierarchy Item Definition	None	View	View
Implementation Authorization	View, Update, Insert, Delete	View	View
Implementation Package	None	View, Update, Insert, Delete	View
Inspection Task	None	View, Update, Insert, Delete	View
KPI	None	View	View
KPI Measurement	None	View	View
Maintenance Item	None	View, Update, Insert, Delete	View
Maintenance Package	None	View, Update, Insert, Delete	View
Maintenance Plan	None	View, Update, Insert, Delete	View
Material	None	View, Update, Insert, Delete	View
Measurement Location	None	View, Update, Insert, Delete	View
Measurement Location Group	None	View, Update, Insert, Delete	View
Measurement Location Template	View, Update, Insert, Delete	View, Update, Insert	View
Notification	None	View, Update, Insert, Delete	View
Object List Item	None	View, Update, Insert, Delete	View
Operation	None	View, Update, Insert, Delete	View
Operator Rounds Allowable Values	None	View	View
Probability	None	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Proposed Strategy	None	View	View
Protection Level	None	View	View
PRT	None	View, Update, Insert, Delete	View
PRT Template	View, Update, Insert, Delete	View	View
RCM FMEA Asset	None	View	View
RCM FMEA Recommendation	None	View	View
Risk	None	View	View
Risk Assessment	None	View	View
Risk Category	None	View	View
Risk Matrix	None	View	View
Risk Rank	None	View	View
Risk Threshold	None	View	View
SAP System	View, Update, Insert, Delete	View	View
Site Reference	View	View	View
System Strategy	None	View	View
Task List	None	View, Update, Insert, Delete	View
Task Types	None	View	View
Thickness Monitoring Task	None	View, Update, Insert, Delete	View
Unit Strategy	None	View	View
Work Management Item Child Definition	View, Update, Insert, Delete	View	View
Work Management Item Definition	View, Update, Insert, Delete	View	View
Work Management Item Definition Configuration	View, Update, Insert, Delete	View	View
Relationship Families			
Authorized to Implement	View, Update, Insert, Delete	View	View
Documents Action	View, Update, Insert, Delete	View, Update, Insert, Delete	View
Has Actions	None	View	View
Has Action Mapping	View, Update, Insert, Delete	View	View
Has Action Revisions	None	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Has Active Strategy	None	View	View
Has Asset Strategy	None	View	View
Has Associated Recommendation	None	View	View
Has Checkpoint	None	View, Insert	View
Has Child Hierarchy Item	None	View	View
Has Child Work Management Item	View, Update, Insert, Delete	View	View
Has Cycles	None	View, Update, Insert, Delete	View
Has Driving Recommendation	None	View	View
Has Execution Mapping	View, Update, Insert, Delete	View	View
Has Health Indicators	View, Update, Insert, Delete	View, Update, Insert, Delete	View
Has KPI Measurement	None	View	View
Has Maintenance Item	None	View, Update, Insert, Delete	View
Has Maintenance Package	None	View, Update, Insert, Delete	View
Has Material	None	View, Update, Insert, Delete	View
Has Measurement Location Group	None	View, Update, Insert, Delete	View
Has Mitigation Revisions	None	View	View
Has Object List Item	None	View, Update, Insert, Delete	View
Has Operation	None	View, Update, Insert, Delete	View
Has Proposed Strategy	None	View	View
Has PRT	None	View, Update, Insert, Delete	View
Has Reference Values	None	View	View
Has Risk	None	View	View
Has Risk Category	None	View	View
Has Risk Revisions	None	View	View
Has SAP System	None	View, Update, Insert, Delete	View
Has Strategy	None	View	View
Has Strategy Revision	None	View	View
Has System Strategy	None	View	View

Family	MI ASI Administrator	MI ASI User	MI ASI Viewer
Has Tasks	None	View, Update, Insert, Delete	View
Has Task List	None	View, Update, Insert, Delete	View
Has Task Revision	None	View, Update, Insert, Delete	View
Has Work Management Item	None	View, Update, Insert, Delete	View
Has Work Management Item Definition Configuration	View, Update, Insert, Delete	View	View
Health Indicator Has Mapping	None	View, Update, Insert	View
Health Indicator Has Source	None	View, Update, Insert, Delete	View
Implements Action	None	View, Update, Insert, Delete	View
Implements Strategy	None	View, Update, Insert, Delete	View
Implements Secondary Strategy	None	View, Update, Insert, Delete	View
Is Mitigated	None	View	View
Master Template Has Asset Strategy	None	View	View
Mitigates Risk	None	View	View
Was Applied to Asset Strategy	View, Update, Insert, Delete	View, Update, Insert, Delete	View
Was Applied to PRT	View, Update, Insert, Delete	View, Update, Insert, Delete	View

Install or Upgrade the ASI ABAP Add-On on the SAP System

Before You Begin

Determine the release and level of your current ABAP installation by completing the steps to verify the ABAP installation.

Procedure

1. On a machine from which you can access the SAP Server, access your ASI ABAP installation package.
2. Determine how to proceed based on your ABAP release and level and type of SAP system.

    - For ECC6, if your currently installed ABAP release is 400_600 or 420_600 and the level is 0000 or 0032, proceed to step 17 on page 66. Otherwise, proceed to the next step.
    - For S/4 Hana, if your currently installed ABAP release is 4XX_750 and the level is 0000, proceed to step 17 on page 66. Otherwise, proceed to the next step.
3. Navigate to the folder `\\SAP ASI ABAP Add-On\Service Pack Files\ECC6` or `\\SAP ASI ABAP Add-On\Service Pack Files\S/4 Hana`, and then select one of the following folders:

    - **Exchange Upgrade**: To upgrade the ASI ABAP Add-on when upgrading to a new SAP version.

- **Installation**: To install the ASI ABAP Add-on for the first time.
- **Upgrade**: To upgrade the ASI ABAP Add-on.

4. Copy the .pat file(s). The file names begin with either D07 or H4S.

5. On the SAP Server, paste the copied file(s) into the folder **usr\sap\trans\eps\in**.

6. Log in to the SAP system as a user with:

   - SCTSIMPSGL and S_CTS_ADMIN authorizations.

     -or-
   - SAP_ALL authorization

7. Run the following transaction: SAINT

   The **Add-On Installation Tool** screen appears.

8. In the upper-left corner of the page, select **Installation Package**, then select **Load Packages**, and then select **From Application Server**.
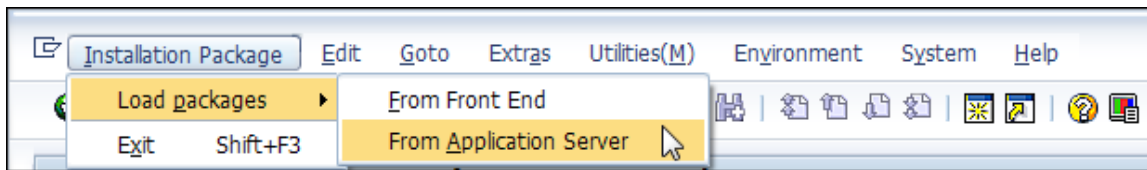
   A message appears, asking if you want to upload OCS packages from the ECS inbox.

