



# Asset Strategy Implementation



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# Chapter 1

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## Overview

### Topics:

- [Overview of Asset Strategy Implementation](#)
- [Access the ASI Module Overview Page](#)
- [ASI Workflow](#)

# 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.

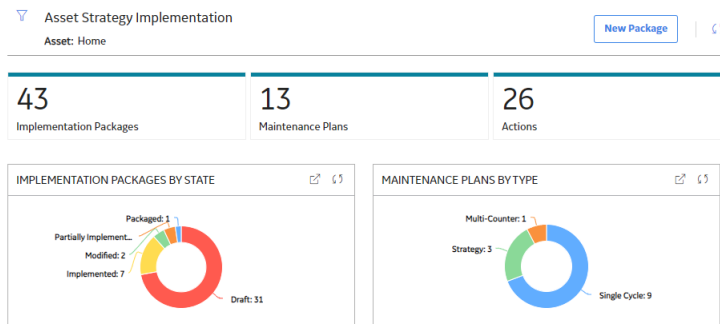
Keep in mind that although ASI is highly configurable, the focus of this documentation is to explain how to perform tasks using the baseline ASI implementation.

## Access the ASI Module Overview Page

### Procedure

In the **Applications** menu, navigate to the **STRATEGY** section, and then select **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

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## Workflow

### Topics:

- [APM Strategy: ASI for SAP Workflow](#)
- [Asset Strategy Management \(ASM\)](#)
- [Create Implementation Packages](#)
- [Create/Update Work Management Items](#)
- [Propose Package](#)
- [Implement Package](#)
- [SAP](#)

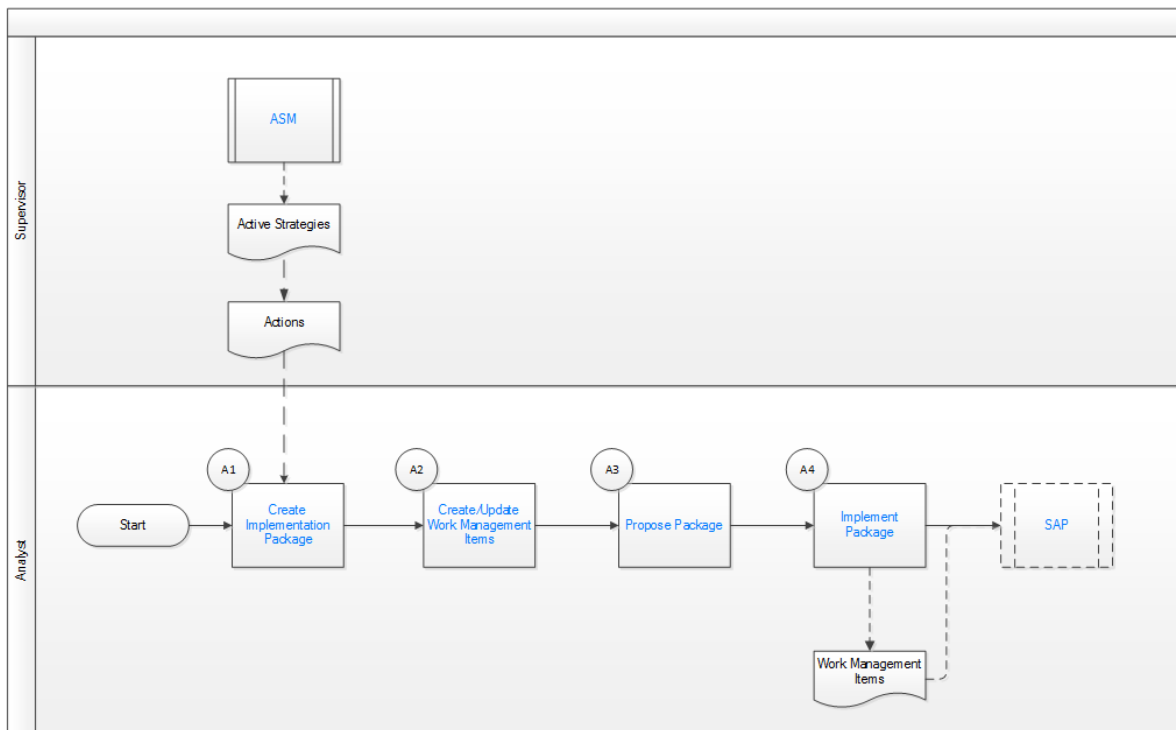
## APM Strategy: ASI for SAP Workflow

**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 the corresponding description has been provided in the sections that follow the diagram. For more information, refer to the [Interpreting the Workflow Diagrams](#) topic in the [APM Product Workflows](#) documentation.

