

Meridium APM Inspection Management

V3.6.1.7.0



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V3.6.1.7.0

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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 (<u>https://www.me</u>-ridium.com/secure/documentation/WebHelp/Home.htm).

Note: If you do not have access to the Meridium APM Documentation Website, contact GE Global Support (<u>https://www.ge.com/digital/asset-performance-management</u>).

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Overview of Inspection Management

Accurate understanding of current equipment and location conditions is critical to analyzing the reliability and future availability of the equipment and locations. Meridium APM provides a solution for this requirement through the *Inspection Management* module, a tool that you can use to document, manage, and analyze data associated with the inspections of equipment and locations in your facility. The Inspection Management functionality is fully integrated with other Meridium APM features to give you access to other analytical tools, such as Thickness Monitoring. Throughout the documentation, we refer to the Inspection Management module and its associated functionality simply using the term *Inspection*.

Inspection Management System Requirements

The *Inspection Management* license is required to take advantage of Inspection Management functionality. In addition, your system must contain the basic Meridium APM system architecture.

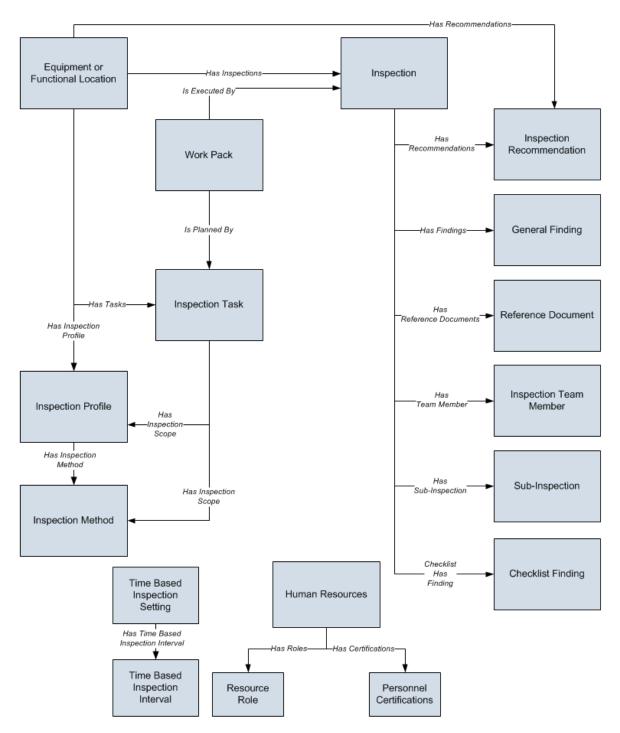
After you have installed and configured the basic system architecture, you will need to perform some configuration tasks specifically for the Inspection Management module.

Inspection Management Data Model

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

Because you should already be familiar with the concept of records and viewing records in the Meridium APM Record Manager, as you attempt to get your bearings in Inspection Management, it may be useful to remember that the pages in Inspection Management simply offer a customized view of individual records that belong to families in the data model. In addition, each step in the <u>Inspection Management workflow</u> allows you to create, view, or manage those records.

The following diagram illustrates how records are linked to one another within Inspection Management. The shaded boxes represent entity families, and the arrows represent relationship families. You can determine the direction of each relationship from the direction of the arrow head: the box to the *left* of each arrow head is the *predecessor* in that relationship, and the box to the *right* of each arrow head is the *successor* in that relationship. For example, you can see that Inspection records are linked to Inspection Recommendation records through the Has Recommendations relationship, where the Inspection family is the predecessor.



While the image shows one box for the *Inspection* family, Meridium APM provides the following Inspection families as part of the baseline Inspection Management content:

- Bundle Inspection
- Bundle Sub-Inspection

- API 510 External Checklist
- API 510 Internal Exchanger Checklist
- API 510 Internal Checklist
- API 570 External Checklist
- API 653 External Checklist
- API 653 Internal Checklist
- External PRD Checklist
- Full Inspection
- General Inspection
- PRD Pop Test Checklist
- Pressure Test Inspection
- Pressure Test Sub-Inspection

In the image above, the *Inspection* box is the predecessor to the *Checklist Finding* box. In the baseline database, however, only the following Inspection families are related to the Checklist Finding family:

- API 510 External Checklist
- API 510 Internal Exchanger Checklist
- API 510 Internal Checklist
- API 570 External Checklist
- API 653 External Checklist
- API 653 Internal Checklist
- External PRD Checklist
- PRD Pop Test Checklist

Note that although both the Equipment and Functional Location families are related to the Inspection Profile family, this documentation assumes that you will create Inspection Profiles only for *equipment*. You will typically not create Inspection Profiles for locations.

Inspection Management and RBI Integration

In addition to the families shown in the <u>Inspection Management data model</u>, access to the following Risk Based Inspection (RBI) entity and relationship families is provided when the Inspection Management license is active:

- Asset Group
- Criticality Calculator PRD Components
- Criticality Calculator RBI Components
- Criticality PRD Component Relief Valve
- Criticality PRD Component Rupture Disk
- Criticality RBI Component Cylindrical Shell
- Criticality RBI Component Exchanger Bundle
- Criticality RBI Component Exchanger Header
- Criticality RBI Component Exchanger Tube
- Criticality RBI Component Piping
- Criticality RBI Component Tank Bottom
- Grouping Element
- Has Asset Group
- Has RBI Components
- Has RBI Systems
- Is Part of Group
- RBI Components
- RBI Degradation Mechanism Evaluation
- RBI System
- Represents Inspections

The MI Inspection Security Group has View privileges to *all* families in this list. These families support the following functionality:

• <u>Time-based inspection settings</u>, which play a role in populating values in Inspection Task records that are associated with the equipment that you analyze in RBI and Inspection. In the baseline Meridium APM database, the entity families that support this functionality are related to the Equipment family through the Has RBI Components relationship.

Additionally, when the RBI license is active, the inspection intervals that are associated with the time-based inspection settings you define are considered by the Meridium APM system when determining the value that will be populated in the Desired Interval field in Inspection Task records that you create in RBI. Inspection Grouping, which allows you to group RBI Components based on certain criteria and perform inspections for a subset of the equipment in the group rather than for *every* piece of equipment in the group. When the RBI license is active, the Inspection Groups that you create in RBI facilitate the creation of <u>Represented</u> <u>Inspections</u> in Inspection Management.

Inspection Documents

Inspection Documents contain all of the information associated with a given inspection. You can think of an Inspection Document as the collection of information stored in any Inspection record and each record that is linked to that record, which are best viewed together using the configured explorer that is defined for the Inspection family.

For example, if you view a Full Inspection record in its configured explorer, you will see a list of records that have been linked to that Full Inspection record. The *Inspection Document* is the information in the Full Inspection record and the records that are linked to it, such as General Finding and Recommendation records. You can also think of an Inspection Document as all of the information that is included when you print an inspection report.

Throughout the Inspection Management interface, you will see the term *Inspection Document*. When you see this term in the documentation, keep in mind that we are referring collectively to the information that is stored in an Inspection record and each record that is linked to it.

Because of how we define an Inspection Document, you will not find specific instructions for creating an Inspection Document in this documentation. Instead, you will find instructions for creating individual Inspection records, General Finding records, Inspection Recommendations records, and so on, which together are used to build the Inspection Document. Because an Inspection Document is the compilation of various records, the Inspection workflow does not facilitate the creation of an Inspection Document directly. An Inspection Document is a *concept* rather than a specific entity.

Types of Inspections

Using Inspection Management, you can record inspection results for the following types of inspections:

- Shell and tube heat exchanger inspections.
- General routine inspections performed against any piece of equipment or location for compliance purposes.
- General routine inspections performed against any piece of equipment or location by operators versus inspectors (does not necessarily meet compliance standards).
- Hydrostatic tests (i.e., the process of filling a pressure vessel with liquid, such as water, and increasing the internal pressure to test for leaks).
- External and internal pressure vessel inspections (following API 510 standards).
- Internal exchanger inspections (following API 510 standards).
- External piping inspections (following API 570 standards).
- External and internal tank inspections (following API 653 standards).
- External visual inspections of pressure relief devices (PRDs).
- External functional inspections of pressure relief devices (PRDs) (following API 576 standards).

You will record the results of each inspection in an *Inspection record* and in successor records to which the Inspection record is linked. The baseline Meridium APM database contains Inspection families that you can use for recording the results of each type of inspection. The following table lists the baseline Inspection families and the type of inspection to which they correspond.

| Family | Inspection Type |
|------------------------------|---|
| Bundle Inspection | Shell and tube heat exchanger inspec- |
| Bundle Sub-Inspection | tions. |
| Full Inspection | General routine inspections performed against any piece of equipment or loc- ation for compliance purposes. |
| General Inspection | General routine inspections performed against any piece of equipment or loc- ation by operators versus inspectors (does not necessarily meet compliance standards). |
| Pressure Test Inspection | Hydrostatic tests. |
| Pressure Test Sub-Inspection | |

| Family | Inspection Type |
|--|---|
| API 510 External Checklist API 510 Internal Exchanger Checklist API 510 Internal Checklist | External and internal pressure vessel inspections and internal exchanger inspections (following API 510 standards). |
| API 570 External Checklist | External piping inspections (following API 570 standards). |
| API 653 External Checklist API 653 Internal Checklist | External and internal tank inspections (fol- lowing API 653 standards). |
| External PRD Checklist | External visual inspections of PRDs. |
| PRD Pop Test Checklist | External functional inspections of PRDs (following API 576 standards). |

Depending upon the type of inspection that you want to conduct, the <u>workflow you will</u> <u>use</u> in Inspection Management to record the results will be different.

Inspection Profiles

An *Inspection Profile* is a combination of an Equipment record, Inspection Profile records, and Inspection Method records that together determine which equipment subcomponents need to be inspected and the methods that will be used to inspect them. Specifically:

- The Equipment record represents the equipment that needs to be inspected.
- Inspection Profile records represent subcomponents of the equipment that need to be inspected. Each Inspection Profile record is linked directly to the Equipment record.
- Inspection Method records represent how you plan to inspect each subcomponent. Each Inspection Method record is linked to an Inspection Profile record.

Note: Typically, you will want to configure Inspection Profiles only for *equipment* and not for locations. Throughout this documentation, therefore, we refer to creating Inspection Profiles using Equipment records and not Functional Location records.

For example, suppose you need to inspect a water heater. The water heater represents the equipment as a whole, but you need to inspect individual parts of that water heater separately. You might need to inspect the pipes, heating rods, thermostat, and insulation and then record your findings in separate records. In addition, for each part that needs to be inspected, there might be multiple ways in which it can be inspected. For example, to fully inspect the pipes, you might need to look for cracks and heat loss.

You would, therefore, need to create:

- A Water Heater record to represent the equipment.
- Individual Inspection Profile records to represent each subcomponent of the water heater. In each Inspection Profile record, you would use the Item Category field to indicate the part of the water heater that you need to inspect. For example, you might create the *Pipes* Inspection Profile record.
- Individual Inspection Method records to represent how each subcomponent needs to be inspected. For example, you might create the following Inspection Method records, which would be linked to the Pipes Inspection Profile record: *Check for cracks* and *Evaluate heat loss*.

After you define the Inspection Profile for an equipment, when you create an Inspection Task record to use for inspecting the equipment, you can define the scope of that individual inspection event by selecting which subcomponents (Inspection Profile records) and methods (Inspection Method records) you want to include in the inspection. In other words, after an inspection profile exists for an equipment, you can pick and choose which parts of the profile you want to include in each future inspection of the equipment.

If the <u>Event Configuration</u> is set up correctly, when you create an Inspection record that is linked to an Equipment record, General Finding records will be created automatically

according to the Inspection Scope for the equipment. For example, if the Inspection Task record that was used to create the Inspection record is linked to five Inspection Profile records, and each of those records is linked to two Inspection Method records, ten General Finding records will be created, one per Inspection Method record that was included in the Inspection Scope. You can then record your findings for each subcomponent in a separate record. This is useful if parts of the equipment passed the inspection and other parts failed the inspection. If you had only one record to record your findings, you would be unable to fully represent the inspection results.

Additionally, if the Application Configuration is set up correctly, <u>Inspection Profile</u> <u>records will be created automatically</u> for Equipment records that are not yet linked to Inspection Profile records.

You can <u>create</u> or modify an Inspection Profile record from the **Inspection Profile for <Equipment Record ID>** page, where **<Equipment Record ID>** is the Record ID of the Equipment record whose inspection profile is defined on the page.

Note: You do not need to define Inspection Profiles if you plan to create records only in the Inspection families whose caption contains the word *Checklist*. The <u>process</u> for recording subcomponent findings for these families does not rely on Inspection Profile or Inspection Method records.

What is an Inspection Scope?

While each piece of equipment has one Inspection Profile, each time that you identify a need to inspect a piece of equipment, you will need to define the *Inspection Scope* for that individual inspection event. Each Inspection Scope defines for an individual inspection the equipment parts that need to be inspected and the methods that should be used to inspect them.

An Inspection Scope consists of the following items:

- An Equipment record, which defines the equipment that should be inspected.
- An Inspection Task record, which provides details about the inspection event that should be performed, including information such as the desired inspection date and any minimum or maximum date ranges for the inspection event. The Inspection Task record is linked to the Equipment record
- One or more Inspection Profile records, which define the subcomponents that should be inspected.
- One or more Inspection Method records, which define the methods that should be used to inspect the individual subcomponents.

For example, suppose that you define an Inspection Profile for a water heater with the following information.

| Inspection Profile | Inspection Method |
|--------------------|--|
| Pipes | Check for cracksEvaluate heat loss |
| Heating Rods | Check for proper functioning |
| Thermostat | Check for proper functioning |
| Insulation | Check for heat lossCheck for corrosion |
| Tank | Check for heat loss Check for corrosion Check for rust buildup |

This Inspection Profile indicates *all* possible subcomponents and inspection methods for those subcomponents.

Suppose that after a week of washing the dishes or showering, you realize that the water is taking too long to get warm. If you suspect that the water heater is somehow losing too much heat, you might identify a need to inspect the parts of the water heater that affect its ability to retain heat: pipes, tank, and insulation.

In this case, the Inspection Scope for this inspection event would include a subset of the entire Inspection Profile. This inspection scope might contain the following items:

- Inspection Task record
- Equipment record (which represents the water heater)
- Multiple Inspection Profile and Inspection Method records, as shown in the following image.

| Inspection Pro- file | Inspection Method |
|-------------------------|---------------------|
| Pipes | Evaluate heat loss |
| Insulation | Check for heat loss |
| Tank | Check for heat loss |

To define an Inspection Scope, you will need to create an Inspection Task record or find an existing Inspection Task record and link it to the Inspection Profile and Inspection Method records that identify the subcomponents that should be inspected and the methods that should be used. You can <u>create an Inspection Scope</u> from the **Inspection Management Start Page** or the **Inspection Profile** page. When you create an Inspection Scope from the **Inspection Management Start Page**, you will need to select the Equipment record that represents the equipment that should be inspected. When you create an Inspection Scope from the **Inspection Profile** page, however, the Meridium APM system assumes that you want to define the Inspection Scope for the equipment that is currently displayed on the **Inspection Profile** page.

Note: You do not need to define an Inspection Scope if you plan to create records only in the Inspection families whose caption contains the word *Checklist*. The <u>process</u> for recording subcomponent findings for these families does not rely on Inspection Profile or Inspection Method records.

How is an Inspection Scope Used?

Each Inspection Scope consists of an Equipment record, an Inspection Task record that is linked to the Equipment record, one or more Inspection Profile records, and optionally, one or more Inspection Method records.

When you create an Inspection record that is linked to that Equipment record, the Meridium APM system will generate General Finding records (assuming the <u>Event Con-figuration</u> that is defined for the Inspection family is configured correctly) automatically. The number of records that are created automatically is based upon the Inspection Pro-file and Inspection Method records that are included in the Inspection Scope.

Note: You do not need to define an Inspection Scope if you plan to create records only in the Inspection families whose caption contains the word *Checklist*. The <u>process</u> for recording subcomponent findings for these families does not rely on Inspection Profile or Inspection Method records.

You can use the following guidelines to determine how the Meridium APM system will use the Inspection Scope to generate General Finding records automatically:

• If the Inspection Scope contains Inspection Profile records that are not linked to Inspection Method records, one General Finding record will be generated for each *Inspection Profile* record that is included and not linked to an Inspection Method record.

| Selected | Item Category | Δ | Item Description | Item ID | Sequence | RBI Component | RBI Component Family |
|----------------------------------|---|-----|------------------|----------|-------------|---------------|-----------------------|
| | Baffles (BAFFLES) | | | BAFFLES | | | |
| ✓ | Bearings (BEARING | is) | | BEARINGS | | | |
| | Body (BODY) | | | BODY | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 44 4 Record 1 of | 3 > > > > > > > > > > > > > > > > > > > | | | | | | |
| 44 4 Record 1 of pection Methods | 3 > > > > > > > > > > > > > > > > > > > | | | | | | |
| | 3 > >> >> >> >> >> >> >> >> >> >> >> >> | ry | | ID | Description | RBI | Degradation Mechanism |
| pection Methods | , | гу | [| D | Description | RBI | Degradation Mechanism |
| pection Methods | , | ry | [| D | Description | RBI | Degradation Mechanism |

For example, consider the following Inspection Scope.