9. Select **Yes**.

   The **SAINT: Uploading Packages from the File System** screen appears.

   Note: In an S/4 Hana environment, 2 files are uploaded and are displayed in the **SAINT: Uploading Packages from the File System** screen.

   In the **Message Text** column, on the row corresponding the uploaded .pat file, the message Uploaded successfully is displayed.

10. At the top of the screen, select .

    The **Add-On Installation Tool** screen appears again.

11. Select **Start**.

    A new grid appears. MIAPM appears in the list of add-on packages that can be installed.

12. Select the row containing the text MIAPM in the first column, and then select **Continue**.

    The **Support Package selection** tab appears.

13. Select **Continue**, and then select **Continue** again.

    Note:

    During the installation, if the **Add Modification Adjustment Transports to the Queue** dialog box appears, select **No**.

    During the installation, if the **Open data extraction requests** dialog box appears, select **Skip**, and then select **Yes**.

    At the bottom of the screen, an indicator appears, displaying the progress of the installation.

14. When the indicator disappears, a message appears, indicating that the add-on package will be installed.

15. Select .

The status is updated to indicate that the add-on package will now be imported, and the installation process continues. When the installation process is complete, the status is updated to indicate that the add-on package was imported successfully.

16. Select **Finish**.

The MIAPM add-on package appears in the list of installed add-on packages on the Add-On Installation Tool screen.

17. In the installation package, navigate to the folder `\\SAP ASI ABAP Add-On\Support Package \`.

Depending on your SAP system, navigate to either the `ECC6` folder or navigate to the `S/4 Hana` folder.

18. If your APBP release was 420_600 and level was 0000, navigate to the folder **\V4.2.0**.

-or-

If your ABAP release was any other version, navigate to the folder **\V4.0.0**.

19. Copy the .pat file(s).

20. On the SAP Server, paste the copied file(s) into the folder `\\usr\sap\trans\eps\in`.

21. Log in to the SAP system.

22. Run the following transaction: SPAM.

The **Support Package Manager** screen appears.

23. Select **Menu**, then select **Support Package**, select **Load Packages**, and then select **From Application Server**.

A message appears, asking if you want to upload the package.

24. Select **Yes**.

A summary screen appears, indicating that the package was uploaded successfully.

25. Select **Back**.

26. Select **Display/define**.

The **Component Selection** dialog box appears.

27. Select **MIAPMINT**.

28. When prompted, confirm that the patch will be imported into the queue, and then select ✅.

29. Select **Menu**, then select **Support Package**, and then select 🚚.

30. On the **SPAM: Import: Queue** dialog box, select ✅.

The import process begins. When the import is complete, a message appears, indicating that the import process was successful.

31. Select **Continue**.

Another message appears, indicating that the import process was successful.

32. Select ✅.

33. Select Menu, then select **Support Package**, and then select 🖊️.

The installation is complete.

Next Steps

-

Verify ASI ABAP Add-On

Procedure

1. In SAP, select **Menu**, then select **System**, and then select **Status...**.
   The System: Status window appears.

2. In the SAP System data subsection, select [icon].
   The System: Component information window appears.

3. If you have deployed the ABAP Add-On package for the SAP Adapter, scroll down until you see the Software Component MIAPM.
   If you see the following values in the following columns, the Add-On was applied successfully:

   - **Release:**

     ◦ ECC6: 700_600 depending on the version of SAP that you have installed.
     ◦ S/4 Hana: 4XX_750

   - **Level:**

- ◦ ECC6: 0000 (**APM Asset Strategy SP 7 - SP1**)
- ◦ S/4 Hana: 0036

Note: If the level does not match, go back to step 17 on page 66 of Install or Upgrade the ASI ABAP Add-On on the SAP System and rerun the installation steps.

Next Steps

Return to the workflow for the next step in the deployment process.

Uninstall the ASI ABAP Base Service Pack Add-On

Before You Begin

- Verify the release and level of your ASI ABAP installation.

Procedure

1. Log in to the SAP server as a user with either SCTSIMPSGL and S_CTS_ADMIN authorizations or SAP_ALL authorization.
2. Enter SAINT.
   The **Add-On Installation Tool** screen appears.
3. Select the **Uninstallable components** tab.
   MIAPM appears in the list of add-on packages that can be uninstalled.
4. Select **MIAPM**, and then select **Continue**.
   The **Start options** dialog box appears.
5. Select **Default options**.
6. Select ✅.
   The status is updated to indicate that the add-on package will now be imported and the uninstallation process continues. When the process completes, the status is updated to show that the add-on package was removed successfully.
7. Select **Finish**.

Results

The MIAPM add-on package is removed from the list of installed add-on packages in the **Add-On Installation Tool** screen.

Configure SAP for External Numbering

About This Task

When you implement an Implementation Package in ASI, GE Digital APM generates unique numbers for SAP Maintenance Plans, Maintenance Items, and General Maintenance Task Lists. For GE Digital APM to assign these external numbers, your SAP system must be configured to allow External Numbering.

Procedure

Define the following External Number Ranges using the SAP documentation:

Object Type	From Number	To Number
Maintenance Plan **Note:** As a baseline, you must assign the number range to the PM group.	M00000000001	M99999999999
Maintenance Item	M000000000000001	M999999999999999
General Maintenance Task List	M0000001	M9999999

Next Steps

Configure SAP Permissions

Configure SAP Permissions

Before You Begin

Complete the steps described in Create APM Connect User Profile.

Procedure

Configure the following security permissions:

- Access to execute RFCs as described in SAP note 460089.
- Access to execute the functions contained in the /MIAPM/ASM function group.
- Authorizations defined in the SAP_PM_DATATRANSFER role.

   Note: For details on configuring SAP security, see the documentation for your SAP system.

Chapter

9

Reference

Topics:

General Reference

Asset Strategy Implementation (ASI) System Requirements

License Requirements

The following licenses are required to take full advantage of ASI functionality:

- Asset Strategy Management
- SAP Content for ASI

SAP System Requirements

The following SAP system versions are required to update items in SAP with changes made in ASI:

- **To create ASI/ASM objects in SAP and import ASI/ASM objects from SAP:** SAP ECC 6.0 - Enhancement Packs (EhP) 1 and above.
- **To update ASI/ASM objects in SAP:** SAP ECC 6.0 - Enhancement Packs (EhP) 5 and above.

Note: For supported SAP releases, see the SAP System Requirements section in APM Connect System Requirements.

