Meridium APM Calibration Management

3.6.1.5.0

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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.

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Overview of Calibration Management

The Meridium APM *Calibration Management* module lets you track the performance of certain equipment, such as instruments and analyzers, by evaluating the detailed results of the calibration events associated with those pieces of equipment. Calibration event data can be recorded manually, using Calibration Event records, or automatically, using an automated data calibrator device or interface from an external system.

Calibration Management provides tools that you can use to:

- **Define the requirements of the calibration events.** Calibration requirements are stored in Calibration Template records. These records store the number of test points, ranges, and the accuracy required for that defined calibration.
- **Define a schedule on which calibration events should occur** and audit changes to requirements and schedules. You can use Calibration Task records to schedule calibration events on a regular basis or as a single event. You can integrate Calibration Task records with an EAM system.
- **Record and evaluate calibration event data.** Calibration results are recorded in Calibration Event records. Calibration Event families are provided for the following types of calibrations:
  - Analog
  - Discrete
  - Analyzers
  - Weight Scales
  - Functional Test

  The calibration results that are stored in Calibration Event records can be used to assess the overall performance of the piece of equipment and evaluate the optimal calibration frequency for that piece of equipment.

Calibration Management System Requirements

The *Calibration Management* license is required to take advantage of Calibration Management. In addition, your system must contain the basic Meridium APM system architecture and the files that support the device(s) that you will use to perform automated calibrations. The following devices are supported by Calibration Management:

- **Beamex MC5 Documenting Process Calibrator:** You can install the supporting files for this device using the Meridium APM Drivers installer, which is provided in the Meridium APM 3rd party distribution package.
- **Fluke 74x and 75x Documenting Process Calibrators:** The supporting files for these devices are installed automatically when you install the Meridium APM Framework application using the Meridium APM Framework installer.
- **Meriam MFT4010 Documenting Process Calibrator:** You can install the supporting files for this device using the Meriam installer, which is provided in the Meridium APM 3rd party distribution package.

After you have installed and configured the basic system architecture, you will need to perform some configuration tasks specifically for the Calibration Management module.

Current Calibration Model vs. Custom Calibration Model

This documentation provides details on using Calibration Management with the *currentCalibration Management model*. A custom model was required in previous releases. While the current version of the Calibration Management product is backwards compatible with earlier versions, this documentation does not attempt to explain how the current product will function if you have elected to continue using the former model. If you are using a model that was available in previous versions, you will need to refer to the documentation for that version.

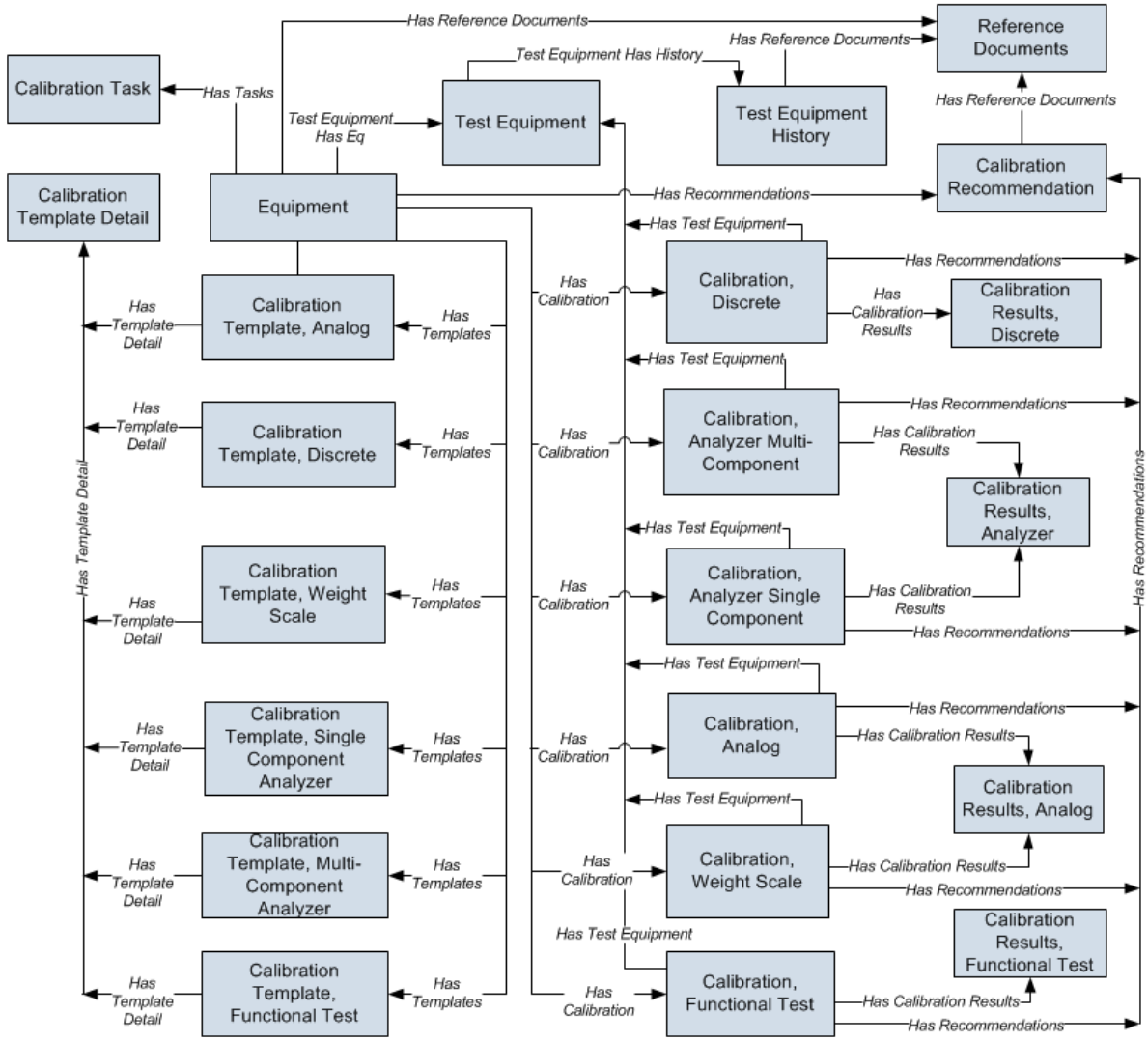
IMPORTANT: Throughout this documentation, wherever we refer to *baseline* functionality or families, we mean the baseline features within the *current* Calibration Management model. If you are using the former model, you may see baseline functionality that deviates from what is described in this documentation.

To enable the current Calibration Management model, on the **Calibration Management Administration** page, you must select the **Use the Base Calibration Management model** check box, and then specify the two queries that return data from the following families:

- Equipment
- Calibration Task

Calibration Management Data Model

Calibration Management leverages the fundamental Meridium APM entity and relationship family infrastructure for storing data. The following diagram illustrates how records are linked to one another within the Calibration Management module. The shaded boxes represent entity families, and the arrows represent relationship families. You can determine the direction of each relationship definition from the direction of the arrow head: the box from which the arrow originates is the *predecessor* in that relationship definition, and the box to which the arrow head points is the *successor* in that relationship definition. For example, you can see that Calibration Task records are linked to Equipment records through the Has Tasks relationship, where the Equipment family is the predecessor.



While the Calibration Management module can be configured to work with the baseline Functional Location family, this documentation assumes that you are using the baseline *Equipment* family as defined in the preceding data model image.

Optional Calibration Management Relationship and Entity Families

In addition to the entity and relationship families that appear in the Calibration Management data model image, the following families exist in the baseline Meridium APM database for use with Calibration Management. These families, however, are not linked by default to any of the Calibration Management families shown in the data model, and to simplify the data model image, these families were left out:

- Standard Gas
- Standard Gas Components
- Has Standard Gas
- Has Components

In the baseline Meridium APM database, the Standard Gas family is related to the Standard Gas Components family through the *Has Components* relationship family. Standard Gas records and Standard Gas Component records store information about gas components that are associated with a piece of equipment or a location. If you want to link Standard Gas records to Equipment records, you can define the relationship using the *Has Standard Gas* relationship family.

Additionally, if you want to be able to link Calibration Task records to Calibration Template records, you can link the Calibration Task family to the desired Calibration Template families through the *Has Template*relationship family.

Calibration Family Reports

By default, the Calibration Event families are associated with reports so that records in these families can be printed using a pre-defined report format. The following table summarizes the family reports that are provided for use with Calibration and associated by default with the Calibration Event families. Each of these reports is located in the following Catalog folder: \\Public\Meridium\Modules\Calibration Management\Reports.

Family	Report
Calibration, Analog	Analog Calibration Report
Calibration, Analyzer Multi-Component	Analyzer MultiComponent Calibration Report
Calibration, Analyzer Single Component	Analyzer SingleComponent Calibration Report
Calibration, Discrete	Discrete Calibration Report
Calibration, Functional Test	Functional Test Calibration Report
Calibration, Weight Scale	WeightScale Calibration Report

To use these reports, no additional configuration is necessary. You need to modify these reports only if you want them to work differently than they do by default.

Calibration Management Workflow

The Calibration Management workflow consists of the following steps, which should be completed in the order in which they are listed here:

1. **Identify the pieces of equipment that require calibration**.
2. **Define the test equipment that you will use to perform the calibration.** To do so, for *each* piece of test equipment, you will need to create a Test Equipment record. Test Equipment records store details about the piece of test equipment, including whether or not the piece of test equipment is certified.
3. **Using Calibration Management, define the type of calibration that should be performed on those pieces of equipment**. To do so, for *each* piece of equipment that requires calibration, you will need to create one Calibration Template record. Calibration Template records store details on the type of calibration that the piece of equipment requires. You can create a Calibration Template record in the Calibration Template family that corresponds to the type of calibration that should be performed (e.g., Calibration Template, Analog records store data specific to an *analog* calibration). Calibration Template records also store the information required by the device so that you can perform an automated calibration, such as the Asset ID of the piece of equipment that requires calibrating.
4. **Using Calibration Management,define the schedule on which the calibrations should be performed**. To do so, for each piece of equipment that requires calibration, you will need to create one Calibration Task record. Calibration Task records store the schedule on which a calibration should be performed. You can use a single Calibration Task record to represent a recurring schedule, or you can create one Calibration Task record for each calibration. Throughout this documentation, we assume that you have created a single recurring Calibration Task record.
5. **In your facility, calibrate pieces of equipment as needed per the defined schedule**.
6. **Transfer the calibration data to the Meridium APM system**. You can do so in one of two ways:
    - Transfer it automatically from an automated data collecting device. When you transfer data from the device, Calibration Event records are created automatically and populated with the details from that calibration event and the test equipment used to perform the calibration. If you use this approach, the Calibration Event record will be linked automatically to the Equipment record that identifies the piece of equipment on which the calibration was performed.

    -or-

    - Enter it manually into Calibration Event records. If you use this approach, you will need to create each Calibration Event record manually, and link it to the Equipment record that identifies the piece of equipment on which the calibration was

performed using a link on the **Associated Pages** menu. You can also link it to the Test Equipment record that identifies the piece of equipment used to perform the calibration using the **Test Equipment** tab on the datasheet.

In both cases, for each calibration that is performed, one Calibration Event record will need to exist to store data that represents a snapshot of that calibration, including the type of calibration that was performed and the results of the calibration.

7. **Evaluate the results**. You can evaluate the results using the reports and graphs that are delivered with Calibration Management and other Meridium APM modules.
8. **Create and assign recommendations.** You can create Calibration Recommendation records to store recommendations and link them to Equipment records and Calibration Event records.

Throughout the documentation, we assume that a Super User or a member of the MI Calibration Administrator Security Group has configured the appropriate administrative settings.

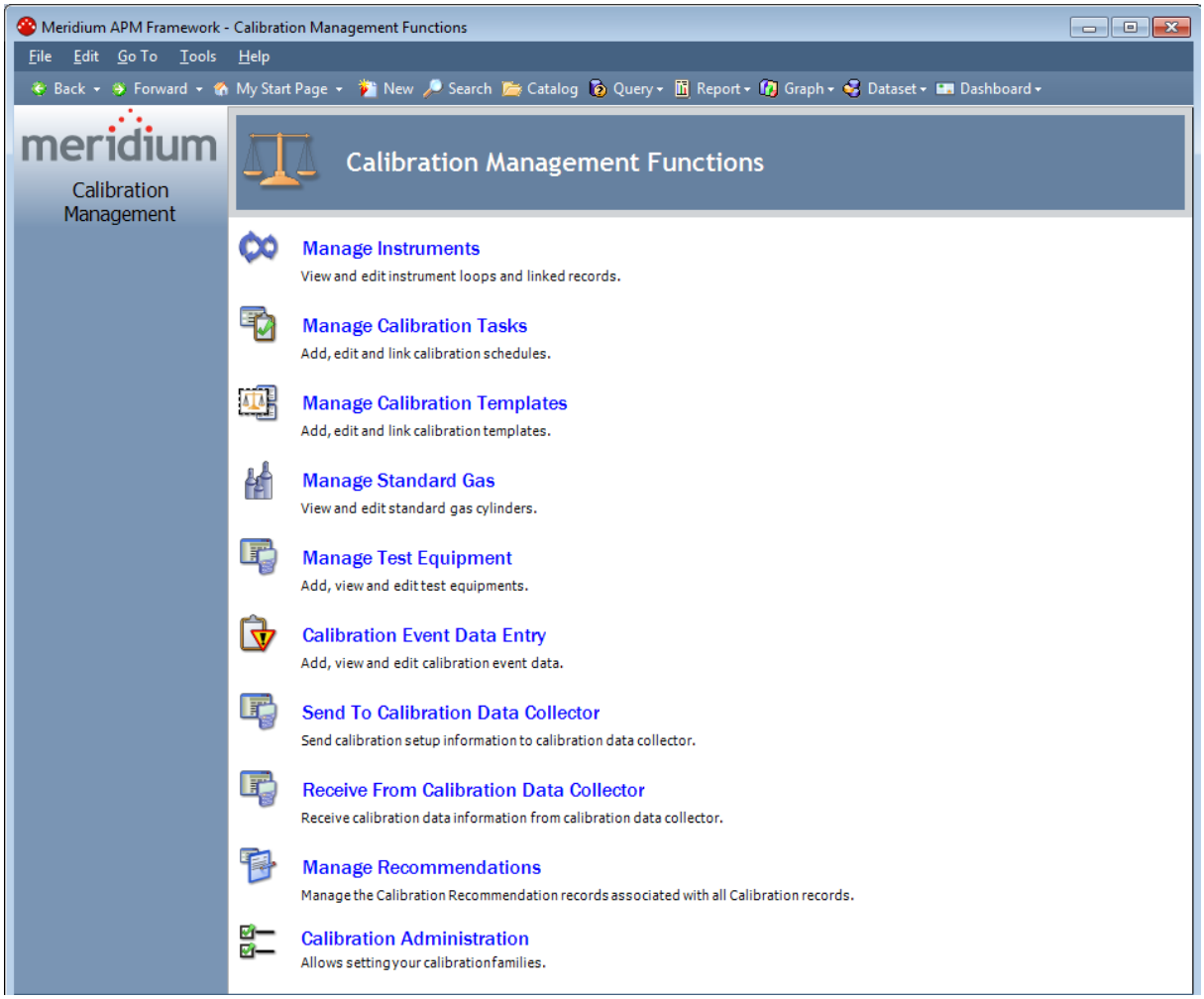
Accessing the Calibration Management Functions Page

The **Calibration Management Functions** page serves as a starting point for all the tasks that you can perform using Calibration Management.

To access the Calibration Management Functions page:

- On the Meridium APM Framework main menu, click **Go To**, point to **Asset Safety**, and then click **Calibration Management.**

  The **Calibration Management Functions** page appears.



Aspects of the Calibration Management Functions Page

The **Calibration Management Functions** page displays links that provide access to commonly used Calibration Management features.

The following links are available on the **Calibration Management Functions** page:

- **Manage Instruments:** Provides access records in the Equipment family, which contains records representing the Instruments that you want to manage using Calibration Management.
    - If a query has not been specified in the **Manage Instruments Query Path** text box on the **Calibration Administration** page, when you click this link, the **Search** page appears, where you can search for the desired Equipment record.
    - If a query path has been specified in the **Manage Instruments Query Path** text box on the **Calibration Administration** page, the query results will appear.
- **Manage Calibration Tasks:** Displays the **Task Options** dialog box, where you can choose to create a new Calibration Task or search for an existing Calibration Task. You should not use this option with the current Calibration Management model. Instead, you can create Calibration Task records using Associated Pages that have been configured for the Equipment family.
- **Manage Calibration Templates:** Displays the **Template Options** dialog box, where you can choose to create a new template or access an existing template. You should not use this option with the current Calibration Management model. Instead, you can create Calibration Template records using Associated Pages that have been configured for the Equipment family.
- **Manage Standard Gas:** Displays the **Standard Gas Options** dialog box, where you can choose to create a new Standard Gas Cylinder record or search for existing Standard Gas Cylinder records.
- **Manage Test Equipment:** Displays the **Test Equipment Options** dialog box, where you can choose to create a new Test Equipment record or search for existing Test Equipment records.
- **Calibration Event Data Entry:** Displays the **Calibration Event Options** dialog box, where you can choose to create a new Calibration Event record using the **Event Builder** or by running a stored query. You should not use this option with the current Calibration Management model. Instead you can create Calibration Event records using Associated Page links that have been configured for the Equipment family.
- **Send To Calibration Data Collector:** Displays the **Select a Device and Properties** dialog box, which you can use to send Calibration data to a device.
- **Receive From Calibration Data Collector:** Displays the **Select a Device and Properties** dialog box, which you can use to receive Calibration data from a device.

- **Manage Recommendations:** Displays the **Recommendation Management** page, which allows you to create and view Calibration Recommendation records.
- **Calibration Administration:** Displays the **Calibration Administration** page, where you can configure settings for Calibration Management.

First-Time Deployment Workflow

Deploying and configuring Calibration Management 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 Calibration Management module on top of the basic 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 steps to take advantage of Calibration Management 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	Install the supporting files for the Beamex MC5 device on all the Meridium APM Framework machines that will connect to the Beamex MC5 device.	Optional	This step is necessary only if you will perform automated calibrations using a Beamex MC5 device.
2	Install the supporting files for the Meriam MFT 4010 device on all the Meridium APM Framework machines that will connect to the Meriam MFT 4010 device.	Optional	This step is necessary only if you will perform automated calibrations using a Meriam MFT4010 device.
3	If you have equipment or location data in families outside of the baseline Equipment and Functional Location families, review the Calibration Management data model to determine which relationship definitions you will need to modify to include your custom families. Modify any relationship definitions as needed via Configuration Manager.	Optional	This step is necessary only if you will store equipment or location data in families other than the baseline Equipment and Functional Location families.
4	Assign the desired Security Users to the Calibration Management Security Groups in Configuration Manager.	Required	None

Step	Task	Required/Optional	Notes
5	Configure the Has Standard Gas relationship family to include the desired Instrument families as predecessors to the Standard Gas Cylinder family in Configuration Manager.	Required	None
6	Specify the path to the Instruments query.	Required	None
7	Select the **Use the Base Calibration Management model** check box.	Required	None
8	Modify the Instrument Data query.	Optional	This step is necessary only if you are using a family *other than* the baseline Equipment family to store your equipment data.
9	Specify the path to the Instrument Data query.	Required	None
10	Specify the path to the Task query.	Required	None
11	Configure default values for Calibration Template and Calibration Event Records.	Required	None

Upgrade or Update Calibration Management to 3.6.1.5.0

The following tables list the steps that are required to update or upgrade Calibration Management to 3.6.1.5.0. These steps assume that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Update from any version V3.6.1.0.0 through V3.6.1.4.0

This module will be updated to 3.6.1.5.0 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 V3.6.0.12.7

Step	Task	Required/Optional	Notes
1	Install the supporting files for the Beamex MC5 device on all the Meridium APM Framework machines that will connect to the Beamex MC5 device.	Optional	This step is necessary only if you will perform automated calibrations using a Beamex MC5 device.
2	Install the supporting files for the Meriam MFT 4010 device on all the Meridium APM Framework machines that will connect to the Meriam MFT 4010 device.	Optional	This step is necessary only if you will perform automated calibrations using a Meriam MFT4010 device.

Upgrade from any version V3.5.1.0.0 through V3.5.1.12.1

Step	Task	Required/Optional	Notes
1	Install the supporting files for the Beamex MC5 device on all the Meridium APM Framework machines that will connect to the Beamex MC5 device.	Optional	This step is necessary only if you will perform automated calibrations using a Beamex MC5 device.

Step	Task	Required/Optional	Notes
2	Install the supporting files for the Meriam MFT 4010 device on all the Meridium APM Framework machines that will connect to the Meriam MFT 4010 device.	Optional	This step is necessary only if you will perform automated calibrations using a Meriam MFT4010 device.

Upgrade from any version V3.5.0 SP1 LP through V3.5.0.1.10.0

Step	Task	Required/Optional	Notes
1	Install the supporting files for the Beamex MC5 device on all the Meridium APM Framework machines that will connect to the Beamex MC5 device.	Optional	This step is necessary only if you will perform automated calibrations using a Beamex MC5 device.
2	Install the supporting files for the Meriam MFT 4010 device on all the Meridium APM Framework machines that will connect to the Meriam MFT 4010 device.	Optional	This step is necessary only if you will perform automated calibrations using a Meriam MFT4010 device.

Upgrade from any version V3.5.0 through V3.5.0.0.7.1

Step	Task	Required/Optional	Notes
1	Install the supporting files for the Beamex MC5 device on all the Meridium APM Framework machines that will connect to the Beamex MC5 device.	Optional	This step is necessary only if you will perform automated calibrations using a Beamex MC5 device.

Step	Task	Required/Optional	Notes
2	Install the supporting files for the Meriam MFT 4010 device on all the Meridium APM Framework machines that will connect to the Meriam MFT 4010 device.	Optional	This step is necessary only if you will perform automated calibrations using a Meriam MFT4010 device.

Upgrade from any version V3.4.5 through V3.4.5.0.1.4

Step	Task	Required/Optional	Notes
1	Install the supporting files for the Beamex MC5 device on all the Meridium APM Framework machines that will connect to the Beamex MC5 device.	Optional	This step is necessary only if you will perform automated calibrations using a Beamex MC5 device.
2	Install the supporting files for the Meriam MFT 4010 device on all the Meridium APM Framework machines that will connect to the Meriam MFT 4010 device.	Optional	This step is necessary only if you will perform automated calibrations using a Meriam MFT4010 device.

Calibration Management Security Groups

The following baseline Security Groups are provided for Calibration Management:

- **MI Calibration Administrator:** Provides users with administrative access to Calibration Management.
- **MI Calibration User:** Provides users with general access to Calibration Management, including creating records for calibration events.

All Security Users who need to access Calibration Management functionality must be assigned to one of these two groups. Family-level privileges alone are not enough to allow a user to access Calibration Management.

Note: Any Security User that is a member of the MI Calibration Administrator Security Group should also be added to MI Devices Administrators Security Group. Members of the MI Calibration User Security Group should also be added to MI Devices Power Users Security Group. This will allow Calibration users to perform automated Calibrations.

The following table summarizes the baseline privileges for these Security Groups.

Family	MI Calibration Administrator	MI Calibration User
Alert	View, Update, Insert, Delete	View, Update, Insert, Delete
Calibration Recommendation	View, Update, Insert, Delete	View, Update, Insert
Calibration Setup Defaults	View, Update, Insert, Delete	View
Calibration Task	View, Update, Insert, Delete	View, Update, Insert, Delete
Calibration Template	View, Update, Insert, Delete	View
Calibration Template Defaults	View, Update, Insert, Delete	View
Calibration Template Detail	View, Update, Insert, Delete	View
Calibration Template Detail, Analyzer	View, Update, Insert, Delete	View
Calibration (Event)	View, Update, Insert, Delete	View, Update, Insert, Delete

Family	MI Calibration Administrator	MI Calibration User
Calibration Result	View, Update, Insert, Delete	View, Update, Insert, Delete
Equipment	View	View
Functional Location	View	View
SAP System	View	None
Task	View, Update, Insert, Delete	None
Task Types	View, Update, Insert, Delete	View
Test Equipment	View, Update, Insert, Delete	View, Update, Insert, Delete
Test Equipment History	View, Update, Insert, Delete	View, Update, Insert, Delete
Work History	View	View
Work History Detail	View	View
Equipment Has Equipment	View	View
Functional Location Has Equipment	View	View
Functional Location Has Functional Location(s)	View	View
Has Associated Recommendation	View, Update, Insert, Delete	View
Has Calibration	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Calibration Results	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Consolidated Recommendations	View, Update, Insert, Delete	View
Has Driving Recommendation	View, Update, Insert, Delete	View
Has Event Detail	View	View

Family	MI Calibration Administrator	MI Calibration User
Has Recommendations	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Reference Documents	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Standard Gas	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Standard Gas Details	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Superseded Recommendations	View, Update, Insert, Delete	View
Has Task Revision	View, Update, Insert, Delete	None
Has Tasks	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Templates	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Template Detail	View, Update, Insert, Delete	View
Has Test Equipment	View, Update, Insert, Delete	View, Update, Insert, Delete
Has Work History	View	View
Reference Document	View, Update, Insert, Delete	View
Test Equip Has Equip	View, Update, Insert, Delete	View, Update, Insert, Delete
Test Equipment Has History	View, Update, Insert, Delete	View, Update, Insert, Delete

Note: As with all family-level security privileges, all privileges are automatically spread to the subfamilies of the families listed in the table.

Configuring the Has Standard Gas Relationship

The Has Standard Gas relationship family is used to link Standard Gas Cylinder records to customer-defined instrument records. Because the baseline Meridium APM product does not include instrument families, you will need to define this relationship yourself after you have created the desired instrument families. After you have chosen the desired families, you will need to create the following relationship definition:

- **Predecessor:** Customer-defined instrument family
- **Predecessor Cardinality:** Zero or many
- **Successor:** Standard Gas Cylinder
- **Successor Cardinality:** Zero or Many

Accessing the Calibration Administration Page

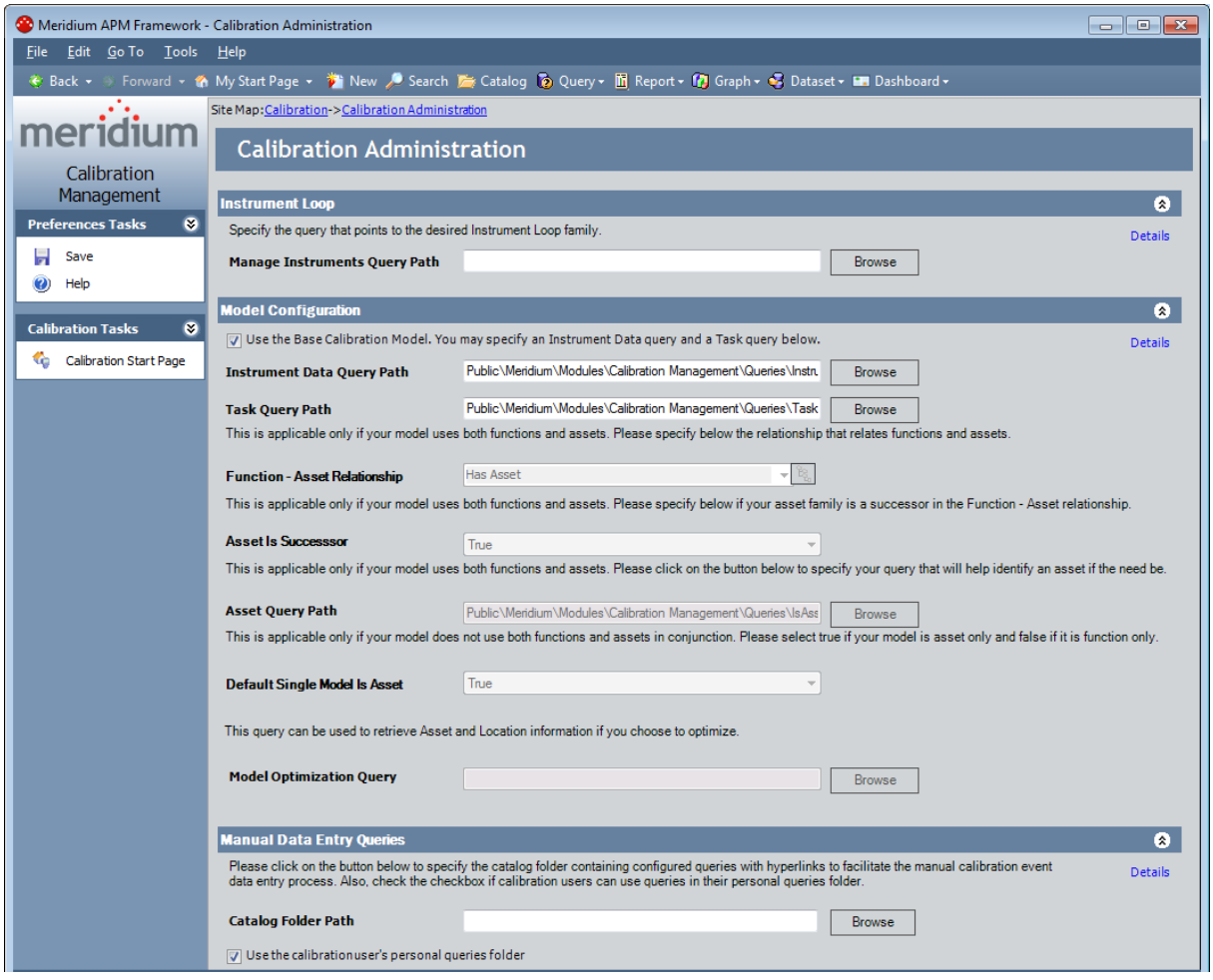
The **Calibration Administration** page provides options that you can use to specify that you are using the current Calibration Management model and the queries that will be used to populate Calibration Template and Calibration Task records. An administrative user must configure these settings before other Calibration users begin using Calibration Management.

Note: To configure settings on the **Calibration Administration** page, you must be a Super User or a member of the MI Calibration Administrator Security Group and have access to the Catalog folder \\Public\Meridium\Modules\Calibration Management.

To access the Calibration Administration page:

- On the Calibration Management Functions page, click the **Calibration Administration** link.

  The **Calibration Administration** page appears.



Aspects of the Calibration Administration Page

The **Calibration Administration** page contains three sections:

- **Instrument Loop:** Contains the **Manage Instruments Query Path** option, which lets you specify the path to the query that returns the records for the Equipment family. If you specify a query for this setting, when you click the **Manage Instruments** link on the **Calibration Management Functions** page, the query results appear automatically. If you do not specify a query for this setting, when you click the **Manage Instruments** link, the **Search** page will appear, and you will need to specify the desired family and search for the records.
- **Model Configuration:** Contains the following options:
  - **Use the Base Calibration Model:** Specifies that you want to use the current Calibration Management model. This check box is cleared by default. When this check box is selected, the **Instrument Data Query Path** and **Task Query Path** options are enabled, and all other options in the **Model Configuration** section are disabled.

  Note: Throughout this documentation, we assume that the**Use the Base Calibration Model** check box is selected.

  - **Instrument Data Query Path:** Lets you specify the path to the query that returns the records for the Equipment family. This query is used to populate equipment data in new Calibration Template records when you create these records via a link on the **Associated Pages** menu when you are viewing an Equipment record. This field is enabled only if the **Use the Base Calibration Model** check box is selected. If desired, you can use the baseline Instrument Data Query, which is stored in the Catalog folder \\Public\Meridium\Modules\Calibration Management\Queries.
  - **Task Query Path:** Lets you specify the path to the query that returns the records for the Calibration Task family. This field is enabled only if the **Use the Base Calibration Model** check box is selected. If desired, you can use the baseline Task Query, which is stored in the Catalog folder \\Public\Meridium\Modules\Calibration Management\Queries.
  - **Function-Asset Relationship:** This option is disabled when the **Use the Base Calibration Model** check box is selected.
  - **Asset Is Successor:** This option is disabled when the **Use the Base Calibration Model** check box is selected.
  - **Asset Query Path:** This option is disabled when the **Use the Base Calibration Model** check box is selected.
  - **Default Single Model Is Asset:** This option is disabled when the **Use the Base Calibration Model** check box is selected.
  - **Model Optimization Query:** This option is disabled when the **Use the Base Calibration Model** check box is selected.

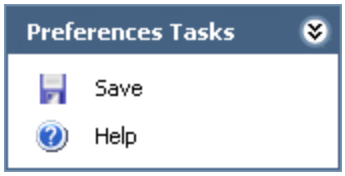
- **Manual Data Entry Queries:** Contains the following options:
  - **Catalog Folder Path:** Lets you define the path to the Catalog folder that will be used to store queries for *manual* Calibration data entry. You should not use this option with the current Calibration Management model.
  - **Use the calibration user's personal queries folder:**This option is not functional.

To the right of each of the sections in the preceding list, a **Details** link appears and displays the context-sensitive help topic for the **Calibration Administration** page.

The **Calibration Administration** page contains the following task menus:

- Preferences Tasks
- Calibration Tasks

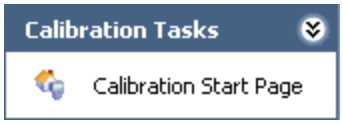
Preferences Tasks



The **Preferences Tasks** menu on the **Calibration Administration** page contains the following options:

- **Save:** Saves the current administrative settings.
- **Help:** Displays the context-sensitive Help topic for the **Calibration Administration** page.

Calibration Tasks



The **Calibration Tasks** menu on the **Calibration Administration** page contains the following link:

- **Calibration Start Page:** Displays the Calibration Management Functions page. If there are unsaved changes on the **Calibration Administration** page, a dialog box appears, asking if you want to save your changes, and then the **Calibration Management Functions** page appears.

About the Instrument Data Query

The following description assumes that you are using the Base Calibration model and creating Calibration Template records using the links on the **Associated Pages** menu in the Record Manager. When you create a Calibration Template record in this way, the Meridium APM system uses the Instrument Data Query to populate the Calibration Template record with values from the Equipment record to which you are linking the Calibration Template record.

The Instrument Data Query contains a prompt for the Entity Key of the Equipment record to which you are linking the new Calibration Template record. When you create a Calibration Template record and link it to an Equipment record, the Entity Key of the Equipment record is passed into the query prompt automatically. Then, the query returns values in the Equipment record with the provided Entity Key, and those values are used to populate the corresponding fields in the Calibration Template record.

By default, the query returns values in the following fields in the baseline *Equipment* family:

- **Equipment ID:** Used to populate the Template ID and Tag Name fields in the Calibration Template record.
- **Equipment Short Description:** Used to populate the Tag Description field in the Calibration Template record.
- **Manufacturer:** Used to populate the Manufacturer field in the Calibration Template record.
- **Model Number:** Used to populate the Model Number field in the Calibration Template record.
- **Serial Number:** Used to populate the Serial Number field in the Calibration Template record.

Specifying the Instruments Query

The query that you specify on the **Calibration Administration** page is used to display query results for the Equipment family when you click the **Manage Instruments** link on the **Calibration Management Functions** page.

Note: If the **Manage Instruments Query Path** setting is not defined, when you click the **Manage Instruments** link on the **Calibration Management Functions** page, the **Search** page will appear, and the **Search In** list will contain ALL Meridium APM families by default.

To specify the Instruments query:

1. On the Calibration Administration page, in the **Instrument Loop** section, in the **Manage Instruments Query Path** text box, type the Catalog path to the desired query.

   -OR-

   Click the **Browse** button to search for the desired query. These instructions assume that you have clicked this button.

   The **Save As** dialog box appears, where you can navigate to the desired query.

2. Navigate to the desired query, and click the **Open** button.

   The Catalog query path to the selected query appears in the**Manage Instruments Query Path**text box.

Specifying the Path to the Instrument Data Query

The following instructions provide details on specifying the path to the query that returns the records for the Equipment family, which is used for storing information about the instruments in your facility.

The baseline Instrument Data query is provided for this purpose and returns data in the baseline Equipment family by default. If desired, you can use the baseline Instrument Data Query, which is stored in the Catalog folder \\Public\Meridium\Modules\Calibration Management\Queries. This query is used to automatically populate data from Equipment records to a Calibration Template record, which you can use to send data to a device. Using Calibration Template records, you can also specify information about the calibration that you want to perform, and this information will be sent to a device for automated calibrations and to the Calibration Event datasheet for manual calibrations.

To specify the path to the Instrument Data query:

1. On the **Calibration Administration** page, in the **Model Configuration** section, type the Catalog path to the desired query.

   -OR-

   Click the **Browse** button to search for the desired query. These instructions assume that you have clicked this button.

   The **Save As** dialog box appears, where you can navigate to the desired query.

2. Navigate to the desired query, and click the **Open** button.

   The Catalog query path to the selected query appears in the **Instrument Data Query Path** text box.

Specifying the Path to the Task Query

The following instructions provide details on specifying the path to the query that returns records for the Calibration Task family. Meridium APM provides the baseline Task Query that is stored in the Catalog folder \\Public\Meridium\Modules\Calibration Management\Queries. The Calibration Task query is used to populate the Calibration Task ID field in Calibration Template records so that calibration and equipment data can be shared between these records.

These instructions assume that you have selected the **Use the Base Calibration Model** check box.

To specify the path to the Task query:

1. On the **Calibration Administration** page, in the **Model Configuration** section, type the Catalog path to the desired query.

   -OR-

   Click the **Browse** button to search for the desired query. These instructions assume that you have clicked this button.

   The **Save As** dialog box appears, where you can navigate to the desired query.

2. Navigate to the desired query, and click the **Open** button.

   The Catalog query path to the selected query appears in the **Task Query Path** text box.

About Managing Default Values for Calibration Template and Calibration Event Records

When you create a Calibration Template record or a Calibration Event record, some values are populated in the record by default. The *default values* that appear are stored in baseline Meridium APM records. Additionally, the data stored in these baseline Meridium APM records is used when you send data to a device for an automated calibration. If desired, you can modify the values in these baseline records so that the Calibration Template and Calibration Event records are populated with the default values that you specify.

Two baseline families are provided for this purpose:

- **Calibration Setup Defaults:** Stores default values for the Calibration Template families and Calibration Event families. One Calibration Setup Defaults record with the Record ID *My Template Defaults* is provided in the baseline Meridium APM database. You can modify the values in the baseline record if desired.
- **Calibration Template Defaults:** Stores default values for the Calibration Template families. Numerous baseline records exist in this family. When you send data to a device, you are sending data that is stored in Calibration Template records and Calibration Template Defaults records. You can modify the values in the baseline records if desired.

Only Super Users and members of the MI Calibration Administrator Security Group can modify the baseline records in these families.

Installing Supporting Files for the Beamex MC5 Device on Meridium APM Framework Machines

If you will use the Beamex MC5 device to perform automated calibrations, you must first install supporting files on the Meridium APM Framework machines that will be connected to the device. You can install these files using the Meridium APM Drivers installer.

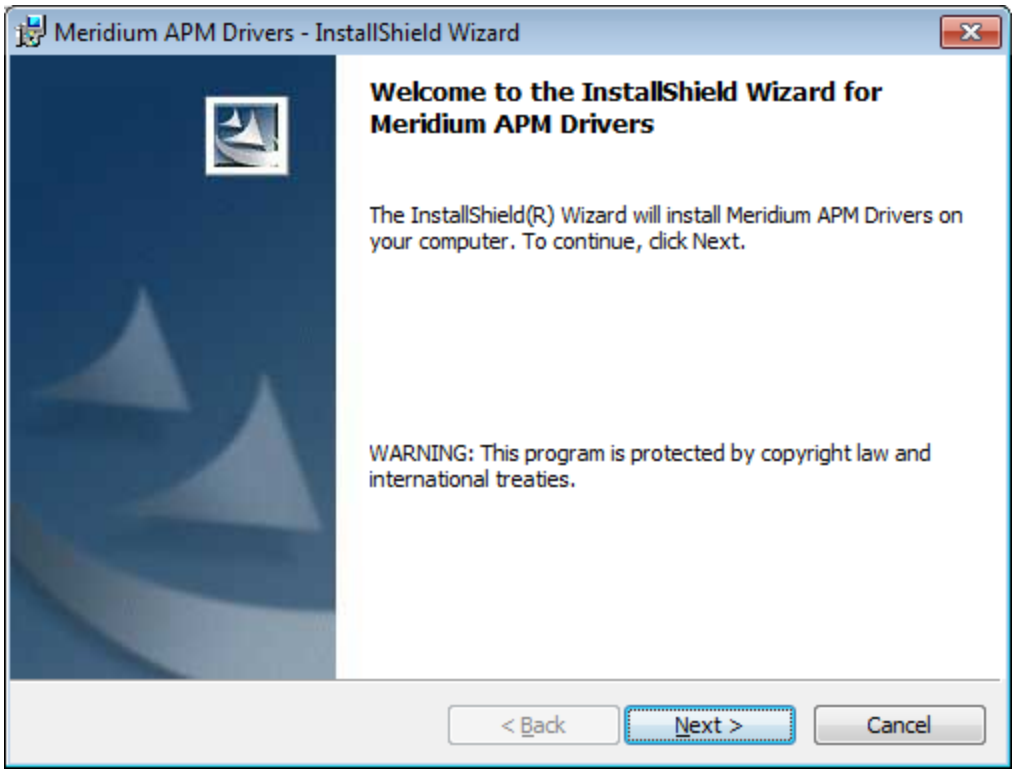
To install the supporting files for the Beamex MC5 Device on a Meridium APM Framework machine:

1. On the Meridium APM Framework machine that will connect to the device, insert the 3rd party DVD, and navigate to the folder **\\Third Party Drivers for APM\Meridium APM Drivers**.
2. Double-click the file **setup.exe**.