In this example, you can see that only the following Inspection Profile records are included in the scope: BAFFLES and BEARINGS. Neither of these Inspection Profile records is linked to an Inspection Method record.

In this case, if an Inspection record is generated, the following General Finding records will be created automatically:

- BAFFLES
- BEARINGS

• If the Inspection Scope contains Inspection Profile records that are linked to Inspection Method records and one or more of those Inspection Method records are included in the Inspection Scope, one General Finding record will be generated for each *Inspection Method* record that is included.

For example, consider an Inspection Scope where the following are true:

The Inspection Profile record BAFFLES is linked to Inspection Method record Method A, and Method A is included in the Inspection Scope, as shown in the following image.

| | spection Profile | | | | | | |
|-----|------------------------------|---------------------------|------------------|----------|-------------|---------------|----------------------|
| | Selected | Item Category 🛛 🛆 | Item Description | Item ID | Sequence | RBI Component | RBI Component Family |
| F | | Baffles (BAFFLES) | | BAFFLES | | | |
| | ✓ | Bearings (BEARINGS) | | BEARINGS | | | |
| | | Body (BODY) | | BODY | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 144 | Record 1 of 3 | | | | | |) |
| | Record 1 of 3 | ► ₩ ₩ ◀ | | | | | Þ |
| _ | | Category | D | | Description | RBI Deg | radation Mechanism |
| _ | spection Methods | | | thod A | Description | RBI Deg | gradation Mechanism |
| | spection Methods Selected | Category | | | Description | RBI Deg | pradation Mechanism |
| _ | spection Methods Selected | Category Method A (Met | | | Description | RBI Deg | gradation Mechanism |

The Inspection Profile record *BEARINGS* is linked to Inspection Method records *Method B* and *Method C*, and *Method B* is included in the Inspection Scope, as shown in the following image.

| | Item Category △ Baffles (BAFFLES) Bearings (BEARINGS) Body (BODY) | Item Description | Item ID BAFFLES BEARINGS BODY | Sequence | RBI Component | RBI Component Family |
|---------------|---|--|--|--|---|---|
| | Bearings (BEARINGS) | | BEARINGS | | | |
| | | | | | | |
| | Body (BODY) | | BODY | | | |
| | | | | | | |
| | | | | | | |
| Record 2 of 3 | | | | | | |
| | 1 | 1 | | 1 | t | |
| | | | | Description | RBI Deg | gradation Mechanism |
| | Method B (Meth | nod B) Met | hod B | | | |
| | Method C (Meth | nod C) Met | hod C | | | |
| | | | | | | |
| | on Methods cted | cted Category Category Method B (Method C (M | Category ID Image: Category ID Image: Category Method B (Method B) Image: Category Method C (Method C) | cted Category ID Image: Category Method B (Method B) Method B Image: Category Method C (Method C) Method C | Category ID Description Image: Constraint of the state of the st | Ceted Category ID Description RBI Description Image: Control of the second secon |

 The Inspection Profile records *BODY* is linked to Inspection Method record *Method D*, and *Method D* is not included in the Inspection Scope, as shown

| | tion Profile | | | | | | |
|--------|---------------|---------------------|------------------|--------------|-------------|---------------|-----------------------|
| Se | lected | Item Category | Item Description | Item ID | Sequence | RBI Component | RBI Component Family |
| | ~ | Baffles (BAFFLES) | | BAFFLES | | | |
| | ~ | Bearings (BEARINGS) | | BEARINGS | | | |
| ► | | Body (BODY) | | BODY | | | |
| | | | | | | | |
| | | | | | | | |
| • | Record 3 of 3 | 3 1 14 141 4 | | | | | Þ |
| | Record 3 of 3 | 3 > > > + 4 | | | | | Þ |
| Inspec | | 3 > > > > < | |) | Description | RBI | Degradation Mechanism |
| Inspec | tion Methods | | |) ethod D | Description | RBI | Degradation Mechanism |
| Inspec | lected | Category | | | Description | RBI | Degradation Mechanism |

in the following image.

In other words, the Inspection Scope includes Inspection Method records *Method A*, which is linked to Inspection Profile record *BAFFLES*, and *Method B*, which is linked to Inspection Profile record *BEARINGS*.

In this case, if an Inspection record is generated, the following General Finding records will be created automatically:

- BAFFLES
- BEARINGS

In addition to determining the number of General Finding records that are created, the Inspection Scope also determines the values that will be used to populate the RBI Component fields in those General Finding records. If the Inspection Scope includes an Inspection Profile record with a value in the RBI Component field, when a General Finding record is created from that Inspection Profile record (or any Inspection Method record to which it is linked), the value in the RBI Component field will be transferred to the RBI Component field in the General Finding record.

About Work Packs

A *Work Pack* is a collection of records that define inspection work that needs to be performed for a piece of equipment or location in your organization. Work Pack records store preparation information about the inspection work that needs to be performed. Work Packs records, in combination with the following records that can be linked to Work Pack records, are intended to define planned inspection work that can be estimated by outside resources who might perform the work:

- Inspection Task
- Inspection

The general process for managing Work Packs is as follows:

- 1. Create one or more Work Pack records, depending upon <u>what should be inspec-</u> ted and the type of those inspections.
- 2. <u>Link the Work Pack records that represent the items that should be inspected to</u> the Inspection Task records that define the planned inspection work.
- 3. <u>Generate a report that includes details about the Inspection Task records that are</u> <u>linked to the Work Pack records.</u>
- 4. Print the report and distribute it to the appropriate resources so that the cost of performing the inspection work can be estimated.
- 5. Based on the estimates, determine which inspections will be performed and which ones will not.

For example, suppose a Work Pack includes tasks to inspect all pieces of equipment in a particular system. If you receive an estimate from an inspector that exceeds your budget, you might need to trim the inspection work and inspect *only* the pieces of equipment whose previous inspections revealed defects.

- 6. <u>Generate an Inspection record from each Inspection Task record that defines work</u> <u>that is actually planned</u>, based on the final estimates. For each Inspection record that is created from an Inspection Task record, the Meridium APM system will also create a General Finding record based on the Inspection Profile and Inspection Method records that are included in the Inspection Scope containing that Inspection Task record.
- 7. <u>Generate a report that includes a list of the General Finding records</u>, and distribute the report to the individuals responsible for performing the inspection. They can record their findings on the printed report.

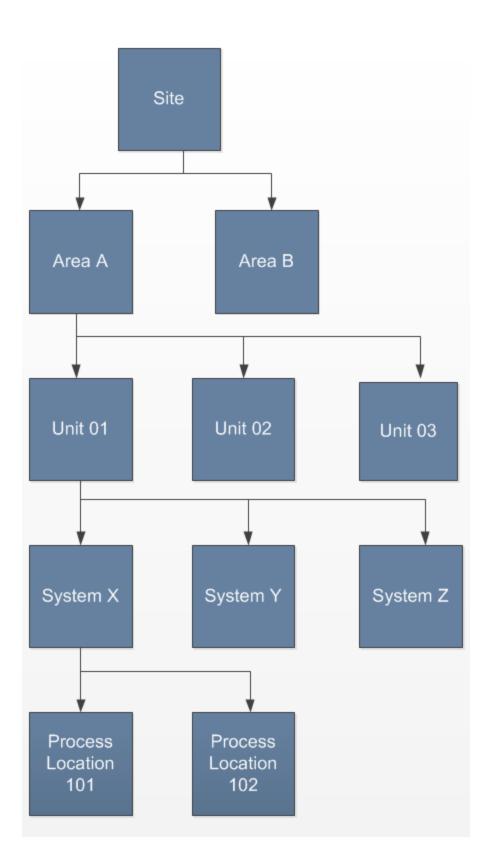
About the Work Pack Hierarchy

You can create a hierarchy of Work Pack records to organize the work that you will perform during inspections, where:

- The lowest level of the hierarchy contains a Work Pack record for the actual item that will be inspected (i.e., a piece of equipment or location).
- The levels above the lowest level contain Work Pack records for the locations containing the item that will be inspected.

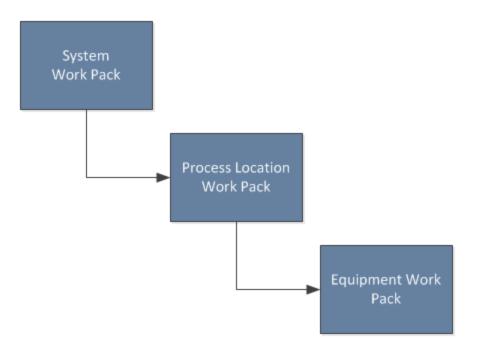
Each Work Pack hierarchy can include up to three levels.

To fully understand this concept, you must understand the concept of a location hierarchy, where each location at a lower level belongs to a location at a higher level. For example, you might have a location hierarchy that looks like the following diagram, where process locations belong to systems, systems belong to units, and so on.

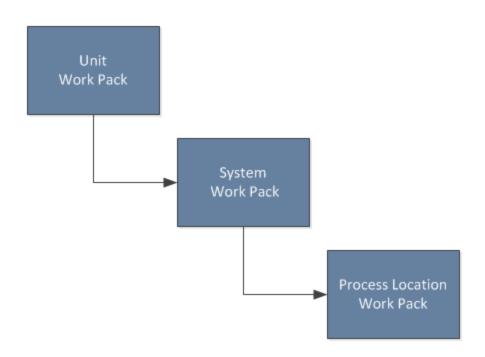


Assuming that your location hierarchy contains at least three levels (where level 1 is higher than level 2, level 2 is higher than level 3, and so on):

• If you are inspecting *equipment*, the lowest level of the hierarchy should contain Work Pack records representing the equipment. If you want to include three levels in the Work Pack hierarchy, the top two levels should represent the locations to which the equipment belongs. For example, if your location hierarchy looks like the previous example location hierarchy, you would want to structure the Work Pack hierarchy like this:



• If you are inspection *locations*, the lowest level of the hierarchy should contain Work Pack records representing those locations. If you want to include three levels in the Work Pack hierarchy, the top two levels should represent the higherlevel locations to which those locations belong. For example, if your location hierarchy looks like the previous example location hierarchy, you would want to structure the Work Pack hierarchy like this:



These examples illustrate the use of three levels in the Work Pack hierarchy, but you may want to create *fewer than* three levels, depending upon your needs.

Regardless of how many levels you create in a Work Pack hierarchy, you should <u>link</u> <u>Inspection Task and Inspection records</u> directly to the Work Pack record that represents the item that will be inspected. In other words, in the first example, you would link Inspection Task and Inspection records directly to the equipment-level Work Pack records (not the location-level Work Pack records). In the second example, you would link Inspection Task and Inspection records directly to the process-location-level Work Pack record (not the system-level or unit-level Work Pack records).

Inspection Team Members

An *inspection team member* is any person that participates in an inspection. When you view an inspection report, you will see a section that lists all team members associated with that inspection.

When you view an Inspection record in the Record Manager or on the **Inspection Finding Checklist** page, you can use the record hierarchy to create a new Inspection Team Member record to link to the Inspection record. Any user that has been assigned the Inspector role can be selected in the *Full Name* field of that Inspection Team Member record. After the Inspection Team Member record has been linked to the Inspection record, the information in the Team Member record will be displayed in the Inspection Team Members section of the inspection report.

Roles

Each Human Resource record can be linked to one or more Resource Role records, where each Resource Role record contains a Role field. The value in the Role field is used to indicate that user's role within the organization.

After a Human Resource record is linked to a Resource Role record, the value in the Role field:

- Determines certain administrative tasks that a user can perform by controlling which links the user can see on the <u>Inspection Administration page</u>.
- Filters certain lists in Inspection records.

Roles are intended to control the workflow of users who work with Inspection Management. As they are delivered, each role should be used as described in the following list. Note, however, that the Inspection Specialist role does not have a pre-delivered function. This role is provided so that you can customize the associated rules to fit any responsibility within your company.

- Inspector: Gathers data to enter into a new or existing Inspection record. Users assigned the Inspector role appear in the Inspection Report Owner list on the Inspection datasheet. The Inspection record would then be assigned to a reviewer, which would be assigned the Inspection Supervisor role. A user who is assigned an Inspector role will see only the Manage Inspection Alerts and Manage Strategies links on the Inspection Administration page.
- Inspection Supervisor: Reviews Inspection records that have been created by a user with an Inspector role. Users assigned this role appear in the Reviewers Name list on the Inspection datasheet. Users assigned an Inspection Supervisor role will see only the Manage Inspection Alerts and Manage Strategies links on the Inspection Administration page.
- Inspection Administrator: Performs administrative tasks such as updating Security User roles and certifications, managing existing Inspection Conditional Alert records, creating new Inspection Conditional Alert records, creating new configured explorers for new Inspection families, and defining default inspection intervals. A user who is assigned an Inspection Administrator role will see the following links on the Inspection Administration page:
 - Inspection Configuration
 - Manage Inspection Resources, Roles and Certifications
 - Manage Inspection Alerts
 - Manage Strategies
 - Manage Time-Based Settings
- **Inspection Specialist:** Performs functions as determined by your unique implementation of this role.

Certifications

You can <u>indicate a user's certification level</u> by creating a Personnel Certification record to link to that user's Human Resource record. When that user creates or approves an Inspection record, the Certification record will serve as documentation that the user is qualified to perform that task. Because Inspection records are often used as legal documentation to prove that an inspection took place, recording the responsible party's qualifications is an important step.

Published Inspections

In an Inspection record, you can select the **Published** check box. The **Published** check box does not restrict access to the document, however. It serves only as a visual indicator about the status of the inspection. You can <u>access published Inspection records</u> from the **Published Inspection Documents** page.

Note that if you have View privileges to an Inspection family, you will be able to see all published and unpublished Inspection records that belong to that family. By default, the Everyone group has View privileges to the baseline Inspection families.

You can <u>publish inspections</u> using the Inspection datasheet for any of the following Inspection families:

- Bundle Inspection
- Bundle Sub-Inspection
- Full Inspection
- General Inspection
- Pressure Test Inspection
- Pressure Test Sub-Inspection

Event Configurations

By default, each of the baseline Inspection families has its own Event Configuration. The Event Configuration is created using the **Inspection Event Configuration Wizard** and determines:

- Whether General Finding records or Observation records will be created automatically for each subcomponent of the piece of equipment that you inspected when you created a new Inspection record for that piece of equipment. The subcomponents are determined by the value that you specify in the Item Category field in Inspection Profile records that are linked to the Equipment record (i.e., each Inspection Profile record represents a different subcomponent of the piece of equipment).
- The datasheet that the inspection reviewer (i.e., the user whose name appears in the Reviewers Name field in the Inspection record) will see.
- The configured explorer that will be used to display the Inspection record and all records to which it is linked.

If you create new Inspection families, you must <u>create an Event Configuration</u> for those families.

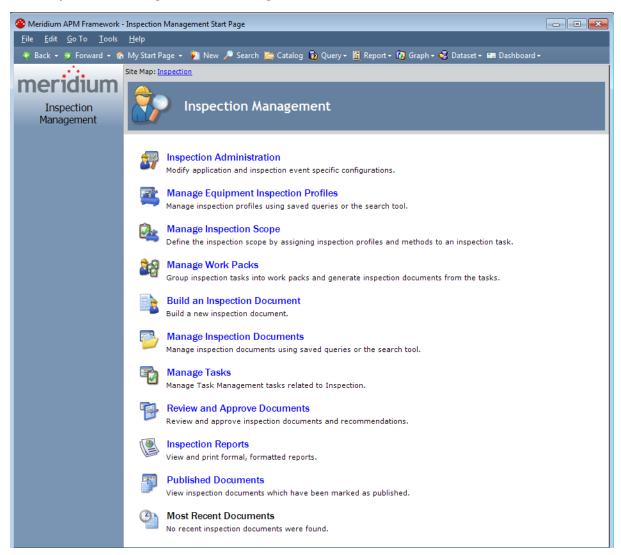
Accessing the Inspection Management Start Page

The **Inspection Management Start Page** serves as the starting point for all of the tasks that you can perform in Inspection Management.

To access the Inspection Management Start Page:

• On the Meridium APM main menu, click **Go To**, point to **Mechanical Integrity**, and then click **Inspection Management**.

The Inspection Management Start Page appears.



Aspects of the Inspection Management Start Page

The **Inspection Management Start Page** displays links that let you access the features in Inspection Management.

Note: The content of the Inspection Management Start Page is determined by your assigned <u>role</u>. Depending on your assigned role, some of these links may not be available to you. For example, only Super Users and Security Users who have been assigned a role will see the Inspection Administration link. All users will be able to see the **Published Documents** and **Most Recent Documents** links, but if you are a non-Super User with no assigned roles, you will see *only* these two links.