Additional Components Required

In addition to the basic GE Digital APM system architecture, your system must also contain the following additional components:

- **The Asset Strategy Management (ASM) module.** ASI allows you to build Implementation Packages, which are containers of records that dictate the work that you want to perform and the Asset Strategies that contain the original work requests (i.e., Action Revision records). Asset Strategies are created in ASM.
- **An SAP System.** The connectivity to SAP is required only if you want to create items such as Maintenance Plans, Maintenance Items, and Task Lists from ASI. To take full advantage of the ASI module, we recommend that you integrate ASI with SAP.

Deploying Asset Strategy Implementation

After you have installed and configured the basic GE Digital APM system architecture, you will need to perform some configuration steps specifically for Asset Strategy Implementation.

Supported Features in APM Now

This GE Digital APM module is not available in the APM Now environment.

ASI Data Model

Like all GE Digital APM modules, Asset Strategy Implementation consists of entity families, relationship families, and business rules. The **ASI Overview** page in ASI provides you with a custom view of ASI records that exist in the database. This page also helps facilitate the creation of new records.

When attempting to understand and make use of ASI functionality, it can be helpful to visualize the ASI data model. Because you should already be familiar with the concept of records and viewing records in Record Manager, as you attempt to get your bearings in ASI, it may be useful to remember that ASI is

simply a customized view of individual records that work together to make up an Implementation Package.

All ASI implementation packages begin with an Implementation Package record. Each Implementation Package record will be linked to:

- Zero or one SAP System records through the Has SAP System relationship.
- At least one Asset Strategy record through the Implements Strategy relationship.
- Zero or more Asset Strategy records through the Implements Secondary Strategy relationship.
- One or more Action records through the Implements Actions relationship.
- One or more other records through the Has Work Management Item relationship. These records store the details of work items that you want to implement, either in GE Digital APM or in an external SAP management system.

The following diagram illustrates how families are related to one another within the ASI data model. The boxes represent entity families, and the arrows represent relationship families. You can determine the predecessor and successor in each relationship by the direction of the arrow head. The box to which the arrow is pointing is the successor in the relationship.
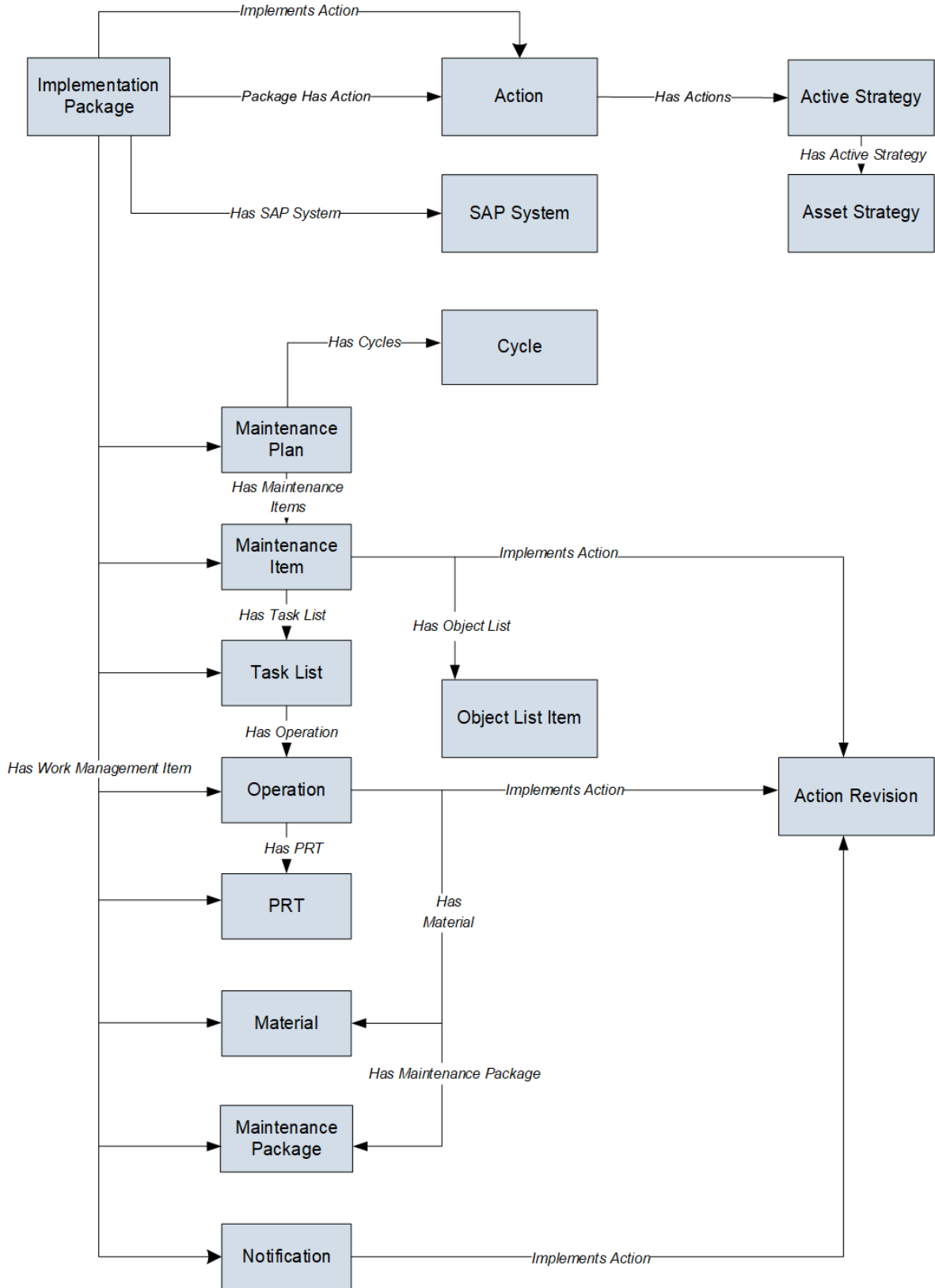
ASI URLs

URL Paths for ASI Features

In Asset Strategy Implementation, there is one route for accessing the overview and one URL base path for building URLs elsewhere in the module: **asi/overview**. The following table describes the various paths that build on the route, and the elements that you can specify for each.

Feature	URL Path	Description
ASI Overview Page	asi/overview	Displays the **ASI Module Overview** page. This path does not accept parameters.
Asset Strategy Implementation Administration Page	/strategy/asi/admin	Displays the **Asset Strategy Implementation Administration** page. This path does not accept parameters.
New Implementation Package	/asi/package/0	Displays the workspace for a new **Implementation Package**.
Specific Implementation Package	/asi/package/<EntityKey>	Displays the Implementation Package connected to the specific entity key.
New Maintenance Plan for a Specific Implementation Package	/asi/package/<EntityKey>/wmi/0	Displays the workspace for a new Maintenance Plan within an existing Implementation Package.
New Child Record for a Specific WMI in a Package	/asi/package/<EntityKey>/wmi/{wmikey}/new/{type}	Displays the workspace for a new child record under the specified WMI.