   A message appears, asking if you want to allow the installer to make changes to your machine.
3. Click the **Yes** button.

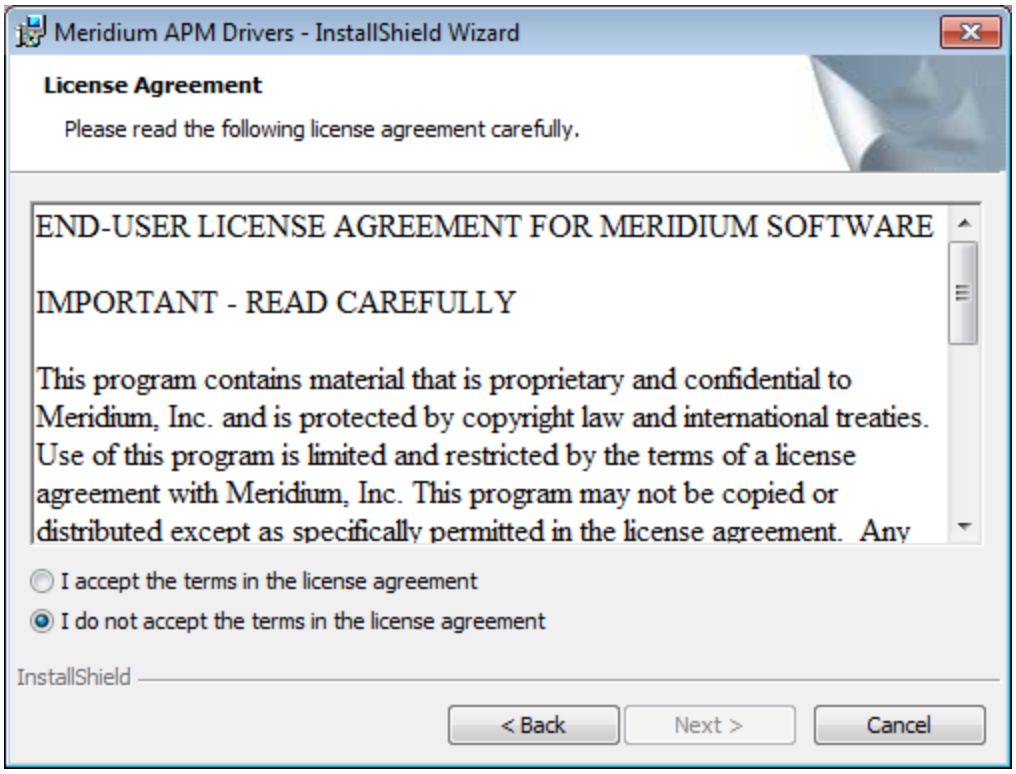
   The **Meridium APM Drivers** installer appears, which contains a progress bar.

   After the progress bar reaches the end, the Welcome screen appears.



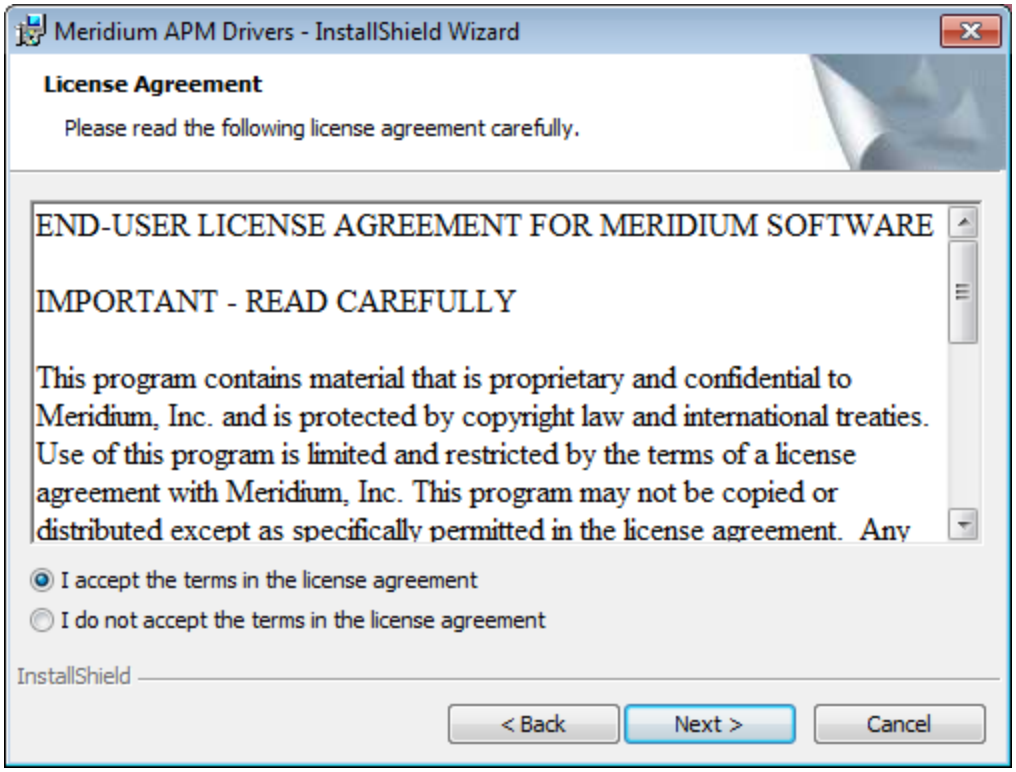
4. Click the **Next** button.

   The **License Agreement** screen appears.



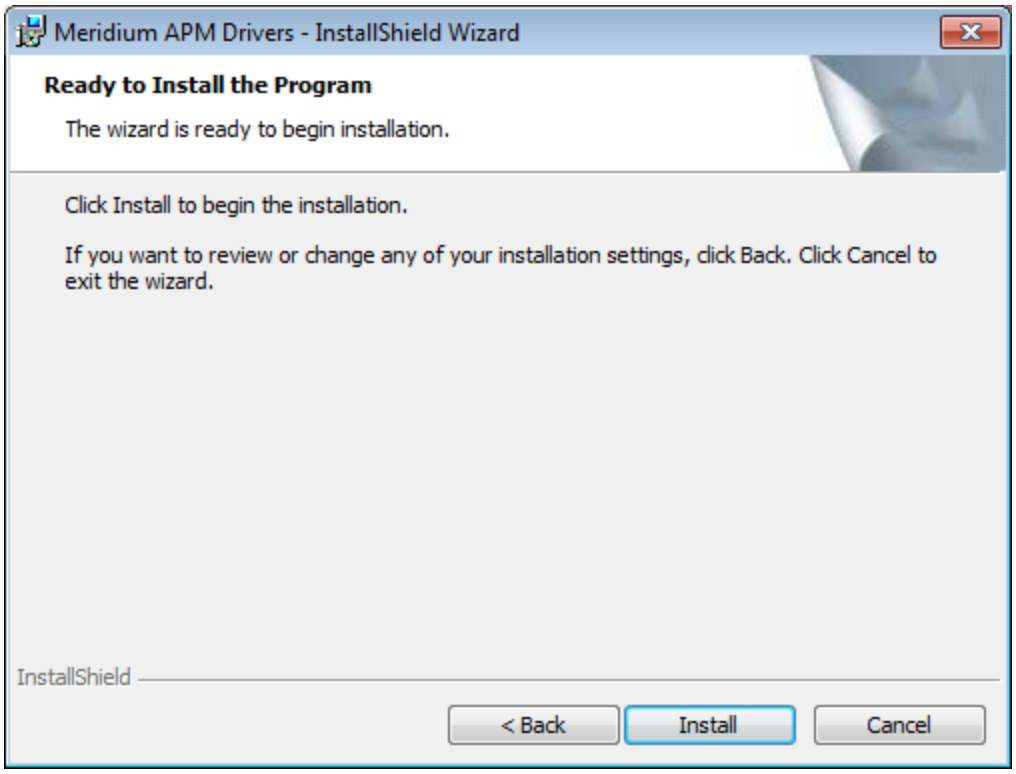
5. Read the entire license agreement, and then select one of the following options:
   - **I accept the terms of the license agreement**, if you agree to the terms of the license agreement and want to continue. These instructions assume that you want to continue.
   - **I do not accept the terms of the license agreement.** This option is selected by default. If you do not agree to the terms of the license agreement and do not want to continue, click the **Cancel** button to exit the installer.

   The **Next** button becomes enabled.



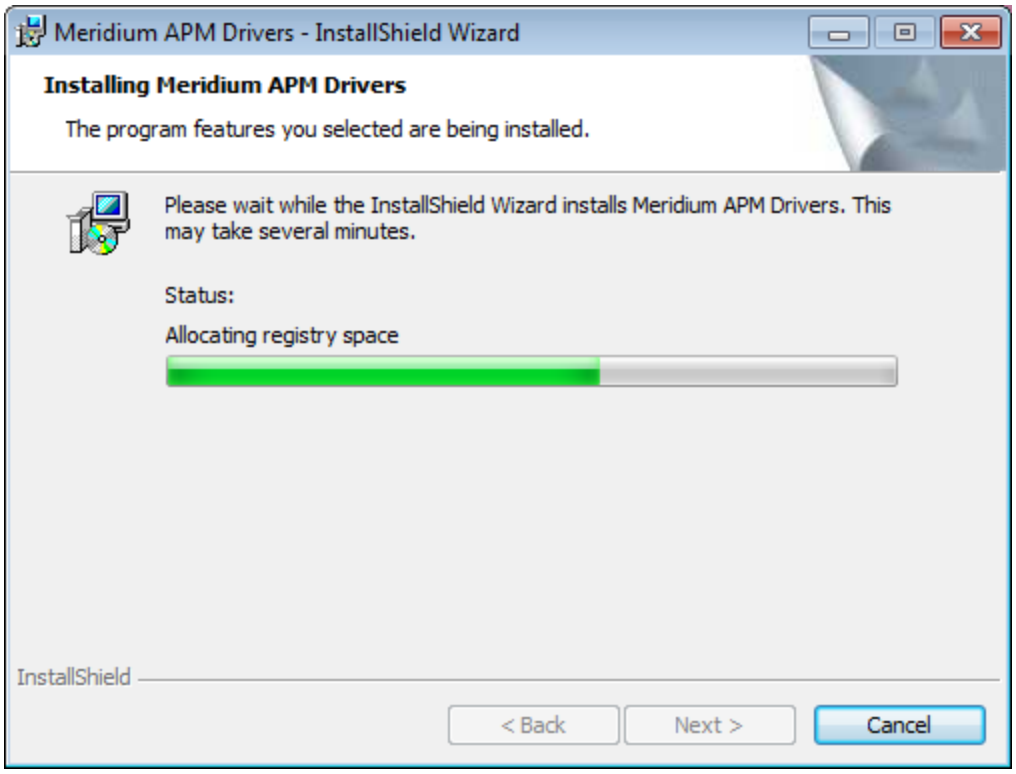
6. Click the **Next** button.

   The **Ready to Install the Program** screen appears.

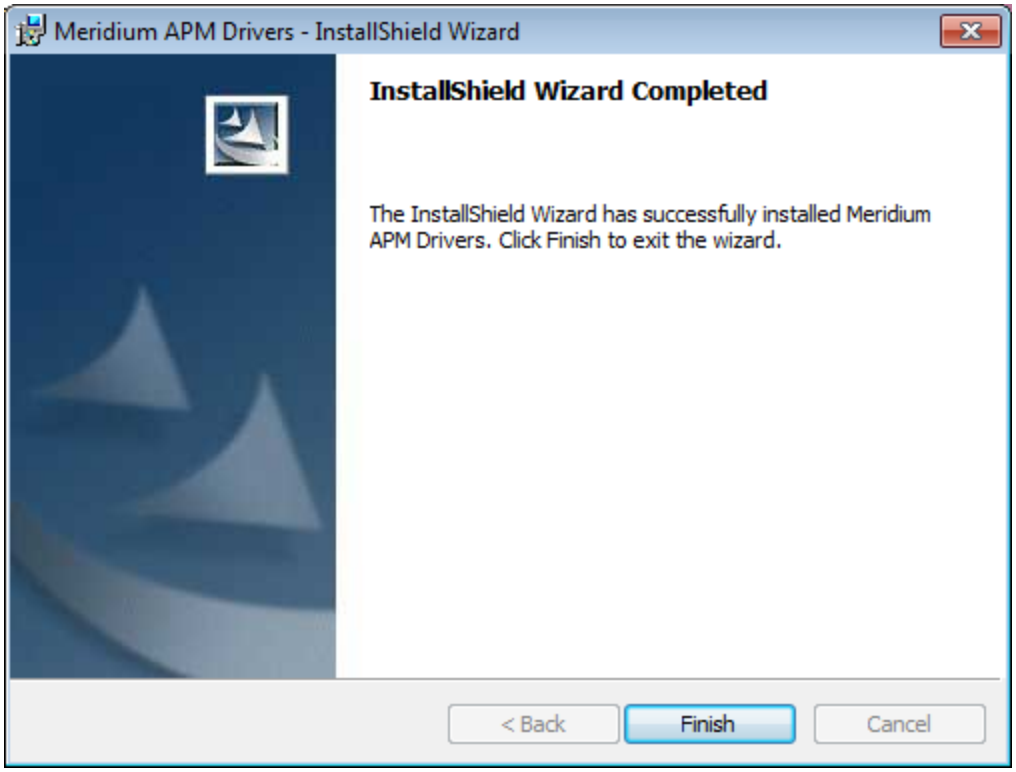


7. Click the **Install** button.

   The **Installing Meridium APM Drivers** screen appears, displaying a progress bar that indicates the status of the installation process.



After the progress bar reaches the end, the **InstallShield Wizard Completed** screen appears.



8. Click the **Finish** button.

   The Meridium APM Drivers installer closes. The supporting files for the Beamex MC5 device are now installed on the Meridium APM Framework machine.

Installing Supporting Files for the Meriam MFT 4010 Device on Meridium APM Framework Machines

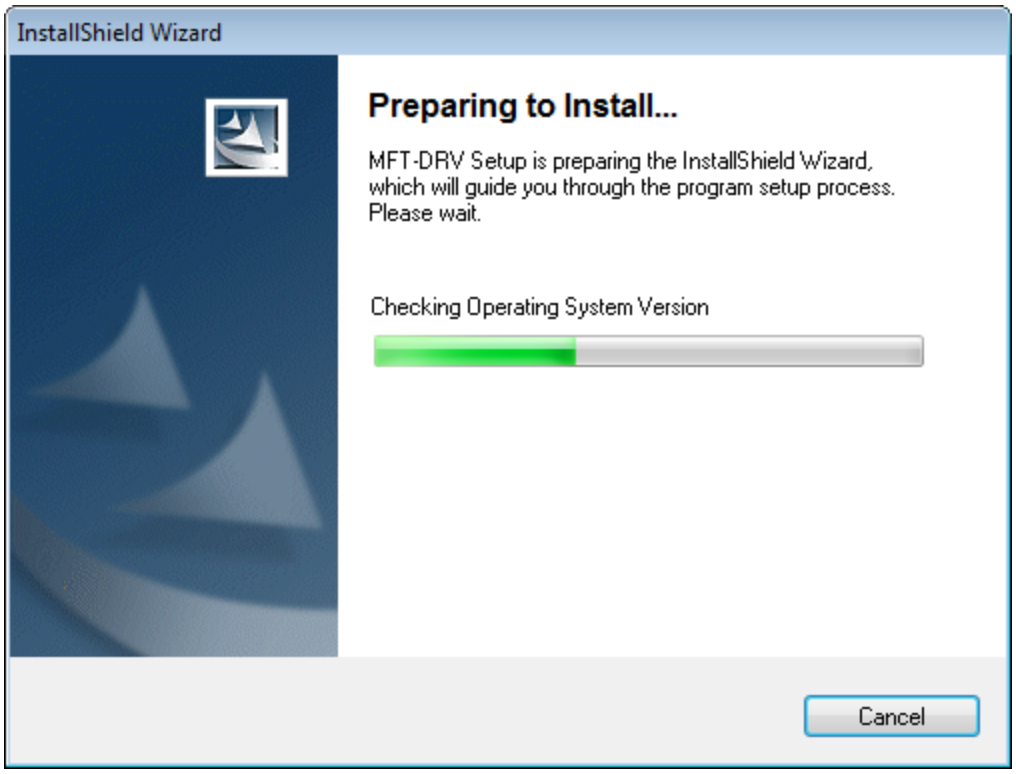
If you will use the Meriam MFT 4010 device to perform automated calibrations, you must first install supporting files on the Meridium APM Framework machines that will be connected to the device. You can install these files using the Meridium APM Drivers installer.

To install the supporting files for the Meriam MFT 4010 Device on a Meridium APM Framework machine:

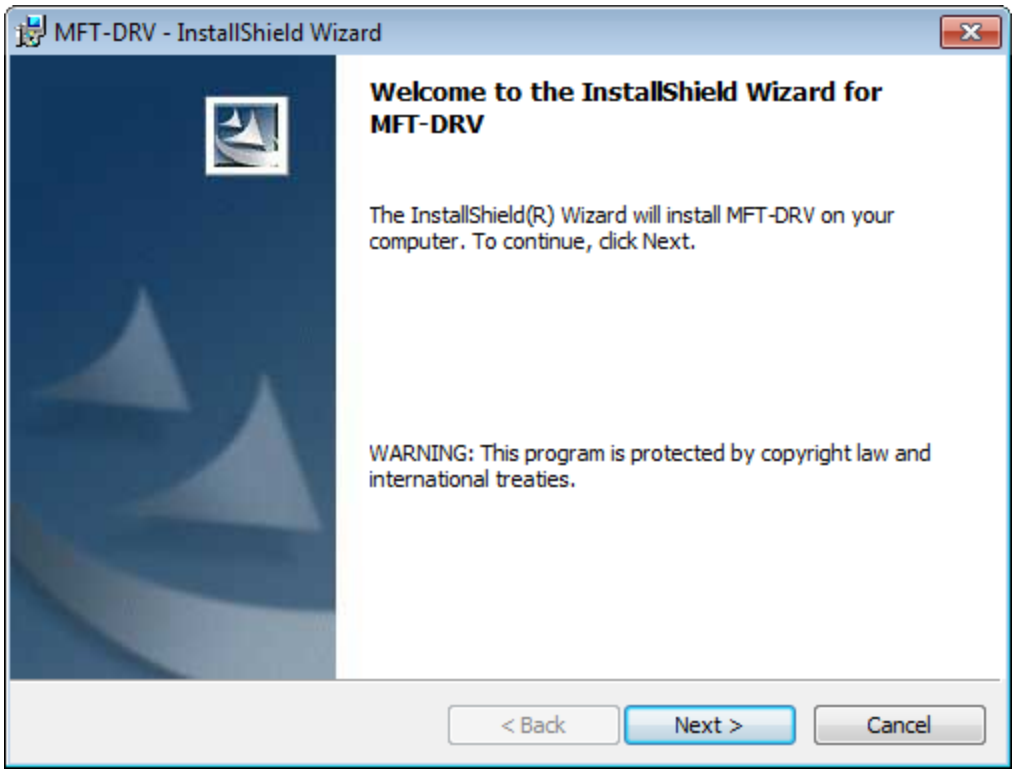
1. On the Meridium APM Framework machine that will connect to the device, insert the 3rd party DVD, and navigate to the folder **\\Third Party Drivers for APM\Meriam Calibrator**.
2. Double-click the file **setup.exe**.

   A message appears, asking if you want to allow the installer to make changes to your machine.
3. Click the **Yes** button.

   The **MFT-DRV** installer appears, which contains a progress bar.



   After the progress bar reaches the end, the Welcome screen appears.



4. Click the **Next** button.

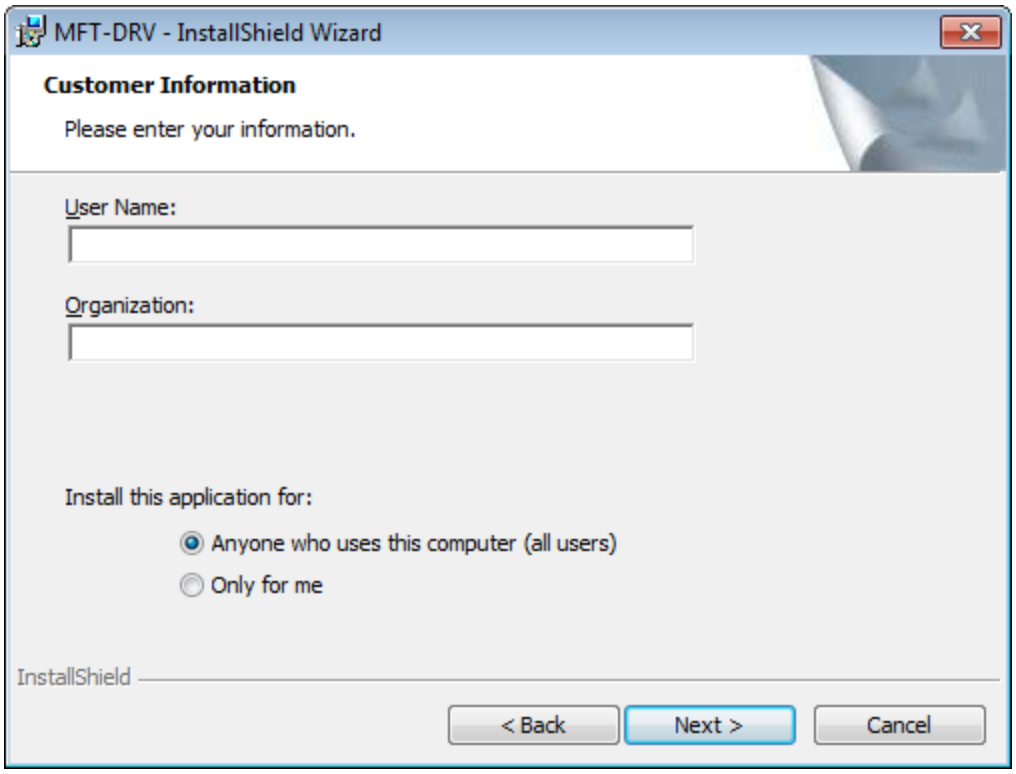
   The **License Agreement** screen appears.

5. Read the entire license agreement, and then select one of the following options:
   - **I accept the terms of the license agreement**, if you agree to the terms of the license agreement and want to continue. These instructions assume that you want to continue.
   - **I do not accept the terms of the license agreement.** This option is selected by default. If you do not agree to the terms of the license agreement and do not want to continue, click the **Cancel** button to exit the installer.

   The **Next** button becomes enabled.

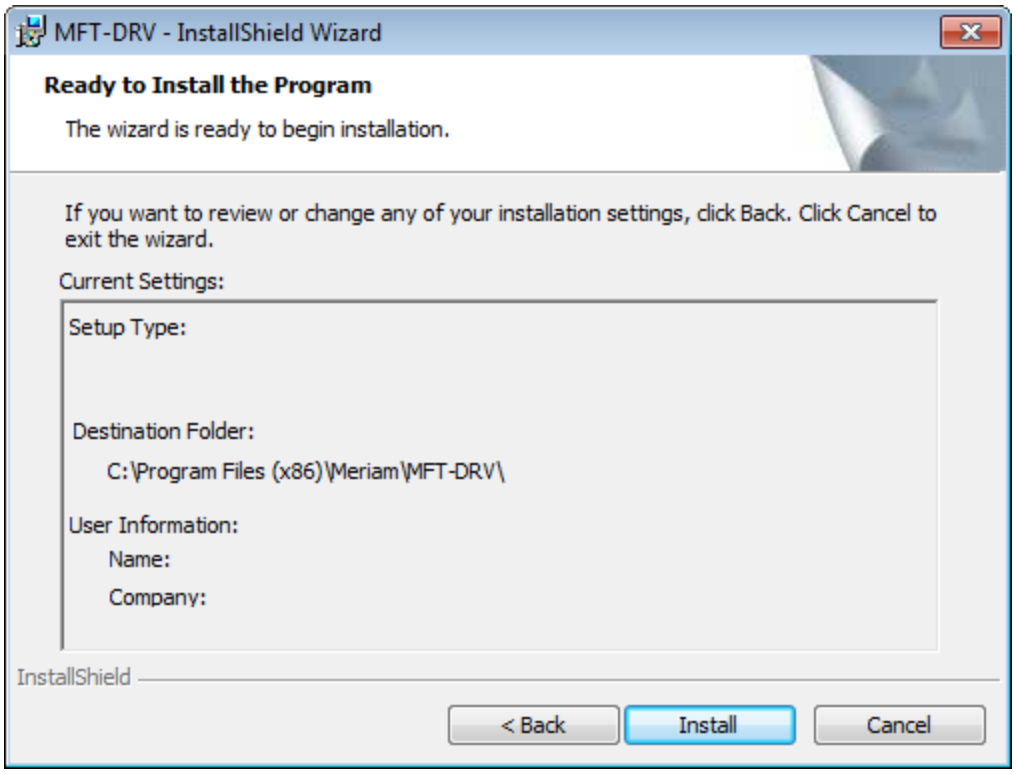
6. Click the **Next** button.

   The **Customer Information** screen appears.



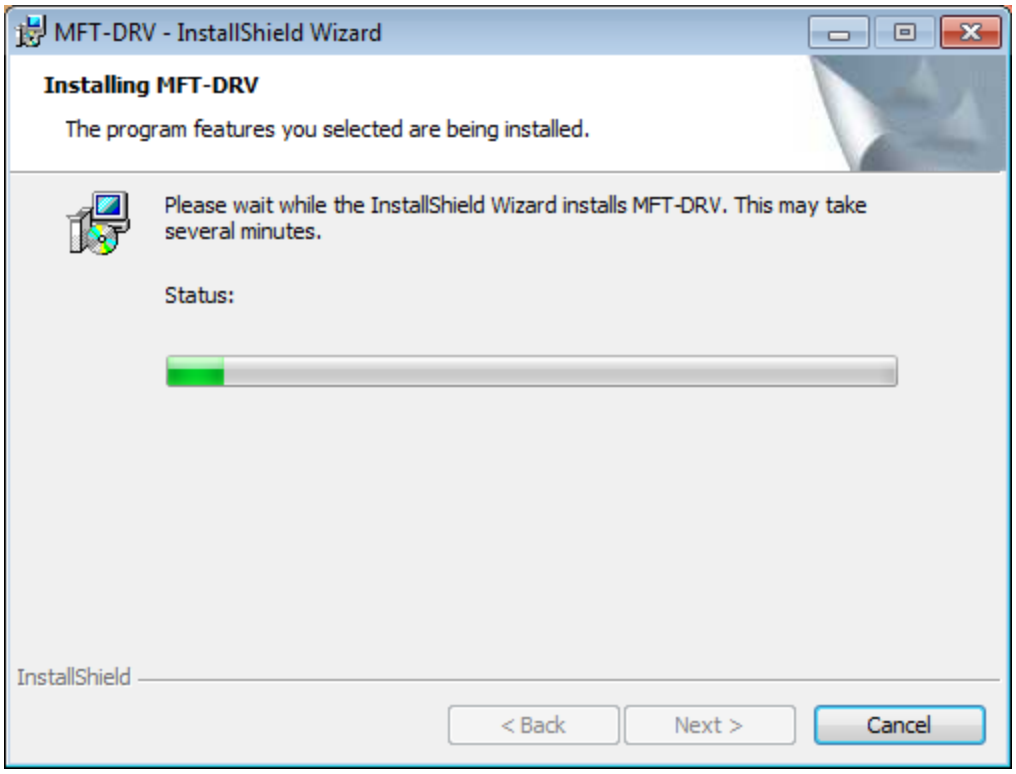
7. In the **User Name** or **Organization** text boxes, enter the desired user name and organization. This step is optional.
8. Below the **Install this application for:** label, select the desired option.
9. Click the **Next** button.

   The **Ready to Install the Program** screen appears.

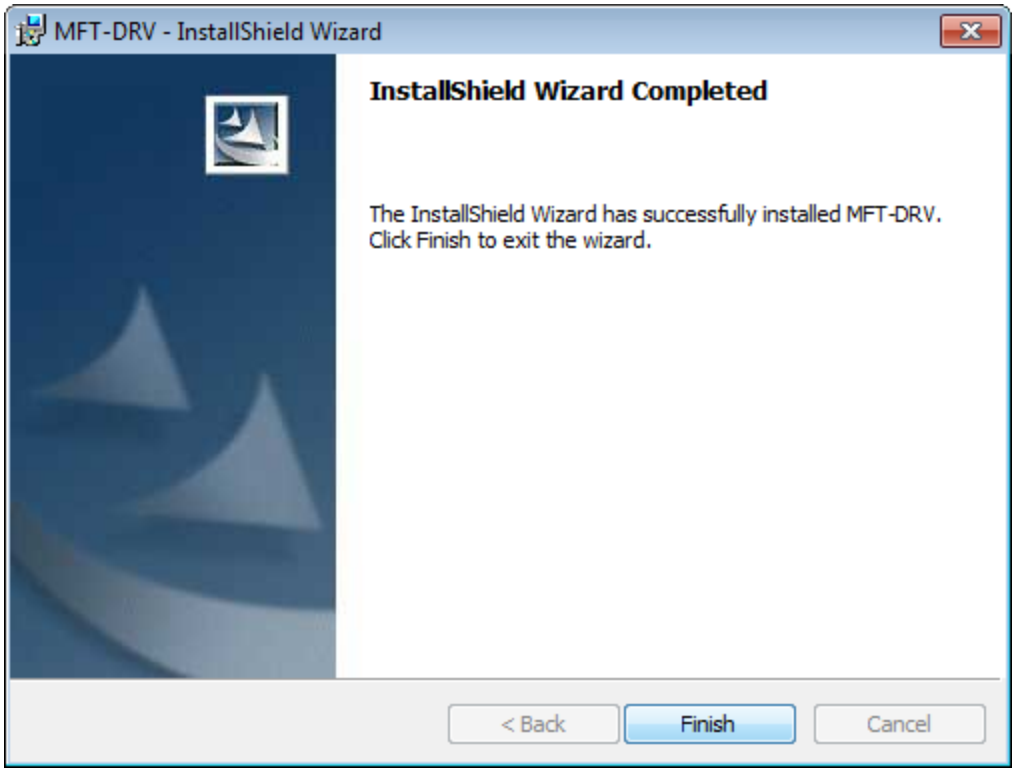


10. Click the **Install** button.

    The **Installing MFT-DRV** screen appears, displaying a progress bar that indicates the status of the installation process.



After the progress bar reaches the end, the **InstallShield Wizard Completed** screen appears.



11. Click the **Finish** button.

    The **MFT-DRV** installer closes. The supporting files for the Meriam MFT 4010 device are now installed on the Meridium APM Framework machine.

About Identifying Equipment That Require Calibration

The first step to using Calibration Management is to identify which equipment in your facility require calibration. This documentation assumes that Equipment records already exist in the Meridium APM database to represent these pieces of equipment.

To complete a calibration for a piece of equipment, you must first open that Equipment record in the Record Manager, where you can create a record in the following families to link to that Equipment record:

- Calibration Task, which stores the schedule on which the calibration should be performed for the piece of equipment.
- Calibration Template, which stores the details of the calibration that should be performed for the piece of equipment.

Once these records exist, you can perform calibrations for the pieces of equipment and store the results in a Calibration Event record.

While you can use the standard Meridium APM Framework features to locate the Equipment record, this documentation provides details on using the features within the Calibration Management module to locate the desired record.

About Test Equipment Records

Test equipment refers to any equipment that is used to perform a calibration. Examples of test equipment include documenting process calibrators, pressure gauges, and thermometers. *Test Equipment records* store information about the test equipment that you use to perform calibrations.

Before you perform a calibration, you should create Test Equipment records to represent each piece of equipment you will use to perform the calibration. When you do so, you will also need to provide certification information for each piece of test equipment.

After a Test Equipment exists, it will be used to:

- **Determine if a particular device is certified.** Before a Security User can perform a calibration, they will need to identify the device that will be used (i.e., the test equipment) by entering the manufacturer and serial number of the device. The Meridium APM system will use that information to identify the Test Equipment record for that device, and then determine if the specified device is certified or not according to the value stored in the Certification Status field in that record.
- **Provide test equipment information for a calibration event.** Up to three Test Equipment records can be linked to a Calibration Event record in order to provide information about the test equipment that was used to perform a particular calibration. The **Test Equipment** tab on the Calibration Event datasheet contains three columns (i.e., **Test Equip 1**, **Test Equip 2**, and **Test Equip 3**), where each column represents a single Test Equipment record, and each row represents a field in the corresponding record. These fields are populated automatically when the Test Equipment record is linked to the Calibration Event record.

About Test Equipment Certification

Test equipment certification is performed by a third-party organization in order to prove that the standards used by the test equipment to perform calibrations are accurate and valid with regards to the National Institute of Standards and Technology (NIST) or other organization standards. For example, if you are using a piece of test equipment to calibrate the clock on another piece of equipment, you would need to certify that the test equipment clock is accurate with regard to the standard time for that time zone. The third-party organizations that perform these certifications should use a process that is in compliance with the standard ISO/IEC 17025.

To ensure that the test equipment remains accurate, it should be recertified on a set time interval (e.g., once a year). If the test equipment is *not* recertified within the defined time interval, it will be considered *out of certification*. If you enter the most recent certification date and certification interval in a Test Equipment record, it will automatically determine whether that piece of equipment is currently certified and store that information in the Certification Status field. Test Equipment History records store the certification history of a piece of test equipment and are linked to the corresponding Test Equipment record for that piece of equipment.

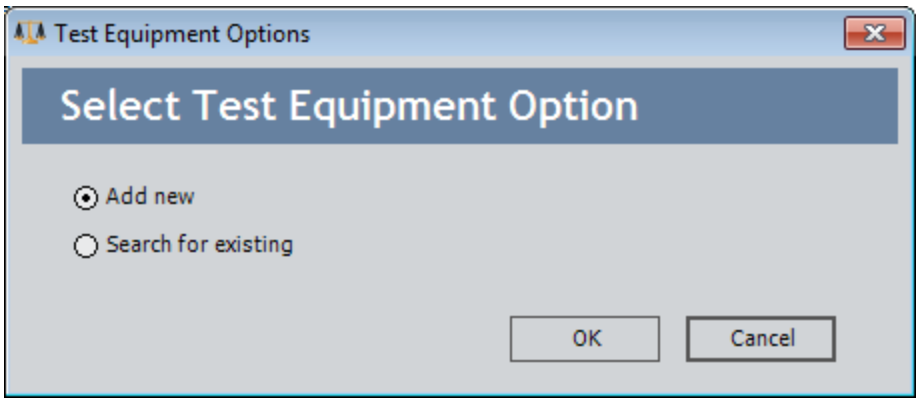
Although the Meridium APM system does not require you to use a certified device, it is recommended that you use a certified device to perform automated calibrations.

Creating Test Equipment Records

To create a Test Equipment record:

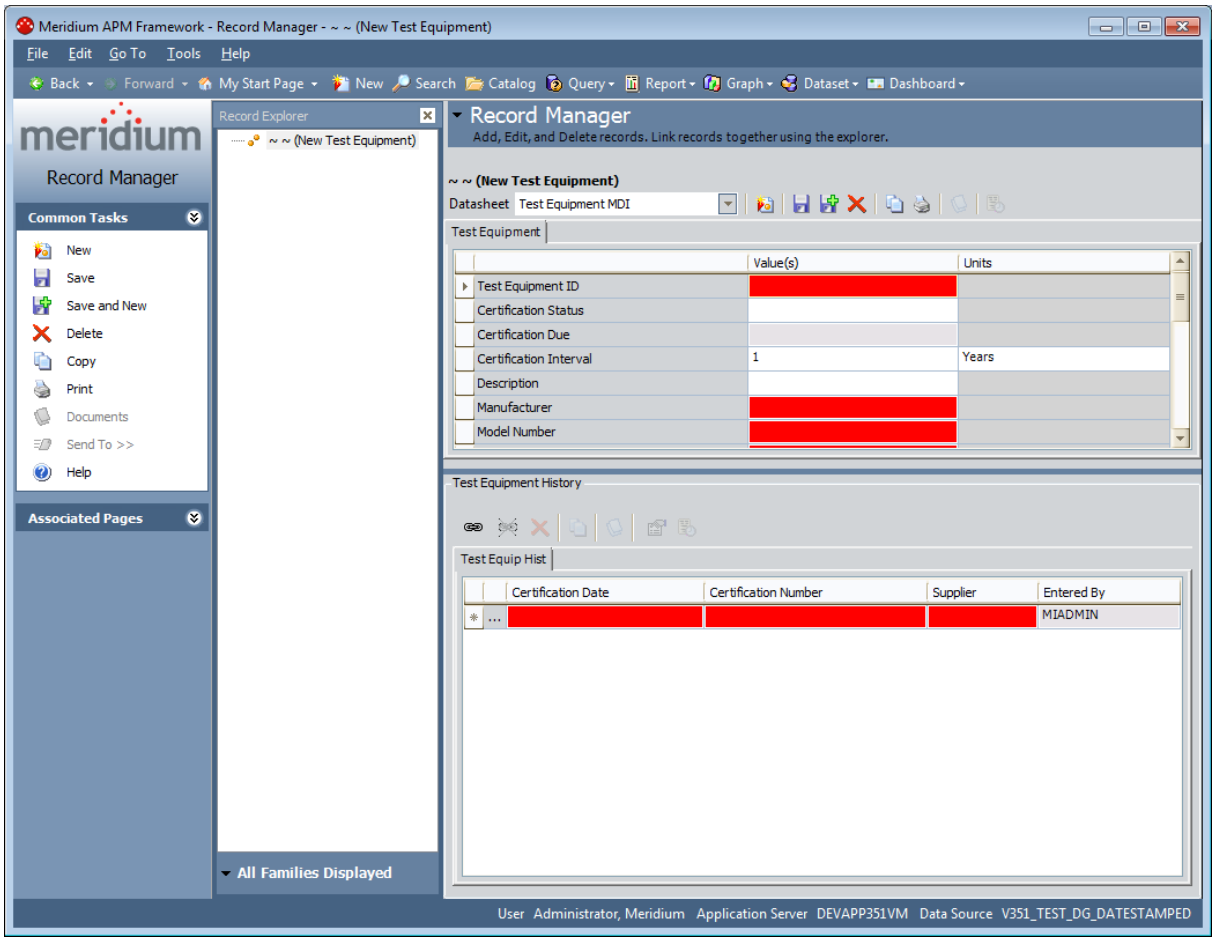
1. On the **Calibration Management Functions** page, click the **Manage Test Equipment** link.

   The **Test Equipment Options** dialog box appears, and the **Add new** option is selected by default.



2. Click **OK**.

   A new Test Equipment record opens in Record Manager.



3. Use the datasheet to provide values in the appropriate fields. Note that some fields are required.
4. On the **Common Tasks** menu, click the **Save** link.

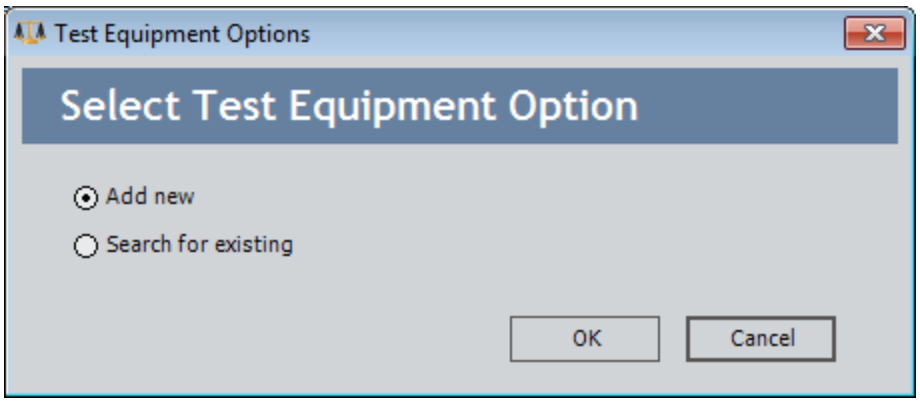
   The Test Equipment record is saved.

Opening Existing Test Equipment Records

To open an existing Test Equipment record:

1. On the **Calibration Management Functions** page, click the **Manage Test Equipment** link.

   The **Test Equipment Options** dialog box appears, and the **Add new** option is selected by default.



2. Select the **Search for existing** option, and then click **OK**.

   The Search Tool appears, displaying the Test Equipment family in the **Search In** text box.

3. Click the **Find Now** button.

   The search results display the existing Test Equipment records.

