



Meridium APM Oracle Interfaces

3.6.1.1.0



Meridium APM Oracle Interfaces

3.6.1.1.0

Copyright © Meridium, Inc. 2017

All rights reserved. Printed in the U.S.A.

This software/documentation contains proprietary information of Meridium, Inc.; it is provided under a license agreement containing restrictions on use and disclosure. All rights including reproduction by photographic or electronic process and translation into other languages of this material are fully reserved under copyright laws. Reproduction or use of this material in whole or in part in any manner without written permission from Meridium, Inc. is strictly prohibited.

Meridium is a registered trademark of Meridium, Inc.

All trade names referenced are the service mark, trademark or registered trademark of the respective manufacturer.

About This Document

This file is provided so that you can easily print this section of the Meridium APM Help system.

You should, however, use the Help system instead of a printed document. This is because the Help system provides hyperlinks that will assist you in easily locating the related instructions that you need. Such links are not available in a print document format.

The Meridium APM Help system can be accessed within Meridium APM itself or via the Meridium APM Documentation Website (<https://www.meridium.com/documentation/WebHelp/WebHelpMaster.htm>).

Note: If you do not have access to the Meridium APM Documentation Website, contact [Meridium Global Support Services](#).

Table of Contents

Meridium APM Oracle Interfaces	1
Copyright and Legal	2
About This Document	3
Table of Contents	4
Overview of the Oracle E-Business Suite™ eAM Interfaces	8
Oracle EBS eAM Interfaces System Requirements	9
Oracle EBS eAM Interfaces Data Model	12
About CMMS System Records	15
About CMMS Interface Records	16
About CMMS Mapping Records	17
About Interface Log Records	18
Oracle SOA Gateway Customers	19
Oracle DB Direct Customers	21
Upgrade or Update Oracle SOA Gateway Customers to 3.6.1.1.0	23
Upgrade or Update Oracle DB Direct Customers to 3.6.1.1.0	26
Identifying Oracle EBS eAM Equipment and Locations	29
Creating Oracle Views	31
Creating PL/SQL Packages and Package Bodies	32
Generating the Oracle EBS eAM Web Services	34
Configuring the Oracle EBS eAM Web Services	36
Modifying the WSDL Files	37
Oracle EBS eAM Interfaces Security Groups	38
Modifying the Baseline CMMS System Record	40
Creating a Scheduled Item to Extract Items from Oracle EBS eAM	41
Requirements for Creating Oracle EBS eAM Work Requests	43
Supported Recommendation Families	45
Creating Oracle EBS eAM Work Requests from Recommendation Records	46
Updating Oracle EBS eAM Work Requests from Recommendation Records	48

Equipment Extraction Interface	49
Functional Location Extraction Interface	50
Work History Extraction Interface	51
Work History Detail Extraction Interface	52
Oracle EBS eAM Interfaces Catalog Folder Structure	53
CMMS System	61
CMMS Interface	63
CMMS Mapping	67
Interface Log	77
System Code Tables Used by the Oracle EBS eAM Interfaces	81
Oracle EBS eAM Values Mapped to Equipment Records	82
Oracle EBS eAM Values Mapped to Functional Location Records	86
Oracle EBS eAM Values Mapped to Work History Records	90
Oracle EBS eAM Values Mapped to Work History Detail Records	95
Recommendation Values Mapped to Work Requests	97
CMMS Interface Record	99
CMMS Mapping Record	100
CMMS System Record	101
Equipment Extraction Interface	102
Functional Location Extraction Interface	103
Interface Log Record	104
Oracle DB Direct	105
Oracle SOA Gateway	106
Work History Detail Extraction Interface	107
Work History Extraction Interface	108
Work Request Creation Interface	109
Overview of the Maximo Interfaces	110
Maximo Interfaces System Requirements	111
Maximo Interfaces Data Model	113
About CMMS System Records	115

About CMMS Interface Records	116
About CMMS Mapping Records	117
About Interface Log Records	118
First-Time Deployment Workflow	119
Upgrade or Update Maximo Interfaces to 3.6.1.1.0	121
Deploying the Web Services	124
Maximo Interfaces Security Groups	126
Modifying the Baseline CMMS System Record	128
Specifying Whether to Create Work Orders or Service Requests from Recommendation Records	129
Specifying Whether to Extract Work Orders or Service Requests from Maximo ..	130
Creating a Scheduled Item to Extract Items from Maximo	131
Requirements for Creating Maximo Work Orders	133
Supported Recommendation Families	135
Creating Maximo Work Orders from Recommendation Records	136
Updating Maximo Work Orders from Recommendation Records	137
Requirements for Creating Maximo Service Requests	138
Supported Recommendation Families	140
Creating Maximo Service Requests from Recommendation Records	141
Updating Maximo Service Requests from Recommendation Records	142
Equipment Extraction Interface	143
Using the Functional Location Extraction Interface	144
Work Order Extraction Interface	145
Service Request Extraction Interface	146
Work Order Detail Extraction Interface	147
Service Request Detail Extraction Interface	148
Maximo Interfaces Catalog Folder Structure	149
CMMS System	150
CMMS Interface	152
CMMS Mapping	157

Interface Log	167
System Code Tables Used by the Maximo Interfaces	171
Maximo Values Mapped to Equipment Records	172
Maximo Values Mapped to Functional Location Records	174
Maximo Work Order Fields Mapped to Work History Records	176
Maximo Service Request Fields Mapped to Work History Records	180
Maximo Work Order Fields Mapped to Work History Detail Records	181
Maximo Service Request Fields Mapped to Work History Detail Records	183
Recommendation Values Mapped to Work Orders	184
Baseline Values Mapped to Service Requests	186
CMMS Interface Record	187
CMMS Mapping Record	188
CMMS System Record	189
Equipment Extraction Interface	190
Functional Location Extraction Interface	191
Interface Log Record	192
Service Request Creation Interface	193
Service Request Detail Extraction Interface	194
Service Request Extraction Interface	195
Work Order Creation Interface	196
Work Order Detail Extraction Interface	197
Work Order Extraction Interface	198

Overview of the Oracle E-Business Suite™ eAM Interfaces

The *Oracle E-Business Suite eAM Interfaces* (Oracle EBS eAM Interfaces) feature allows you to transfer data between your Oracle EBS eAM system and your Meridium APM system. The Oracle EBS eAM Interfaces feature includes the following interfaces:

- **Work Request Creation Interface:** Allows you to [create](#) and [update](#) Work Requests in your Oracle EBS eAM system using values in Recommendation records in your Meridium APM system.
- **Equipment Extraction Interface:** Allows you to [extract data about equipment from your Oracle EBS eAM system and import them into your Meridium APM system as Equipment records.](#)
- **Functional Location Extraction Interface:** Allows you to [extract data about locations from your Oracle EBS eAM system and import them into your Meridium APM system as Functional Location records.](#)
- **Work History Extraction Interface:** Allows you to [extract Work Orders from your Oracle EBS eAM system and import them into your Meridium APM system as Work History records.](#)
- **Work History Detail Extraction Interface:** Allows you to [extract Work Order failure information from your Oracle EBS eAM system and import it into your Meridium APM system as Work History Detail records.](#)

Oracle EBS eAM Interfaces System Requirements

The *Oracle EBS eAM Interfaces* feature allows you to integrate Meridium APM with your Oracle EBS eAM system. You can use either of the following approaches to connect to the Oracle EBS eAM Database Server:

- **Oracle SOA Gateway approach:** Allows the Meridium APM Application Server to connect to the Oracle EBS eAM Database Server through the Oracle web services, which reside on the Oracle EBS eAM Application Server.
- **Oracle DB Direct approach:** Allows the Meridium APM Application Server to connect directly to the Oracle EBS eAM Database Server.

Both approaches provide the same end-user functionality and only differ by the technical integration approach. The choice to use the Oracle SOA Gateway or the Oracle DB Direct approach is ultimately determined by your environment and standards. We recommend that you use the Oracle SOA Gateway approach if you:

- Have the SOA Gateway configured.
- Use Web Services as a corporate standard for data integration.
- Have firewalls between the Meridium APM Application Server and the Oracle EBS eAM Database Server that must block non-HTTP traffic.

You should use the Oracle DB Direct approach, however, if none of the preceding criteria applies to your deployment situation.

The *Oracle EBS eAM Interfaces* license is required to take advantage of Oracle EBS eAM Interfaces functionality. In addition, your system must contain the basic Meridium APM system architecture and the following additional components:

- **Oracle EBS eAM Application Server:** An Oracle EBS eAM Application Server machine that is running version 12.1.1 or 12.1.2.
- **Oracle EBS eAM Database Server:** A database that houses the Oracle EBS eAM data model and data and is running a version that is supported by the Oracle EBS eAM Application Server. For details on requirements of the Oracle EBS eAM Database Server, see the Oracle EBS eAM documentation.

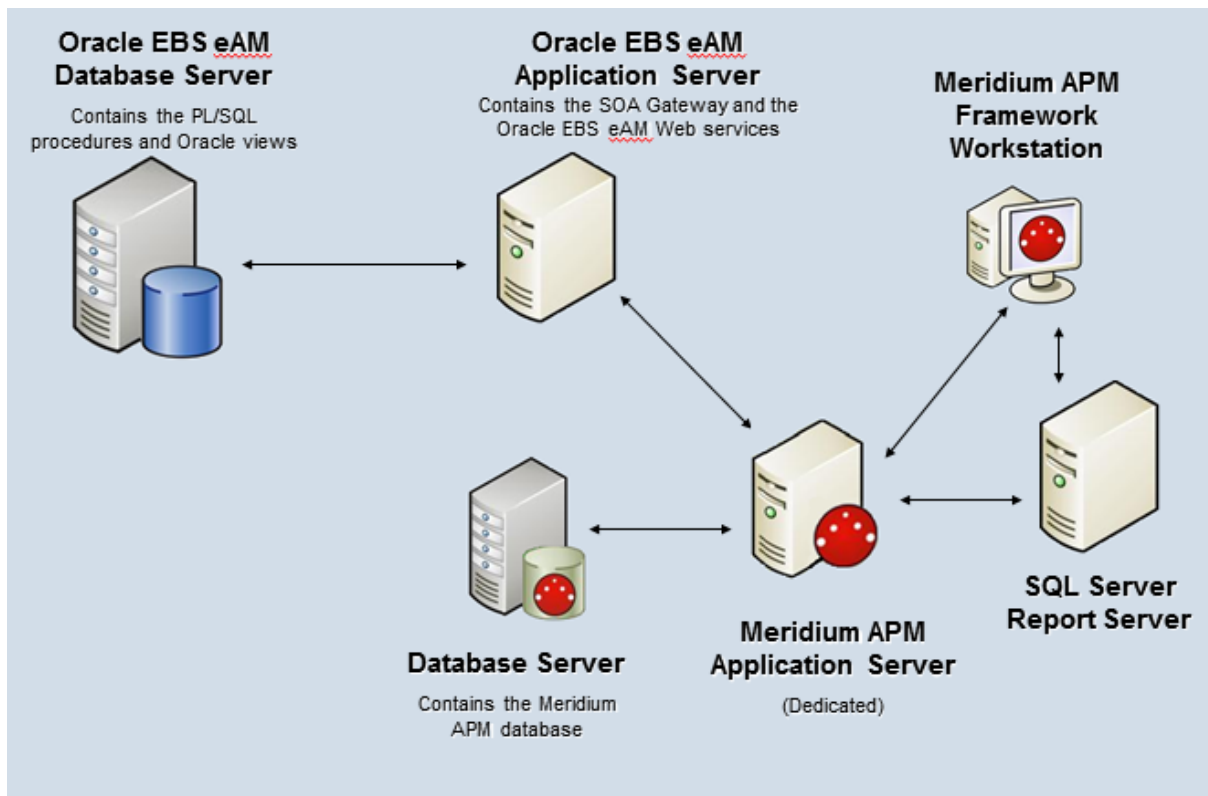
Note that if you want to use the Oracle DB Direct approach versus the Oracle SOA Gateway approach when connecting with the Oracle EBS eAM database, the Meridium APM Application Server *must* contain ODP.NET 11.2.0.1.2.

Note: If you are using an Oracle Meridium APM database, your Meridium APM Application Server should already contain this component. If you are using a SQL Server Meridium APM database, you will not have installed this component as part of the Meridium APM Application Server deployment procedure.

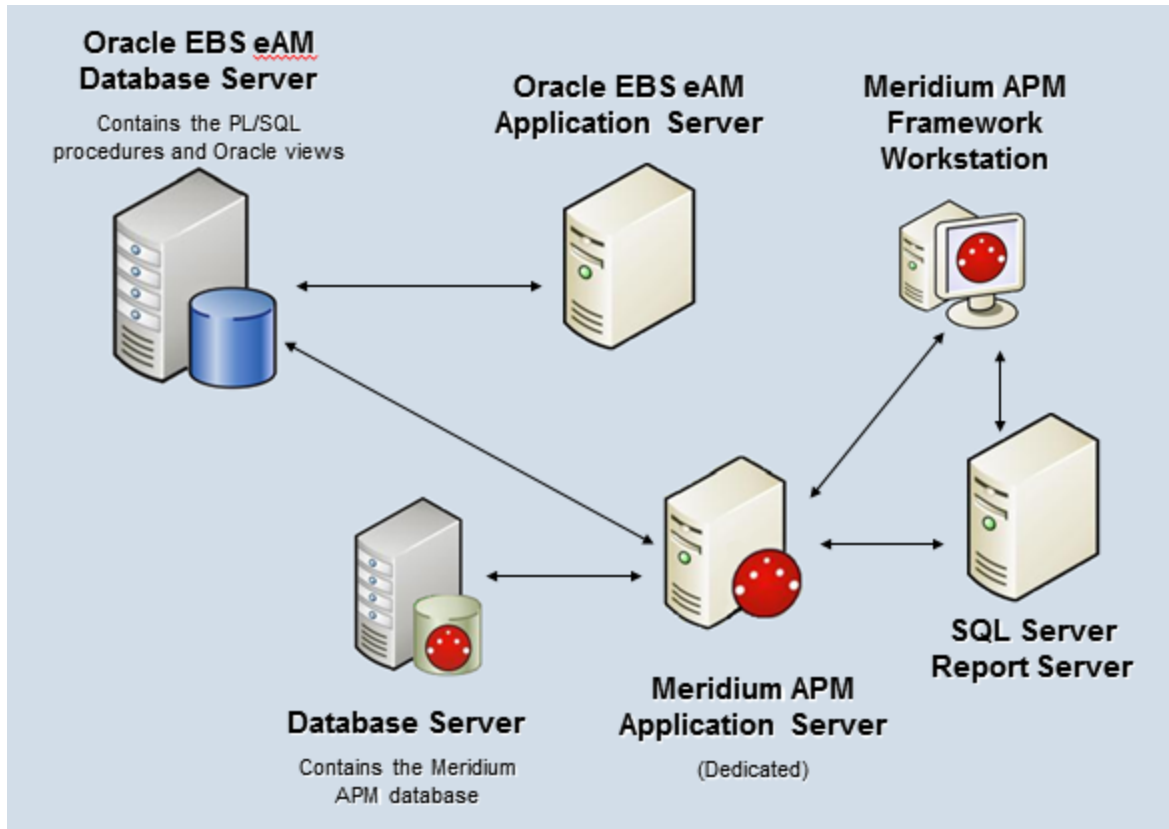
After you have installed and configured the basic Meridium APM application, you will need to perform some configuration steps specifically for the Oracle EBS eAM Interfaces.

The following images show how the additional machines should be incorporated into the basic Meridium APM system architecture to support the Oracle EBS eAM Interfaces.

Oracle SOA Gateway



Oracle DB Direct

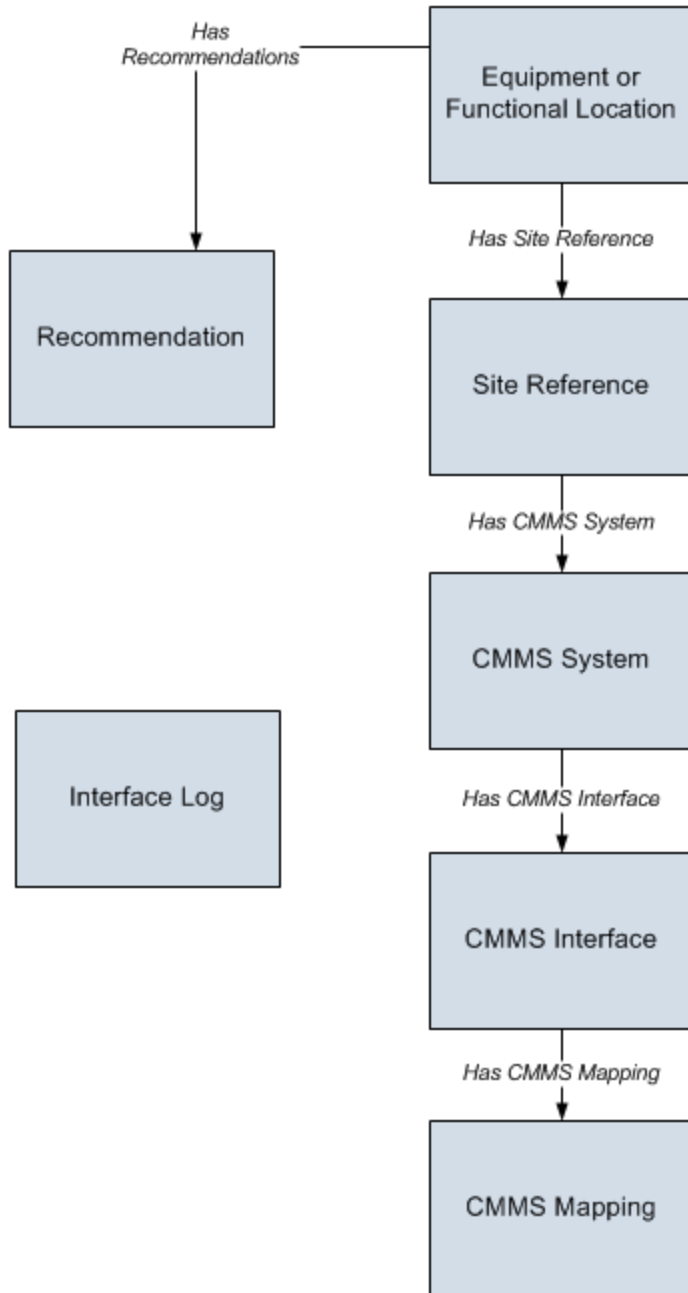


Oracle EBS eAM Interfaces Data Model

Like all Meridium APM modules, the Meridium APM Oracle EBS eAM Interfaces feature consists of entity families, relationship families, and business rules. When attempting to understand and make use of the Meridium Oracle EBS eAM Interfaces functionality, it can be helpful to visualize the Oracle EBS eAM Interfaces data model.

Because you should already be familiar with the concept of records and viewing records in the Meridium APM Record Manager, as you attempt to get your bearings in the Oracle EBS eAM Interfaces, it may be useful to remember that the Oracle EBS eAM Interfaces simply offers functionality that allows you to create and view records.

The following image illustrates how families used by the Oracle EBS eAM Interfaces feature are related to one another. In the following image, boxes represent entity families, and arrows represent relationship families that are configured in the baseline database.



In order to [use the Work Request Creation Interface](#), your database must contain records that represent the equipment and locations for which you want to track recommendations. Before you create Work Requests in the Oracle EBS eAM system, you will need to determine the equipment and locations for which you want to manage recommendations. Then, you will need to link each Equipment or Functional Location record representing those equipment and locations to one or more Recommendation records, which define the recommended actions that should be performed on that equipment or location. An Oracle EBS eAM Work Request can then be created for each of those Recommendation records.

In addition, you can link each Equipment or Functional Location to a Site Reference record, which identifies the site to which that equipment or location belongs.

About CMMS System Records

[CMMS System records](#) are used to store identifying information about your Oracle EBS eAM system. The baseline Meridium APM database includes a CMMS System record that you can use as a starting point for identifying your Oracle EBS eAM system.

If you have more than one Oracle EBS eAM system, you will need to create additional CMMS System records to identify each system. You can use the Default field to indicate which system you want to use by default.

Each CMMS Interface record is linked to:

- One predecessor Site Reference record, which identifies the site that uses that Oracle EBS eAM system.
- One or more successor [CMMS Interface](#) records, which identify the interfaces that will be used to connect to this system.

Note: Data can be transferred to and from an Oracle EBS eAM system only if the CMMS System record is linked to the appropriate CMMS Interface record(s) and the **Enabled** check box on the CMMS System datasheet is selected.

If you delete a CMMS System record, all CMMS Interface records to which it is linked will also be deleted. In addition, any CMMS Mapping records that were linked to the deleted CMMS Interface records will also be deleted if they are not linked to other CMMS Interface records.

About CMMS Interface Records

Each interface that is included in the Oracle EBS eAM Interfaces is represented by a [CMMS Interface record](#). CMMS Interface records are used to identify two main items:

- How the Meridium APM system will communicate with the Oracle EBS eAM system.
- Which interface the record supports, which indicates the type of Oracle EBS eAM data that will be created or extracted.

The Meridium APM database contains the following baseline CMMS Interface records that support the baseline interfaces:

- Equipment Extraction (EE)
- Functional Location Extraction (FLE)
- Work History (WH)
- Work History Detail (WHD)
- Work Request (WR)

You must *modify* the baseline CMMS Interface records to supply the appropriate connection information. In addition, if your system architecture includes more than one Oracle EBS eAM system, for each separate Oracle EBS eAM system, you will need to create the appropriate CMMS Interface records and link them to the CMMS System record that defines that Oracle EBS eAM system.

Each CMMS Interface record is linked to:

- One predecessor [CMMS System record](#), which identifies the Oracle EBS eAM system that should be used when this interface is invoked.
- Multiple successor [CMMS Mapping records](#), which identify how data will be mapped using this interface.

About CMMS Mapping Records

[CMMS Mapping records](#) are used to identify how values will be mapped and which values will be mapped between the Meridium APM system and the Oracle EBS eAM system. Each CMMS Mapping record is linked to one predecessor [CMMS Interface record](#) that identifies the interface that uses that mapping.

The baseline Meridium APM database contains multiple CMMS Mapping records, which are linked to the baseline CMMS Interface record that is used by the Oracle EBS eAM Interfaces.

You can accept the values in the baseline CMMS Mapping records, or you can modify them if you want to map the data differently.

About Interface Log Records

Each time an interface is run, an [Interface Log record](#) is created automatically to store information about the process, such as the status of the process (e.g., Completed with warnings), the date the interface was run, and the parameters that were used to run the interface.

If the value in an Interface Log record is *Completed with Warnings* or *Completed with Errors*, a Super User or a member of the MI CMMS Interfaces Administrator Security Group can review the warnings or errors and then change the status to *Completed with Warnings (Cleared)* or *Completed with Errors (Cleared)*.

Oracle SOA Gateway Customers

Deploying and configuring Oracle EBS eAM Interfaces (if you are using the Oracle SOA Gateway approach) for the first time includes completing multiple steps, which are outlined in the table in this topic. The steps in this section of the documentation provide all the information that you need to deploy and configure Oracle EBS eAM Interfaces on top of the basic Meridium APM system architecture.