Example URLs

Example URL	Destination
asi/overview	Displays the **ASI Module Overview** page.
/strategy/asi/admin	Displays the **Asset Strategy Implementation Administration** page.
/asi/package/0	Displays the workspace for a new Implementation Package.
/asi/package/0228198107	Displays the Implementation Package connected to the specified entity key.
asi/package/64252712975/wmi/64259880695/new/MI_MAINTITM	Displays the child task connected to the specified WMI.

About the ASI for SAP ABAP Add-on

GE Digital APM ASI for SAP extends the basic functionality of Asset Strategy Implementation (ASI) by offering integration with SAP. Deploying ASI for SAP requires two steps:

- Activating the ASI for SAP license in the GE Digital APM database. This documentation assumes that you activated the license when you completed the steps for creating or upgrading your GE Digital APM database.
- Deploying the ASI for SAP ABAP add-on, which is a package that must be deployed on your SAP system to allow for integration between your GE Digital APM system and your SAP system.

The files necessary to deploy ASI for SAP are provided on the ASI for SAP ABAP Add-on DVD, which is not included in the standard GE Digital APM distribution but can be obtained from GE Digital APM upon request.

The ASI for SAP ABAP Add-on DVD contains installation files, upgrade files, and exchange files. In this documentation, we provide details on using the installation and upgrade files. You will need to use the exchange files if you upgrade an SAP system on which the ASI for SAP ABAP Add-on package has been installed. In that case, the SAP upgrade procedure will prompt you to access the exchange files for ASI for SAP. You can find the files in the Exchange Upgrade Files folder on the ASI for SAP ABAP Add-on DVD. Within the Exchange Upgrade Files folder, you will see subfolders representing the version of SAP to which you are upgrading. When prompted for an ASI for SAP exchange file, use the files in these subfolders. This documentation does not provide specific instructions for using these files during an SAP upgrade.

For information about what is included in the ASI ABAP Add-on, see the file SAP_ASI_<version>_ObjectList.pdf, which is located on the ASI for SAP ABAP Add-on installation DVD in the root folder.

System Code Tables Used by ASI

The following table provides a list of the System Code Tables that are used by ASI.

Table ID	Table Description	Function
MI_WKMGMTDF_GROUP	Work Management Item Definition Groups	Used to populate the: • **Group Name** list on the Work Management Item Definition datasheet. • **Packaging Tasks** menu on the **Implementation Packaging** page in the GE Digital APM application.
MI_OPERTION_CALC	Operation Calc	Used to populate the **Calc** list on the Operation datasheet.
MI_MAINTPLN_INDICATOR	Maintenance Plan Scheduling Indicator	Used to populate the **Scheduling Indicator** list on the Maintenance Plan datasheet.

Values Mapped from GE Digital APM to SAP

Values Mapped to SAP Maintenance Plans

The following table explains the Maintenance Plan fields that are used to populate SAP Maintenance Plan fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Authorization Group	BEGRU	Technical Object Authorization Group
Call Confirm	CALL_CONFIRM	Only Create New Call Object After Completing Predecessor
Call Horizon	HORIZ	Call Horizon for Maintenance Plan Calls

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Category	MPTYP	Maintenance Plan Category
Counter	POINT	Measuring Point
Cycle Modification Factor	SFAKT	IBIP: Cycle Modification Factor
Description	WPTXT	Maintenance Plan Text
Factory Calendar	FABKL	Factory Calendar Key
ID	WARPL	Maintenance Plan
Interval	ZYKL1	Maintenance Cycle
Interval Description	PAK_TEXT	Text for Maintenance Package/Cycle (Time/Performance)
Interval Unit	ZEIEH	Unit for the Performance of Maintenance Tasks
Maintenance Strategy	WSTRA	Maintenance Strategy
Offset	OFFS1	Maintenance Package Offset
Scheduling Indicator	STICH	Scheduling Indicator
Scheduling Period	ABRHO	Scheduling Period
Scheduling Unit	HUNIT	Unit in Scheduling Interval
Shift Factor for Early Completion	VSNEG	Shift Factor for Early Completion
Shift Factor for Late Completion	VSPOS	Shift Factor for Late Completion
Sort Field	PLAN_SORT	Sort Field for Maintenance Plans
Start Counter	SZAEH	Start Counter Reading
Start Date	STADT	Start Date
Tolerance for Early Completion	TONEG	Tolerance for Early Completion (%)
Tolerance for Late Completion	TOPOS	Tolerance for Late Completion (%)

Values Mapped to SAP Maintenance Items

The following table explains the Maintenance Item fields that are used to populate SAP Maintenance Item fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Activity Type	ILART	Maintenance Activity Type
Assembly	BAUTL	Assembly
Business Area	GSBER	Business Area

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Category	MPTYP	Maintenance Plan Category
Equipment	EQUNR	Equipment Number
Functional Location	TPLNR	Functional Location
Group	PLNNR	Key for Task List Group
Group Counter	PLNAL	Group Counter
Item Description	PSTXT	Item Short Text
Maintenance Item	WAPOS	Maintenance Item
Maintenance Planner Group	WPGRP	Planner Group for Customer Service and Plant Maintenance
Maintenance Strategy	WSTRA	Maintenance Strategy
Notification Type	QMART	Notification Type
Order Type	AUART	Order Type
Planning Plant	IWERK	Maintenance Planning Plant
Priority	PRIOK	Priority
System Condition	ANLZU	Overall Condition of Technical System
Work Center	GEWERK	Main Work Center for Maintenance Tasks
Work Center Plant	WERGW	Plant Associated with Main Work Center

Values Mapped to SAP Maintenance Items

The following table explains the Object List Item fields that are used to populate SAP Object List Item fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Equipment Number	EQUNR	Equipment Number
Functional Location ID	TPLNR	Functional Location
Functional Location Label	STRNO	Functional location Label
Sort Field	SORTF	Object List Sort Field

Values Mapped to SAP Task Lists

The following table explains the Task List fields that are used to populate SAP Task List fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Assembly	ISTRU	Assembly
Description	KTEXT	Work Center Description
Equipment	EQUNR	Equipment Number
Functional Location	TPLNR	Functional Location
Group	PLNNR	Key for Task List Group
Key Date	STTAG	Key Date
Maintenance Strategy	STRAT	Maintenance Strategy
Planner Group	VAGRP	Responsible Planner Group/Department
Planning Plant	WERKS	Maintenance Planning Plant
Plant	AWERK	Plant
Status	STATU	Status
System Condition	ANLZU	Overall Condition of Technical System
Usage	VERWE	Use by User or System
Work Center	ARBPL	Work Center