**Note:** For information on the personas associated with a GE Digital APM module, refer to the [APM Product Workflows](#) documentation.



## 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

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## ASI Packages

### Topics:

- [What is an Implementation Package?](#)
- [About State Configuration in ASI](#)
- [About Site Filtering in ASI](#)
- [Access an Existing Implementation Package](#)
- [Create an Implementation Package](#)
- [Import SAP Objects into ASI](#)
- [Package Implementation Packages](#)
- [Revert a Package](#)
- [Implement a Package](#)
- [Revise a Package](#)
- [Update an ASI Package](#)
- [Delete ASI Packages](#)
- [Remove an Action from a Package](#)
- [Build SAP Plan from Actions](#)
- [Apply Updates to Implemented Actions](#)

# 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

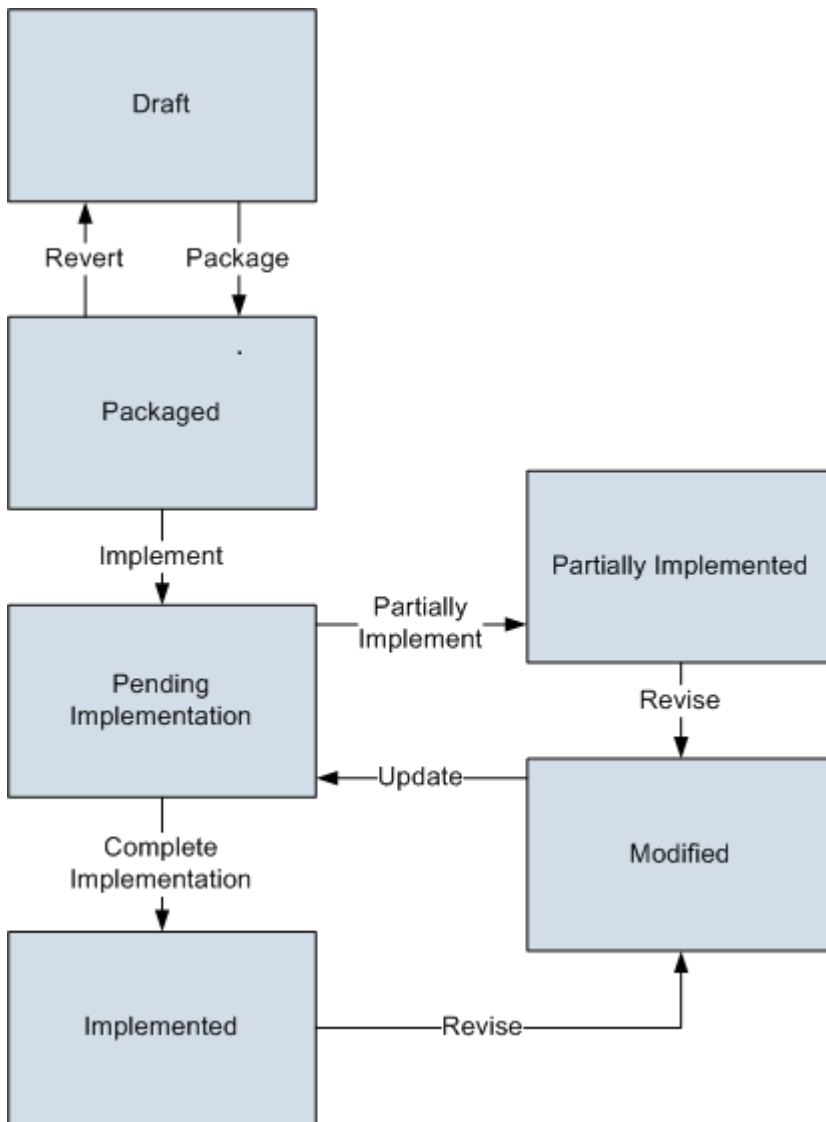
ASI leverages State Configuration Roles, which you can assign to Security Users to manage who can transition strategies from one state to another.

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.

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.

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.