4. Select the row containing the Test Equipment record that you want to open, and click the **Open** button.

5. The Test Equipment record you selected appears in Record Manager.

About Calibration Template Records

Calibration Template records contain the setup information for manual and automated calibrations. They store the following information that you can use to define the calibrations that should be performed for a piece of equipment:

- Calibration strategy
- Input/Output ranges
- Maximum error limit
- Parameters required by a device for automated calibration data collection.

For automated calibrations, a Calibration Template record *must* be linked to an Equipment record to send the necessary data to a device. This relationship is not required for manual calibrations, but you can use Calibration Template records to help eliminate repetitive data entry. If you are using a manual data entry method, after you perform a calibration, when you create the Calibration Event record, you can select in the Calibration Template Key field the Template ID of the Calibration Template record that contains the details of the calibration that was performed. When you select a Template ID in this field, the Calibration Event record will be populated automatically with data from the Calibration Template record. In this way, you only need to provide details about each type of calibration that should be performed for a piece of equipment one time: when you create the Calibration Template record.

The following baseline Calibration Template families are provided and let you store information for a specific type of calibration:

- Calibration Template, Analog
- Calibration Template, Discrete
- Calibration Template, Weight Scale
- Calibration Template, Analyzer Multi-Component
- Calibration Template, Analyzer Single Component

You can create a Calibration Template record using the **Create Template** link on the **Associated Pages** menu in the Record Manager. When you do so:

- The Calibration Template record will be automatically linked to the currently selected Equipment record.
- The Instrument Data Query is used to automatically populate Equipment information in the Calibration Template record.

Each Calibration Template record can be linked to multiple Calibration Template Detail records through the *Has Template Detail* relationship. This relationship is defined in the baseline Meridium APM database. When you create a new Calibration Template record, the Calibration Template Detail records will be created and linked to the Calibration Template record automatically, based on the value you select in the Calibration Strategy field.

Only members of the Calibration Administrator Security Group can create, modify, copy, or delete Calibration Template records and Calibration Template Detail records. Members of the Calibration User Security Group can view and print these records.

Creating a New Calibration Template Record

To create a new Calibration Template record, you must be a Super User or a member of the MI Calibration Administrator Security Group. Calibration Template records can be created via a link on the **Associated Pages** menu when you are viewing an Equipment record in the Record Manager.

To create a new Calibration Template record:

1. Open in the Record Manager the Equipment record to which you want to link the Calibration Template record.
2. On the **Associated Pages** menu, click the **Create Template** link.

   A submenu appears and contains the following options:

- **Create Analog Calibration Template**
- **Create Discrete Calibration Template**
- **Create Multi-Component Analyzer Template**
- **Create Single-Component Analyzer Template**
- **Create Weight Scale Calibration Template**
- **Create Functional Test Template**

3. Click the option that corresponds to the type of Calibration Template record that you want to create.

   A new record for the selected family appears in a separate window, and the following fields are populated automatically with data from the Equipment record:

- Tag Name
- Tag Description
- Manufacturer
- Model Number
- Serial Number

4. Enter values in the remaining fields as desired, and then click **OK**.

   The window closes, and the record is saved and linked to the Equipment record that you are currently viewing.

About Calibration Template, Functional Test Records

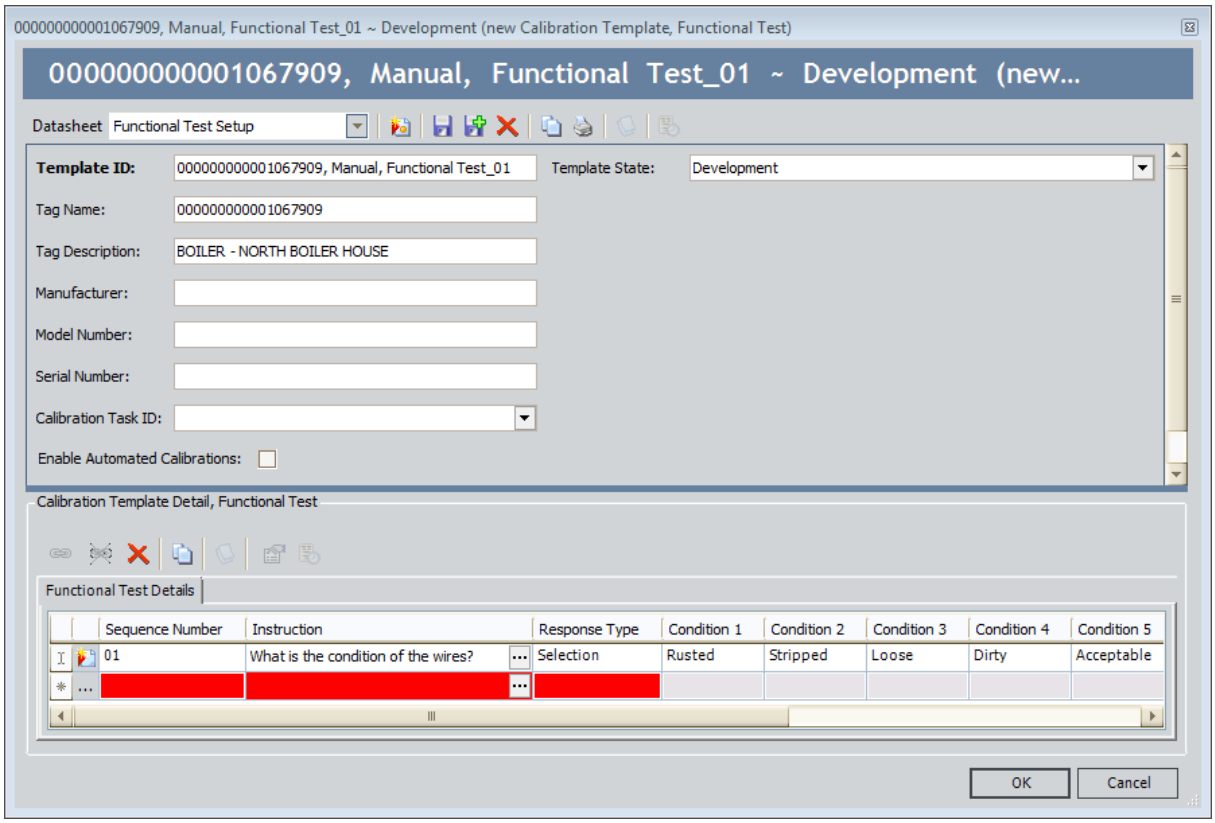
Calibration Template, Functional Test records are specific types of Calibration Template records that allow you to perform functional tests on a piece of equipment. A functional test consists of questions and possible responses to that question.

For example, assume you want to record information about the physical condition of the wires that are attached to a boiler. In this case, you might create the following functional test:

What is the condition of the wires?

1. Rusted
2. Stripped
3. Loose
4. Dirty
5. Acceptable

The following image shows what the Calibration Template, Functional Test record would look like for this functional test.



Like other Calibration Template records, *Calibration Template, Functional Test* records contain setup information for manual and automated functional tests. They are linked to *Calibration Template Detail, Functional Test records*, which store the following information that you can use to define a custom functional test for a piece of equipment:

- Instructions that describe the steps you should perform.
- Responses that correspond with each instruction.
- The sequence in which the instructions should be carried out.

Together, the combination of one *Calibration Template, Functional Test* record and one or more *Calibration Template Detail*, *Functional Test* records make up a single functional test.

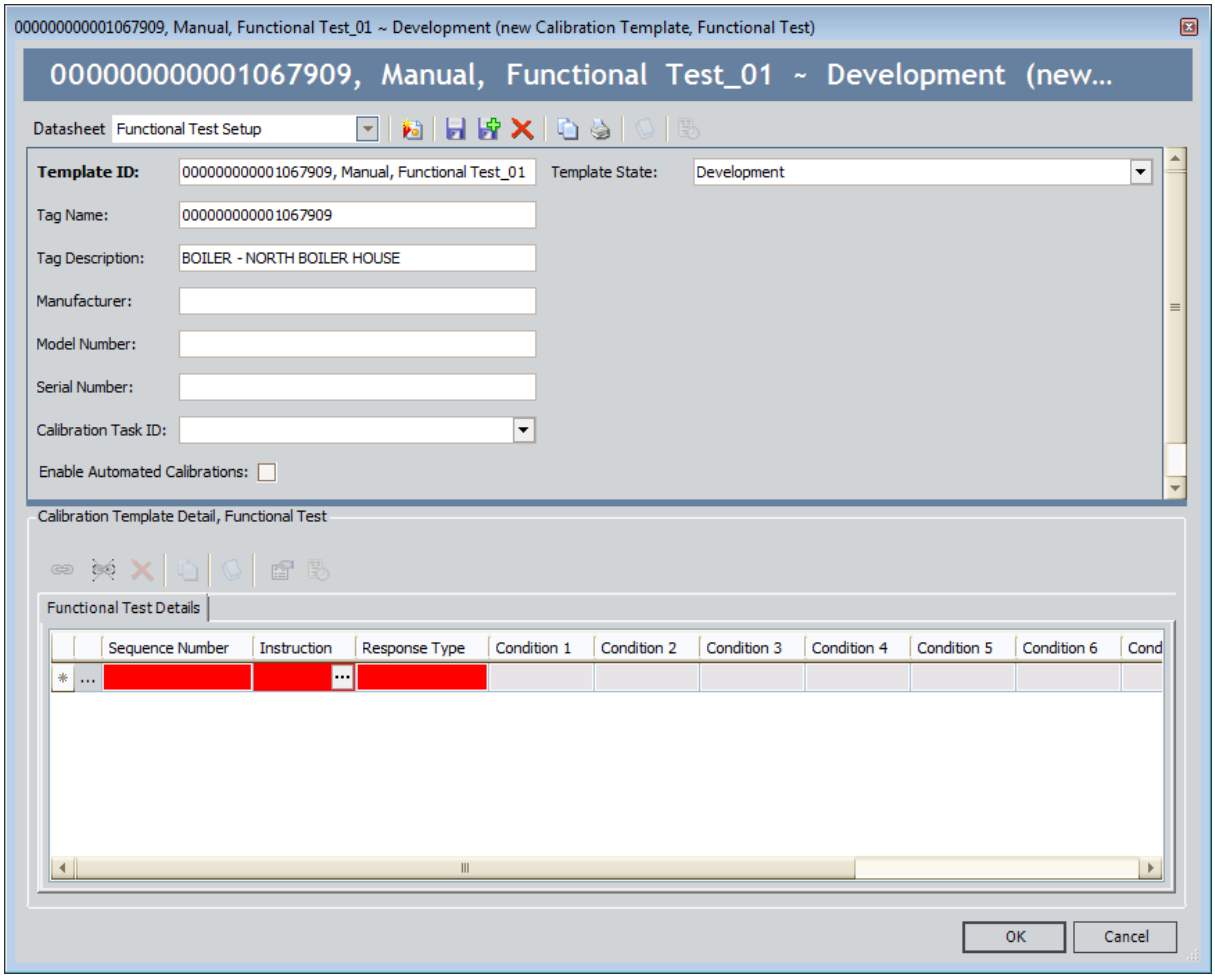
Although Calibration Template, Functional Test records store different information than other Calibration Template records, they function the same way. You can perform an automated functional test in the same way you perform an automated calibration. You can also perform a manual functional test in the same way you perform a manual calibration, except that you should use a printed copy of the Functional Test Calibration Field Report to perform the specified functional test and write the results of the test on the printed report.

Defining a Functional Test

To define a functional test:

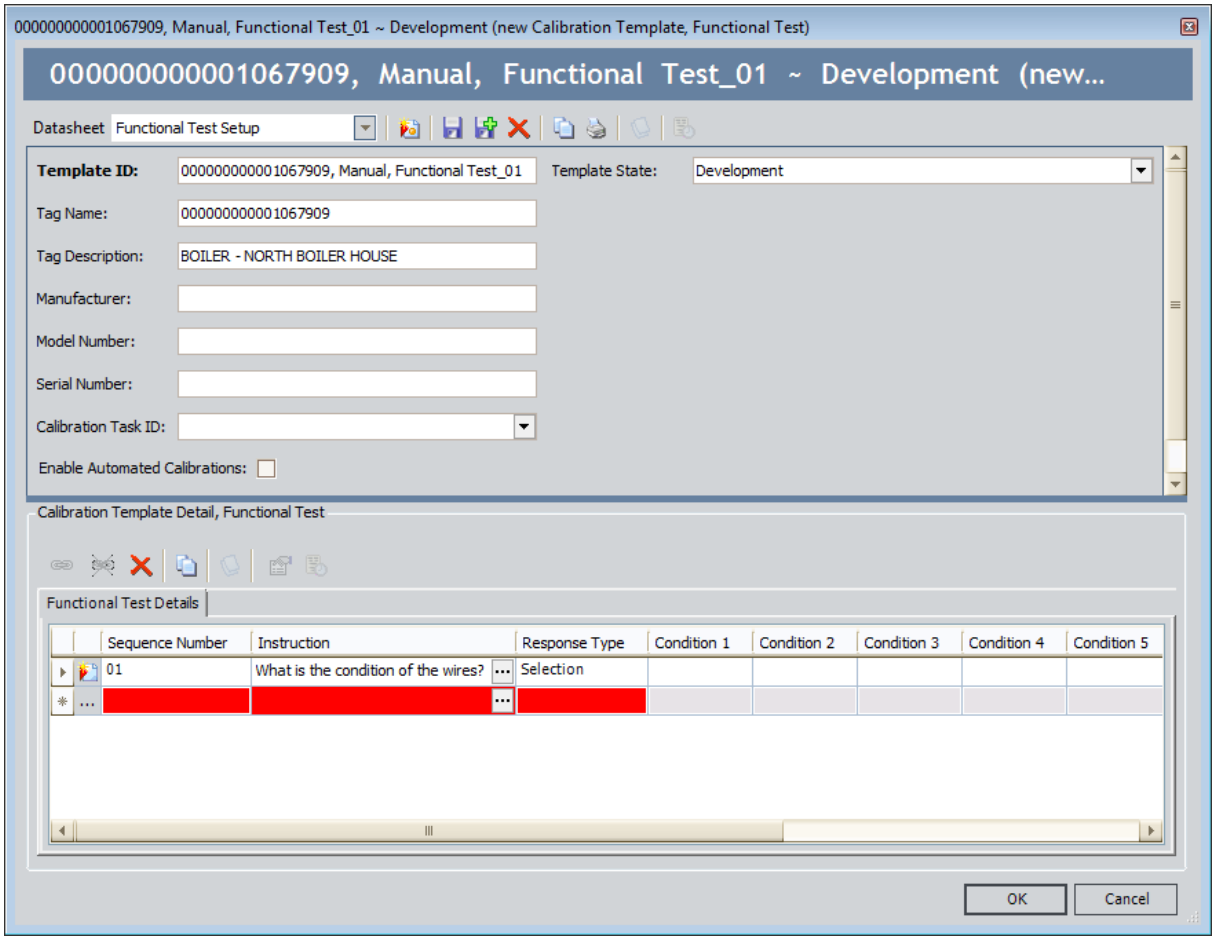
1. Create a new Calibration Template, Functional Test record.

   A new Calibration Template Detail, Functional Test record appears below the Calibration Template, Functional Test record on the Functional Test Setup datasheet.



2. In the **Sequence Number** list, select a number *1* through *25* to indicate the order in which the instruction in that row should be executed in relation to the other instructions.
3. In the **Instruction** cell, type a description of the step that you are performing during the functional test (e.g., *What is the condition of the wires?*).
4. In the **Response Type** list, select the type of answer you should give to the question defined in the **Instruction** cell (e.g., *Selection*).
   - If you select the **Selection** option in the **Response Type** cell, the **Condition** cells are enabled. In each **Condition** cell, type the possible responses to the

step defined in the **Instruction** cell. (e.g., *Rusted*, *Stripped*, *Loose*). You can define up to 10 responses for each instruction with the response type *selection*.



-or-

- If you did *not* select the **Selection** option in the **Response Type** cell, the **Condition** cells remain disabled, and you can continue to the next step.

5. If you want to define additional steps for the functional test, repeat the preceding steps. You can define up to 25 steps for each functional test.
6. Click **OK**.

   The record closes, and both the Calibration Template, Functional Test record and the Calibration Template Detail, Functional Test records are saved. The Calibration Template Detail, Functional Test record is linked to the Calibration Template, Functional Test record automatically.

About Calibration Task Records

Calibration Task records store details about a calibration task that should be performed by a given user for Calibration Management. Specifically, these records store scheduled dates for the next time calibrations should be performed.

Calibration Task records are linked to Equipment records and related to Calibration Template records and Calibration Event records through the link between those records and the Equipment record to which the Calibration Task record is linked.

After a calibration is performed and the Calibration Event record that is linked to the Equipment record is closed, the Calibration Task record is updated automatically to reflect the date on which the calibration event was performed and the next date on which the calibration is due for that piece of equipment. You can use Calibration Task records whether you are performing manual or automated calibrations.

You can create a Calibration Task record via a link on the **Associated Pages** menu when you are viewing an Equipment record. After a Calibration Task record exists, you will be able to view and manage those records along with any other existing Task records via Task Management. Throughout these instructions, we assume that you are familiar with using the Record Manager and Task Management. For the purposes of this documentation, we limit our discussion to features that are unique to Calibration Management.

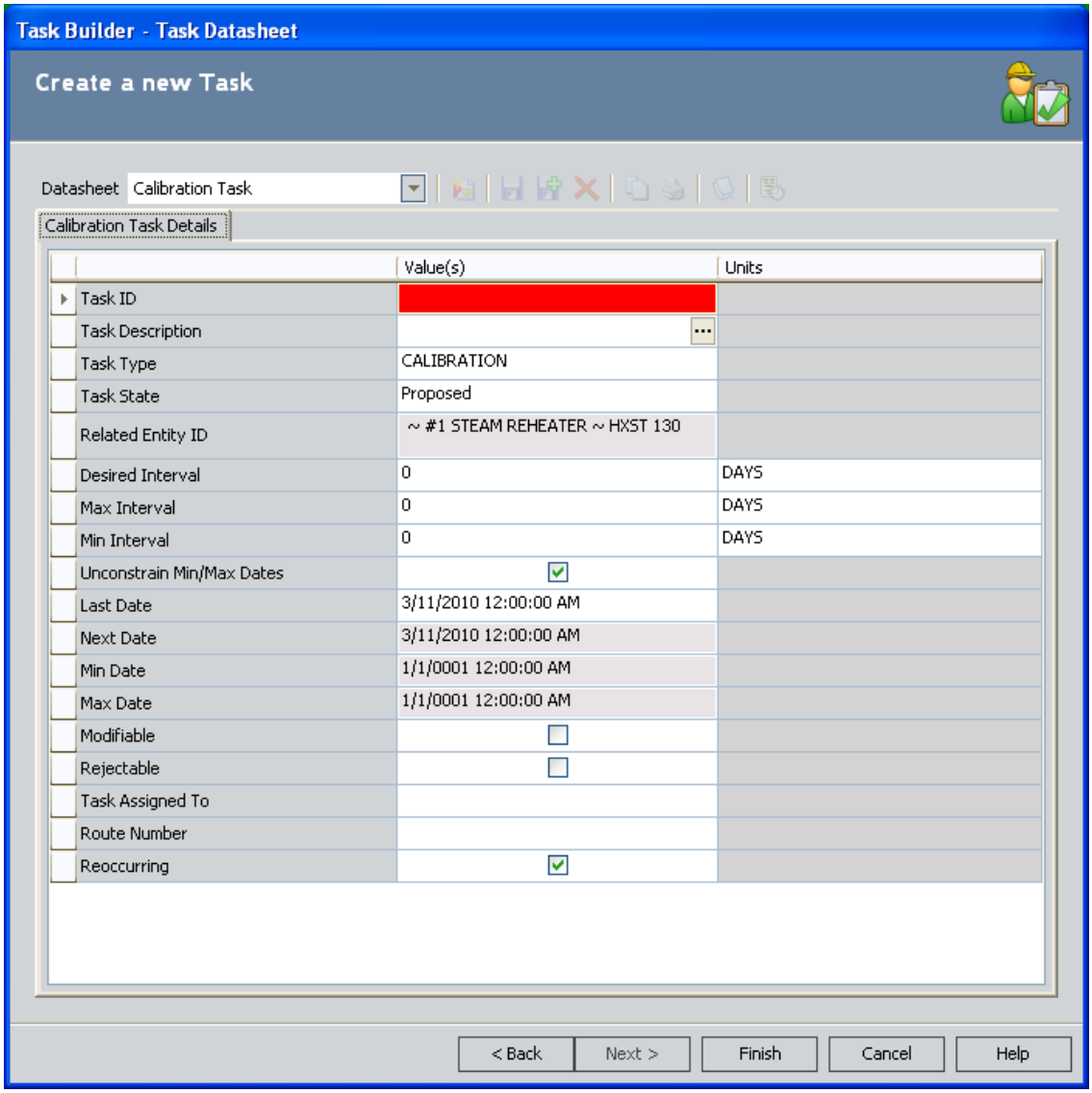
If you delete a Calibration Task record, the link between the Calibration Task record and the Equipment record will also be deleted. Additionally, if you delete an Equipment record that is linked to a Calibration Task record, the Calibration Task record and the link that exists between them will also be deleted.

Creating Calibration Task Records

To create a Calibration Task record:

1. Open in the Record Manager the Equipment record to which you want to link the Calibration Task record.
2. On the **Associated Pages** menu, click the **Create Task** link.

   The **Task Builder** appears, displaying the **Task Datasheet** screen.



Note: The **Next** button is disabled. If desired, you can click the **Back** button to specify a different task family or to search for an existing task. However, these instructions assume that you want to create a new *Calibration* Task record.

3. Provide values in the fields as desired. Note that the Task ID field is required.
4. Click the **Finish** button.

   The Calibration Task record is saved to the Meridium APM database and linked automatically to the currently selected Equipment record.

About Devices in Calibration Management

The Meridium APM Devices functionality allows for the collection and transfer of data between a Meridium APM database and a device. The Meridium APM Devices interface enables direct communication between supported data-collection devices, the Meridium APM Framework machine, and the Meridium APM database. This is accomplished by defining a device and associating with it a mapping, which defines the data that is to be sent to and received from the data-collection device.

In Calibration Management, devices are used to perform automated calibrations on a piece of equipment. The following devices are supported by Calibration Management:

- Beamex MC5 Documenting Process Calibrator
- Fluke 74x Documenting Process Calibrator
- Fluke 75x Documenting Process Calibrator
- Meriam MFT4010 Documenting Process Calibrator

Much of the functionality that is used by Calibration Management for automated calibrations is explained in the documentation for the standard Meridium APM Framework Devices feature. For example, you can use the Devices functionality to automate thickness measurement collection in Thickness Monitoring. For the purposes of this documentation, we limit our discussion to devices functionality that is specific to Calibration Management. These instructions assume that you are already familiar with Devices functionality and that your devices are already set up and properly configured to work with Meridium APM.

About Performing Automated Calibrations

An *automated calibration* is one that is performed using a device such as a Fluke. When you perform an automated calibration, you will:

1. Determine whether or not the device is currently certified.
2. Send to the device information about the type of calibration that should be performed on a specific piece of equipment. The data that is sent to the device is stored in a Calibration Template record.

   Note: Only *Analog*, *Discrete*, and *Functional Test* template types can be sent to a Fluke device. Only *Analog* template types can be sent to Meriam and Beamex devices.

3. Perform the specified calibration event, and record the results on the device.
4. Receive the results of the calibration back into the Meridium APM system for review. When you receive the results of the calibration and save it to the Meridium APM database, Calibration Event records are created automatically and populated with the results.

Preconfigured Beamex Device Mappings

The Meridium APM product is shipped with preconfigured device mappings that define the data that is to be sent to and received from the Beamex device. The following baseline Device Mapping records are available for the Beamex MC5 device. You should not modify these records:

- Send, Beamex MC5, 02 An Pts_01
- Send, Beamex MC5, 03 An Pts, SqRt Press_01
- Send, Beamex MC5, 03 An Pts_01
- Send, Beamex MC5, 05 An Pts, SqRt Press_01
- Send, Beamex MC5, 05 An Pts_01
- Send, Beamex MC5, 06 An Pts, SqRt Press_01
- Send, Beamex MC5, 06 An Pts_01
- Send, Beamex MC5, 09 An Pts, SqRt Press_01
- Send, Beamex MC5, 09 An Pts_01
- Send, Beamex MC5, 11 An Pts, SqRt Press_01
- Send, Beamex MC5, 11 An Pts_01
- Send, Beamex MC5, 21 An Pts, SqRt Press_01
- Send,Beamex MC5, 21 An Pts_01
- Send, Beamex MC5, Single Switch_01
- Receive, Beamex MC5, 02 An Pts_01
- Receive, Beamex MC5, 03 An Pts, SqRt Press_01
- Receive, Beamex MC5, 03 An Pts_01
- Receive, Beamex MC5, 05 An Pts, SqRt Press_01
- Receive, Beamex MC5, 05 An Pts_01
- Receive, Beamex MC5, 06 An Pts, SqRt Press_01
- Receive, Beamex MC5, 06 An Pts_01
- Receive, Beamex MC5, 09 An Pts, SqRt Press_01
- Receive, Beamex MC5, 09 An Pts_01
- Receive, Beamex MC5, 11 An Pts, SqRt Press_01
- Receive, Beamex MC5, 11 An Pts_01
- Receive, Beamex MC5, 21 An Pts, SqRt Press_01
- Receive, Beamex MC5, 21 An Pts_01
- Receive, Beamex MC5, Single Switch_01

Preconfigured Fluke Device Mappings

The Meridium APM product is shipped with preconfigured device mappings that define the data that is to be sent to and received from the Fluke device. The following baseline Device Mapping records are available for the Fluke 74x and Fluke 75x devices. You should not modify these records:

- Send, Fluke 74x, 02 An Pts, CUM_01
- Send, Fluke 74x, 02 An Pts, CUS_01
- Send, Fluke 74x, 02 An Pts, CUSM_01
- Send, Fluke 74x, 02 An Pts_01
- Send, Fluke 74x, 03 An Pts, CUM_01
- Send, Fluke 74x, 03 An Pts, CUS_01
- Send, Fluke 74x, 03 An Pts, CUSM_01
- Send, Fluke 74x, 03 An Pts, SqRt Press, CUM_01
- Send, Fluke 74x, 03 An Pts, SqRt Press_01
- Send, Fluke 74x, 03 An Pts_01
- Send, Fluke 74x, 05 An Pts, CUM_01
- Send, Fluke 74x, 05 An Pts, CUS_01
- Send, Fluke 74x, 05 An Pts, CUSM_01
- Send, Fluke 74x, 05 An Pts, SqRt Press, CUM_01
- Send, Fluke 74x, 05 An Pts, SqRt Press_01
- Send, Fluke 74x, 05 An Pts_01
- Send, Fluke 74x, 09 An Pts, CUM_01
- Send, Fluke 74x, 09 An Pts, CUS_01
- Send, Fluke 74x, 09 An Pts, CUSM_01
- Send, Fluke 74x, 09 An Pts, SqRt Press, CUM_01
- Send, Fluke 74x, 09 An Pts, SqRt Press_01
- Send, Fluke 74x, 09 An Pts_01
- Send, Fluke 74x, 11 An Pts, CUM_01
- Send, Fluke 74x, 11 An Pts, CUS_01
- Send, Fluke 74x, 11 An Pts, CUSM_01
- Send, Fluke 74x, 11 An Pts, SqRt Press, CUM_01
- Send, Fluke 74x, 11 An Pts, SqRt Press_01
- Send, Fluke 74x, 11 An Pts_01
- Send, Fluke 74x, 21 An Pts, CUM_01

- Send, Fluke 74x, 21 An Pts, CUS_01
- Send, Fluke 74x, 21 An Pts, CUSM_01
- Send, Fluke 74x, 21 An Pts, SqRt Press, CUM_01
- Send, Fluke 74x, 21 An Pts, SqRt Press_01
- Send, Fluke 74x, 21 An Pts_01
- Send, Fluke 74x, Double Switch_01
- Send, Fluke 74x, Single Switch_01
- Send, Fluke 74x, Double Switch,CUS_01
- Send, Fluke 74x, Single Switch,CUS_01
- Send, Fluke 74x, 01 S Func_01
- Send, Fluke 74x, 02 S Func_01
- Send, Fluke 74x, 03 S Func_01
- Send, Fluke 74x, 04 S Func_01
- Send, Fluke 74x, 05 S Func_01
- Send, Fluke 74x, 06 S Func_01
- Send, Fluke 74x, 07 S Func_01
- Send, Fluke 74x, 08 S Func_01
- Send, Fluke 74x, 09 S Func_01
- Send, Fluke 74x, 11 S Func_01
- Send, Fluke 74x, 12 S Func_01
- Send, Fluke 74x, 13 S Func_01
- Send, Fluke 74x, 14 S Func_01
- Send, Fluke 74x, 15 S Func_01
- Send, Fluke 74x, 16 S Func_01
- Send, Fluke 74x, 17 S Func_01
- Send, Fluke 74x, 18 S Func_01
- Send, Fluke 74x, 19 S Func_01
- Send, Fluke 74x, 20 S Func_01
- Send, Fluke 74x, 21 S Func_01
- Send, Fluke 74x, 22 S Func_01
- Send, Fluke 74x, 23 S Func_01
- Send, Fluke 74x, 24 S Func_01
- Send, Fluke 74x, 25 S Func_01
- Receive, Fluke 74x, 02 An Pts, CUM_01

- Receive, Fluke 74x, 02 An Pts, CUS_01
- Receive, Fluke 74x, 02 An Pts, CUSM_01
- Receive, Fluke 74x, 02 An Pts_01
- Receive, Fluke 74x, 03 An Pts, CUM_01
- Receive, Fluke 74x, 03 An Pts, CUS_01
- Receive, Fluke 74x, 03 An Pts, CUSM_01
- Receive, Fluke 74x, 03 An Pts, SqRt Press, CUM_01
- Receive, Fluke 74x, 03 An Pts, SqRt Press_01
- Receive, Fluke 74x, 03 An Pts_01
- Receive, Fluke 74x, 05 An Pts, CUM_01
- Receive, Fluke 74x, 05 An Pts, CUS_01
- Receive, Fluke 74x, 05 An Pts, CUSM_01
- Receive, Fluke 74x, 05 An Pts, SqRt Press, CUM_01
- Receive, Fluke 74x, 05 An Pts, SqRt Press_01
- Receive, Fluke 74x, 05 An Pts_01
- Receive, Fluke 74x, 09 An Pts, CUM_01
- Receive, Fluke 74x, 09 An Pts, CUS_01
- Receive, Fluke 74x, 09 An Pts, CUSM_01
- Receive, Fluke 74x, 09 An Pts, SqRt Press, CUM_01
- Receive, Fluke 74x, 09 An Pts, SqRt Press_01
- Receive, Fluke 74x, 09 An Pts_01
- Receive, Fluke 74x, 11 An Pts, CUM_01
- Receive, Fluke 74x, 11 An Pts, CUS_01
- Receive, Fluke 74x, 11 An Pts, CUSM_01
- Receive, Fluke 74x, 11 An Pts, SqRt Press, CUM_01
- Receive, Fluke 74x, 11 An Pts, SqRt Press_01
- Receive, Fluke 74x, 11 An Pts_01
- Receive, Fluke 74x, 21 An Pts, CUM_01
- Receive, Fluke 74x, 21 An Pts, CUS_01
- Receive, Fluke 74x, 21 An Pts, CUSM_01
- Receive, Fluke 74x, 21 An Pts, SqRt Press, CUM_01
- Receive, Fluke 74x, 21 An Pts, SqRt Press_01
- Receive, Fluke 74x, 21 An Pts_01
- Receive, Fluke 74x, Double Switch_01

- Receive, Fluke 74x, Single Switch_01
- Receive, Fluke 74X, Double Switch, CUS_01
- Receive, Fluke 74x, Single Switch,CUS_01
- Receive, Fluke 74x, 01 S Func_01
- Receive,Fluke 74x, 02 S Func_01
- Receive, Fluke 74x, 03 S Func_01
- Receive, Fluke 74x, 04 S Func_01
- Receive, Fluke 74x, 05 S Func_01
- Receive, Fluke 74x, 06 S Func_01
- Receive, Fluke 74x, 07 S Func_01
- Receive, Fluke 74x, 08 S Func_01
- Receive, Fluke 74x, 09 S Func_01
- Receive, Fluke 74x, 11 S Func_01
- Receive, Fluke 74x, 12 S Func_01
- Receive, Fluke 74x, 13 S Func_01
- Receive, Fluke 74x, 14 S Func_01
- Receive, Fluke 74x, 15 S Func_01
- Receive, Fluke 74x, 16 S Func_01
- Receive, Fluke 74x, 17 S Func_01
- Receive, Fluke 74x, 18 S Func_01
- Receive, Fluke 74x, 19 S Func_01
- Receive, Fluke 74x, 20 S Func_01
- Receive, Fluke 74x, 21 S Func_01
- Receive, Fluke 74x, 22 S Func_01
- Receive, Fluke 74x, 23 S Func_01
- Receive, Fluke 74x, 24 S Func_01
- Receive, Fluke 74x, 25 S Func_01

Preconfigured Meriam Device Mappings

The Meridium APM product is shipped with preconfigured device mappings that define the data that is to be sent to and received from the Meriam device. The following baseline Device Mapping records are available for the Meriam MFT4010 device. You should not modify these records:

- Send, Meriam MFT4010, 02 An Pts_01
- Send, Meriam MFT4010, 03 An Pts, SqRt Press_01
- Send, Meriam MFT4010, 03 An Pts_01
- Send, Meriam MFT4010, 05 An Pts, SqRt Press_01
- Send, Meriam MFT4010, 05 An Pts_01
- Send, Meriam MFT4010, 06 An Pts, SqRt Press_01
- Send, Meriam MFT4010, 06 An Pts_01
- Send, Meriam MFT4010, 09 An Pts, SqRt Press_01
- Send, Meriam MFT4010, 09 An Pts_01
- Send, Meriam MFT4010, 11 An Pts, SqRt Press_01
- Send, Meriam MFT4010, 11 An Pts_01
- Send, Meriam MFT4010, 21 An Pts, SqRt Press_01
- Send, Meriam MFT4010, 21 An Pts_01
- Send, Meriam MFT4010, Single Switch_01
- Receive, Meriam MFT4010, 02 An Pts_01
- Receive, Meriam MFT4010, 03 An Pts, SqRt Press_01
- Receive, Meriam MFT4010, 03 An Pts_01
- Receive, Meriam MFT4010, 05 An Pts, SqRt Press_01
- Receive, Meriam MFT4010, 05 An Pts_01
- Receive, Meriam MFT4010, 06 An Pts, SqRt Press_01
- Receive, Meriam MFT4010, 06 An Pts_01
- Receive, Meriam MFT4010, 09 An Pts, SqRt Press_01
- Receive, Meriam MFT4010, 09 An Pts_01
- Receive, Meriam MFT4010, 11 An Pts, SqRt Press_01
- Receive, Meriam MFT4010, 11 An Pts_01
- Receive, Meriam MFT4010, 21 An Pts, SqRt Press_01
- Receive, Meriam MFT4010, 21 An Pts_01
- Receive, Meriam MFT4010, Single Switch_01

About Sending Calibration Data to a Device

When you *send calibration data to a device*, you are exporting information about the type of calibrations that should be performed for specific pieces of equipment. This information is stored in Calibration Template records, which are linked to the Equipment records that represent the pieces of equipment for which calibration measurements should be collected. The following records will appear on the **Devices** page when you send calibration data to a device:

- Calibration Template records in which the **Enable Automated Calibrations** check box is selected.
- Calibration Template, Analog records that contain a value other than *Analog-Manual* in the Calibration Type field.

When you send calibration data to a device, you can select from a list of supported devices the device that you want to use to record the calibration data. With the current Calibration Management model, you should select one of the following devices:

- Beamex MC5
- Fluke 74x_3.4.0
- Meriam MFT4010

After you select a device, you can enter the manufacturer and serial number of the device to determine whether or not the device is currently certified. While the Meridium APM system does not prevent you from using a device that is out of certification, we recommend that you use a certified device to perform calibrations.

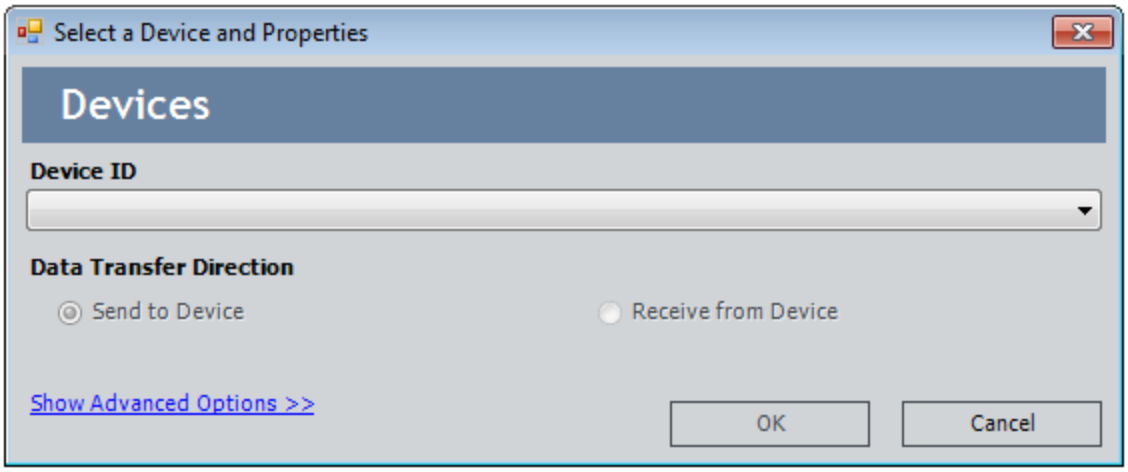
Note: If you are using a Fluke 75x device, you should select Fluke 74x_3.4.0.

Sending Calibration Data to Devices

To send calibration data to a device:

1. On the Calibration Management Functions page, click the **Send to Calibration Data Collector** link.

   The **Select a Device and Properties** dialog box appears.

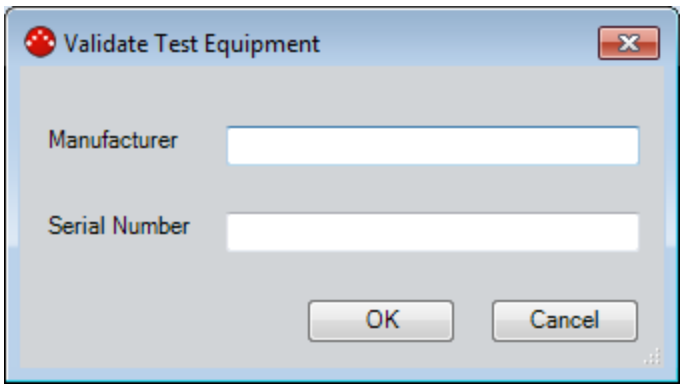


2. In the **Device ID** list, select the device that you will use to collect calibration data. The name of the device that was used last is selected by default.
3. In the **Data Transfer Direction** section, accept the default selection ***Send To Device***.

   Note: Super Users and members of the MI Device Administrators Security Group can click the **Show Advanced Options** link to configure the selected device and its mappings. For other users, this link is disabled.

4. Click **OK**.

   The **Validate Test Equipment** dialog box appears.



Note: The **Validate Test Equipment** dialog box appears only when you select a device that is supported by Calibration Management.

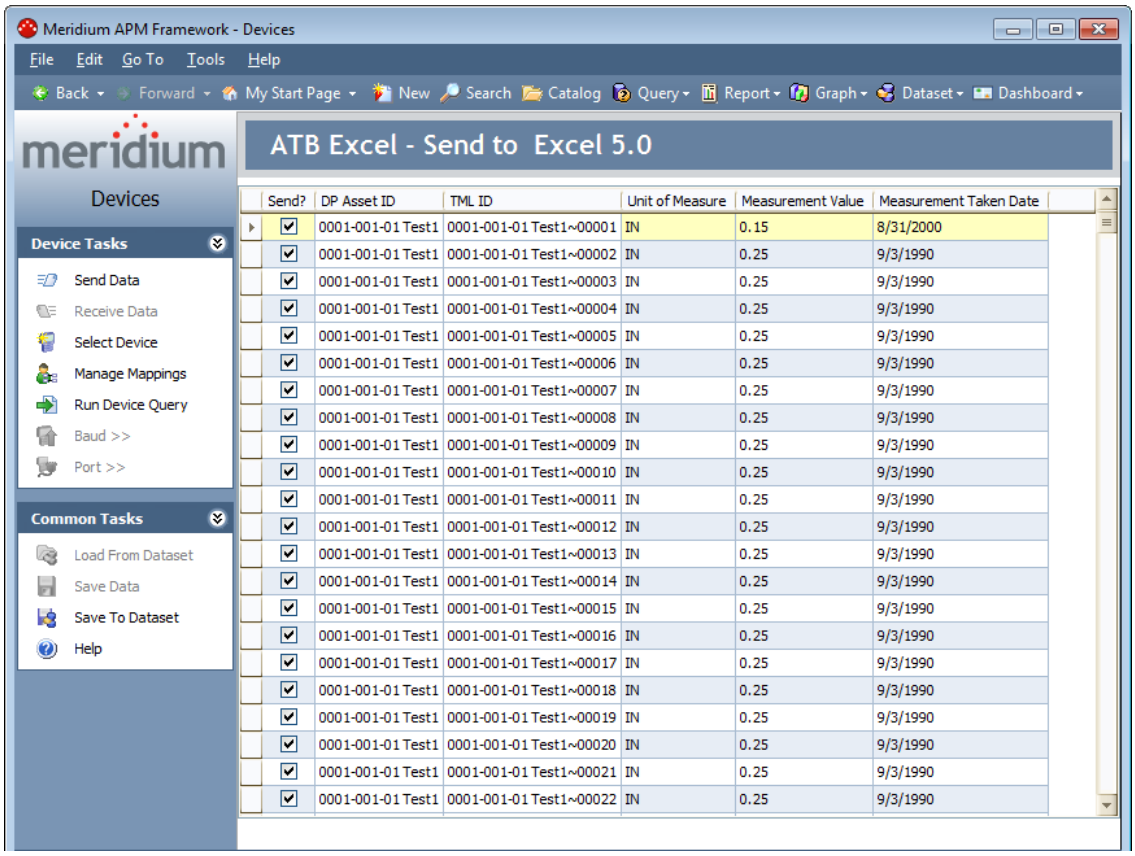
5. In the **Manufacturer** text box, type the manufacturer name of the specific device (e.g., Fluke) that you are using.
6. In the **Serial Number** text box, type the serial number of the specific device (e.g., Fluke) that you are using.
7. Click **OK**.