Site Map: Inspection

Inspection Management



Inspection Administration

Modify application and inspection event specific configurations.



Manage Equipment Inspection Profiles

Manage inspection profiles using saved queries or the search tool.



Manage Inspection Scope

Define the inspection scope by assigning inspection profiles and methods to an inspection task.



Manage Work Packs

Group inspection tasks into work packs and generate inspection documents from the tasks.



Build an Inspection Document

Build a new inspection document.



Manage Inspection Documents

Manage inspection documents using saved queries or the search tool.



Manage Task Management tasks related to Inspection.



Review and Approve Documents

Review and approve inspection documents and recommendations.



Inspection Reports

View and print formal, formatted reports.



Published Documents

View inspection documents which have been marked as published.

| 6 | Æ |
|---|---|
| - | |
| | |

Most Recent Documents

No recent inspection documents were found.

The **Inspection Management Start Page** contains the following links:

- Inspection Administration: Displays the Inspection Administration page, which displays links to administrative tasks.
- Manage Equipment Inspection Profiles: Displays the Inspection Manage Profiles

page, which displays a list of searches and queries that have been set up to retrieve <u>inspection profiles</u>. By executing a search or query, you can create and modify Inspection Profiles.

- Manage Inspection Scope: Displays the Task Builder, where you can select the Equipment record and Task record that belong to the Inspection Scope that you want to manage.
- Manage Work Packs: Displays the Manage Work Packs page, which displays a list of existing Work Pack records.
- Build an Inspection Document: Displays the Event Builder, which walks you through the process of <u>creating an Inspection record</u>.
- Manage Inspection Documents: Displays the Inspection Manage Documents page, which displays a list of queries and searches that have been set up to retrieve Inspection Event records.
- Manage Tasks: Displays the Inspection Manage Tasks page, which displays a list of searches and queries that have been set up to return Equipment or Functional Location records that can be linked to Inspection Task records. After you run a search or query to retrieve these Equipment or Functional Location records, you can then manage the Task records to which they are linked from the Task List page in Task Management.
- Review and Approve Documents: Displays the Review and Approve Inspection Documents page, which displays a list of saved searches and queries that have been created to facilitate the review and <u>approval process</u>. You can run a search or query to locate Inspection Event records that have been submitted for approval and retrieve Inspection Event records based on the reviewer's name and the document state.
- Inspection Reports: Displays the Inspection Reports page, which displays a list of saved searches and queries that have been created for the purpose of retrieving inspection reports.
- **Published Documents:** Displays the **Published Inspection Documents** page, which displays a list of Inspection records that have been flagged as <u>published</u>.
- Most Recent Documents: Displays in the Record Manager the Inspection record associated with the link that you click. The list displays your four most recently accessed Inspection records.

First-Time Deployment Workflow

Deploying and configuring Inspection 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 Inspection Management on top of the basic Meridium APM system architecture.

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

The person responsible for completing each task will 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 | Review the Inspection Man- agement data model to determ- ine which relationship definitions you will need to modify to include your custom equipment and location fam- ilies. Modify any relationship definitions as needed via the Configuration Manager applic- ation. | Optional | This task is necessary only if you store equip- ment and location information in families other than the baseline Equipment and Func- tional Location fam- ilies. |
| 2 | Assign Security Users to one or more of the Inspection Man- agement Security Groups via the Configuration Manager application. | Required | Security Users will need permissions to the Inspection Man- agement families before they can use the Inspection Man- agement features. |

| Step | Task | Required/Optional | Notes |
|------|---|-------------------|---|
| 3 | Set the Asset Query Path setting to the baseline Asset Query via the Meridium APM Framework application. | Required | In the baseline data- base, this setting is not defined. The doc- umentation assumes that you are using the product according to the Meridium APM Best Practice. As such, we assume that you will <u>set the Asset Query</u> <u>Path setting</u> to the <u>baseline Asset Query</u> . |
| 4 | Set the Associated Relationship Family setting to <i>Functional</i> <i>Location Has Equipment</i> . You can accomplish this task using the Meridium APM Framework application. | Required | In the baseline data- base, this setting is not defined. The doc- umentation assumes that you are using the product according to the Meridium APM Inspection Best Practice. As such, we assume that you will <u>set the Associated Rela- tionship Family setting</u> to <i>Functional Location</i> <i>Has Equipment</i> . |

| Step | Task | Required/Optional | Notes |
|------|--|-------------------|---|
| | | | The following Applic- ation Configurations are defined in the baseline database: |
| | | | Published Query Path |
| | | | • Summary Query Path |
| | Modify baseline <u>Application Con</u> - | | Alerts Query Path |
| 5 | figuration settings via the Meridium APM Framework | Optional | Asset Is Successor |
| | application. | | Profile Con- figuration |
| | | | Method Con- figuration |
| | | | Strategy Rule Con- figuration |
| | | | You can modify these Application Con- figurations if you want. |
| 6 | Assign roles to users who should be able to complete tasks in Inspection Man- agement. You can accomplish this task using the Meridium APM Framework application. | Required | None |
| 7 | Define the Inspection Profile for each piece of equipment that you will inspect. You can accom- plish this task using the Meridium APM Framework application. | Required | This step is required only if you plan to cre- ate Inspection records in baseline families <i>other than</i> the Check- lists subfamilies. |
| 8 | Modify the baseline Asset query via the Meridium APM Frame- work application. | Optional | This step is required only if you want Inspec- tion records to be linked to records in a family other than the Equipment family. |

First-Time Deployment Workflow

| Step | Task | Required/Optional | Notes |
|------|---|-------------------|---|
| 9 | Define Event Configurations for any new Inspection families that you have created. You can accomplish this task using the Meridium APM Framework application. | Optional | This step is required only if you have created custom Inspection fam- ilies that you want to use within Inspection Management. |
| 10 | Assign certifications to users via the Meridium APM Framework application. | Optional | None |
| 11 | Configure Meridium APM to send email messages about inspection data to the appro- priate recipients. You can accomplish this task using the Meridium APM Framework application. | Optional | None |
| 12 | Group inspection work into Work Packs. You can accom- plish this task using the Meridium APM Framework application. | Optional | None |
| 13 | Define time-based inspection settings. You can accomplish this task using the Meridium APM Framework application. | Optional | None |

Upgrade or Update Inspection Management to V3.6.1.7.0

The following tables list the steps that are required to update or upgrade Inspection Management to V3.6.1.7.0. These steps assumes that you have completed the steps for upgrading the basic Meridium APM system architecture.

Update from any version V3.6.1.0.0 through V3.6.1.6.1

The Inspection Management module will be upgraded to V3.6.1.7.0 automatically when you upgrade the components in the basic Meridium APM system architecture. No additional steps are required.

Upgrade from any version V3.6.0.0.0 through V3.6.0.12.8

The Inspection Management module will be upgraded to V3.6.1.7.0 automatically when you upgrade the components in the basic Meridium APM system architecture. No additional steps are required.

Upgrade from any version V3.5.1.0.0 through V3.5.1.12.1

The Inspection Management module will be upgraded to V3.6.1.7.0 automatically when you upgrade the components in the basic Meridium APM system architecture. No additional steps are required.

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

| Step | Task | Required/Optional | Notes |
|------|--|-------------------|-------|
| 1 | Define time-based inspection settings. You can accomplish this task using the Meridium APM Framework application. | Optional | None |

Upgrade from any version V3.5.0 through V3.5.0.0.7.1

| Step | Task | Required/Optional | Notes |
|------|--|-------------------|-------|
| 1 | Define time-based inspection settings. You can accomplish this task using the Meridium APM Framework application. | Optional | None |

Upgrade from any version V3.4.5 through V3.4.5.0.1.4

| Step | Task | Required/Optional | Notes |
|------|---|-------------------|---|
| 1 | If you have added System Codes to the MI_INSPECTION_ TYPE System Code Table, create Task Types records rep- resenting those task types, and set the value in the Reference field to <i>Inspection_Strategy</i> . You can do so via the Configuration Manager application. | Optional | This step is necessary only if you have added System Codes to the MI_INSPECTION_TYPE System Code table. |
| 2 | Define time-based inspection settings. You can accomplish this task using the Meridium APM Framework application. | Optional | None |

Inspection Management Security Groups

The baseline Inspection Management module contains one Security Group, *MI Inspection*. The following table lists the default privileges that members of the MI Inspection Security Group have to the Inspection entity and relationship families.

| Family | Privileges |
|----------------------------------|------------------------------|
| Entity Families | |
| Alert | View, Insert, Update, Delete |
| Certification | View, Insert, Update, Delete |
| Checklist Finding | View, Insert, Update, Delete |
| Conditional Alerts | View, Insert, Update, Delete |
| Corrosion | View, Insert, Update, Delete |
| Equipment | View, Insert, Update, Delete |
| Event | View, Insert, Update, Delete |
| Finding | View, Insert, Update, Delete |
| Human Resource | View |
| Inspection Method | View, Insert, Update, Delete |
| Inspection Profile | View, Insert, Update, Delete |
| Inspection Team Member | View, Insert, Update, Delete |
| Potential Degradation Mechanisms | View |
| RBI Degradation Mechanisms | View |
| Recommendation | View, Insert, Update, Delete |
| Reference Document | View, Insert, Update, Delete |
| Resource Role | View, Insert, Update, Delete |
| SAP System | View |
| Security User | View |
| Strategy | View, Update |
| Task | View, Insert, Update, Delete |
| Task Execution | View, Insert |

| Family | Privileges |
|--------------------------------------|------------------------------|
| Taxonomy References | View |
| Time Based Inspection Interval | View, Insert, Update, Delete |
| Time Based Inspection Setting | View, Insert, Update, Delete |
| Work Pack | View, Insert, Update, Delete |
| Relationship Families | |
| Belongs to a Unit | View, Update, Insert, Delete |
| Checklist Has Finding | View, Insert, Update, Delete |
| Has Certifications | View, Insert, Update, Delete |
| Has Degradation Mechanisms | View |
| Has Event Execution | View, Insert |
| Has Findings | View, Insert, Update, Delete |
| Has Inspection Method | View, Insert, Update, Delete |
| Has Inspection Profile | View, Insert, Update, Delete |
| Has Inspection Scope | View, Insert, Update, Delete |
| Has Inspections | View, Insert, Update, Delete |
| Has Potential Degradation Mechanisms | View |
| Has Recommendations | View, Insert, Update, Delete |
| Has Reference Documents | View, Insert, Update, Delete |
| Has Roles | View, Insert, Update, Delete |
| Has Sub-Inspections | View, Insert, Update, Delete |
| Has Tasks | View, Insert, Update, Delete |
| Has Task History | Insert |
| Has Task Execution | View, Insert |
| Has Task Revision | View, Insert |
| Has Team Member | View, Insert, Update, Delete |
| Has Taxonomy Hierarchy Element | View |
| Has Taxonomy Mapping | View |

| Family | Privileges |
|------------------------------------|------------------------------|
| Has Time Based Inspection Interval | View, Insert, Update, Delete |
| Has Work Pack | View, Update, Insert, Delete |
| ls a User | View |
| Is Planned By | View, Insert, Update, Delete |
| Is Executed By | View, Insert, Update, Delete |

Note that:

- The family-level privileges granted to the following families are also spread to all of their subfamilies:
 - Event
 - Taxonomy References
- The Has Task History relationship family is inactive in the baseline Meridium APM database.
- In addition to the families listed in the preceding table, members of the MI Inspection Security Group have View privileges to additional families to facilitate <u>integ-</u> <u>ration with the Risk Based Inspection module</u>. Since these families are not used elsewhere in Inspection Management, they are not listed in this table.

Note: As part of implementing Inspection Management, you will decide whether you want to link Inspection records to Equipment records, Functional Location records, or both. If you want to link Inspection records to Functional Location records, you will need to grant members of the MI Inspection Security Group at least View privileges to the Functional Location family and the Functional Location Has Equipment relationship family.

About Inspection Configuration Pages

This section of the documentation provides information on the following pages that are used to perform configuration tasks for first-time deployments of the Inspection Management module:

- Inspection Administration page
- Inspection Configuration page
- Inspection Manage Resources page
- Time-Based Inspection Settings page
- Inspection Manage Profiles page
- Inspection Profile page

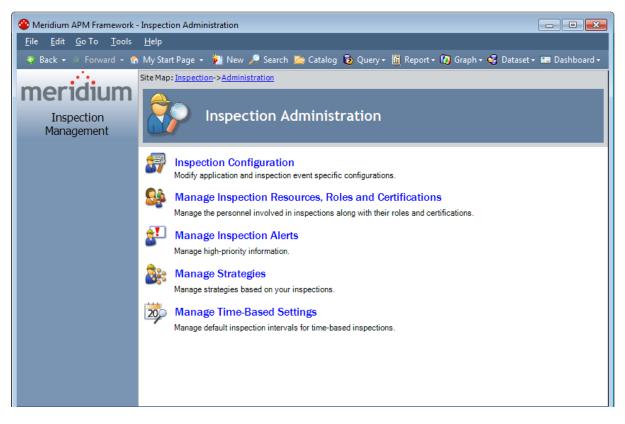
Accessing the Inspection Administration Page

The **Inspection Administration** page serves as the starting point for performing administrative tasks. The following instructions provide details on accessing the **Inspection Administration** page.

To access the Inspection Administration page:

• In the Meridium APM Framework, on <u>theInspection Management Start Page</u>, click the Inspection Administration link.

The Inspection Administration page appears.



Aspects of the Inspection Administration Page

The **Inspection Administration** page serves as the starting point for performing administrative tasks and contains the following links:

- Inspection Configuration: Displays the Inspection Configuration page, where you can manage configuration settings and provide information about your Inspection Management data model.
- Manage Inspection Resources, Roles, and Certifications: Displays the Inspection Manage Resources page, where you can manage the personnel involved in inspections, along with their <u>roles</u> and <u>certifications</u>.
- Manage Inspection Alerts: Displays the Inspection Alerts page, where you can manage high-priority information, such as overdue inspections. You can create and modify alerts and generate email messages based on certain alert conditions.
- Manage Strategies: Displays the Strategy List page, where you can locate and <u>manage strategy rules</u> for a selected family.
- Manage Time-Based Settings: Displays the <u>Time-Based Inspection Settings page</u>, where you can define time-based inspection settings.

Note that some links may not appear, depending on your assigned <u>role</u>.

Accessing the Inspection Configuration Page

To access the Inspection Configuration page:

• In the Meridium APM Framework, on the <u>Inspection Administration page</u>, click the Inspection Configuration link.

The **Inspection Configuration** page appears.