Values Mapped to SAP Operations

The following table explains the Operation fields that are used to populate SAP Operation fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Activity Type	LARNT	Activity Type
Calc	INDET	Key for Calculation
Control Key	STEUS	Control Key
Cost Element	SAKTO	Cost Element
Currency	WAERS	Currency Key
Description	LTXA1	Operation Short Text
Execution Factor	AUFKT	Execution Factor
Material Group	MATKL	Material Group
Normal Duration	DAUNO	IBIP: Normal Operation Duration
Normal Duration Unit	DAUNE	Normal Duration/Unit
Number of Resources	ANZZL	IBIP: Char. - No. of Required Capacity

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Operation	VORNR	Operation/Activity Number
Order Quantity	BMEIH	Operation Order Quantity Unit
Order Quantity Unit	BMVRG	IBIP: Purchase Order Quantity Operation
Plant	WERKS	Plant
Purchasing Group	EKGRP	Purchasing Group for External Processing
Purchasing Organization	EKORG	Purchasing Organization
StdTxt	KTSCH	Standard Text Key
Sub Operation	UVORN	Suboperation
System Condition	ANLZU	System Condition
User Field 0	USR00	User Field with 20 Characters
User Field 1	USR01	User Field with 20 Characters
User Field 2	USR02	User Field with 10 Characters
User Field 3	USR03	User Field with 10 Characters
User Field 4	USR04	IBIP: User Field for Quantity (Length 10,3)
User Field 4 Units	USE04	User field: Unit for Quantity Fields
User Field 5	USR05	IBIP: User Field for Quantity (Length 10,3)
User Field 5 Units	USE05	User field: Unit for Quantity Fields
User Field 6	USR06	IBIP: User Field for Values (Length 10,3)
User Field 6 Units	USE06	User field: Unit for Quantity Fields
User Field 7	USR07	IBIP: User Field for Values (Length 10,3)
User Field 7 Units	USE07	User field: Unit for Quantity Fields
User Field 8	USR08	User field for Date
User Field 9	USR09	User field for Date
User Field 10	USR10	User-defined Field: Indicator for Reports
User Field 11	USR11	User-defined Field: Indicator for Reports
User Field Key Word ID	SLWID	Key Word ID for User-defined Fields
Work	ARBEI	IBIP: Operation Labor
Work Center	ARBPL	Work Center
Work Unit	ARBEH	Unit for Work

Values Mapped to SAP Materials

The following table explains the Material fields that are used to populate SAP Material fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Material Number	IDNRK	Material Number
Quantity	MENGE	Quantity

Values Mapped to SAP PRTs

The following table explains the PRT fields that are used to populate SAP PRT fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
None. The value in the FHMAR field is always set to D.	FHMAR	Production Resources/Tools Category
Control Key	STEUF	Control Key for Management of Production Resources/Tools
Document	DOKNR	Document Number
Document Part	DOKTL	Document Part
Document Type	DOKAR	Document Type
Document Version	DOKVR	Document Version
Item Number	PSNFH	Item Number for Production Resource/Tool
Quantity	MGVGW	Standard Value for PRT Quantity
Quantity Unit	MGEINH	Quantity Unit of Production Resource/Tool

Values Mapped to SAP Maintenance Packages

The following table explains the Maintenance Package fields that are used to populate SAP Maintenance Package fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Cycle	KTEXTZYK<#> Note: <#> is a number between one (1) and 32 that is determined by the sequence of the Operations on the associated Task List, regardless of the Operation number.	Short Text for the Maintenance Cycle (Time/Performance)

Values Mapped to SAP Notifications

The following table explains the Notification fields that are used to populate SAP Notification fields when you implement an Implementation Package.

GE Digital APM Field Caption	SAP Field ID	SAP Field Caption
Equipment	EQUIPMENT	Equipment Number
Functional Location	FUNCT_LOC	Functional Location
Notification Type	NOTIF_TYPE	Notification Type
Priority	PRIORITY	Priority
Required End Date	DESENDDATE -AND- DESENDDATE	Required End Date -AND- Required End Time
Required Start Date	DESSTDATE -AND- DESSTTIME	Required Start Date -AND- Required Start Time
Short Text	SHORT_TEXT	Short Text
None. The value in the NOTIF_DATE field is populated automatically with the date and time that the Notification was created.	NOTIF_DATE	Date of Notification
None. The value in the NOTIFTIME field is populated automatically with the date and time that the Notification was created.	NOTIFTIME	Notification Time

About the Get SAP ID for <Equipment or Functional Location> Query

After providing a prompt for an Entity Key, the query Get SAP ID for Equipment returns the record with the provided Entity Key. In the baseline GE Digital APM database, the query returns records in the Equipment family. This query is not meant to be run on its own. Instead, GE Digital APM runs this query automatically to determine whether to populate the Equipment or Functional Location field when you build Notification or Maintenance Item records from Actions.

When GE Digital APM runs the query, GE Digital APM provides the prompt with the Entity Key of the predecessor record that is linked to the underlying Asset Strategy record:

- If the Entity Key identifies a record that belongs to the query's source family, the Equipment field in the Notification and Maintenance Item records will be populated automatically with the ID of that record. GE Digital APM uses the value that is returned by the query as the ID. In the baseline query, the query returns the Equipment ID.
- If the Entity Key does not identify a record that belongs to the query's source family, GE Digital APM runs the query Get SAP ID for Functional Location. If the Entity Key identifies a record that belongs to that query source's family (which is the Functional Location family if you have not modified the query), the Functional Location field in the Notification and Maintenance Item records will be populated automatically with the ID of that record.

For example, suppose an Asset Strategy record is linked to the Equipment record HX-112. If you build a Notification record from an Action that belongs to this Asset Strategy, GE Digital APM will:

- Identify the Entity Key of the Equipment record HX-112.
- Supply this Entity Key to the prompt in the Get SAP ID for Equipment query.
- Identify the Equipment ID returned by the query: HX-112.
- Populate the Equipment field in the Notification record with HX-112.

You will not need to modify the baseline query if your Asset Strategy records are linked to records in the baseline Equipment or Functional Location family.

Family Field Descriptions

Family Field Descriptions

This topic provides a listing of all the families in the ASI module with links to the family fields information.

SAP-Specific Work Item Records

About These Descriptions

Throughout most of the GE Digital APM documentation, family field descriptions are provided in a table format, where the table describes the purpose and behavior of all fields that are defined for a specific family.

In ASI, however, most of the fields that are defined for families representing SAP items (e.g., Maintenance Plan) correspond directly to an SAP field. We assume that you are familiar with your SAP data structure and fields, so we do not provide descriptions of the values that these fields are meant to store. In other words, because they store the same values that their corresponding SAP counterpart fields store, we assume that you understand what to enter or select in the fields in GE Digital APM.

We do, however, provide information about the behavior of some fields on the datasheet if that behavior cannot be inferred based upon prior knowledge of SAP functionality. For example, if a field is required in GE Digital APM to save a record, we note the requirement. Likewise, if a field is populated automatically in GE Digital APM as a result of selecting a value in another field, this is also noted.