   A message appears, indicating whether or not the specified device is certified. Note that if the device is *not* certified, you can still perform the calibration, but we recommend that you use only certified devices to perform calibrations.
8. Click **OK**.

   The query runs, and then the **Devices** page appears, displaying a list of values that are available to be sent to the device.

   Note: If the Send query contains prompt(s), the prompt(s) for the query parameter values will appear. If a query has been used previously, the Meridium APM system will automatically display the values that were entered last by the user who is currently logged in. If you see a prompt, you will need to provide the desired parameters.

   The following image shows an example of what the **Devices** page looks like. Note that the column headers are based on the Device Query for the selected device.



Note: If an appropriate device mapping could not be found for a given row, a message will appear in that row, explaining the problem. Additionally, the row will be disabled and the data that is associated with that row will *not* be sent to the device.

9. In the **Send?** column for each Calibration Task you want to send, select the **Send?** check box. For rows of data that you do not want to send to the device, clear the **Send?** check box.
10. On the **Device Tasks** menu, click the **Send Data** link.

    A confirmation message appears, asking you to check that the device is connected.
11. Click the **Yes** button.
    - If a connection to the device cannot be found, a message will appear, explaining the problem, and you will be unable to send data to the device until the problem is corrected.
    - If a connection to the device is found, the Meridium APM system attempts to send the data to the selected device, and a status message appears, indicating that:

- The send action has been completed and displaying the number of items that were sent successfully.
- The send action failed and displaying the items that were not sent to the device. If the send action fails, you will need to correct the issue and try again.

About Receiving Calibration Data from a Device

When you *receive calibration datafrom a device*, you are importing the results of an automated calibration from the device into the Meridium APM system. After the data is imported into the Meridium APM system, you can choose to save the results to the Meridium APM database, which will automatically create one Calibration Event record for each calibration that was performed. The Calibration Event records are then populated automatically with values that you entered in the device when you performed the calibration.

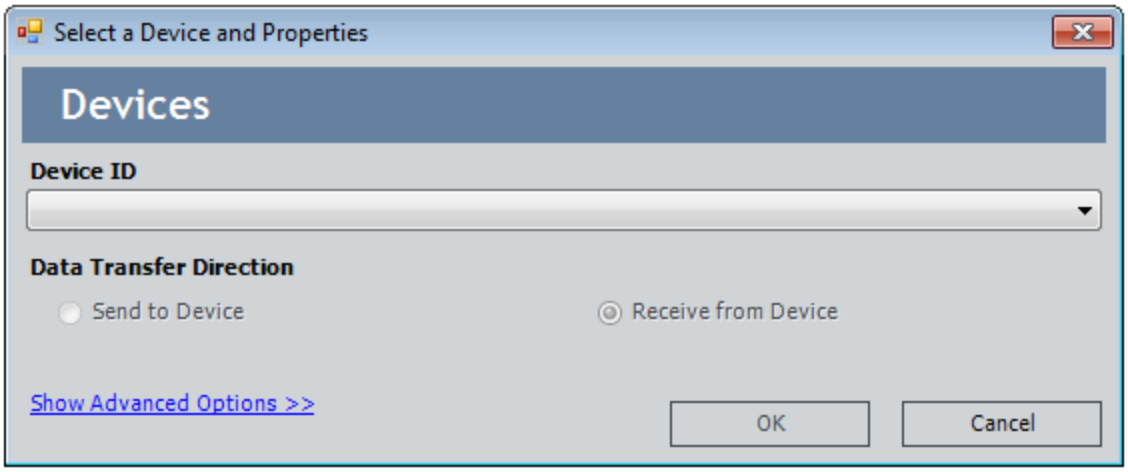
If you sent calibration data to a device and some calibrations were not performed, *only* those calibrations that were performed will be received. You must determine if any calibrations were not performed and then take the necessary action to complete those that were skipped.

Receiving Calibration Data from Devices

To receive calibration data from a device:

1. On the Calibration Management Functions page, click the **Receive from Calibration Data Collector** link.

   The **Select a Device and Properties** dialog box appears.

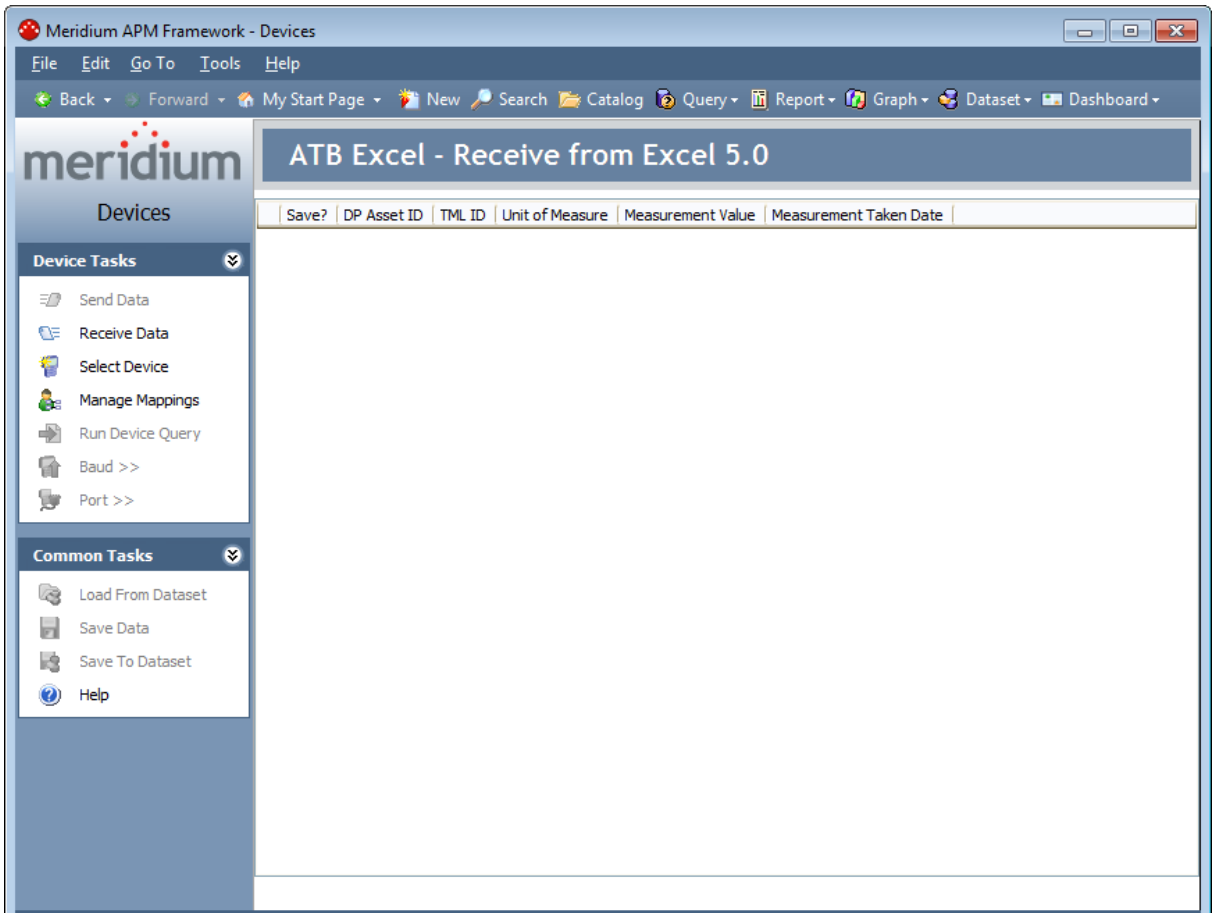


2. In the **Device ID** list, select the desired device. The name of the devices that was used last is selected by default.
3. In the **Data Transfer Direction** section, accept the default option ***Receive from Device***.

   Note: Only Super Users and members of the MI Device Administrators Security Group can click the **Show Advanced Options** link to configure the selected device and its mappings. For other users, this link is disabled.

4. Click **OK**.

   The **Devices** page appears, displaying a blank grid.



5. On the **Device Tasks** menu, click the **Receive Data** link.

   A confirmation message appears, asking you to check that the device is connected.

6. Click the **Yes** button to verify that the device is connected and ready to send data to Meridium APM.

- If a connection to the device cannot be found, a message will appear, explaining the problem, and you will be unable to receive data from the device until the problem is corrected.
- If a connection to the device is found, the Meridium APM system attempts to receive the data from the selected device, and a status message appears, indicating that:
  - The receive operation was successful and displaying the number of items that were received successfully. Additionally, the data that was received is displayed on the **Devices** page, where you can evaluate the data and save it to the Meridium APM database.
  - The receive operation failed and displaying the list of items that were not received.

Saving Data Received from a Device to the Meridium APM Database

After you receive Calibration data from a device, you can save the data directly to the Meridium APM database in Calibration Event records, which will be created automatically. The following instructions assume that you are viewing on the **Devices** page the data that was received from a device. To save data that is received from a device, you must be a member of the MI Devices Power Users Security Group.

To save data received from a device to the Meridium APM database:

1. In the list of received data, select the **Save?** check box for each row of data that you want to save.

   > **Hint:** If you want to select all the received data that is displayed, right-click the list, and then click **Select All Records**. You can *clear* all the selections using the **Deselect All Records** option.

2. On the **Devices** page, on the **Common Tasks** menu, click the **Save Data** link.

   One Calibration Event record is created per row that appears in the results. If a Calibration Event record was not created for an event, that event will appear in the grid on the **Devices** page. Otherwise, the grid will be empty. Additionally, the **Calibration Event List** window appears, displaying the list of Calibration Event records that were created as a result of the data you saved to the Meridium APM database.

   If desired, you can open a Calibration Event record from this list by clicking the hyperlinked record ID of that record. When you do so, the record contents will appear in a separate window. At this point, you can close a Calibration Event record.

   > **Note:** If saving the records to the database is unsuccessful, an error message will appear, indicating that the data could not be saved. You can access the error log via the error message.

Saving Data Received from a Device to a Meridium APM Dataset

After you receive data from a device, if desired, you can save the data as a Meridium APM dataset.

To save received data as a Meridium APM dataset:

1. In the list of received data, select the **Save?** check box for each row of data that you want to flag for saving.

   Note that this selection does not affect which rows of data are actually included in the dataset. Regardless of your selection, ALL rows of received data will be saved to the dataset. Your **Save?** designation will be saved with each row of data and will serve to indicate which rows you think are valid and should be saved to the database. When an administrative user later reviews the dataset, he or she can determine which information to commit to the database, based upon your recommendation.

   > **Hint:** If you want to flag all the received data, right-click the list, and then click **Select All Records**. Note that choosing **Deselect All Records** clears all your selections.

2. On the **Common Tasks** menu, click the **Save To Dataset** link.

   The **Save Results As Dataset** dialog box appears.

3. Navigate to the Catalog location where you want to save the dataset.
4. Type a name for the dataset and a description, if desired.
5. Click the **Save** button.

   The dataset is saved to the Catalog. If the operation is unsuccessful, an error message will appear, indicating that the data could not be saved. From the error message, you can access the error log.

Viewing the Error Log When the Save Is Unsuccessful

When you attempt to save data that you received from a device to the Meridium APM database or as a dataset and the save is unsuccessful, a message appears, indicating that the data was not saved. If you see this message, you can click **OK** to view an error log with the details of the error.

The specific error message that you see will vary depending on:

- The type of device you are using.
- Whether the Meridium APM system failed to save all or only some of the data.
- Where you are saving the data (i.e., in Calibration Event records or as a dataset).

Regardless of the message that appears, when you click **OK**, the **Devices Log** will appear, displaying a list of the data that could not be saved to the Meridium APM system.

On the **Devices Log** dialog box, you can double-click any row in the grid to view the details of the error.

About Performing Manual Calibrations

A *manual calibration* is one in which calibration data is recorded by hand and typed manually into Calibration Event records. When you perform a manual calibration you will:

- Perform the specified calibration event.
- Create one Calibration Event record per calibration that was performed, and type the results in the records.

About Performing Manual Functional Tests

A *manual functional test* is similar to a manual calibration, except that you will record data for the functional test that you have defined using a Calibration Template, Functional Test record. You should use the following workflow to perform a manual functional test:

1. Print a Functional Test Calibration Field Report.
2. Perform the specified functional test.
3. Create a Calibration, Functional Test record for the functional test that was performed, and type the results into the record manually.

About the Functional Test Field Calibration Report

The *Functional Test Field Calibration Report* displays the information that you defined in a Calibration Template, Functional Test record. You can print the report and use it to manually record the results of the functional test in the field, and then you can transfer the results from the report to a Calibration, Functional Test record in the Meridium APM Framework.

The Functional Test Field Calibration Report contains the following sections:

- Calibration Details
- Functional Test Calibration Results as Recorded in the Field
- Test Equipment Used in Calibration

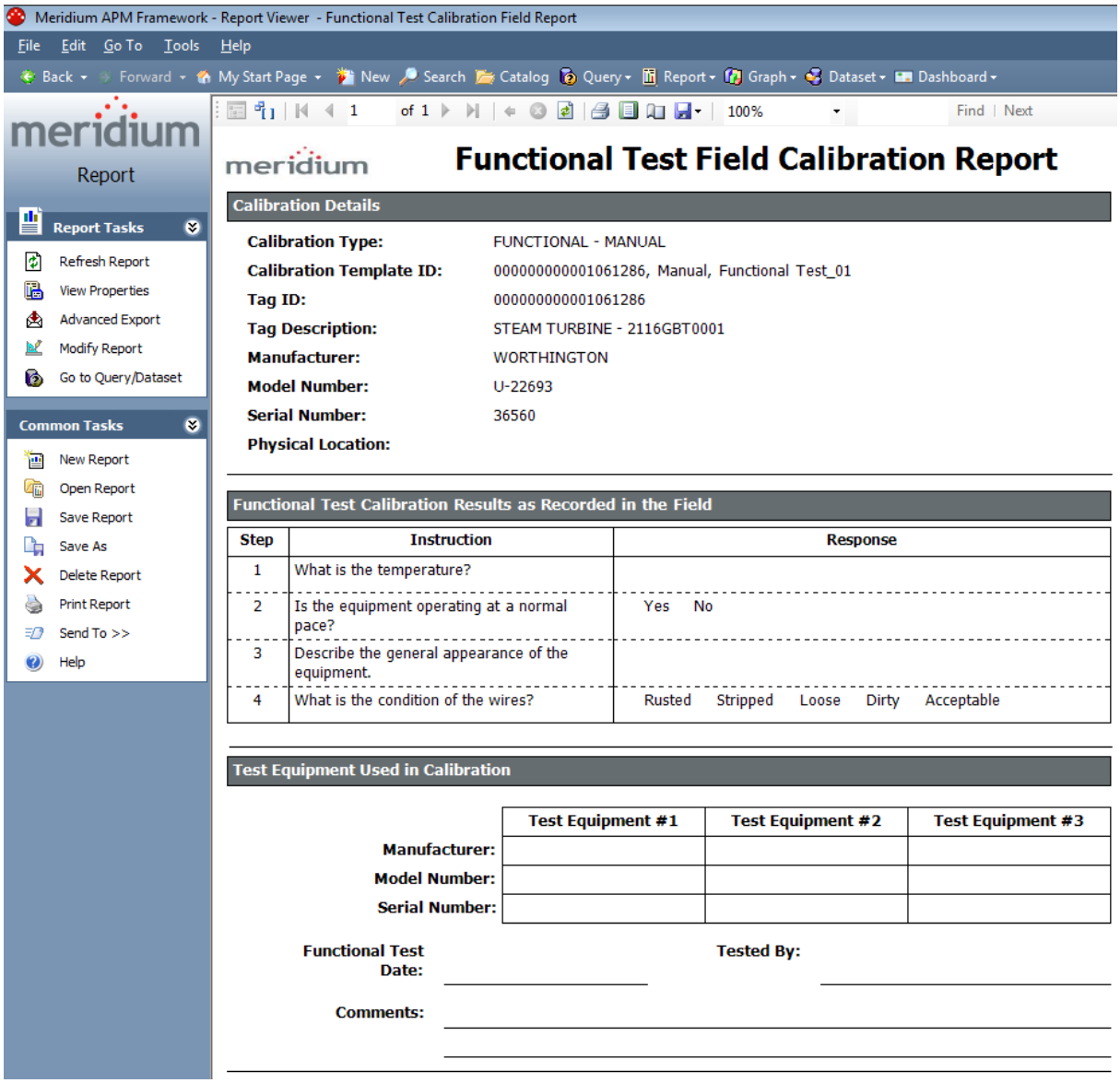
Accessing the Functional Test Field Calibration Report

To access the Functional Test Field Calibration Report:

1. Open in Record Manager the Calibration Template, Functional Test record that contains the functional test information you want to use for the Functional Test Field Calibration Report.
2. On the **Associated Pages** menu, click the **Calibration Reports** link.

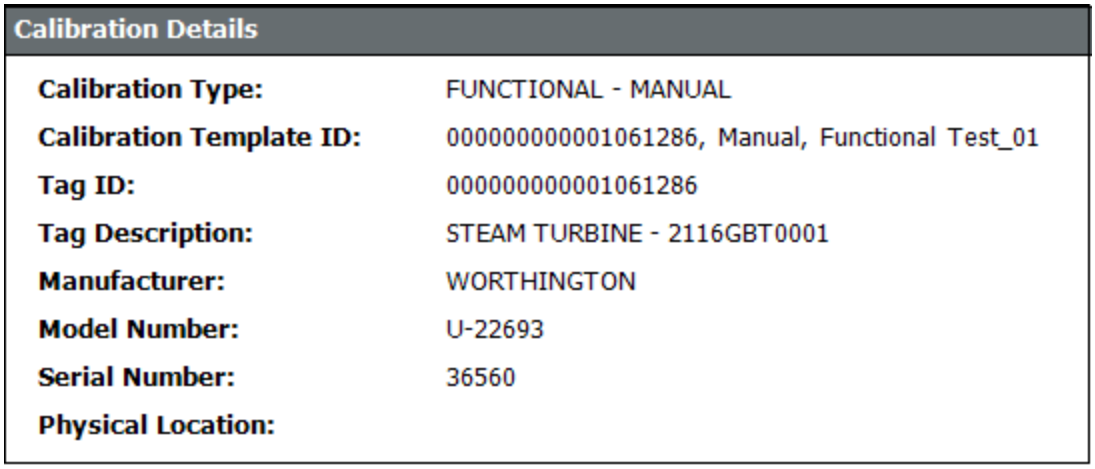
   A submenu appears.
3. Click the **Functional Test Calibration Field Report** option.

   The report appears on the **Meridium APM Report Viewer** page.


Meridium APM Framework - Report Viewer - Functional Test Calibration Field Report
File Edit Go To Tools Help
Back Forward My Start Page New Search Catalog Query Report Graph Dataset Dashboard
meridium
Report
Report Tasks
Refresh Report
View Properties
Advanced Export
Modify Report
Go to Query/Dataset
Common Tasks
New Report
Open Report
Save Report
Save As
Delete Report
Print Report
Send To >>
Help
1 of 1 100% Find | Next
meridium
Functional Test Field Calibration Report
Calibration Details
Calibration Type: FUNCTIONAL - MANUAL
Calibration Template ID: 000000000001061286, Manual, Functional Test_01
Tag ID: 000000000001061286
Tag Description: STEAM TURBINE - 2116GBT0001
Manufacturer: WORTHINGTON
Model Number: U-22693
Serial Number: 36560
Physical Location:
Functional Test Calibration Results as Recorded in the Field
Step | Instruction | Response
1 | What is the temperature? |
2 | Is the equipment operating at a normal pace? | Yes No
3 | Describe the general appearance of the equipment. |
4 | What is the condition of the wires? | Rusted Stripped Loose Dirty Acceptable
Test Equipment Used in Calibration
Test Equipment #1 | Test Equipment #2 | Test Equipment #3
Manufacturer:
Model Number:
Serial Number:
Functional Test Date:
Tested By:
Comments:

Aspects of the Calibration Details Section

The **Calibration Details** section in the Functional Test Field Calibration Report displays information about the piece of equipment on which you are performing the functional test.



Calibration Details	
Calibration Type:	FUNCTIONAL - MANUAL
Calibration Template ID:	000000000001061286, Manual, Functional Test_01
Tag ID:	000000000001061286
Tag Description:	STEAM TURBINE - 2116GBT0001
Manufacturer:	WORTHINGTON
Model Number:	U-22693
Serial Number:	36560
Physical Location:	

The following table lists each item that appears in the **Calibration Details** section and the corresponding record in which the underlying value is stored, if applicable.

Report Item	Record in which the value is stored	Field in which the value is stored	Notes
Calibration Type	N/A	N/A	This value is populated automatically with *Functional - Manual*.
Calibration Template ID	Calibration Template, Functional Test	Template ID	None
Tag ID	Calibration Template, Functional Test	Tag Name	None
Tag Description	Calibration Template, Functional Test	Tag Description	None
Manufacturer	Calibration Template, Functional Test	Manufacturer	None

Report Item	Record in which the value is stored	Field in which the value is stored	Notes
Model Number	Calibration Template, Functional Test	Model Number	None
Serial Number	Calibration Template, Functional Test	Serial Number	None
Physical Location	N/A	N/A	An empty space appears for this item by default. You can write the physical location value directly onto the printed Functional Test Field Calibration Report.

Aspects of the Functional Test Calibration Results Section

The **Functional Test Calibration Results** section in the Functional Test Field Calibration Report contains a table, where you can manually write the results of the functional test on the printed report.

Functional Test Calibration Results as Recorded in the Field

Step	Instruction	Response
1	What is the temperature?	
2	Is the equipment operating at a normal pace?	Yes No
3	Describe the general appearance of the equipment.	
4	What is the condition of the wires?	Rusted Stripped Loose Dirty Acceptable

The following table lists each column in the **Functional Test Calibration Results** section and the corresponding record in which the value is stored, if applicable.

Report Column	Record in which the value is stored	Field in which the value is stored	Notes
Step	Calibration Template Detail, Functional Test	Sequence Number	None
Instruction	Calibration Template Detail, Functional Test	Instruction	None

Report Column	Record in which the value is stored	Field in which the value is stored	Notes
Response	N/A	N/A	The values that appear in this field depend upon the value stored in the Response Type field in the Calibration Template Detail, Functional Test record. If the value stored in that field is: • **Yes/No:** The text *Yes* and *No* will appear in this column in the report. You can circle the appropriate response. • **Number:** The column will not contain a value. You can write a numeric value in the **Number** cell. • **Text**: The column will not contain a value. You can write a numeric value in the **Text** cell. • **Selection:** A list of the options that you entered in each Condition field in the Calibration Template, Functional Test record will appear in this column in the report. You can circle the appropriate response.

Aspects of the Test Equipment Used in Calibration Section

The **Test Equipment Used in Calibration** section of the Functional Test Field Calibration Report allows you to manually write on the printed report information about the test equipment you used to perform the functional test, which you can later type into a Test Equipment record in the Meridium APM Framework.

Test Equipment Used in Calibration

	Test Equipment #1	Test Equipment #2	Test Equipment #3
Manufacturer:			
Model Number:			
Serial Number:			

Functional Test Date: _____ **Tested By:** _____

Comments: _____

_____

Printing the Functional Test Field Calibration Report

To print the Functional Test Field Calibration Report:

- Access the Functional Test Field Calibration Report, and then use the Report Tool to print the report.

Creating Calibration Event Records Manually

The following instructions provide details on creating a Calibration Event record manually via a link that appears on the **Associated Pages** menu when you are viewing an Equipment record. This step is necessary only if you are performing *manual calibrations*. You do *not* need to complete this step if you are performing automated calibrations.

To create a Calibration Event record manually:

1. Open in the Record Manager the Equipment record to which the Calibration Event record should be linked.
2. On the **Associated Pages** menu, click the **Create Calibration** link.

   A submenu appears with the following options, which you can use to create records in the associated Calibration Event family:

- Create Analog Calibration
- Create Discrete Calibration
- Create Multi-Component Analyzer Calibration
- Create Single Component Analyzer Calibration
- Create Weight Scale Calibration
- Create Functional Test Calibration

3. Click the option that corresponds to the type of Calibration Event record that you want to create.

   A new record in the selected Calibration Event family appears in a separate window. Note that:

- The Event ID field is populated automatically.
- If the Equipment record to which you are linking the Calibration Event record is already linked to ONE Calibration Template record, other fields are populated automatically based on the information in the Calibration Template record.
- If the Equipment record to which you are linking the Calibration Event record is already linked to *multiple* Calibration Template records, in the Calibration Template Key field, you can select the Calibration Template record whose data you want to use for populating the Calibration Event record. These instructions assume that the template data is populated in the Calibration Event record.

4. Provide values in the remaining fields. Depending on the type of Calibration Event record that you are creating, the required fields will vary.
5. When you are finished, click **OK**.

   The Calibration Event record is saved and linked automatically to the currently selected Equipment record.

About Calibration Event Records

Calibration Eventrecords store information about calibrations that are performed in your facility. Calibrations can be performed using an automated method or a manual method. Regardless of the method that you use, Calibration Event records will exist to store a snapshot of the current condition of the piece of equipment that is calibrated.

The difference between an automated calibration and a manual calibration is the method that is used to perform the calibration and create the Calibration Event record:

- When you enter calibration results into a device and then save to the Meridium APM database the data received from that device, Calibration Event records are created automatically.
- When you perform a calibration by hand, you will manually create Calibration Event records and type the results into the record by hand.

In the baseline Meridium APM database, the *Calibration* family appears below the root level *Event* family. Throughout this documentation, we refer to these records and all the records for the families that appear below the Calibration family as *Calibration Event* records.

The baseline Meridium APM database contains the following Calibration Event families that store information that is specific to a type of calibration:

- Calibration, Analog: Stores information for linear or square root calibrations that have a single input signal, a primary output, and an optional secondary output. Examples of analog calibrations include gauges, flow, pressure, and temperature.
- Calibration, Discrete: Stores information for single- or dual- switch instruments. Examples of discrete calibrations include flow, level, pressure, temperature, vibration, and position switches.
- Calibration, Analyzer Single Component: Stores information for single component calibrations. Examples of single- component analyzer calibrations include calibrating pH, in-situ oxygen, toxic gas, and combustible gas.
- Calibration, Analyzer Multi-Component: Stores information for comparing standard gas values to test results from the analyzer. Examples of multi-component analyzer calibrations include Mass Spectrometers and Process Gas Chromatographs.
- Calibration, Weight Scale: Stores information for weight scale calibrations.
- Calibration, Functional Test: Stores information for functional test calibrations, which allow you to perform custom functional tests on a piece of equipment. An example of an instruction in a functional test is *Describe the wires on the piece of equipment*.

About Calibration Event Records and Test Equipment

Information about the test equipment that was used to perform a calibration is stored in the Calibration Event record for the following families and is displayed on the **Test Equipment** tab on the family's datasheet:

- Calibration, Analog
- Calibration, Discrete
- Calibration, Analyzer Single Component
- Calibration, Weight Scale
- Calibration, Functional Test

The **Test Equipment** tab on the Calibration Event datasheet contains three columns:

- **Test Equip 1**
- **Test Equip 2**
- **Test Equip 3**

...where each column represents one Test Equipment record, and each row contains information about that piece of test equipment. In other words, a given calibration event can be associated with up to three pieces of equipment.

The values on the **Test Equipment** tab are populated differently depending upon whether you perform an automated calibration or a manual calibration.

- **Automated calibration:** The following fields are populated automatically from the device (i.e., these values are stored only in the Calibration Event record and not in the Test Equipment record):
  - Test Equipment Manufacturer 1
  - Test Equipment Model 1
  - Test Equipment Serial 1
- **Manual calibration:** When you perform a calibration manually, after you link a Test Equipment record to the Calibration Event record using the Test Equipment ID No 1 field, the remaining fields on the **Test Equipment** tab are populated automatically with values from the Test Equipment record.

  In addition, the Test Equipment Status 1 field in the Test Equipment record indicates whether or not the test equipment is certified. While the Meridium APM system does not prevent you from using uncertified test equipment to perform calibrations, we recommend that you perform calibration using only certified test equipment.

Note: If you are performing an automated calibration and want to provide more information about the test equipment than the values populated automatically from

the device, you can link a Test Equipment record to the Calibration Event record manually in the same way you would for a manual calibration, and the additional information will be populated automatically in the Calibration Event record.

Closing a Calibration Event

When you *close a calibration event*, you are indicating that the results of that event have been reviewed and do not require further review. A member of the Calibration Administrator Security Group can close an event record by selecting the **Calibration Close** check box in the Calibration Event record representing that calibration event. When you close a Calibration Event record, all fields in the Calibration Event records is disabled, an only a member of the Calibration Administrator Security Group can clear the check box to enable the datasheet. Additionally, the following fields are updated automatically in the Calibration Task record that is linked to the Equipment record to which the Calibration Event record is linked:

- **Last Date:** Populated with the date and time on which the **Calibration Close** check box in the Calibration Event record is selected.
- **Next Date:** Populated with the next date on which a calibration event should be performed for the equipment, based on the schedule that is defined in that Calibration Task record.

To close a Calibration Event:

1. Open the Calibration Event record that you want to close.
2. In the **Calibration Close** cell, select the **Calibration Close** check box.

   The fields on the Calibration Event record are disabled, and the fields in the Last Date and Next Date fields in the Calibration Task record are updated automatically.

About Calibration Event Graphs

Meridium APM Calibration Management includes various predefined graphs, which provide a visual representation of the data that exists in the Calibration Event records. These graphs are stored by default in the Catalog folder \\Public\Meridium\Modules\Calibration Management\Graphs.

When you are viewing a Calibration Event record in the Record Manager, these graphs are available via links on the **Calibration** submenu of the **Associated Pages** menu. The following tables list by Calibration Event family the graphs that are available for each and the name of link on the **Associated Pages** menu that you can use to access the graph.

Calibration, Analog	
Graph Name	**Associated Pages link**
Analog Calibration Error Graph	View Error Graph
Analog Calibration Measure Graph	View Measure Graph
Calibration Error Trend Graph	View Error Trend
Calibration Pass Fail Trend Graph	View Pass/Fail Trend

Calibration, Discrete	
Graph Name	**Associated Pages link**
Calibration Error Trend Graph	View Error Trend
Calibration Pass Fail Trend Graph	View Pass/Fail Trend

Calibration, Analyzer Multi-Component	
Graph Name	**Associated Pages link**
Analyzer Multi-Component Calibration Error Graph	View Error Graph
Calibration Error Trend Graph	View Error Trend
Calibration Pass Fail Trend Graph	View Pass/Fail Trend

Calibration, Analyzer Single Component	
Graph Name	**Associated Pages link**
Analyzer SingleComponent Calibration Error Graph	View Error Graph
Analyzer SingleComponent Calibration Measure Graph	View Measure Graph
Calibration Error Trend Graph	View Error Trend
Calibration Pass Fail Trend Graph	View Pass/Fail Trend

Calibration, Weight Scale	
Graph Name	**Associated Pages link**
WeightScale Calibration Error Graph	View Error Graph
WeightScale Calibration Measure Graph	View Measure Graph
Calibration Error Trend Graph	View Error Trend
Calibration Pass Fail Trend Graph	View Pass/Fail Trend

Accessing Reports for Calibration Event Records

Meridium APM Calibration Management includes the following pre-configured Calibration reports (i.e., one for each baseline Calibration Event family):

- Analog Calibration Report
- Analyzer MultiComponent Calibration Report
- Analyzer SingleComponent Calibration Report
- Discrete Calibration Report
- WeightScale Calibration Report
- Functional Test Calibration Report

These reports are stored in the Catalog folder \\Public\Meridium\Modules\Calibration Management\Reports.

When you are viewing a Calibration Event record in the Meridium APM Record Manager, you can access the associated Calibration report via the **View Report** link on the **Calibration** submenu, which appears as a link on the **Associated Pages** menu. When you click the **View Report** link, the report for the *current* Calibration Event family will appear. For example, when you are viewing a Calibration, Analog record, the **View Report** link will display the Analog Calibration Report.

Note: When you are viewing a Calibration, Functional Test record in Record Manager, you can access the Functional Test Calibration Report via the **Functional Test Calibration Report** link on the **Calibration** submenu instead of the View Report link.

To view the report for a Calibration event record:

1. Open the desired Calibration Event record in the Record Manager.
2. On the **Associated Pages** menu, click **Calibration**, and then click **View Report**.

   The report appears on the **Meridium APM Report Viewer** page, where all the standard Report Viewer functionality is available to you. You can click the **Print Report** link on the **Common Tasks** menu to print the report.

About Calibration Recommendation Records

Based on the results of a calibration, you might need to propose a recommendation that further action be taken. For example, if you perform a calibration that fails, you may want to recommend that a more thorough inspection be conducted on the piece of equipment with failed calibration results.

You can create a new Calibration Recommendation record to store the details of the recommendation. There are two ways that Calibration Recommendation Records can be created:

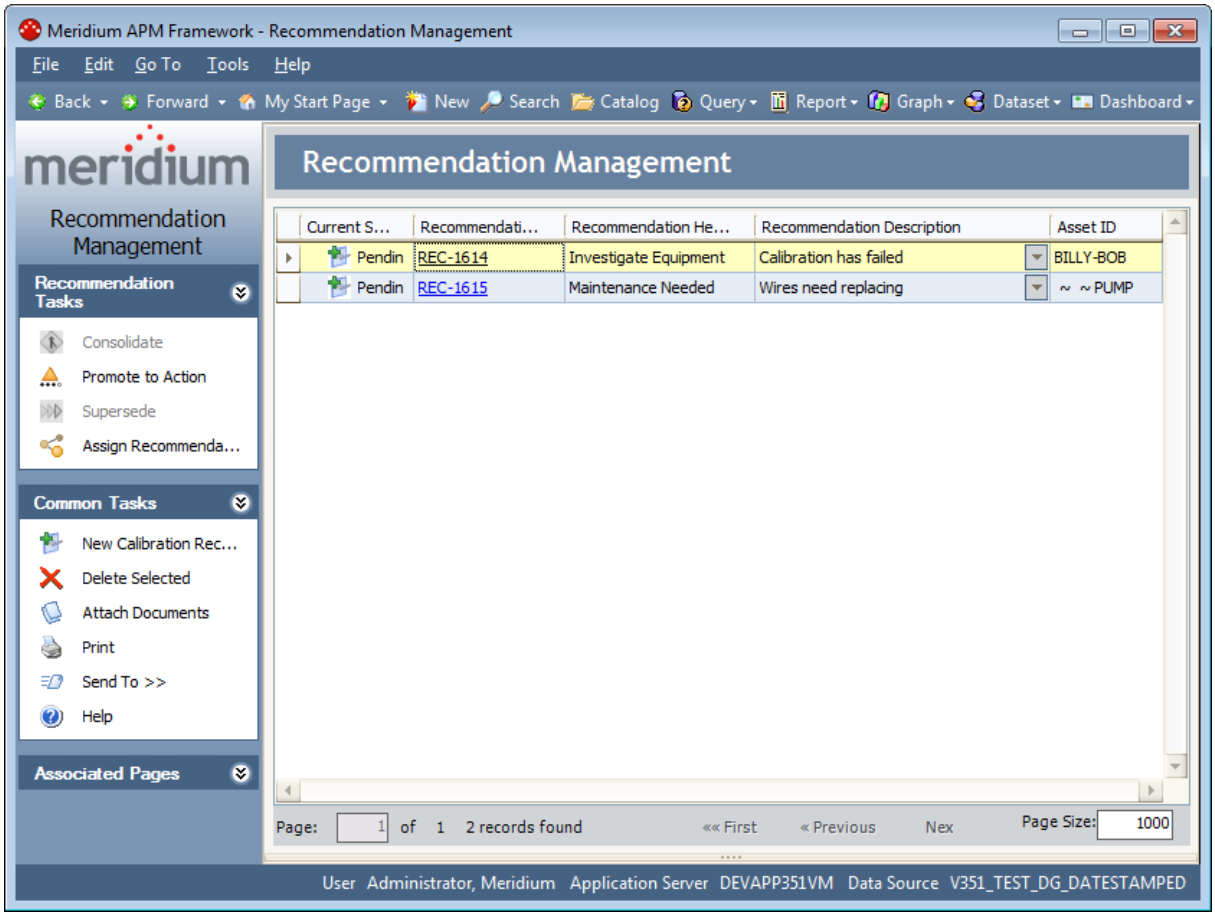
- From the Recommendation Management page. If you want to link a Calibration Recommendation record to more than one Equipment record or Functional Location record, you should use this workflow.
- From an Associated Page for an Equipment record or Calibration Event record in Record Manager. If you want to link a Calibration Recommendation record to a one specific Equipment record, you should use this workflow.

Accessing the Recommendation Management Page From Calibration Management

To access the Recommendation Management page:

- On the **Calibration Management Functions** page, click the **Manage Recommendations** link.

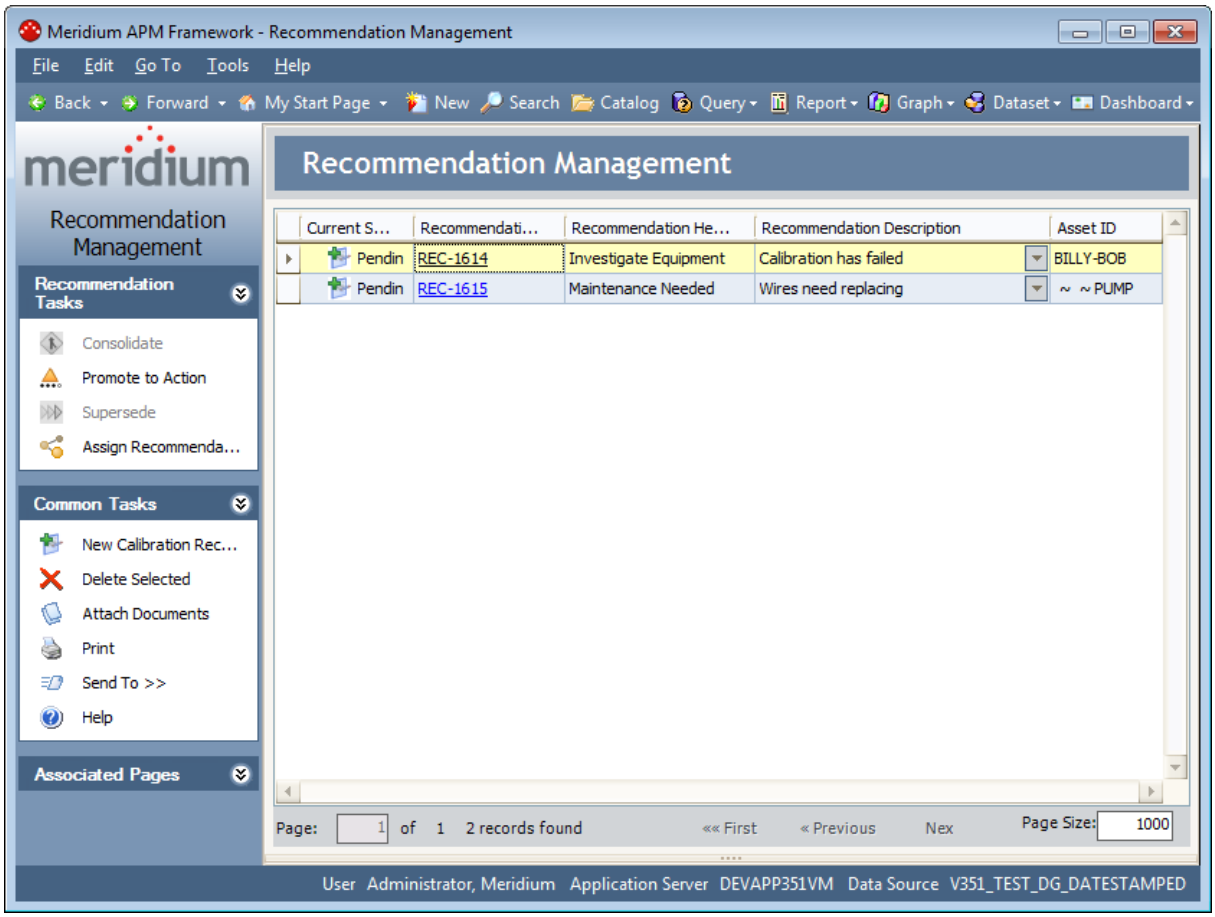
  The **Recommendation Management** page appears, displaying a list of all the Calibration Recommendation records that exist.