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 you 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.
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

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## Work Management Items (WMIs)

### Topics:

- [About Work Management Items \(WMI\)](#)
- [About the Maintain Object List](#)
- [Create a Work Management Item \(WMI\)](#)
- [Copy and Paste a Work Management Item \(WMI\)](#)
- [Link Actions to a Work Management Item \(WMI\)](#)
- [Unlink an Action from a Work Management Item \(WMI\)](#)
- [Link an Existing Task List in SAP to a Maintenance Item](#)
- [Manage a Maintenance Package from a Task List](#)
- [Delete a Work Management Item \(WMI\)](#)
- [Synchronize Equipment or Functional Location Field in a Task List](#)
- [Maintain Object Lists](#)

## 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 .
  4. Select the root node or the node in the tree to which you want to paste 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 .
  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.
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.
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 ensures 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

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## Process Resource Tool (PRT) Report

### Topics:

- [Process Resource Tool \(PRT\) Report](#)
- [Link an Action to Maintenance Item or Operation](#)
- [Sequence Actions Associated With a WMI](#)
- [Create a Process Resource Tool \(PRT\) Report](#)

## 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. [Link an Action to Maintenance Item or Operation](#) on page 25.
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. [Sequence Actions Associated With a WMI](#) on page 25.
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.

### PRT Report

Last Modified On : 8/27/2020 2:11:37 PM Modified By Administrator, Meridium

Maintenance Item Description - Frequency (18 Months)			
1	Change Lubricant		
	<table border="1"> <tr> <td><b>Acceptable Limit</b></td> </tr> <tr> <td><b>Execution Guidance Note</b> Perform changeout of lubricant</td> </tr> </table>	<b>Acceptable Limit</b>	<b>Execution Guidance Note</b> Perform changeout of lubricant
	<b>Acceptable Limit</b>		
	<b>Execution Guidance Note</b> Perform changeout of lubricant		
PMP-7176 TK 2177 SOUR WATER COL.			
Comment :  Secondary Action (TL) :			
2	Performance Test		
	<table border="1"> <tr> <td><b>Acceptable Limit</b></td> </tr> <tr> <td><b>Execution Guidance Note</b> Perform component performance test over full range of operation. Establish baseline and action levels. Trend results. Test includes pressures, temperatures, flows, etc...</td> </tr> </table>	<b>Acceptable Limit</b>	<b>Execution Guidance Note</b> Perform component performance test over full range of operation. Establish baseline and action levels. Trend results. Test includes pressures, temperatures, flows, etc...
	<b>Acceptable Limit</b>		
	<b>Execution Guidance Note</b> Perform component performance test over full range of operation. Establish baseline and action levels. Trend results. Test includes pressures, temperatures, flows, etc...		
PMP-7176 TK 2177 SOUR WATER COL.			
Comment :  Secondary Action (TL) :			
3	Vibration Analysis		
	<table border="1"> <tr> <td><b>Acceptable Limit</b></td> </tr> <tr> <td><b>Execution Guidance Note</b> Perform full spectrum vibration monitoring. Establish baseline and action levels. Trend results.</td> </tr> </table>	<b>Acceptable Limit</b>	<b>Execution Guidance Note</b> Perform full spectrum vibration monitoring. Establish baseline and action levels. Trend results.
	<b>Acceptable Limit</b>		
	<b>Execution Guidance Note</b> Perform full spectrum vibration monitoring. Establish baseline and action levels. Trend results.		
PMP-7176 TK 2177 SOUR WATER COL.			
Comment :  Secondary Action (TL) :			



# Chapter 6

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## Cycles

### Topics:

- [Access the Manage Cycles Window](#)
- [Create a New Cycle](#)
- [Assign a Cycle Set Sequence](#)
- [Update a Cycle](#)
- [Delete a Cycle](#)

## 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.
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.

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 .
4. Select **Yes**.  
The cycle is deleted.

# Chapter 7

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## Administration

### Topics:

- [Access ASI Admin Settings](#)
- [Create Work Management Item Definitions](#)
- [Create ASI Admin Configuration](#)
- [Modify ASI Admin Configuration](#)
- [Set Implementation Location Preferences](#)
- [Configure the Import from SAP Feature](#)
- [Configure the PRT Settings](#)

# Access ASI Admin Settings

## Procedure



In the **Applications** menu, navigate to **ADMIN > Application Settings > Asset Strategy Implementation**.