Whether a step is required or optional is indicated in the **Required/Optional** cell. Steps are marked as *Required* if you must perform the step to take advantage of Oracle EBS eAM Interfaces functionality.

The person responsible for completing each task may vary with your organization. We recommend, however, that the steps be performed in relatively the same order in which they are listed in the table.

Step	Task	Required/Optional
1	Ensure that the Oracle EBS eAM system requirements have been met.	Required
2	<p>Configure the Meridium APM Application Server for use with Oracle EBS eAM Interfaces. This step includes the following tasks:</p> <ul style="list-style-type: none"> • Configure the TNS_ADMIN Environment Variable • Create and Oracle Net Service Name <p>If you use an Oracle database provider, you may have already completed these steps when you configured the Application Server for use with an Oracle database. If you use SQL Server as your database provider, however, you will need to complete these steps.</p>	Required
3	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
4	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
5	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
6	Generate the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required
7	Configure the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required

Step	Task	Required/Optional
8	Modify the WSDL files on the Oracle EBS eAM Application Server.	Required
9	Assign the desired Security Users to the Oracle EBS eAM Interfaces Security Groups via the Configuration Manager application.	Required
10	Modify the baseline CMMS System record to define your default Oracle EBS eAM system.	Required
11	Review the values in the baseline CMMS Interface records, and modify any values as necessary.	Optional
12	Review the values in the baseline CMMS Mapping records, and modify any values as necessary.	Optional
13	In each CMMS Interface record representing an extraction interface, modify the value in the Connection String field so that it contains valid connection information.	Required
14	Create a scheduled item in the Schedule Manager application that will cause the Meridium APM system to extract the items from the Oracle eAM system on a pre-defined schedule.	Required only for the extraction interfaces.

Oracle DB Direct Customers

Deploying and configuring Oracle EBS eAM Interfaces (if you are using the Oracle DB Direct approach) for the first time includes completing multiple steps, which are outlined in the table in this topic. The steps in this section of the documentation provide all the information that you need to deploy and configure Oracle EBS eAM Interfaces on top of the basic Meridium APM system architecture.

Whether a step is required or optional is indicated in the **Required/Optional** cell. Steps are marked as *Required* if you must perform the step to take advantage of Oracle EBS eAM Interfaces functionality.

The person responsible for completing each task may vary within your organization. We recommend, however, that the steps be performed in relatively the same order in which they are listed in the table.

Step	Task	Required/Optional
1	Ensure that the Oracle EBS eAM system requirements have been met.	Required
2	<p>Configure the Meridium APM Application Server for use with Oracle EBS eAM Interfaces. This step includes the following tasks:</p> <ul style="list-style-type: none"> • Create and Oracle Net Service Name <p>If you use an Oracle database provider, you may have already completed these steps when you configured the Application Server for use with an Oracle database. If you use SQL Server as your database provider, however, you will need to complete these steps.</p>	Required
3	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
4	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
5	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
6	Assign the desired Security Users to the Oracle EBS eAM Interfaces Security Groups via the Configuration Manager application.	Required
7	Modify the baseline CMMS System record to define your default Oracle EBS eAM system.	Required

Step	Task	Required/Optional
8	Review the values in the baseline CMMS Interface records, and modify any values as necessary.	Optional
9	Review the values in the baseline CMMS Mapping records, and modify any values as necessary.	Optional
10	In each CMMS Interface record representing an extraction interface, modify the value in the Connection String field so that it contains valid connection information.	Required
11	<p>Create and link a new CMMS Mapping record to each CMMS Interface record representing an extraction interface. In the new CMMS Mapping records, type the following values:</p> <ul style="list-style-type: none"> • Approach: CONST • Element Type: MERIDIUM • Element Field: ORACLE_EAM_USE_DB_DIRECT • Constant: TRUE 	Required
12	Create a scheduled item in the Schedule Manager application that will cause the Meridium APM system to extract the items from the Oracle eAM system on a pre-defined schedule.	Required only for extraction interfaces.

Upgrade or Update Oracle SOA Gateway Customers to 3.6.1.1.0

The following tables list the steps that are required to update or upgrade the Oracle EBS eAM Interfaces to 3.6.1.1.0 (if you are using the Oracle SOA Gateway approach). These steps assume that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Update from version V3.6.1.0.0

This module will be updated to 3.6.1.1.0 automatically when you update the components in the basic Meridium APM system architecture. No additional steps are required.

Upgrade from any version V3.6.0.0.0 through V3.6.0.12.3

The Oracle EBS eAM Interfaces (Oracle SOA Gateway) will be upgraded to 3.6.1.1.0 automatically when you upgrade the components in the basic Meridium APM architecture. No additional steps are required.

Upgrade from any version V3.5.1.0.0 through V3.5.1.12.0

The Oracle EBS eAM Interfaces (Oracle SOA Gateway) will be upgraded to 3.6.1.1.0 automatically when you upgrade the components in the basic Meridium APM architecture. No additional steps are required.

Upgrade from any version V3.5.0 SP1 LP through V3.5.0.1.9.0

Step	Task	Required/Optional
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	Generate the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required
5	Configure the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required

Step	Task	Required/Optional
6	Modify the WSDL files on the Oracle EBS eAM Application Server.	Required
7	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define the new default Oracle EBS eAM system .	Required
8	Review the values in the baseline CMMS Interface records, and modify any values as necessary.	Optional
9	Review the values in the baseline CMMS Mapping records, and modify any values as necessary.	Optional

Upgrade from any version V3.5.0 through V3.5.0.0.7.1

Step	Task	Required/Optional
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	Generate the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required
5	Configure the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required
6	Modify the WSDL files on the Oracle EBS eAM Application Server.	Required
7	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define the new default Oracle EBS eAM system .	Required
8	Review the values in the baseline CMMS Interface records, and modify any values as necessary.	Optional

Step	Task	Required/Optional
9	Review the values in the baseline CMMS Mapping records, and modify any values as necessary.	Optional

Upgrade from any version V3.4.5 through V3.4.5.0.1.4

Step	Task	Required/Optional
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	Generate the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required
5	Configure the Oracle EBS eAM Web services on the Oracle EBS eAM Application Server.	Required
6	Modify the WSDL files on the Oracle EBS eAM Application Server.	Required
7	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define the new default Oracle EBS eAM system.	Required
8	Review the values in the baseline CMMS Interface records, and modify any values as necessary.	Optional
9	Review the values in the baseline CMMS Mapping records, and modify any values as necessary.	Optional

Upgrade or Update Oracle DB Direct Customers to 3.6.1.1.0

The following tables list the steps that are required to update or upgrade the Oracle EBS eAM Interfaces to 3.6.1.1.0 (if you are using the Oracle DB Direct approach). These steps assume that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Update from version V3.6.1.0.0

This module will be updated to 3.6.1.1.0 automatically when you update the components in the basic Meridium APM system architecture. No additional steps are required.

Upgrade from any version V3.6.0.0.0 through V3.6.0.12.3

Step	Task	Required/Optional?
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define your default Oracle EBS eAM system .	Required
5	Review the values in the baseline CMMS Interface records, and modify any values as necessary .	Optional
6	Review the values in the baseline CMMS Mapping records, and modify any values as necessary .	Optional

Upgrade from any version V3.5.1.0.0 through V3.5.1.12.0

Step	Task	Required/Optional?
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required

Step	Task	Required/Optional?
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define your default Oracle EBS eAM system .	Required
5	Review the values in the baseline CMMS Interface records, and modify any values as necessary .	Optional
6	Review the values in the baseline CMMS Mapping records, and modify any values as necessary .	Optional

Upgrade from any version V3.5.0 SP1 LP through V3.5.0.1.9.0

Step	Task	Required/Optional?
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define your default Oracle EBS eAM system .	Required
5	Review the values in the baseline CMMS Interface records, and modify any values as necessary .	Optional
6	Review the values in the baseline CMMS Mapping records, and modify any values as necessary .	Optional

Upgrade from any version V3.5.0 through V3.5.0.0.7.1

Step	Task	Required/Optional?
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define your default Oracle EBS eAM system .	Required
5	Review the values in the baseline CMMS Interface records, and modify any values as necessary .	Optional
6	Review the values in the baseline CMMS Mapping records, and modify any values as necessary .	Optional

Upgrade from any version V3.4.5 through V3.4.5.0.1.4

Step	Task	Required/Optional?
1	Identify which Oracle EBS eAM assets are equipment and which ones are locations on the Oracle EBS eAM Application Server.	Required
2	Create the Oracle database views on the Oracle EBS eAM Database Server.	Required
3	Create the PL/SQL packages and package bodies on the Oracle EBS eAM Database Server.	Required
4	If you have changed your default Oracle EBS eAM system since you upgraded, modify the baseline CMMS System record to define your default Oracle EBS eAM system .	Required
5	Review the values in the baseline CMMS Interface records, and modify any values as necessary .	Optional
6	Review the values in the baseline CMMS Mapping records, and modify any values as necessary .	Optional

Identifying Oracle EBS eAM Equipment and Locations

In the Oracle EBS eAM system, certain characteristics of an asset identify it as either a piece of equipment or a location. When Meridium APM users run the Equipment Extraction Interface and the Functional Location Extraction Interface, assets are extracted from the Oracle EBS eAM system and used to create either Equipment records or Functional Location records in the Meridium APM system. For the extraction process to work correctly and create records in the appropriate family, you will need to identify which asset characteristics should be used to create Equipment records and which ones should be used to create Functional Location records. The following instructions explain how to do this.

To identify which asset characteristics in the Oracle EBS eAM system should be used to create Equipment records and Functional Location records:

1. On the Oracle EBS eAM Application Server, insert the Oracle EBS eAM Interfaces installation DVD.
2. Copy the contents of the DVD to a local drive.

Note: You can copy the contents of the DVD to any folder of your choice, provided that you are using a local drive. For the purposes of these instructions, we assume that you have copied the contents to the folder **C:\Meridium APM Interfaces**.

3. Navigate to the folder **C:\Meridium APM Interfaces\Equipment Extraction Interface**, and open the file **MI_EQUIPMENT_EXT_V - Materialized.txt**.
4. Scroll to the bottom of the file, and locate the following lines of text:
and MSI_PARENT.DESCRPTION NOT IN ('Location')
WHERE A.ASSET_GROUP_DESCRIPTION NOT IN ('Location')
5. Replace the text **Location** with the Asset Group Description value that identifies locations in your Oracle EBS eAM system.
6. Save and close the file.

7. Navigate to the folder **C:\Meridium APM Interfaces\Functional Location Extraction Interface**, and open the file **MI_LOCATIONS_EXT_V - Materialized.txt**.
8. Scroll to the bottom of the file, and locate the following lines of text:
and MSI_PARENT.DESCRPTION IN ('Location')
WHERE A.ASSET_GROUP_DESCRIPTION IN ('Location')

9. Replace the text **Location** with the Asset Group Description value that identifies locations in your Oracle EBS eAM system.
10. Save and close the file.
11. Navigate to the folder **C:\Meridium APM Interfaces\Work History Extraction Interface**, and open the file **MI_WRK_HIST_EXT_V - Materialized.txt**.
12. Replace all instances of **Location** with the Asset Group Description value that identifies locations in your Oracle EBS eAM system.
13. Save and close the file.

Creating Oracle Views

To deploy the Oracle EBS eAM Interfaces, after you [identify which asset characteristics define equipment and which ones define locations in your Oracle EBS eAM system](#), you will need to create Oracle views using the following files:

- MI_EQUIPMENT_EXT_V - Materialized.txt
- MI_LOCATIONS_EXT_V - Materialized.txt
- MI_WRK_HSTD_L_EXT_V - Materialized.txt
- MI_WRK_HIST_EXT_V - Materialized.txt

These files are provided on the Oracle EBS eAM Interfaces installation DVD. As part of the process for identifying Oracle EBS eAM equipment and functional locations, you should have already copied the contents of the installation DVD to the local folder C:\Meridium APM Interfaces. Assuming that you have done so, the text files you will need for creating the views will be located in the following folders.

File	Folder
MI_EQUIPMENT_EXT_V - Materialized.txt	C:\Meridium APM Interfaces\Equipment Extraction Interface
MI_LOCATIONS_EXT_V - Materialized.txt	C:\Meridium APM Interfaces\Functional Location Extraction Interface
MI_WRK_HSTD_L_EXT_V - Materialized.txt	C:\Meridium APM Interfaces\Work History Details Extraction Interface
MI_WRK_HIST_EXT_V - Materialized.txt	C:\Meridium APM Interfaces\Work History Extraction Interface

Via SQL*Plus, you can use these text files to create the Oracle views that are required for the Oracle EBS eAM Interfaces to function correctly. Specific instructions for creating views, however, exceed the scope of the Meridium APM documentation. For detailed instructions on creating views, consult your Oracle documentation.

Creating PL/SQL Packages and Package Bodies

To deploy the Oracle EBS eAM Interfaces, after you [create the Oracle views](#), you will need to create PL/SQL packages and package bodies using the following files:

- MI_EQUIPMENT_EXT_PKG.pls
- MI_EQUIPMENT_EXT_PKG_BODY.pls
- MI_LOCATIONS_EXT_PKG.pls
- MI_LOCATIONS_EXT_PKG_BODY.pls
- MI_WRK_HSTD_L_EXT_PKG.pls
- MI_WRK_HSTD_L_EXT_PKG_BODY.pls
- MI_WRK_HIST_EXT_PKG.pls
- MI_WRK_HIST_EXT_PKG_BODY.pls
- MI_WORKREQUEST.pls
- MI_WORKREQUEST_BODY.pls

These files are provided on the Oracle EBS eAM Interfaces installation DVD. As part of the process for [identifying Oracle EBS eAM equipment and functional locations](#), you should have already copied the contents of the installation DVD to the local folder C:\Meridium APM Interfaces. Assuming that you have done so, the text files you will need for creating the views will be located in the following folders.

File	Folder
MI_EQUIPMENT_EXT_PKG.pls MI_EQUIPMENT_EXT_PKG_BODY.pls	C:\Meridium APM Interfaces\Equipment Extraction Interface
MI_LOCATIONS_EXT_PKG.pls MI_LOCATIONS_EXT_PKG_BODY.pls	C:\Meridium APM Interfaces\Functional Location Extraction Interface
MI_WRK_HSTD_L_EXT_PKG.pls MI_WRK_HSTD_L_EXT_PKG_BODY.pls	C:\Meridium APM Interfaces\Work History Details Extraction Interface
MI_WRK_HIST_EXT_PKG.pls MI_WRK_HIST_EXT_PKG_BODY.pls	C:\Meridium APM Interfaces\Work History Extraction Interface

File	Folder
MI_WORKREQUEST.pls MI_WORKREQUEST_ BODY.pls	C:\Meridium APM Interfaces\Work Request Creation Interface

Via SQL*Plus, you can use these text files to create the PL/SQL packages and package bodies that are required for the Oracle EBS eAM Interfaces to function correctly. Specific instructions for creating PL/SQL packages and package bodies, however, exceed the scope of the Meridium APM documentation. For detailed instructions on creating PL/SQL packages and package bodies, consult your Oracle documentation.

Generating the Oracle EBS eAM Web Services

Note: The following instructions assume that you have already copied the contents of the Oracle EBS eAM Interfaces DVD to the folder **C:\Meridium APM Interfaces** on the Oracle EBS eAM Application Server.

You will need to complete the following steps only if you are using the Oracle SOA Gateway approach to connect to the Oracle EBS eAM database. You do not need to complete the following steps if you are using the Oracle DB Direct approach.

To generate the Oracle EBS eAM web services:

1. On the Oracle EBS eAM Application Server, navigate to the folder **C:\Meridium APM Interfaces\Equipment Extraction Interface**.
2. Open the file **MI_EQUIPMENT_EXT_PKG Web Service.txt**.
3. Copy the first line of text:

```
CD C:\oracle\VIS\apps\tech_st\10.1.3\perl\5.8.3\bin
```

Note: Do not close the text file.

4. On the Oracle EBS eAM Application Server, navigate to the folder **C:\oracle\VIS\apps\apps_st\appl**.
5. Right click the file **envshellVIS_<Server Name>.cmd**, where **<Server Name>** is the name of the Oracle EBS eAM Application Server, and click **Create Shortcut**.
6. Double-click the shortcut file that you created in the previous step.
The **Command Prompt** window appears.
7. At the command prompt, paste the text that you copied from the text file.
8. Press **Enter**.
The command runs.
9. Navigate back to the file **MI_EQUIPMENT_EXT_PKG Web Service.txt**.
10. Locate the second line of text, and in the file path, directly after the text **c:**, type: **Meridium APM Interfaces**

After you have done so, the full file path should look like this:

```
c:\Meridium APM Interfaces\Equipment Extraction Interface\MI_EQUIPMENT_EXT_PKG.pls
```

Note: If you have completed all the steps in these instructions and are now repeating them using a file *other than* the file **MI_EQUIPMENT_EXT_PKG Web Service.txt**, the file path that you see will be different. You can use the preceding

example file path as a general guideline for validating the structure of the file path that you see. The folder name (e.g., Equipment Extraction Interface) and file name (e.g., MI_EQUIPMENT_EXT_PKG.pls) will vary.

11. Copy the second line of text:

```
perl %fnd_top%\bin\irep_parser.pl -g -v -username=sysadmin
eam:patch/115/sql:MI_EQUIPMENT_EXT_PKG.pls:342.0="c:\Meridium APM Inter-
faces\Equipment Extraction Interfaces\MI_EQUIPMENT_EXT_PKG.pls"
```

12. Navigate back to the **Command Prompt** window.
13. At the command prompt, paste the text that you copied from the text file.
14. Press **Enter**.

The command runs and creates an ILDT file in the folder **C:\oracle\VIS\apps\tech_st\10.1.3\perl\5.8.3\bin**.

15. Navigate back to the file **MI_EQUIPMENT_EXT_PKG Web Service.txt**.

16. Copy the third line of text:

```
%fnd_top%/bin/fndload apps/apps@vis 0 Y UPLOAD %fnd_top%/patch/115/im-
port/wfirep.ict MI_EQUIPMENT_EXT_PKG_pls.ildt
```

17. Navigate back to the **Command Prompt** window.
18. At the command prompt, paste the text that you copied from the text file.
19. Press **Enter**.

The command runs and uploads the ILDT files to the Oracle EBS eAM system.

20. Repeat steps 10 through 19, using the following files in the following folders.

File	Folder
MI_LOCATIONS_EXT_PKG Web Service.txt	C:\Meridium APM Interfaces\Functional Location Extraction Interface
MI_WRK_HSTD_L_EXT_PKG Web Service.txt	C:\Meridium APM Interfaces\Work History Details Extraction Interface
MI_WRK_HIST_EXT_PKG Web Service.txt	C:\Meridium APM Interfaces\Work History Extrac- tion Interface

The Oracle EBS eAM web services are generated.

Configuring the Oracle EBS eAM Web Services

You will need to complete the following steps only if you are using the Oracle SOA Gateway approach to connect to the Oracle EBS eAM database. You do not need to complete the following steps if you are using the Oracle DB Direct approach.

To configure the Oracle EBS eAM web services:

1. On the Oracle EBS eAM Application Server, log into the Oracle EBS eAM system as a system administrator.

The **Oracle Applications Home Page** appears.

2. In the list of folders on the left, click the **Integrated SAO Gateway** link.
3. In the middle pane, click the **Integration Repository** link.

The **Oracle Integration Repository** screen appears.

4. Click the **Search** button on the top right side of the screen.

A search form appears.

5. In the **Interface Name** text box, type: **Meridium Interfaces**

6. Click the **Go** button.

The list of interfaces appears below the search criteria.

7. In the first row, which contains the Interface MI_EQUIPMENT_EXTRACTION, in the **Name** column, click the hyperlink.

A new screen appears, containing details of the selected interface.

8. In the **Procedures and Functions** section, click the **Create Grant** button to create a Grant to manage user access to the selected interface. For more details on creating Grants, see the Oracle EBS eAM Help system.

9. At the top of the screen, click the **Generate WSDL** button to generate the web service. For more details on generating web services, see the Oracle EBS eAM Help system.

10. In the middle of the screen, click the **Deploy** button to deploy the web service. For more details on deploying web services, see the Oracle EBS eAM Help system.

The Oracle EBS eAM web services are configured.

11. Restart the Oracle EBS eAM Application Server.

Modifying the WSDL Files

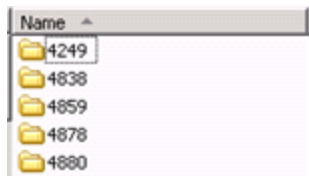
You will need to complete the following instructions only if:

- Your Oracle EBS eAM system is running version 12.1.2. You do not need to complete these instructions if your Oracle EBS eAM system is running version 12.1.1.
- You are using the Oracle SOA Gateway approach to connect to the Oracle EBS eAM database. You do not need to complete the following steps if you are using the Oracle DB Direct approach.

To modify the WSDL files:

1. On the Oracle EBS eAM system, navigate to the following location: **C:\oracle\VIS\inst\apps\VIS_orabus2\soa\PLSQL**

Several subfolders appear. The names of the subfolders will be different for each customer, so the following image shows an *example* of the subfolders that you will see.



Each subfolder contains one of the following WSDL files, which you will need to modify:

- WORK_REQUEST_IMPORT.wsdl
 - EXTRACT_EQUIPMENT.wsdl
 - EXTRACT_LOCATIONS.wsdl
 - EXTRACT_WRK_HIST.wsdl
 - EXTRACT_WRK_HSTDLL.wsdl
2. Within each folder, modify the appropriate WSDL file by completing the following steps:
 - a. Open the file in Notepad.
 - b. Delete the following text: **IRepOverloadSeq="1"**
 - c. Save and close the file.

Oracle EBS eAM Interfaces Security Groups

Meridium APM provides the following baseline Security Groups for use with the Oracle EBS eAM Interfaces:

- MI CMMS Interface Administrator
- MI CMMS Interface User

The following table lists the family-level privileges that exist for these Security Groups.

Entity Families		
Family	MI CMMS Interface Administrator	MI CMMS Interface User
CMMS Interface	View, Update, Insert, Delete	View
CMMS Mapping	View, Update, Insert, Delete	View
CMMS System	View, Update, Insert, Delete	View
Equipment	View, Update, Insert, Delete	View
Functional Location	View, Update, Insert, Delete	View
Interface Log	View, Update, Insert, Delete	View
SAP System ¹	View, Update, Insert, Delete	View
Site Reference	View	View
Work History	View, Update, Insert, Delete	View, Update, Insert
Work History Detail	View, Update, Insert, Delete	View, Update, Insert
Relationship Families		
Family	MI CMMS Interface Administrator	MI CMMS Interface User
Equipment Has Equipment	View, Update, Insert, Delete	View, Update, Insert

Entity Families		
Functional Location Has Equipment	View, Update, Insert, Delete	View, Update, Insert
Functional Location Has Functional Location(s)	View, Update, Insert, Delete	View, Update, Insert
Has CMMS Interface	View, Update, Insert, Delete	View
Has CMMS Mapping	View, Update, Insert, Delete	View
Has CMMS System	View, Update, Insert, Delete	View
Has Event Detail	View, Update, Insert, Delete	View, Update, Insert
Has SAP System ¹	View, Update, Insert, Delete	View
Has Work History	View, Update, Insert, Delete	View, Update, Insert

Modifying the Baseline CMMS System Record

To modify the baseline CMMS System record:

1. Using the Search Tool, perform a search on the CMMS System family.
2. From the search results, open the baseline [CMMS System record](#) with the Record ID <YOUR SYSTEM NAME>.