From the **Recommendation Management** page, you can manage the states of the Calibration Recommendation records.

Aspects of the Recommendation Management Page when Accessed from Calibration Management

When you access Recommendation Management from Calibration Management, the **Recommendation Management** page contains a grid that displays Calibration Recommendation records *only*. The following image shows an example of the **Recommendation Management** page when accessed via Calibration Management.



When accessed from Calibration Management, the **Recommendation Management** page contains the following additional items:

- A grid that displays Calibration Recommendation records, which contains the following columns:
  - **Current State:** Displays the current state of the Calibration Recommendation record.
  - **Recommendation ID:** Displays the value stored in the Recommendation ID field of the Calibration Recommendation record as a hyperlink, which you can use to open the Calibration Recommendation record in Record Manager.

- **Recommendation Headline:** Displays the value stored in the Recommendation Headline field of the Calibration Recommendation record.
- **Recommendation Description:** Displays the value stored in the Recommendation Description field of the Calibration Recommendation record.
- **Asset ID:** Displays the value stored in the Equipment ID field of the Calibration Recommendation record.

- The following task menus:
  - **Recommendation Tasks menu:** Provides access to State Configuration operations that are available for the selected Calibration Recommendation records. This menu works the same way as it does if you access Recommendation Management from the **Go To** menu,

    Note: If you are a member of the Calibration User Security Group, on the **Recommendation Tasks** menu, the **Consolidate** link, **Promote to Action** link, and **Supersede** link will be disabled.

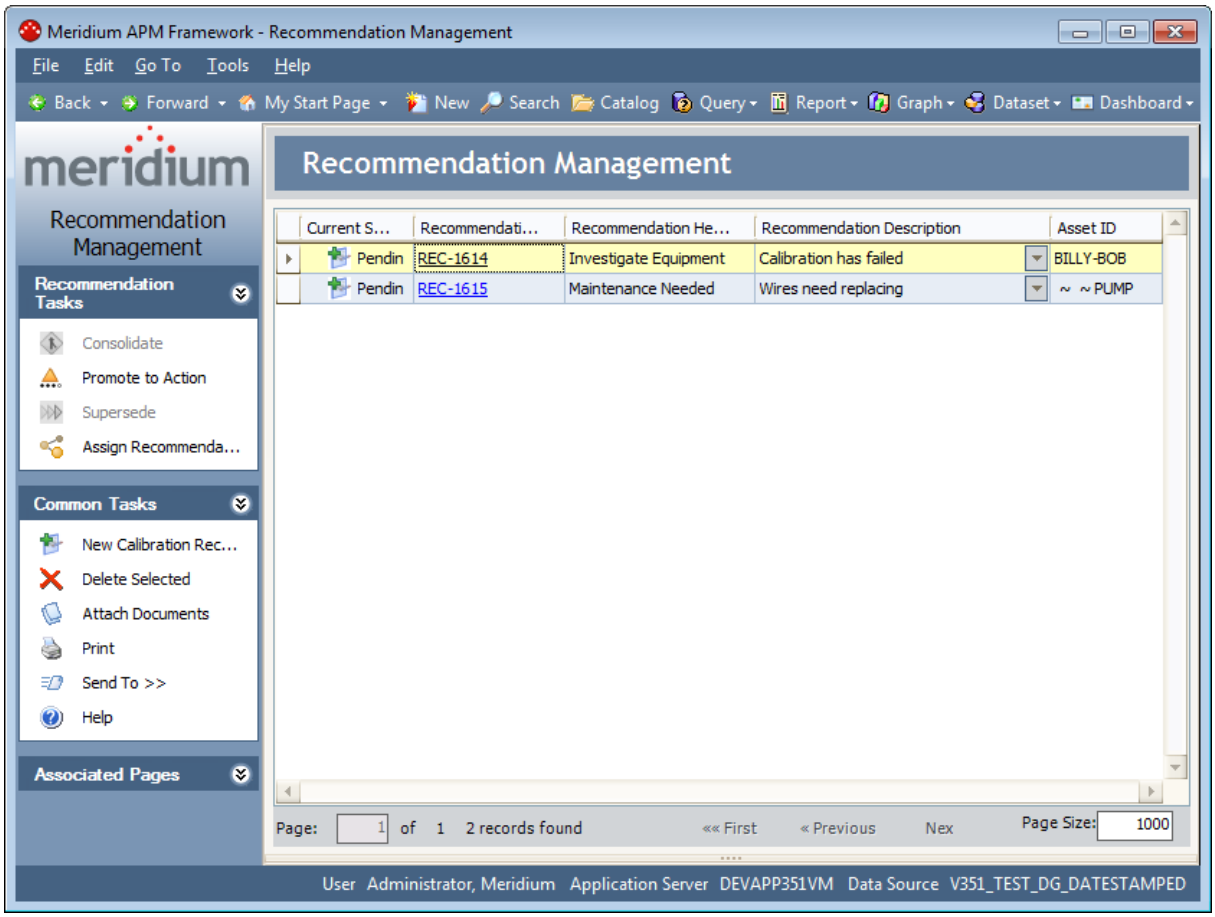
  - **Common Tasks Menu:** Provides standard functionality. This menu works the same way as it does if you access Recommendation Management from the **Go To** menu, except that the **New Recommendation** link is labeled **New Calibration Recommendation** and allows you to create a Calibration Recommendation record instead of a Meridium General Recommendation record.

You can customize the appearance of the grid (e.g., sort the results), if desired.

Creating Calibration Recommendations from Recommendation Management

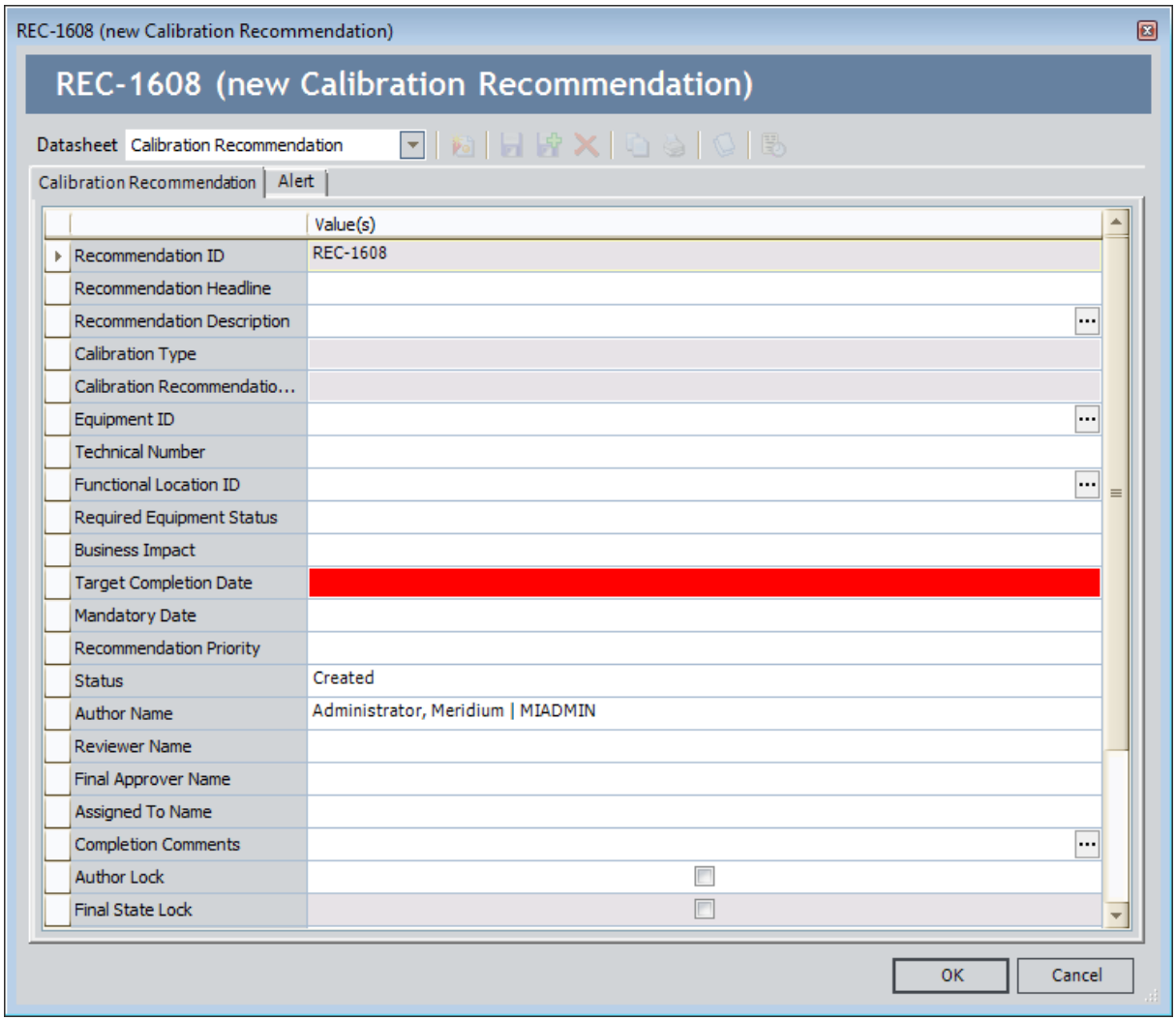
To create a Calibration Recommendation record from Recommendation Management:

1. Access the Recommendation Management page via Calibration Management.



2. On the **Recommendation Management** page, on the **Common Tasks** menu, click the **New Calibration Recommendation** link.

   The **New Calibration Recommendation** window appears.



3. Use the fields on the datasheet to provide the information that is necessary for the recommendation. Note that while the Equipment ID and Functional Location ID fields are not required, we recommend that you use those fields to link the Calibration Recommendation record to Equipment and Functional Location records.
4. Click **OK**.

   The Calibration Recommendation record closes, and your changes are saved.

Note: If you did not link the Calibration Recommendation record to at least one Equipment record or Functional Location record, a message will appear, indicating that no Equipment or Functional Location records were selected. If this is intentional, click **OK**. If this is *not* intentional, click **OK**, and then reopen the Calibration Recommendation record to link it to an Equipment or Functional Location record.

Creating Calibration Recommendations from an Associated Page

To create a Calibration Recommendation from an Associated Page:

1. In Record Manager, open the Equipment record *or* Calibration Event record for which you want to create a Calibration Recommendation record.
2. If you are viewing an Equipment record, on the **Associated Pages** menu, click the **Create Calibration** link.

   -or-

   If you are viewing a Calibration Event record, on the **Associated Pages** menu, click the **Calibration** link.

   A submenu appears.
3. If you are viewing an Equipment record, click the **Create Calibration Recommendation** link.

   -or-

   If you are viewing a Calibration Event record, click the **New Calibration Recommendation** link.

   A new record for the Calibration Recommendation family appears in a separate window, and the following fields are populated automatically with data from the Equipment or Calibration Event record:

   - Calibration Type
   - Calibration Recommendation Basis
   - Equipment ID
   - Functional Location ID
4. Enter values in the remaining fields as desired, and click **OK**.

   The window closes, and the record is saved and linked to the Equipment record or Calibration Event record that you are currently viewing. If you are viewing a Calibration Event record that is also linked to an Equipment record, the Calibration Recommendation record is linked to *both* the Calibration Event record and the Equipment record.

Calibration, Analog Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration, Analog family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
New Calibration Task	Displays the **Task Builder**, which you can use to create a new Task record. This Associated Page appears on the **Calibration** submenu.
New Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Calibration** submenu.
Enter Calibration Data	Displays the **Event Builder**, which you can use to create a new Event record. This Associated Page appears on the **Calibration** submenu.
View Report	Launches the Report Viewer, which displays the Calibration Event record data in a pre-formatted report. This Associated Page appears on the **Calibration** submenu.
View Error Graph	Launches the Graph Viewer, which displays the Error graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Measure Graph	Launches the Graph Viewer, which displays the Measure graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Error Trend	Launches the Graph Viewer, which displays the Error Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Pass/Fail Trend	Launches the Graph Viewer, which displays the Pass/Fail Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.

Calibration, Analyzer Multi-Component Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration, Analyzer Multi-Component family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
New Calibration Task	Displays the **Task Builder**, which you can use to create a new Task record. This Associated Page appears on the **Calibration** submenu.
New Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Calibration** submenu.
Enter Calibration Data	Displays the **Event Builder**, which you can use to create a new Event record. This Associated Page appears on the **Calibration** submenu.
View Report	Launches the Report Viewer, which displays the Calibration Event data in a preformatted report. This Associated Page appears on the **Calibration** submenu.
View Error Graph	Launches the Graph Viewer, which displays the Error graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Error Trend	Launches the Graph Viewer, which displays the Error Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Pass/Fail Trend	Launches the Graph Viewer, which displays the Pass/Fail Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.

Calibration, Analyzer Single Component Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration, Analyzer Single Component family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
New Calibration Task	Displays the **Task Builder**, which you can use to create a new Task record. This Associated Page appears on the **Calibration** submenu.
New Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Calibration** submenu.
Enter Calibration Data	Displays the **Event Builder**, which you can use to create a new Event record. This Associated Page appears on the **Calibration** submenu.
View Report	Launches the Report Viewer, which displays the Calibration Event data in a preformatted report. This Associated Page appears on the **Calibration** submenu.
View Error Graph	Launches the Graph Viewer, which displays the Error graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Measure Graph	Launches the Graph Viewer, which displays the Measure graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Error Trend	Launches the Graph Viewer, which displays the Error Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.

Caption	Description
View Pass/Fail Trend	Launches the Graph Viewer, which displays the Pass/Fail Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.

Calibration, Discrete Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration, Discrete family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
New Calibration Task	Displays the **Task Builder**, which you can use to create a new Task record. This Associated Page appears on the **Calibration** submenu.
New Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Calibration** submenu.
Enter Calibration Data	Displays the **Event Builder**, which you can use to create a new Event record. This Associated Page appears on the **Calibration** submenu.
View Report	Launches the Report Viewer, which displays the Calibration Event data in a preformatted report. This Associated Page appears on the **Calibration** submenu.
View Error Trend	Launches the Graph Viewer, which displays the Error Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Pass/Fail Trend	Launches the Graph Viewer, which displays the Pass/Fail Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.

Calibration, Weight Scale Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration, Weight Scale family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
New Calibration Task	Displays the **Task Builder**, which you can use to create a new Task record. This Associated Page appears on the **Calibration** submenu.
New Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Calibration** submenu.
Enter Calibration Data	Displays the **Event Builder**, which you can use to create a new Event record. This Associated Page appears on the **Calibration** submenu.
View Report	Launches the Report Viewer, which displays the Calibration Event data in a preformatted report. This Associated Page appears on the **Calibration** submenu.
View Error Graph	Launches the Graph Viewer, which displays the Error graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Measure Graph	Launches the Graph Viewer, which displays the Measure graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Error Trend	Launches the Graph Viewer, which displays the Error Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.
View Pass/Fail Trend	Launches the Graph Viewer, which displays the Pass/Fail Trend graph for the Calibration Event record. This Associated Page appears on the **Calibration** submenu.

Calibration, Functional Test

The following Associated Page is configured in the baseline Meridium APM database for the Calibration, Functional Test family.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

Caption	Description
New Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Calibration** submenu.
Functional Test Calibration Report	Displays the Functional Test Report in the Report Viewer. This Associated Page appears on the **Calibration** submenu.

Calibration Template Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration Template family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
Link to Equipment	Lets you link the current Calibration Template record to an equipment or location record. This Associated Page appears on the **Calibration** submenu.
Unlink from Equipment	Lets you unlink the current Calibration Template record from an equipment or location record. This Associated Page appears on the **Calibration** submenu.

Calibration Template Detail Associated Pages

The following Associated Page is configured in the baseline Meridium APM database for the Calibration Template Detail family:

- **Start Page:** Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

Calibration Template, Functional Test

The following Associated Page is configured in the baseline Meridium APM database for the Calibration Template, Functional Test family.

- **Functional Test Calibration Field Report:** Displays the Functional Test Calibration Field Report in the Report Viewer. This Associated Page appears on the **Calibration Reports** submenu.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

Calibration Task Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Calibration Task family.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Start Page	Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.
Link to Template	Lets you link the current Calibration Task record to a Calibration Template record. This Associated Page appears on the **Calibration** submenu.
Unlink From Template	Lets you unlink the current Calibration Task record from a Calibration Template record. This Associated Page appears on the **Calibration** submenu.

Calibration Results, Analog Associated Pages

The following Associated Page is configured in the baseline Meridium APM database for the Calibration Results, Analog family:

- **Start Page:** Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

Calibration Results, Analyzer Associated Pages

The following Associated Page is configuredin the baseline Meridium APM database for the Calibration Results, Analyzer family:

- **Start Page:** Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

Calibration Results, Discrete Associated Pages

The following Associated Page is configured in the baseline Meridium APM database for the Calibration Results, Discrete family:

- **Start Page:** Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

Equipment Associated Pages

The following Associated Pages are configured in the baseline Meridium APM database for the Equipment family for use with Calibration Management.

Note: To see the underlying URL for each Associated Page, you can use the URL Manager application.

Caption	Description
Create Calibration Recommendation	Displays a new Calibration Recommendation record. This Associated Page appears on the **Create Calibration** submenu.
Create Analog Calibration	Displays a new Calibration, Analog record. This Associated Page appears on the **Create Calibration** submenu.
Create Discrete Calibration	Displays a new Calibration, Discrete record. This Associated Page appears on the **Create Calibration** submenu.
Create Multi-Component Analyzer Calibration	Displays a new Calibration, Analyzer Multi-Component record. This Associated Page appears on the **Create Calibration** submenu.
Create Single Component Analyzer Calibration	Displays a new Calibration, Analyzer Single Component record. This Associated Page appears on the **Create Calibration** submenu.
Create Weight Scale Calibration	Displays a new Calibration, Weight Scale record. This Associated Page appears on the **Create Calibration** submenu.
Create Functional Test Calibration	Displays a new Calibration, Functional Test record. This Associated Page appears on the **Create Calibration** submenu.

Caption	Description
Create Task	Displays the **Task Builder**, which you can use to create a new Calibration Task record. This Associated Page appears on the **Create Template** submenu.
Create Analog Calibration Template	Displays a new Calibration Template, Analog record. This Associated Page appears on the **Create Template** submenu.
Create Discrete Calibration Template	Displays a new Calibration Template, Discrete record. This Associated Page appears on the **Create Template** submenu.
Create Multi-Component Analyzer Template	Displays a new Calibration Template, Analyzer Multi-Component record. This Associated Page appears on the **Create Template** submenu.
Create Single Component Analyzer Template	Displays a new Calibration Template, Analyzer Single Component record. This Associated Page appears on the **Create Template** submenu.
Create Weight Scale Calibration Template	Displays a new Calibration Template, Weight Scale record. This Associated Page appears on the **Create Template** submenu.
Create Functional Test Template	Displays a new Calibration Template, Functional Test record. This Associated Page appears on the **Create Template** submenu.

Standard Gas Components Associated Pages

The following Associated Page is configured in the baseline Meridium APM database for the Standard Gas Components family:

- **Start Page:** Displays the **Calibration Management Functions** page. This Associated Page appears on the **Calibration** submenu.

Note: To see the underlying URL for this Associated Page, you can use the URL Manager application.

About the Calibration Management Catalog Folder Structure

The Calibration Management Catalog folders contain graphs, queries, and reports that are used by Calibration Management to display information contained in records that participate in the Calibration Management data model. The Catalog folder **\\Public\Meridium\Modules\Calibration Management** contains the following sub-folders:

- **Graphs:** Contains graphs that display calibration data and summary information.
- **Queries:** Contains queries that support graphs and reports and are used by Calibration Management to identify your equipment families.
- **Reports:** Contains SQL Server Reporting Services reports that display calibration data and summary information.
- **SSRS:** This folder is *not* used by the Meridium APM system.

The Graphs Folder

The following table lists the items that are stored in the Catalog folder **\\Public\Meridium\Modules\Calibration Management\Graphs**.

Item Name	Behavior and Usage
Analog Calibration Error Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Analog record, and then displays in a line graph a summary of the as-found, as-left, negative, and positive error limit data for the specified record.
Analog Calibration Measure Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Analog record, and then displays in a line graph a summary of the output as-found, output as-left, and expected data for the specified record.
Analyzer Multi-Component Calibration Error Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Analyzer Multi-Component record, and then displays in a bar graph the positive error, negative error, as-found error, and as-left error limit values for the specified record.
Analyzer SingleComponent Calibration Error Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Analyzer Single Component record, and then displays in a line graph the positive error, negative error, as-found error, and as-left error limit values for the specified record.
Analyzer SingleComponent Calibration Measure Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Analyzer Single Component record, and then displays in a line graph the primary output as-found and primary output as-left values for the specified record.

Item Name	Behavior and Usage
Calibration Error Trend Graph	Displays the following prompts, and then displays in a line graph the overall as found max error, overall as-found RMS error, overall as-left max error, and overall as-left RMS error values for the specified record. ■ **Range:** Lets you specify the time span in which the calibration events whose results you want to include in the graph took place. You can choose from the following values: ◦ Last 1 month ◦ Last 3 months ◦ Last 1 year ◦ Last 3 years ◦ All ■ **Family:** Lets you specify the Calibration Event family whose record you want to include in the graph. The Family list contains the family captions for the Calibration Event families (except the Calibration, Discrete family) as they appear in the database. You can choose from the following values: ◦ **MI_EVCAANLG:** The Calibration, Analog family caption. ◦ **MI_EVCAANMC:** The Calibration, Analyzer Multi-Component family caption. ◦ **MI_EVCAANSC:** The Calibration, Analyzer Single Component family caption. ■ **EventPred:** Lets you specify the Entity Key for the Equipment record to which Calibration Event records are linked.

Item Name	Behavior and Usage
Calibration Pass Fail Trend Graph	Displays the following prompts, and then displays in a line graph the overall as found max error, overall as found RMS error, overall as-left max error, and overall as-left RMS error values for the specified record. • **Range:** Lets you specify the time span in which the calibration events whose results you want to include in the graph took place. You can choose from the following values: ◦ Last 1 month ◦ Last 3 months ◦ Last 1 year ◦ Last 3 years ◦ All • **Family:** Lets you specify the Calibration Event family whose record you want to include in the graph. The Family list contains the family captions for the Calibration Event families (except the Calibration, Discrete family) as they appear in the database. You can choose from the following values: ◦ **MI_EVCAANLG:** The Calibration, Analog family caption. ◦ **MI_EVCAANMC:** The Calibration, Analyzer Multi-Component family caption. ◦ **MI_EVCAANSC:** The Calibration, Analyzer Single Component family caption. • **EventPred:** Lets you specify the Entity Key for the Equipment record to which Calibration Event records are linked.
Calibration Summary	This graph is not used by the baseline Calibration Management module.
WeightScale Calibration Error Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Weight Scale record, and then displays in a line graph a summary of the as-found, as-left, negative, and positive error limit data for the specified record.

Item Name	Behavior and Usage
WeightScale Calibration Measure Graph	Displays the **EventKey** prompt for the Entity Key of the Calibration, Weight Scale record and then displays in a line graph a summary of the primary output as-found, primary output as-left, and expected data for the specified record.

The Queries Folder

The following table lists the items that are stored in the Catalog folder **\\Public\Meridium\Modules\Calibration Management\Queries**.

Item Name	Behavior and Usage
Beamex Receive Query	Displays the data that is received from a Beamex device. This query appears on the **Devices** page after you receive data from a Beamex device.
Beamex Send Query	Displays the data that is sent to a Beamex device. This query appears on the **Devices** page when you send data to a Beamex device.
Calibration Totals Query	Displays by Asset ID the number of calibrations that have taken place for that piece of equipment, based on the number of closed Calibration Event records that are linked to that Equipment record.
Device Mapping Query	Displays the **Select Mapping ID** prompt, which contains the list of mapping types, and then displays the mappings that exist for the selected type.
Fluke Receive Query	Displays the data that is received from a Fluke device. This query appears on the **Devices** page after you receive data from a Fluke.
Fluke Send Query	Displays the data that is sent to a Fluke device. This query appears on the **Devices** page when you send data to a Fluke.
Instrument Data Query	Displays the **Asset_Key** prompt for the Entity Key of an Equipment record, and then displays data stored in the specified record. This query is used to populate newly created Calibration Template records with equipment data from the Equipment record to which it is linked.

Item Name	Behavior and Usage
IsAssetQuery	This query is not used by the current Calibration Management model.
Meriam Receive Query	Displays the data that is received from a Meriam device. This query appears on the Devices page after you receive data from a Meriam device.
Meriam Send Query	Displays the data that is sent to a Meriam device. This query appears on the **Devices** page when you send data to a Meriam device.
Model Optimization Query	Supports the Event Builder, which you should not use with the current Calibration Management model.
Query For AnalogCalibrationGraphs	Supports the Analog Calibration Error Graph and the Analog Calibration Measure Graph, which are stored in the **Graphs** folder.
Query For AnalogCalibrationReport	Supports the Analog Calibration Report, which is stored in the **Reports** folder.
Query For AnalyzerMultiComponentCalibrationGraphs	Supports the Analyzer Multi-Component Calibration Error Graph, which is stored in the **Graphs** folder.
Query For AnalyzerMultiComponentCalibrationReport	Supports the Analyzer MultiComponent Calibration Report, which is stored in the **Reports** folder.
Query For AnalyzerSingleComponentCalibrationGraphs	Supports the Analyzer SingleComponent Calibration Error Graph and the Analyzer SingleComponent Calibration Measure Graph, which are stored in the **Graphs** folder.
Query For AnalyzerSingleComponentCalibrationReport	Supports the Analyzer SingleComponent Calibration Report, which is stored in the **Reports** folder.
Query For CalibrationErrorTrendGraphs	Supports the Calibration Error Trend Graph, which is stored in the **Graphs** folder.

Item Name	Behavior and Usage
Query For CalibrationPassFailTrendGraphs	Supports the Calibration Pass Fail Trend Graph, which is stored in the **Graphs** folder.
Query For DiscreteCalibrationReport	Supports the Discrete Calibration Report, which is stored in the **Reports** folder.
Query For Func-tionalTestCalibrationFieldReport	Supports the Functional Test Cal-ibration Field Report, which is stored in the **Reports** folder.
Query For FunctionalTestCalibrationReport	Support the Functional Test Calibration Report, which is stored in the **Reports** folder.
Query For WeightScaleCalibrationGraphs	Supports the WeightScale Calibration Error Graph and the WeightScale Cal-ibration Measure Graph, which are stored in the **Graphs** folder.
Query For WeightScaleCalibrationReport	Supports the WeightScale Calibration Report, which is stored in the **Reports** folder.
Task Query	Displays the Asset_Key prompt for the Entity Key for the Equipment record, and then displays the Calibration Tasks records for the specified record.

Item Name	Behavior and Usage
Data Entry Queries	A subfolder that contains the items with the following names: ■ **Promptable Query:** This query supports the Event Builder, which you should not use with the current Calibration Management model. ■ **Promptable Query By Due Date:** This query supports the Event Builder, which you should not use with the current Calibration Management model. ■ **Promptable Query By Technician:** This query supports the Event Builder, which you should not use with the current Calibration Management model.

The Reports Folder

The Catalog folder **\\Public\Meridium\Modules\Calibration Management\Reports** contains the following items, which you can access via a link on the **Associated Pages** menu when you are viewing a Calibration Event record.

Report Name	Behavior and Usage
Analog Calibration Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration, Analog* record, and then displays in the Report Viewer the details for the specified Calibration Event record, including a results summary and equipment information.
Analyzer MultiComponent Calibration Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration, Analyzer Multi-Component* record, and then displays in the Report Viewer the details for the specified Calibration Event record, including a results summary and equipment information.
Analyzer SingleComponent Calibration Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration, Analyzer Single Component* record, and then displays in the Report Viewer the details for the specified Calibration Event record, including a results summary and equipment information.
Discrete Calibration Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration, Discrete* record, and then displays in the Report Viewer the details for the specified Calibration Event record, including a results summary and equipment information.
Functional Test Calibration Field Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration Template, Functional Tes*t record, and then displays in the Report Viewer the details for the specified *Calibration Template, Functional Test* record including a blank results section and a blank test equipment section.
Functional Test Calibration Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration, Functional Test* record, and then displays in the Report Viewer the details for the specified *Calibration, Functional Test* record including a results summary and test equipment information.
WeightScale Calibration Report	Displays the **EventKey** prompt for the Entity Key of the *Calibration, Weight Scale* record, and then displays in the Report Viewer the details for the specified Calibration Event record, including a results summary and equipment information.

Calibration Task

Calibration Task records store details about a calibration task that should be performed by a given user for Calibration Management. Specifically, these records store scheduled dates for the next time calibrations should be performed. The following table provides an alphabetical list and description of the fields that exist for the Calibration Task family. The information in the table reflects the baseline state and behavior of these fields. The list is limited, however, to details that are specific to Calibration Task records. If a field in the Calibration Task family works the same way as it does in the root Task family, that field is excluded from the table.

Field	Data Type	Description	Behavior and Usage
Task Type	Character	The type of task the record represents. By default, this field contains the value *CALIBRATION*.	On the datasheet, this field appears as a list labeled **Task Type** and contains a list of values from the Task Type family that correspond to types of calibrations, such as *CALIBRATION: AUTOMATED, ANALOG, 11 UP/DN, LINEAR, DCV/DCV*. You can select a value other than the default.
Task State	Character	The state associated with the Calibration Task record. By default this field contains the value *Proposed*.	On the datasheet, this field appears as a list labeled **Task State** and contains a list of states. After you save a new Calibration Task record, this value is changed automatically from *Proposed* to *Scheduled without change*.
Related Entity ID	Character	The Entity ID of the record to which the Calibration Task record is linked (i.e., the record that is selected when you create the Calibration Task record).	On the datasheet, this field is disabled and populated automatically if you create the record using the Associated Pages link.

Field	Data Type	Description	Behavior and Usage
Last Date	Date	The date on which the associated Calibration Event record is closed. By default, this field contains the date on which the Calibration Task record is created.	On the datasheet, this field is disabled and populated automatically with the date on which the associated Calibration Event record is closed.
Route Number	Character	A value that represents a route or group of tasks. By default, this field contains the value *None*.	On the datasheet, this field appears as a text box. You can remove the default value and type your own value in the **Route Number** cell. You can use this field in a query to view the tasks that are assigned to a particular route or group of tasks.

Calibration Template, Analog

Calibration Template, Analog records store details on the analog calibration that should be performed for a specific piece of equipment. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template, Analog family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Key	Number	The Entity Key of the Equipment record to which the Calibration Template record is linked. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value is used to execute the Instrument Data query that is specified on the **Calibration Administration** page, so that equipment data can be populated in the Calibration Template record.	None

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Calibration Strategy	Character	The strategy for the analog calibration.	On the datasheet, this field appears as a list labeled **Calibration Strategy** and contains a list of strategies for the analog calibration. This field is required. You can choose from the following strategies: • 2 Up • 2 Down • 2 Up then 2 Down • 3 Up • 3 Down • 3 Up then 3 Down • 5 Up • 5 Down • 5 Up then 5 Down • 5 Up then 1 Down • 11 Up • 11 Down • 11 Up then 11 Down After you save the Calibration Template, Analog record, this field is disabled.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equip-ment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a list which con-tains the IDs of the Calibration Task record that are linked to the Equip-ment record to which the Cal-ibration Template record is linked. You can select the desired Calibration Task record from the list. If the Equip-ment record is not linked to a Cal-ibration Task record, this list will be empty.	**Calibration Setup** tab on the Analog Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Calibration Type	Character	The type of calibration you will perform (i.e., manual or automatic) and the type of device used to perform the calibration, if applicable.	On the datasheet, this field appears as a list labeled **Calibration Type** and is required. You can choose from the following options: • **Analog-Manual:** Indicates that you will perform a manual calibration. When this option is selected, the fields on the **Automated Calibration Parameters** tab are disabled. • **Fluke 74x:** Indicates that you will perform an automatic calibration using a Fluke 74x or 75x device. • **Meriam MFT4010:** Indicates that you will perform an automatic calibration using a Meriam device.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			• **Beamex MC5:** Indicates that you will perform an automatic calibration using a Beamex device.	
Custom Input Lower Range	Number	A number representing the lower range value for the custom input range.	On the datasheet, this field appears as a text box labeled **Low** and is grouped with the following other fields under the label **Custom Input Values**: • Custom Input Upper Range • Custom Input Range UOM This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Input Range UOM	Character	The UOM for the custom input range.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Custom Input Values**: • Custom Input Lower Range • Custom Input Upper Range This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Analog Cal-ibration Tem-plate Setup datasheet.
Custom Input Upper Range	Number	A number rep-resenting the upper range value for the custom input range.	On the datasheet, this field appears as a text box labeled **High** and is grouped with the following other fields under the label **Custom Input Values**: • Custom Input Lower Range • Custom Input Range UOM This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Analog Cal-ibration Tem-plate Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Input Values	Logical	Indicates that you will enter custom input values for the calibration.	On the datasheet, this field appears as a check box labeled **Custom Input Values**. This field is enabled only when the value stored in the Calibration Type field is *Fluke 74x*. When you select the **Custom Input Values** check box: • The following fields are enabled: ▪ Custom Input Lower Range ▪ Custom Input Upper Range ▪ Custom Input Range UOM • The **Manual Entered Input Values** check box is auto-matically selected and disabled.	**Automated Calibration Parameters** tab on the Analog Cal-ibration Tem-plate Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Output Lower Range Value	Number	A number representing the lower range value for the custom output range.	On the datasheet, this field appears as a text box labeled **Low** and is grouped with the following other fields under the label **Custom Output Values**: • Custom Output Upper Range • Custom Output Range UOM This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Output Range UOM	Character	The UOM for the custom output range.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Custom Output Values**: • Custom Output Lower Range • Custom Output Upper Range This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Output Upper Range Value	Number	A number representing the upper range value for the custom output range.	On the datasheet, this field appears as a text box labeled **High** and is grouped with the following other fields under the label **Custom Output Values**: • Custom Output Lower Range • Custom Output Range UOM This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Output Values	Logical	Indicates whether you will enter custom output values for the calibration.	On the datasheet, this field appears as a check box labeled **Custom Output Values**. This field is enabled only when the value stored in the Calibration Type field is *Fluke 74x*. When you select the **Custom Output Values** check box: • The following fields are enabled: ▪ Custom Output Lower Range ▪ Custom Output Upper Range ▪ Custom Output Range UOM • The **Manual Entered Input Values** check box is automatically selected and disabled.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Input Damping Setting	Character	Indicates whether this setting should be on or off.	This field appears as a list and contains the following options: • *On* • *Off*	Auxiliary Automated Calibration Parameters datasheet.
Input Min Max Mode	Character	Indicates whether this setting should be on or off.	This field appears as a list and contains the following options: • *On* • *Off*	Auxiliary Automated Calibration Parameters datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Input Type	Character	The input type for the analog calibration.	On the datasheet, this field appears as a list labeled **Input Type** and contains a list of input types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. This field is required. The options that appear in the list depend on the value stored in the **Calibration Type** field. If the value in the Calibration Type field is *Meriam MFT4010*, you can choose from the following options: • Pressure • Temperature • Voltage • Current If the value in the Calibration Type field is *Beamex MC5*, the list includes all of the options listed for a Meriam device *and* the following additional options: • Frequency • Resistance If the value in the	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			Calibration Type field is *Fluke 74x* or *Analog-Manual*, the list includes all of the options listed for a Beamex device *and* the following additional options: • Flow • Level • Weight • Other	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Linear TC LRV	Number	A number representing the lower value on the linear thermocouple range.	On the datasheet, this field appears as a text box labeled **Linear TC LRV** . This field is enabled only when the **TC Linear** check box is selected. This field is populated automatically with values from the following fields based on the value that exists in the Output Type field and Input Type field: • Primary Input Range LRV if the value in the Output Type field is not *Temperature*and the value in the Input Range field is*Temperature*. • Primary Output Range LRV is the value in the Output Type field is *Temperature*.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Linear TC URV	Number	A number representing upper value on the linear thermocouple range.	On the datasheet, this field appears as a text box labeled **Linear TC URV**. This field is enabled only when the **TC Linear** check box is selected. This field is populated automatically with values from the following fields based on the value that exists in the Output Type field: • Primary Input Range URV if the value in the Output Type field is not *Temperature* and the value in the Input Range field is *Temperature*. • Primary Output Range URV if the value in the Output Type field is *Temperature*.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Loop Power	Character	Indicates the loop power that is enabled or disabled. This field contains the value *Disabled* by default.	On the datasheet, this field appears as a list labeled **Loop Power** and contains the following values: • Disabled • Enabled 24V • Enabled 28V This field is disabled if the value stored in the Calibration Type field is *Analog-Manual*.	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Manual Entered Input Values	Logical	Indicates whether you will manually enter the input value into the device during the automated calibration.	On the datasheet, this field appears as a check box labeled **Manual Entered Input Values** and is cleared by default. Selecting the **Manual Entered Input Values** check box indicates that you will manually enter the input value into the device during the automated calibration. The state of this field is dependent upon the state of other fields. Specifically, this check box is: • Enabled only when the value stored in the Calibration Type field is *Beamex MC5* or *Fluke 74x*. • Disabled and selected automatically if the **Custom Input Values** check box is selected. • Disabled automatically if the Performs Square Root field contains	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			the value *Yes (Y)*.	
Manual Entered Out-put Values	Logical	Indicates whether you will manually enter the out-put value into the device during the automated calibration.	On the datasheet, this field appears as a check box labeled **Manual Entered Output Val-ues** and is cleared by default. Select-ing this check box indicates that you will manually enter the output value into the device dur-ing the automated calibration. The state of this field is dependent upon the state of other fields. Spe-cifically, this check box is: • Enabled only when the value stored in the Cal-ibration Type field is *Beamex MC5* or *Fluke 74x*. • Selected and disabled auto-matically if the **Custom Output Val-ues** check box is selec-ted.	**Automated Calibration Parameters** tab on the Analog Cal-ibration Tem-plate Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Man-ufacturer	Character	The man-ufacturer of the piece of equipment, which is rep-resented by the Equip-ment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Man-ufacturer** and is populated auto-matically with the value stored in the Manufacturer field in the Equipment record to which the Calibration Tem-plate record is linked.	**Calibration Setup** tab on the Analog Calibration Template Setup data-sheet.
Max Error Limit	Number	A number rep-resenting the maximum amount of error in per-cent that is allowed before a cal-ibration event is considered *failed*.	On the datasheet, this field appears as a text box labeled **Max Error Limit** and includes an additional label **PCT** to the right. This field is pop-ulated auto-matically with the value *3* by default, as specified in the Analog Error Limit field in the Cal-ibration Setup Defaults record. You can modify this value if desired. This field accepts numeric values between 0 and 10. This value is used in the Calibration Event record to cal-culate whether a calibration event is failed or passed.	**Calibration Setup** tab on the Analog Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Model Number	Character	The model number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.
Output Damping Setting	Character	Indicates whether this setting should be on or off.	This field appears as a list and contains the following options: • *On* • *Off*	Auxiliary Automated Calibration Parameters datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Output Type	Character	The output type for the analog calibration.	On the datasheet, this field appears as a list labeled **Output Type** and contains a list of input types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. This field is required. The options that appear in the list depend on the value stored in the **Calibration Type** field. If the value in the Calibration Type field is *Meriam MFT4010*, you can choose from the following options: • Voltage • Current If the value in the Calibration Type field is *Beamex MC5*, the list includes all of the options listed for a Meriam device *and* the following additional options: • Pressure • Temperature • Frequency • Resistance If the value in the	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			Calibration Type field is *Fluke 74x* or *Analog-Manual*, the list includes all of the options listed for a Beamex device *and* the following additional options: • Flow • Level • Weight • Other	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Performs Square Root	Character	Indicates whether or not a square root calculation will be performed on the values in the Input Measure AF and Input Measure AL fields.	On the datasheet, this field appears as a list labeled **Performs Square Root** and contains the values *Yes (Y)* and *No (N)*. This field is disabled or enabled based upon the state of other fields on the datasheet: • You can select the value *Yes (Y)* only if the value in the Input Type field is *Pressure* or *Flow*. • When the value in the Calibration Strategy field is *2 Down* or *2 Up then 2 Down*, this field is disabled and displays the value *No (N).* • If the value in the Input Type field is *Flow*, the value in the Calibration Type field must be *Analog-Manual*. Only *pressure*	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			input values can be used with auto-mated cal-ibrations. • When the **Manual Entered Input Values** check box on the **Automated Calibration Parameters** tab is selec-ted, this field will be dis-abled an pop-ulated automatically with the value*No (N)*.	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Input LRV	Number	A number representing the lower range value for the primary input range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input URV • Primary Input Range Units The value stored in the Primary Input LRV field combined with the value stored in the Primary Input URV field define the primary input range for the calibration. This field is required.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Input Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input URV This list contains a list of UOMs that is filtered based on the value in the Input Type field and the Calibration Type field. This means that only the UOM values that are relevant for that input type and calibration type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the device. If the selected value is not compatible, an error message will appear, indicating the problem.	**Calibration Setup** tab on the Analog Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Input URV	Number	A number representing the upper range value for the primary input range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input Range Units The value stored in the Primary Input URV field combined with the value stored in the Primary Input LRV field define the primary input range for the calibration. This field is required.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Output LRV	Number	A number representing the lower range value for the primary output range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output URV • Primary Output Range Units The value stored in the Primary Output LRV field combined with the value stored in the Primary Output URV field define the primary output range for the calibration. This field is required.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Output Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output URV This list contains a list of UOMs that is filtered based on the value in the Output Type field and the Calibration Type field. This means that only the UOM values that are relevant for that input type and calibration type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the device. If the selected value is not compatible, an error message will appear, indicating the problem.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Output URV	Number	A number representing the upper range value for the primary output range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output Range Units The value stored in the Primary Output URV field combined with the value stored in the Primary Output LRV field define the primary ouput range for the calibration. This field is required.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Refresh Equipment Data	Logical	Indicates whether or not inform-ation in the Equipment record that is linked to the Calibration Template record has been updated. This field is used by the Meridium APM system and should not be mod-ified.	This field does not appear on a data-sheet by default. This value tells the Asset Key field to execute the Instru-ment Data query so that the equipment data in the Cal-ibration Template record is updated or not.	None

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
RTD Wiring Con-figuration	Character	The RTD wir-ing con-figuration associated with the cal-ibration.	On the datasheet, this field appears as a list labeled **RTD Wiring Con-figuration** and is enabled if: • The value stored in the **Calibration Type** field is *Beamex MC5* or *Fluke 74x*. • The value stored in the **Output Type** field is *Tem-perature*. • The Tem-perature Ele-ment Type field contains an value that is an RTD type (i.e., the value ends in *RTD*). If the value stored in the Calibration Type field is *Beamex MC5*, the following options appear in the **RTD Wiring Con-figuration** list: • 2 Wire RTD • 3 Wire RTD • 4 Wire RTD If the value stored in the Calibration	**Automated Calibration Parameters** tab on the Analog Cal-ibration Tem-plate Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			Type field is *Fluke 74x*, the **RTD Wiring Configuration** list includes all of the options listed for a Beamex device *and* the following additional options: • 2 Wire Ohms • 3 Wire Ohms • 4 Wire Ohms	
Serial Number	Character	The serial number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Equipment record to which the Calibration Template record is linked. If the value stored in the **Calibration Type** field is *Meriam MFT4010*, this value is required.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Tag Description	Character	The description of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Description**. This field is populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.
Tag Name	Character	The ID of the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Name.**This field is populated automatically with the value in the Equipment field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
TC Linear	Logical	Indicates whether you want to provide a value in the Linear TC LRV and Linear TC URV fields.	On the datasheet, this field appears as a check box labeled **TC Linear**. This check box is cleared by default and enabled only if the value in the Calibration Type field is *Fluke 74x* and the Temperature Element Type field contains a Thermocouple value (i.e., the value ends in *Thermocouple*).	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Temperature Element Type	Character	The type of temperature element used for the calibration.	On the datasheet, this field appears as a list labeled **Temperature Element Type** and contains a list of temperature element types. The Temperature Element Type field is enabled and required only if the value in the **Calibration Type** field is *not* Analog-Manual and if the Input Type or Output Type fields contain the value *Temperature*. The temperature element types that are listed depend on the value stored in the **Calibration Type** field (i.e., *Beamex MC5*, *Meriam MFT4010*, or *Fluke 74x*).	**Automated Calibration Parameters** tab on the Analog Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Template ID	Character	The ID of the Calibration Template record.	On the datasheet, this field appears as a text box labeled **Template ID** and displays the value in the format **<Tag Name><Calibration Type><Calibration Strategy><Primary Input Range Units><Primary Output Range Units>**, where the values in brackets represent the values that are stored in the fields with the same names.	**Calibration Setup** tab on the Analog Calibration Template Setup data-sheet.
Template State	Character	The state of the Calibration Template record. By default, this field contains the value *Development*.	On the datasheet, this field appears as a list labeled **Template State** and contains the following values: • Development • Approved • Obsolete You can select a value in this list.	**Calibration Setup** tab on the Analog Calibration Template Setup data-sheet.