Note: For all families, all fields are disabled after the Implementation Package is implemented.

Cycle

- **Counter ID:** This field contains the ID for the counter that is being applied to the Maintenance Plan. If there is no Counter ID, the Cycle will be time-based.
- **Cycle:** The numeric component of the Counter interval applied to the Maintenance Plan.
- **Cycle Description:** A description of the Cycle being applied to the Maintenance Plan.
- **Cycle Set Sequence:** This field contains a number which corresponds to the Cycle Set Sequence value that you assigned to the Maintenance Plan.
- **Cycle UOM:** The unit component of the Counter interval applied to the Maintenance Plan.
- **Offset:** This field contains a numeric value corresponding to an interval at which some maintenance may have been carried out in the middle of a scheduled Cycle.
- **Plan Key:** The ID for the associated Maintenance Plan.
- **Start Counter:** This field contains a numeric value corresponding to an interval at which the maintenance plan will begin. This field is only applicable to single-cycle plans.

Maintenance Item

- **Cycle Set Sequence:** This field contains a number which corresponds to the Cycle Set Sequence value that you assigned to a Maintenance Item.
- **Equipment:** The Equipment field is disabled if the Maintenance Item record is linked to a Task List record and the associated Task List has been implemented in SAP, or if the Task List record contains a value in the Equipment field.

  If a Maintenance Item record contains a value in either the Functional Location or Equipment field, after you create a Task List record that is linked to that Maintenance Item record, you can use the **Synchronize** button in that Maintenance Item record to copy that value to the Task List record.
- **Functional Location:** The Functional Location field is disabled if the Maintenance Item record is linked to a Task List record and the associated Task List has been implemented in SAP or if the Task List record contains a value in the Functional Location field.

  If a Maintenance Item record contains a value in either the Functional Location or Equipment field, then after you create a Task List record that is linked to that Maintenance Item record, you can use the **Synchronize** button in that Maintenance Item record to copy that value to the Task List record.
- **Implementation Status:** This field can contain any of the following values:

  ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.
- **Item Description:** This field is required.
- **Maintenance Item:** After the Implementation Package is implemented, this field is populated automatically with a link that you can select to open the **ITS System Information** screen in Internet Explorer, where you can log in to the SAP system to view the Maintenance Item.

Maintenance Package

- **Implementation Status:** This field can contain any of the following values:

  ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.

Maintenance Plan

- **Description:** This field is required.

- **Factory Calendar:** This field is disabled if the value in the Scheduling Indicator field is empty. If the Scheduling Indicator field is cleared after a value already exists in the Factory Calendar field, the Factory Calendar field will be cleared automatically.
- **Implementation Status:** This field can contain any of the following values:

  ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.
- **ID:** After the Implementation Package is implemented, this field is populated automatically with a link that you can select to open the **ITS System Information** screen in Internet Explorer, where you can log in to the SAP system to view the Maintenance Plan.
- **Interval:** This field is required.
- **Interval Unit:** This field is required.
- **Maintenance Strategy:** If you modify the value stored in the Maintenance Strategy field in a predecessor Maintenance Plan record, that value will be copied automatically to the Maintenance Strategy field in the successor records, with one exception: if you modify the value stored in the Maintenance Strategy field in a Maintenance Plan record that is linked to predecessor Maintenance Package records, the Maintenance Package records will be deleted automatically.
- **Multiple Counter:** If this box is checked when creating a Maintenance Plan, it will enable multiple cycles to be applied. Otherwise, only a single-cycle plan can be created. This check box is unselected by default. If the check box is selected, then the Scheduling Indicator field will automatically be populated as Multiple Counter (4) and disabled.
- **Scheduling Indicator:** Within a maintenance strategy, you can use different scheduling indicators to specify the type of scheduling you require:

  ◦ Time - Key Date (1)
  ◦ Time - Factor Calendar (2)
  ◦ Performance Based (3)
  ◦ Multiple Counter (4).

  Note: The Multiple Counter (4) value will only be populated if the **Multiple Counter** check box is selected.

Material

- **Implementation Status:** This field can contain any of the following values:

  ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.

Notification

- **Implementation Status:** This field can contain any of the following values:

  ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.

- **Notification Number:** After the Implementation Package is implemented, this field is populated automatically with a link that you can select to open the **ITS System Information** screen in Internet Explorer, where you can log in to the SAP system to view the Notification.
- **Notification Type:** This field is required.
- **Short Text**: This field is required.

Object List Item

- **Equipment Description:** This field is populated automatically after the Equipment Number field is populated.
- **Equipment Number:** If the Functional Location ID field is empty, this field is required.
- **Functional Location ID:** If the Equipment Number field is empty, this field is required.
- **Functional Location Label:** This field is populated automatically after the Functional Location ID field is populated.
- **Implementation Status:** This field can contain any of the following values:

  ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.

Operation

- **Calc**: Depending upon what you select in the Calc list, other fields will be enabled or disabled. This behaviors are described in the following list:

  ◦ If you select Calculate Duration, the Normal Duration and Normal Duration Unit fields will be disabled.
  ◦ If you select Calculate Work, the Work and Work Unit fields will be disabled.

- ◦ If you select Calculate Number of Capacities, the Number of Resources field will be disabled.
  - ◦ If you select Calculate Manually or leave this field blank, all the fields are enabled.
- **Implementation Status:** This field can contain any of the following values:

  - ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  - ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  - ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  - ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.
- **Plant:** This field is populated automatically after the Work Center field is populated.
- **StdTxt:**The value in this field is automatically populated via SAP records. Next to the StdTxt field, when

  you select °°°, a drop-down list box appears. The value that you select in this drop-down list box then populates the Long Text field of the Operation record with the SAP-specific description.

Task List

- **Description:** This field is required.
- **Equipment:** If the Equipment field contains a value, an Equipment Task List will be created in SAP. If the Functional Location field contains a value, a Functional Location Task List will be created in SAP. If neither field contains a value, a General Task List will be created in SAP.
- **Equipment Description:** This field is populated automatically after the Equipment field is populated.
- **Functional Location:** If the Equipment field contains a value, an Equipment Task List will be created in SAP. If the Functional Location field contains a value, a Functional Location Task List will be created in SAP. If neither field contains a value, a General Task List will be created in SAP.
- **Functional Location Label:** This field is populated automatically after the Functional Location field is populated.
- **Group:** After the Implementation Package is implemented, this field is populated automatically with a link, which displays the ITS System Information window in Internet Explorer, where you can log in to the SAP System to view the SAP Task List.
- **Implementation Status:** This field can contain any of the following values:

  - ◦ **Added:** The record is new and has not yet been sent to SAP. In this case, when the Implementation Package is implemented, the corresponding SAP item will be created.
  - ◦ **Modified:** One or more values in the record have changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be updated accordingly.
  - ◦ **Deleted:** The record has been flagged for deletion since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will be deleted.
  - ◦ **Unchanged:** The record has not changed since it was last sent to SAP. In this case, when the Implementation Package is reimplemented, the corresponding SAP item will not be modified.