The CMMS System record appears in the Record Manager.

Details	
	Value(s)
▶ Name	<YOUR SYSTEM NAME>
Description	<YOUR SYSTEM NAME DESCRIPTION>
Enabled	<input type="checkbox"/>
Is Default?	<input type="checkbox"/>
Type	Oracle

3. In the **Name** cell, delete the text <YOUR SYSTEM NAME>, and type the name of your Oracle EBS eAM system.
4. In the **Description** cell, delete the text <YOUR SYSTEM NAME DESCRIPTION>, and type a description of your Oracle EBS eAM system.
5. Select the **Enabled** check box.
6. If you want this Oracle EBS eAM system to be used by default when data is transferred from Meridium APM to Oracle EBS eAM, select the **Default** check box.

Note: Only *one* CMMS System record can be designated as the default record.

7. On the **Common Tasks** menu, click the **Save** link.

The CMMS System record is saved.

Creating a Scheduled Item to Extract Items from Oracle EBS eAM

Using the [Oracle EBS eAM Interfaces](#), you can extract the following items from your Oracle EBS eAM system into your Meridium APM system:

- Equipment
- Locations
- Work History
- Work History Details

To enable this functionality, an administrative user must create a scheduled item in the Schedule Manager that will cause Meridium APM to extract the items on a pre-defined schedule.

Use the following guidelines for creating a scheduled item that will extract items from Oracle eAM:

- On the **Choose a Meridium APM Assembly** dialog box, select the file **Meridium.Integration.dll**.
- On the **Choose an Object Type** dialog box, select the file **Meridium.Integration.CMMS.DataCollection.DataCollectionTask**.
- On the **Task** tab, define a schedule that will execute the scheduled item on a recurring basis. The frequency by which you want to execute the scheduled item is up to you.
- On the **User** tab, specify a Security User who is either a Super User or a member of the MI CMMS Interface Administrator Security Group.
- On the **Parameters** tab:
 - In the **CMMS System** list, select the Oracle eAM system from which you want to extract data.
 - On the **Parameters** tab, after you have selected the Oracle eAM system from which you want to extract data, use each item-specific tab to define the range of creation or modification dates of the items that you want to extract. For example, if you want to extract locations that were created or changed on or after January 1, 1990 and on or before January 1, 2009, you would specify the dates on the **Functional Location Extraction (FLE) oraebus** tab as shown in the following image:

The screenshot shows a software interface with three tabs: 'Task', 'User', and 'Parameters'. The 'Parameters' tab is active. It contains a 'CMMS System' dropdown menu with 'oraebus' selected. Below this, there are two tabs: 'Functional Location Extraction (FLE) oraebus' and 'Work History (WH) oraebus'. The 'Start Date' is set to '1/1/1990 2:01 PM' and the 'End Date' is set to '1/1/2009 2:01 PM'.

If you define parameters on *all* tabs, the interfaces will be run in the following order:

- Functional Location Extraction
- Equipment Extraction
- Work History Extraction
- Work History Detail Extraction

Note: To determine which tabs appear on the **Parameters** tab, the Meridium APM system runs the Interfaces Related to a System query, which is stored in the Meridium APM Catalog. This query contains a prompt for a CMMS system name, and the value that you select in the **CMMS System** list on the **Parameters** tab is passed into the query prompt automatically. The query returns the CMMS Interface records that are linked to the CMMS System record whose Name field contains the value that you selected in the **CMMS System** list. For each CMMS Interface record that is returned by the query, a corresponding tab is displayed on the **Parameters** tab. By default, the query is configured to return all CMMS Interface records *except* the one that contains the value *Work Request (WR)* in the Interface Type field.

Requirements for Creating Oracle EBS eAM Work Requests

In order to create an Oracle EBS eAM Work Request from a Meridium APM Recommendation record, at a minimum, your database must contain a CMMS System record whose Enabled field contains the value *True*. The CMMS System record is used to define the connection information to your Oracle EBS eAM system. If the SAP Interfaces and the Oracle EBS eAM Interfaces licenses are both active, in addition to this requirement, certain additional conditions must be met regarding the SAP System and CMMS System records that exist in the database. The exact conditions that must be met depends on the following main factors:

- Whether or not the Recommendation record is linked to an Equipment or Functional Location record.
- Whether or not that Equipment or Functional Location record is linked to a Site Reference record.

The following scenarios describe the conditions that must exist in each of these cases.

Scenario A: Recommendation Record Is *not* Linked to an Equipment or Functional Location Record

In this scenario, you can create a Work Request successfully only if *both* of the following conditions are true:

- Either *no* SAP System records exist or none of the existing SAP System records contain the value *True* in the Default SAP System field.
- and-
- A CMMS System record exists with the value *True* in the Is Default field.

Scenario B: Recommendation Record *Is* Linked to an Equipment or Functional Location Record

Option 1: The Equipment or Functional Location record *is* linked to a Site Reference record

In this scenario, you can create a Work Request successfully only if *no* SAP System records exist in the database. In addition, if the Site Reference record is linked to a CMMS System record, the Work Request will be created automatically in the Oracle EBS eAM system represented by that CMMS System, regardless of whether or not the Is Default field in that record contains the value *True*. If, however, the Site Reference record is not linked to a CMMS System record, the requirements in option 2 must be met.

Option 2: The Equipment or Functional Location record is *not* linked to a Site Reference record

In this scenario, you can create a Work Request successfully only if *both* of the following conditions are true:

- Either *no* SAP System records exist or none of the existing SAP System records contain the value *True* in the Default SAP System field.
- and-
- A CMMS System record exists with the value *True* in the Is Default field.

Supported Recommendation Families

You can create Oracle EBS eAM Work Requests from Recommendation records belonging to any baseline Recommendation family *except* for the following families:

- Recommendation (i.e., the *root* Recommendation family)
- AMS Asset Recommendation
- RBI Recommendation
- RCMO Recommendation
- Risk Assessment Recommendation

Because you can create an Oracle EBS eAM Work Request from a Recommendation record belonging to one of many families, throughout the Oracle EBS eAM Interfaces documentation, we refer to this record as a *Meridium APMRecommendation record*.

Creating Oracle EBS eAM Work Requests from Recommendation Records

Note: The following instructions assume that the Create Work Request field exists on the baseline datasheets for the [supported Recommendation families](#). This field exists on the default datasheets in the baseline Meridium APM database, so these instructions assume that they have not been removed by an administrative user.

To create an Oracle EBS eAM Work Request from a Recommendation record:

1. Create a new or open an existing Recommendation record.
2. Make sure that the Recommendation record is linked to the Equipment or Functional Location record that represents the equipment or location for which you want to create an Oracle EBS eAM Work Request.
3. Select the default datasheet (as it is defined via the Configuration Manager) for the Recommendation record. For example, if you are viewing an Inspection Recommendation record, because the Inspection Recommendation datasheet is configured as the default datasheet via the Configuration Manager, you would need to select this datasheet.
4. On the datasheet, enter values into the fields as desired to provide information about the recommended action.

Note: The value in the Target Completion Date field must be a date *other than* the current date.

5. On the datasheet, select the **Create Work Request?** check box.
6. On the **Common Tasks** menu, click the **Save** link.

The record is saved. In addition, the Meridium APM system:

- Creates a Work Request in the Oracle EBS eAM system and maps values to the Work Request using the [CMMS Mapping records](#) that exist in the database.
- Populates the Work Request Reference field with the ID of the corresponding Work Request. Note that after the Work Request Reference field is populated, the Create Work Request field becomes disabled.
- Populates one of the following fields in the Recommendation record with the Oracle EBS eAM Asset Number:
 - Work Request Equipment (if the Work Request belongs to an equipment)
 - Work Request Location (if the Work Request belong to a location)

If the Work Request does not belong to an equipment or location, these fields

remain empty.

Note: If a Work Request could not be created for any reason, a message appears, describing the problem. You will be unable to save the Recommendation record until you clear the **Create Work Request?** check box.

Updating Oracle EBS eAM Work Requests from Recommendation Records

To update an Oracle EBS eAM Work Request that was created from a Recommendation record:

1. Open the existing Recommendation record that was used to [create an Oracle EBS eAM Work Request](#).
2. On the datasheet, modify any of the values that were originally mapped to the Work Request.

Note: The value in the Target Completion Date field must be a date *other than* the current date.

3. On the **Common Tasks** menu, click the **Save** link.

The Recommendation record is saved, and the Work Request is updated in the Oracle EBS eAM system.

Equipment Extraction Interface

The *Equipment Extraction Interface* allows you to extract data about equipment from your Oracle EBS eAM system and import it into your Meridium APM system as Equipment records. To execute the Equipment Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Equipment Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Equipment Extraction Interface is run, for each piece of equipment in the Oracle EBS eAM system that meets the criteria defined in the scheduled item, a corresponding Equipment record will be created in the Meridium APM database. In addition, if that Oracle EBS eAM equipment has a parent equipment or location, the Meridium APM Equipment record will be linked automatically to a parent record belonging to the Equipment family or the Functional Location family, as appropriate.

As a Meridium APM Framework user, after the Equipment Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Equipment records that were created automatically. When you are viewing an Equipment record that was created as a result of the Equipment Extraction Interface, to see all the values that were [mapped from the Oracle EBS eAM system](#), you can use the Equipment (Oracle) datasheet.

In addition, to see the status of any given execution of the Equipment Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Functional Location Extraction Interface

The *Functional Location Extraction Interface* allows you to extract data about locations from your Oracle EBS eAM system and import it into your Meridium APM system as Functional Location records. To execute the Functional Location Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Functional Location Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Functional Location Extraction Interface is run, for each location in the Oracle EBS eAM system that meets the criteria defined in the scheduled item, a corresponding Functional Location record will be created in the Meridium APM database. In addition, if that Oracle EBS eAM location has a parent equipment or location, the Meridium APM Functional Location record will be linked automatically to a parent record belonging to the Equipment family or the Functional Location family, as appropriate.

As a Meridium APM Framework user, after the Functional Location Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Functional Location records that were created automatically. When you are viewing a Functional Location record that was created as a result of the Functional Location Extraction Interface, to see all the values that were [mapped from the Oracle EBS eAM system](#), you can use the Functional Location (Oracle) datasheet.

In addition, to see the status of any given execution of the Functional Location Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Work History Extraction Interface

The *Work History Extraction Interface* allows you to extract Work Orders from your Oracle EBS eAM system into your Meridium APM system as Work History records. To execute the Work History Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Work History Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Work History Extraction Interface is run, for each Work Order in the Oracle EBS eAM system that meets the criteria defined in the scheduled item, a corresponding Work History record will be created in the Meridium APM database. Each Work History record will be linked to one Equipment or Functional Location record identifying the equipment or location against which the Oracle EBS eAM Work Order is written. Specifically:

- If the Work Order is written against a location, the Work History record will be linked to a Functional Location record, and the Location ID field in the Work History record will be populated automatically with the Asset Number of that Oracle EBS eAM location.
- If the Work Order is written against equipment, the Work History record will be linked to an Equipment record, and the Equipment ID field in the Work History record will be populated automatically with the Asset Number of that Oracle EBS eAM equipment. In addition, if the Oracle EBS eAM equipment has a *parent* location, the Work History record will also be linked to a Functional Location record representing that parent Oracle EBS eAM location. The Location ID field in the Work History record will also be populated automatically with the Asset Number of that parent Oracle EBS eAM location.

As a Meridium APM Framework user, after the Work History Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Work History records that were created automatically. When you are viewing a Work History record that was created as a result of the Work History Extraction Interface, to see all the values that were [mapped from the Oracle EBS eAM system](#), you can use the Work History (Oracle) datasheet.

CEHint: You can also use the Work History with Details (Oracle) datasheet, which is a master/detail datasheet, to view the Work History records and the [Work History Detail records](#) to which they are linked.

In addition, to see the status of any given execution of the Work History Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Work History Detail Extraction Interface

The *Work History Detail Extraction Interface* allows you to extract Work Order failure information from your Oracle EBS eAM system into your Meridium APM system as Work History Detail records. To execute the Work History Detail Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Work History Detail Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Work History Detail Extraction Interface is run, for each Work Order in the Oracle EBS eAM system that meets the criteria defined in the scheduled item and contains failure information, a corresponding Work History Detail record will be created in the Meridium APM database. Each Work History Detail record will be linked to a Work History record representing the Work Order on which the failure information exists.

Note that if, however, a Work Order does not have any failure information, a Work History Detail record will not be created.

As a Meridium APM Framework user, after the Work History Detail Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Work History Detail records that were created automatically. If desired, you can open a Work History record and use the Work History with Details (Oracle) datasheet, which is a master/detail datasheet, to view Work History records and the Work History Detail records to which they are linked. If you are viewing a Work History Detail record on its own, to see all the values that were [mapped from the Oracle EBS eAM system](#), you can use the Work History Detail (Oracle) datasheet.

In addition, to see the status of any given execution of the Work History Detail Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Oracle EBS eAM Interfaces Catalog Folder Structure

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

Query	Behavior and Usage
ASSET_GROUP_LOOKUP	<p>Returns from an Equipment or Functional record a value representing an asset group. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value (which comes from the Equipment or Functional Location record to which the Recommendation record is linked) to a target field in the Oracle EBS eAM Work Request.</p> <p>Regardless of whether the Recommendation record is linked to an Equipment record or a Functional Location record, the value in the <i>Asset Group</i> field in that Equipment or Functional Location record is mapped to the Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, the value is mapped to the <i>ASSET_GROUP</i> field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p>

Query	Behavior and Usage
ASSET_NUMBER_LOOKUP	<p>Returns from an Equipment or Functional Location record a value representing an asset number. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value (which comes from the Equipment or Functional Location record to which the Recommendation record is linked) to a target field in the Oracle EBS eAM Work Request.</p> <p>If the Recommendation record is linked to an Equipment record, the value in the <i>Equipment ID</i> field in that Equipment record is mapped to the Work Request.</p> <p>If the Recommendation record is linked to a Functional Location record, the value in the <i>Functional Location</i> field in that Functional Location record is mapped to the Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, this value is mapped to the <i>ASSET_NUMBER</i> field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p>
EQUIPMENT_LOOKUP	<p>Returns the Oracle EBS eAM Asset Number for the equipment to which a given Work Request belongs. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query and the FUNCTIONAL_LOCATION_LOOKUP query automatically and maps the returned value to one of the following fields in the Recommendation record:</p> <ul style="list-style-type: none"> ■ The <i>Work Request Equipment</i> field, if the Asset Number belongs to an equipment. ■ The <i>Work Request Location</i> field, if the Asset Number belongs to a location.

Query	Behavior and Usage
<p>FUNCTIONAL_LOCATION_LOOKUP</p>	<p>Returns the Oracle EBS eAM Asset Number for the location to which a given Work Request belongs. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query and the FUNCTIONAL_LOCATION_LOOKUP query automatically and maps the returned value to one of the following fields in the Recommendation record:</p> <ul style="list-style-type: none"> ■ The <i>Work Request Equipment</i> field, if the Asset Number belongs to an equipment. ■ The <i>Work Request Location</i> field, if the Asset Number belongs to a location.
<p>Interfaces Related to a System</p>	<p>After providing a prompt for a CMMS system name, returns the CMMS Interface records that are linked to the CMMS System record whose Name field contains the value that is specified in the prompt. This query is run automatically when an administrative user creates a scheduled item to run an interface belonging to the Oracle EBS eAM Interfaces. For each CMMS Interface record that is returned by the query, a corresponding tab is displayed on the Parameters tab of the Schedule Data Collection window in the Meridium APM Schedule Manager. By default, the query is configured to return all CMMS Interface records <i>except</i> the one that contains the value <i>Work Request (WR)</i> in the Interface Type field.</p>

Query	Behavior and Usage
MAINTENANCE_OBJECT_ID_LOOKUP	<p>Returns from an Equipment or Functional record a value representing a maintenance object ID. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value (which comes from the Equipment or Functional Location record to which the Recommendation record is linked) to a target field in the Oracle EBS eAM Work Request.</p> <p>If the Recommendation record is linked to an Equipment record, the value in the <i>Equipment ID</i> field in that Equipment record is mapped to the Work Request.</p> <p>If the Recommendation record is linked to a Functional Location record, the value in the <i>Functional Location</i> field in that Functional Location record is mapped to the Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, this value is mapped to the <i>MAINTENANCE_OBJECT_ID</i> field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p>

Query	Behavior and Usage
MAINTENANCE_OBJECT_TYPE_LOOKUP	<p>Returns from an Equipment or Functional record a value representing a maintenance object type. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value (which comes from the Equipment or Functional Location record to which the Recommendation record is linked) to a target field in the Oracle EBS eAM Work Request.</p> <p>Regardless of whether the Recommendation record is linked to an Equipment record or a Functional Location record, the value in the <i>Object Type</i> field in that Equipment or Functional Location record is mapped to the Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, this value is mapped to the <i>WORK_REQUEST_MAINTENANCE_OBJECT_TYPE</i> field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p>

Query	Behavior and Usage
ORGANIZATION_ID_LOOKUP	<p>Returns from an Equipment or Functional record a value representing an organization ID. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value (which comes from the Equipment or Functional Location record to which the Recommendation record is linked) to a target field in the Oracle EBS eAM Work Request.</p> <p>Regardless of whether the Recommendation record is linked to an Equipment record or a Functional Location record, the value in the <i>Organization Internal ID</i> field in that Equipment or Functional Location record is mapped to the Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, this value is mapped to the <i>ORGANIZATION_ID</i> field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p>

Query	Behavior and Usage
OWNING_DEPT_ID_LOOKUP	<p>Returns from an Equipment or Functional record a value representing an owning department ID. When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value (which comes from the Equipment or Functional Location record to which the Recommendation record is linked) to a target field in the Oracle EBS eAM Work Request.</p> <p>Regardless of whether the Recommendation record is linked to an Equipment record or a Functional Location record, the value in the <i>Owning Department</i> field in that Equipment or Functional Location record is mapped to the Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, this value is mapped to the <i>WORK_REQUEST_OWNING_DEPT</i> field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p>

Query	Behavior and Usage
<p>PRIORITY_ID_LOOKUP</p>	<p>Returns the priority from a Recommendation record (stored in the Priority field). When you create an Oracle EBS eAM Work Request from a Recommendation record, the Meridium APM system runs this query automatically and maps the returned value to a target field in the Oracle EBS eAM Work Request.</p> <p>The Work Request field to which this value is mapped is determined by the CMMS Mapping record with this query name in the Query field. In the baseline database, this value is mapped to the WORK_REQUEST_PRIORITY_ID field in the Oracle EBS eAM Work Request. If you want this value to be mapped to a <i>different</i> Work Request field, you will need to modify the CMMS Mapping record accordingly. The Oracle EBS eAM Interfaces documentation assumes that you have <i>not</i> modified the baseline CMMS Mapping record or this query.</p> <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;"> <p>Note: The query assumes that the values in the Priority field in the Recommendation record come from the System Code Table with the ID <i>MI_PRIORITY</i>. If the Priority field has been modified to return different values, the query will not work.</p> </div>

CMMS System

The following table provides a list and description of the fields that exist in CMMS System records and are available on the baseline CMMS System datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available.



Field	Data Type	Description	Behavior and Usage
Name	Character	The name of the Oracle EBS eAM system.	The name must be unique with respect to the name in other CMMS System records. The value in this field will be used to populate the System field in all CMMS Interface records to which this CMMS System record is linked. This field is required.
Description	Character	A description of the Oracle EBS eAM system.	None
Enabled	Logical	A value that indicates that the Oracle EBS eAM system is enabled.	On the datasheet, you will see a check box, which you can select to indicate that the system is enabled. If this check box is not selected, records will not be extracted from Oracle EBS eAM when you execute the interfaces.
Is Default	Logical	A value that indicates that data should be created in or extracted from this Oracle EBS eAM system by default.	On the datasheet, you will see a check box, which you can select to indicate that the system is enabled. Only one CMMS System record can be designated as the default record.

Field	Data Type	Description	Behavior and Usage
Type	Character	The type of system that this record represents.	By default, the baseline CMMS System records used by the Oracle EBS eAM Interfaces contain the value <i>Oracle</i> in this field. You should not modify this value in the baseline records. If you create a new CMMS System record for use with the Oracle EBS eAM Interfaces, you should select the value <i>Oracle</i> in this field.


CMMS Interface

The following table provides a list and description of the fields that exist in CMMS Interface records and are available on the baseline CMMS Interface datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available.

Field	Data Type	Description	Behavior and Usage
Interface Type	Character	The type of interface.	On the datasheet, this field contains a list of values from the MI_CMMS_INTERFACE_TYPE System Code Table. In the baseline Meridium APM database, the list contains the following values: <ul style="list-style-type: none"> • Work Request (WR) • Equipment Extraction (EE) • Functional Location Extraction (FLE) • Work History Detail (WHD) • Work History (WH)
Enabled	Logical	A value that indicates whether this interface is enabled.	On the datasheet, you will see a check box, which you can select to indicate that the interface type is enabled.
Connection String	Character	The URL to the web service that is called by this interface.	None
User ID	Character	A user ID that can be used to log in to the Oracle EBS eAM software.	None

Field	Data Type	Description	Behavior and Usage
Password	Character	The password that is associated with the ID that is stored in the User ID field.	On the datasheet, this field contains a  button that you can click to launch the Enter Password dialog box, where you can type the password. The password will appear as asterisks.
Project Path	Character	The path to the Rules Library project that is used to implement the interface.	On the datasheet, this field contains a  button that you can click to launch the Select Rule Library Project dialog box, where you can select the desired Rules Library project from the Catalog folder \\Public\Rules Library. This field is required.
Class	Character	The full name (including the namespace) of the class, which exists within the Rules Library project that is referenced in the Project Path field, that implements the interface.	On the datasheet, this field contains a list of available classes. This field is required.
System	Character	The name of the Oracle EBS eAM system from which data will be transferred when this interface is run.	This field is disabled and populated automatically with the value in the CMMS System field in the CMMS System record to which this CMMS Interface record is linked.