Calibration Template, Discrete

Calibration Template, Discrete records store details on the discrete calibration that should be performed for a specific piece of equipment or a location. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template, Discrete family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Activate Switch 1	Char-acter	The direction in which the input value will be trav-elling when switch 1 changes states (i.e., when the value in the SW 1 Set-point field is reached).	On the datasheet, this field appears as a list labeled **Activate Switch 1** and contains the fol-lowing baseline values: • Increase • Decrease This field is enabled only when a value exists in the Cal-ibration Strategy field.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.
Activate Switch 2	Char-acter	The direction in which the input value will be trav-elling when switch 2 changes states (i.e., when the value in the SW 2 Set-point field is reached).	On the datasheet, this field appears as a list labeled **Activate Switch 2** and contains the fol-lowing baseline values: • Increase • Decrease This field is enabled only when the value in the Calibration Strategy field is *Double Switch*.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Asset Key	Number	The Entity Key of the Equipment record to which the Calibration Template record is linked. This field is used by the Meridium APM system and should not be mod-ified.	This field does not appear on a datasheet by default. This value is used to execute the Instrument Data query that is specified on the **Calibration Admin-istration** page, so that equipment data can be populated in the Cal-ibration Template record.	None
Calibration Strategy	Char-acter	The strategy for the dis-crete cal-ibration.	On the datasheet, this field appears as a list labeled **Calibration Strategy** and contains the following values: • **Single Switch:** Specifies that you are inspecting a single switch. When you select this value, the SW 1 Setpoint field is required. • **Double Switch:** Specifies that you are inspecting a double switch. When you select this value, the SW 1 Setpoint and SW 2 Set-point fields are required. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Calibration Task ID	Char-acter	The ID of the Calibration Task record that is linked to the Equip-ment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a list which contains the IDs of the Calibration Task record that are linked to the Equipment record to which the Cal-ibration Template record is linked. You can select the desired Calibration Task record from the list. If the Equipment record is not linked to a Cal-ibration Task record, this list will be empty.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.
Custom Input Lower Range	Number	A number representing the lower range value for the cus-tom input range.	On the datasheet, this field appears as a text box labeled **Low** and is grouped with the fol-lowing other fields under the label **Cus-tom Input Values**: • Custom Input Upper Range • Custom Input Range UOM This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Discrete Cal-ibration Tem-plate Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Custom Input Range UOM	Char-acter	The UOM for the custom input range.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Custom Input Values**: • Custom Input Lower Range • Custom Input Upper Range This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Discrete Calibration Template Setup datasheet.
Custom Input Upper Range	Number	A number representing the upper range value for the custom input range.	On the datasheet, this field appears as a text box labeled **High** and is grouped with the following other fields under the label **Custom Input Values**: • Custom Input Lower Range • Custom Input Range UOM This field is enabled and required only when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Enable Automated Calibrations	Logical	Indicates whether or not you want to use this template with automated calibrations.	On the datasheet, this field appears as a check box labeled **Enable Automated Calibrations** and is cleared by default. If you want to use this template with automated calibrations, select the **Enable Automated Calibrations** check box. When this check box is selected, the fields on the **Automated Calibration Parameters** tab are enabled and the data in this record will be available to send to a device.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Engineering Units Error Limit	Number	A number representing the max-imum amount of error in engineering units that is allowed before a cal-ibration event is con-sidered *failed*.	On the datasheet, this field appears as a text box labeled **Engin-eering Units Error Limit**. The state of this field is dependent upon the stat of other fields. Specifically, if the: • Error Assessment field in the Cal-ibration Setup Defaults record contains the value *Engin-eering Units*, this field populated automatically with a default value from the Calibration Setup Defaults record. • Error Assessment field in the Cal-ibration Setup Defaults record contains the value *Percent of Range*, this field is disabled and populated auto-matically based on the values in the Primary Input Range and the Error Limit fields, using the fol-lowing cal-culation: **(<Max Error Lim-it>/100) x (<URV> - <LRV>)**	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			...where: ■ **<Max Error Limit>** is the value in the Max Error Limit field. ■ **<URV>** is the value in the Primary Input Range URV field. ■ **<LRV>** is the value in the Primary Input Range LRV field. You can modify the default value if desired. This field accepts numeric values between 0 and 100. This field is required. The value stored in this field is the value that will be sent to the device. If you modify this value, the value in the Max Error Limit (PCT) field will be updated automatically.	
Input Damp-ing Setting	Char-acter	Indicates whether this setting should be on or off.	This field appears as a list and contains the fol-lowing options: • On • Off	Auxiliary Automated Calibration Parameters datasheet.
Input Min Max Mode	Char-acter	Indicates whether this setting should be on or off.	This field appears as a list and contains the fol-lowing options: • On • Off	Auxiliary Automated Calibration Parameters datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Input Type	Char-acter	The input type for the discrete cal-ibration.	On the datasheet, this field appears as a list labeled **Input Type** and contains the input types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. You can choose from the following input types: • Pressure • Temperature • Flow • Level • Voltage • Current • Frequency • Resistance • Other This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Linear TC LRV	Number	A number representing the lower value on the linear thermocouple range.	On the datasheet, this field appears as a text box labeled **Linear TC LRV**. This field is enabled only when the **TC Linear** check box is selected. This field is populated automatically with values from the following fields based on the value that exists in the Output Type field and Input Type field: • Primary Input Range LRV if the value in the Output Type field is not *Temperature* and the value in the Input Range field is *Temperature*. • Primary Output Range LRV is the value in the Output Type field is *Temperature*.	**Automated Calibration Parameters** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Linear TC URV	Number	A number representing upper value on the linear ther-mocouple range.	On the datasheet, this field appears as a text box labeled **Linear TC URV**. This field is enabled only when the **TC Linear** check box is selected. This field is populated auto-matically with values from the following fields based on the value that exists in the Output Type field: • Primary Input Range URV if the value in the Out-put Type field is not *Temperature* and the value in the Input Range field is *Tem-perature*. • Primary Output Range URV if the value in the Out-put Type field is*Temperature*.	**Automated Calibration Parameters** tab on the Discrete Cal-ibration Tem-plate Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Manual Entered Input Values	Logical	Indicates whether you will manually enter the input value into the device during the automated calibration.	On the datasheet, this field appears as a check box labeled **Enable Automated Calibrations** and is cleared by default. Selecting this check box indicates that you will manually enter the input value into the device during the automated calibration. The state of this field is dependent upon the state of other fields. Specifically, this check box is: • Enabled only when the **Enable Automated Calibrations** check box is selected. • Selected and disabled automatically when the **Custom Input Values** check box is selected.	**Automated Calibration Parameters** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Max Error Limit	Number	A number representing maximum amount of error in percent that is allowed before a calibration event is considered *failed*.	On the datasheet, this field appears as a text box **Max Error Limit** and includes an additional label **PCT** to the right. This state of this field is dependent upon the state of other fields. Specifically, if the: • Error Assessment field in the Calibration Setup Defaults record contains the value *Engineering Units*, this field is disabled and populated automatically based on the values in the Primary Input Range fields, using the following calculation: **(<Engineering Units Error Limit>/100) x (<URV> - <LRV>)** ...where: ▪ **<Engineering Units Error Limit** is the value in the Engineering Units Error Limit field.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			■ <URV> is the value in the Primary Input Range URV field. ■ <LRV> is the value in the Primary Input Range LRV field. • Error Assessment field in the Calibration Setup Defaults record contains the value *Percent of Range*, this field is populated automatically with a default value from the Calibration Setup Defaults record. This value is used in the Calibration Event record to calculate whether the calibration event is failed or passed. You can modify the default value if desired. This field accepts numeric values between 0 and 10. If you modify this value, the value in the Engineering Units Error Limit field will be updated automatically.	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			This field is required.	
Output Damping Setting	Char-acter	Indicates whether this setting should be on or off.	This field appears as a list and contains the following options: • On • Off	Auxiliary Automated Calibration Parameters datasheet.
Output Type	Char-acter	The output type for the discrete calibration.	On the datasheet, this field appears as a list labeled **Output Type** and contains the list of output types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. You can choose from the following output types: • **Trip Cont:** The output will be resistance, measured in ohms. • **Trip DCV:** The output will be power, measured in DC volts. • **Trip ACV:** The output will be power, measured in AC volts. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Input LRV	Number	A number representing the lower range value for the primary input range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input URV • Primary Input Range Units The value stored in the Primary Input LRV field combined with the value stored in the Primary Input URV field define the primary input range for the calibration. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Input Range Units	Char-acter	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the fol-lowing other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input URV This list contains a list of UOMs that is filtered based on the value in the Input Type field. This means that only the UOM values that are relevant for that input type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the Fluke device. If the selected values is not compatible, an error message will appear, indicating the problem.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Input URV	Number	A number representing the upper range value for the primary input range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input Range Units The value stored in the Primary Input URV field combined with the value stored in the Primary Input LRV field define the primary input range for the calibration. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Output LRV	Number	A number representing the lower range value for the primary output range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output URV • Primary Output Range Units The value stored in the Primary Output LRV field combined with the value stored in the Primary Output URV field define the primary output range for the calibration. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Output Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output URV This list contains a list of UOMs that is filtered based on the value in the Output Type field. This means that only the UOM values that are relevant for that output type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the Fluke device. If the selected values is not compatible, an error message will appear, indicating the problem.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Primary Output URV	Number	A number representing the upper range value for the primary output range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output Range Units The value stored in the Primary Output URV field combined with the value stored in the Primary Output LRV field define the primary ouput range for the calibration. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.
RTD Wiring Configuration	Character	The RTD wiring configuration associated with the calibration.	On the datasheet, this field appears as a list labeled **RTD Wiring Configuration** and is populated automatically if... • The **Enable Automated Calibrations** check box is selected. • The Temperature Element Type field contains an value that is an RTD type (i.e., the value ends in *RTD*).	**Automated Calibration Parameters** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Specified Maximum Dead Band Switch 1	Number	A number representing the upper value on the dead band range,* where the value in the SW 1 Set-point field is the ref-erence point on that range. The maximum dead band value rep-resent the amount of allowable error above the value in the setpoint value that can occur for a calibration to be con-sidered *passed*.	On the datasheet, this field appears as a text box labeled **Maximum Dead Band** and is grouped with the fol-lowing fields: • Specified Min-imum Dead Band Switch 1 • Validate Dead-band This field is populated automatically using the following calculation: **<Set point> x <Default Max Deadband>** ...where: • **<Set point>** is the value in the SW 1 Setpoint field. • **<Default Max Deadband>** is the default value in the Discrete Max Deadband field in the Cal-ibration Setup Defaults record. For example, if the value in the SW 1 Set-point field is 80, by default, and the value in the Discrete Max Deadband field in the Calibration Setup Defaults record is 10%, the Maximum Dead Band field will contain	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			the value *8*, which indicates that the calibration can still be considered passed if the output value is higher than 80 by a value of 8. In other words, if the output value is 89, the calibration will be considered *failed*. If the output value is 88, the calibration will be considered *passed*. The Meridium APM system will include the dead band values in the pass/fail validation process only if the **Validate Deadband** check box is selected on the Discrete Calibration Template Setup datasheet. If this check box is not selected, only the values in the Max Error Limit and SW 1 Setpoint fields will be used to determine whether a calibration is passed or failed. The state of this field is dependent upon other fields. Specifically, if the Calibration Strategy field contains the value Single Switch or Double Switch, this field is enabled. Otherwise, this field is disabled. You can modify this	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			value if desired.	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Specified Maximum Dead Band Switch 2	Number	A number representing the upper value on the dead band range,* where the value in the SW 2 Set-point field is the ref-erence point on that range. The maximum dead band value rep-resent the amount of allowable error above the value in the setpoint value that can occur for a calibration to be con-sidered *passed*.	On the datasheet, this field appears as a text box labeled **Maximum Dead Band** and is grouped with the fol-lowing fields: • Specified Min-imum Dead Band Switch 2 • Validate Dead-band This field is populated automatically using the following calculation: **<Set point> x <Default Max Deadband>** ...where: • **<Set point>** is the value in the SW 2 Setpoint field. • **<Default Max Deadband>** is the default value in the Discrete Max Deadband field in the Cal-ibration Setup Defaults record. For example, if the value in the SW 2 Set-point field is 80, by default, and the value in the Discrete Max Deadband field in the Calibration Setup Defaults record is 10%, the Maximum Dead Band field will contain	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			the value *8*, which indicates that the calibration can still be considered passed if the output value is higher than 80 by a value of 8. In other words, if the output value is 89, the calibration will be considered *failed*. If the output value is 88, the calibration will be considered *passed*. The Meridium APM system will include the dead band values in the pass/fail validation process only if the **Validate Deadband** check box is selected on the Discrete Calibration Template Setup datasheet. If this check box is not selected, only the values in the Max Error Limit and SW 2 Setpoint fields will be used to determine whether a calibration is passed or failed. The state of this field is dependent upon other fields. Specifically, if the Calibration Strategy field contains the value Double Switch, this field is enabled. Otherwise, this field is disabled.	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Specified Minimum Dead Band Switch 1	Number	A number representing the lower range value on the dead band range*, where the value in the SW 1 Set-point field is the ref-erence point on that range. The minimum dead band value rep-resents the amount of allowable error below the value in the setpoint value that can occur for the cal-ibration can be con-sidered *passed*.	On the datasheet, this field appears as a text box labeled **Minimum Dead Band** and is grouped with the fol-lowing fields: • Specified Max-imum Dead Band Switch 1 • Validate Dead-band This field is populated automatically using the following calculation: **<Set point> x <Default Min Deadband>** ...where: • **<Set point>** is the value in the SW 1 Setpoint field. • **<Default Min Deadband>** is the value in the Discrete Min Deadband field in the Calibration Setup Defaults record. For example, if the value in the SW 1 Set-point field is 80, by default, and the value in the Discrete Min Deadband field in the Calibration Setup Defaults record is 1%, the Minimum Dead Band field will contain	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			the value *.8*, which indicates that the calibration can still be considered passed if the measurement is lower than 80 by a value of .8. In other words, if the measurement is 78.9, the calibration will be considered *failed*. If the measurement is 79.2, the calibration will be considered *passed*. The Meridium APM system will include the dead band values in the pass/fail validation process only if the **Validate Deadband** check box is selected on the Discrete Calibration Template Setup datasheet. If this check box is not selected, only the values in the Max Error Limit and SW 1 Setpoint fields will be used to determine whether a calibration is passed or failed. The state of this field is dependent upon other fields. Specifically, if the Calibration Strategy field contains the value Single Switch or Double Switch, this field is enabled. Otherwise, this field is disabled. You can modify this	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			value if desired.	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Specified Minimum Dead Band Switch 2	Number	A number representing the lower range value on the dead band range1, where the value in the SW 2 Set-point field is the ref-erence point on that range. The minimum dead band value rep-resents the amount of allowable error below the value in the setpoint value that can occur for the cal-ibration can be con-sidered *passed*.	On the datasheet, this field appears as a text box labeled **Minimum Dead Band** and is grouped with the fol-lowing fields: • Specified Max-imum Dead Band Switch 2 • Validate Dead-band This field is populated automatically using the following calculation: **<Set point> x <Default Min Deadband>** ...where: • **<Set point>** is the value in the SW 2 Setpoint field. • **<Default Min Deadband>** is the value in the Discrete Min Deadband field in the Calibration Setup Defaults record. For example, if the value in the SW 2 Set-point field is 80, by default, and the value in the Discrete Min Deadband field in the Calibration Setup Defaults record is 1%, the Minimum Dead Band field will contain	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
			the value *.8*, which indicates that the calibration can still be considered passed if the measurement is lower than 80 by a value of .8. In other words, if the measurement is 78.9, the calibration will be considered *failed*. If the measurement is 79.2, the calibration will be considered *passed*. The Meridium APM system will include the dead band values in the pass/fail validation process only if the **Validate Deadband** check box is selected on the Discrete Calibration Template Setup datasheet. If this check box is not selected, only the values in the Max Error Limit and SW 2 Setpoint fields will be used to determine whether a calibration is passed or failed. The state of this field is dependent upon other fields. Specifically, if the Calibration Strategy field contains the value Double Switch, this field is enabled. Otherwise, this field is disabled. You can modify this value if desired.	

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
SW 1 Contact State	Char-acter	The contact position in which switch 1 will appear before it changes states (i.e., when the value in the SW 1 Set-point field is reached).	On the datasheet, this field appears as a list labeled **SW 1 Contact State** and contains the following baseline val-ues: • Normally Open (0) • Normally Closed (1) This field is enabled only when a value exists in the Cal-ibration Strategy field.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.
SW 1 Set-point	Number	A number representing the output value where you want switch 1 to trip.	On the datasheet, this field appears as a text box. You can enter your own value in the **SW 1 Setpoint** cell. This field is required.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.
SW 2 Contact State	Char-acter	The contact position in which switch 1 will appear before it changes states (i.e., when the value in the SW 2 Set-point field is reached).	On the datasheet, this field appears as a list labeled **SW 2 Contact State** and contains the following baseline val-ues: • Normally Open (0) • Normally Closed (1) This field is enabled only when the value in the Calibration Strategy field is *Double Switch*.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
SW 2 Set-point	Number	A number representing the output value where you want switch 2 to trip.	On the datasheet, this field appears as a text box. You can enter your own value in the **SW 2 Setpoint** cell. When the Calibration Strategy field contains the value *Double Switch*, this field is required. Otherwise, this field is disabled.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.
Tag Descrip-tion	Char-acter	The descrip-tion of the piece of equipment, which is rep-resented by the Equip-ment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Description**. This field is populated auto-matically with the value stored in the Equip-ment ID field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.
Template State	Char-acter	The state of the Cal-ibration Tem-plate record. By default, this field con-tains the value *Devel-opment*.	On the datasheet, this field appears as a list labeled **Template State** and contains the fol-lowing values: • Development • Approved • Obsolete You can select a value in this list.	**Calibration Setup** tab on the Discrete Calibration Template Setup data-sheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
TC Linear	Logical	Indicates whether you want to provide a value in the Linear TC LRV and Linear TC URV fields.	On the datasheet, this field appears as a check box labeled **TC Linear**. This check box is cleared by default and enabled only if the Temperature Element Type field contains a Thermocouple value (i.e., the value ends in *Thermocouple*).	**Automated Calibration Parameters** tab on the Discrete Calibration Template Setup datasheet.

Field	Data Type	Description	Behavior and Usage	Data-sheet/Tab
Validate Deadband	Logical	Indicates whether or not you want the Meridium APM system to include the dead band range values in the pass/fail validation process.	On the datasheet, this field appears as a check box labeled **Validate Deadband** and is grouped with the following fields: • Specified Maximum Dead Band Switch 1 • Specified Minimum Dead Band Switch 1 • Specified Minimum Dead Band Switch 2 • Specified Maximum Dead Band Switch 2 Selecting this check box indicates that you want the Meridium APM system to include the dead band range values in the pass/fail validation process. When this check box is *cleared*, the Meridium APM system will use ONLY the values in the Max Error Limit and SW 1 Setpoint or SW 2 Setpoint fields in the pass/fail validation process.	**Calibration Setup** tab on the Discrete Calibration Template Setup datasheet.

The dead band range specifies the allowable amount of variation from the setpoint value (stored in the SW 1 Setpoint or SW 2 Setpoint fields) that can occur before a calibration is considered *failed*. The dead band range includes a maximum value (stored in the Maxmimum Dead Band field) and a minimum value (stored in the Minimum Dead Band field).

Calibration Template, Weight Scale

Calibration Template, Weight Scale records store details on the weight scale calibration that should be performed for a specific piece of equipment. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template, Weight Scale family and appear on the Calibration Weight Scale Template Setup datasheet. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field Name	Data Type	Description	Behavior and Usage
Asset Key	Number	The Entity Key of the Equipment record to which the Calibration Template record is linked. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value is used to execute the Instrument Data query that is specified on the **Calibration Administration** page, so that equipment data can be populated in the Calibration Template record.

Field Name	Data Type	Description	Behavior and Usage
Calibration Strategy	Character	The strategy for the weight scale calibration.	On the datasheet, this field appears as a list labeled **Calibration Strategy** and contains the following values: • 2 Up • 2 Down • 2 Up then 2 Down • 3 Up • 3 Down • 3 Up then 3 Down • 5 Up • 5 Down • 5 Up then 5 Down • 5 Up then 1 Down • 11 Up • 11 Down • 11 Up then 11 Down This field is required.

Field Name	Data Type	Description	Behavior and Usage
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a list which contains the IDs of the Calibration Task record that are linked to the Equipment record to which the Calibration Template record is linked. You can select the desired Calibration Task record from the list. If the Equipment record is not linked to a Calibration Task record, this list will be empty.
Input Type	Character	The input type for the weight scale calibration.	On the datasheet, this field appears as a list labeled **Input Type** and contains the input types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. You can choose from the following input types: • Weight • Voltage • Current • Other This field is required.

Field Name	Data Type	Description	Behavior and Usage
Output Type	Character	The output type for the weight scale calibration.	On the datasheet, this field appears as a list labeled **Output Type** and contains the list of output types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. You can choose from the following output types: • Pressure • Temperature • Flow • Level • Weight • Voltage • Current • Frequency • Resistance • Other This field is required.
Manufacturer	Character	The manufacturer of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Equipment record to which the Calibration Template record is linked.

Field Name	Data Type	Description	Behavior and Usage
Max Error Limit	Number	A number that represents the maximum amount of error in percent that is allowed before a calibration event is considered *failed*.	On the datasheet, this field appears as a text box **Max Error Limit** and includes an additional label **PCT** to the right. This field is populated automatically with the value specified in the Weight Scale Error Limit field in the Calibration Setup Defaults record. You can modify this value if desired. This field accepts numeric values between 0 and 10.
Model Number	Character	The model number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration Template record is linked.

Field Name	Data Type	Description	Behavior and Usage
Primary Input LRV	Number	A number representing the lower range value for the primary input range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input URV • Primary Input Range Units The value stored in the Primary Input LRV field combined with the value stored in the Primary Input URV field define the primary input range for the calibration. This field is required.

Field Name	Data Type	Description	Behavior and Usage
Primary Input Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input URV This list contains a list of UOMs that is filtered based on the value in the Input Type field. This means that only the UOM values that are relevant for that input type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the Fluke device. If the selected values is not compatible, an error message will appear, indicating the problem.

Field Name	Data Type	Description	Behavior and Usage
Primary Input URV	Number	A number representing the upper range value for the primary input range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input Range Units The value stored in the Primary Input URV field combined with the value stored in the Primary Input LRV field define the primary input range for the calibration. This field is required.

Field Name	Data Type	Description	Behavior and Usage
Primary Output LRV	Number	A number representing the lower range value for the primary output range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output URV • Primary Output Range Units The value stored in the Primary Output LRV field combined with the value stored in the Primary Output URV field define the primary output range for the calibration. This field is required.

Field Name	Data Type	Description	Behavior and Usage
Primary Output Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output URV This list contains a list of UOMs that is filtered based on the value in the Output Type field. This means that only the UOM values that are relevant for that output type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the Fluke device. If the selected values is not compatible, an error message will appear, indicating the problem.

Field Name	Data Type	Description	Behavior and Usage
Primary Output URV	Number	A number representing the upper range value for the primary output range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output Range Units The value stored in the Primary Output URV field combined with the value stored in the Primary Output LRV field define the primary ouput range for the calibration. This field is required.
Refresh Equipment Data	Logical	Indicates whether or not information in the Equipment record that is linked to the Calibration Template record has been updated. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value tells the Asset Key field to execute the Instrument Data query so that the equipment data in the Calibration Template record is updated or not.

Field Name	Data Type	Description	Behavior and Usage
Serial Number	Character	The serial number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Equipment record to which the Calibration Template record is linked.
Tag Description	Character	The description of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Description**. This field is populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration Template record is linked.
Tag Name	Character	The ID of the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Name.** This field is populated automatically with the value in the Equipment field in the Equipment record to which the Calibration Template record is linked.

Field Name	Data Type	Description	Behavior and Usage
Template State	Character	The state of the Calibration Template record. By default, this field contains the value *Development*.	On the datasheet, this field appears as a list labeled **Template State** and contains the following values: • Development • Approved • Obsolete You can select a value in this list.

Calibration Template, Multi-Component Analyzer

Calibration Template, Analyzer Multi-Component records store details on the multi-component analyzer calibration that should be performed for a specific piece of equipment. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template, Multi-Component Analyzer family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field Name	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Key	Number	The Entity Key of the Equipment record to which the Calibration Template record is linked. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value is used to execute the Instrument Data query that is specified on the **Calibration Administration** page, so that equipment data can be populated in the Calibration Template record.	None

Field Name	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a list which contains the IDs of the Calibration Task record that are linked to the Equipment record to which the Calibration Template record is linked. You can select the desired Calibration Task record from the list. If the Equipment record is not linked to a Calibration Task record, this list will be empty.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.
Manufacturer	Character	The manufacturer of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.

Field Name	Data Type	Description	Behavior and Usage	Datasheet/Tab
Max Error Limit	Number	A number representing the maximum amount of error in percent that is allowed before a calibration event is considered *failed*.	On the datasheet, this field appears as a text box **Max Error Limit** and includes an additional label **PCT** to the right. This field is populated automatically with the value specified in the Weight Scale Error Limit field in the Calibration Setup Defaults record. You can modify this value if desired. This field accepts numeric values between 0 and 10.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.
Model Number	Character	The model number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.

Field Name	Data Type	Description	Behavior and Usage	Datasheet/Tab
Refresh Equipment Data	Logical	Indicates whether or not information in the Equipment record that is linked to the Calibration Template record has been updated. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value tells the Asset Key field to execute the Instrument Data query so that the equipment data in the Calibration Template record is updated or not.	None
Serial Number	Character	The serial number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.

Field Name	Data Type	Description	Behavior and Usage	Datasheet/Tab
Tag Name	Character	The ID of the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Name.** This field is populated automatically with the value in the Equipment field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.
Tag Description	Character	The description of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Description**. This field is populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration Template record is linked.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.
Template ID	Character	The ID for the record.	On the datasheet, this field appears as a text box. You can enter your own value in the **Template ID** cell. This field is required.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.

Field Name	Data Type	Description	Behavior and Usage	Datasheet/Tab
Template State	Character	The state of the Calibration Template record. By default, this field contains the value *Development*.	On the datasheet, this field appears as a list labeled **Template State** and contains the following values: • Development • Approved • Obsolete You can select a value in this list.	**Calibration Setup** section on the Multi-Component Analyzer Setup and Multi- Component Analyzer datasheets.

Calibration Template, Single Component Analyzer

Calibration Template, Analyzer Single Component records store details on the single component analyzer calibration that should be performed for a specific piece of equipment. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template, Single Component Analyzer family and appear both the *Single Component Analyzer* and *Single Component Analyzer Setup* datasheets with a few exceptions. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field Name	Data Type	Description	Behavior and Usage
Asset Key	Number	The Entity Key of the Equipment record to which the Calibration Template record is linked. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value is used to execute the Instrument Data query that is specified on the **Calibration Administration** page, so that equipment data can be populated in the Calibration Template record.

Field Name	Data Type	Description	Behavior and Usage
Calibration Strategy	Character	The strategy for the analyzer single component calibration.	On the datasheet, this field appears a list labeled **Calibration Strategy** and contains the following strategies: • 2 Up • 2 Down • 2 Up then 2 Down • 3 Up • 3 Down • 3 Up then 3 Down • 5 Up • 5 Down • 5 Up then 5 Down • 5 Up then 1 Down • 11 Up • 11 Down • 11 Up then 11 Down This field is required.
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a list which contains the IDs of the Calibration Task record that are linked to the Equipment record to which the Calibration Template record is linked. You can select the desired Calibration Task record from the list. If the Equipment record is not linked to a Calibration Task record, this list will be empty.

Field Name	Data Type	Description	Behavior and Usage
Input Type	Character	The input type for the analyzer single component calibration.	On the datasheet, this field appears as a list labeled **Input Type** and contains the input types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. You can choose from the following input types: • Analyzer • Current • Resistance • Voltage • Other This field is required.
Manufacturer	Character	The manufacturer of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Equipment record to which the Calibration Template record is linked.
Max Error Limit	Number	The maximum amount of error that is allowed in percent before a calibration event is considered *failed*.	On the datasheet, this field appears as a text box **Max Error Limit** and includes an additional label **PCT** to the right. This field is populated automatically with the value specified in the SC Analyzer Error Limit field in the Calibration Setup Defaults record. You can modify this value if desired. This field accepts numeric values between 0 and 10.

Field Name	Data Type	Description	Behavior and Usage
Model Number	Character	The model number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration Template record is linked.
Output Type	Character	The output type for the analyzer single component calibration.	On the datasheet, this field appears as a list labeled **Output Type** and contains the list of output types that are stored in the MI_CALIBRATION_IO_TYPES System Code Table. You can choose from the following output types: • Analyzer • Current • Resistance • Voltage • Other This field is required.

Field Name	Data Type	Description	Behavior and Usage
Primary Input LRV	Number	A number representing the lower range value for the primary input range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input URV • Primary Input Range Units The value stored in the Primary Input LRV field combined with the value stored in the Primary Input URV field define the primary input range for the calibration. This field is required.
Primary Input Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input URV This list contains a list of UOMs that is filtered based on the value in the Input Type field. This means that only the UOM values that are relevant for that input type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the Fluke device. If the selected values is not compatible, an error message will appear, indicating the problem.

Field Name	Data Type	Description	Behavior and Usage
Primary Input URV	Number	A number representing the upper range value for the primary input range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Input Range**: • Primary Input LRV • Primary Input Range Units The value stored in the Primary Input URV field combined with the value stored in the Primary Input LRV field define the primary input range for the calibration. This field is required.
Primary Output LRV	Number	A number representing the lower range value for the primary output range.	On the datasheet, this field appears as a text box labeled **LRV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output URV • Primary Output Range Units The value stored in the Primary Output LRV field combined with the value stored in the Primary Output URV field define the primary output range for the calibration. This field is required.

Field Name	Data Type	Description	Behavior and Usage
Primary Output Range Units	Character	The UOM for the primary input.	On the datasheet, this field appears as a list labeled **UOM** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output URV This list contains a list of UOMs that is filtered based on the value in the Output Type field. This means that only the UOM values that are relevant for that output type will appear in the list. After you select a value in this list, the Meridium APM system checks to see if the UOM is compatible with the Fluke device. If the selected values is not compatible, an error message will appear, indicating the problem.
Primary Output URV	Number	A number representing the upper range value for the primary output range.	On the datasheet, this field appears as a text box labeled **URV** and is grouped with the following other fields under the label **Primary Output Range**: • Primary Output LRV • Primary Output Range Units The value stored in the Primary Output URV field combined with the value stored in the Primary Output LRV field define the primary ouput range for the calibration. This field is required.

Field Name	Data Type	Description	Behavior and Usage
Refresh Equipment Data	Logical	Indicates whether or not information in the Equipment record that is linked to the Calibration Template record has been updated. This field is used by the Meridium APM system and should not be modified.	This field does not appear on a datasheet by default. This value tells the Asset Key field to execute the Instrument Data query so that the equipment data in the Calibration Template record is updated or not.
Serial Number	Character	The serial number of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Equipment record to which the Calibration Template record is linked.
Tag Description	Character	The description of the piece of equipment, which is represented by the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Description**. This field is populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration Template record is linked.
Tag Name	Character	The ID of the Equipment record to which the Calibration Template record is linked.	On the datasheet, this field appears as a text box labeled **Tag Name.** This field is populated automatically with the value in the Equipment field in the Equipment record to which the Calibration Template record is linked.

Field Name	Data Type	Description	Behavior and Usage
Template State	Character	The state of the Calibration Template record. By default, this field contains the value *Development*.	On the datasheet, this field appears as a list labeled **Template State** and contains the following values: • Development • Approved • Obsolete You can select a value in this list.

Calibration Template, Functional Test

Calibration Template, Functional Test records store information about a functional test that should be performed on a piece of equipment. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template, Functional Test family and appear on both the Functional Test and Functional Test Setup datasheets by default. The information in the table reflects the baseline state and behavior of these fields.

Field Name	Data Type	Description	Behavior and Usage
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration Template record is linked.	This field appears as a list labeled **Calibration Task ID**, which contains the IDs of all the Calibration Task records that are linked to the Equipment record to which the Calibration Template record is linked. You can select a Calibration Task record from the list. If the Equipment record is not linked to any Calibration Task records, this list will be empty.
Enable Automated Calibrations	Logical	Indicates whether or not you want to use this template with automated calibrations.	This field appears as a check box labeled **Enable Automated Calibrations** and is cleared by default. If you want to use this template with automated calibrations, select the **Enable Automated Calibrations** check box.
Manufacturer	Character	The manufacturer of the piece of equipment (represented by the Equipment record to which the Calibration Template record is linked).	This field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Equipment record to which the Calibration Template record is linked.

Field Name	Data Type	Description	Behavior and Usage
Model Number	Character	The model number of the piece of equipment (represented by the Equipment record to which the Calibration Template record is linked).	This field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration Template record is linked.
Serial Number	Character	The serial number of the piece of equipment (represented by the Equipment record to which the Calibration Template record is linked).	This field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Equipment record to which the Calibration Template record is linked.
Tag Description	Character	The description of the piece of equipment (represented by the Equipment record to which the Calibration Template record is linked).	This field appears as a text box labeled **Tag Description**. This field is populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration Template record is linked.
Tag Name	Character	The ID of the Equipment record to which the calibration Template record is linked.	This field appears as a text box labeled **Tag Name.** This field is populated automatically with the value in the Equipment field in the Equipment record to which the Calibration Template record is linked.

Field Name	Data Type	Description	Behavior and Usage
Template ID	Character	The ID of the Calibration record.	This field appears as a text box labeled **Template ID**. This field is required and populated automatically with the appropriate value, depending on the state of the **Enable Automated Calibrations** check box: • If the check box is *selected*, this field will be populated automatically **<Tag Name>, *Automated*, Functional Test_01**. • If the check box is *cleared*, this field will be populated automatically with **<Tag Name>, *Manual*, Functional Test_01**. ...where **<Tag Name>** is the value stored in the Tag Name field. Note that the value *01* will increase incrementally by one each time a new Calibration Template, Functional Test record is created (i.e., *01*, *02*, *03*, and so on).
Template State	Character	The state of the Calibration Template record. By default, this field contains the value *Development*.	This field appears as a list labeled **Template State** and contains the following values: • Development • Approved • Obsolete You can select a value in this list.

Calibration Template Detail, Functional Test

Calibration Template Detail, Functional Test records store details about a functional test that should be performed on a piece of equipment. The following table provides an alphabetical list and description of the fields that exist for the Calibration Template Detail, Functional Test family and appear on the Functional Test Setup datasheet by default. The information in the table reflects the baseline state and behavior of these fields.

Field Name	Data Type	Description	Behavior and Usage
Condition 1	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 1** cell.
Condition 2	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 2** cell.
Condition 3	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 3** cell.

Field Name	Data Type	Description	Behavior and Usage
Condition 4	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 4** cell.
Condition 5	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 5** cell.
Condition 6	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 6** cell.
Condition 7	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 7** cell.

Field Name	Data Type	Description	Behavior and Usage
Condition 8	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 8** cell.
Condition 9	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 9** cell.
Condition 10	Character	A possible answer to an instruction that has the response type *list*. You can define up to 10 conditions (i.e., options) for each list response type.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, you can type a value directly into the **Condition 10** cell.
Instruction	Text	The step you are performing during the functional test (e.g., Describe the condition of the wires).	You can type a value directly into the **Instruction** cell. Alternatively, you can click the ··· button to type a value into the Text Editor.

Field Name	Data Type	Description	Behavior and Usage
Response Type	Character	The type of answer you should give to the question defined in the Instruction field.	This value appears as a list labeled **Response Type**, from which you can select one of the following values: • **Yes/No:** The response will be either *Yes* or *No*. • **Number:** The response will be a numeric value. • **Text:** The response will be a text value. • **Selection:** The response will be one or more of the options provided in the Condition fields.
Sequence Number	Number	A numeric value that represents the order in which the step identified in the Instruction field should be executed in relation to the other steps.	This field appears as a list labeled **Sequence Number** and contains numeric values *1* through *25*. We recommend that you select values in sequential order (e.g., select the value *1* in the first record, select the value *2* in the second record), but if you do not, when you save the records, they will be sorted automatically according to the values stored in the Sequence Number fields. This field is required.