The **Asset Strategy Implementation Admin** page appears, displaying the **Work Management Item Definitions** workspace.

Name	Action Mapping	Execution Mapping	Definition Config
Maintenance Plan	<a href="#">Create</a>	Maintenance Plan <--> SAP	Maintenance Plan Configuration
Notification	MI_NOTIFCTN <--> Action	MI_NOTIFCTN <--> SAP	Notification Configuration
Maintenance Item	MI_MAINTITM <--> Action	Maintenance Item <--> SAP	Maintenance Item Configuration
Object List Item	<a href="#">Create</a>	<a href="#">Create</a>	Object List Item Configuration
Task List	<a href="#">Create</a>	Task List <--> SAP	Task List Configuration
Operation	MI_OPERTION <--> Action	<a href="#">Create</a>	Operation Configuration
Material	<a href="#">Create</a>	<a href="#">Create</a>	Material Configuration
PRT	<a href="#">Create</a>	PRT <--> SAP	PRT Configuration
Maintenance Package	<a href="#">Create</a>	<a href="#">Create</a>	Maintenance Package Configuration


# 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.
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 31.
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 KBA 000059525.



# Chapter 8

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## Deployment and Upgrade

Topics:

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

## Deployment

### Deployment

Refer to the deployment information here [Deploy Asset Strategy Implementation \(ASI\) for the First Time](#).

## Upgrade

### Upgrade

Refer to the upgrade information here [Upgrade or Update Asset Strategy Implementation \(ASI\) to V5.0.2.0.0](#).

# Chapter 9

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## Reference

### Topics:

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

## 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.

### ASI Data Model

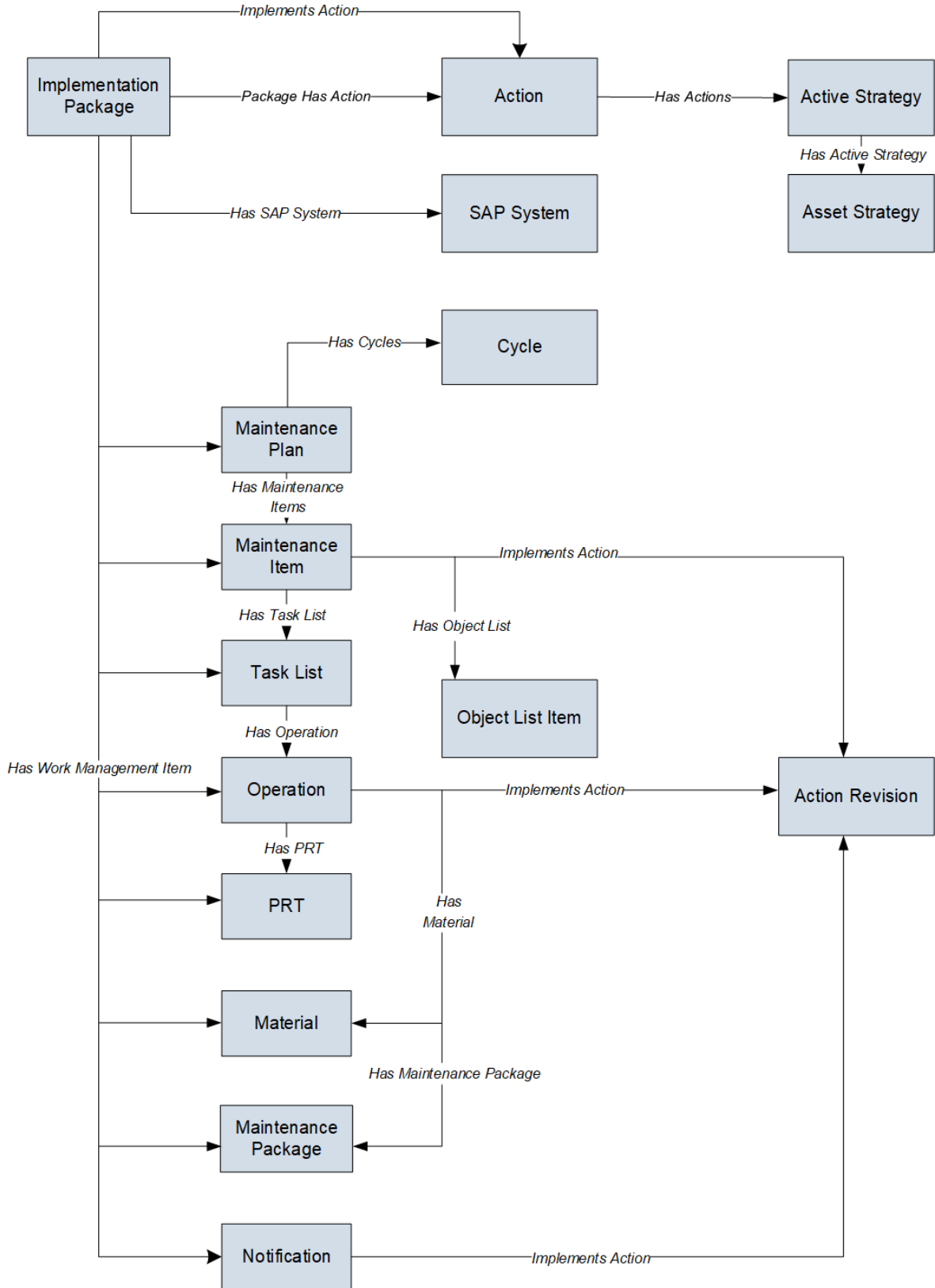
Like all GE Digital APM modules, Asset Strategy Implementation consists of entity families, relationship families, and business rules. The **ASI Overview** page in ASI provides you with a custom view of ASI records that exist in the database. This page also helps facilitate the creation of new records.