Field	Data Type	Description	Behavior and Usage
Enable Debug Tracing	Logical	A value that indicates whether or not you want to capture detailed information in the Log Text field of the Interface Log record that is created when this interface is run.	On the datasheet, you will see a check box, which you can select to indicate that you want to capture detailed information. If this check box is not selected, the Interface Log record that is created when this interface is run will contain only overview information in the Log Text field.
Use Proxy	Logical	A value that indicates whether or not a proxy should be used when accessing the web service.	On the datasheet, you will see a check box, which you can select to indicate that a proxy should be used.
Proxy URL	Character	The URL to the proxy server.	This field is enabled and required only if the Use Proxy check box is selected.
Proxy Port	Character	The port number of the proxy server.	This field is enabled only if the Use Proxy check box is selected. If you do not type a proxy port, HTTP port 80 will be used automatically.
Use Network Credentials	Logical	A value that indicates whether or not network credentials should be used when accessing the web service.	On the datasheet, you will see a check box, which you can select to indicate that network credentials should be used.
Network User ID	Character	The user ID used to access the network.	This field is enabled and required only if the Use Network Credentials check box is selected.

Field	Data Type	Description	Behavior and Usage
Network Password	Character	The password that is associated with the user ID that is stored in the Network User ID field.	This field is enabled only if the Use Network Credentials check box is selected. On the datasheet, this field contains a  button that you can click to launch the Enter Password dialog box, where you can type the password. The password will appear as asterisks. This field is enabled only if the Use Network Credentials check box is selected.
Network Domain	Character	The domain of the network user.	None

CMMS Mapping

The following table provides a list and description of the fields that exist in CMMS Mapping records and are available on the baseline CMMS Mapping datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available.

Field	Data Type	Description	Usage and Behavior
Approach	Character	The approach that will be used to map values to and from Oracle EBS eAM.	<p>On the datasheet, this field contains a list of values from the MI_INTERFACE_MAPPING_APPROACH System Code Table. In the baseline Meridium APM database, the list contains the following values:</p> <ul style="list-style-type: none"> • CONST: Indicates that you want to map a specific, hard-coded value to Maximo. If you select <i>CONST</i>, you will need to specify: <ul style="list-style-type: none"> ■ The specific, hard-coded value, using the Constant field. ■ The Maximo field type, using the Element Type field. ■ The Maximo field, using the Element Field field. <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px; margin: 10px 0;"> <p>Note: Constant values do not appear in the Maximo interface as field values. Instead, they are used during the data transfer process by the Maximo web services.</p> </div> <ul style="list-style-type: none"> • FIELD: Indicates that you want to map a field value. If you select <i>FIELD</i>, you will need to specify: <ul style="list-style-type: none"> ■ The desired Meridium APM family, using the Record Type field. ■ The desired Meridium APM field, using the Record Field field. ■ The desired Maximo field type, using the Element Type field. ■ The desired Maximo field, using the Element Field

Field	Data Type	Description	Usage and Behavior
			<p>field.</p> <ul style="list-style-type: none"> • QUERY: Indicates that you want to map a value from query results to a Work Request field. If you select QUERY, you will need to specify: <ul style="list-style-type: none"> ■ The source query, using the Query field. ■ The target Work Request field type, using the Element Type field. ■ The target Work Request field, using the Element Field field. • LITERAL: Indicates that you want to map a specific, hard-coded value to Meridium APM. If you select <i>LITERAL</i>, you will need to specify: <ul style="list-style-type: none"> ■ The specific, hard-coded value, using the Constant field. ■ The desired Meridium APM family, using the Record Type field. ■ The desired Meridium APM field, using the Record Field field.

Field	Data Type	Description	Usage and Behavior
Element Type	Character	The class name of the Oracle EBS eAM field.	<p>If the interface is creating data in Oracle EBS eAM, the Element Type represents the class name of the target Oracle EBS eAM field <i>to which</i> a value will be mapped.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface), the Element Type represents the class name of the source Oracle EBS eAM field <i>from which</i> the value will be mapped.</p>
Element Field	Character	The field name of the Oracle EBS eAM field.	<p>If the interface is creating data in Oracle EBS eAM (e.g., Work Request Interface), the Element Field represents the target Maximo field to which a value will be mapped.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface), the Element Field represents the source Oracle EBS eAM field <i>from which</i> the value will be mapped.</p> <p>This field is required.</p>
Constant	Character	The specific, hard-coded value that will be mapped to or from Oracle EBS eAM.	<p>This field is enabled and required only if the Approach field contains the value <i>CONST</i> or <i>LITERAL</i>.</p>

Field	Data Type	Description	Usage and Behavior
Query	Character	The query that will be used to map fields to the Work Request.	<p>This field is enabled and required only if the Approach field contains the value <i>QUERY</i>. On the datasheet, this field contains a <input type="button" value="..."/> button, which you can click to launch the Select Query dialog box, where you can select the desired query.</p> <p>Note that the extraction interfaces do not support mapping values from Oracle EBS eAM using a query. The query mapping approach can be used, instead, only if you are mapping values <i>to</i> Oracle EBS eAM.</p>

Field	Data Type	Description	Usage and Behavior
<p>Query Parameter Mapping</p>	<p>Character</p>	<p>The values that will be passed into the prompts that are included in the query specified in the Query field.</p>	<p>To specify prompt values, you will need to use the following syntax:</p> <p><prompt>=<value></p> <p>...where:</p> <ul style="list-style-type: none"> • <prompt> is the prompt ID of the prompt, as defined in the query. Alternatively, you can use the text Pn, where n is the number of the prompt in the query. Note that prompts are numbered beginning with zero (e.g., 0,1,2,3). For example, to specify a value for the <i>second</i> prompt in a query, the parameter would be <i>P1</i>. • <value> is the value that you want to pass in to the prompt. <p>If a query contains multiple prompts whose values you want to pass in, you can separate the prompt values with the ampersand (&) (e.g., Manufacturer=Pacific&Part_Number=123456).</p> <p>Note that instead of passing specific, hard-coded values in to the prompt, you can also map variable values from any record to which Recommendation record is linked. To do so, you would use the following syntax:</p> <p><prompt>=<Family ID>.<Field ID></p> <p>...where:</p> <ul style="list-style-type: none"> • <prompt> is the prompt ID of the prompt. • <Family ID> is the Family ID of the family containing the record whose value you want to pass in to the prompt.

Field	Data Type	Description	Usage and Behavior
			<ul style="list-style-type: none"> • <Field ID> is the Field ID of the field whose value you want to pass in to the prompt. <p>For example, suppose a Recommendation record is linked to an Equipment record with the value <i>Pacific</i> in the Manufacturer field. Suppose you also have a query that returns Equipment records by manufacturer, with a prompt on the Manufacturer field. In this case, using the Query field of a CMMS Mapping record, you would select the query. Then, in the Query Parameter Mapping field, you would type the following text:</p> <p>Manufacturer=MI_EQUIP000.MI_EQUIP000_MFR_C</p> <p>...where:</p> <ul style="list-style-type: none"> • <i>Manufacturer</i> is the prompt ID of the prompt. • <i>MI_EQUIP000</i> is the Family ID of the Equipment family. • <i>MI_EQUIP000_MFR_C</i> is the Field ID of the Manufacturer field.

Field	Data Type	Description	Usage and Behavior
Record Type	Character	The Meridium APM family that will be used to map values to or from Oracle EBS eAM.	<p>If the interface is creating data in Oracle EBS eAM (e.g., Work Request Interface), the Record Type represents the family containing the record whose field value will be mapped to Maximo.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface):</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>FIELD</i>, the Record Type represents the Meridium APM family whose records will be created or updated <i>from</i> Oracle EBS eAM. <p>-OR-</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>LITERAL</i>, the Record Type represents the Meridium APM family whose records will be populated with a constant value. <p>This field is enabled and required only if the Approach field contains the value <i>FIELD</i> or <i>LITERAL</i>.</p>

Field	Data Type	Description	Usage and Behavior
Record Field	Character	The Meridium APM field whose value will be mapped to or from Oracle EBS eAM.	<p>If the interface is creating data in Oracle EBS eAM (e.g., Work Request Interface), the Record Field represents the Meridium APM field whose value will be mapped <i>to</i> Oracle EBS eAM.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface):</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>FIELD</i>, the Record Field represents the Meridium APM field whose value will be updated <i>from</i> Oracle EBS eAM. <p>-OR-</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>LITERAL</i>, the Record Field represents the Meridium APM field whose value will be populated with a constant value, as determined by the value in the CONSTANT field. <p>This field is enabled and required only if the Approach field contains the value <i>FIELD</i>.</p>

Field	Data Type	Description	Usage and Behavior
Is Key	Logical	A value that indicates whether or not the Meridium APM field that appears in the Record Field field will be used to determine uniqueness when transferring data to and from the Oracle EBS eAM system.	<p>For example, in the baseline database, for the Equipment Extraction interface, the Equipment Technical Number field is identified as a key field. When you extract Equipment from the Oracle EBS eAM system, the INSTANCE_NUMBER field is mapped from Equipment in Oracle EBS eAM to the Equipment Technical Number field in Meridium APM Equipment records.</p> <p>During the extraction process, a new Equipment record will be created in the Meridium APM database only if an Equipment record with the same Equipment Technical Number does not already exist. If an Equipment record with that Equipment Technical Number already exists, it will be updated with the value in the INSTANCE_NUMBER field in the Oracle EBS eAM system.</p>

Interface Log

The following table provides a list and description of the fields that exist in Interface Log records and are available on the baseline Interface Log datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage
System ID	Character	The name of the Oracle EBS eAM system from which records were extracted.	This field is disabled.
Type	Character	The name of the interface that was executed (i.e., Equipment Extraction).	This field is disabled.
Date Executed	Date	The date that the interface was executed.	This field is disabled.

Field	Data Type	Description	Behavior and Usage
Status	Character	The status of the extraction process.	<p>On the datasheet, this field contains a list of values from the MI_CMMS_INF_ERROR_CODES System Code Table. In the baseline Meridium APM database, the list contains the following values:</p> <ul style="list-style-type: none"> • Completed: The extraction process completed successfully without warnings or errors. • Completed with Warnings: The extraction process completed successfully, but with warnings, indicating that you might want to review the warnings to determine if any action is needed. • Completed with Errors: The extraction process did not complete successfully. • Completed with Warnings (Cleared): The extraction process completed successfully with warnings, and someone has reviewed the warnings. • Completed with Errors (Cleared): The extraction process did not complete successfully, and someone has reviewed the errors. <p>When the extraction process is finished running, the value in the Status field will be set automatically to <i>Completed</i>, <i>Completed with Warnings</i>, or <i>Completed with Errors</i>. If the status indicates warnings or errors have occurred, a Super User or a member of the MI CMMS Interfaces Administrator Security Group can review the warnings or errors and then change the status to <i>Completed with Warnings (Cleared)</i> or <i>Completed with Errors (Cleared)</i>.</p>

Field	Data Type	Description	Behavior and Usage
Log Text	Text	Information about the extraction process, including any warnings or errors that occurred.	The level of detail that appears in the Log Text field depends upon whether or not the Enable Debug Tracing check box is selected in the CMMS Interface record representing the interface that was run to create this Interface Log record. If that check box is selected, the Log Text field will contain detailed information, and if that check box is cleared, the Log Text field will contain general overview information about the extraction process. This field is disabled.
Number Of Records Processed	Number	The number of Oracle EBS eAM records that were processed during the extraction process.	This field is disabled.
Number Of Records Rejected	Number	The number of Oracle EBS eAM records that were rejected during the extraction process.	This field is disabled.

Field	Data Type	Description	Behavior and Usage
Number Of Records Created	Number	The number of Meridium APM records that were created during the extraction process.	This field is disabled.
Number Of Records Updated	Number	The number of Meridium APM records that were updated during the extraction process.	<p>If the parameters that are defined in the Schedule Manager cause the extraction process to process Oracle EBS eAM records for which corresponding Meridium APM records already exist, the Interface Log record for that extraction process will show that those Meridium APM records were <i>updated</i>. This does not mean, however, that they were changed in some way. If the values in Oracle EBS eAM are the same as the values in the existing Meridium APM records, the Meridium APM records will not be changed.</p> <p>This field is disabled.</p>

System Code Tables Used by the Oracle EBS eAM Interfaces

The following System Code Tables are used by the Oracle EBS eAM Interfaces:

Table ID	Table Description	Function
MI_CMMS_INF_ERROR_CODES	CMMS Interface Error Codes	Used to populate the Status list in Interface Log records.
MI_CMMS_INTERFACE_TYPE	CMMS Interface Types	Used to populate the Interface Type list in CMMS Interface records.
MI_CMMS_TYPE	CMMS System Type	Used to populate the Type list in CMMS System records.
MI_DIRECTION_INDICATOR	CMMS Mapping Direction Indicators	Used to populate the Direction list in CMMS Mapping records.
MI_INTERFACE_MAPPING_APPROACH	Mapping Approach Indicators for CMMS Interface Mapping	Used to populate the Approach list in CMMS Mapping records.

Oracle EBS eAM Values Mapped to Equipment Records

The following tables explain the values that are used to populate Equipment fields when you [run the Equipment Extraction Interface](#).

Values Mapped From Oracle EBS eAM

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Equipment Field Caption	Meridium APM Equipment Field ID
Area Internal ID	AREA_ID	Area Internal ID	MI_EQUIP000_AREA_CODE_C
Area	AREA	Area	MI_EQUIP000_AREA_ID_C
Area Description	AREA_DESCRIPTION	Area Description	MI_EQUIP000_AREA_DESC_C
Asset Category	ASSET_CATEGORY_ID	Category	MI_EQUIP000_SAP_CATEG_C
Criticality Internal ID	ASSET_CRITICALITY	Criticality Internal ID	MI_EQUIP000_CRITI_INTER_ID_C
Criticality	ASSET_CRITICALITY_CODE	Criticality Indicator	MI_EQUIP000_CRITI_IND_C
Criticality Description	ASSET_CRITICALITY_DESC	Criticality Indicator Description	MI_EQUIP000_CRITI_IND_DESC_C
Asset Group Description	ASSET_GROUP_DESCRIPTION	Asset Group Description	MI_EQUIP000_ASSET_GROUP_DESC_C
Asset Category Description	CATEGORY_NAME	Category Description	MI_EQUIP000_SAP_CATEG_DESC_C
Asset Group	CONCATENATED_SEGMENTS	Asset Group	MI_EQUIP000_ASSET_GROUP_C

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Equipment Field Caption	Meridium APM Equipment Field ID
Asset Route	ASSET_ROUTE	Asset Route	MI_EQUIP000_ASSET_ROUTE_C
None. This value is not visible in the Oracle EBS eAM interface.	CREATION_DATE	CMMS Creation Date	MI_EQUIP000_CREATE_DATE_D
Organization Internal ID	CURRENT_ORGANIZATION_ID	Organization Internal ID	MI_EQUIP000_ORGAN_INTER_ID_C
Organization	INV_ORGANIZATION_CODE	Organization	MI_EQUIP000_ORGANIZATION_C
Organization Description	ORGANIZATION_NAME	Organization Description	MI_EQUIP000_ORGAN_DESC_C
Supplier Warranty Expiration Date	SUPPLIER_WARRANTY_EXP_DATE	Warranty Expiration Date	MI_EQUIP000_WRNTY_EXPR_D
Asset Description	DESCRIPTIVE_TEXT	Equipment Long Description -AND- Equipment Short Description	MI_EQUIP000_EQUIP_LNG_DESC_T -AND- MI_EQUIP000_EQUIP_SHRT_DESC_C
Active	IS_ACTIVE_FLAG	Active	MI_EQUIP000_ACTIVE_F
Equipment Serial Number	EQP_SERIAL_NUMBER	Serial Number	MI_EQUIP000_SN_C
Asset Serial Number	SERIAL_NUMBER	Asset Serial Number	MI_EQUIP000_ASSET_SERIAL_NBR_C

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Equipment Field Caption	Meridium APM Equipment Field ID
Asset Number	INSTANCE_NUMBER -AND- PARENT_INSTANCE_NUMBER ¹	Equipment ID -AND- Equipment Technical Number	MI_EQUIP000_EQUIP_ID_C -AND- MI_EQUIP000_EQUIP_TECH_NBR_C
None. This value is not visible in the Oracle EBS eAM interface.	LAST_UPDATE_DATE	CMMS Last Changed Date	MI_EQUIP000_CHANGE_DATE_D
Maintainable	MAINTAINABLE_FLAG	Maintainable	MI_EQUIP000_MAINTAINABLE_F
Owning Department	OWNING_DEPARTMENT	Owning Department	MI_EQUIP000_OWNING_DEPT_C
Owning Department Internal ID	OWNING_DEPARTMENT_ID	Owning Department Internal ID	MI_EQUIP000_OWNING_DEPT_ID_C
Owning Department Description	OWNING_DEPARTMENT_DESC	Owning Department Description	MI_EQUIP000_OWNING_DEPT_DESC_C
WIP Accounting Class	WIP_ACCOUNTING_CLASS_CODE	WIP Accounting Class	MI_EQUIP000_WIP_ACCONT_CLASS_C

If the Oracle EBS eAM Asset Number belongs to equipment, the Asset Number will be mapped to the Equipment ID field in the Equipment record. In addition, if the Asset Number identifies equipment that has a parent location in Oracle EBS eAM, the Functional Location field and the Functional Location Description field in the Equipment record will also be populated with the Asset Number and Asset Description, respectively, of that location.

Constant Values

In addition to the values that are mapped from Oracle EBS eAM to Meridium APM Equipment records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record

for the Equipment Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MAX_ROWS	100
SOAHeader	NLSLanguage	AMERICAN
SOAHeader	Org_Id	996
SOAHeader	RespApplication	EAM
SOAHeader	Responsibility	EAM_OPM_ASSET_MANAGEMENT
SOAHeader	ResponsibilityApplName	EAM
SOAHeader	ResponsibilityName	Enterprise Asset Management, Process
SOAHeader	SecurityGroup	STANDARD
SOAHeader	SecurityGroupName	STANDARD

Oracle EBS eAM Values Mapped to Functional Location Records

The following tables explain the values that are used to populate Functional Location fields when you [run the Functional Location Extraction Interface](#).

Values Mapped From Oracle EBS eAM

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Functional Location Field Caption	Meridium APM Functional Location Field ID
Area Internal ID	AREA_ID	Area Internal ID	MI_FNCLOC00_ AREA_CODE_C
Area	AREA	Area	MI_FNCLOC00_ AREA_ID_C
Area Description	AREA_ DESCRIPTION	Area Description	MI_FNCLOC00_ AREA_DESC_C
Criticality Internal ID	ASSET_ CRITICALITY	Criticality Internal ID	MI_FNCLOC00_ CRTCAL_IND_C
Criticality	ASSET_ CRITICALITY_ CODE	Criticality Indicator	MI_FNCLOC00_ CRTCAL_IND_D_ C
Asset Group Description	ASSET_GROUP_ DESCRIPTION	Asset Group Description	MI_FNCLOC00_ ASSET_GROUP_ DESC_C
Asset Category	ASSET_ CATEGORY_ID	Category	MI_FNCLOC00_ CATEG_C
Asset Category Description	CATEGORY_ NAME	Category Description	MI_FNCLOC00_ CATEG_D_C
Asset Group	CONCATENATED_ SEGMENTS	Asset Group	MI_FNCLOC00_ ASSET_GROUP_ C
Asset Route	ASSET_ROUTE	Asset Route	MI_FNCLOC00_ ASSET_ROUTE_C
None. This value is not visible in the Oracle EBS eAM interface.	CREATION_DATE	CMMS Creation Date	MI_FNCLOC00_ CREATE_DATE_D

Oracle EBS eAM Values Mapped to Functional Location Records

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Functional Location Field Caption	Meridium APM Functional Location Field ID
Organization Internal ID	CURRENT_ORGANIZATION_ID	Organization Internal ID	MI_FNCLOC00_ORGAN_INTER_ID_C
Organization	INV_ORGANIZATION_CODE	Organization	MI_FNCLOC00_ORGANIZATION_C
Organization Description	ORGANIZATION_NAME	Organization Description	MI_FNCLOC00_ORGAN_DESC_C
Asset Description	DESCRIPTIVE_TEXT	Equipment Long Description -AND- Equipment Short Description	MI_FNCLOC00_FNC_LOC_LNG_DESC_C -AND- MI_FNCLOC00_FNC_LOC_DESC_C
Asset Serial Number	SERIAL_NUMBER	Asset Serial Number	MI_FNCLOC00_ASSET_SERIAL_NBR_C
Asset Number	INSTANCE_NUMBER	Functional Location -AND- Functional Location Internal ID	MI_FNCLOC00_FNC_LOC_C -AND- MI_FNCLOC00_INTERNAL_ID_C
Parent Asset Number ¹	PARENT_INSTANCE_NUMBER	Superior Function Location	MI_FNCLOC00_SUPR_FNC_LOC_C
Active	IS_ACTIVE_FLAG	Active	MI_FNCLOC00_ACTIV_F
None. This value is not visible in the Oracle EBS eAM interface.	LAST_UPDATE_DATE	CMMS Last Changed Date	MI_FNCLOC00_CHANGE_DATE_D

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Functional Location Field Caption	Meridium APM Functional Location Field ID
Maintainable	MAINTAINABLE_FLAG	Maintainable	MI_FNCLOC00_MAINTAINABLE_F
Owning Department	OWNING_DEPARTMENT	Owning Department	MI_FNCLOC00_OWNING_DEPT_C
Owning Department Internal ID	OWNING_DEPARTMENT_ID	Owning Department Internal ID	MI_FNCLOC00_OWNING_DEPT_ID_C
Owning Department Description	OWNING_DEPARTMENT_DESC	Owning Department Description	MI_FNCLOC00_OWNING_DEPT_DESC_C
WIP Accounting Class	WIP_ACCOUNTING_CLASS_CODE	WIP Accounting Class	MI_FNCLOC00_WIP_ACCOUNT_CLASS_C

If the Oracle EBS eAM Asset Number belongs to a location that has a parent location, the Asset Number of the *child* location will be mapped to the Functional Location field in the Functional Location record. In addition, the Asset Number of the parent location in Oracle EBS eAM will be mapped to the Superior Function Location field in the Meridium APM Functional Location record.

Constant Values

In addition to the values that are mapped from Oracle EBS eAM to Meridium APM Functional Location records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Functional Location Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MAX_ROWS	100
SOAHeader	NLSLanguage	AMERICAN
SOAHeader	Org_Id	996
SOAHeader	RespApplication	EAM

Element Type	Element Field	Constant Value
SOAHeader	Responsibility	EAM_OPM_ASSET_MANAGEMENT
SOAHeader	ResponsibilityApplName	EAM
SOAHeader	ResponsibilityName	Enterprise Asset Management, Process
SOAHeader	SecurityGroup	STANDARD
SOAHeader	SecurityGroupName	STANDARD

Oracle EBS eAM Values Mapped to Work History Records

The following tables explain the values that are used to populate Work History fields when you [run the Work History Extraction Interface](#).