Calibration, Analog

Calibration, Analog records store information for linear or square root calibrations that have a single input signal, a primary output, and an optional secondary output. The following table provides an alphabetical list and description of the fields that exist for the Calibration, Analog family. The information in this table reflects the baseline state and behavior of these fields. Unless the information indicates otherwise, the behavior and usage for these fields is the same for both manual *and* automated calibrations. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset ID	Character	The ID for the Equipment record that is linked to the Calibration, Analog record.	On the datasheet, this field appears as a text box labeled **Equipment ID**, which is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration, Analog record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Asset Short Description	Character	A description of the equipment represented by the Equipment record that is linked to the Calibration, Analog record.	On the datasheet, this field appears as a text box labeled **Equipment Short Description**, which is disabled and populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration, Analog record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Type	Character	The type of equipment represented by the Equipment record that is linked to the Calibration, Analog record.	On the datasheet, this field appears as a text box labeled **Equipment Type**, which is disabled and populated automatically with the value stored in the Object Type field in the Equipment record to which the Calibration, Analog record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Calibration Approval By	Character	The name and User ID of the user who approved the calibration.	On the datasheet, this field appears as a list labeled **Calibration Approval By** and contains a list of user names. You can select the desired user from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Closed	Logical	Indicates whether or not the calibration even is closed. By default, this field contains the value *False*.	On the datasheet, this field appears as a check box labeled **Calibration Close**. The state of this check box affects the state of other fields in other records. Specifically, if this check box is *selected:* • The date and time on which the check box was selected is used to populate the Last Date field in the Calibration Task record whose Record ID appears in the **Tasks Addressed** cell. • If your database has been configured correctly, a Task Execution record will be created and linked to the Calibration Event record and the Calibration Task record whose	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			Entity ID appears in the **Tasks Addressed** cell. • The value in the Date Executed field in the Task Execution record will be set automatically to the date that the **Calibration Close** check box was selected. This field is enabled only for Super Users and members of the Calibration Administrator Security Group.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Error Limit	Number	A number indicating the maximum percentage of acceptable error before the calibration is considered to be *failed*.	On the datasheet, this field appears as a text box labeled **Calibration Error Limit** which appears below the column labeled **% of Scale**. If the Equipment record to which the Calibration, Analog record is linked is linked to a Calibration Template, Analog record, this field is populated automatically with the value stored in the Max Error Limit field of that Calibration Template, Analog record. Otherwise, you can type a value directly into the **Calibration Error Limit** cell. If the value in the Calibration Type field is anything other than Analog-Manual *or* the **Calibration Close** check box is selected, this field is disabled.	**Calibration Summary** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Strategy	Character	The number of test points and the direction of the input signal that will be recorded for the calibration.	On the datasheet, this field appears as a list labeled **Calibration Strategy** and contains the following values: • 2 Up • 2 Down • 2 Up then 2 Down • 3 Up • 3 Down • 3 Up then 3 Down • 5 Up • 5 Down • 5 Up then 5 Down • 5 Up then 1 Down • 11 Up • 11 Down • 11 Up then 11 Down You can select this value from the list. If, however, the Equipment record to which the Calibration, Analog record is linked is linked to a Calibration Template, Analog record, this field is populated automatically with the value in the Calibration Strategy	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			field of that Calibration Template, Analog record.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration, Analog record is linked.	On the datasheet, this field appears as a list labeled **Calibration Task ID** and contains the list of Calibration Task records that are linked to the Equipment record to which the Calibration, Analog record is linked. You can select a value from this list, or if the Calibration Template ID field contains a Calibration Template record that contains a reference to a Calibration Task record, the Calibration Task ID field will be populated automatically with the Record ID of that Calibration Task record. After the Calibration Task ID field contains the ID of a Calibration Task record, the Tasks Addressed field will be populated automatically with the Entity Key of that Calibration Task record.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Technician	Character	The name of the person who is responsible for performing the calibration.	On the datasheet, this field appears as a list labeled **Calibration Technician**. If you performed a manual calibration *or* an automated calibration using a *Meriam* device, this field is populated automatically with the name and User ID of the user who created the record. If you perform an automated calibration using a *Fluke* or *Beamex* device, this field is populated automatically from the device. You can change this value by clicking in the cell and selecting the desired value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Template Key	Number	The ID of the Calibration Template record that is linked to the Equipment record to which the Calibration, Analog record is linked.	On the datasheet, this field appears as a list labeled **Calibration Template ID** and contains the Record IDs of the Calibration Template records that are linked to the Equipment record to which the Calibration Event record is linked. If only one Calibration Template record is linked to the Equipment record, this field is populated automatically with the Record ID of that Calibration Template record. If a Calibration Template is not linked to the Equipment record, this field will be empty. After a Calibration Template record is specified in this field, other fields on the Calibration Event datasheet will be populated automatically with equipment data from the specified Calibration Template record. Additionally, the Calibration Task ID	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			and Tasks Addressed fields are populated automatically with the Record ID and Entity Key of the Calibration Task record that is referenced in the Calibration Template record.	
Calibration Type	Character	The type of calibration event.	On the datasheet, this field appears as a text box labeled **Calibration Type** and is disabled. This value is disabled and populated automatically with *Analog - Manual*. If, however, the Equipment record to which the Calibration, Analog record is linked is linked to a Calibration Template, Analog record, this field is populated automatically with the value stored in the Calibration Type field of that Calibration Template, Analog record.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Manufacturer	Character	The manufacturer of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Manufacturer**, which is populated automatically with the value stored in the Manufacturer field in the Equipment record to which the Calibration, Analog record is linked. You can modify this value if needed.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Equipment Model Number	Character	The model number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Model Number**, which is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration, Analog record is linked. You can modify this value if needed.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Serial Number	Character	The serial number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Serial Number**, which is populated automatically with the value stored in the Equipment Serial Number field in the Equipment record to which the Calibration, Analog record is linked. You can modify this value if needed.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event End Date	Date	The date on which the calibration event was completed.	On the datasheet, this field appears as a text box labeled **Calibration End Date.** If you perform a manual calibration *or* an automated calibration using a *Meriam* device, this field is populated automatically with the date and time that the Calibration, Analog record was created. If you perform an automated calibration using a *Fluke* or *Beamex* device, this field is populated automatically with the data and time that the calibration was performed on the device. You can modify this value if needed.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event Long Description	Character	Additional comments about the calibration event.	On the datasheet, this field appears as a text box labeled **Comments** and contains a ... button, which you can click to access the Text Editor.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Event Start Date	Date	The date on which the calibration event is initiated.	On the datasheet, this field appears as a text box labeled **Calibration Start Date**. By default, this field is populated automatically with the date and time that the Calibration, Analog record was created. You can modify this value if needed.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Input Characteristic Curve	Character	The characteristics of the input signal to the instrument that you are calibrating.	On the datasheet, this field appears as a list labeled **Input Characteristic Curve** and contains the following values: • Linear • Percent • Square Root • None You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Maintenance Type	Character	The type of maintenance performed by this calibration event. By default, this field contains the value *Scheduled*.	On the datasheet, this field appears as a list labeled **Maintenance Type** and contains the following values: ▪ Scheduled ▪ Repair ▪ Unscheduled ▪ New Installation You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Off Line Duration	Number	A number representing the amount of time in hours that passed between the time the calibration was initiated and the time that it was completed.	On the datasheet, this field appears as a text box labeled **Off Line Duration** , in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AF Error Max	Number	A number that corresponds to the highest error value recorded from all the as found values in all existing records in the current family.	On the datasheet, this field is disabled and populated automatically. If you perform an automated calibration, the Meridium APM system calculates the value in this field based on data received from the device. If the calculated value contains more than six digits, it will be rounded.	**Calibration Summary** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Overall AF Pass/Fail	Character	A value that indicates whether the calibration passed or failed based on whether the as found values fall within the range values specified in the record.	On the datasheet, this field is disabled and populated automatically. If the value in the Overall AF Error Max field is greater than the value stored in the Calibration Error Limit field, this value is *Fail*. Otherwise, this value is *Pass*.	**Calibration Summary** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AL Error Max	Number	The highest error value recorded for all the As left values in all the existing records in the Calibration, Analog family.	On the datasheet, this field is disabled and populated automatically. If you perform an automated calibration, the Meridium APM system calculates the value in this field based on data received from the device. If the calculated value contains more than six digits, it will be rounded.	**Calibration Summary** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Overall AL Pass/Fail	Character	A value that indicates if the calibration passed or failed based on whether the as left values fall within the range values specified in the Calibration, Analog record.	On the datasheet, this field is disabled and populated automatically. If the value in the Overall AL Error Max field is greater than the value in the Calibration Error Limit field, this value is *Fail*. Otherwise, this value is *Pass*.	**Calibration Summary** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Scheduled Calibration Date	Date	The date on which the calibration is scheduled to be executed.	On the datasheet, this field appears as a box labeled **Scheduled Date**, where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Test Equipment Cal. Expire 1, Test Equipment Cal. Expire 2, **Test Equipment Cal. Expire 3**	Date	The date on which the certification of the test equipment expires.	This field appears as a text box labeled **Calibration Expire** and is populated automatically with the value stored in the Next Certification field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment ID No 1, Test Equipment ID No 2, Test Equipment ID No 3	Character	The ID of the Test Equipment record that is linked to the Calibration, Analog record.	This field appears as a text box labeled **ID No** and contains the ··· button, which you can use to select a Test Equipment record. • If you select a Test Equipment record that is certified, this cell will be shaded green. • If you select a Test Equipment record that is *not* certified, a message appears indicating that the Test Equipment is out of certification, and the cell will be shaded red. If you try to select the same Test Equipment record more than once (i.e., if you try to select it the Test Equipment ID No 1 *and* in the Test Equipment ID No 2 fields), an error message appears.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Last Cal. 1, Test Equipment Last Cal. 2, Test Equipment Last Cal. 3	Date	The date on which the test equipment was most recently certified.	This field appears as a text box labeled **Last Calibration Date** and is populated automatically with the value stored in the Last Certification Date field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Test Equipment Manufacturer 1, Test Equipment Manufacturer 2, Test Equipment Manufacturer 3	Character	The manufacturer of the test equipment.	This field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Model Number 1, Test Equipment Model Number 2, Test Equipment Model Number 3	Character	The model of the test equipment.	This field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
Test Equipment Serial Number 1, Test Equipment Serial Number 2, Test Equipment Serial Number 3	Character	The serial number of the test equipment.	This field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Status 1, Test Equipment Status 2, Test Equipment Status 3	Character	The certification status of the test equipment.	This field appears as a text box labeled **Status** and is populated automatically with the value stored in the Certification Status field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration
WO Reference (Event)	Character	The work order number associated with the calibration event.	On the datasheet, this field appears as a text box labeled **WO Reference**, in which you can type your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analog • Calibration, Analog MDF • Calibration, Analog SAP Integration

Calibration, Discrete

Calibration, Discrete records store information for single- or dual- switch instruments. The following table provides an alphabetical list and description of the fields that exist for the Calibration, Discrete family. The information in this table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset ID	Character	The ID for the Equipment record that is linked to the Calibration, Discrete record.	On the datasheet, this field appears as a text box labeled **Equipment ID**, which is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration, Discrete record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Asset Short Description	Character	A description of the equipment represented by the Equipment record that is linked to the Calibration, Discrete record.	On the datasheet, this field appears as a text box labeled **Equipment Short Description**, which is disabled and populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration, Discrete record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Type	Character	The type of equipment represented by the Equipment record that is linked to the Calibration, Discrete record.	On the datasheet, this field appears as a text box labeled **Equipment Type**, which is disabled and populated automatically with the value stored in the Object Type field in the Equipment record to which the Calibration, Discrete record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Calibration Approval By	Character	The name and User ID of the user who approved the calibration.	On the datasheet, this field appears as a list labeled **Calibration Approval By** and contains a list of user names. You can select the desired user from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Closed	Logical	Indicates whether or not the calibration even is closed. By default, this field contains the value *False*.	On the datasheet, this field appears as a check box labeled **Calibration Close**. The state of this check box affects the state of other fields in other records. Specifically, if this check box is *selected*... • The date and time on which the check box was selected is used to populate the Last Date field in the Calibration Task record whose Record ID appears in the **Tasks Addressed** cell. • If your database has been configured correctly, a Task Execution record will be created and linked to the Calibration Event record and the Calibration Task	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			record whose Entity ID appears in the **Tasks Addressed** cell. -and- The value in the Date Executed field in the Task Execution record will be set automatically to the date that the **Calibration Close** check box was selected. This field is enabled only for Super Users and members of the Calibration Administrator Security Group.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Error Limit	Number	A number indicating the maximum percentage of acceptable error before the calibration is considered to be *failed*.	On the datasheet, this field appears as a text box labeled **Calibration Error Limit** which appears below the column labeled **% of Scale**. You can enter the desired value directly in the **Calibration Error Limit** cell. If the Error Assessment field contains the value *Percent of Range*, this field is enabled and populated automatically with the value that exists in the Discrete Error Limit field in the Calibration Setup Defaults record. This field is disabled if: • The Calibration Type field contains a device name (i.e., for an automated calibration). -OR- • The **Calibration Close** check box is selected.	The **Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Strategy	Character	The number of test points and the direction of the input signal that will be recorded for the calibration.	On the datasheet, this field appears as a list labeled **Calibration Strategy** and contains the following values: • Single Switch • Double Switch You can select this value from the list. If, however, the Equipment record to which the Calibration, Discrete record is linked is linked to a Calibration Template record, this field is populated automatically based on the strategy that is defined in the template.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration, Discrete record is linked.	On the datasheet, this field appears as a list labeled **Calibration Task ID** and contains the list of Calibration Task records that are linked to the Equipment record to which the Calibration Event record is linked. You can select a value from this list, or if the Calibration Template ID field contains a Calibration Template record that contains a reference to a Calibration Task record, the Calibration Task ID field will be populated automatically with the Record ID of that Calibration Task record. After the Calibration Task ID field contains the ID of a Calibration Task record, the Tasks Addressed field will be populated automatically with the Entity Key of that Calibration Task record.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Technician	Character	The name of the person who is responsible for performing the calibration.	On the datasheet, this field appears as a list labeled **Calibration Technician**. This field is populated automatically with the name and User ID of the user who created the record. You can change this value by clicking in the cell and selecting the desired value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Template Key	Number	The ID of the Calibration Template record that is linked to the Equipment record to which the Calibration, Discrete record is linked.	On the datasheet, this field appears as a list labeled Calibration Template ID and contains the Record IDs of the Calibration Template records that are linked to the Equipment record to which the Calibration Event record is linked. If only one Calibration Template record is linked to the Equipment record, this field is populated automatically with the Record ID of that Calibration Template record. If a Calibration Template is not linked to the Equipment record, this field will be empty. After a Calibration Template record is specified in this field, other fields on the Calibration Event datasheet will be populated automatically with equipment data from the specified Calibration Template record. Additionally, the	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			Calibration Task ID and Tasks Addressed fields are populated automatically with the Record ID and Entity Key of the Calibration Task record that is referenced in the Calibration Template record.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Type	Character	The type of calibration event.	On the datasheet, this field is disabled and populated automatically with *Switch - Manual*.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Engineering Units Error Limit	Character	The maximum amount of error in engineering units that is allowed before a calibration event is considered *failed*.	On the datasheet, this field appears as a text box labeled **Engineering Units Error Limit**, which appears below the column labeled **% of Scale**. The value stored in this field is the value that is sent to the device. This field disabled and populated automatically with a default value from the Calibration Setup Defaults record, if the Error Assessment field in the Calibration Setup Defaults record contains the value *Engineering Units*. You can modify the default value if desired. This field accepts numeric values between 0 and 100. If you modify this value, the value in the Error Limit field will be updated automatically. If the Error Assessment field in the Calibration Setup Defaults record contains the value *Percent of Range*, this field is dis-	The **Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			abled and populated automatically based on the values in the Primary Input Range and the Error Limit fields. This field is populated using the following calculation: **(<Max Error Limit>/100) x (<URV> - <LRV>)** ...where: • **<Max Error Limit>** is the value in the Max Error Limit field. • **<URV>** is the value in the Primary Input Range URV field. • **<LRV>** is the value in the Primary Input Range LRV field. This field is disabled if the: • Calibration Type field contains a device name (i.e., for an automated calibration). -OR-	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			• **Calibration Close** check box is selected.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Manufacturer	Character	The manufacturer of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Manufacturer**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Equipment Model Number	Character	The model number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Model Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Equipment Serial Number	Character	The serial number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Serial Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Error Assessment	Character	The measurement type that you will use to enter the calibration results.	On the datasheet, this field appears as a list and contains the following values: • **Percent of Range:** When this value is selected, the Error Limit field is enabled, and the Engineering Units Error Limit field is disabled. • **Engineering Units:** When this value is selected, the Engineering Units Error Limit field is enabled, and the Error Limit field is disabled. This field is disabled if the: • Calibration Type field contains a device name (i.e., for an automated calibration) • **Calibration Close** check box is selected, this field	The **Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			will be disabled.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event End Date	Date	The date on which the calibration event was completed.	On the datasheet, this field appears as a box labeled **Calibration End Date,** where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Event ID	Character	The ID of the calibration event.	On the datasheet, this field is disabled and automatically populated with a sequential value in relation to all Calibration Event families.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Event Long Description	Character	Additional comments about the calibration event.	On the datasheet, this field appears as a text box labeled **Comments** and contains a ··· button, which you can click to access the Text Editor.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event Start Date	Date	The date on which the calibration event is initiated.	On the datasheet, this field appears as a box labeled **Calibration Start Date**, where you can select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Input Characteristic Curve	Character	The characteristics of the input signal to the instrument that you are calibrating.	On the datasheet, this field appears as a list labeled **Input Characteristic Curve** and contains the following values: • Linear • Percent • Square Root • None You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Maintenance Type	Character	The type of maintenance performed by this calibration event. By default, this field contains the value *Scheduled*.	On the datasheet, this field appears as a list labeled **Maintenance Type** and contains the following values: ▪ Scheduled ▪ Repair ▪ Unscheduled ▪ New Installation You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Off Line Duration	Number	A number representing the amount of time in hours that passed between the time the calibration was initiated and the time that it was completed	On the datasheet, this field appears as a text box labeled **Off Line Duration**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Overall AF Error Max	Number	A number that corresponds to the highest error value recorded from all the as found values in all existing records in the current family.	On the datasheet, this field is disabled and populated automatically.	**The Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AF Pass/Fail	Character	A value that indicates whether the calibration passed or failed based on whether the as found values fall within the range values specified in the record.	On the datasheet, this field is disabled and populated automatically.	The **Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Overall AL Error Max	Number	The highest error value recorded for all the As left values in all the existing records in the Calibration, Discrete family.	On the datasheet, this field is disabled and populated automatically.	The **Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Overall AL Pass/Fail	Character	A value that indicates if the calibration passed or failed based on whether the as left values fall within the range values specified in the Calibration, Discrete record.	On the datasheet, this field is disabled and populated automatically.	The **Calibration Summary** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Scheduled Calibration Date	Date	The date on which the calibration is scheduled to be executed.	On the datasheet, this field appears as a box labeled **Scheduled Date,** where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Test Equipment Cal. Expire 1, Test Equipment Cal. Expire 2, **Test Equipment Cal. Expire 3**	Date	The date on which the certification of the test equipment expires.	This field appears as a text box labeled **Calibration Expire** and is populated automatically with the value stored in the Next Certification field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment ID No 1, Test Equipment ID No 2, Test Equipment ID No 3	Character	The ID of the Test Equipment record that is linked to the Calibration, Discrete record.	This field appears as a text box labeled **ID No** and contains the ··· button, which you can use to select a Test Equipment record. • If you select a Test Equipment record that is certified, this cell will be shaded green. • If you select a Test Equipment record that is *not* certified, a message appears indicating that the Test Equipment is out of certification, and the cell will be shaded red. If you try to select the same Test Equipment record more than once (i.e., if you try to select it the Test Equipment ID No 1 *and* in the Test Equipment ID No 2 fields), an error message appears.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Last Cal. 1, Test Equipment Last Cal. 2, Test Equipment Last Cal. 3	Date	The date on which the test equipment was most recently certified.	This field appears as a text box labeled **Last Calibration Date** and is populated automatically with the value stored in the Last Certification Date field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Test Equipment Manufacturer 1, Test Equipment Manufacturer 2, Test Equipment Manufacturer 3	Character	The manufacturer of the test equipment.	This field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Model Number 1, Test Equipment Model Number 2, Test Equipment Model Number 3	Character	The model of the test equipment.	This field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
Test Equipment Serial Number 1, Test Equipment Serial Number 2, Test Equipment Serial Number 3	Character	The serial number of the test equipment.	This field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Status 1, Test Equipment Status 2, Test Equipment Status 3	Character	The certification status of the test equipment.	This field appears as a text box labeled **Status** and is populated automatically with the value stored in the Certification Status field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration
WO Reference (Event)	Character	The work order number associated with the calibration event.	On the datasheet, this field appears as a text box labeled **WO Reference**, in which you can type your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Discrete • Calibration, Discrete MDF • Calibration, Discrete SAP Integration

Calibration, Functional Test

Calibration, Functional Test records store information about functional test calibrations. The following table provides an alphabetical list and description of the fields that exist for the Calibration, Functional Test family. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset ID	Character	The ID for the Equipment record that is linked to the Calibration, Functional Test record.	This field appears as a text box labeled **Equipment ID**, which is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration, Functional Test record is linked.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Asset Short Description	Character	A description of the equipment represented by the Equipment record that is linked to the Calibration, Functional Test record.	This field appears as a text box labeled **Equipment Short Description**, which is disabled and populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration, Functional Test record is linked.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Type	Character	The type of equipment represented by the Equipment record that is linked to the Calibration, Functional Test record.	This field appears as a text box labeled **Equipment Type**, which is disabled and populated automatically with the value stored in the Object Type field in the Equipment record to which the Calibration, Functional Test record is linked.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Calibration Approval By	Character	The name and User ID of the user who approved the functional test.	This field appears as a list labeled **Calibration Approval By** and contains a list of user names. You can select the desired user from the list.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Closed	Logical	Indicates whether or not the calibration event is closed. By default, this field contains the value *False*.	This field appears as a check box labeled **Calibration Close**. The state of this check box affects the state of other fields in other records. Specifically, if this check box is *selected:* • The date and time on which the check box was selected is used to populate the Last Date field in the Calibration Task record whose Record ID appears in the **Tasks Addressed** cell. • If your database has been configured correctly, a Task Execution record will be created and linked to the Calibration Event record and the Calibration Task record whose Entity ID appears in the **Tasks Addressed** cell.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			• The value in the Date Executed field in the Task Execution record will be set automatically to the date that the **Calibration Close** check box was selected. This field is enabled only for Super Users and members of the Calibration Administrator Security Group.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Strategy	Character	The number of steps that will be performed for the functional test.	This field appears as a list labeled **Calibration Strategy** and contains the values in the following format ***<#> Step***, where **<#>** is a number. These values start with *1* and span through *25.* You can select a value from the list. If the Equipment record (to which the Calibration, Functional Test record is linked is linked) is linked to a *Calibration Template, Functional Test* record, this field is populated automatically with the number of Calibration Template Detail, Functional Test records that exist.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration, Functional Test record is linked.	This field appears as a list labeled **Calibration Task ID** and contains the list of Calibration Task records that are linked to the Equipment record to which the Calibration, Functional Test record is linked. You can select a value from this list, or if the Calibration Template ID field contains a Calibration Template record that contains a reference to a Calibration Task record, the Calibration Task ID field will be populated automatically with the Record ID of that Calibration Task record. After the Calibration Task ID field contains the ID of a Calibration Task record, the Tasks Addressed field will be populated automatically with the Entity Key of that Calibration Task record.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Technician	Character	The name of the person who is responsible for performing the calibration.	This field appears as a list labeled **Calibration Technician**. If you performed a manual functional test, this field is populated automatically with the name and User ID of the user who created the record. If you perform an automated calibration functional test, this field is populated automatically from the device. You can change this value by clicking in the cell and selecting the desired value from the list.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Template Key	Number	The ID of the Calibration Template record that is linked to the Equipment record to which the Calibration, Functional Test record is linked.	This field appears as a list labeled **Calibration Template ID** and contains the Record IDs of the Calibration Template records that are linked to the Equipment record to which the Calibration Event record is linked. If only one Calibration Template record is linked to the Equipment record, this field is populated automatically with the Record ID of that Calibration Template record. If a Calibration Template is not linked to the Equipment record, this field will be empty. After a Calibration Template record is specified in this field, other fields on the Calibration Event datasheet will be populated automatically with equipment data from the specified Calibration Template record. Additionally, the Calibration Task ID and Tasks Addressed fields are populated	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			automatically with the Record ID and Entity Key of the Calibration Task record that is referenced in the Calibration Template record.	
Calibration Type	Character	The type of calibration event.	This field appears as a text box labeled **Calibration Type** and is disabled. If you perform a manual functional test, this field is populated automatically with *Functional - Manual*. If you perform an automated calibration, this field is populated automatically with *Fluke 74x*.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Equipment Manufacturer	Character	The manufacturer of the instrument on which the functional test is being performed.	This field appears as a text box labeled **Instrument Manufacturer**, which is populated automatically with the value stored in the Manufacturer field in the Equipment record to which the Calibration, Functional Test record is linked. You can modify this value if needed.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Model Number	Character	The model number of the instrument on which the functional test is being performed.	This field appears as a text box labeled **Instrument Model Number**, which is populated automatically with the value stored in the Model Number field in the Equipment record to which the Calibration, Functional Test record is linked. You can modify this value if needed.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Equipment Serial Number	Character	The serial number of the instrument on which the functional test is being performed.	This field appears as a text box labeled **Instrument Serial Number**, which is populated automatically with the value stored in the Equipment Serial Number field in the Equipment record to which the Calibration, Functional Test record is linked. You can modify this value if needed.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event End Date	Date	The date on which the functional test was completed.	This field appears as a text box labeled **Calibration End Date.** If you perform a manual calibration, this field is populated automatically with the date and time that the Calibration, Functional Test record was created. If you perform an automated calibration, this field is populated automatically with the data and time that the functional test was performed on the device. You can modify this value if needed.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Event Long Description	Character	Additional comments about the calibration event.	This field appears as a text box labeled **Comments** and contains a ··· button, which you can click to access the Text Editor.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event Start Date	Date	The date on which the calibration event is initiated.	This field appears as a text box labeled **Calibration Start Date**. By default, this field is populated automatically with the date and time that the Calibration, Functional Test record was created. You can modify this value if needed.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Maintenance Type	Character	The type of maintenance performed by this functional test. By default, this field contains the value *Scheduled*.	This field appears as a list labeled **Maintenance Type** and contains the following values: ▪ Scheduled ▪ Repair ▪ Unscheduled ▪ New Installation You can select a value from the list.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Off Line Duration	Number	A number representing the amount of time in hours that passed between the time the functional test was initiated and the time that it was completed.	This field appears as a text box labeled **Off Line Duration** , in which you can enter your own value.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Scheduled Calibration Date	Date	The date on which the functional test is scheduled to be executed.	This field appears as a box labeled **Scheduled Date**, where you can type or select the desired date.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Test Equipment Cal. Expire 1, Test Equipment Cal. Expire 2, **Test Equipment Cal. Expire 3**	Date	The date on which the certification of the test equipment expires.	This field appears as a text box labeled **Calibration Expire** and is populated automatically with the value stored in the Next Certification field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment ID No 1, Test Equipment ID No 2, Test Equipment ID No 3	Character	The ID of the Test Equipment record that is linked to the Calibration, Functional Test record.	This field appears as a text box labeled **ID No** and contains the ··· button, which you can use to select a Test Equipment record. • If you select a Test Equipment record that is certified, this cell will be shaded green. • If you select a Test Equipment record that is *not* certified, a message appears indicating that the Test Equipment is out of certification, and the cell will be shaded red. If you try to select the same Test Equipment record more than once (i.e., if you try to select it the Test Equipment ID No 1 *and* in the Test Equipment ID No 2 fields), an error message appears.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Last Cal. 1, Test Equipment Last Cal. 2, Test Equipment Last Cal. 3	Date	The date on which the test equipment was most recently certified.	This field appears as a text box labeled **Last Calibration Date** and is populated automatically with the value stored in the Last Certification Date field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Test Equipment Manufacturer 1, Test Equipment Manufacturer 2, Test Equipment Manufacturer 3	Character	The manufacturer of the test equipment.	This field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Model Number 1, Test Equipment Model Number 2, Test Equipment Model Number 3	Character	The model of the test equipment.	This field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
Test Equipment Serial Number 1, Test Equipment Serial Number 2, Test Equipment Serial Number 3	Character	The serial number of the test equipment.	This field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Status 1, Test Equipment Status 2, Test Equipment Status 3	Character	The certification status of the test equipment.	This field appears as a text box labeled **Status** and is populated automatically with the value stored in the Certification Status field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration
WO Reference (Event)	Character	The work order number associated with the functional test.	This field appears as a text box labeled **WO Reference**, in which you can type your own value.	The **Default** tab on the following datasheets: • Calibration, Functional Test • Calibration, Functional Test MDF • Calibration, Functional Test SAP Integration

Calibration, Analyzer Single Component

Calibration, Analyzer Single Component records store information about single component calibrations. Examples of single- component analyzer calibrations include calibrating pH, in-situ oxygen, toxic gas, and combustible gas. The following table provides an alphabetical list and description of the fields that exist for the Calibration, Analyzer Single Component family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset ID	Character	The ID for the Equipment record that is linked to the Calibration, Analyzer Single Component record.	On the datasheet, this field appears as a text box labeled **Equipment ID**, which is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration, Analyzer Single Component record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Asset Short Description	Character	A description of the equipment represented by the Equipment record that is linked to the Calibration, Analyzer Single Component record.	On the datasheet, this field appears as a text box labeled **Equipment Short Description**, which is disabled and populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration, Analyzer Single Component record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Type	Character	The type of equipment represented by the Equipment record that is linked to the Calibration, Analyzer Single Component record.	On the datasheet, this field appears as a text box labeled **Equipment Type**, which is disabled and populated automatically with the value stored in the Object Type field in the Equipment record to which the Calibration, Analyzer Single Component record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Calibration Approval By	Character	The name and User ID of the user who approved the calibration.	On the datasheet, this field appears as a list labeled **Calibration Approval By** and contains a list of user names. You can select the desired user from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Closed	Logical	Indicates whether or not the calibration even is closed. By default, this field contains the value *False*.	On the datasheet, this field appears as a check box labeled **Calibration Close**. The state of this check box affects the state of other fields in other records. Specifically, if this check box is *selected*: • The date and time on which the check box was selected is used to populate the Last Date field in the Calibration Task record whose Record ID appears in the **Tasks Addressed** cell. • If your database has been configured correctly, a Task Execution record will be created and linked to the Calibration Event record and the Calibration Task record whose Entity ID	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			appears in the **Tasks Addressed** cell. -and- The value in the Date Executed field in the Task Execution record will be set auto-matically to the date that the **Cal-ibration Close** check box was selec-ted. This field is enabled only for Super Users and mem-bers of the Cal-ibration Administrator Security Group.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Error Limit	Number	A number indicating the maximum percentage of acceptable error before the calibration is considered to be *failed*.	On the datasheet, this field appears as a text box labeled **Calibration Error Limit** which appears below the column labeled **% of Scale**. You can enter the desired value directly in the **Calibration Error Limit** cell. This field is disabled if: • The Calibration Type field contains a device name (i.e., for an automated calibration). -OR- • The **Calibration Close** check box is selected.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Strategy	Character	The number of test points and the direction of the input signal that will be recorded for the calibration.	On the datasheet, this field appears as a list labeled **Calibration Strategy** and contains the following values: • 2 Up • 2 Down • 2 Up then 2 Down • 3 Up • 3 Down • 3 Up then 3 Down • 5 Up • 5 Down • 5 Up then 5 Down • 5 Up then 1 Down • 11 Up • 11 Down • 11 Up then 11 Down You can select this value from the list. If, however, the Equipment record to which the Calibration, Analyzer Single Component record is linked is linked to a Calibration Template record, this field is populated automatically based on the strategy that is	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			defined in the template.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration, Analyzer Single Component record is linked.	On the datasheet, this field appears as a list labeled **Calibration Task ID** and contains the list of Calibration Task records that are linked to the Equipment record to which the Calibration Event record is linked. You can select a value from this list, or if the Calibration Template ID field contains a Calibration Template record that contains a reference to a Calibration Task record, the Calibration Task ID field will be populated automatically with the Record ID of that Calibration Task record. After the Calibration Task ID field contains the ID of a Calibration Task record, the Tasks Addressed field will be populated automatically with the Entity Key of that Calibration Task record.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Technician	Character	The name of the person who is responsible for performing the calibration.	On the datasheet, this field appears as a list labeled **Calibration Technician**. This field is populated automatically with the name and User ID of the user who created the record. You can change this value by clicking in the cell and selecting the desired value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Template Key	Number	The ID of the Calibration Template record that is linked to the Equipment record to which the Calibration, Analyzer Single Component record is linked.	On the datasheet, this field appears as a list labeled **Calibration Template ID** and contains the Record IDs of the Calibration Template records that are linked to the Equipment record to which the Calibration Event record is linked. If only one Calibration Template record is linked to the Equipment record, this field is populated automatically with the Record ID of that Calibration Template record. If a Calibration Template is not linked to the Equipment record, this field will be empty. After a Calibration Template record is specified in this field, other fields on the Calibration Event datasheet will be populated automatically with equipment data from the specified Calibration Template record. Additionally, the Calibration Task ID	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			and Tasks Addressed fields are populated automatically with the Record ID and Entity Key of the Calibration Task record that is referenced in the Calibration Template record.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Type	Character	The type of calibration event.	On the datasheet, this field is disabled and populated automatically with *Analyzer - Single Component*.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Equipment Manufacturer	Character	The manufacturer of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Manufacturer**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Model Number	Character	The model number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Model Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Equipment Serial Number	Character	The serial number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Serial Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event End Date	Date	The date on which the calibration event was completed.	On the datasheet, this field appears as a box labeled **Calibration End Date,** where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Event ID	Character	The ID of the calibration event.	On the datasheet, this field is disabled and automatically populated with a sequential value in relation to all Calibration Event families.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event Long Description	Character	Additional comments about the calibration event.	On the datasheet, this field appears as a text box labeled **Comments** and contains a ··· button, which you can click to access the Text Editor.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Event Start Date	Date	The date on which the calibration event is initiated.	On the datasheet, this field appears as a box labeled **Calibration Start Date,** where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Maintenance Type	Character	The type of maintenance performed by this calibration event. By default, this field contains the value *Scheduled*.	On the datasheet, this field appears as a list labeled **Maintenance Type** and contains the following values: ▪ Scheduled ▪ Repair ▪ Unscheduled ▪ New Installation You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Off Line Duration	Number	A number representing the amount of time in hours that passed between the time the calibration was initiated and the time that it was completed	On the datasheet, this field appears as a text box labeled **Off Line Duration**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AF Error Max	Number	A number that corresponds to the highest error value recorded from all the as found values in all existing records in the current family.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Overall AF Pass/Fail	Character	A value that indicates whether the calibration passed or failed based on whether the as found values fall within the range values specified in the record.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AL Error Max	Number	The highest error value recorded for all the As left values in all the existing records in the Calibration, Analyzer Single Component family.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Overall AL Pass/Fail	Character	A value that indicates if the calibration passed or failed based on whether the as left values fall within the range values specified in the Calibration, Analyzer Single Component record.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Scheduled Calibration Date	Date	The date on which the calibration is scheduled to be executed.	On the datasheet, this field appears as a box labeled **Scheduled Date,** where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Test Equipment Cal. Expire 1, Test Equipment Cal. Expire 2, **Test Equipment Cal. Expire 3**	Date	The date on which the certification of the test equipment expires.	This field appears as a text box labeled **Calibration Expire** and is populated automatically with the value stored in the Next Certification field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment ID No 1, Test Equipment ID No 2, Test Equipment ID No 3	Character	The ID of the Test Equipment record that is linked to the Calibration, Analyzer Single Component record.	This field appears as a text box labeled **ID No** and contains the ··· button, which you can use to select a Test Equipment record. • If you select a Test Equipment record that is certified, this cell will be shaded green. • If you select a Test Equipment record that is *not* certified, a message appears indicating that the Test Equipment is out of certification, and the cell will be shaded red. If you try to select the same Test Equipment record more than once (i.e., if you try to select it the Test Equipment ID No 1 *and* in the Test Equipment ID No 2 fields), an error message appears.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Last Cal. 1, Test Equipment Last Cal. 2, Test Equipment Last Cal. 3	Date	The date on which the test equipment was most recently certified.	This field appears as a text box labeled **Last Calibration Date** and is populated automatically with the value stored in the Last Certification Date field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Test Equipment Manufacturer 1, Test Equipment Manufacturer 2, Test Equipment Manufacturer 3	Character	The manufacturer of the test equipment.	This field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Model Number 1, Test Equipment Model Number 2, Test Equipment Model Number 3	Character	The model of the test equipment.	This field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
Test Equipment Serial Number 1, Test Equipment Serial Number 2, Test Equipment Serial Number 3	Character	The serial number of the test equipment.	This field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Status 1, Test Equipment Status 2, Test Equipment Status 3	Character	The certification status of the test equipment.	This field appears as a text box labeled **Status** and is populated automatically with the value stored in the Certification Status field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn
WO Reference (Event)	Character	The work order number associated with the calibration event.	On the datasheet, this field appears as a text box labeled **WO Reference**, in which you can type your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Single Component • Calibration, Analyzer Single Component MDF • Calibration, Analyzer Single Component SAP Intgtn

Calibration, Analyzer Multi-Component

Calibration, Analyzer Multi-Component records store information for comparing standard gas values to test results form the analyzer. Examples of multi-component analyzer calibrations include Mass Spectrometers and Process Gas Chromatographs. The following table provides an alphabetical list and description of the fields that exist for the Calibration, Analyzer Multi-Component family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset ID	Character	The ID for the Equipment record that is linked to the Calibration, Analyzer Single Component record.	On the datasheet, this field appears as a text box labeled **Equipment ID**, which is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration, Analyzer Single Component record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Asset Short Description	Character	A description of the equipment represented by the Equipment record that is linked to the Calibration, Analyzer Single Component record.	On the datasheet, this field appears as a text box labeled **Equipment Short Description**, which is disabled and populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration, Analyzer Single Component record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Type	Character	The type of equipment represented by the Equipment record that is linked to the Calibration, Analyzer Single Component record.	On the datasheet, this field appears as a text box labeled **Equipment Type**, which is disabled and populated automatically with the value stored in the Object Type field in the Equipment record to which the Calibration, Analyzer Single Component record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Calibration Approval By	Character	The name and User ID of the user who approved the calibration.	On the datasheet, this field appears as a list labeled **Calibration Approval By** and contains a list of user names. You can select the desired user from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Closed	Logical	Indicates whether or not the calibration even is closed. By default, this field contains the value *False*.	On the datasheet, this field appears as a check box labeled **Calibration Close**. The state of this check box affects the state of other fields in other records. Specifically, if this check box is *selected*: • The date and time on which the check box was selected is used to populate the Last Date field in the Calibration Task record whose Record ID appears in the **Tasks Addressed** cell. • If your database has been configured correctly, a Task Execution record will be created and linked to the Calibration Event record and the Calibration Task record whose	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			Entity ID appears in the **Tasks Addressed** cell. -and- The value in the Date Executed field in the Task Execution record will be set automatically to the date that the **Calibration Close** check box was selected. This field is enabled only for Super Users and members of the Calibration Administrator Security Group.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Error Limit	Number	A number indicating the maximum percentage of acceptable error before the calibration is considered to be *failed*.	On the datasheet, this field appears as a text box labeled **Calibration Error Limit** which appears below the column labeled **% of Scale**. You can enter the desired value directly in the **Calibration Error Limit** cell. This field is disabled if: • The Calibration Type field contains a device name (i.e., for an automated calibration). -OR- • The **Calibration Close** check box is selected.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration, Analyzer Multi-Component record is linked.	On the datasheet, this field appears as a list labeled **Calibration Task ID** and contains the list of Calibration Task records that are linked to the Equipment record to which the Calibration Event record is linked. You can select a value from this list, or if the Calibration Template ID field contains a Calibration Template record that contains a reference to a Calibration Task record, the Calibration Task ID field will be populated automatically with the Record ID of that Calibration Task record. After the Calibration Task ID field contains the ID of a Calibration Task record, the Tasks Addressed field will be populated automatically with the Entity Key of that Calibration Task record.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Technician	Character	The name of the person who is responsible for performing the calibration.	On the datasheet, this field appears as a list labeled **Calibration Technician**. This field is populated automatically with the name and User ID of the user who created the record. You can change this value by clicking in the cell and selecting the desired value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Template Key	Number	The ID of the Calibration Template record that is linked to the Equipment record to which the Calibration, Analyzer Single Component record is linked.	On the datasheet, this field appears as a list labeled Calibration Template ID and contains the Record IDs of the Calibration Template records that are linked to the Equipment record to which the Calibration Event record is linked. If only one Calibration Template record is linked to the Equipment record, this field is populated automatically with the Record ID of that Calibration Template record. If a Calibration Template is not linked to the Equipment record, this field will be empty. After a Calibration Template record is specified in this field, other fields on the Calibration Event datasheet will be populated automatically with equipment data from the specified Calibration Template record. Additionally, the Calibration Task ID	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			and Tasks Addressed fields are populated automatically with the Record ID and Entity Key of the Calibration Task record that is referenced in the Calibration Template record.	
Cylinder ID	Character	The Record ID of the Standard Gas Cylinder record that represents the standard gas cylinder used to perform the calibration.	On the datasheet, this field appears as a list and contains the Record IDs of the existing Standard Gas Cylinder records. You can select a value in the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Type	Character	The type of calibration event.	On the datasheet, this field is disabled and populated automatically with *Analyzer - Multi-Component*.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Cylinder Expiration Date	Date	The expiration date of the standard gas cylinder	On the datasheet, this field is disabled and populated automatically based upon the value stored in the Cylinder ID field.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Manufacturer	Character	The manufacturer of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Manufacturer**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Equipment Model Number	Character	The model number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Model Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Serial Number	Character	The serial number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Serial Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Event End Date	Date	The date on which the calibration event was completed.	On the datasheet, this field appears as a box labeled **Calibration End Date**, where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event ID	Character	The ID of the calibration event.	On the datasheet, this field is disabled and automatically populated with a sequential value in relation to all Calibration Event families.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Event Long Description	Character	Additional comments about the calibration event.	On the datasheet, this field appears as a text box labeled **Comments** and contains a ··· button, which you can click to access the Text Editor.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event Start Date	Date	The date on which the calibration event is initiated.	On the datasheet, this field appears as a box labeled **Calibration Start Date,**where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Maintenance Type	Character	The type of maintenance performed by this calibration event. By default, this field contains the value *Scheduled*.	On the datasheet, this field appears as a list labeled **Maintenance Type** and contains the following values: ▪ Scheduled ▪ Repair ▪ Unscheduled ▪ New Installation You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Off Line Duration	Number	A number representing the amount of time in hours that passed between the time the calibration was initiated and the time that it was completed	On the datasheet, this field appears as a text box labeled **Off Line Duration**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Overall AF Error Max	Number	A number that corresponds to the highest error value recorded from all the as found values in all existing records in the current family.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AF Pass/Fail	Character	A value that indicates whether the calibration passed or failed based on whether the as found values fall within the range values specified in the record.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Overall AL Error Max	Number	The highest error value recorded for all the As left values in all the existing records in the Calibration, Analyzer Single Component family.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AL Pass/Fail	Character	A value that indicates if the calibration passed or failed based on whether the as left values fall within the range values specified in the Calibration, Analyzer Single Component record.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn
Scheduled Calibration Date	Date	The date on which the calibration is scheduled to be executed.	On the datasheet, this field appears as a text box labeled **Scheduled Date,** where you can type or select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
WO Reference (Event)	Character	The work order number associated with the calibration event.	On the datasheet, this field appears as a text box labeled **WO Reference**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Analyzer Multi-Component • Calibration, Analyzer Multi-Component MDF • Calibration, Analyzer Multi-Component SAP Intgtn

Calibration, Weight Scale

Calibration, Weight Scale records store information about weight scale calibrations. The following table provides an alphabetical list and description of the fields that exist for the Calibration, Weight Scale family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset ID	Character	The ID for the Equipment record that is linked to the Calibration, Weight Scale record.	On the datasheet, this field appears as a text box labeled **Equipment ID**, which is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which the Calibration, Weight Scale record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Asset Short Description	Character	A description of the equipment represented by the Equipment record that is linked to the Calibration, Weight Scale record.	On the datasheet, this field appears as a text box labeled **Equipment Short Description**, which is disabled and populated automatically with the value stored in the Equipment Short Description field in the Equipment record to which the Calibration, Weight Scale record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Asset Type	Character	The type of equipment represented by the Equipment record that is linked to the Calibration, Weight Scale record.	On the datasheet, this field appears as a text box labeled **Equipment Type**, which is disabled and populated automatically with the value stored in the Object Type field in the Equipment record to which the Calibration, Weight Scale record is linked.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Calibration Approval By	Character	The name and User ID of the user who approved the calibration.	On the datasheet, this field appears as a list labeled **Calibration Approval By** and contains a list of user names. You can select the desired user from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Closed	Logical	Indicates whether or not the calibration even is closed. By default, this field contains the value *False*.	On the datasheet, this field appears as a check box labeled **Calibration Close**. The state of this check box affects the state of other fields in other records. Specifically, if this check box is *selected*: • The date and time on which the check box was selected is used to populate the Last Date field in the Calibration Task record whose Record ID appears in the **Tasks Addressed** cell. • If your database has been configured correctly, a Task Execution record will be created and linked to the Calibration Event record and the Calibration Task record whose	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			Entity ID appears in the **Tasks Addressed** cell. -and- The value in the Date Executed field in the Task Execution record will be set automatically to the date that the **Calibration Close** check box was selected. This field is enabled only for Super Users and members of the Calibration Administrator Security Group.	