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 <b>ASI Module Overview</b> page. This path does not accept parameters.
Asset Strategy Implementation Administration Page	/strategy/asi/admin	Displays the <b>Asset Strategy Implementation Administration</b> page. This path does not accept parameters.
New Implementation Package	/asi/package/0	Displays the workspace for a new <b>Implementation Package</b> .
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 <b>ASI Module Overview</b> page.
/strategy/asi/admin	Displays the <b>Asset Strategy Implementation Administration</b> 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/ML_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: <ul style="list-style-type: none"> <li>• <b>Group Name</b> list on the Work Management Item Definition datasheet.</li> <li>• <b>Packaging Tasks</b> menu on the <b>Implementation Packaging</b> page in the GE Digital APM application.</li> </ul>
MI_OPERTION_CALC	Operation Calc	Used to populate the <b>Calc</b> list on the Operation datasheet.
MI_MAINTPLN_INDICATOR	Maintenance Plan Scheduling Indicator	Used to populate the <b>Scheduling Indicator</b> 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 Object List

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

<b>GE Digital APM Field Caption</b>	<b>SAP Field ID</b>	<b>SAP Field Caption</b>
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- DESSTIME	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

## Values Mapped from SAP to GE Digital APM on Import

### Values Mapped from SAP Fields to Maintenance Plans

The following table explains the SAP fields that are used to populate Maintenance Plans fields when you import Work Management items from SAP.

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

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

### Values Mapped from SAP Fields to Maintenance Items

The following table explains the SAP fields that are used to populate Maintenance items fields when you import Work Management items from SAP.

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
ILART	Maintenance Activity Type	Activity Type
BAUTL	Assembly	Assembly
GSBER	Business Area	Business Area
MPTYP	Maintenance Plan Category	Category
EQU NR	Equipment Number	Equipment
TPLNR	Functional Location	Functional Location

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
PSTXT	Item Short Text	Item Description
WAPOS	Maintenance Item	Maintenance Item
WPGRP	Planner Group for Customer Service and Plant Maintenance	Maintenance Planner Group
WSTRA	Maintenance Strategy	Maintenance Strategy
QMART	Notification Type	Notification Type
AUART	Order Type	Order Type
IWERK	Maintenance Planning Plant	Planning Plant
PRIOK	Priority	Priority
ANLZU	Overall Condition of Technical System	System Condition
GEWRK	Main Work Center for Maintenance Tasks	Work Center
WERGW	Plant Associated with Main Work Center	Work Center Plant
STRNO	Functional Location Label	Functional Location Label
EQKTX	Description of technical object	Equipment Description
CYCLESEQIND	Cycle Set Sequence	Cycle Set Sequence

### Values Mapped from SAP Fields to Object List

The following table explains the SAP fields that are used to populate Object List fields when you import Work Management items from SAP.

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

### Values Mapped from SAP Fields to Task List

The following table explains the SAP fields that are used to populate Task List fields when you import Work Management items from SAP.