Values Mapped From Oracle EBS eAM

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Work Order Description	WO_DESCRIPTION	Order Description -and- Event ID Description	MI_EVWKHIST_ORDR_DESC_C -and- MI_EVENT_SHRT_DSC_CHR
Order Internal ID	WORK_ORDER_ID	Event ID	MI_EVENT_ID
Asset Number	INSTANCE_NUMBER -and- PARENT_INSTANCE_NUMBER ¹	Equipment ID -and- Location ID ¹	MI_EVENT_ASST_ID_CHR -and- MI_EVENT_LOC_ID_CHR ¹
Asset Description	WO_ASSET_DESCRIPTION	Equipment Short Description -and- Location Short Description ²	MI_EVENT_ASST_DESC_CHR -and- MI_EVENT_LOC_SHRT_DESC_CHR ²
Scheduled Start Date	SCHEDULED_START_DATE	Scheduled Start Date	MI_EVWKHIST_SCHED_START_D
Scheduled Completion Date	SCHEDULED_COMPLETION_DATE	Scheduled Completion Date	MI_EVWKHIST_SCHED_COMPL_D

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Status	WORK_ORDER_STATUS	Order User Status	MI_EVWKHIST_ORDR_USER_STAT_C
Work Order Type	WORK_ORDER_TYPE	Order Type Code	MI_EVWKHIST_ORDR_TYP_CD_C
Work Order Type Description	WORK_ORDER_TYPE_DISP	Order Type Description	MI_EVWKHIST_ORDR_TYP_DESC_C
Priority	PRIORITY	Order Priority	MI_EVWKHIST_ORDR_PRTY_C
Priority Description	PRIORITY_DISP	Order Priority Description	MI_EVWKHIST_ORDR_PRTY_DESC_C
None. This value is not visible in the Oracle EBS eAM interface.	ASSET_ACTIVITY	Asset Activity	MI_EVWKHIST_ASSET_ACTIV_C
None. This value is not visible in the Oracle EBS eAM interface.	ASSET_ACTIVITY_DESCRIPTION	Asset Activity Description	MI_EVWKHIST_ASSET_ACTIV_DESC_C
None. This value is not visible in the Oracle EBS eAM interface.	ASSET_ACTIVITY_ID	Asset Activity Internal ID	MI_EVWKHIST_ASSET_ACTIV_ID_C
Activity Type	ACTIVITY_TYPE	Order PM Activity Type	MI_EVWKHIST_ORDR_PM_ACT_C
Activity Type Description	ACTIVITY_TYPE_DISP	Order PM Activity Type Description	MI_EVWKHIST_ORDR_PM_ACT_DESC_C
Activity Cause	ACTIVITY_CAUSE	Activity Cause	MI_EVWKHIST_ACTIV_CAUSE_C
Activity Cause Description	ACTIVITY_CAUSE_DISP	Activity Cause Description	MI_EVWKHIST_ACTIV_CAUSE_DESC_C

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Activity Source	ACTIVITY_SOURCE	Detection Method Code	MI_EVWKHIST_DETCT_MTHD_CD_C
Activity Source Description	ACTIVITY_SOURCE_MEANING	Detection Method Description	MI_EVWKHIST_DETCT_MTHD_DESC_C
Failure Entry Required	FAILURE_CODE_REQUIRED	Functional Loss Code	MI_EVWKHIST_FNCTNL_LOSS_CD_C
System Status	WORK_ORDER_STATUS_PENDING	Order System Status	MI_EVWKHIST_ORDR_SYS_STAT_C
Actual Cost	ACTUAL_TOTAL_COST	Maintenance Cost	MI_EVWKHIST_MAINT_CST_N
Material Cost	ACTUAL_MATERIAL_COST	Actual Material Cost	MI_EVWKHIST_ACT_MTRL_COST_N
Labor Cost	ACTUAL_LABOR_COST	Actual Labor Cost	MI_EVWKHIST_ACT_LABOR_COST_N
Equipment Cost	ACTUAL_EQUIPMENT_COST	Actual Equipment Cost	MI_EVWKHIST_ACT_EQUIP_COST_N
Actual Start Date	ACTUAL_START_DATE	Maintenance Start Date	MI_EVWKHIST_MAINT_START_D
Actual End Date	DATE_COMPLETED	Maintenance Completion Date	MI_EVWKHIST_MAINT_COMPL_D
WO Created By	WO_CREATED_BY	Created By	MI_EVENT_CRTEG_BY_CHR
Work Order Description	WO_DESCRIPTION	Event Short Description	MI_EVENT_SHRT_DSC_CHR

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
None. This value is not visible in the Oracle EBS eAM interface.	WO_CREATION_DATE	Order Creation Date	MI_EVWKHIST_ORDR_CRT_DT_D
None. This value is not visible in the Oracle EBS eAM interface.	WO_LAST_UPDATE_DATE	Order Last Change Date	MI_EVWKHIST_ORDR_CHNG_DT_D

If the Oracle EBS eAM Asset Number belongs to a location, the Asset Number will be mapped to the Location ID field in the Work History record. Likewise, if the Oracle EBS eAM Asset Number belongs to equipment, the Asset Number will be mapped to the Equipment ID field in the Work History record. In addition, if the Asset Number identifies equipment that has a parent location in Oracle EBS eAM, the Location ID field in the Work History record will also be populated with the Asset Number of that location.

If the Oracle EBS eAM Asset Description belongs to a location, the Asset Description will be mapped to the Location Short Description field in the Work History record. Likewise, if the Oracle EBS eAM Asset Description belongs to equipment, the Asset Description will be mapped to the Equipment Short Description field in the Work History record. In addition, if the Asset Description identifies equipment that has a parent location in Oracle EBS eAM, the Location Short Description in the Work History record will also be populated with the Asset Description of that location.

Literal Value

When you create Work History records using the Work History Extraction Interface, the Maintenance Cost UOM field will be populated automatically with the value *USD*.

Constant Values

In addition to the values that are mapped from Oracle EBS eAM to Meridium APM Work History records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Work History Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MAX_ROWS	100
SOAHeader	NLSLanguage	AMERICAN

Element Type	Element Field	Constant Value
SOAHeader	Org_Id	996
SOAHeader	RespApplication	EAM
SOAHeader	Responsibility	EAM_OPM_ASSET_ MANAGEMENT
SOAHeader	ResponsibilityApplName	EAM
SOAHeader	ResponsibilityName	Enterprise Asset Man- agement, Process
SOAHeader	SecurityGroup	STANDARD
SOAHeader	SecurityGroupName	STANDARD

Oracle EBS eAM Values Mapped to Work History Detail Records

The following tables explain the values that are used to populate Work History Detail fields when you [run the Work History Detail Extraction Interface](#).

Values Mapped From Oracle EBS eAM

Oracle EBS eAM Interface Label	Oracle EBS eAM Internal ID	Meridium APM Work History Detail Field Caption	Meridium APM Work History Detail Field ID
Failure Code	FAILURE_CODE	Maintainable Item Code	MI_DTWKHIST_MAINT_ITEM_CD_C
Failure Description	FAILURE_DESCRIPTION	Maintainable Item Description	MI_DTWKHIST_MAINT_ITEM_DESC_C
Cause Code	CAUSE_CODE	Condition Code	MI_DTWKHIST_CNDTN_CD_C
Cause Description	CAUSE_DESCRIPTION	Condition Description	MI_DTWKHIST_CNDTN_DESC_C
Resolution	RESOLUTION_CODE	Maintenance Action Code	MI_DTWKHIST_MAINT_ACTN_CD_C
Resolution Description	RESOLUTION_DESCRIPTION	Maintenance Action Description	MI_DTWKHIST_MAINT_ACTN_DESC_C
Work Order ID	WORK_ORDER_ID	Order ID	MI_DTWKHIST_ORDR_ID_C

Constant Values

In addition to the values that are mapped from Oracle EBS eAM to Meridium APM Work History Detail records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Work History Detail Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MAX_ROWS	100

Element Type	Element Field	Constant Value
SOAHeader	NLSLanguage	AMERICAN
SOAHeader	Org_Id	996
SOAHeader	RespApplication	EAM
SOAHeader	Responsibility	EAM_OPM_ASSET_MANAGEMENT
SOAHeader	ResponsibilityApplName	EAM
SOAHeader	ResponsibilityName	Enterprise Asset Management, Process
SOAHeader	SecurityGroup	STANDARD
SOAHeader	SecurityGroupName	STANDARD

Recommendation Values Mapped to Work Requests

The following tables explain the values that are used to populate Work Request fields when you [create Oracle EBS eAM Work Requests from Recommendation records in Meridium APM](#).

Values Mapped From a Query

Work Request Field	Query ¹	Query Parameters
MAINTENANCE_OBJECT_ID	MAINTENANCE_OBJECT_ID_LOOKUP	enty_id=[MI Recommendation].[MI_REC_ASSET_ID_CHR]
ASSET_NUMBER	ASSET_NUMBER_LOOKUP	entity_id=[MI Recommendation].[MI_REC_ASSET_ID_CHR]
MAINTENANCE_OBJECT_ID	MAINTENANCE_OBJECT_ID_LOOKUP	enty_id=[MI Recommendation].[MI_REC_ASSET_ID_CHR]
ORGANIZATION_ID	ORGANIZATION_ID_LOOKUP	enty_id=[MI Recommendation].[MI_REC_ASSET_ID_CHR]
WORK_REQUEST_MAINTENANCE_OBJECT_TYPE	MAINTENANCE_OBJECT_TYPE_LOOKUP	enty_id=[MI Recommendation].[MI_REC_ASSET_ID_CHR]
WORK_REQUEST_OWNING_DEPT	ORGANIZATION_ID_LOOKUP	entity_id=[MI Recommendation].[MI_REC_ASSET_ID_CHR]
WORK_REQUEST_PRIORITY_ID	PRIORITY_ID_LOOKUP	rec_priority=[MI Recommendation].[MI_REC_PRIORITY_C]

Values Mapped From a Recommendation Field

Work Request Field	Recommendation Field Caption
DESCRIPTION	Work Request Reference
EXPECTED_RESOLUTION_DATE	Target Completion Date
WORK_REQUEST_ID	Work Request Reference

Work Request Field	Recommendation Field Caption
WORK_REQUEST_NUMBER	Work Request Reference
P_REQUEST_LOG	Recommendation Description

Constant Values

In addition to the values that are mapped from Meridium APM Recommendation records to Oracle EBS eAM, several values are used in the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Work Request Creation Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
APPSWIP_EAM_WORKREQUEST_PUB_ROWTY	WORK_REQUEST_TYPE_ID	20
InputParameters	P_API_VERSION	1
InputParameters	P_COMMIT	T
InputParameters	P_INIT_MSG_LIST	T
SOAHeader	NLSLanguage	AMERICAN
SOAHeader	Org_Id	996
SOAHeader	RespApplication	EAM
SOAHeader	Responsibility	EAM_OPM_ASSET_MANAGEMENT
SOAHeader	ResponsibilityApplName	EAM
SOAHeader	ResponsibilityName	Enterprise Asset Management, Process
SOAHeader	SecurityGroup	STANDARD
SOAHeader	SecurityGroupName	STANDARD

CMMS Interface Record

Represents an interface that is included in the Oracle EBS eAM Interfaces and is used to identify:

- How the Meridium APM system will communicate with the Oracle EBS eAM system.
- Which interface the record supports, which indicates the type of Oracle EBS eAM data that will be created or extracted.

CMMS Mapping Record

Used to identify how values will be mapped and which values will be mapped between the Meridium APM system and the Oracle EBS eAM system.

CMMS System Record

Used to store identifying information about your Oracle EBS eAM system. The baseline Meridium APM database includes a CMMS System record that you can use as a starting point for identifying your Oracle EBS eAM system.

Equipment Extraction Interface

Allows you to extract data about equipment from your Oracle EBS eAM system and import them into your Meridium APM system as Equipment records.

Functional Location Extraction Interface

Allows you to extract data about locations from your Oracle EBS eAM system and import them into your Meridium APM system as Functional Location records.

Interface Log Record

Created automatically each time an interface is run to store information about the process, such as the status of the process (e.g., Completed with warnings), the date the interface was run, and the parameters that were used to run the interface.

Oracle DB Direct

Allows the Meridium APM Application Server to connect directly to the Oracle EBS eAM Database Server.

Oracle SOA Gateway

Allows the Meridium APM Application Server to connect to the Oracle EBS eAM Database Server through the Oracle web services, which reside on the Oracle EBS eAM Application Server.

Work History Detail Extraction Interface

Allows you to extract Work Order failure information from your Oracle EBS eAM system and import it into your Meridium APM system as Work History Detail records.

Work History Extraction Interface

Allows you to extract Work Orders from your Oracle EBS eAM system and import them into your Meridium APM system as Work History records.

Work Request Creation Interface

Allows you to create and update Work Requests in your Oracle EBS eAM system using values in Recommendation records in your Meridium APM system.

Overview of the Maximo Interfaces

The *Maximo Interfaces* feature allows you to transfer data between your Maximo system and your Meridium APM system. The Maximo Interfaces feature includes the following interfaces:

- **Work Order Creation Interface:** Allows you to [create](#) and [update](#) Work Orders in your Maximo system using values in Recommendation records in your Meridium APM system.
- **Service Request Creation Interface:** Allows you to [create](#) and [update](#) Service Requests in your Maximo system using values in Recommendation records in your Meridium APM system.
- **Equipment Extraction Interface:** Allows you to extract data about assets from your Maximo system and [import them into your Meridium APM system as Equipment records](#).
- **Functional Location Extraction Interface:** Allows you to extract data about locations from your Maximo system and [import them into your Meridium APM system as Functional Location records](#).
- **Work Order Extraction Interface:** Allows you to [extract Work Orders from your Maximo system and import them into your Meridium APM system as Work History records](#).
- **Service Request Extraction Interface:** Allows you to [extract Service Requests from your Maximo system and import them into your Meridium APM system as Work History records](#).

Note: You cannot run the Work Order Extraction Interface and the Service Request Extraction Interface. You can run only one or the other.

- **Work Order Detail Extraction Interface:** Allows you to [extract Work Order failure information from your Maximo system and import it into your Meridium APM system as Work History Detail records](#).
- **Service Request Detail Extraction Interface:** Allows you to [extract Service Requests from your Maximo system and import it into your Meridium APM system as Work History Detail records](#).

Note: You cannot run the Work Order Detail Extraction Interface and the Service Request Detail Extraction Interface. You can run only one or the other.

The Maximo Interfaces cannot be used to extract items with dates *earlier than* January 1, 1970. For example, you cannot extract an asset with a Changed Date of December 21, 1969.

Maximo Interfaces System Requirements

The *Maximo Interfaces* feature allows you to integrate Meridium APM with your Maximo system. The *Maximo Interfaces* license is required to take advantage of Maximo Interfaces functionality. In addition, your system must contain the basic Meridium APM system architecture and the following additional components:

- **Maximo Application Server:** A Maximo Application Server machine that houses the Maximo Web Services and is running version 7.1, 7.5, or 7.6.

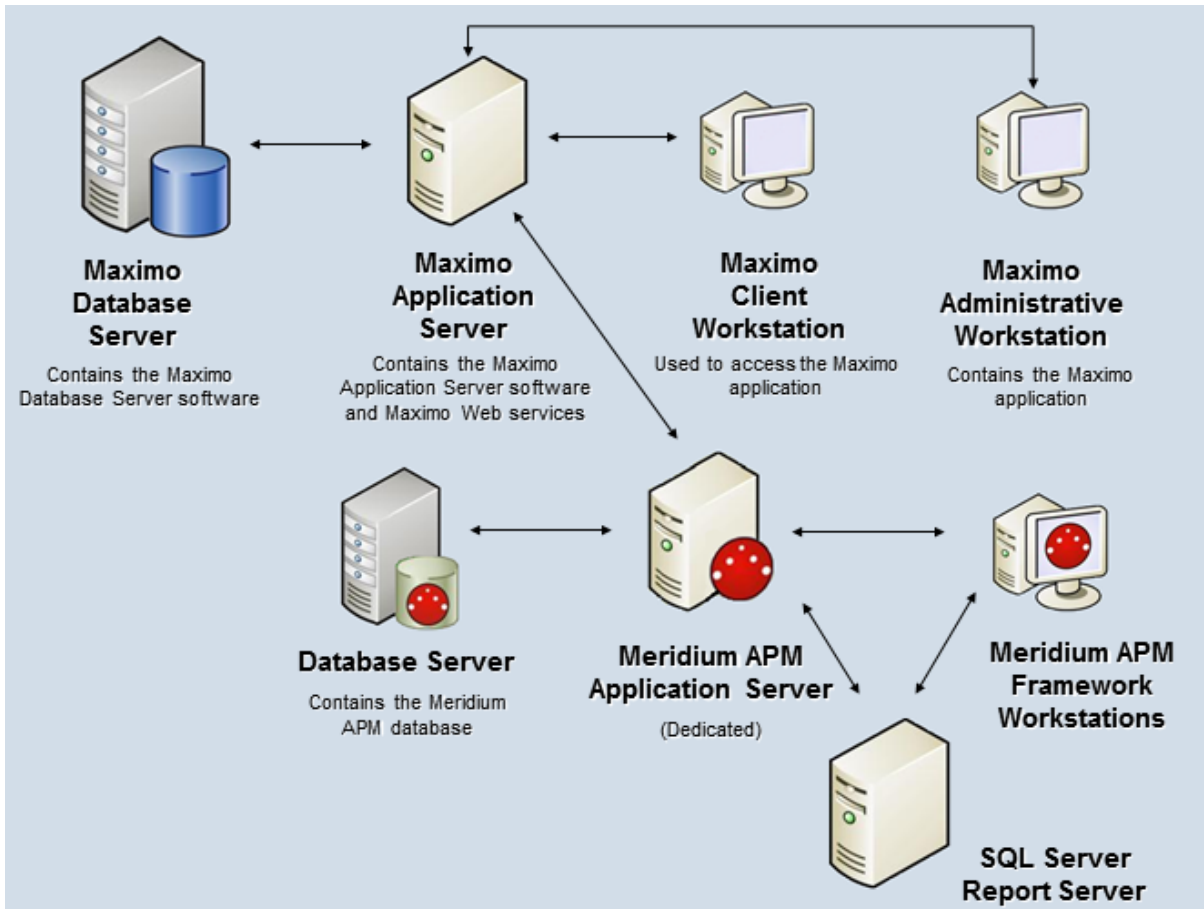
Note: Before users begin using the Maximo Interfaces, the Maximo Application Server must contain the following Web Services, which must be [deployed and defined as object structure services](#): MIASSET, MIOPERLOC, MIWO, MIWODETAIL, and MISR.

- **Maximo Database Server:** A database that houses the Maximo data model and data and is running a version that is supported by the Maximo Application Server. For details on requirements of the Maximo Database Server, see the Maximo documentation.
- **Maximo Client Workstation:** A computer that is used to access the Maximo application. For details on the requirements of the Maximo Client workstation, see the Maximo documentation.
- **Maximo Administrative Workstation:** A computer that contains the Maximo application. For details on the requirements of the Maximo Administrative workstation, see the Maximo documentation.

After you have installed and configured the basic Meridium APM application, you will need to perform some configuration steps for Maximo Interfaces.

The following image shows how the additional Maximo machines should be incorporated into the basic Meridium APM system architecture to support the Maximo Interfaces.

Maximo Interfaces System Requirements

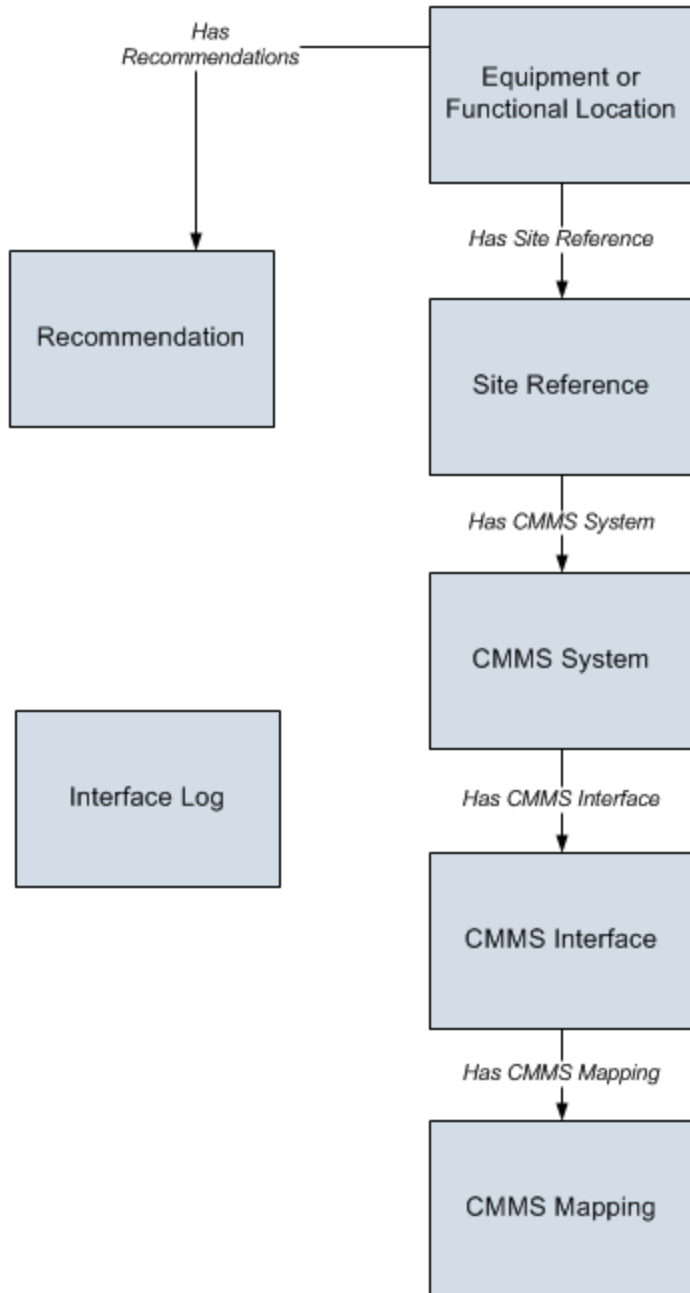


Maximo Interfaces Data Model

Like all Meridium APM modules, the Meridium APM Maximo Interfaces feature consists of entity families, relationship families, and business rules. When attempting to understand and make use of the Meridium APM Maximo Interfaces functionality, it can be helpful to visualize the Maximo Interfaces data model.

Because you should already be familiar with the concept of records and viewing records in the Meridium APM Record Manager, as you attempt to get your bearings in the Maximo Interfaces, it may be useful to remember that the Maximo Interfaces simply offers functionality that allows you to create and view records.

The following image illustrates how families used by the Maximo Interfaces feature are related to one another. In the following image, boxes represent entity families, and arrows represent relationship families that are configured in the baseline database.



In addition, you can link each Equipment or Functional Location record to a Site Reference record, which identifies the site to which that equipment or location belongs.

About CMMS System Records

[CMMS System records](#) are used to store identifying information about your Maximo system. The baseline Meridium APM database includes a CMMS System record that you can use as a starting point for identifying your Maximo system.

If you have more than one Maximo system, you will need to create additional CMMS System records to identify each system. You can use the Default field to indicate which system you want to use by default.

Each CMMS Interface record is linked to:

- One predecessor Site Reference record, which identifies the site that uses that Maximo system.
- One or more successor [CMMS Interface records](#), which identify the interfaces that will be used to connect to this system.