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Error Limit	Number	A number indicating the maximum percentage of acceptable error before the calibration is considered to be *failed*.	On the datasheet, this field appears as a text box labeled **Calibration Error Limit** which appears below the column labeled **% of Scale**. You can enter the desired value directly in the **Calibration Error Limit** cell. This field is disabled if: • The Calibration Type field contains a device name (i.e., for an automated calibration). -OR- • The **Calibration Close** check box is selected.	**Calibration Summary** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Task ID	Character	The ID of the Calibration Task record that is linked to the Equipment record to which the Calibration, Weight Scale record is linked.	On the datasheet, this field appears as a list labeled **Calibration Task ID** and contains the list of Calibration Task records that are linked to the Equipment record to which the Calibration Event record is linked. You can select a value from this list, or if the Calibration Template ID field contains a Calibration Template record that contains a reference to a Calibration Task record, the Calibration Task ID field will be populated automatically with the Record ID of that Calibration Task record. After the Calibration Task ID field contains the ID of a Calibration Task record, the Tasks Addressed field will be populated automatically with the Entity Key of that Calibration Task record.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Technician	Character	The name of the person who is responsible for performing the calibration.	On the datasheet, this field appears as a list labeled **Calibration Technician**. This field is populated automatically with the name and User ID of the user who created the record. You can change this value by clicking in the cell and selecting the desired value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Template Key	Number	The ID of the Calibration Template record that is linked to the Equipment record to which the Calibration, Weight Scale record is linked.	On the datasheet, this field appears as a list labeled **Calibration Template ID** and contains the Record IDs of the Calibration Template records that are linked to the Equipment record to which the Calibration Event record is linked. If only one Calibration Template record is linked to the Equipment record, this field is populated automatically with the Record ID of that Calibration Template record. If a Calibration Template is not linked to the Equipment record, this field will be empty. After a Calibration Template record is specified in this field, other fields on the Calibration Event datasheet will be populated automatically with equipment data from the specified Calibration Template record. Additionally, the Calibration Task ID	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			and Tasks Addressed fields are populated automatically with the Record ID and Entity Key of the Calibration Task record that is referenced in the Calibration Template record.	
Calibration Type	Character	The type of calibration event.	On the datasheet, this field is disabled and populated automatically with *Analog - Manual*.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Equipment Manufacturer	Character	The manufacturer of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Manufacturer**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment Model Number	Character	The model number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Model Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Equipment Serial Number	Character	The serial number of the instrument that is being calibrated.	On the datasheet, this field appears as a text box labeled **Instrument Serial Number**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Event End Date	Date	The date on which the calibration event was completed.	On the datasheet, this field appears as a box labeled **Calibration End Date,**where you can select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Event ID	Character	The ID of the calibration event.	On the datasheet, this field is disabled and automatically populated with a sequential value in relation to all Calibration Event families.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Event Long Description	Character	Additional comments about the calibration event.	On the datasheet, this field appears as a text box labeled **Comments** and contains a ··· button, which you can click to access the Text Editor.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Event Start Date	Date	The date on which the calibration event is initiated.	On the datasheet, this field appears as a box labeled **Calibration Start Date,** where you can select the desired date.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Input Characteristic Curve	Character	The characteristics of the input signal to the instrument that you are calibrating.	On the datasheet, this field appears as a list labeled **Input Characteristic Curve** and contains the following values: • Linear • Percent • Square Root • None You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Maintenance Type	Character	The type of maintenance performed by this calibration event. By default, this field contains the value *Scheduled*.	On the datasheet, this field appears as a list labeled **Maintenance Type** and contains the following values: ▪ Scheduled ▪ Repair ▪ Unscheduled ▪ New Installation You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Off Line Duration	Number	A number representing the amount of time in hours that passed between the time the calibration was initiated and the time that it was completed.	On the datasheet, this field appears as a text box labeled **Off Line Duration**, in which you can enter your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Output Characteristic Curve	Character	The type of output signal to the piece of equipment being calibrated.	On the datasheet, this field appears as a list labeled **Output Characteristic Curve** and contains the following values: • Linear • Percent • Square Root • None You can select a value from the list.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Overall AF Error Max	Number	A number that corresponds to the highest error value recorded from all the as found values in all existing records in the current family.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Overall AF Pass/Fail	Character	A value that indicates whether the calibration passed or failed based on whether the as found values fall within the range values specified in the record.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Overall AL Error Max	Number	The highest error value recorded for all the As left values in all the existing records in the Calibration, Weight Scale family.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Overall AL Pass/Fail	Character	A value that indicates if the calibration passed or failed based on whether the as left values fall within the range values specified in the Calibration, Weight Scale record.	On the datasheet, this field is disabled and populated automatically.	**Calibration Summary** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Cal. Expire 1, Test Equipment Cal. Expire 2, **Test Equipment Cal. Expire 3**	Date	The date on which the certification of the test equipment expires.	This field appears as a text box labeled **Calibration Expire** and is populated automatically with the value stored in the Next Certification field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment ID No 1, Test Equipment ID No 2, Test Equipment ID No 3	Character	The ID of the Test Equipment record that is linked to the Calibration, Weight Scale record.	This field appears as a text box labeled **ID No** and contains the ··· button, which you can use to select a Test Equipment record. • If you select a Test Equipment record that is certified, this cell will be shaded green. • If you select a Test Equipment record that is *not* certified, a message appears indicating that the Test Equipment is out of certification, and the cell will be shaded red. If you try to select the same Test Equipment record more than once (i.e., if you try to select it the Test Equipment ID No 1 *and* in the Test Equipment ID No 2 fields), an error message appears.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Last Cal. 1, Test Equipment Last Cal. 2, Test Equipment Last Cal. 3	Date	The date on which the test equipment was most recently certified.	This field appears as a text box labeled **Last Calibration Date** and is populated automatically with the value stored in the Last Certification Date field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Test Equipment Manufacturer 1, Test Equipment Manufacturer 2, Test Equipment Manufacturer 3	Character	The manufacturer of the test equipment.	This field appears as a text box labeled **Manufacturer** and is populated automatically with the value stored in the Manufacturer field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Model Number 1, Test Equipment Model Number 2, Test Equipment Model Number 3	Character	The model of the test equipment.	This field appears as a text box labeled **Model Number** and is populated automatically with the value stored in the Model Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
Test Equipment Serial Number 1, Test Equipment Serial Number 2, Test Equipment Serial Number 3	Character	The serial number of the test equipment.	This field appears as a text box labeled **Serial Number** and is populated automatically with the value stored in the Serial Number field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field. If you perform an automated calibration, this field is populated automatically from the device.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Test Equipment Status 1, Test Equipment Status 2, Test Equipment Status 3	Character	The certification status of the test equipment.	This field appears as a text box labeled **Status** and is populated automatically with the value stored in the Certification Status field in the Test Equipment record that is identified in the corresponding Test Equipment ID No field.	The **Test Equipment** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration
WO Reference (Event)	Character	The work order number associated with the calibration event.	On the datasheet, this field appears as a text box labeled **WO Reference**, in which you can type your own value.	The **Identification/Details** tab on the following datasheets: • Calibration, Weight Scale • Calibration, Weight Scale MDF • Calibration, Weight Scale SAP Integration

Calibration Results, Functional Test

Calibration Results, Functional Test records store information about the results of a functional test calibration. The following table provides an alphabetical list and description of the fields that exist for the Calibration Results, Functional Test family and appear on the Calibration Results, Functional Test datasheet by default. Each row displayed on the datasheet represents a different Calibration Results, Functional Test record. The information in the table reflects the baseline state and behavior of these fields.

Field Name	Data Type	Description	Behavior and Usage

Response 1	Character	The response associated with the step defined in the Instructions field.	This field behaves differently depending upon the value in the Response Type field. If the value in the Response Type field is:
			• **Number:** The **Response** field appears as a text box and accepts only a *numeric* value. If you type a value other than a number, an error message will appear.
			• **Yes/No:** The **Response** field will appear as a list from which you can select one of the following options:
			  • Yes
			  • No
			• **Text:** The **Response** field appears as a text box, and you can type any value directly into the cell.
			• **Selection:** The **Response** field appears as a list containing the options that you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.

Field Name	Data Type	Description	Behavior and Usage
Response 2	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.
Response 3	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.

Field Name	Data Type	Description	Behavior and Usage
Response 4	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.
Response 5	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked. .

Field Name	Data Type	Description	Behavior and Usage
Response 6	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.
Response 7	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.

Field Name	Data Type	Description	Behavior and Usage
Response 8	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.
Response 9	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.

Field Name	Data Type	Description	Behavior and Usage
Response 10	Character	A possible answer to an instruction that has the response type *list*. The number of response fields that appear is the same as the number of Condition fields that are defined for the associated Calibration Template Details, Functional Test record.	This field is enabled only if the value stored in the Response Type field is *List*. In this case, the field appears as a list that contains the options you defined in the Condition fields in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.
Instruction	Text	The question you are answering during the functional test (e.g., What is the current temperature?).	This field is disabled and populated automatically with the value stored in the Instruction field in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.
Response Type	Character	The type of answer you should give to the question defined in the Instruction field.	This field is disabled and populated automatically with the value stored in the Response Type field in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.

Field Name	Data Type	Description	Behavior and Usage
Calibration Sequence Number	Number	A numeric value that represents the order in which the step identified in the Instruction field was performed in relation to other steps.	This field is disabled and populated automatically with the value stored in the Sequence Number field in the Calibration Template Details, Functional Test record that is linked to the Calibration Template, Functional Test record to which the Calibration, Functional Test record is linked.

Calibration Recommendation

Calibration Recommendation records store information about recommendations that were created for Calibration Event records or Equipment records after a calibration. The following table provides an alphabetical list and description of the fields that exist for the Calibration Recommendation family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Alert Assignee When Due?	Logical	Indicates whether or not you want to send an email message to the person who is responsible for implementing the recommendation when the recommendation is due.	This field appears as a check box labeled **Alert Assignee When Due**. If this value is *True*, an email message will be sent to the user identified in the Assigned to Name field on the date defined in the Target Completion Date field. If this value is *False*, no alert will be sent. In order for an email message to be sent, the value in the Status field must be *Approved* or *In Progress*.	**Alert** tab on the Calibration Recommendation datasheet
Assigned to Name	Character	The name of the person who is responsible for implementing the recommendation.	This field appears as a list labeled **Assigned to Name**, which contains a list of Security Users that are members of the MI Calibration User Security Group. You can select a value from the list.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Author Name	Character	The name of the person proposing the recommendation.	This value appears as a list labeled **Author Name**, which contains list of Security Users that are members of the MI Calibration User Security Group. This field is populated with the name of the Security User who created the Calibration Recommendation record by default.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Business Impact	Character	The impact to the facility if the recommended action is performed.	This field appears as a list labeled **Business Impact** and contains a list of System Codes that exist in the MI_BUSINESS_IMPACT System Code Table. You can choose from the following values: • Facility Shutdown (FACILITY SHUTDOWN) • Facility Slowdown (FACILITY SLOWDOWN) • Unit Shutdown (UNIT SHUTDOWN) • Unit Slowdown (UNIT SLOWDOWN) • System Shutdown (SYSTEM SHUTDOWN) • System Slowdown (SYSTEM SLOWDOWN) • Product Degradation (PRODUCT DEGRADATION) • None (NONE)	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Calibration Type	Character	The type of Calibration Event record for which the recommendation was created.	This field appears as a text box labeled **Calibration Type**, which is disabled and populated automatically with the value stored in the Calibration Type field in the Calibration Event record to which the Calibration Recommendation record is linked.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Calibration Recommendation Basis	Character	The ID of the Calibration Event record for which the recommendation was created.	This field appears as a text box labeled **Calibration Recommendation Basis**, which is disabled and populated automatically with the value stored in the Event ID field in the Calibration Event record to which the Calibration Recommendation record is linked.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Create Work Request?	Logical	Indicates whether not an SAP Notification or Oracle EBS eAM Work Request should be created from this Calibration Recommendation record when it is saved.	This field appears as a check box labeled **Create Work Request**. If this value is *True*, and SAP Notification or Oracle EBS eAM Work Request will be created.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Creation Date	Date	The date that the recommendation was created.	This field appears as a text box labeled **Creation Date**, which is disabled and populated automatically with the date on which the Calibration Recommendation record was created.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Completion Comments	Text	Details about the completed recommendation.	You can type a value directly into the **Completion Comments** cell. This field is required if the value in the Status field is *Rejected*, *Superseded*, or *Cancelled*.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Days Before Due Date to be Notified	Number	Specifies how many days before the value in the Target Completion Date field that an email message will be sent.	When the value in the Alert Assignee When Due field is *True*, this field is enabled and required, and you can type a number directly into the **Days Before Due Date to be Notified** cell. Otherwise, this field is disabled.	**Alert** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Equipment ID	Character	The ID of the Equipment record to which the Calibration Recommendation record is linked.	This field appears as a text box labeled **Equipment ID**. If the Calibration Recommendation record is created from an Equipment record, this field is disabled and populated automatically with the value stored in the Equipment ID field in that Equipment record. If the Calibration Recommendation record is created from a Calibration Event record, this field is disabled and populated automatically with the value stored in the Equipment ID field in the Equipment record to which that Calibration Event record is linked. If the Calibration Recommendation record is created from the **Recommendation Management** page, you can click the ··· button to select one or more Equipment records to link to the Calibration	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
			Recommendation record.	
Final Approver Name	Character	The name of the person who should approve the information in the Calibration Recommendation record after the recommended action has been performed.	This field appears as a list labeled **Final Approver Name**, which contains a list of Security Users that are members of the MI Calibration Administrator Security Group. You can select a value from the list. Note that only the user identified in the Final Approver field can set the value in the Status field to *Approved*.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Final State Lock	Logical	Indicates whether or not the Calibration Recommendation record has reached a final state.	This field appears as a check box labeled **Final State Lock**. If this value is *True*, the recommendation has been completed and the Calibration Recommendation record is in a final state. If this value is *False*, the recommendation has not yet been finalized.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Frequency of Alert After Due Date	Character	Specifies how often email messages will be sent to the person who is responsible for implementing the recommendation after the completion date has passed.	This field appears as a list labeled **Frequency of Alert After Due Date**. You can choose from a list of the following options: • Never • Daily • Weekly • Monthly • Yearly This field is enabled and required when the value in the Alert Assignee When Due field is *True*. Otherwise, this field is disabled.	**Alert** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Functional Location ID	Character	The ID of the Functional Location record to which the Equipment record identified in the Equipment ID field is linked.	This field appears as a text box labeled **Functional Location ID** and is populated automatically with the value stored in the Functional Location field in the Functional Location record to which the Equipment record identified in the Equipment ID field is linked. If the Calibration Recommendation record is created from the **Recommendation Management** page, you can click the ··· button to select one or more Functional Location records to link to the Calibration Recommendation record.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Implementation Alert Text	Text	The date on which the recommended action was performed.	You can type a value directly into the **Implementation Alert Text** cell.	**Alert** tab on the Calibration Recommendation datasheet
Implemented Date	Date	The date the recommendation was implemented.	You can type a value directly into the **Implemented Date** cell.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Mandatory Date	Date	The date by which the recommended action must be completed if it was not completed by the target completion date.	You can type a value directly into the **Mandatory Date** cell.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Recommendation Description	Text	A description of the recommended action.	You can type a value directly into the **Recommendation Description** cell.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Recommendation Headline	Character	A brief description of the recommended action.	You can type a value directly into the **Recommendation Headline** cell. If the value in the Alert Assignee When Due field is *True*, the text that you type in the Recommendation Headline field will become the subject of the email.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Recommendation ID	Character	A value that identifies the Calibration Recommendation record.	This field appears as a text box labeled **Recommendation ID**, which is disabled and populated automatically with an ID generated by the Meridium APM system.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Recommendation Priority	Character	The priority of the recommended action.	This field appears as a list labeled **Recommendation Priority**, which contains a list of System Codes that exist in the MI_PRIORITY System Code Table. You can choose from the following baseline values: • High (HIGH) • Medium (MEDIUM) • Low (LOW)	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Reevaluate?	Logical	Indicates whether or not you want to send an email message suggesting a re-evaluation of the recommendation.	This field appears as a check box labeled **Reevaluate**. If the value is set to *True*, an email message will be sent to users specified in the Reevaluation Notification List field. If this value is *False*, the recommendation does not need to be re-evaluated. In order for an email message to be sent, the value in the Status field must be *Approved* or *In Progress*.	**Alert** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Reevaluation Alert Body Text	Text	The text that will be included in the re-evaluation email message.	This field is enabled and required when the value in the Reevaluate field is *True*, and you can type a value directly into the **Reevaluation Alert Body Text** cell. Otherwise, this field is disabled.	**Alert** tab on the Calibration Recommendation datasheet
Reevaluation Date	Date	The date that a re-evaluation email message will be sent.	This field is enabled and required when the value in the Reevaluate field is *True*, and you can select a date manually. Otherwise, this field is disabled.	**Alert** tab on the Calibration Recommendation datasheet
Reevaluation Notification List	Character	The users to whom the re-evaluation email message will be sent.	This field is enabled and required when the value in the Reevaluate field is *True*. Otherwise, this field is disabled.	**Alert** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Required Equipment Status	Character	The state in which the equipment should exist before performing the recommended action against it.	This field contains a list of System Codes that exist in the MI_STATUS System Code Table. You can choose from the following baseline values: • On-line (ON-LINE) • Off-line (OFF-LINE) • Not Applicable (N/A)	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Reviewer Name	Character	The name of the person responsible for reviewing the recommendation.	This field appears as a list labeled **Review Name** and contains a list of Security Users that are a member of the MI Calibration Administrator Security Group. You can select a value from the list.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Status	Character	The status of the recommendation.	You can choose from a list of the following values: • Approved • Created • Pending Review • Reviewed • Rejected • Cancelled • Superseded • In Progress • Implemented When the record is created, the field set automatically to *Created*, but can be modified if needed. This field is required.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Target Completion Date	Date	The date by which the recommended action should be completed.	You can select a date manually. This value is required.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Technical Number	Character	The technical number associated with the Equipment record identified in the Equipment ID field.	You can type a value into this field manually.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Field	Data Type	Description	Behavior and Usage	Datasheet/Tab
Work Request Equipment	Character	The ID of the Equipment associated with the SAP Notification or Oracle EBS eAM Work Request created from the Calibration Recommendation record.	If the value in the Create Work Request field is *True*, this field is disabled and populated automatically with the ID of the SAP or Oracle EBS eAM Equipment that is associated with the SAP Notification or Oracle EBS eAM Work Request that was created.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Work Request Functional Location	Character	The ID of the Functional Location associated with the SAP Notification or Oracle EBS eAM Work Request created from the Calibration Recommendation record.	If the value in the Create Work Request field is *True*, this field is disabled and populated automatically with the ID of the SAP or Oracle EBS eAM Functional Location that is associated with the SAP Notification or Oracle EBS eAM Work Request that was created.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet
Work Request Reference	Character	The ID of the SAP Notification or Oracle EBS eAM Work Request that was created from the Calibration Recommendation record.	If the value in the Create Work Request field is *True*, this field is disabled and populated automatically with the ID of the SAP Notification or Oracle EBS eAM Work Request that was created.	**Calibration Recommendation** tab on the Calibration Recommendation datasheet

Test Equipment

Test Equipment records store details about a piece of test equipment that is used to perform calibrations. The following table provides an alphabetical list and description of the fields that exist for the Test Equipment family and appear on the Test Equipment MDI and Test Equipment datasheets by default. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage
Assigned To	Character	The person to which the test equipment is assigned. In other words, the person who is responsible for the test equipment.	You can type a value directly into the **Assigned To** cell.
Category	Character	The category of the test equipment.	You can type a value directly into the **Category** cell.
Certification Interval	Number	A number that, along with the unit of measure stored in the Certification Units field, represents the amount of time that is required between certifications.	This field appears as a text box labeled **Certification Interval** and is populated with *1* by default. You must type a number into this field. Otherwise, an error message will appear.
Certification Status	Character	A value that indicates whether or not the test equipment is currently certified.	This value appears as a text box labeled **Certification Status** and is disabled. If the date stored in the Next Certification field has passed, this field is populated automatically with *Out of Cert* to indicate that the test equipment is no longer certified. If the date in the Next Certification has not yet passed, this field is populated automatically with *Certified*.
Certification Supplier is ISO/IEC 17025 Certified	Character	Indicates that the organization that certified the device uses a work process that is in compliance with the certification standard ISO/IEC 17025.	You can type a value directly into the **Certification Supplier is ISO/IEC 17025 Certified** cell.

Field	Data Type	Description	Behavior and Usage
Certification Units	Character	The time unit associated with the certification interval identified in the Certification Interval field.	This field appears as a list labeled **Certification Units** and contains the following options: • Minutes • Hours • Days • Weeks • Months • Years This field is populated with *Years* by default.
Check Interval	Number	A number that, along with the unit of measure stored in the Check Interval Units field, represents the amount of time that is required between test equipment checks.	You can type a value directly into the **Check Interval** cell. You must type a numeric value into this field. Otherwise, an error message will appear.
Check Interval Units	Character	The time unit associated with the check interval identified in the Check Interval field.	This field appears as a text box labeled **Check Interval Unit** and contains the following options: • Minutes • Hours • Days • Weeks • Months • Years This field is populated with *Years* by default.
Class	Character	The class of the test equipment.	You can type a value directly into the **Class** cell.

Field	Data Type	Description	Behavior and Usage
Description	Character	A description of the test equipment.	You can type a value directly into the **Description** cell.
Equipment ID	Character	The ID of the test equipment.	This field appears as a text box labeled **Test Equipment ID**. This field is required and must be unique.
Last Certification Date	Date	The most recent date on which the test equipment was certified.	This field appears as a text box labeled **Last Certification Date** and displays the Calendar feature. This field is required.
Last Check Date	Date	The most recent date on which the test equipment was checked.	This field appears as a text box labeled **Last Check Date** and displays the Calendar feature.
Maintenance Plant	Character	The plant to which the test equipment is assigned. In other words, the plant where the test equipment is located.	You can type a value directly into the **Maintenance Plant** cell.
Manufacturer	Character	The manufacturer of the test equipment.	You can type a value directly into the **Manufacturer** cell. This field is required.
Model Number	Character	The model number of the test equipment.	You can type a value directly into the **Model Number** cell. This field is required.

Field	Data Type	Description	Behavior and Usage
Next Certification	Date	The date on which the next certification of the test equipment is due.	This field appears as a text box labeled **Certification Due**, which is disabled and populated automatically with the next certification date. This value is calculated by adding the value stored in the Certification Interval field to the value stored in the Last Certification Date field. For example, if the Last Certification Date field contains the date *4/1/2013*, the Certification Interval field contains the value *1*, and the Certification Units field contains the value *Years*, the value stored in the Next Certification field will be *4/1/2014*.
NIST Traceability Required	Character	Indicates that the test equipment performs calibrations using a standard that can be traced back to a valid standard with regards to the National Institute of Standards and Technology (NIST).	You can type a value directly into the **NIST Traceability Required** cell.
Purchase Date	Date	The date the test equipment was purchased.	This field appears as a text box labeled **Purchase Date** and displays the Calendar feature.
Purchase Order Number	Character	The order number that was used to purchase the test equipment.	You can type a value directly into the **Purchase Order Number** cell.
Serial Number	Character	The serial number of the test equipment.	You can type a value directly into the **Serial Number** cell. This field is required.

Field	Data Type	Description	Behavior and Usage
Type	Character	The type of test equipment.	You can type a value directly into the **Type** cell.
Vendor	Character	The vendor from which the test equipment was purchased.	You can type a value directly into the **Vendor** cell.

Test Equipment History

Test Equipment History records store details about the certification history of a piece of test equipment. The following table provides an alphabetical list and description of the fields that exist for the Test Equipment History family and appear on the Test Equipment History datasheet by default. The information in the table reflects the baseline state and behavior of these fields.

Field	Data Type	Description	Behavior and Usage
Certification Date	Date	The date on which that the test equipment was certified.	This field appears as a text box labeled **Certification Date** and displays the Calendar feature. This field is required. After the Test Equipment History record is saved, this field becomes disabled.
Certification Number	Character	The certification number that is assigned to the test equipment by the certification organization identified in the Supplier field.	You can type a value directly in the **Certification Number** field. This field is required. After the Test Equipment History record is saved, this field becomes disabled.
Entered By	Character	The user ID of the Security User that created the Test Equipment History record.	This field is disabled and populated automatically with the user ID of the Security User who was logged in when the Test Equipment History record was created.
Supplier	Character	The third party organization that certified of the piece of test equipment.	You can type a value directly into the **Supplier** cell. This field is required. After the Test Equipment History record is saved, this field becomes disabled.

System Code Tables Used by Calibration Management

The following System Code Tables are used by Calibration Management.

Table ID	Table Description
MI_CALIBRATION_CHECKLIST_TYPE	MI Calibration, Check List Type
MI_CALIBRATION_ERROR_ASSESSMENT	MI Calibration Error Assessment
MI_CALIBRATION_FUNCTION	MI Calibration, Calibration Function
MI_CALIBRATION_IO_TYPES	Calibration Input/Output Types
MI_CALIBRATION_MODE	MI Calibration, Calibration Mode
MI_CALIBRATION_REFERENCES	MI Calibration, Calibration List of References
MI_CALIBRATION_STRATEGIES	MI Calibration, Strategies
MI_CALIBRATION_TEMPERATURE_SOURCE	MI Calibration Temperature Source
MI_CALIBRATION_TYPE	MI Calibration, Calibration Type
MI_CALIBRATION_YES_OR_NO	MI Calibration, Yes or No
MI_CHARACTERISTIC_CURVE	MI Calibration, Characteristic Curve
MI_CHEMICAL_COMPONENTS	Calibration, Chemical Components
MI_DAMPING_TYPE	MI Calibration, Damping Type
MI_ERROR_BASIS	MI Calibration, Percent Error Basic Calculation
MI_FLUKE_ERROR_MODES	MI Calibration, Fluke Error Modes
MI_GAS _CYLINDER_CONNECTION_NUMBER	MI Calibration, Gas Cylinder Connection Number
MI_GAS_CYLINDER_SIZE	MI Calibration, Gas Cylinder Size
MI_GAS_CYLINDER_TYPE	MI Calibration, Gas Cylinder Type
MI_MAINTENANCE_TYPE	MI Calibration, Maintenance Type
MI_POWER_SOURCE	MI Calibration, Power Source
MI_RTD_TYPE	MI Calibration, RTD Type

Table ID	Table Description
MI_SENSOR_TYPE	MI Calibration, Sensor Type
MI_STATUS	Status Codes - CORE
MI_SWITCH_CONTACT_STATE	MI Calibration, Switch Contact State
MI_TASK_TYPE_REFERENCE	CORE, Reference values to limit task type lists when creating tasks
MI_TEMPERATURE_MEASUREMENT_STANDARD	MI Calibration, Temperature Measurement Standard
MI_THERMOCOUPLE_TYPE	MI Calibration, Thermocouple Type
MI_YES_NO	MI Core, Yes-No

URL Paths for Calibration Features

The following table lists and describes the paths for the Meridium APM Calibration Management features. Note that to construct a valid URL, you must prepend **meridium://** to the path. In some cases, you must define parameters following the path.

Feature	URL Path	Description
Calibration Start Page	Calibration	Displays the **Calibration Management Functions** page.
Calibration Devices	Calibration/Devices	Displays the **Select a Device and Properties** dialog box. This path accepts parameters that let you specify whether to send or receive data.
Calibration Events	Calibration/Events	Displays the **Calibration Event Options** dialog box, where you can choose to create a new event or search for an existing event. This path accepts a parameter that allows you to launch the **Event Builder** for the purpose of creating a Calibration event.
Calibration Graphs	Calibration/Graphs	Serves as the path for URLs that open Calibration graphs. This path accepts parameters that allow you to specify which graph to open.
Calibration Administration	Calibration/Preferences	Displays the **Calibration Administration** page, where you can configure administrative settings for Calibration Management.
Calibration Reports	Calibration/Reports	Serves as the path for URLs that open Calibration reports.
Calibration Tasks	Calibration/Tasks	Serves as the path for accessing and building Calibration Tasks. This path accepts parameters that let you supply details about the task that you want to access.
Calibration Templates	Calibration/Templates	Serves as the path for accessing Calibration templates.

Parameters for the Calibration Devices URL

The URL for accessing Devices in Calibration, **meridium://Calibration/Devices**, accepts the parameter described in the following table. Note that a link created from the path with NO parameters open the **Select a Device and Properties** dialog box.

Parameter Name	Description	Accepted Value(s)	Notes
Action	Specifies the action that you want to take: send or receive.	Send Receive	When you specify Send, the **Send to Device** option will be selected by default on the **Select a Device and Properties** dialog box. Specifying Receive will cause the **Receive from Device** option to be selected by default.

Examples of the Calibration Devices URL

- meridium://Calibration/Devices

  Opens the **Select a Device and Properties** dialog box.

- meridium://Calibration/Devices**?Action=Send**

  Opens the **Select a Device and Properties** dialog box with the **Send to Device** option selected by default.

- meridium://Calibration/Devices?Action=**Receive**

  Opens the **Select a Device and Properties** dialog box with the **Receive from Device** option selected by default.

Parameters for the Calibration Events URL

The URL for accessing Devices in Calibration, **meridium://Calibration/Events**, accepts the parameter described in the following table. Note that a link created from the path with NO parameters open the **Calibration Event Options** dialog box.

Parameter Name	Description	Accepted Value(s)	Notes
Mode	Specifies to use the **Event Builder**.	Build	Specifying this parameter launches the **Event Builder**, where you can create a new Calibration Event record. Note that this URL is different from the Event Builder URL, as it supplies Calibration-specific selections to the builder automatically without requiring you to specify additional parameters.

Examples of the Calibration Events URL

- meridium://Calibration/Events

  Opens the **Calibration Event Options** dialog box.

- meridium://Calibration/Events**?Mode=Builder**

  Launches the **Event Builder**, which guides you through the process of creating a Calibration Event record.

Parameters for the Calibration Graphs URL

The URL for accessing Calibration graphs, **meridium://Calibration/Graphs**, accepts the parameters described in the following table. This URL is designed to display a specific type of graph for a specific Calibration Event. Therefore, both parameters are *required* for the URL to work.

Parameter Name	Description	Accepted Value(s)
EventKey	Specifies the Calibration Event record for which you want to access a graph.	The Entity Key of the Calibration Event record.
GraphType	Specifies which graph you want to access for the specified Entity Key.	Analog AnalogError AnalogMeasure AnalyzerMultiComponent

Note: By default, Calibration graph URLs are configured as links on the **Associated Pages** menu for each of the baseline Calibration Event families.

Examples of the Calibration Graphs URL

- meridium://Calibration/Graphs**?EventKey=1234567**&**GraphType=AnalogError**

  Displays the Analog Error graph for the Calibration Event record with the Entity Key 1234567.

Parameters for the Calibration Reports URL

The URL for accessing Calibration reports, **meridium://Calibration/Reports**, accepts the parameters described in the following table. This URL is designed to display a specific type of report for a specific Calibration Event record. Therefore, both parameters are *required* for the URL to work.

Parameter Name	Description	Accepted Value(s)
EventKey	Specifies the Calibration Event record for which you want to access a report.	The Entity Key of the Calibration Event record.
ReportType	Specifies which report you want to access for the specified Entity Key.	Analog AnalyzerMultiComponent Functional

Examples of the Calibration Reports URL

- meridium://Calibration/Reports?EventKey=1234567&ReportType=Analog

  Displays the Analog report for the Calibration Event record the Entity Key 1234567.

Parameters for the Calibration Tasks URL

The URL for accessing Calibration Task records, **meridium://Calibration/Tasks**, accepts the parameters described in the following table. Note that a link constructed from the path with NO parameters will open the **Task Options** dialog box, where you can choose to create a new task or access an existing Task record.

Parameter Name	Description	Accepted Value(s)	Notes
EntityKey	Specifies the Entity Key of the Task record that you want to link to a Calibration Template record.	The Entity Key of the desired Calibration Task record.	This parameter is used in conjunction with the Mode and FamilyKey parameters.
EquipmentEntityKey	Specifies the piece of equipment for which to create a new Task record.	The Entity Key of the appropriate piece of equipment.	Use this parameter in conjunction with the UseTaskBuilder parameter to pass in the Entity Key of the piece of equipment for which you are creating a new Task record.
FamilyKey	Specifies the Family Key of the family to which the specified Task record belongs.	The Family Key of the appropriate family.	This parameter is used in conjunction with the Mode and EntityKey parameters.

Parameter Name	Description	Accepted Value(s)	Notes
Mode	Specifies whether you want to link the Calibration Task record to a Calibration Template record or unlink the Calibration Task record from a Calibration Template record	Link Unlink	This parameter is used in conjunction with the FamilyKey and EntityKey parameters. • **Link:** Launches the **Link Calibration Task to Calibration Template Builder**, which lets you link a specific Calibration Task record (as determined by the EntityKey) to a Calibration Template record. • **Unlink:** Removes the link between a given Calibration Task record and the Calibration Template record to which it is currently linked.
UseTaskBuilder	Specifies that you want to use the **Task Builder** for creating a new Task record.	True	When you use this parameter, you can also use the EquipmentEntityKey parameter to specify the piece of equipment for which you are creating the new Task record.

Examples of the Calibration Tasks URL

- meridium://Calibration/Tasks

  Opens the **Task Options** dialog box, where you can choose to create a new Task record or access an existing Task record.

- meridium://Calibration/Tasks**?Mode=Link&EntityKey=[ENTY_KEY]&FamilyKey=[FMLY_KEY]**

  Launches the **Link Calibration Task to Calibration Template Builder**, which lets you link a specific Calibration Task record (as determined by the EntityKey) to a Calibration Template record.

- meridium://Calibration/Tasks?Mode=**Unlink**&EntityKey=[ENTY_KEY]&FamilyKey=[FMLY_KEY]

  Removes the link between a given Calibration Task record and the Calibration Template record to which it is currently linked.

  Note: The Link and Unlink URLs are pre-configured as links on the **Associated Pages**menu for the Calibration Task family.

- meridium://Calibration/Tasks**?UseTaskBuilder=True**

  Launches the **Task Builder**, where you can create a new Calibration Task record.

- meridium://Calibration/Tasks?UseTaskBuilder=True**&EquipmentEntityKey=[ENTY_KEY]**

  Launches the **Task Builder** and automatically selects the Equipment record indicated by the **EquipmentEntityKey** so that you can create a new Calibration Task for that piece of equipment.

  Hint: You can use this URL to create links for equipment families that can have Calibration Tasks. In this way, when you are viewing Equipment records in the Record Manager, you will be able to click the link to create a Calibration Task record that is linked to the current Equipment record.

Parameters for the Calibration Templates URL

The URL for accessing Calibration Template records, **meridium://Calibration/Templates**, *requires* the parameters described in the following table. To construct a valid URL from the path, you must define all three parameters.

Parameter Name	Description	Accepted Value(s)	Notes
EntityKey	Specifies the Entity Key of the Calibration Template record that you want to link to an Equipment record.	The Entity Key of the desired Calibration Template record.	This parameter is used in conjunction with the Mode and FamilyKey parameters.
FamilyKey	Specifies the Family Key of the family to which the specified Calibration Template record belongs.	The Family Key of the appropriate family.	This parameter is used in conjunction with the Mode and EntityKey parameters.
Mode	Specifies whether you want to link the Calibration Template record to an Equipment record or unlink the Calibration Task record from an Equipment record.	Link Unlink	This parameter is used in conjunction with the FamilyKey and EntityKey parameters. • **Link:** Launches the **Link Calibration Template** builder, which lets you link a specific Calibration Template record (as determined by the EntityKey) to an Equipment record. • **Unlink:** Removes the link between a given Calibration Template record and the Equipment record to which it is currently linked.

Examples of the Calibration Templates URL

- meridium://Calibration/Templates**?EntityKey-y=1234567&FamilyKey=1234567&Mode=Link**

  Launches the **Link Calibration Template** builder, where you can link the Calibration Template record with the Entity Key 1234567 to a selected Equipment record.

- meridium://Calibration/Templates?EntityKey=1234567&FamilyKey=1234567&Mode=**Unlink**

  Unlinks the Calibration Template record with the Entity Key 1234567 from the Equipment record to which it is currently linked.

Automated Calibration

A calibration performed using a device such as a Fluke.

Manual Calibration

A calibration in which calibration data is recorded by hand and typed manually into Calibration Event records.