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|--|------------|---|--|---|---|
| Back 👻 🛞 Forward 🗣 | % I | My Start Page 👻 🎽 New 🔎 Sea | rch 障 Catalog 🕻 | 🗿 Query 👻 🛅 Report 🗸 🚺 Graph 🗸 | 🥰 Dataset 🕶 💷 Dashboard 🗸 |
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| Add New | R | ecord 1 of 9 | | | |
| Edit Selected | | | | Event Configurations | |
| | | | | - | |
| Collete Selected | | Family | Auto Generate | Reviewer's Datasheet | Explorer Path |
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| Celete Selected | | | | | Explorer Path Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ |
| Celete Selected | | Pressure Test Inspection | None | Reviewers Datasheet | Public\Meridium\Modules\Inspection\Explorers\ |
| Celete Selected | | Pressure Test Inspection API 653 External Checklist | None None | Reviewers Datasheet API 653 External Checklist | Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ |
| Collete Selected | | Pressure Test Inspection API 653 External Checklist Bundle Inspection | None None None | Reviewers Datasheet API 653 External Checklist Reviewer Datasheet | Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ |
| Collete Selected | | Pressure Test Inspection API 653 External Checklist Bundle Inspection API 570 External Checklist | None None None None | Reviewers Datasheet API 653 External Checklist Reviewer Datasheet API 570 External Checklist | Public/Meridium /Modules /Inspection /Explorers / Public/Meridium /Modules /Inspection /Explorers / Public/Meridium /Modules /Inspection /Explorers / Public/Meridium /Modules /Inspection /Explorers / |
| Celete Selected | | Pressure Test Inspection API 653 External Checklist Bundle Inspection API 570 External Checklist General Inspection | None None None None | Reviewers Datasheet API 653 External Checklist Reviewer Datasheet API 570 External Checklist General Inspection Audit | Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ |
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| Celete Selected | | Pressure Test Inspection API 653 External Checklist Bundle Inspection API 570 External Checklist General Inspection API 510 Internal Exchanger Che API 510 External Checklist | None None None None None None None | Reviewers Datasheet API 653 External Checklist Reviewer Datasheet API 570 External Checklist General Inspection Audit API 510 Internal Exchanger Checklist API 510 External Checklist | Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ Public/Meridium/Modules/Inspection/Explorers/ |

Aspects of the Inspection Configuration Page

The Inspection Configuration page contains the following grids:

- **Application Configurations:** Displays one row for each Application Configuration setting that must be configured before beginning work in the Inspection module.
- **Event Configurations:** Displays one row for each Inspection family for which an Event Configuration has been defined.

| | spection->Administration->Configuration Configuration Page | | | | | |
|----------|--|---------------------|--|---|------|--|
| | | | Application Configurations | | | |
| | Name | Value | | | | |
| ► | Asset Query Path | Public (Meridium (M | odules\Inspection\Config Queries\Asset | Query | = | |
| | Published Query Path | Public (Meridium (M | odules \Inspection \Config Queries \Publish | ned Documents | - | |
| | Summary Query Path | Public (Meridium (M | lodules \Inspection \Config Queries \Inspec | tion History Summary Query | | |
| | Alerts Query Path | Public (Meridium (M | lodules\Inspection\Conditional Alert Quer | ies\All Inspection Alerts | - | |
| | | | | | | |
| | Family | Auto Generate | Event Configurations Reviewer's Datasheet | Explorer Path | | |
| ► | Pressure Test Inspection | None | Reviewers Datasheet | Public/Meridium/Modules/Inspection/Explorers/ | | |
| | API 653 External Checklist | None | API 653 External Checklist | Public/Meridium/Modules/Inspection/Explorers/ | | |
| | Bundle Inspection | None | Reviewer Datasheet | Public\Meridium\Modules\Inspection\Explorers\ | | |
| | API 570 External Checklist | None | API 570 External Checklist | Public\Meridium\Modules\Inspection\Explorers\ | = | |
| | General Inspection | None | General Inspection Audit | Public\Meridium\Modules\Inspection\Explorers\ | | |
| | API 510 Internal Exchanger Che | None | API 510 Internal Exchanger Checklist | Public\Meridium\Modules\Inspection\Explorers\ | | |
| | API 510 External Checklist | None | API 510 External Checklist | Public\Meridium\Modules\Inspection\Explorers\ | | |
| | API 653 Internal Checklist | None | API 653 Internal Checklist | Public\Meridium\Modules\Inspection\Explorers\ | Γ | |
| <u> </u> | Full Inspection | Auto generate fi | Reviewers Datasheet | Public\Meridium\Modules\Inspection\Explorers\ | | |
| | | | | | 1 W. | |

The **Inspection Configuration** page contains the following task menus: <u>Common Tasks</u>, <u>Application Tasks</u>, and <u>Event Tasks</u>.

Application Configuration Grid

The **Application Configurations** grid displays one row for each Application Configuration setting that must be defined before users can being using the Inspection Management module. Some Application Configuration settings are defined in the baseline database, and others <u>must be defined manually</u>. We recommend that you accept the baseline setting for each setting that is configured by default. The following image shows what the **Application Configurations** grid looks like in the baseline database.

| | Application Configurations | | | | | |
|---|--------------------------------|--|---|--|--|--|
| | Name | Value | | | | |
| ⊧ | Asset Query Path | | | | | |
| | Published Query Path | Public\Meridium\Modules\Inspection\Config Queries\Published Documents | | | | |
| | Summary Query Path | Public\Meridium\Modules\Inspection\Config Queries\Inspection History Summary Query | | | | |
| | Alerts Query Path | Public\Meridium\Modules\Inspection\Conditional Alert Queries\All Inspection Alerts | | | | |
| | Associated Relationship Family | | | | | |
| | Asset Is Successor | True | | | | |
| | Profile Configuration | System Code[MI_INSPECTION_PROFILE_CATEGORY] | | | | |
| | Method Configuration | System Code[MI_INSPECTION_METHOD_CATEGORY] | | | | |
| | Strategy Rule Configuration | MI_InspectionTasksUpdate | - | | | |
| 4 | | | , | | | |

The following columns are displayed in the **Application Configurations** grid:

- **Name:** The name of the Application Configuration setting. Throughout the documentation, each setting is referred to using the value that is displayed in this column. For example, the *Asset Query Path setting* corresponds with the row containing the value *Asset Query Path* in the **Name** column.
- Value: The value or selection defined for the setting.

The following table lists the Application Configuration settings that are displayed in the grid, a description of each setting, and whether or not the setting is defined in the baseline database.

| Application Con- figuration Setting | Description | Defined in the baseline data- base? (Yes/N- o) | Notes |
|--|---|--|---|
| Asset Query Path | Specifies the query that is used to identify records that store inform- ation about pieces of equip- ment for which you perform inspections. | No | The documentation assumes that you will <u>set the Asset Query Path setting</u> to the <u>baseline Asset Query</u> . |
| Published Query Path | Specifies the query that is used to display results on the <u>Published Inspec-</u> tion Documents page. | Yes | In the baseline database, the <u>Published</u> <u>Documents query</u> in the following Cata- log location is specified for this setting: \\Public\Meridi- um\Modules\Inspection\Config Queries. |
| Summary Query Path | Specifies the query that is used to load all Inspection records that are linked to a spe- cific Equipment or Functional Location record. | Yes | In the baseline database, the <u>Inspection</u> <u>History Summary query</u> in the following Catalog location is specified for this set- ting: \\Public\Meridium\Modules\Config Quer- ies. |
| Alerts Query Path | Specifies the query that is used to populate the results dis- played on the Inspection Alerts page. | Yes | In the baseline database, the <u>All Inspec- tion Alerts query</u> in the following Catalog location is specified for this setting: \\Public\Meridium\Modules\Conditional Alert Queries |

| Application Con- figuration Setting | Description | Defined in the baseline data- base? (Yes/N- o) | Notes | |
|--|---|--|---|--|
| Associated Relationship Family | Specifies the rela- tionship that you use to relate Functional Loca- tion records to Equipment records. | No | The documentation assumes that you will <u>set the Associated Relationship Fam-</u> ily setting to <i>Functional Location Has Equipment</i> . | |
| Asset ls Suc- cessor | Specifies whether the Equipment family is the pre- decessor or the successor in the relationship that you defined in the Associated Relationship Fam- ily setting. | Yes | In the baseline database, this setting is set to <i>True</i> , meaning that the Equipmer family is the successor in the Functiona Location Has Equipment relationship. | |

Application Configuration Grid

| Application Con- figuration Setting | Description | Defined in the baseline data- base? (Yes/N- o) | Notes |
|--|--|--|--|
| | Determines the: | | |
| Profile Con- figuration | Value that is used to populate the Item Category field in Inspection Profile records that are cre- ated auto- matically. List of val- ues avail- able in the Item Cat- egory field in Inspec- tion Profile records that are cre- ated manu- ally. | Yes | In the baseline database, the MI_ INSPECTION_PROFILE_CATEGORY Sys- tem Code Table is <u>specified for this set-</u> ting. |

| Application Con- figuration Setting | Description | Defined in the baseline data- base? (Yes/N- o) | Notes |
|--|---|--|---|
| Method Con- figuration | Determines which of the fol- lowing items will be used to pop- ulate the Item Category field in Inspection Profile records that are created auto- matically (for Equipment records that are not already linked to Inspec- tion Profile records): • System Codes in a System Code Table • Results from a query • Field values in the Equipment record to which the Inspection Profile records will be linked. | Yes | In the baseline database, the MI_ INSPECTION_METHOD_CATEGORY Sys- tem Code Table is <u>specified for this set-</u> ting. |

Application Configuration Grid

| Application Con- figuration Setting | Description | Defined in the baseline data- base? (Yes/N- o) | Notes |
|--|---|--|--|
| Strategy Rule Con- figuration | Determines the strategy rulethat will be executed when you select the Inspection Task Complete check box in an Inspection record. | Yes | In the baseline database, the <u>MI_Inspec- tionTasksUpdate strategy rule</u> is spe- cified for this setting. The strategy rule MI_Inspec- tionTasksUpdate updates the values in the Last Date and Next Date fields in all Inspection Task records that are linked to Inspection records that have a value in the Completion Date field. |

About Event Configurations

The **Event Configurations** grid displays one row for each Inspection family for which an Event Configuration has been defined.

| [| Family | Auto Generate | Reviewer's Datasheet | Explorer Path |
|---|--------------------------------------|------------------------|--------------------------------------|---|
| · | Pressure Test Inspection | None | Reviewers Datasheet | Public/Meridium/Modules/Inspection/Explorers/Pressure |
| | API 653 External Checklist | None | API 653 External Checklist | Public/Meridium/Modules/Inspection/Explorers/API 653 E |
| | Bundle Inspection | None | Reviewer Datasheet | Public\Meridium\Modules\Inspection\Explorers\Bundle Ins |
| | API 570 External Checklist | None | API 570 External Checklist | Public/Meridium/Modules/Inspection/Explorers/API 570 E |
| | General Inspection | None | General Inspection Audit | Public\Meridium\Modules\Inspection\Explorers\General In |
| | API 510 Internal Exchanger Checklist | None | API 510 Internal Exchanger Checklist | Public/Meridium/Modules/Inspection/Explorers/API 510 I |
| | API 510 External Checklist | None | API 510 External Checklist | Public/Meridium/Modules/Inspection/Explorers/API 510 E |
| | API 653 Internal Checklist | None | API 653 Internal Checklist | Public/Meridium/Modules/Inspection/Explorers/API 653 I |
| | Full Inspection | Auto generate findings | Reviewers Datasheet | Public/Meridium/Modules/Inspection/Explorers/Full Inspe |
| | External PRD Checklist | None | External PRD Checklist | Public/Meridium/Modules/Inspection/Explorers/External P |
| | API 510 Internal Checklist | None | API 510 Internal Checklist | Public\Meridium\Modules\Inspection\Explorers\API 510 I |

In the baseline database, an Event Configuration is defined for each baseline Inspection family. As a result, one row is displayed in the grid for each baseline Inspection family. The following columns are displayed in the **Event Configurations** grid:

- Family: Displays the family caption.
- Auto Generate: Displays one of the following values:
 - Auto generate findings: Indicates that General Finding records will be created automatically when you create an Inspection record in this family.
 - Auto generate observations: Indicates that Observations records will be created automatically when you create an Inspection record in this family.
 - None: Indicates that neither General Finding nor Observation records will be created automatically when you create an Inspection record in this family.
- Reviewer's Datasheet: Displays the datasheet caption that was specified when the <u>Event Configuration was defined</u> for the family, (i.e., the datasheet that was selected in the Reviewer's Datasheet list on the Select Reviewer's Datasheet screen in the Inspection Event Configuration Wizard).
- Explorer Path: Displays the Catalog location of the configured explorer that was created when the Event Configuration was defined for the family, (i.e., the value that was specified in the Customized Explorer text box on the Configure Explorer screen in the Inspection Event Configuration Wizard). This Catalog location will be used to display records in the Inspection family.

You can select rows in this grid to modify or delete an existing Event Configuration.

Common Tasks

| Com | mon Tasks | ۲ |
|-----|-----------|---|
| 0 | Help | |

The **Common Tasks** menu on the **Inspection Configuration** page contains the following link:

• Help: Displays the context-sensitive Help topic for the Inspection Configuration page.

Application Tasks



The **Application Tasks** menu on the **Inspection Configuration** page contains the following link:

- Edit Selected: Opens a dialog box specific to your selection in the Application Configurations grid. You can use the dialog box to specify the following settings:
 - Asset Query Path
 - Published Query Path
 - <u>Summary Query Path</u>
 - Alerts Query Path
 - Associated Relationship Family
 - Asset Is Successor
 - <u>Profile Configuration</u>
 - Method Configuration

Event Tasks



The **Event Tasks** menu on the **Inspection Configuration** page contains the following links:

- Add New: Displays the Inspection Event Configuration Wizard, which you can use to create a new Event Configuration for an Inspection family.
- Edit Selected: Displays the Inspection Event Configuration Wizard, which you can use to edit the Event Configuration that has been created for the Inspection family that is selected in the Event Configurations grid.
- **Delete Selected:** After displaying a confirmation message, <u>deletes the Event Con-</u><u>figuration</u> for the specified family and then lets you choose whether or not to delete the configured explorer for the specified family.

Accessing the Inspection Manage Resources Page

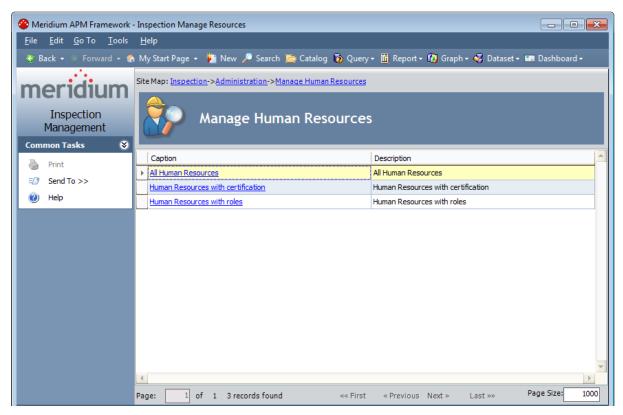
You can use the Inspection Manage Resources page to view the following types of records in your database:

- All Human Resource records.
- All Human Resource records that are linked to a Personnel Certification record.
- All Human Resource records that have been assigned a role.

To access the Inspection Manage Resources page:

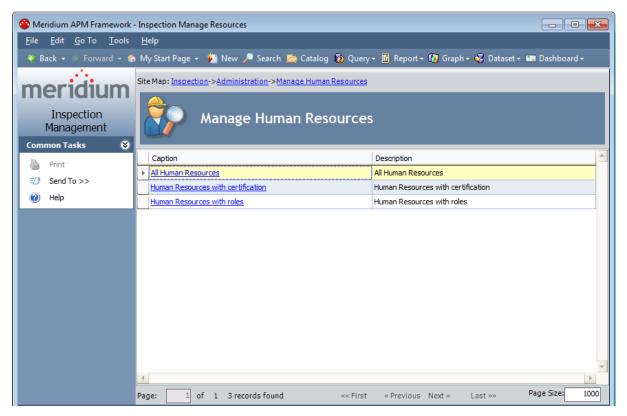
• In the Meridium APM Framework, on the Inspection Administration page, click the Manage Inspection Resources, Roles, and Certifications link.

The Inspection Manage Resources page appears.



Aspects of the Inspection Manage Resources Page

The **Inspection Manage Resources** page contains a grid that displays rows that correspond with the queries that are stored in the Catalog location <u>\Public\Meridi-</u> <u>um\Modules\Inspection\Resource Queries</u>. You can access the results of these queries via the **Inspection Manage Resources** page in order to <u>assign a new role to a user</u> or <u>modify a user's existing role</u>.



The grid on the **Inspection Manage Resources** page contains the following columns:

- Caption: Displays the hyperlinked captions of the following queries:
 - All Human Resources: Displays the Saved Search: All Human Resources page, which displays a list of all Human Resource records.
 - Human Resources with certification: Displays the Saved Search: Human Resources with certification page, which displays a list of all Human Resource records that are linked to a Personnel Certification record.
 - Human resources with roles: Displays the Saved Search: Human Resources with roles page, which displays a list of all Human Resource records that have been assigned a role.

Note: In the Meridium APM baseline database, each page described in the preceding list displays in the page title the catalog item *caption* for the query with which it is associated. This documentation assumes that you have not modified these query captions.

• **Description:** Displays the description of each Catalog item.

The Inspection Manage Resources page contains one task menu, Common Tasks.

Common Tasks Menu



The **Common Tasks** menu on the **Inspection Manage Resources** page contains the following links:

- Print: This link is always disabled.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Manage Resources page.

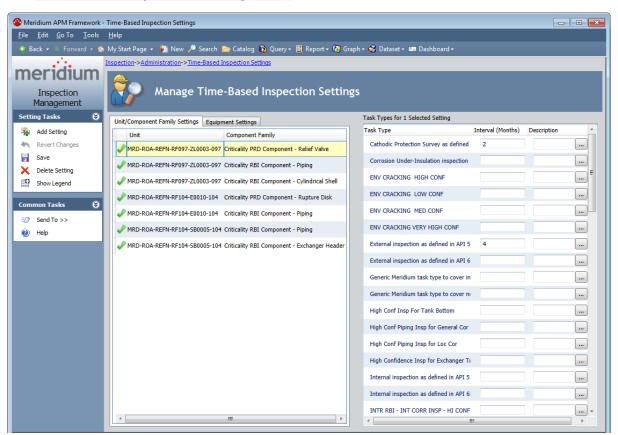
Accessing the Time-Based Inspection Settings Page

You can use the **Time-Based Inspection Settings** page to define <u>time-based inspection</u> <u>settings</u>.