Note: Data can be transferred to and from a Maximo system only if the CMMS System record is linked to the appropriate CMMS Interface record(s) and the **Enabled** check box on the CMMS System datasheet is selected.

If you delete a CMMS System record, all CMMS Interface records to which it is linked will also be deleted. In addition, any CMMS Mapping records that were linked to the deleted CMMS Interface records will also be deleted if they are not linked to other CMMS Interface records.

About CMMS Interface Records

Each interface that is included in the Maximo Interfaces is represented by a [CMMS Interface record](#). CMMS Interface records are used to identify two main items:

- How the Meridium APM system will communicate with the Maximo system.
- Which interface the record supports, which indicates the type of Maximo data that will be created or extracted.

The Meridium APM database contains the following baseline CMMS Interface records that support the baseline interfaces:

- Equipment Extraction (EE)
- Functional Location Extraction (FLE)
- Work History (WH) - Service Request
- Work History (WH) - Work Order
- Work History Detail (WHD) - Service Request
- Work History Detail (WHD) - Work Order
- Work Request (WR) - Service Request
- Work Request (WR) - Work Order

You must *modify* the baseline CMMS Interface records to supply the appropriate connection information. In addition, if your system architecture includes more than one Maximo system, for each separate Maximo system, you will need to create the appropriate CMMS Interface records and link them to the [CMMS System record](#) that defines that Maximo system.

Each CMMS Interface record is linked to:

- One predecessor CMMS System record, which identifies the Maximo system that should be used when this interface is invoked.
- Multiple successor CMMS Mapping records, which identify how data will be mapped using this interface.

About CMMS Mapping Records

[CMMS Mapping records](#) are used to identify how values will be mapped and which values will be mapped between the Meridium APM system and the Maximo system. Each CMMS Mapping record is linked to one predecessor [CMMS Interface record](#) that identifies the interface that uses that mapping.

The baseline Meridium APM database contains multiple CMMS Mapping records, which are linked to the baseline CMMS Interface record that is used by the Maximo Interfaces.

You can accept the values in the baseline CMMS Mapping records, or you can modify them if you want to map the data differently.

About Interface Log Records

Each time an interface is run, an [Interface Log record](#) is created automatically to store information about the process, such as the status of the process (e.g., Completed with warnings), the date the interface was run, and the parameters that were used to run the interface.

If the value in an Interface Log record is *Completed with Warnings* or *Completed with Errors*, a Super User or a member of the MI CMMS Interfaces Administrator Security Group can review the warnings or errors and then change the status to *Completed with Warnings (Cleared)* or *Completed with Errors (Cleared)*.

First-Time Deployment Workflow

Deploying and configuring the Maximo Interfaces for the first time includes completing multiple steps, which are outlined in the table in this topic. The steps in this section of the documentation provide all the information that you need to deploy and configure the Maximo Interfaces on top of the basic Meridium APM system architecture.

Whether a step is required or optional is indicated in the **Required/Optional** cell. Steps are marked as *Required* if you must perform the step to take advantage of Maximo Interfaces functionality.

The person responsible for completing each task may vary within your organization. We recommend, however, that the steps be performed in relatively the same order in which they are listed in the table.

Step	Task	Required/Optional	Notes
1	Ensure that the Maximo system requirements have been met.	Required	None
2	Deploy the Maximo Web services on the Maximo Application Server.	Required	None
3	Assign the desired Security Users to the Maximo Interfaces Security Groups via the Configuration manager application.	Required	None
4	Modify the baseline CMMS System record to define your default Maximo system.	Required	None
5	Review the values in the baseline CMMS Interface records, and modify any values as necessary.	Optional	None
6	Review the values in the baseline CMMS Mapping records, and modify any values as necessary.	Optional	None
7	In each CMMS Interface record representing an extraction interface, modify the value in the Connection String field so that it contains valid connection information.	Required	None

Step	Task	Required/Optional	Notes
8	Specify whether you want users to create Work Orders or Service Requests from Meridium APM Recommendation records.	Required	This step is necessary only for the Work Order Creation and Service Request Creation Interfaces.
9	Specify whether you want users to extract Work Orders or Service Requests when creating Meridium APM Work History records.	Required	This step is necessary only for the following interfaces: <ul style="list-style-type: none"> • Work Order Extraction • Work Order Detail Extraction • Service Request Extraction • Service Request Detail Extraction
10	Create a scheduled item in the Schedule Manager application that will cause the Meridium APM system to extract the items from the Maximo system on a pre-defined schedule.	Required	This step is necessary only for the extraction interfaces.

Upgrade or Update Maximo Interfaces to 3.6.1.1.0

The following tables list the steps that are required to update or upgrade the Maximo Interfaces to 3.6.1.1.0. These steps assumes that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Update from version V3.6.1.0.0

This module will be updated to 3.6.1.1.0 automatically when you update the components in the basic Meridium APM system architecture. No additional steps are required.

Upgrade from any version V3.6.0.0.0 through V3.6.0.12.3

The Maximo Interfaces will be upgraded to 3.6.1.1.0 automatically when you upgrade the components in the basic Meridium APM system architecture.

Upgrade from any version V3.5.1.0.0 through V3.5.1.12.0

The Maximo Interfaces will be upgraded to 3.6.1.1.0 automatically when you upgrade the components in the basic Meridium APM system architecture.

Upgrade from any version V3.5.0 SP1 LP through V3.5.0.1.9.0

The Maximo Interfaces will be upgraded to 3.6.1.1.0 automatically when you upgrade the components in the basic Meridium APM system architecture.

Upgrade from any version V3.5.0 through V3.5.0.0.7.1

Step	Task	Required/Optional	Notes
1	<p>Run the following query to ensure that your database does not contain duplicate Work History records:</p> <pre>SELECT Count([MI_EVWKHIST].ENTY_KEY) "Total Number of Records", [MI_EVWKHIST].[MI_EVENT_ID] "Event ID", [MI_EVWKHIST].[MI_EVWKHIST_SAP_SYSTEM_C] "CMMS System" FROM [MI_EVWKHIST] GROUP BY [MI_EVWKHIST].[MI_EVENT_ID], [MI_EVWKHIST].[MI_EVWKHIST_SAP_SYSTEM_C] HAVING Count([MI_EVWKHIST].ENTY_KEY) > 1</pre> <p>If the query returns any results, which represent potential duplicate records, contact Meridium, Inc. for assistance in reconciling the duplicate records.</p>	Optional	<p>In V3.5.0, if you ran the Work Order Detail Extraction Interface <i>before</i> running the Work Order Extraction Interface, duplicate Work History records would be created to represent the same Maximo Work Order.</p> <p>The first Work History record would be created when you ran the Work Order Detail Extraction Interface, and a second, duplicate Work History record would be created when you ran the Work Order Extraction Interface. The first record would not contain a value in the</p>

Step	Task	Required/Optional	Notes
			<p>Site field, but the second record would. The other values in the two records, however, would be identical.</p> <p>This issue was resolved in V3.5.0 HF2.</p> <p>If you are upgrading from V3.5.0 and you did not apply V3.5.0 HF2, if you are unsure whether your database contains duplicate Work History records as a result of this issue, you can run the suggested query.</p>

Deploying the Web Services

The following instructions explain how to deploy the *MIASSET* Web Service. You will need to repeat these instructions four additional times to deploy the following additional Web Services:

- MIOPERLOC
- MIWO
- MIWODETAIL
- MISR

Each of these additional Web Services will be created as a duplicate of an existing Maximo Web Service, as described below:


- **MIOPERLOC:** Create as a duplicate of MXOPERLOC
- **MIWO:** Create as a duplicate of MXWO
- **MIWODETAIL:** Create as a duplicate of MXWODETAIL
- **MISR:** Create as a duplicate of MXSR

In the following instructions, where you see *MXASSET*, you can replace it with one of the Maximo Web Services listed above. Where you see *MIASSET*, you can replace it with the corresponding Maximo Web Service listed above. For example, to deploy the Web Service used by the Functional Location Extraction Interface, in the following instructions, you would need to replace *MXASSET* with *MXOPERLOC*. Likewise, you would need to replace *MIASSET* with *MIOPERLOC*.

To deploy the Web Services:

1. In the Maximo application, on the **Go To** menu, point to **Integration**, and then click **Object Structures**.

The **List** tab appears.

2. In the **Object Structure** text box, type: **MXASSET**
3. Press **Enter**.
4. To the right of the **List** tab, click the **Object Structure** tab.
5. In the **Select Action** list, select **Duplicate Object Structure**.
6. In the **Object Structure** text box, type: **MIASSET**
7. Click the  button.
8. In the **Select Action** list, select **Exclude/Include Fields**.
9. On the **Persistent Fields** tab, include all fields *except* LANGCODE and HASLD.
10. On the **Non-Persistent Fields** tab, include all fields.

11. On the **Go To** menu, point to **Integration**, and then click **Web Services Library**.
12. In the **Select Action** list, point to **Create Web Service**, and then click **Create WS from Object Structure**.
13. In the list, to the left of the object structure with the name *MIASSET*, select the check box.

14. Click the **Create** button.

A message appears, indicating the schema will be regenerated for every operation in this service.

15. Click **OK**.
16. In the **Select Action** list, click **Deploy Web Service**.

The Web Service is deployed.

Maximo Interfaces Security Groups

Meridium APM provides the following baseline Security Groups for use with the Maximo Interfaces:

- MI CMMS Interface Administrator
- MI CMMS Interface User

The following table lists the family-level privileges that exist for these Security Groups.

Entity Families		
Family	MI CMMS Interface Administrator	MI CMMS Interface User
CMMS Interface	View, Update, Insert, Delete	View
CMMS Mapping	View, Update, Insert, Delete	View
CMMS System	View, Update, Insert, Delete	View
Equipment	View, Update, Insert, Delete	View
Functional Location	View, Update, Insert, Delete	View
Interface Log	View, Update, Insert, Delete	View
SAP System ¹	View, Update, Insert, Delete	View
Site Reference	View	View
Work History	View, Update, Insert, Delete	View, Update, Insert
Work History Detail	View, Update, Insert, Delete	View, Update, Insert
Relationship Families		
Family	MI CMMS Interface Administrator	MI CMMS Interface User
Equipment Has Equipment	View, Update, Insert, Delete	View, Update, Insert

Entity Families		
Functional Location Has Equipment	View, Update, Insert, Delete	View, Update, Insert
Functional Location Has Functional Location(s)	View, Update, Insert, Delete	View, Update, Insert
Has CMMS Interface	View, Update, Insert, Delete	View
Has CMMS Mapping	View, Update, Insert, Delete	View
Has CMMS System	View, Update, Insert, Delete	View
Has Event Detail	View, Update, Insert, Delete	View, Update, Insert
Has SAP System ¹	View, Update, Insert, Delete	View
Has Work History	View, Update, Insert, Delete	View, Update, Insert

Modifying the Baseline CMMS System Record

To modify the baseline CMMS System record:

1. Using the Search Tool, perform a search on the CMMS System family.
2. From the search results, open the baseline CMMS System record with the Record ID <YOUR MAXIMO SYSTEM NAME>.

The CMMS System record appears in the Record Manager.

Details	
	Value(s)
▶ Name	<YOUR MAXIMO SYSTEM NAME>
Description	<YOUR MAXIMO SYSTEM NAME DESCRIPTION>
Enabled	<input type="checkbox"/>
Is Default?	<input type="checkbox"/>
Type	Maximo

3. In the **Name** cell, delete the text <YOUR MAXIMO SYSTEM NAME>, and type the name of your Maximo system.
4. In the **Description** cell, delete the text <YOUR MAXIMO SYSTEM NAME DESCRIPTION>, and type a description of your Maximo system.
5. Select the **Enabled** check box.
6. If you want this Maximo system to be used by default when data is transferred from Meridium APM to Maximo, select the **Default** check box.

Note: Only *one* CMMS System record can be designated as the default record.

7. On the **Common Tasks** menu, click the **Save** link.

The CMMS System record is saved.

Specifying Whether to Create Work Orders or Service Requests from Recommendation Records

When you select the **Create Work Request** check box in a Recommendation record and save the record, the Meridium APM system will attempt to create a Work Order or a Service Request in the Maximo system. To specify which one should be created, you will need to select the **Enabled** check box in one of the following CMMS Interface records:

- Work Request (WR) <Maximo System Name> Service Request
- Work Request (WR) <Maximo System Name> Work Order

If you want to create *Service Requests* from your Recommendation records, you will need to select the **Enabled** check box in the *Work Request (WR) <Maximo System Name> Service Request* record. Likewise, if you want to create *Work Orders* from your Recommendation records, you will need to select the **Enabled** check box in the *Work Request (WR) <Maximo System Name> Work Order* record.

Note: If you select the **Enabled** check box in both records, an error message will appear after you save the Recommendation record.

Specifying Whether to Extract Work Orders or Service Requests from Maximo

When you run the scheduled item that an administrative user created for the purpose of extracting Maximo Work Orders or Service Requests, the Meridium APM system will attempt to extract a Work Order or a Service Request from the Maximo system. To specify which one should be extracted, you will need to select the **Enabled** check box in one of the following CMMS Interface records:

- Work History (WH) <Maximo System Name> Service Request
- Work History (WH) <Maximo System Name> Work Order

If you want to extract *Service Requests* from Maximo, you will need to select the **Enabled** check box in the *Work History (WH) <Maximo System Name> Service Request* record. Likewise, if you want to extract *Work Orders* from Maximo, you will need to select the **Enabled** check box in the *Work History (WH) <Maximo System Name> Work Order* record.

Note: If you select the **Enabled** check box in both records, an error message will appear when you run the scheduled item.

Likewise, you can also extract failure information from Work Orders. To do so, you will need to make sure that the **Enabled** check box is selected in the *Work History Detail (WHD) <Maximo System Name> Work Order* record. If you are extracting Service Requests instead of Work Orders, although they do not contain failure information, you will also want to select the **Enabled** check box in the *Work History Detail (WHD) <Maximo System Name> Service Request* record.

Creating a Scheduled Item to Extract Items from Maximo

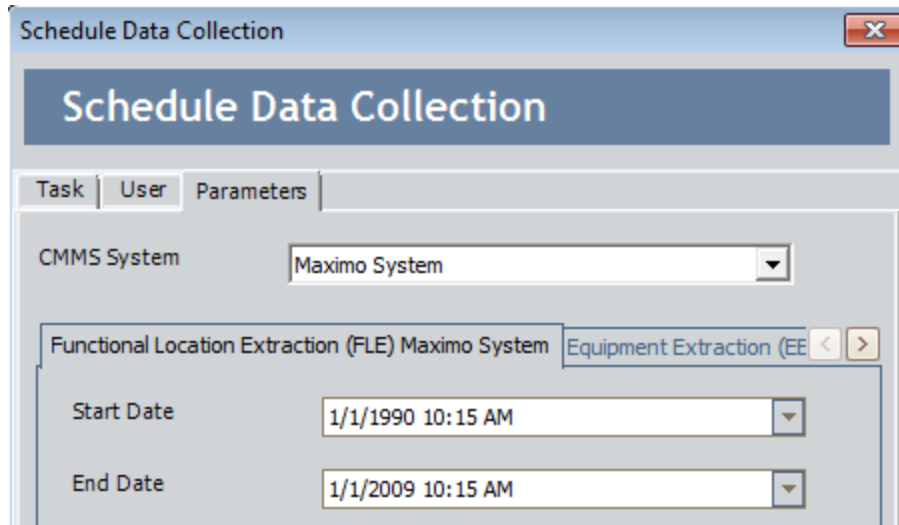
Using the Maximo Interfaces, you can extract the following Maximo items from your Maximo system into your Meridium APM system:

- Assets (will be used to create Equipment records in the Meridium APM system)
- Locations (will be used to create Functional Location records in the Meridium APM system)
- Work Orders and Service Requests (will be used to create Work History and Work History Detail records in the Meridium APM system)

To enable this functionality, an administrative user must create a scheduled item in the Schedule Manager that will cause Meridium APM to extract the items on a pre-defined schedule.

Use the following guidelines for creating a scheduled item that will extract items from Maximo:

- On the **Choose a Meridium APM Assembly** dialog box, select the file **Meridium.Integration.dll**.
- On the **Choose an Object Type** dialog box, select the file **Meridium.Integration.CMMS.DataCollection.DataCollectionTask**.
- On the **Task** tab, define a schedule that will execute the scheduled item on a recurring basis. The frequency by which you want to execute the scheduled item is up to you.
- On the **User** tab, specify a Security User who is either a Super User or a member of the MI CMMS Interface Administrator Security Group.
- On the **Parameters** tab:
 - In the **CMMS System** list, select the Maximo system from which you want to extract data.
 - On the **Parameters** tab, after you have selected the Maximo system from which you want to extract data, use each item-specific tab to define the range of creation or modification dates of the items that you want to extract. For example, if you want to extract Functional Locations that were created or changed on or after January 1, 1990 and on or before January 1, 2009, you would specify the dates on the **Functional Location Extraction (FLE) Maximo System** tab as shown in the following image:



If you define parameters on *all* tabs, the interfaces will be run in the following order:

- Functional Location Extraction
- Equipment Extraction
- Work Order and Service Request Extraction
- Work Order and Service Request Detail Extraction

Note: To determine which tabs appear on the **Parameters** tab, the Meridium APM system runs the Interfaces Related to a System query, which is stored in the Meridium APM Catalog. This query contains a prompt for a CMMS system name, and the value that you select in the **CMMS System** list on the **Parameters** tab is passed into the query prompt automatically. The query returns the CMMS Interface records that are linked to the CMMS System record whose Name field contains the value that you selected in the **CMMS System** list. For each CMMS Interface record that is returned by the query, a corresponding tab is displayed on the **Parameters** tab. By default, the query is configured to return all CMMS Interface records *except* the ones that contain the value *Work Request (WR)* in the Interface Type field.

Requirements for Creating Maximo Work Orders

In order to create a Maximo Work Order from a Meridium APM Recommendation record, at a minimum, your database must contain a CMMS System record whose Enabled field contains the value *True*. The CMMS System record is used to define the connection information to your Maximo system. If the SAP Interfaces and the Maximo Interfaces licenses are both active, in addition to this requirement, certain additional conditions must be met regarding the SAP System and CMMS System records that exist in the database. The exact conditions that must be met depend on the following main factors:

- Whether or not the Recommendation record is linked to an Equipment or Functional Location record.
- Whether or not that Equipment or Functional Location record is linked to a Site Reference record.

The following scenarios describe the conditions that must exist in each of these cases.

Scenario A: Recommendation Record Is not Linked to an Equipment or Functional Location Record

In this scenario, you can create a Work Order successfully only if *both* of the following conditions are true:

- Either NO SAP System records exist or none of the existing SAP System records contain the value *True* in the Default SAP System field.
- and-
- A CMMS System record exists with the value *True* in the Is Default field.

Scenario B: Recommendation Record IS Linked to an Equipment or Functional Location Record

Option 1: The Equipment or Functional Location record IS linked to a Site Reference record

In this scenario, you can create a Work Order successfully only if NO SAP System records exist in the database. In addition, if the Site Reference record is linked to a CMMS System record, the Work Order will be created automatically in the Maximo system represented by that CMMS System, regardless of whether or not the Is Default field in that record contains the value *True*. If, however, the Site Reference record is not linked to a CMMS System record, the requirements in option 2 must be met.

Option 2: The Equipment or Functional Location record is not linked to a Site Reference record

In this scenario, you can create a Work Order successfully only if *both* of the following conditions are true:

Requirements for Creating Maximo Work Orders

- Either NO SAP System records exist or none of the existing SAP System records contain the value *True* in the Default SAP System field.
- and-
- A CMMS System record exists with the value *True* in the Is Default field.

Supported Recommendation Families

You can create Maximo Work Orders from Recommendation records belonging to any baseline Recommendation family *except* for the following families:

- Recommendation (i.e., the *root* Recommendation family)
- AMS Asset Recommendation
- RBI Recommendation
- RCMO Recommendation
- Risk Assessment Recommendation

Because you can create a Maximo Work Order from a Recommendation record belonging to one of many families, throughout the Maximo Interfaces documentation, we refer to this record as a *Meridium APMRecommendation record*.

Creating Maximo Work Orders from Recommendation Records

Note: The following instructions assume that the Create Work Request field exists on the baseline datasheets for the [supported Recommendation families](#). This field exists on the default datasheets in the baseline Meridium APM database, so these instructions assume that they have not been removed by an administrative user.

To create a Maximo Work Order from a Recommendation record:

1. Create a new or open an existing Recommendation record.
2. Make sure that the Recommendation record is linked to the Equipment or Functional Location record that represents the equipment or location for which you want to create a Maximo Work Order.
3. Select the default datasheet (as it is defined via the Configuration Manager) for the Recommendation record. For example, if you are viewing an Inspection Recommendation record, because the Inspection Recommendation datasheet is configured as the default datasheet via the Configuration Manager, you would need to select this datasheet.
4. On the datasheet, enter values into the fields as desired to provide information about the recommended action.

Note: The value in the Target Completion Date field must be a date *other than* the current date.

5. On the datasheet, select the **Create Work Request?** check box.
6. On the **Common Tasks** menu, click the **Save** link.

The record is saved. In addition, the Meridium APM system:

- Creates a Work Order in the Maximo system and maps values to it using the [CMMS Mapping records](#) that exist in the database.
- Populates the Work Request Reference field with the ID of the corresponding Work Order. Note that after the Work Request Reference field is populated, the Create Work Request field becomes disabled.

Note: If a Work Order could not be created for any reason, a message appears, describing the problem. You will be unable to save the Recommendation record until you clear the **Create Work Request?** check box.

Updating Maximo Work Orders from Recommendation Records

To update a Maximo Work Order that was created from a Recommendation record:

1. Open the existing Recommendation record that was used to [create a Maximo Work Order](#).
2. On the datasheet, modify any of the values that were originally mapped to the Work Order.

Note: The value in the Target Completion Date field must be a date *other than* the current date.

3. On the **Common Tasks** menu, click the **Save** link.

The Recommendation record is saved, and the Work Order is updated in the Maximo system.

Requirements for Creating Maximo Service Requests

In order to create a Maximo Service Request from a Meridium APM Recommendation record, at a minimum, your database must contain a CMMS System record whose Enabled field contains the value *True*. The CMMS System record is used to define the connection information to your Maximo system. If the SAP Interfaces and the Maximo Interfaces licenses are both active, in addition to this requirement, certain additional conditions must be met regarding the SAP System and CMMS System records that exist in the database. The exact conditions that must be met depends on the following main factors:

- Whether or not the Recommendation record is linked to an Equipment or Functional Location record.
- Whether or not that Equipment or Functional Location record is linked to a Site Reference record.

The following scenarios describe the conditions that must exist in each of these cases.

Scenario A: Recommendation Record Is not Linked to an Equipment or Functional Location Record

In this scenario, you can create a Service Request successfully only if *both* of the following conditions are true:

- Either NO SAP System records exist or none of the existing SAP System records contain the value *True* in the Default SAP System field.
- and-
- A CMMS System record exists with the value *True* in the Is Default field.