  The Implementation Status field is not available on any baseline datasheets. Instead, the value is used to determine the image that is displayed next to the node name in the tree on the **Packaging** page.
- **Key Date:** By default, the value in this field is set to the current date and time.
- **Maintenance Strategy:** This field is disabled if the associated Task List has been implemented in SAP.
- **Status:** By default, the value in this field is set to 4.

Work Management Item Definition Configuration Records

The following table provides an alphabetical list and descriptions of the fields that exist for the Work Management Item Definition Configuration family. The information in the table reflects the baseline state and behavior of the fields.

This family is not enabled for site filtering, which means that records in this family can be accessed by any user with the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

Field Caption	Data Type	Description	Behavior and Usage
Class Name	Character	The rule class that will be invoked when you select a work item node in the tree on the **Packaging** page.	You will need to enter the name of the class.
Description	Text	A description of the configuration.	You can enter any description.
Name	Character	The name of the configuration.	The value in this field is displayed in the **Definition Configuration** column on the **Work Management Item Definitions** page.
Project Path	Character	The path to the rule that will be invoked when you select a work item node in the tree on the **Packaging** page.	You will need to enter the path to the rule project.

Work Management Item Definition Records

The following table provides an alphabetical list and descriptions of the fields that exist for the Work Management Item Definition family. The information in the table reflects the baseline state and behavior of the fields.

This family is not enabled for site filtering, which means that records in this family can be accessed by any user with the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

Field Caption	Data Type	Description	Behavior and Usage
Allow Link Existing	Logical	A value that indicates whether or not you are allowed to add existing records in the family that is stored in the Family ID field to records in its predecessor family using the shortcut menu in the tree on the **Packaging** page.	On the datasheet, you can select or clear the check box. For example, if you selected Preventative Maintenance Task in the **Family ID** list, its successor family is the Implementation Package family, and the **Allow Link Existing** check box is selected, and when you select the Implementation Package node in the tree, the **Find an existing Preventative Maintenance Task to link to <Root Implementation Package Name> Implementation Package** option will appear.
Family ID	Character	The family ID of the family representing the type of work item record that you want to add to an Implementation Package.	On the datasheet, the list displays all families that are related to the Implementation Package family through the Has Work Management Item relationship. This field is required. For example, if you want to be able to add Preventative Maintenance Task records to an Implementation Package, you would select Preventative Maintenance Task in the **Family ID** list. This would allow you to add Preventative Maintenance Task records to an Implementation Package when you select the Implementation Package node in the tree on the **Packaging** page.
Parent Family ID	Character	The family ID of the family whose records will be predecessors to records that belong to the family that is stored in the Family ID field.	On the datasheet, the list displays all families that are related to the Implementation Package family through the Has Work Management Item relationship.

Field Caption	Data Type	Description	Behavior and Usage
Parent Family Relationship ID	Character	The relationship family that relates the family that is stored in the Family ID field to the family that is stored in the Parent Family ID field.	On the datasheet, the list displays all relationship families that exist in the database. For example, suppose you selected Preventative Maintenance Task in the **Family ID** list and Task Grouping in the **Parent Family ID** list. If the Task Grouping family is related to the Preventative Maintenance Task family through the Has Tasks relationship, you would select Has Tasks in the **Parent Family Relationship ID** list.
Sequence	Number	A number that determines the order in which the family identified by the value in the Family ID field will appear on the **Packaging Tasks** submenu, the menu in the tree, and the **Work Management Item Definitions** grid on the **Implementation Administration** page.	You can enter any number beginning with 0.

Work Management Item Child Definition Records

The following table provides an alphabetical list and descriptions of the fields that exist for the Work Management Item Child Definition family. The information in the table reflects the baseline state and behavior of the fields.

This family is not enabled for site filtering, which means that records in this family can be accessed by any user with the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

Field Caption	Data Type	Description	Behavior and Usage
Child Family ID	Character	The successor family whose records you want to link to records belonging to the family that appears in the **Family ID** cell in the Work Management Item Definition record to which this Work Management Item Child Definition record is linked.	On the datasheet, you can select a family from a list containing all families that are related to the Implementation Package family through the Has Work Management Item relationship. For example, suppose you want to be able to link Preventative Maintenance Task records to Task Grouping records. If the Family ID field in the predecessor Work Management Item Definition record contains the value Task Grouping, then in the **Child Family ID** list, you would select Preventative Maintenance Task.
Child Family Relationship ID	Character	The relationship family that relates the family that appears in the **Family ID** cell in the predecessor Work Management Item Definition record to the family that is stored in the Child Family ID field in this Work Management Item Child Definition record.	On the datasheet, you can select the appropriate relationship family from the list.

Implementation Package Records

The following table provides an alphabetical list and descriptions of the fields that exist for the Implementation Package family. The information in the table reflects the baseline state and behavior of the fields.

This family is not enabled for site filtering, which means that records in this family can be accessed by any user with the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

Field Caption	Data Type	Description	Behavior and Usage
Description	Text	A description of the Implementation Package.	You can enter any description. This field is disabled if the Implementation Package record is set to the Packaged or Implemented state.
ID	Character	The ID of the Implementation Package.	You can enter any ID. This is a required field.
SAP System	Character	The name of the SAP system to which you will transfer the items in the Implementation Package.	Select the SAP System record representing the SAP system to which you want to transfer items in the Implementation Package. This is a required field.

Execution Mapping Records

The following table provides an alphabetical list and descriptions of the fields that exist for the Execution Mapping family. The information in the table reflects the baseline state and behavior of the fields.

This family is not enabled for site filtering, which means that records in this family can be accessed by any user with the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

Field Caption	Data Type	Description	Behavior and Usage
Class Name	Character	The rule class that will be invoked when you implement the Implementation Package.	You will need to enter the name of the class.
Description	Text	A description of the mapping.	You can enter any description.
Name	Character	The name of the mapping.	The value in this field is displayed in the **Execution Mapping** column on the **Work Management Item Definitions** page.
Project Path	Character	The path to the Rules Library rule project that stores the rule that will be invoked when you implement the Implementation Package.	You will need to enter the path to the rule project.

Action Mapping Records

The following table provides an alphabetical list and descriptions of the fields that exist for the Action Mapping family. The information in the table reflects the baseline state and behavior of the fields.

This family is not enabled for site filtering, which means that records in this family can be accessed by any user with the appropriate license and family privileges. For more information, refer to the Sites section of the documentation.