To access the Time-Based Inspection Settings page:

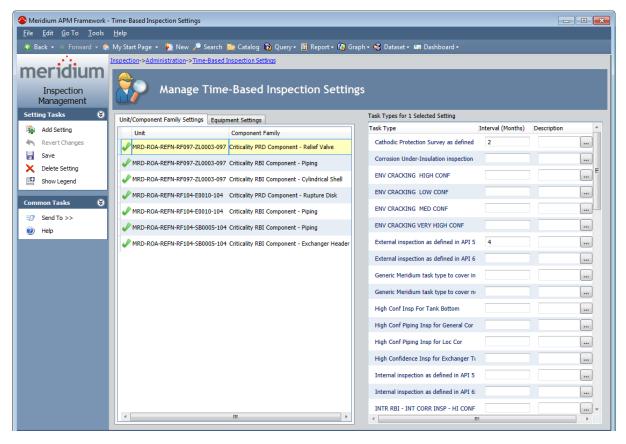
• In the Meridium APM Framework, on the <u>Inspection Administration page</u>, click the Manage Time-Based Settings link.

The **<u>Time-Based Inspection Settings page</u>** appears.



Aspects of the Time-Based Inspection Settings Page

The **Time-Based Inspection Settings** page is used to <u>define time-based inspection set</u>-<u>tings</u>.



The **Time-Based Inspection Settings** page contains the **Manage Time-Based Inspection Settings** workspace. This workspace contains the following items:

- The Unit/Component Family Settings tab: Contains a grid that displays one row for each Functional Location record and/or Criticality Calculator RBI Components family for which <u>time-based inspection settings</u> have been defined. The grid contains the following columns:
 - Unit: Displays the Record ID of the Functional Location record associated with the time-based inspection setting.
 - **Component Family:** Displays the family caption of the Criticality Calculator RBI Components family associated with the time-based inspection setting.
- The Equipment Settings tab: Contains a grid that displays one row for each Equipment record for which <u>time-based inspection settings</u> have been defined. The grid contains the following columns:
 - Unit: Displays the Record ID of the Functional Location record representing a Unit that is linked to the Equipment record associated with the time-based

inspection setting.

- **Equipment ID:** Displays the Record ID of the Equipment record associated with the time-based inspection setting.
- The Task Types for <number> Selected Settings pane: Contains a grid that displays one row for each Task Types record in the database whose Reference field contains one of the following values, where <number> is the number of rows selected in the grid on the Unit/Component Family Settings or Equipment tab:
 - INSPECTION_STRATEGY (Inspection Strategy), if the following conditions are met:
 - The Risk Based Inspection (RBI) license is active.

-and-

• The **Generate Recommendations using Policy Manager** setting is *enabled* on the **Administrative Tasks** page in RBI.

-or-

- The RBI license is *not* active.
- *INSPECTION (Inspection)*, if the following conditions are met:
 - The RBI license is active.

-but-

• The Generate Recommendations using Policy Manager setting on the Administrative Tasks page in RBI is *disabled*.

Throughout this documentation, the **Task Types for <number> Selected Settings** pane is referred to simply as the **Task Types** pane. The grid in this pane contains the following columns:

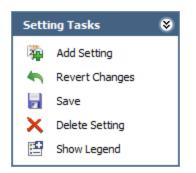
- Task Type: Displays the value stored in the Task Type Description field in the Task Types record.
- Interval (Months): Displays the user-specific inspection interval. The value that you type in this cell is stored in the Interval field in the associated Time Based Inspection Interval record.
- Description: Displays the user-specific description for the inspection interval. The value that you type in this cell is stored in the Description field in the associated Time Based Inspection Interval record. The cells in this column contain the button, which displays the Description dialog box that can be used to specify the description.
- The legend: Displays the icons listed in the following table. One icon is displayed for each row in the grids on the Unit/Component Family Settings and Equipment Settings tabs and indicates whether or not the associated time-based inspection setting is valid:

| lcon | Description |
|-------------|---|
| > | Indicates that at least one valid inspection interval has been defined for the record or family. You can save time-based inspection settings only when at least one valid inspection interval is defined. |
| ? | Indicates one of the following, depending upon the tab that is selected in the Manage Time-Based Inspection Settings workspace. When the: |
| | Unit/Component Family Settings tab is selected, indicates that one of the following has <i>not</i> been defined: |
| | A Unit or Criticality Calculator RBI Components family. |
| | At least one inspection interval. |
| | • Equipment Settings tab is selected, indicates that at least one inspec- tion interval has <i>not</i> been defined. |
| × | Indicates that one or more invalid inspection intervals (e.g., a text value) are defined for the record or family. |
| | Indicates that time-based inspection settings for the record or family already exist. |

The legend is hidden by default. To show the legend, click the **Show Legend** link on the **Setting Tasks** menu.

The **Time-Based Inspection Settings** page contains the following task menus: <u>Setting</u> <u>Tasks</u> and <u>Common Tasks</u>.

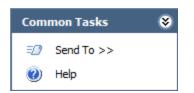
Setting Tasks



The **Setting Tasks** menu on the **Time-Based Inspection Settings** page contains the following links:

- Add Setting: Results in the following behavior, depending upon which tab is selected in the Manage Time-Based Inspection Settings workspace. When the:
 - Unit/Component Family Settings tab is selected, a new row is added to the grid on the tab that you can use to define new time-based inspection settings for a Functional Location record or a Criticality Calculator RBI Components family.
 - Equipment Settings tab is selected, the Find Items window is displayed, where you can perform a search for the Equipment record for which you want to define new time-based inspection settings.
- **Revert Changes:** After displaying a confirmation message, reverses any modifications that you have made on the page since you last saved your changes.
- Save: Saves the time-based inspection settings that you have defined.
- Delete Setting: After displaying a confirmation message, <u>deletes the time-based</u> <u>inspection settings</u> associated with the record or family that is selected on the Unit/Component Family Settings or Equipment Settings tab.
- Show Legend: Displays the legend at the bottom of the Manage Time-Based Inspection Settings workspace. When you click the Show Legend link, the label of this link changes to *Hide Legend*. When you click the Hide Legend link, the legend will be hidden.

Common Tasks



The **Common Tasks** menu on the **Time-Based Inspection Settings** page contains the following links:

- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the current page.

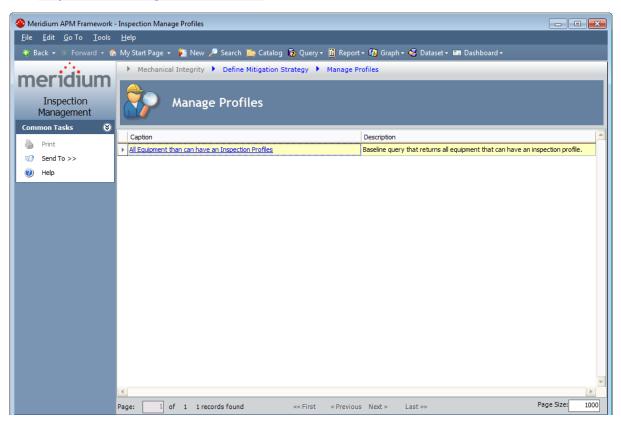
Accessing the Inspection Manage Profiles Page

You can use the **Inspection Manage Profiles** page to <u>access the Inspection Profile page</u> for an Equipment record.

To access the Inspection Manage Profiles page:

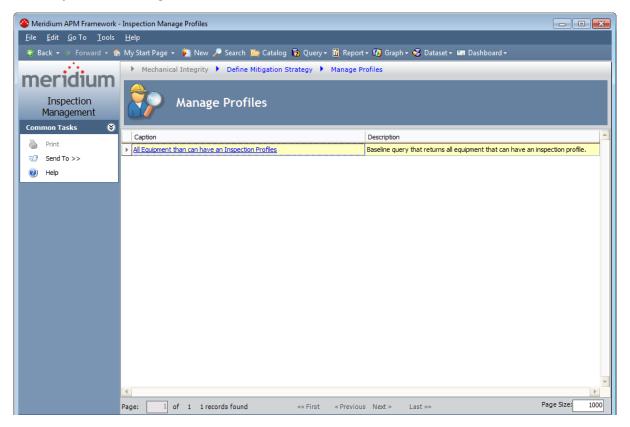
 On the <u>Inspection Management Start Page</u>, click the Manage Equipment Inspection Profiles link.

The Inspection Manage Profiles page appears.



Aspects of the Inspection Manage Profiles Page

The Inspection Manage Profiles page contains a grid with one row.



The grid contains the following columns:

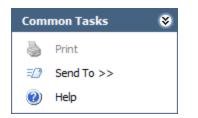
• Caption: Displays the hyperlinked text *All Equipment that can have an Inspection Profiles*, which displays the results of the All Equipment that can have an Inspection Profiles query on the Saved Search: All Equipment that can have an Inspection Profiles page. On this page, you can select the Equipment record to which you want to link an Inspection Profile record.

Note: In the Meridium APM baseline database, the page described here displays in the page title the catalog item *caption* for the query with which it is associated. This documentation assumes that you have not modified this query caption.

• **Description:** Displays the Catalog description of the All Equipment that can have Inspection Profiles query.

The **Inspection Manage Profiles** page contains the following task menu: <u>Common</u> <u>Tasks</u>.

Common Tasks Menu



The **Common Tasks** menu on the **Inspection Manage Profiles** page contains the following links:

- Print: This link is always disabled.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Manager Profiles page.

Accessing the Inspection Profile Page

You can use the **Inspection Profile** page to create or modify the Inspection Profile for a piece of equipment that you will inspect.

To access the Inspection Profile page:

1. In the Meridium APM Framework, on the <u>Inspection Management Start Page</u>, click the **Manage Equipment Inspection Profiles** link.

The **Inspection Manage Profiles** page appears, displaying a list the queries that are stored the <u>Profile Queries folder</u> in the Catalog. The following image shows an example of what this page looks like by default.

| Seridium APM Framework | rk - Inspection Manage Profiles | | • x |
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| | Mechanical Integrity Define Mitigation Strategy Manage Profiles | | |
| meridium | | | |
| Inspection Management | Manage Profiles | | |
| Common Tasks 🛛 😵 | | | |
| Print | Caption Description Caption Caption Caption Description Descriptio | - i 61 | |
| Send To >> | baseline query that returns all equipment that can have an inspection Promies | Inspection profile | 2. |
| 😢 Help | | | |
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| | a | | ▼ |
| | Page: 1 of 1 1 records found «« First « Previous Next » Last »» | Page Size: | 1000 |

2. In the grid, click the All Equipment that can have an Inspection Profiles link.

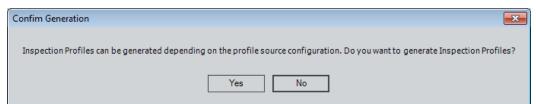
The **Saved Search: All Equipment that can have an Inspection Profiles** page appears, displaying a list of all Equipment records that can be linked to an Inspection Profile record.

| ile <u>E</u> dit <u>G</u> oTo <u>T</u> ool | s <u>H</u> elp | | | | | | | |
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| 🗧 Back 👻 🋞 Forward 👻 | 🍘 My Start Page 👻 🎽 New , | 🔎 Search D Catalog 🔞 Query 🕶 🛅 Repor | t 🕶 👩 Graph 🕶 🥰 Data | iset 🕶 🖬 Dashboard 🗸 | | | | |
| Site Map: Inspection->Equipment Inspection Profile Searches->Saved Search : All Equipment than can have an Inspection Profiles | | | | | | | | |
| Inspection Management | Saved | Search : All Equipment t | han can have | an Inspection Profiles | | | | |
| | | | | | | | | |
| | Action | Equipment ID | Family | Equipment Key | | | | |
| Print . | Manage Profiles | AI0001-002 ~ 000000000001000019 | Equipment | 242648 | | | | |
| E Send To >> | Manage Profiles | AI0003-002 ~ 0000000000 1000020 | Equipment | 242648 | | | | |
| 🕖 Help | Manage Profiles | AL0001-002 ~ 0000000000 1000022 | Equipment | 242648 | | | | |
| | Manage Profiles | AL0002-002 ~ 0000000000 1000023 | Equipment | 242648 | | | | |
| | Manage Profiles | AL0003-002 ~ 0000000000 1000024 | Equipment | 242649 | | | | |
| | Manage Profiles | B0001-002 ~ 0000000000 1000027 | Equipment | 242649 | | | | |
| | Manage Profiles | B0003-002 ~ 0000000000 1000028 | Equipment | 242649 | | | | |
| | Manage Profiles | B0004-002 ~ 0000000000 1000029 | Equipment | 242649 | | | | |
| | Manage Profiles | BL0001-002 ~ 000000000001000031 | Equipment | 242649 | | | | |
| | Manage Profiles | BL0002-002 ~ 0000000000 1000032 | Equipment | 242650 | | | | |
| | Manage Profiles | D0001-002 ~ 0000000000 1000065 | Equipment | 242650 | | | | |
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| | Manage Profiles | D0004-002 ~ 0000000000 1000068 | Equipment | 242650 | | | | |
| | Manage Profiles | D0037-002 ~ 0000000000 1000069 | Equipment | 242651 | | | | |
| | Manage Profiles | D0038-002 ~ 0000000000 1000070 | Equipment | 242651 | | | | |
| | Manage Profiles | D0040-002 ~ 00000000001000071 | Equipment | 242651 | | | | |
| | Manage Profiles | D0128-002 ~ 00000000001000072 | Equipment | 242651 | | | | |
| | Manage Profiles | DL0010-002 ~ 0000000000 1000074 | Equipment | 242651 | | | | |
| | Manage Profiles | DL0085-002 ~ 0000000000 1000075 | Equipment | 242652 | | | | |
| | | | | | | | | |

3. In the row containing the Equipment record whose Inspection Profile you want to view on the **Inspection Profile** page, click the **Manage Profiles** link.

If the Equipment record for which you are accessing the Inspection Profile is:

- Already linked to at least one Inspection Profile record, the **Inspection Profile** page appears
- Not linked to any Inspection Profile records, the **Confirm Generation** dialog box appears.



If you click the:

- Yes button, the Inspection Profile page appears, and Inspection Profile records will be created automatically for the Equipment record, according to your profile configuration setting.
- No button, the Inspection Profile page appears, and Inspection Profile records will not be created automatically for the Equipment record, according to your profile configuration setting.s

Aspects of the Inspection Profile Page

The **Inspection Profile - <Equipment Record ID>** page, where **<Equipment Record ID>** is the Record ID of the Equipment record that is linked to the Inspection Profile record displays details for a specific Inspection Profile record and any associated Inspection Method records. Throughout the documentation, we refer to the **Inspection Profile -<Equipment Record ID>** page simply as the **Inspection Profile** page.

| 😵 Meridium APM Framework - Inspection Profile for HE-2318 OFF-GAS COOLER | | | | | | | | |
|---|--|---------------------|------------------|----------------|--------------------|-----------------------|--|--|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>E</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools <u>H</u> elp | | | | | | | |
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| Inspection Management | Datasheet Inspection Profile | 💽 🛃 🗙 🛇 | | | | | | |
| Common Tasks 😵 | Inspection Profile | | | | | | | |
| Add Existing Item | [Item Category | Item ID | Item Description | Sequence | RBI Component | RBI Component Family | | |
| Manage Scope | Actuator (ACTUATOR) | ACTUATOR | | | | | | |
| Sequence Profile | Annular Plate (ANNULAR PLATE) | ANNULAR PLATE | | | | | | |
| Save | * | | | | | | | |
| Print | | | | | | | | |
| Send To >> | | | | | | | | |
| Help | | | | | | | | |
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| Associated Pages 🛛 😵 | | | | | | | | |
| APM Summary | Datasheet Inspection Method | 💽 🛃 🗙 🕥 | | | | | | |
| | Inspection Method | | | | | | | |
| | Category | ID | Des | scription | RBI | Degradation Mechanism | | |
| | General Measurements (ML) | ML | | | | | | |
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The Inspection Profile page contains the following items:

- Inspection Profile tab: Displays a grid containing the Inspection Profile records that are linked to the Equipment record.
- Inspection Method tab: Displays a grid containing the Inspection Method records that are linked to the Inspection Profile record that is selected in the Inspection **Profile** section.
- Task menus: Menus that provide specific functionality. The following menus are available: <u>Common Tasks</u> and <u>Associated Pages</u>.

Inspection Profile Tab

The **Inspection Profile** tab on the <u>Inspection Profile page</u> contains a grid that contains a row for each Inspection Profile record that is linked to the Equipment record identified by the Record ID that appears below the Site Map.

The following columns of information are displayed on the **Inspection Profile** tab:

- Item Category
- Item ID
- Item Description
- Sequence
- RBI Component

Note: The cells in the **RBI Component** column are enabled only if the Risk Based Inspection (RBI) module is active.

• RBI Component Family

Above the grid, the following items are displayed:

- **Reference Documents link:** Displays the **Reference Documents** dialog box, where you can manage the Reference Document records that are linked to the Equipment record.
- 🚽 button: Saves any changes that you have made on the Inspection Profiles tab.
- **X** button: After asking for confirmation, deletes the selected Inspection Profile record and any Inspection Method records to which it is linked.
- Solution: Displays the Reference Documents dialog box, when you can manage the Reference Document records that are linked to the Equipment record.

Below the grid, buttons are displayed that you can use to navigate between the rows in the grid.