Scenario B: Recommendation Record IS Linked to an Equipment or Functional Location Record

Option 1: The Equipment or Functional Location record IS linked to a Site Reference record

In this scenario, you can create a Service Request successfully only if NO SAP System records exist in the database. In addition, if the Site Reference record is linked to a CMMS System record, the Service Request will be created automatically in the Maximo system represented by that CMMS System, regardless of whether or not the Is Default field in that record contains the value *True*. If, however, the Site Reference record is not linked to a CMMS System record, the requirements in option 2 must be met.

Option 2: The Equipment or Functional Location record is not linked to a Site Reference record

In this scenario, you can create a Service Request successfully only if *both* of the following conditions are true:

- Either NO SAP System records exist or none of the existing SAP System records contain the value *True* in the Default SAP System field.
- and-
- A CMMS System record exists with the value *True* in the Is Default field.

Supported Recommendation Families

You can create Maximo Service Requests from Recommendation records belonging to any baseline Recommendation family *except* for the following families:

- Recommendation (i.e., the *root* Recommendation family)
- AMS Asset Recommendation
- RBI Recommendation
- RCMO Recommendation
- Risk Assessment Recommendation

Because you can create a Maximo Service Request from a Recommendation record belonging to one of many families, throughout the Maximo Interfaces documentation, we refer to this record as a *Meridium APMRecommendation record*.

Creating Maximo Service Requests from Recommendation Records

Note: The following instructions assume that the Create Work Request field exists on the baseline datasheets for the [supported Recommendation families](#). This field exists on the default datasheets in the baseline Meridium APM database, so these instructions assume that they have not been removed by an administrative user.

To create a Maximo Service Request from a Recommendation record:

1. Create a new or open an existing Recommendation record.
2. Make sure that the Recommendation record is linked to the Equipment or Functional Location record that represents the equipment or location for which you want to create a Maximo Service Request.
3. Select the default datasheet (as it is defined via the Configuration Manager) for the Recommendation record. For example, if you are viewing an Inspection Recommendation record, because the Inspection Recommendation datasheet is configured as the default datasheet via the Configuration Manager, you would need to select this datasheet.
4. On the datasheet, enter values into the fields as desired to provide information about the recommended action.

Note: The value in the Target Completion Date field must be a date *other than* the current date.

5. On the datasheet, select the **Create Work Request?** check box.
6. On the **Common Tasks** menu, click the **Save** link.

The record is saved. In addition, the Meridium APM system:

- Creates a Service Request in the Maximo system and maps values to it using the [CMMS Mapping records](#) that exist in the database.
- Populates the Work Request Reference field with the ID of the corresponding Service Request. Note that after the Work Request Reference field is populated, the Create Work Request field becomes disabled.

Note: If a Work Order could not be created for any reason, a message appears, describing the problem. You will be unable to save the Recommendation record until you clear the **Create Work Request?** check box.

Updating Maximo Service Requests from Recommendation Records

To update a Maximo Service Request that was created from a Recommendation record:

1. Open the existing Recommendation record that was used to [create a Maximo Service Request](#).
2. On the datasheet, modify any of the values that were originally mapped to the Service Request.

Note: The value in the Target Completion Date field must be a date *other than* the current date.

3. On the **Common Tasks** menu, click the **Save** link.

The Recommendation record is saved, and the Service Request is updated in the Maximo system.

Equipment Extraction Interface

The *Equipment Extraction Interface* allows you to extract data about assets from your Maximo system and import it into your Meridium APM system as Equipment records. To execute the Equipment Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Equipment Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Equipment Extraction Interface is run, for each asset in the Maximo system that meets the criteria defined in the scheduled item, a corresponding Equipment record will be created in the Meridium APM database. In addition, if that Maximo asset has a parent asset or location, the Meridium APM Equipment record will be linked automatically to a parent record belonging to the Equipment family or the Functional Location family, as appropriate.

As a Meridium APM Framework user, after the Equipment Extraction Interface runs, you can use standard Meridium APM tools (e.g., Search Tool) to access the Equipment records that were created automatically. When you are viewing an Equipment record that was created as a result of the Equipment Extraction Interface, to see all the values that were mapped from the Maximo system, you can use the Equipment (Maximo) data-sheet.

In addition, to see the status of any given execution of the Equipment Extraction Interface, you can view the corresponding Interface Log record that was created automatically when the interface was run.

Note: If an asset is deleted in the Maximo system after an Equipment record has already been created for it in the Meridium APM system, rerunning the Equipment Extraction Interface will not delete the Meridium APM Equipment record.

Using the Functional Location Extraction Interface

The *Functional Location Extraction Interface* allows you to extract data about locations from your Maximo system and import it into your Meridium APM system as Functional Location records. To execute the Functional Location Extraction Interface, an administrative user will [create a scheduled item via the Meridium APM Schedule Manager](#). After the scheduled item is created, the Functional Location Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Functional Location Extraction Interface is run, for each location in the Maximo system that meets the criteria defined in the scheduled item, a corresponding Functional Location record will be created in the Meridium APM database. In addition, if that Maximo location has a parent asset or location, the Meridium APM Functional Location record will be linked automatically to a parent record belonging to the Equipment family or the Functional Location family, as appropriate.

Note: The Functional Location Extraction Interface will not extract locations of the type *COURIER* or *LABOR*.

As a Meridium APM Framework user, after the Functional Location Extraction Interface runs, you can use standard Meridium APM tools (e.g., Search Tool) to access the Functional Location records that were created automatically. When you are viewing a Functional Location record that was created as a result of the Functional Location Extraction Interface, to see all the values that were mapped from the Maximo system, you can use the Functional Location (Maximo) datasheet.

In addition, to see the status of any given execution of the Functional Location Extraction Interface, you can view the corresponding Interface Log record that was created automatically when the interface was run.

Note: If an asset is deleted in the Maximo system after a Functional Location record has already been created for it in the Meridium APM system, rerunning the Functional Location Extraction Interface will not delete the Meridium APM Functional Location record.

Work Order Extraction Interface

The *Work Order Extraction Interface* allows you to extract Work Orders from your Maximo system into your Meridium APM system as Work History records. To execute the Work Order Extraction Interface, an administrative user will [create a scheduled item](#) in the Meridium APM Schedule Manager. After the scheduled item is created, the interface will run automatically according to the schedule that is defined in the scheduled item.

When the Work Order Extraction Interface is run, for each Work Order in the Maximo system that meets the criteria defined in the scheduled item, a corresponding Work History record will be created in the Meridium APM database. Each Work History record will be linked to one Equipment or Functional Location record identifying the asset or location against which the Maximo Work Order is written. Specifically:

- If the Work Order is written against a location, the Work History record will be linked to a Functional Location record, and the Location ID field in the Work History record will be populated automatically with the Asset Number of that Maximo location.
- If the Work Order is written against an asset, the Work History record will be linked to an Equipment record, and the Equipment ID field in the Work History record will be populated automatically with the Asset Number of that Maximo asset. In addition, if that Maximo asset has a *parent* location, the Work History record will also be linked to a Functional Location record representing that parent Maximo location. The Location ID field in the Work History record will also be populated automatically with the Asset Number of that parent Maximo location.

As a Meridium APM Framework user, after the Work Order Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Work History records that were created automatically. When you are viewing a Work History record that was created as a result of the interface, to see all the values that were [mapped from the Maximo system](#), you can use the Work History (Maximo) datasheet.

CE Hint: You can also use the Work History with Details (Maximo) datasheet, which is a master/detail datasheet, to view the Work History records and the [Work History Detail records](#) to which they are linked.

In addition, to see the status of any given execution of the Work Order Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Service Request Extraction Interface

The *Service Request Extraction Interface* allows you to extract Service Requests from your Maximo system into your Meridium APM system as Work History records. To execute the Service Requests Extraction Interface, an administrative user will [create a scheduled item](#) in the Meridium APM Schedule Manager. After the scheduled item is created, the interface will run automatically according to the schedule that is defined in the scheduled item.

When the Service Request Extraction Interface is run, for each Service Request in the Maximo system that meets the criteria defined in the scheduled item, a corresponding Work History record will be created in the Meridium APM database. Each Work History record will be linked to one Equipment or Functional Location record identifying the asset or functional location against which the Maximo Service Request is written. Specifically:

- If the Service Request is written against a location, the Work History record will be linked to a Functional Location record, and the Location ID field in the Work History record will be populated automatically with the Asset Number of that Maximo location.
- If the Service Request is written against an asset, the Work History record will be linked to an Equipment record, and the Equipment ID field in the Work History record will be populated automatically with the Asset Number of that Maximo asset. In addition, if that Maximo asset has a *parent* location, the Work History record will also be linked to a Functional Location record representing that parent Maximo location. The Location ID field in the Work History record will also be populated automatically with the Asset Number of that parent Maximo location.

As a Meridium APM Framework user, after the Service Request Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Work History records that were created automatically. When you are viewing a Work History record that was created as a result of the interface, to see all the values that were [mapped from the Maximo system](#), you can use the Work History (Maximo) datasheet.

CEHint: You can also use the Work History with Details (Maximo) datasheet, which is a master/detail datasheet, to view the Work History records and the [Work History Detail records](#) to which they are linked.

In addition, to see the status of any given execution of the Service Request Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Work Order Detail Extraction Interface

The *Work Order Detail Extraction Interface* allows you to extract Work Order failure information from your Maximo system into your Meridium APM system as Work History Detail records. To execute the Work History Detail Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Work Order Detail Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Work Order Detail Extraction Interface is run, for each Work Order in the Maximo system that meets the criteria defined in the scheduled item and contains failure information, a corresponding Work History Detail record will be created in the Meridium APM database. Each Work History Detail record will be linked to a Work History record representing the Work Order on which the failure information exists.

Note that if, however, a Work Order does not have any failure information, a Work History Detail record will not be created.

As a Meridium APM Framework user, after the Work Order Detail Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Work History Detail records that were created automatically. If you are viewing a Work History Detail record on its own, to see all the values that were [mapped from the Maximo system](#), you can use the Work History Detail (Maximo) datasheet.

In addition, to see the status of any given execution of the Work Order Detail Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Service Request Detail Extraction Interface

The *Service Request Detail Extraction Interface* allows you to extract Service Requests from your Maximo system into your Meridium APM system as Work History Detail records. To execute the Service Request Detail Extraction Interface, an administrative user will [create a scheduled item](#) via the Meridium APM Schedule Manager. After the scheduled item is created, the Service Request Detail Extraction Interface will run automatically according to the schedule that is defined in the scheduled item.

When the Service Request Detail Extraction Interface is run, for each Service Request in the Maximo system that meets the criteria defined in the scheduled item and contains failure information, a corresponding Work History Detail record will be created in the Meridium APM database. Each Work History Detail record will be linked to a Work History record representing the Service Request on which the failure information exists.

As a Meridium APM Framework user, after the Service Request Detail Extraction Interface runs, you can use the Meridium APM Core Tools (e.g., Search Tool) to access the Work History Detail records that were created automatically. If you are viewing a Work History Detail record on its own, to see all the values that were [mapped from the Maximo system](#), you can use the Work History Detail (Maximo) datasheet.

In addition, to see the status of any given execution of the Service Request Detail Extraction Interface, you can view the corresponding [Interface Log record](#) that was created automatically when the interface was run.

Maximo Interfaces Catalog Folder Structure

The following queries are provided in the Catalog folder \\Public\Meridium\Modules\CMMS Interfaces\Maximo\Queries.

- **MaximoSuperiorEquipmentLookup**
- **MaximoSuperiorFunctionLocationLookup**
- **MaximoSuperiorWorkHistoryLookup**

Note that when you create a scheduled item to execute a Maximo interface (e.g., Equipment Extraction), the Meridium APM system uses the Interfaces Related to a System query, which is actually stored in the Catalog folder \\Public\Meridium\Modules\CMMS Interfaces*Oracle*. After providing a prompt for a CMMS system name, this query returns the CMMS Interface records that are linked to the CMMS System record whose Name field contains the value that is specified in the prompt. For each CMMS Interface record that is returned by the query, a corresponding tab is displayed on the **Parameters** tab of the **Schedule Data Collection** window in the Meridium APM Schedule Manager.

CMMS System

The following table provides a list and description of the fields that exist in CMMS System records and are available on the baseline CMMS System datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available.

Field	Data Type	Description	Behavior and Usage
Name	Character	The name of the Maximo system.	The name must be unique with respect to the name in other CMMS System records. The value in this field will be used to populate the System field in all CMMS Interface records to which this CMMS System record is linked. This field is required.
Description	Character	A description of the Maximo system.	None
Enabled	Logical	A value that indicates that the Maximo system is enabled.	On the datasheet, you will see a check box, which you can select to indicate that the system is enabled. If this check box is not selected, records will not be extracted from Maximo when you execute the interfaces.
Is Default	Logical	A value that indicates that data should be created in or extracted from this Maximo system by default.	On the datasheet, you will see a check box, which you can select to indicate that the system is enabled. Only one CMMS System record can be designated as the default record.



Field	Data Type	Description	Behavior and Usage
Type	Character	The type of system that this record represents.	By default, the baseline CMMS System records used by the Maximo Interfaces contain the value <i>Maximo</i> in this field. You should not modify this value in the baseline records. If you create a new CMMS System record for use with the Maximo Interfaces, you should select the value <i>Maximo</i> in this field.

CMMS Interface


The following table provides a list and description of the fields that exist in CMMS Interface records and are available on the baseline CMMS Interface datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available.

Field	Data Type	Description	Behavior and Usage
Interface Type	Character	The type of interface.	<p>On the datasheet, this field contains a list of values from the MI_CMMS_INTERFACE_TYPE System Code Table. In the baseline Meridium APM database, the list contains the following values:</p> <ul style="list-style-type: none"> • Work Request (WR) • Equipment Extraction (EE) • Functional Location Extraction (FLE) • Work History Detail (WHD) • Work History (WH)

Field	Data Type	Description	Behavior and Usage
Enabled	Logical	A value that indicates whether this interface is enabled.	<p>On the datasheet, you will see a check box, which you can select to indicate that the interface type is enabled.</p> <p>The baseline database contains two <i>Work Request</i> CMMS Interface records: one for creating Work Orders, and one for creating Service Requests. You should select the Enabled check box in only <i>one</i> of these records. You cannot create Work Orders and Service Requests at the same time. By default, the check box is selected in the record used for creating <i>Work Orders</i>.</p> <p>Likewise, the baseline database contains two <i>Work History</i> CMMS Interface records: one for extracting Work Orders, and one for extracting Service Requests. You should select the Enabled check box in only <i>one</i> of these records. You cannot extract Work Orders and Service Requests at the same time. By default, the check box is selected in the record used for creating <i>Work Orders</i>.</p> <p>Similarly, the baseline database contains two <i>Work History Detail</i> CMMS Interface records: one for extracting Work Order failure information, and one for extracting Service Requests. You should select the Enabled check box in only <i>ONE</i> of these records. You cannot create Work History Detail records from Work Order failure information and Service Requests at the same time. By default, the check box is selected in the record used for creating <i>Work Orders</i>.</p>
Connection String	Character	The URL to the web service that is called by this interface.	None

Field	Data Type	Description	Behavior and Usage
User ID	Character	A user ID that can be used to log in to the Maximo software.	None
Password	Character	The password that is associated with the ID that is stored in the User ID field.	On the datasheet, this field contains a  button that you can click to launch the Enter Password dialog box, where you can type the password. The password will appear as asterisks.
Project Path	Character	The path to the Rules Library project that is used to implement the interface.	On the datasheet, this field contains a  button that you can click to launch the Select Rule Library Project dialog box, where you can select the desired Rules Library project from the Catalog folder \\Public\Rules Library. This field is required.
Class	Character	The full name (including the namespace) of the class, which exists within the Rules Library project that is referenced in the Project Path field, that implements the interface.	On the datasheet, this field contains a list of available classes. This field is required.

Field	Data Type	Description	Behavior and Usage
System	Character	The name of the Maximo system from which data will be transferred when this interface is run.	This field is disabled and populated automatically with the value in the CMMS System field in the CMMS System record to which this CMMS Interface record is linked.
Enable Debug Tracing	Logical	A value that indicates whether or not you want to capture detailed information in the Log Text field of the Interface Log record that is created when this interface is run.	Because the Enable Debug Tracing field is a logical field, on the datasheet, you will see a check box, which you can select to indicate that you want to capture detailed information. If this check box is cleared, the Interface Log record that is created when this interface is run will contain only overview information in the Log Text field.
Use Proxy	Logical	A value that indicates whether or not a proxy should be used when accessing the web service.	On the datasheet, you will see a check box, which you can select to indicate that a proxy should be used.
Proxy URL	Character	The URL to the proxy server.	This field is enabled and required only if the Use Proxy check box is selected.
Proxy Port	Character	The port number of the proxy server.	This field is enabled only if the Use Proxy check box is selected. If you do not type a proxy port, HTTP port 80 will be used automatically.

Field	Data Type	Description	Behavior and Usage
Use Network Credentials	Logical	A value that indicates whether or not network credentials should be used when accessing the web service.	On the datasheet, you will see a check box, which you can select to indicate that network credentials should be used.
Network User ID	Character	The user ID used to access the network.	This field is enabled and required only if the Use Network Credentials check box is selected.
Network Password	Character	The password that is associated with the user ID that is stored in the Network User ID field.	This field is enabled only if the Use Network Credentials check box is selected. On the datasheet, this field contains a  button that you can click to launch the Enter Password dialog box, where you can type the password. The password will appear as asterisks. This field is enabled only if the Use Network Credentials check box is selected.
Network Domain	Character	The domain of the network user.	None

CMMS Mapping

The following table provides a list and description of the fields that exist in CMMS Mapping records and are available on the baseline CMMS Mapping datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available.

Field	Data Type	Description	Usage and Behavior
<p>Approach</p>	<p>Character</p>	<p>The approach that will be used to map values to and from Maximo.</p>	<p>On the datasheet, this field contains a list of values from the MI_INTERFACE_MAPPING_APPROACH System Code Table. In the baseline Meridium APM database, the list contains the following values:</p> <ul style="list-style-type: none"> • CONST: Indicates that you want to map a specific, hard-coded value to Maximo. If you select <i>CONST</i>, you will need to specify: <ul style="list-style-type: none"> ■ The specific, hard-coded value, using the Constant field. ■ The Maximo field type, using the Element Type field. ■ The Maximo field, using the Element Field field. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Note: Constant values do not appear in the Maximo interface as field values. Instead, they are used during the data transfer process by the Maximo web services.</p> </div> <ul style="list-style-type: none"> • FIELD: Indicates that you want to map a field value. If you select <i>FIELD</i>, you will need to specify: <ul style="list-style-type: none"> ■ The desired Meridium APM family, using the Record Type field. ■ The desired Meridium APM field, using the Record Field field. ■ The desired Maximo field type, using the Element Type field. ■ The desired Maximo field, using the Element Field

Field	Data Type	Description	Usage and Behavior
			<p>field.</p> <ul style="list-style-type: none"> • QUERY: Indicates that you want to map a value from query results to a Work Request field. If you select <i>QUERY</i>, you will need to specify: <ul style="list-style-type: none"> ■ The source query, using the Query field. ■ The target Work Request field type, using the Element Type field. ■ The target Work Request field, using the Element Field field. • LITERAL: Indicates that you want to map a specific, hard-coded value to Meridium APM. If you select <i>LITERAL</i>, you will need to specify: <ul style="list-style-type: none"> ■ The specific, hard-coded value, using the Constant field. ■ The desired Meridium APM family, using the Record Type field. ■ The desired Meridium APM field, using the Record Field field.

Field	Data Type	Description	Usage and Behavior
Element Type	Character	The class name of the Maximo field.	<p>If the interface is creating data in Maximo, the Element Type represents the class name of the target Maximo field <i>to which</i> a value will be mapped.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface), the Element Type represents the class name of the source Maximo field <i>from which</i> the value will be mapped.</p>
Element Field	Character	The field name of the Maximo field.	<p>If the interface is creating data in Maximo (e.g., Work Request Interface), the Element Field represents the target Maximo field to which a value will be mapped.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface), the Element Field represents the source Maximo field <i>from which</i> the value will be mapped.</p> <p>This field is required.</p>
Constant	Character	The specific, hard-coded value that will be mapped to or from Maximo.	This field is enabled and required only if the Approach field contains the value <i>CONST</i> or <i>LITERAL</i> .

Field	Data Type	Description	Usage and Behavior
Query	Character	The query that will be used to map fields to the Work Request.	<p>This field is enabled and required only if the Approach field contains the value <i>QUERY</i>. On the datasheet, this field contains a <input type="button" value="..."/> button, which you can click to launch the Select Query dialog box, where you can select the desired query.</p> <p>Note that the extraction interfaces do not support mapping values from Maximo using a query. The query mapping approach can be used, instead, only if you are mapping values <i>to</i> Oracle EBS eAM.</p>

Field	Data Type	Description	Usage and Behavior
<p>Query Parameter Mapping</p>	<p>Character</p>	<p>The values that will be passed into the prompts that are included in the query specified in the Query field.</p>	<p>To specify prompt values, you will need to use the following syntax:</p> <p><prompt>=<value></p> <p>...where:</p> <ul style="list-style-type: none"> • <prompt> is the prompt ID of the prompt, as defined in the query. Alternatively, you can use the text Pn, where n is the number of the prompt in the query. Note that prompts are numbered beginning with zero (e.g., 0,1,2,3). For example, to specify a value for the <i>second</i> prompt in a query, the parameter would be <i>P1</i>. • <value> is the value that you want to pass in to the prompt. <p>If a query contains multiple prompts whose values you want to pass in, you can separate the prompt values with the ampersand (&) (e.g., Manufacturer=Pacific&Part_Number=123456).</p> <p>Note that instead of passing specific, hard-coded values in to the prompt, you can also map variable values from any record to which Recommendation record is linked. To do so, you would use the following syntax:</p> <p><prompt>=<Family ID>.<Field ID></p> <p>...where:</p> <ul style="list-style-type: none"> • <prompt> is the prompt ID of the prompt. • <Family ID> is the Family ID of the family containing the record whose value you want to pass in to the prompt.

Field	Data Type	Description	Usage and Behavior
			<ul style="list-style-type: none"> • <Field ID> is the Field ID of the field whose value you want to pass in to the prompt. <p>For example, suppose a Recommendation record is linked to an Equipment record with the value <i>Pacific</i> in the Manufacturer field. Suppose you also have a query that returns Equipment records by manufacturer, with a prompt on the Manufacturer field. In this case, using the Query field of a CMMS Mapping record, you would select the query. Then, in the Query Parameter Mapping field, you would type the following text:</p> <p>Manufacturer=MI_EQUIP000.MI_EQUIP000_MFR_C</p> <p>...where:</p> <ul style="list-style-type: none"> • <i>Manufacturer</i> is the prompt ID of the prompt. • <i>MI_EQUIP000</i> is the Family ID of the Equipment family. • <i>MI_EQUIP000_MFR_C</i> is the Field ID of the Manufacturer field.