Field Caption	Data Type	Description	Behavior and Usage
Class Name	Character	The rule class that will be invoked when you use an Action to create a GE Digital APM record, such as an Inspection Task or a Maintenance Item.	You will need to enter the name of the class.
Description	Text	A description of the mapping.	You can enter any description.
Name	Character	The name of the mapping.	The value in this field is displayed in the **Action Mapping** column on the **Work Management Item Definitions** page.
Project Path	Character	The path to the Rules Library rule project that stores the rule that will be invoked when you use an Action to create a GE Digital APM record, such as an Inspection Task record or a Maintenance Item record.	You will need to enter the path to the rule project.

Catalog Items

Catalog Items

The ASI catalog folders contain queries, graphs, and dashboards that appear throughout the ASI for SAP module and display information contained in the records that make up ASI.

About the ASI Catalog Folder Structure

The main ASI Catalog folder is `\\Public\Meridium\Modules\Asset Strategy Management\Implementation`. This folder contains a subfolder, Queries, which contains baseline queries that are used by default in ASI.

If desired, you can store additional items in the main ASI Catalog folder or in the Queries subfolder. In addition, you can create new subfolders to store additional items.

Note: All Public folders exist by default. Any baseline item in the Baseline folder is also available in the corresponding Public folder. Throughout this documentation, however, we refer to items in the Public folder.

Dashboards Folder

The Catalog folder `\\Public\Meridium\Modules\Asset Strategy\Dashboards` contains the baseline dashboards that are used for the **ASI Overview** page. The following table identifies and describes the dashboards.

Dashboard	Behavior and Usage
ASI Dashboard	Displays the dashboard for the ASI module, which contains the **ASI - Package Count** and **Percentage of Actions Implemented** graphs.

Graphs Folder

The Catalog folder `\\Public\Meridium\Modules\Asset Strategy Management \Implementation` and `\\Public\Meridium\Modules\Asset Strategy\Dashboards` contain the baseline graphs that are used the **ASI Overview** page. The following table contains the graph names and details.

Graph	Behavior and Usage
ASI - Package Count	This graph shows the number of ASI packages that currently exist, broken down by the state that the package is in.
Percentage of Actions Implemented	Displays a graph representing the number of actions which have been implemented versus the total number of actions.

Queries Folder

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

Important: With the exception of the Get SAP ID for Equipment and Get SAP ID for Functional Location queries, you should not modify these queries in any way or move them to another Catalog folder. Also, while modifying the design of the Get SAP ID for Equipment and Get SAP ID for Functional Location queries is allowed, if you are using the baseline Equipment and Functional Location families, it is not necessary.

Query	Behavior and Usage
ASI - Package Count	Returns the number of packages that currently exist in the database.
ASI Overview Filter Query	Returns the parameters used for filtering on the ASI Overview page.
ASI Packages - No Assets	Returns all packages in the database, but without associated assets.
ASIAllPackages	Returns all packages that currently exist in the database.
Asset Is Equipment	This query is used in the ASI Action Mappings to determine if the Asset tied to the Asset Strategy is a piece of Equipment or a Functional Location. Counts greater than 0 represent Equipment where counts equal to 0 represent Functional Locations.

Query	Behavior and Usage
Get Equipment for SAP ID	Returns the Equipment record that contains the ID corresponding to the value supplied for the SAP Equipment ID prompt and is linked to the SAP System record identified by the value supplied for the SAP System prompt. In the baseline GE Digital APM database, the query returns records in the Equipment family.

This query is not meant to be run on its own. Instead, the GE Digital APM system runs this query automatically to determine which Equipment record to link to the new Asset Strategy record when you create an Asset Strategy by importing Maintenance Items, Notifications, or Operations from SAP. When the GE Digital APM system runs this query, it performs several actions automatically:

• It passes the Equipment ID of the imported SAP item to the SAP Equipment ID prompt in the query.
• It locates the Site Reference record that you selected on the Select SAP Object(s) screen of the Asset Strategy Builder and locates the SAP System record that is linked to that Site Reference record. It then passes the value in the Name field in that SAP System record to the SAP System prompt in the query.

If the query returns a record using the provided values, the GE Digital APM system links that record to the new Asset Strategy record. If the query does not return a record using that value, the GE Digital APM system runs the Get Functional Location for SAP ID query.

Note: Because the documentation for importing SAP items to create Asset Strategies assumes that you began the workflow by importing Equipment and Functional Location records using the SAP Interfaces, this documentation assumes that you will link your Asset Strategy records to either an Equipment or Functional Location record. You will not, therefore, need to modify the baseline Get Equipment for SAP ID query to include a family other than the baseline Equipment family. |

Query	Behavior and Usage
Get Functional Location for SAP ID	Returns the Functional Location record that contains the ID corresponding to the value supplied for the SAP Functional Location ID prompt and is linked to the SAP System record identified by the value supplied for the SAP System prompt. In the baseline GE Digital APM database, the query returns records in the Functional Location family. This query is not meant to be run on its own. Instead, the GE Digital APM system runs this query automatically to determine which Functional Location record to link to the new Asset Strategy record when you create an Asset Strategy by importing Maintenance Items, Notifications, or Operations from SAP. When the GE Digital APM system runs this query, it performs several actions automatically: • It passes the Functional Location of the imported SAP item to the SAP Functional Location ID prompt in the query. • It locates the Site Reference record that you selected on the Select SAP Object(s) screen of the Asset Strategy Builder and locates the SAP System record that is linked to that Site Reference record. It then passes the value in the Name field in that SAP System record to the SAP System prompt in the query. If the query returns a record using the provided values, the GE Digital APM system links that record to the new Asset Strategy record. **Note:** : Because the documentation for importing SAP items to create Asset Strategies assumes that you began the workflow by importing Equipment and Functional Location records using the SAP Interfaces, this documentation assumes that you will link your Asset Strategy records to either an Equipment or Functional Location record. You will not, therefore, need to modify the baseline Get Functional Location for SAP ID query to include a family other than the baseline Functional Location family.
Get Package Implemented Action Count	Returns the number of implemented actions for a particular implementation package.
Get SAP ID for Equipment	After providing a prompt for an Entity Key, returns the record with the provided Entity Key. In the baseline GE Digital APM database, the query returns records in the Equipment family. This query is not meant to be run on its own. Instead, GE Digital APM runs this query automatically to determine whether to populate the Equipment or Functional Location field when you build Notification or Maintenance Item records from Actions.
Get SAP ID for Functional Location	After providing a prompt for an Entity Key, returns the record with the provided Entity Key. In the baseline GE Digital APM database, the query returns records in the Functional Location family. This query is not meant to be run on its own. Instead, it is run automatically to determine whether to populate the Equipment or Functional Location field when you build Notification or Maintenance Item records from Actions.

Glossary

Implementation Package

A collection of records that define the work that you want to perform and the Asset Strategies that contain the original work requests (for example, Action records).

Work Management Item (WMI) Record

Records that represent the work that should be completed when the Implementation Package is implemented. Throughout the documentation, we refer to them as work item records because they can belong to any family.