Inspection Method Tab

The **Inspection Method** tab on the <u>Inspection Profile page</u> contains a grid that contains a row for each Inspection Method record that is linked to the Inspection Profile record that is selected on the <u>Inspection Profile tab</u>.

The following columns are displayed on the **Inspection Method** tab:

- Category
- ID
- Description
- RBI Degradation Mechanism

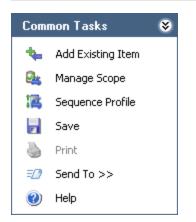
Note: The cells in the **RBI Degradation Mechanism** column are enabled only if the Risk Based Inspection (RBI) module is active.

Above the grid, the following buttons are displayed.

| Button | Function |
|--------|---|
| 2 | Saves any changes that you have made on the Inspection Method tab. |
| × | After asking for confirmation, deletes the selected Inspection Method record. |
| Q | Displays the Reference Documents dialog box, where you can manage the Reference Document records that are linked to the selected Inspection Method record. |

Below the grid, buttons are displayed that you can use to navigate between the rows in the grid.

Common Tasks



The **Common Tasks** menu on the **Inspection Profile** page contains the following links:

- Add Existing Item: Displays the Find Items window, where you can <u>search for an</u> Equipment record whose Inspection Profile you want to use to create new Inspection Profile and Inspection Method records that are linked to the current Equipment record.
- Manage Inspection Scope: Displays the Task Builder, where you can choose to define a new Inspection Scope or view an existing Inspection Scope for the current equipment.
- Sequence Profile: Displays the Sequencing page, where you can <u>apply a sequence</u> value to the Inspection Profile records that are displayed on the Inspection Profile page.
- Save: Saves any changes that you have made in either the Inspection Profile section or the Inspection Method section.
- **Print:** Displays the **Preview** window, which shows you a preview of the **Inspection Profile** page as it will appear on the printed page.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Profile page.

Associated Pages

The **Associated Pages** menu on the **Inspection Profile** page displays Associated Pages that have been configured for the family of the record that is linked to the Inspection Profile records that are displayed on the page.

About Required Tasks

This section of the documentation provides details on the following tasks that *must* be completed prior to beginning work in Inspection Management in order to take advantage of Inspection Management functionality:

- Defining the Asset Query Path setting
- Defining the Associated Relationship Family setting
- Assigning roles to users who should be able to complete tasks in Inspection
- Defining Inspection Profiles

Defining the Asset Query Path Setting

The Asset Query Path Setting defines the query that identifies the record in which you store information for pieces of equipment for which you perform inspections.

To define the Asset Query Path setting:

- 1. in the Meridium APM Framework, <u>access the **Inspection Configuration** page</u>.
- 2. In the **Application Configurations** grid, select the row containing the value *Asset Query Path* in the **Name** column, as shown in the following image.

| | Application Configurations | | | | | |
|----|----------------------------|--|---|--|--|--|
| | Name | Value | | | | |
| ► | Asset Query Path | | = | | | |
| | Published Query Path | Public/Meridium/Modules/Inspection/Config Queries/Published Documents | Г | | | |
| | Summary Query Path | Public/Meridium/Modules/Inspection/Config Queries/Inspection History Summary Query | | | | |
| | Alerts Query Path | Public/Meridium/Modules/Inspection/Conditional Alert Queries/All Inspection Alerts | Ŧ | | | |
| - | | > | | | | |
| Re | cord 1 of 9 | | | | | |

3. On the Application Tasks menu, click the Edit Selected link.

The Save As window appears.

| ok in: | | # * × |
|---|--|----------------------------|
| Name | Description | Туре |
| Baseline Personal [Administrator, Meridium] Personal [Notification, MI] Public | Static version of baseline Meridium c Personal Folders available to all users. | Folder Folder Folder |
| • | | |

- 4. Navigate to the following Catalog location and select the Asset Query: \\Public\Meridium\Modules\Inspection\Config Queries.
- 5. Click the **Open** button.

The **Save As** window closes, and the Catalog location is populated in the **Value** column in the **Application Configurations** grid.

| | Application Configurations | | | | | |
|-----|--|--|---|--|--|--|
| | Name | Value | | | | |
| ► | Asset Query Path | Baseline Meridium Modules Inspection Config Queries Asset Query | = | | | |
| | Published Query Path Public/Meridium/Modules/Inspection/Config Queries/Published Documents | | | | | |
| | Summary Query Path | Public/Weridium/Modules/Inspection/Config Queries/Inspection History Summary Query | | | | |
| | Alerts Query Path | Public/Weridium/Modules/Inspection/Conditional Alert Queries/All Inspection Alerts | - | | | |
| | | | | | | |
| Red | cord 1 of 9 | | | | | |

Defining the Associated Relationship Family Setting

The Associated Relationship Family setting specifies the relationship that relates Functional Location records to Equipment records. When you create Inspection records using the **Event Builder**, certain fields in the Inspection record will be populated with values from both the Equipment and Functional Location record based upon this setting.

▲ IMPORTANT: The following instructions assume that you are conducting a baseline deployment of the Inspection module. (i.e., Equipment records will be linked to Functional Location records through the Functional Location Has Equipment relationship family). If you are conducting a custom deployment of the Inspection module, this setting should specify the relationship family that is used to link the records in which you store equipment data to the records in which you store location data).

To define the Associated Relationship Family setting:

- 1. In the Meridium APM Framework, <u>access the **Inspection Configuration** page</u>.
- 2. In the **Application Configurations** grid, select the row containing the value *Associated Relationship Family* in the **Name** column, as shown in the following image.

| | Application Configurations | | | | | | |
|--|--------------------------------|--|---|--|--|--|--|
| | Name | Value | - | | | | |
| | Summary Query Path | Public/Meridium/Modules/Inspection/Config Queries/Inspection History Summary Query | | | | | |
| Alerts Query Path Public/Meridium/Modules/Inspection/Conditional Alert Queries/All Inspection Alerts | | | | | | | |
| Þ | Associated Relationship Family | | | | | | |
| | Asset Is Successor | True | | | | | |
| | | | • | | | | |
| Red | ord 5 of 9 | | | | | | |

3. On the Application Tasks menu, click the Edit Selected link.

The Meridium Inspection dialog box appears.

| Meridium Inspection | |
|-------------------------|--------------------|
| Edit Applica | ation |
| Associated Re | elationship Family |
| Location Contains Asset | • |
| | OK Cancel |

4. In the Associated Relationship Family list, select Functional Location Has Equipment, and click OK.

The **Meridium Inspection** dialog box closes, and the **Value** column in the grid is populated with the relationship family that you specified.

| | Application Configurations | | | | | |
|---------------|--------------------------------|--|----|--|--|--|
| | Name | Value | | | | |
| | Alerts Query Path | Public/Meridium/Modules/Inspection/Conditional Alert Queries/All Inspection Alerts | ٦. | | | |
| ► | Associated Relationship Family | Functional Location Has Equipment | = | | | |
| | Asset Is Successor | True | | | | |
| | Profile Configuration | Taxonomy[MI_INSPECTION_PROFILE_CATEGORY] | - | | | |
| | | | Þ | | | |
| Record 5 of 9 | | | | | | |

Assigning a Role

To assign a role to a Security User, you will need to link a Resource Role record to the Human Resource record for that Security User. The Resource Role record contains the Role field, which should contain a value that indicates the role assigned to that user. For example, if John Smith is responsible for reviewing Inspection records, you would create a Human Resource record for John Smith and link it to a Resource Role record. That Resource Role record would contain the value *Inspection Supervisor* in the Role field.

To assign a role to an Inspection Management user:

1. On the Inspection Administration page, click the Manage Inspection Resources, Roles, and Certifications link.

The **Inspection Manage Resources** page appears, displaying a list of all queries and searches in the **Resource Queries** folder in the Catalog.

2. Click the All Human Resources link.

The **Saved Search: All Human Resources** page appears, displaying a list of all Human Resource records that exist in the database.

3. In the row containing the user to whom you want to assign a role, click the **Manage Resource Roles** link.

The Record Manager appears, displaying the Human Resource record in the master/detail datasheet.

- 4. In the **Resource Role** section:
 - a. In the Category list, select Inspection.
 - b. In the **Role** list, select the role you want to assign the Security User.

Note: If you assign a user the Inspector role, that user's name will appear in the Inspection Report Owner field when you create an Inspection record. If you assign a user the Inspection Supervisor role, that user's name will appear in the Reviewers Name field when you create an Inspection record.

- 5. If desired, assign a second role to the user by selecting on a new row the Inspection category and a different value in the **Role** field.
- 6. On the **Common Tasks** menu, click the **Save** link.

The Human Resource record and the linked Resource Role record(s) are saved.

Modifying a User's Role

To modify a user's role:

- 1. In the Meridium APM Framework, access the Inspection Administration page.
- 2. Click the Manage Inspection Resources, Roles, and Certifications link.

The **Inspection Manage Resources** page appears, displaying a list of all queries and searches in the **Resource Queries** folder in the Catalog.

3. Click the Human Resources with roles link.

The **Saved Search: Human Resources with Roles** page appears, displaying a list of all users that have been assigned a role.

4. In the row containing the user whose role you want to modify, click the hyperlink in the **Last Name** column.

The Record Manager appears, displaying the Human Resource record in the master/detail datasheet.

- 5. In the detail grid, modify the roles as desired.
- 6. Save the record.

Creating an Inspection Profile Record

To create an Inspection Profile record:

1. In the Meridium APM Framework, access the Inspection Profile page.

The **Inspection Profile** page appears, displaying on the **Inspection Profile** tab the Inspection Profile records that are that is linked to the Equipment record identified by the Record ID that appears below the Site Map. A red outline has been added to the following image to highlight the **Inspection Profile** tab.

| See Meridium APM Framework - Inspection Profile for HE-2312 CHARGE MIX COOLER | | | | | | | | | |
|---|--------------------------------|--|------------------|----------------------|----------------------|----------------------|--|--|--|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | | | | | | |
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| Mechanical Integrity Define Mitigation Strategy Manage Profiles | | | | | | | | | |
| menulum | HE-2312 CHARGE MIX COOLER | Reference Documents | | | | | | | |
| Inspection Management | Datasheet Inspection Profile | Image: A state of the state | | | | | | | |
| Common Tasks 😵 | Inspection Profile | | | | | | | | |
| 4 Add Existing Item | Item Category | Item ID | Item Description | Sequence | RBI Component | RBI Component Family | | | |
| Manage Scope | Actuator (ACTUATOR) | ACTUATOR | | | | | | | |
| Sequence Profile | Annular Plate (ANNULAR PLATE) | ANNULAR PLATE | | | | | | | |
| | * | | | | | | | | |
| Save | | | | | | | | | |
| Print | | | | | | | | | |
| Send To >> | | | | | | | | | |
| Help | | | | | | | | | |
| Associated Pages 🛛 📚 | | | | | | | | | |
| APM Summary | Datasheet Inspection Method | 🖸 🛃 🗙 🕓 | | | | | | | |
| | Inspection Method | | | | | | | | |
| | Category | D | [[| Description | RBI Degradat | tion Mechanism | | | |
| | F Ceneral Measurements (ML) | ML | | | | | | | |
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2. On the Inspection Profile tab, in the first blank row at the bottom of the grid, in the ItemCategory list, click inside the cell and then click the button, and select the subcomponent that needs to be inspected. The list of values is generated based on the Profile Configuration setting on the Inspection Configuration page.

The **ItemID** cell is populated automatically with the value that you selected in the **Category** cell. You can modify the ID if desired.

- 3. In the **ItemDescription** cell, type a description for the subcomponent.
- 4. In the **Sequence** cell, type a number indicating the order in which the subcomponent should be inspected, relative to the other subcomponents in the grid.
- 5. In the **RBIComponent** list, select the subcomponent type. The list contains the

Record ID of all Criticality Calculator RBI Components records that are linked to the Equipment record.

6. In the **RBI Component Family** list, select the Criticality Calculator RBI Components family associated with the Inspection Profile record.

Note: This step is required only if you define <u>time-based inspection settings at</u> <u>the Criticality Calculator RBI Components level</u> and perform inspections by <u>defining Inspection Scope</u>.

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

The Inspection Profile record is saved and linked to the Equipment record.

Copying an Inspection Profile from One Piece of Equipment to Another Piece of Equipment

If you define an Inspection Profile for a piece of equipment and another similar piece of equipment already has an Inspection Profile, you can create all or part of the Inspection Profile for the current piece of equipment using the Inspection Profile that is already defined for the similar piece of equipment. When you do so, Meridium APM will use the Inspection Profile records that are already linked to the similar piece of Equipment as the basis for creating new Inspection Profile records that will be linked to the Equipment record that you are working with. In addition, any Inspection Method records in the source Inspection Profile will be used to create new Inspection Method records in the new Inspection Profile.

In other words, when you are finished with the process, the two Equipment records will be linked to *different* Inspection Profile records that have the same values in the Category, ID, and Description fields. The Inspection Method records from the source Inspection Profile will also be *different* records from the Inspection Method records in the new Inspection Profile.

To copy an Inspection Profile from one piece of equipment to another piece of equipment:

- 1. In the Meridium APM Framework, <u>access the Inspection Profile</u> for the Equipment record *to which* you want to copy an existing Inspection Profile.
- 2. On the Inspection Profile page, on the Common Tasks menu, click the Add Existing Item link.

The **Find Items** window appears, displaying the **Simple Search** workspace. The **Search In** list is populated automatically with the *Equipment* family.

Copying an Inspection Profile from One Piece of Equipment to Another Piece of Equipment

| 差 Find Items | | | × |
|-------------------|--|----------|--------------------|
| meridium | Simple Search | | |
| Search Type 😵 | Search In: Equipment | - | Find Now |
| 🗊 Advanced search | Look For: | | Stop New Search |
| | Category: ALL Class: ALL Type: ALL | • • | ≈1 |
| | | | |
| | | | |
| | Select | | Cancel |

- 3. In the Linked To list, select Inspection Profile.
- 4. If desired, add additional search criteria. You can do so using the **Look For** text box on the **Simple Search** workspace or the additional advanced search optionson the Advanced Search workspace, which you can access by clicking the **Advanced Search** link on the **Search Type** menu.
- 5. When you are finished adding criteria to the search, click the **Find Now** button.

The search results appear, displaying all Equipment records that are linked to an existing Inspection Profile record and meet the additional search criteria that you defined.

Copying an Inspection Profile from One Piece of Equipment to Another Piece of Equipment

| ¢ | Simple | e Search | | | | |
|--|-------------------------|-------------------|--------------------|--|----------------------|---|
| | Search In: | quipment | | • | Find Now | |
| | Linked To: | nspection Profile | | ; | Chan | |
| | Look For: | | | ! | Stop | _ |
| | | atch Case? | | [| New Search | |
| | ☑ Include Search Fields | | | | * | 1 |
| | Category: A | LL | | • | | |
| | Class: | LL | | - | | |
| | Туре: 🚺 | LL | | - | | |
| | | | | | | |
| | Family | Record ID | Linked Family | | ed Record ID | - |
| Ŀ | Equipment | D0003-097 ~ | Inspection Profile | | ator (ACTUATOR) | = |
| Ц | Equipment | D0003-097 ~ | Inspection Profile | | ılar Plate (ANNULAR | |
| | Equipment | D0003-097 ~ | Inspection Profile | | irtances | - |
| Ц | Equipment | D0003-097 ~ | Inspection Profile | Attachments | | |
| | Equipment | D0003-097 ~ | Inspection Profile | Baffles (BAFFLES) BAFFLES | | |
| Н | Equipment | D0003-097 ~ | Inspection Profile | Bearings (BEARINGS) Boiler Tubes (BOILER TUBES) | | |
| 4 | Equipment | D0003-097 ~ | Inspection Profile | Bolle | TUDES (BOILER TUBES) | * |
| Page: 1 of 1 35 records found «« First « Previous Next » Page Size: 1000 | | | | | | |
| | | | Select | | Cancel | |

6. In the search results, select the row containing the Equipment record that is linked to the Inspection Profile records that you want to use to create new Inspection Profile records that will be linked to the Equipment record that you are working with on the **Inspection Profile** page, and click the **Select** button.

New Inspection Profile records appear in the grid in the **Inspection Profile** section, where the Category, ID, and Description values are the same as the values in the Inspection Profile records that are linked to the similar Equipment record. If any of the source Inspection Profile records are linked to Inspection Method records, new Inspection Method records also appear in the grid in the **Inspection Method** section.

Creating an Inspection Method Record

To identify the ways in which you could inspect equipment subcomponents, you will need to create Inspection Method records and link them to the Inspection Profile records that represent those subcomponents.