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
ISTRU	Assembly	Assembly
KTEXT	Work Center Description	Description
EQUNR	Equipment Number	Equipment



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

### Values Mapped from SAP Fields to Operations

The following table explains the SAP fields that are used to populate Operations fields when you import Work Management items from SAP.

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

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

### Values Mapped from SAP Fields to Materials

The following table explains the SAP fields that are used to populate Materials fields when you import Work Management items from SAP.

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
IDNRK	Material Number	Material Number
IMENG	Quantity	Quantity
MEINS	Base Unit of Measure	Unit of Measure

### Values Mapped from SAP Fields to PRTs

The following table explains the SAP fields that are used to populate PRTs fields when you import Work Management items from SAP.

Only document type PRTs are supported in APM.

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
STEUF	Control Key for Management of Production Resources/Tools	Control Key
DOKNR	Document Number	Document
DOKTL	Document Part	Document Part
DOKAR	Document Type	Document Type
DOKVR	Document Version	Document Version
MGVGW	Standard Value for PRT Quantity	Quantity
MGEINH	Quantity Unit of Production Resource/ Tool	Quantity Unit

### Values Mapped from SAP Fields to Maintenance Packages

The following table explains the SAP fields that are used to populate Maintenance Packages fields when you import Work Management items from SAP.

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
KZYK1	Short text for the maintenance cycle (time/performance)	Cycle
PAKET	Maintenance Package Number	Maintenance Package Number
ZYKZT	Maintenance package cycle/offset	Cycle Length
ZEIEH	Unit for the performance of maintenance tasks	Cycle UOM

### Values Mapped from SAP Fields to Notifications

The following table explains the SAP fields that are used to populate Notifications fields when you import Work Management items from SAP.

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
QMNUM	Notification No	Notification Number
QMART	Notification Type	Notification Type

SAP Field ID	SAP Field Caption	GE Digital APM Field Caption
EQUNR	Equipment Number	Equipment
EQKTX	Description of technical object	Equipment Description
TPLNR	Functional Location	Functional Location
STRNO	Functional Location Label	Functional Location Label
QMTXT	Short Text	Short Text
PRIOK	Priority	Priority
STRMN + STRUR	Required start date + Required start Time	Required Start Date
LTRMN + LTRUR	Required end date + Required end Time	Required End Date

## 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 <b>Packaging</b> 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 <b>Definition Configuration</b> column on the <b>Work Management Item Definitions</b> 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 <b>Packaging</b> 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 <b>Packaging</b> page.	On the datasheet, you can select or clear the check box.  For example, if you selected Preventative Maintenance Task in the <b>Family ID</b> list, its successor family is the Implementation Package family, and the <b>Allow Link Existing</b> check box is selected, and when you select the Implementation Package node in the tree, the <b>Find an existing Preventative Maintenance Task to link to &lt;Root Implementation Package Name&gt; Implementation Package</b> 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 <b>Family ID</b> 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 <b>Packaging</b> 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 <b>Family ID</b> list and Task Grouping in the <b>Parent Family ID</b> 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 <b>Parent Family Relationship ID</b> 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 <b>Packaging Tasks</b> submenu, the menu in the tree, and the <b>Work Management Item Definitions</b> grid on the <b>Implementation Administration</b> 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 <b>Family ID</b> 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 <b>Child Family ID</b> list, you would select Preventative Maintenance Task.
Child Family Relationship ID	Character	The relationship family that relates the family that appears in the <b>Family ID</b> 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 <b>Execution Mapping</b> column on the <b>Work Management Item Definitions</b> 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 <b>Action Mapping</b> column on the <b>Work Management Item Definitions</b> 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 <b>ASI - Package Count</b> and <b>Percentage of Actions Implemented</b> 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
<p>Get Equipment for SAP ID</p>	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> <li>• It passes the Equipment ID of the imported SAP item to the SAP Equipment ID prompt in the query.</li> <li>• 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.</li> </ul> <p>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.</p> <p><b>Note:</b> 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.</p>

Query	Behavior and Usage
Get Functional Location for SAP ID	<p>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:</p> <ul style="list-style-type: none"> <li>• It passes the Functional Location of the imported SAP item to the SAP Functional Location ID prompt in the query.</li> <li>• 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.</li> </ul> <p>If the query returns a record using the provided values, the GE Digital APM system links that record to the new Asset Strategy record.</p> <p><b>Note:</b> 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.</p>
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.