Field	Data Type	Description	Usage and Behavior
Record Type	Character	The Meridium APM family that will be used to map values to or from Maximo.	<p>If the interface is creating data in Maximo (e.g., Work Request Interface), the Record Type represents the family containing the record whose field value will be mapped <i>to</i> Maximo.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface):</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>FIELD</i>, the Record Type represents the Meridium APM family whose records will be created or updated <i>from</i> Maximo. <p>-OR-</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>LITERAL</i>, the Record Type represents the Meridium APM family whose records will be populated with a constant value. <p>This field is enabled and required only if the Approach field contains the value <i>FIELD</i> or <i>LITERAL</i>.</p>

Field	Data Type	Description	Usage and Behavior
Record Field	Character	The Meridium APM field whose value will be mapped to or from Maximo.	<p>If the interface is creating data in Maximo (e.g., Work Request Interface), the Record Field represents the Meridium APM field whose value will be mapped to Maximo.</p> <p>-or-</p> <p>If the interface is creating or updating data in Meridium APM (e.g., Equipment Extraction Interface):</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>FIELD</i>, the Record Field represents the Meridium APM field whose value will be updated <i>from</i> Maximo. <p>-or-</p> <ul style="list-style-type: none"> • If the value in the Approach field is <i>LITERAL</i>, the Record Field represents the Meridium APM field whose value will be populated with a constant value, as determined by the value in the CONSTANT field. <p>This field is enabled and required only if the Approach field contains the value <i>FIELD</i>.</p>

Field	Data Type	Description	Usage and Behavior
Is Key	Logical	A value that indicates whether or not the Meridium APM field that appears in the Record Field field will be used to determine uniqueness when transferring data to and from the Maximo system.	<p>For example, in the baseline database, for the Equipment Extraction interface, the Equipment Technical Number field is identified as a key field. When you extract Equipment from the Maximo system, the ASSETNUM field is mapped from the Equipment in Maximo to the Equipment Technical Number field in Meridium APM Equipment records.</p> <p>During the extraction process, a new Equipment record will be created in the Meridium APM database only if an Equipment record with the same Equipment Technical Number does not already exist. If an Equipment record with that Equipment Technical Number already exists, it will be updated with the value in the ASSETNUM field in the Maximo system.</p>

Interface Log

The following table provides a list and description of the fields that exist in Interface Log records and are available on the baseline Interface Log datasheet. The information in the table reflects the baseline state and behavior of these fields. If your implementation has been customized, these fields may behave differently, and fields in addition to those listed here may be available. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage
System ID	Character	The name of the Maximo system from which records were extracted.	This field is disabled.
Type	Character	The name of the interface that was executed (i.e., Equipment Extraction).	This field is disabled.
Date Executed	Date	The date that the interface was executed.	This field is disabled.

Field	Data Type	Description	Behavior and Usage
Status	Character	The status of the extraction process.	<p>On the datasheet, this field contains a list of values from the MI_CMMS_INF_ERROR_CODES System Code Table. In the baseline Meridium APM database, the list contains the following values:</p> <ul style="list-style-type: none"> • Completed: The extraction process completed successfully without warnings or errors. • Completed with Warnings: The extraction process completed successfully, but with warnings, indicating that you might want to review the warnings to determine if any action is needed. • Completed with Errors: The extraction process did not complete successfully. • Completed with Warnings (Cleared): The extraction process completed successfully with warnings, and someone has reviewed the warnings. • Completed with Errors (Cleared): The extraction process did not complete successfully, and someone has reviewed the errors. <p>When the extraction process is finished running, the value in the Status field will be set automatically to <i>Completed</i>, <i>Completed with Warnings</i>, or <i>Completed with Errors</i>. If the status indicates warnings or errors have occurred, a Super User or a member of the MI CMMS Interfaces Administrator Security Group can review the warnings or errors and then change the status to <i>Completed with Warnings (Cleared)</i> or <i>Completed with Errors (Cleared)</i>.</p>

Field	Data Type	Description	Behavior and Usage
Log Text	Text	Information about the extraction process, including any warnings or errors that occurred.	The level of detail that appears in the Log Text field depends upon whether or not the Enable Debug Tracing check box is selected in the CMMS Interface record representing the interface that was run to create this Interface Log record. If that check box is selected, the Log Text field will contain detailed information, and if that check box is cleared, the Log Text field will contain general overview information about the extraction process. This field is disabled.
Number Of Records Processed	Number	The number of Maximo records that were processed during the extraction process.	This field is disabled.
Number Of Records Rejected	Number	The number of Maximo records that were rejected during the extraction process.	This field is disabled.
Number Of Records Created	Number	The number of Meridium APM records that were created during the extraction process.	This field is disabled.

Field	Data Type	Description	Behavior and Usage
Number Of Records Updated	Number	The number of Meridium APM records that were updated during the extraction process.	If the parameters that are defined in the Schedule Manager cause the extraction process to process Maximo records for which corresponding Meridium APM records already exist, the Interface Log record for that extraction process will show that those Meridium APM records were <i>updated</i> . This does not mean, however, that they were changed in some way. If the values in Maximo are the same as the values in the existing Meridium APM records, the Meridium APM records will not be changed. This field is disabled.

System Code Tables Used by the Maximo Interfaces

The following System Code Tables are used by the Maximo Interfaces.

Table ID	Table Description	Function
MI_CMMS_INF_ERROR_CODES	CMMS Interface Error Codes	Used to populate the Status list in Interface Log records.
MI_CMMS_INTERFACE_TYPE	CMMS Interface Types	Used to populate the Interface Type list in CMMS Interface records.
MI_CMMS_TYPE	CMMS System Type	Used to populate the Type list in CMMS System records.
MI_DIRECTION_INDICATOR	CMMS Mapping Direction Indicators	Used to populate the Direction list in CMMS Mapping records.
MI_INTERFACE_MAPPING_APPROACH	Mapping Approach Indicators for CMMS Interface Mapping	Used to populate the Approach list in CMMS Mapping records.

Maximo Values Mapped to Equipment Records

The following tables explain the values that are used to populate Equipment fields when you [run the Equipment Extraction Interface](#).

Values Mapped From Maximo

Maximo Interface Label	Maximo Internal ID	Meridium APM Equipment Field Caption	Meridium APM Equipment Field ID
None. This value is not displayed on the Maximo interface.	ASSETID	Equipment ID	MI_EQUIP000_EQUIP_ID_C
Asset	ASSETNUM	Equipment Technical Number	MI_EQUIP000_EQUIP_TECH_NBR_C
Type	ASSETTYPE	Equipment Type	MI_EQUIP000_TYPE_C
Changed Date	CHANGEDATE	CMMS Last Changed Date	MI_EQUIP000_CHANGE_DATE_D
This value appears to the right of the Asset text box on the Maximo interface.	DESCRIPTION	Equipment Short Description	MI_EQUIP000_EQUIP_SHRT_DESC_C
This value appears in the Long Description window.	DESCRIPTION_LONGDESCRIPTION	Equipment Long Description	MI_EQUIP000_EQUIP_LNG_DESC_T
Installation Date	INSTALLDATE	Purchase Date	MI_EQUIP000_PRCH_D
Rotating Item	ITEMNUM	Inventory Number	MI_EQUIP000_INV_NO_C
Location	LOCATION	Functional Location	MI_EQUIP000_FNC_LOC_C
Manufacturer	MANUFACTURER	Manufacturer	MI_EQUIP000_MFR_C

Maximo Interface Label	Maximo Internal ID	Meridium APM Equipment Field Caption	Meridium APM Equipment Field ID
Priority	PRIORITY	Criticality Indicator	MI_EQUIP000_CRITI_IND_C
Serial #	SERIALNUM	Asset Serial Number	MI_EQUIP000_ASSET_SERIAL_NBR_C
Site	SITEID	Site	MI_EQUIP000_SITE_C
Status	STATUS	System Status	MI_EQUIP000_SYS_ST_C
Vendor	VENDOR	Equipment Vendor	MI_EQUIP000_EQUIP_VNDR_C
None. This value is not displayed on the Maximo interface.	WARRANTYEXPDATE	Warranty Expiration Date	MI_EQUIP000_WRNTY_EXPR_D

Constant Values

In addition to the values that are mapped from Maximo to Meridium APM Equipment records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Equipment Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MaxItems	100
InputParameters	MaxLimit	1000

Maximo Values Mapped to Functional Location Records

The following tables explain the values that are used to populate Functional Location fields when you [run the Functional Location Extraction Interface](#).

Values Mapped From Maximo

Maximo Interface Label	Maximo Internal ID	Meridium APM Functional Location Field ID	Meridium APM Functional Location Field Caption
None. This value is not displayed on the Maximo interface.	CHANGEDATE	CMMS Last Changed Date	MI_FNCLOC00_CHANGE_DATE_D
This value appears to the right of the Location text box on the Maximo interface.	DESCRIPTION	Functional Location Description	MI_FNCLOC00_FNC_LOC_DESC_C
This value appears in the Long Description window.	DESCRIPTION_LONGDESCRIPTION	Functional Location Long Description	MI_FNCLOC00_FNC_LOC_LNG_DESC_C
Failure Class	FAILURECODE	Failure Class	MI_FNCLOC00_FAIL_CLASS_C
Location	LOCATION	Functional Location	MI_FNCLOC00_FNC_LOC_C
None. This value is not displayed on the Maximo interface.	LOCATIONSID	Functional Location Internal ID	MI_FNCLOC00_INTERNAL_ID_C
Priority	LOCPRIORITY	Criticality Indicator	MI_FNCLOC00_CRTCAL_IND_C
Parent	PARENT	Superior Functional Location	MI_FNCLOC00_SUPR_FNC_LOC_C
Site	SITEID	Site	MI_FNCLOC00_SITE_C

Maximo Interface Label	Maximo Internal ID	Meridium APM Functional Location Field ID	Meridium APM Functional Location Field Caption
Status	STATUS	System Status	MI_FNCLOC00_SYS_STATUS_C
Type	TYPE	Location Type	MI_FNCLOC00_TYPE_C

Constant Values

In addition to the values that are mapped from Maximo to Meridium APM Functional Location records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Functional Location Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MaxItems	100
InputParameters	MaxLimit	1000

Maximo Work Order Fields Mapped to Work History Records

The following tables explain the values that are used to populate Work History fields when you [extract Work Orders from Maximo](#).

Values Mapped From Maximo

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Actual Finish	ACTFINISH	Maintenance Completion Date	MI_EVWKHIST_MAINT_COMPL_D
Actual Labor Cost	ACTLABCOST	Actual Labor Cost	MI_EVWKHIST_ACT_LABOR_COST_N
Actual Labor Hours	ACTLABHRS	Actual Labor	MI_EVWKHIST_ACT_LABOR_TIME_N
Actual Material Cost	ACTMATCOST	Actual Material Cost	MI_EVWKHIST_ACT_MTRL_COST_N
Actual Service Cost	ACTSERVCOST	Actual Service Cost	MI_EVWKHIST_ACT_SERV_COST_N
Actual Start	ACTSTART	Maintenance Start Date	MI_EVWKHIST_MAINT_START_D
Actual Tool Cost	ACTTOOLCOST	Actual Tool Cost	MI_EVWKHIST_ACT_TOOL_COST_N
Actual Total Cost	ACTTOTALCOST	Maintenance Cost	MI_EVWKHIST_MAINT_CST_N
Asset/Location Priority	ASSETLOCPRIORITY	Equipment Location Priority	MI_EVWKHIST_EQU_LOC_PRIORITY_N

Maximo Work Order Fields Mapped to Work History Records

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Asset	ASSETNUM	Equipment ID	MI_EVENT_ASST_ID_CHR
Asset/Location Priority	CALCPRIORITY	Calculated Priority	MI_EVWKHIST_CALC_PRIORITY_N
Modified By	CHANGEBY	Modified By	MI_EVENT_MODFD_BY_CHR
None. This value is not visible in the Maximo interface.	CHANGEDATE	Order Last Change Date	MI_EVWKHIST_ORDR_CHNG_DT_D
Crew	CREWID	Crew ID	MI_EVWKHIST_CREW_ID_C
Description	DESCRIPTION	Order Description -AND- Event Short Description	MI_EVWKHIST_ORDR_DESC_C -AND- MI_EVENT_SHRT_DSC_CHR
This value appears in the Long Description window.	DESCRIPTION_LONGDESCRIPTION	Event Long Description	MI_EVENT_LNG_DSC_TX
Estimated Labor Cost	ESTLABCOST	Estimated Labor Cost	MI_EVWKHIST_EST_LABOR_COST_N
Estimated Labor Hours	ESTLABHRS	Estimated Labor	MI_EVWKHIST_EST_LABOR_TIME_N
Estimated Material Cost	ESTMATCOST	Estimated Material Cost	MI_EVWKHIST_EST_MTRL_COST_N
Estimated Service Cost	ESTSERVCOST	Estimated Service Cost	MI_EVWKHIST_EST_SERV_COST_N

Maximo Work Order Fields Mapped to Work History Records

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Estimated Tool Cost	ESTTOOLCOST	Estimated Tool Cost	MI_EVWKHIST_EST_TOOL_COST_N
None. This value is not visible in the Maximo interface.	JPNUM	Order Maintenance Plan	MI_EVWKHIST_ORDR_MAINT_PLAN_C
Priority Justification	JUSTIFYPRIORITY	Order Priority Description	MI_EVWKHIST_ORDR_PRTY_DESC_C
Lead	LEAD	Lead Craft	MI_EVWKHIST_LEAD_CRAFT_C
Location	LOCATION	Location ID	MI_EVENT_LOC_ID_CHR
Outside Labor Cost	OUTLABCOST	Actual Outside Labor Cost	MI_EVWKHIST_ACT_OUT_LBR_CST_N
Outside Material Cost	OUTMATCOST	Actual Outside Material Cost	MI_EVWKHIST_ACT_OUT_MTR_CST_N
Outside Tool Cost	OUTTOOLCOST	Actual Outside Tool Cost	MI_EVWKHIST_ACT_OUT_TL_CST_N
None. This value is not visible in the Maximo interface.	PMNUM	PM Number	MI_EVWKHIST_PM_NBR_C
Reported Date	REPORTDATE	Event Start Date	MI_EVENT_STRT_DT
Scheduled Finish	SCHEDFINISH	Scheduled Completion Date	MI_EVWKHIST_SCHED_COMPL_D
Scheduled Start	SCHEDSTART	Scheduled Start Date	MI_EVWKHIST_SCHED_START_D

Maximo Work Order Fields Mapped to Work History Records

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Site	SITEID	Site	MI_EVWKHIST_SITE_C
Status	STATUS	Order System Status	MI_EVWKHIST_ORDR_SYS_STAT_C
Target Finish	TARGCOMPDATE	Target Completion Date	MI_EVWKHIST_TARGET_COMPL_D
None. This value is not visible in the Maximo interface.	TARGSTARTDATE	Target Start Date	MI_EVWKHIST_TARGET_START_D
Work Order	WONUM	Event ID -AND- Order ID	MI_EVENT_ID -ANMI_EVWKHIST_ORDR_ID_CD-
Priority	WOPRIORITY	Order Priority	MI_EVWKHIST_ORDR_PRTY_C
None. This value is not visible in the Maximo interface.	WORKTYPE	Order Type Code	MI_EVWKHIST_ORDR_TYP_CD_C

Constant Values

In addition to the values that are mapped from Maximo to Meridium APM Work History records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Work Order Request Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MaxItems	100
InputParameters	MaxLimit	1000

Maximo Service Request Fields Mapped to Work History Records

The following tables explain the values that are used to populate Work History fields when you [extract Service Requests from Maximo](#).

Values Mapped From Maximo

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Asset	ASSETNUM	Equipment ID	MI_EVENT_ASST_ID_CHR
Summary	DESCRIPTION	Event Short Description	MI_EVENT_SHRT_DSC_CHR
Location	LOCATION	Location ID	MI_EVENT_LOC_ID_CHR
Site	SITEID	Site	MI_EVWKHIST_SITE_C
Service Request	TICKETID	Event ID	MI_EVENT_ID

Constant Values

In addition to the values that are mapped from Maximo to Meridium APM Work History records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Service Request Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MaxItems	100
InputParameters	MaxLimit	1000

Maximo Work Order Fields Mapped to Work History Detail Records

The following tables explain the values that are used to populate Work History Detail fields when you [extract Work Order failure information from Maximo](#).

Values Mapped From Maximo

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Asset	ASSETNUM	Equipment ID	MI_DTWKHIST_ASST_ID_C
Description	DESCRIPTION	Work History Detail Description	MI_DTWKHIST_EVNT_DTL_DESC_C
This value appears in the Long Description window.	DESCRIPTION_LONGDESCRIPTION	Detail Narrative	MI_DTWKHIST_DTL_NARTV_T
Location	LOCATION	Location ID	MI_DTWKHIST_LOC_ID_C
Problem Code	PROBLEMCODE	Condition Code	MI_DTWKHIST_CNDTN_CD_C
Site	SITEID	Site	MI_DTWKHIST_SITE_C

Maximo Interface Label	Maximo Internal ID	Meridium APM Work History Field Caption	Meridium APM Work History Field ID
Work Order	WONUM	Work History ID -AND- Order ID -AND- Work History Detail ID	MI_DTWKHIST_WRK_HISTRY_ID_C -AND- MI_DTWKHIST_ORDR_ID_C -AND- MI_DTWKHIST_EVNT_DTL_ID_C

Constant Values

In addition to the values that are mapped from Maximo to Meridium APM Work History Detail records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Work Order Detail Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MaxItems	100
InputParameters	MaxLimit	1000

Maximo Service Request Fields Mapped to Work History Detail Records

The following tables explain the values that are used to populate Work History Detail fields when you [extract Service Requests from Maximo](#).

Values Mapped From Maximo

Maximo Inter- face Label	Maximo Internal ID	Meridium APM Work His- tory Field Caption	Meridium APM Work History Field ID
Asset	ASSETNUM	Equipment ID	MI_DTWKHIST_ASST_ ID_C
Summary	DESCRIPTION	Work History Detail Description	MI_DTWKHIST_EVNT_ DTL_DESC_C
Location	LOCATION	Location ID	MI_DTWKHIST_LOC_ ID_C
Site ID	SITEID	Site	MI_DTWKHIST_SITE_C
Service Request	TICKETID	Order ID -AND- Work History Detail ID	MI_DTWKHIST_ORDR_ ID_C -AND- MI_DTWKHIST_EVNT_ DTL_ID_C

Constant Values

In addition to the values that are mapped from Maximo to Meridium APM Work History records, several values are used during the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Service Request Detail Extraction Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	MaxItems	100
InputParameters	MaxLimit	1000

Recommendation Values Mapped to Work Orders

The following tables explain the values that are used to populate Work Order fields when you [create Maximo Work Orders from Recommendation records in Meridium APM](#).

Values Mapped from a Meridium APM Field

Work Request Field	Meridium APM Family	Meridium APM Field Caption
ASSETNUM	Equipment	Equipment Technical Number ¹
LOCATION	Functional Location	Functional Location ²
DESCRIPTION	Recommendation	Work Request Reference
TARGCOMPDATE	Recommendation	Target Completion Date

Constant Values

In addition to the values that are mapped from Meridium APM Recommendation records to Maximo, several values are used in the data transfer process and are defined as constants in the CMMS Mapping records that are linked to the CMMS Interface record for the Work Request Creation Interface. These constant values are outlined in the following table.

Element Type	Element Field	Constant Value
InputParameters	TransLanguage	EN
MIWO_WORKORDER1Type	ACTLABCOST	0
MIWO_WORKORDER1Type	ACTMATCOST	0
MIWO_WORKORDER1Type	ACTSERVCOST	0
MIWO_WORKORDER1Type	ACTTOOLCOST	0
MIWO_WORKORDER1Type	ESTATAPPRLABCOST	0
MIWO_WORKORDER1Type	ESTATAPPRMATCOST	0

Recommendation Values Mapped to Work Orders

Element Type	Element Field	Constant Value
MIWO_ WORKORDER1Type	ESTATAPPRSERCOST	0
MIWO_ WORKORDER1Type	ESTATAPPRTOOLCOST	0
MIWO_ WORKORDER1Type	ESTLABCOST	0
MIWO_ WORKORDER1Type	ESTMATCOST	0
MIWO_ WORKORDER1Type	ESTSERVCOST	0
MIWO_ WORKORDER1Type	ESTTOOLCOST	0
MIWO_ WORKORDER1Type	OUTLABCOST	0
MIWO_ WORKORDER1Type	OUTMATCOST	0
MIWO_ WORKORDER1Type	OUTTOOLCOST	0
MIWO_ WORKORDER1Type	TARGCOMPDATE	0

Baseline Values Mapped to Service Requests

The following tables explain the values that are used to populate Service Request fields when you [create Maximo Service Requests from Recommendation records in Meridium APM](#).

Values Mapped from a Meridium APM Field

Work Request Field	Meridium APM Family	Meridium APM Field Caption
ASSETNUM	Equipment	Equipment Technical Number ¹
LOCATION	Functional Location	Functional Location ²
DESCRIPTION	Recommendation	Work Request Reference
TARGCOMPDATE	Recommendation	Target Completion Date

Constant Values

In addition to the values that are mapped from Meridium APM records to Maximo, the following value is used in the data transfer process and is defined as a constant in the CMMS Mapping record that is linked to the CMMS Interface record for the Work Request Creation Interface:

- Element Type: InputParameters
- Element Field: TransLanguage
- Constant Value: EN

CMMS Interface Record

Used to identify two main items:

- How the Meridium APM system will communicate with the Maximo system.
- Which interface the record supports, which indicates the type of Maximo data that will be created or extracted.

CMMS Mapping Record

Used to identify how values will be mapped and which values will be mapped between the Meridium APM system and the Maximo system. Each CMMS Mapping record is linked to one predecessor [CMMS Interface record](#) that identifies the interface that uses that mapping.

CMMS System Record

Used to store identifying information about your Maximo system. The baseline Meridium APM database includes a CMMS System record that you can use as a starting point for identifying your Maximo system.

Equipment Extraction Interface

Allows you to extract data about assets from your Maximo system and import them into your Meridium APM system as Equipment records.

Functional Location Extraction Interface

Allows you to extract data about locations from your Maximo system and import them into your Meridium APM system as Functional Location records.

Interface Log Record

Created automatically each time an interface is run to store information about the process, such as the status of the process (e.g., Completed with warnings), the date the interface was run, and the parameters that were used to run the interface.

Service Request Creation Interface

Allows you to create and update Service Requests in your Maximo system using values in Recommendation records in your Meridium APM system.

Service Request Detail Extraction Interface

Allows you to extract Service Requests from your Maximo system and import it into your Meridium APM system as Work History Detail records.

Service Request Extraction Interface

Allows you to extract Service Requests from your Maximo system and import them into your Meridium APM system as Work History records.

Work Order Creation Interface

Allows you to create and update Work Orders in your Maximo system using values in Recommendation records in your Meridium APM system.

Work Order Detail Extraction Interface

Allows you to extract Work Order failure information from your Maximo system and import it into your Meridium APM system as Work History Detail records.

Work Order Extraction Interface

Allows you to extract Work Orders from your Maximo system and import them into your Meridium APM system as Work History records.