To create an Inspection Method record and link it to an Inspection Profile record:

1. In the Meridium APM Framework, <u>access the **Inspection Profile** page</u>.

The **Inspection Profile** page appears, displaying on the **Inspection Method** tab each Inspection Method record that is linked to the Inspection Profile record that is selected on the **Inspection Profile** tab. A red outline has been added to the following image to highlight the **Inspection Method** tab.

| <u>File Edit Go</u> To <u>T</u> ools | - Inspection Profile for HE-2312 CHARGE N Help | VIX COOLER | | | | |
|---|---|--------------------------------------|--------------------|-------------------|------------------------|----------------------|
| | n My Start Page 👻 🎽 New 🔎 Search 🛛 | 📂 Catalog 👩 Query 🗸 | 🛅 Report - 🕜 Graph | n 🗸 🥪 Dataset 🗸 🍱 | Dashboard - | |
| neridium | Mechanical Integrity Define HE-2312 CHARGE MIX COOLER | Mitigation Strategy | Manage Profiles | | | |
| Inspection Management | Datasheet Inspection Profile | 🖸 🛃 🗙 🖉 | | | | |
| Common Tasks 🛛 😵 | Inspection Profile | | | | | |
| Add Existing Item Manage Scope Sequence Profile Save Print Send To >> Help Help APM Summary | | Item ID ACTUATOR ANNULAR PLATE | Item Description | Sequence | RBI Component | RBI Component Family |
| | Category | ID ML | Der | scription | RBI Degrad | lation Mechanism |

- 2. On the **Inspection Profile** tab, select the row containing the Inspection Profile record that you want to link to a new Inspection Method record.
- On the Inspection Method tab, in the first blank row at the bottom of the grid, in the Category list, click the button, and select the method that should be used to inspect the subcomponent. The list of values is generated based on the <u>Profile</u> <u>Configuration setting</u> on the Inspection Configuration page.

The **ID** cell is populated automatically with the value that you selected in the **Category** cell. You can modify the ID if desired.

- 4. In the **Description** cell, type a description of the inspection method.
- 5. In the **RBI Degradation Mechanism** list, select the RBI degradation mechanism with which the inspection method is associated. The list is filtered automatically to display only the Potential Degradation Mechanisms records that are linked to the Criticality Calculator RBI Components record that appears in the **RBI Component** cell for the currently selected Inspection Profile record.
- 6. On the **Common Tasks** menu, click the **Save** link.

The Inspection Method record is saved and linked to the Inspection Profile record.

Applying a Sequence Value to Inspection Profile Records

To apply a sequence value to Inspection Profile records:

- 1. In the Meridium APM Framework, <u>access the **Inspection Profile** page</u>.
- 2. On the **Common Tasks** menu, click the **Sequence Profile** link.

The **Sequencing** page appears, displaying the Inspection Profile records that were displayed on the **Inspection Profile** page.

3. Use the **Sequencing** page to apply a sequence value to the **Inspection Profile** records.

About Optional Tasks

This section of the documentation provides details on optional configuration tasks that you may complete when deploying the Inspection Management module.

- Modify the baseline Asset Query
- Modify Query Path settings
- Modify the Profile Configuration setting
- Modify the Method Configuration setting
- Modify the Strategy Rule Configuration setting
- Define additional Event Configurations
- Modify email alerts
- <u>Create work packs</u>
- Define time-based inspection settings

Modifying the Baseline Asset Query

Meridium APM provides the Asset Query in the Catalog folder \\Public\Meridium\Modules\Inspection\Config Queries. This query is configured to return Equipment records by default, and it is used to identify records that store information about pieces of equipment for which you perform inspections.

Note that the Asset Query searches the Equipment family and returns the result of a single Count expression and prompt for the Equipment Entity Key.

To modify the baseline Asset Query:

1. In the Meridium APM Framework, navigate to the Catalog, and open the Asset Query in the folder **\\Public\Meridium\Modules\Inspection\Config Queries**.

| Enter parameter values | |
|------------------------|-----------|
| key | |
| | |
| | |
| | OK Cancel |

The **Enter parameter values** dialog box appears.

2. Click Cancel.

Blank query results appear.

| See Meridium APM Framework | - • • |
|--|--------------------------|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools <u>H</u> elp | |
| 📚 Back 🔹 🛞 Forward 👻 🏠 My Start Page 👻 🎉 New 🔎 Search 🗯 Catalog 🔞 Query 📲 Report + 🔞 Graph + 🥰 Dataset + | 💶 Dashboard - |
| Asset Query : Select Query | |
| | |
| Query Builder | <u> </u> |
| Query Tasks 🛛 😵 | |
| Design View | |
| SQL View | |
| Run Query | |
| 🐁 Add Source | |
| ☐_ Options >> | |
| | |
| Common Tasks 😵 | |
| 1 New Query | |
| Correction of the second secon | |
| Save As | |
| X Delete Query | |
| Print Query | |
| =② Send To >> | |
| W Help | |
| | |
| Other Tasks 😵 | |
| Create a Graph | |
| Create a Report | - |
| Export to File | • |
| Page: 0 of 0 0 records found «« First « Previous Next » Page 5 | Size: 1000 |

3. On the **Query Tasks** menu, click the **SQL View** link.

The query SQL code appears.

| Asset Query : Select Query | |
|---|---|
| SELECT Count(*) "Expr" FROM [MI_EQUIP000] WHERE [MI_EQUIP000].ENTY_KEY = (? :n :id=key) | ^ |
| | Y |

- 4. Replace the text **MI_EQUIP000** with the ID of the family whose records store information about the pieces of equipment for which you perform inspections.
- 5. Save the query.

Your modification is saved.

Modifying Query Path Settings

The following instructions provide details on defining the following Application Configuration settings:

- Published Query Path
- Summary Query Path
- Alerts Query Path

To modify a query path:

- 1. In the Meridium APM Framework, <u>access the **Inspection Configuration** page</u>.
- 2. In the **Application Configurations** grid, select the row containing the query path that you want to specify.
- 3. On the **Application Tasks** menu, click the **Edit Selected** link.

The Save As dialog box appears.

4. In the Catalog, select the query that you want to use, and click the **Open** button.

The **Save As** dialog box closes, and **Value** column in the grid is populated with the Catalog location of the query that you selected.

How is the Profile Configuration Setting Used?

The Profile Configuration setting is used to determine the:

- Inspection Profile records that will be created *automatically* when you access the <u>Inspection Profile page</u> for an Equipment record that is not linked to Inspection Profile records. Specifically, the Profile Configuration setting determines which value will be used to populate the Item Category field in Inspection Profile records that are created automatically.
- List of values that is available in the Item Category field in Inspection Profile records that are created *manually*.

By default, the product is configured to use the MI_INSPECTION_PROFILE_CATEGORY System Code Table to populate the Item Category field (in records created automatically) and list (in records created manually). You can modify this setting to specify that one of the following options be used to populate the Item Category field and list:

- IDs of active System Codes in a specific System Code Table.
- <u>Results from a query</u>.
- Field values in the Equipment record to which the Inspection Profile records will be linked.

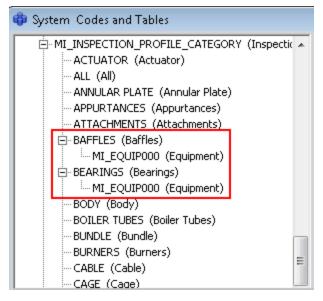
Using a System Code Table to Populate the Item Category Field Automatically

When Inspection Profile records are created automatically, the Item Category field in those records can be populated automatically with the Description and ID of active System Codes in a specific System Code table. Consider the following example.

Suppose that when you access the <u>Inspection Profile page</u> for an Equipment record, you want the Meridium APM system to create two Inspection Profile records with the following values in the Item Category field:

- Baffles (BAFFLES)
- Bearings (BEARINGS)

In this case, an administrative user could define the references outlined in red in the following MI_INSPECTION_PROFILE_CATEGORY System Code Table (via the Configuration Manager).



Notice how the referenced System Codes use the ID *MI_EQUIP000*, which is the family ID of the Equipment family.

Based on these System Codes, if you accepted this default profile configuration setting:

Using a System Code Table to Populate the Item Category Field Automatically

| Se Meridium Inspection | × |
|--|-----------|
| Edit Equipment Profile Configuration | |
| Pick a source for your inspection profile items: | |
| System Code 🔹 | |
| Pick a system code table for generating profile items: | |
| MI_INSPECTION_PROFILE_CATEGORY | ▼ |
| | OK Cancel |

...when you accessed the **Inspection Profile** page for an Equipment record, the following Inspection Profile records would be created automatically.

| Mechanical Integrity Define Mitigation Strategy Manage Profiles | | | | | |
|---|--------------------------------------|------------------|----------|---------------|----------------------|
| HE-725 SLACK WAX HEATER Reference Documents | | | | | |
| Datasheet Inspection Profile | Datasheet Inspection Profile 🔤 🚽 🗙 🔘 | | | | |
| Inspection Profile | | | | | |
| [Item Category | Item ID | Item Description | Sequence | RBI Component | RBI Component Family |
| Baffles (BAFFLES) | BAFFLES | | | | |
| 😡 Bearings (BEARINGS) | BEARINGS | | | | |
| → | | | | | |

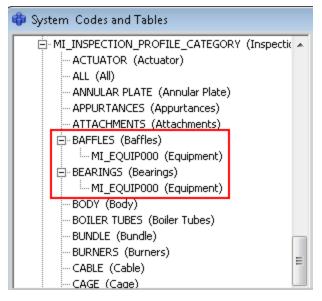
Using a System Code Table to Populate the Item Category List Manually

When you create an Inspection Profile record manually, the Item Category field contains a list of available values. If you configure the profile configuration setting accordingly, this list can contain the IDs of active System Codes in a specific System Code Table. Consider the following example.

Suppose that for Inspection Profile records that are linked to Equipment records, you want the list in the Item Category field to contain the following values:

- BAFFLES
- BEARINGS

In this case, an administrative user could define the references outlined in red in the following MI_INSPECTION_PROFILE_CATEGORY System Code Table (via the Configuration Manager).



Notice how the referenced System Codes use the ID *MI_EQUIP000*, which is the family ID of the Equipment family.

Based on these System Codes, if you accepted this default profile configuration setting:

Using a System Code Table to Populate the Item Category List Manually

| The idium Inspection | × |
|--|-----------|
| Edit Equipment Profile Configuration | |
| Pick a source for your inspection profile items: | |
| System Code 🔹 | |
| Pick a system code table for generating profile items: | |
| MI_INSPECTION_PROFILE_CATEGORY | |
| | OK Cancel |

...when you accessed the **Inspection Profile** page for an Equipment record, the Item Category list in any Inspection Profile records that you created manually would contain the values *BAFFLES* and *BEARINGS*, as shown in the following image.

| Mechanical Integrity | Mechanical Integrity Define Mitigation Strategy Manage Profiles | | | | |
|------------------------------|---|------------------|----------|---------------|----------------------|
| HE-379 D-1 CHARGE P | HE-379 D-1 CHARGE PREHEATER Reference Documents | | | | |
| Datasheet Inspection Profile | · 🔽 🛃 🗙 | | | | |
| Inspection Profile | | | | | |
| [Item Category | Item ID | Item Description | Sequence | RBI Component | RBI Component Family |
| Baffles (BAFFLES) | BAFFLES | | | | |
| 😡 Bearings (BEARING | SS) BEARINGS | | | | |
| 1 | • | | | | |
| Baffles (BAFFLES) | | | | | |
| Bearings (BEARING | >) | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| × | <u></u> | | | | |
| | | | | | |
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Using a Query to Populate the Item Category Field/List Automatically

When Inspection Profile records are created automatically, the Item Category field in those records can be populated with a value that is determined by the results from a query. This option exists only to support custom solutions, which are beyond the scope of the Meridium APM documentation.

Likewise, when Inspection Profile records are created manually, the Item Category list can contain a list of values that is determined by the results from a query. This option exists only to support custom solutions, which are beyond the scope of the Meridium APM documentation.

Using Equipment Record Values to Populate the Item Category Field Automatically

When Inspection Profile records are created automatically, if you or someone else in your organization has completed the steps to classify your equipment, the Item Category field in those records can be populated with field values in the Equipment record to which the Inspection Profile records will be linked. Consider the following example.

Suppose that when you access the <u>Inspection Profile page</u> for an Equipment record containing the following field values, you want the Meridium APM system to create two Inspection Profile records, one with the Item Category value *Baffles (BAFFLES)* and one with the Item Category value *Bearings (BEARINGS)*:

- Taxonomy Category: FIX
- Taxonomy Class: HEA
- Taxonomy Type: SHE

In this case, if you defined this configuration setting:

| The idium Inspection | | | × |
|--|-----------------|---|--------|
| Edit Equipment Pr | ofile Configura | tion | |
| Pick a source for your inspection profile items: Taxonomy | | | |
| Taxonomy | | Inspection Profile | |
| Category Class | Type | Actuator (ACTUATOR) All (ALL) Annular Plate (ANNULAR PLATE) Appurtances (APPURTANCES) Attachments (ATTACHMENTS) Baffles (BAFFLES) Bearings (BEARINGS) Body (BODY) Boiler Tubes (BOILER TUBES) Burners (BURNERS) Cable (CABLE) Cage (CAGE) Casing (CASING) Channel Cover (CHANNEL COVER) Channel Section (CHANNEL SECTION) | |
| | | ОК | Cancel |

...when you accessed the <u>Inspection Profile page</u> for an Equipment record whose Taxonomy Category, Taxonomy Class, and Taxonomy Type fields contain the values listed above, the following Inspection Profile records would be created automatically. Using Equipment Record Values to Populate the Item Category Field Automatically

| ite Map: Inspection->Equipment Inspection Profile Searches->All Equipment than can have an Inspection Profiles Saved Search->Inspection Profile | | | | | |
|---|--------------------------------------|------------------|----------|---------------|--|
| HE-1608 CRUDE-HVY. ATMOS. GAS OIL Reference Documents | | | | | |
| Datasheet Inspection Profile | Datasheet Inspection Profile 💽 🚼 🗙 😡 | | | | |
| Inspection Profile | | | | | |
| Item Category | Item ID | Item Description | Sequence | RBI Component | |
| Baffles (BAFFLES) | BAFFLES | Baffles | 2 | | |
| Bearings (BEARINGS) | BEARINGS | Bearings | 1 | | |
| * | | | | | |

Using Equipment Record Values to Populate the Item Category List Automatically

When you configure the profile configuration setting to populate the Item Category field in automatically created Inspection Profile records using values in the Equipment records to which the Inspection Profile records are linked, when you create Inspection Profile records *manually*, the Item Category list will contain the Description and IDs of all the active System Codes in theMI_INSPECTION_PROFILE_CATEGORY System Code Table.

| Seridium Inspection | | | — × |
|--|------------------|--|------------|
| Edit Equipment Pro | ofile Configurat | ion | |
| Pick a source for your inspection profile items: Taxonomy | | • | |
| Taxonomy | | Inspection Profile | |
| Category Class | Type | Actuator (ACTUATOR) All (ALL) Annular Plate (ANNULAR PLATE) Appurtances (APPURTANCES) Attachments (ATTACHMENTS) Baffles (BAFFLES) Bearings (BEARINGS) Body (BODY) Boiler Tubes (BOILER TUBES) Bundle (BUNDLE) Burners (BURNERS) Cable (CABLE) Cage (CAGE) Casing (CASING) Channel Cover (CHANNEL COVER) Channel Section (CHANNEL SECTION) | |
| | | ОК | Cancel |

For example, if you defined this profile configuration setting:

...when you accessed the **Inspection Profile** page for an Equipment record to create an Inspection Profile record manually, the Item Category list would contain the Descriptions and IDs of all the active System Codes in the MI_INSPECTION_PROFILE_CATEGORY System Code Table, as shown in the following image.

Using Equipment Record Values to Populate the Item Category List Automatically

| ► M | Mechanical Integrity Define Mitigation Strategy Manage Profiles | | | | | |
|----------|---|-----------------|---------------------|----------|---------------|----------------------|
| HE-1 | 609 CRUDE-HVY. ATMOS | GAS OIL Referen | <u>ce Documents</u> | | | |
| Datashe | et Inspection Profile | - | | | | |
| Inspecti | ion Profile | | | | | |
| | Item Category | Item ID | Item Description | Sequence | RBI Component | RBI Component Family |
| | Baffles (BAFFLES) | BAFFLES | | | | |
| | Bearings (BEARINGS) | BEARINGS | | | | |
| 1 | - | | | | | |
| | Actuator (ACTUATOR) All (ALL) Annular Plate (ANNULAR PL Appurtances (APPURTANCE Attachments (ATTACHMENT Baffles (BAFFLES) Bearings (BEARINGS) | ES) | | | | |

Aspects of the Meridium Inspection Window

You can use the **Meridium Inspection** window to define the Profile Configuration setting, which identifies the method that will be used to populate the:

- Item Category field in Inspection Profile records that are created automatically.
- List of values in the Item Category field in Inspection Profile records that are created manually.

The **Meridium Inspection** window displays the **Pick a source for your inspection profile item** list, which contains the following values:

- System Code
- Query
- Taxonomy

Your selection in the list determines which additional items will be displayed on the **Meridium Inspection** window. If you select:

• <u>System Code</u>, the Pick a system code table for generating profile items list is displayed. A red outline has been added to the following image to highlight the Pick a system code table for generating profile items list.

| Section Meridium Inspection | × |
|--|-----------|
| Edit Equipment Profile Configuration | |
| Pick a source for your inspection profile items: System Code | |
| Pick a system code table for generating profile items: MI_INSPECTION_PROFILE_CATEGORY | |
| | OK Cancel |

The **Pick a system code table for generating profile items** list contains the IDs of all the System Code Tables in the baseline Meridium APM database. The value *MI_INSPECTION_PROFILE_CATEGORY* is selected by default.

- *Query*, the following items are displayed:
 - Path to profile query: A text box that identifies the path to the query that you want to use to populate the Item Category field in Inspection Profile records that are created automatically and the list of values in the Item Category field in Inspection Profile records that are created manually. You cannot type a value in this text box. Instead it will be populated automatically after you select a query using the Browse for query hyperlink.

 Browse for query: A hyperlink that displays the Open Catalog Item dialog box, which you can use to browse for the query that you want to use.

A red outline has been added to the following image to highlight the **Path to profile query** text box and **Browse for query** link.

| Service Meridium Inspection | — |
|---|-----------|
| Edit Equipment Profile Configuration | |
| Pick a source for your inspection profile items: Query | ▼ |
| Path to profile query: | |
| Browse for query | |
| | OK Cancel |

- *Taxonomy*, the following sections are displayed:
 - Taxonomy: Displays a grid containing the Category, Class, and Type columns. The cells in each column contain a list of values that are stored in Taxonomy Mapping records:
 - **Category**: A list of the unique values that are stored in the Taxonomy Category field in all Taxonomy Mapping records.
 - **Class:** A list of the unique values that are stored in the Taxonomy Class field in all Taxonomy Mapping records whose Taxonomy Category field contains the value that is selected in the **Category** list.
 - Type: A list of the unique values that are stored in the Taxonomy Type field in all Taxonomy Mapping records whose Taxonomy Category and Taxonomy Class fields contain the values that are selected in the Category and Class lists, respectively.

You can populate multiple rows in the grid, where each row contains a unique set of Equipment field values for which you will select values in the list in the **Inspection Profile** section.

 Inspection Profile: Displays the IDs of all the active System Codes that are stored in the MI_INSPECTION_PROFILE_CATEGORY System Code Table. The value that you select in this list will be used to populate Item Category field in the Inspection Profile records that are created automatically for Equipment records with the selected classification values.

A red outline has been added to the following image to highlight the **Taxonomy** and **Inspection Profile** sections.

| Meridium Inspectior | 1 | | | | × |
|------------------------|-------|---------------|-----------|---|--------|
| Pick a source for your | | t Profile Cor | ifigurati | on | |
| Taxonomy | | | | • | |
| Taxonomy | | | | Inspection Profile | |
| Category * | Class | Type | × | Actuator (ACTUATOR) All (ALL) Annular Plate (ANNULAR PLATE) Appurtances (APPURTANCES) Attachments (ATTACHMENTS) Baffles (BAFFLES) Bearings (BEARINGS) Body (BODY) Boiler Tubes (BOILER TUBES) Bundle (BUNDLE) Burners (BURNERS) Cable (CABLE) Cage (CAGE) Casing (CASING) Channel Cover (CHANNEL COVER) Channel Section (CHANNEL SECTION) | |
| | | | | ОК | Cancel |

The following buttons are displayed at the bottom of the **Meridium Inspection** window:

- OK: Saves any selections that you have made and closes the Meridium Inspection window.
- **Cancel:** Closes the **Meridium Inspection** window and does not retain your selections.

Modifying the Profile Configuration Setting

The <u>Profile Configuration setting</u> determines how the Item Category field (in Inspection Profile records created automatically) and list (in Inspection Profile records created manually) is populated. By default, this setting is configured to use the MI_INSPECTION_ PROFILE_CATEGORY System Code Table.

To modify the Profile Configuration setting:

- On the <u>Inspection Configuration page</u>, in the grid in the <u>Application Con-</u> <u>figurations section</u>, select the row containing *Profile Configuration* in the Name column.
- 2. On the Application Tasks menu, click the Edit Selected link.

| The Meridium Inspe | tion window appears. |
|--------------------|----------------------|
|--------------------|----------------------|

| Meridium Inspection | n | × |
|--------------------------------------|-----------------------------------|-----------|
| Edi | t Equipment Profile Configuration | |
| Pick a source for you System Code | inspection profile items: | |
| | ble for generating profile items: | |
| MI_INSPECTION_PF | OFILE_CATEGORY | ▼ |
| | | OK Cancel |

- 3. In the **Pick a source for your Inspection Profile items** list, select the desired source for the **Profile Configuration setting**.
- 4. Depending upon your selection in the **Pick a source for your Inspection Profile items** list, make selections in the additional fields that are displayed on the <u>Meridium Inspection window</u>.
 - If you selected <u>System Code</u>, in the **Pick a system code table for generating profile items** list, select the desired System Code Table.
 - If you selected <u>Query</u>, click the Browse for query hyperlink to browse for and select the desired query.
 - If you selected <u>*Taxonomy*</u>, in the **Taxonomy** and **Inspection Profile** sections, select the desired values.
- 5. Click **OK**.
- 6. The Profile Configuration setting is saved, the **Meridium Inspection** window closes, and the **Inspection Configuration** page returns to focus.

Defining the Method Configuration

The Method Configuration setting determines the list of values that will be populated in the Category field in <u>Inspection Method records that you create</u>. By default, this setting is configured to use the MI_INSPECTION_METHOD_CATEGORY System Code Table.

To modify the Method Configuration setting:

- 1. In the Meridium APM Framework, access the Inspection Configuration page.
- 2. In the Application Configurations list, select the Method Configuration row.
- 3. On the Application Tasks menu, click the Edit Selected link.

The **Meridium Inspection** dialog box appears.

| Meridium Inspection | | | | |
|---|-----------|--|--|--|
| Edit Inspection Method Configuration | | | | |
| Pick a source for your inspection method items: System Code | • | | | |
| Pick a system code table for generating method items: | | | | |
| ABMT | | | | |
| | | | | |
| | OK Cancel | | | |

- 4. In the **Pick a source for your inspection method items** list, select the desired source for the values in the Category field.
- 5. If you selected **System Code** in the previous list, in the **Pick a system code table for generating method items** list, select the desired System Code Table.

-or-

If you selected **Query** in the previous list, click the **Browse for query** link, locate the desired query in the Catalog, select it, and click the **Open** button. The name of the query that you selected will be displayed in the text box.

6. Click OK.

Your selection is saved.

About Managing Strategy Rules

Inspection Management uses the following strategy rules, which are provided as part of the baseline Inspection Management content:

- MI_ProcessConditionalAlerts
- MI_InspectionTasksUpdate

The strategy rule MI_InspectionTasksUpdate is executed automatically when you update an Inspection record. When this strategy rule is executed, the Last Date and Next Date fields are updated in all Inspection Task records that are linked to Inspection records that:

- Have a value in the Completion Date field are updated.
- Whose Inspection Task Complete field is set to *True*.

For example, if the Inspection record that is linked to Pump 14 is completed on May 1, 2006, and the Inspection Task record that is linked to Pump 14 has a Last Date of April 1, 2006 and a Next Date of May 1, 2006, when you execute the strategy rule, the Last Date will be updated to May 1, 2006 (the date the inspection was completed), and the Next Date will be updated according to the desired interval in the Inspection Task record.

The strategy rule MI_ProcessConditionalAlerts searches for all records in the <u>Conditional</u> <u>Alerts</u> family, and when it is executed, generates an email message based on the conditions in all Conditional Alerts records that it finds. This strategy rule must be executed manually.

You can use Inspection Management to <u>access the **Strategy List** page</u>, where you can select the strategy rule that you want to execute.

Modifying the Strategy Rule Configuration Setting

In the baseline Meridium APM database, the Strategy Rule Configuration setting is set to *MI_InspectionTasksUpdate*. As a result, when the MI_InspectionTasksUpdate strategy rule is executed, the Last Date and Next Date fields are updated in all Inspection Task records that are linked to Inspection records whose:

- Completion Date field contains a value.
- Inspection Task Complete field is set to True.

You can modify the Strategy Rule Configuration setting if you want.

To modify the Strategy Rule Configuration setting:

- 1. In the Meridium APM Framework, access the Inspection Configuration page.
- 2. In the Application Configurations list, select the Strategy Rule Configuration row.
- 3. On the Application Tasks menu, click the Edit Selected link.

The **Meridium Inspection** dialog box appears.

| 🖶 Meridium Ins | pection | | |
|----------------|---------------------------------|----|--------|
| * | dit Strategy Rule Configuration | | |
| Strategy Rule: | MI_InspectionTasksUpdate | | • |
| | | ОК | Cancel |

- 4. In the Strategy Rule list, select the desired strategy rule.
- 5. Click OK.

Your selection is saved.

Accessing the Strategy List Page Via Inspection Management

You can access the **Strategy List** page via the Inspection module in order to locate the strategy rule that you want to execute.

To access the Strategy List page via the Inspection module:

• In the Meridium APM Framework, on the <u>Inspection Administration page</u>, click the Manage Strategies link.

The **Strategy List** page appears.

| 谷 Ме | 🛛 Meridium APM Framework - Strategy List | | | | | | |
|--------------|--|-----------------|---------------------------|---|--------------------------------|---|---------------------|
| <u>F</u> ile | <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | | | |
| e (| lack 👻 🏐 Forward 👻 🐔 | My Start Page 👻 | 🎉 New 🔑 Search | 📂 Catalog 🔞 Query + 🛅 Report + 🕼 Graph + 🥰 | Dataset 🕶 🔤 Dashboard 🕶 | | |
| | Strateav Rules-> Strateav List | | | | | | |
| m | eridium | | | | | | |
| - | Strategy Rules | | All Strategies | 3 | | | |
| Com | mon Tasks 🛛 😵 | _ | | | | | |
| 10 | Create Strategy | Family △ | | | | | <u> </u> |
| 6 | Reset Strategy List | | | | | 1- | |
| - 244 | Execute Strategy(s) | ID | ∆ MS Asset Data Source | Description | Engineering Standard Reference | Purpose | Corporate Guideline |
| | Manage Rules | | | This strategy deans all the assets/folders/events/alerts | | Cleanup | |
| × | Delete Strategy(s) | | onditional Alerts | | | | |
| =0 | Send To | MI Proces | sConditionalAlerts | Process all alerts stored in the Conditional Alert family | N/A | To distribute emails for the results retu | N/A |
| - 16g | Start Page | 📄 Family: I | nspection | | | | |
| | | MI Inspec | tionTasksUpdate | Updates inspection tasks identified in the "Tasks Address | N/A | To update inspection tasks when docu | N/A |
| | | | | | | | |
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| | | 3 records four | d | | | | |
| | | 4 | | | | | • • • |

Defining Event Configurations for Custom Families

An Event Configuration is defined for each baseline Inspection family. If you store information about inspections in non-baseline records, you must define Event Configurations for these families.

To define a new Event Configuration:

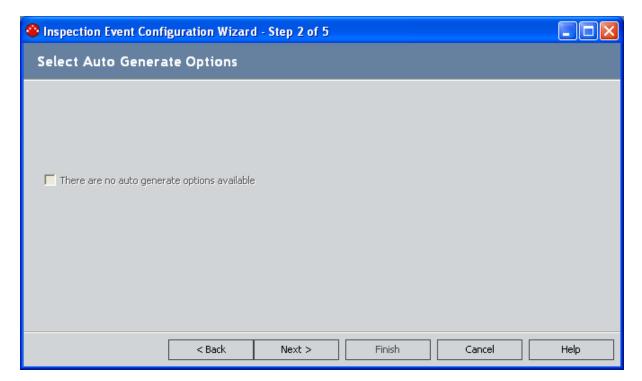
- 1. In the Meridium APM Framework, <u>access the **Inspection Configuration** page</u>.
- 2. On the **Event Tasks** menu, click the **Add New** link.

The **Inspection Event Configuration Wizard** appears, displaying the **Select Inspection Family** screen.

| Sinspection Event Conf | iguration Wizard | i - Step 1 of 5 | | | |
|------------------------|------------------------|-----------------|--------|--------|------|
| Select Inspection E | vent Family | | | | |
| Inspection Family | ieneral Visual Inspect | ion | | | |
| | < Back | Next > | Finish | Cancel | Help |

- 3. In the **Inspection Family** list, select the family for which you want to define an Event Configuration.
- 4. Click the **Next** button.

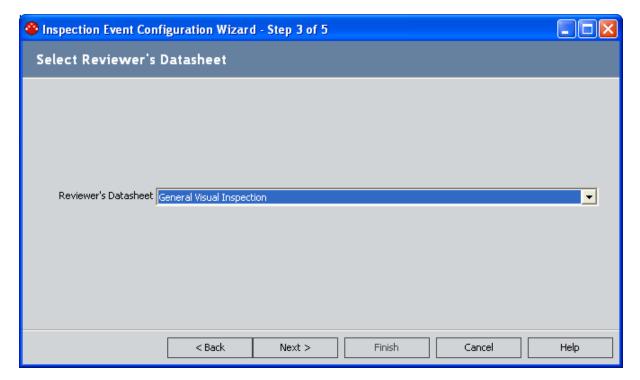
The **Select Auto Generate Options** screen appears.



If selected, the option that appears on this screen will automatically create a General Finding or Observation record for each component of the piece of equipment that you inspected.

- If the family that you selected on the previous screen is related only to the Observation family, the check box is labeled **Auto generate observations**. If it is selected, Observation records will be created automatically when you create this type of record.
- If the family that you selected on the previous screen is related only to the General Finding family, the check box is labeled **Auto generate findings**. If it is selected, General Finding records will be created automatically when you create this type of record.
- If the family that you selected on the previous screen is related to both the Observation and General Finding family, the check box is labeled **Auto generate observations**. If it is selected, only Observation records will be created automatically when you create this type of record.
- If the family that you selected on the previous screen is not related to either the Observation family or the General Finding family, a disabled label that reads *There are no auto generate options available* is displayed. In this case, neither Observation nor General Finding records will be created automatically when you create this type of record.
- 5. If you want to generate General Finding or Observation records automatically when you create new records in this Inspection Event family, select the check box.
- 6. Click the **Next** button.

The Select Reviewer's Datasheet screen appears.



- 7. In the **Reviewer's Datasheet** list, select the datasheet that you want reviewers to see. The reviewer is the user whose name appears in the Reviewer's Name field in the Inspection record. Datasheets will be available in this list only if they have been created for the family that you selected in step 3.
- 8. Click the **Next** button.

The **Configure Explorer** screen appears.

| Inspection Event Co | nfiguration Wizard - | Step 4 of 5 | |
|---------------------|-----------------------|------------------------|---------------------|
| Configure Explor | er | | |
| Customized Explorer | Create a new explorer | Edit selected explorer | Browse for explorer |
| | | | |

9. Click the **Create a new explorer** link.

The **Definable Explorer Wizard** appears, displaying the **Welcome** screen.

| 🕵 Definable Explorer Wizard - Step 1 of 6 | | | | | |
|---|---|------|--|--|--|
| meridium | Welcome to the Definable Explorer Wizard | | | | |
| | This wizard will assist you in creating defined explorers that can be used later for customized record views. These defined explorers are saved as catalog objects. | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | Don't show this page again. | | | | |
| | To continue, click Next. | | | | |
| | < Back Next > Finish Cancel | Help | | | |

10. Proceed through the **Definable Explorer Wizard**, and click the **Finish** button when you have saved the new configured explorer.

The **Configure Explorer** screen of the Inspection **Event Configuration Wizard** appears again, displaying the Catalog path in the **Customized Explorer** text box.

11. Click the **Next** button.

The **Event Configuration Summary** screen appears.

| - | The section Event Configuration Wizard - Step 5 of 5 | | | | | |
|---|--|------|--|--|--|--|
| | Event Configuration Summary | | | | | |
| | | | | | | |
| | Inspection Family: General Visual Inspection | | | | | |
| | Auto Generate: None | | | | | |
| | Reviewer's Datasheet: General Visual Inspection | | | | | |
| | Customized Explorer: | | | | | |
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| | | | | | | |
| | | | | | | |
| | | | | | | |
| | <pre>< Back Next > Finish Cancel</pre> | Help | | | | |

12. Review the information, and click the **Finish** button to save the Event Configuration.

The Event Configuration is saved to the database, and a new row is added to the **Event Configurations** grid on the **Inspection Configuration** page.

Modifying an Existing Event Configuration

To modify an existing Event Configuration:

- 1. In the Meridium APM Framework, <u>access the Inspection Configuration page</u>.
- 2. In the list in the **Event Configurations** section, select the Event Configuration that you want to modify.
- 3. On the **Event Tasks** menu, click the **Edit Selected** link.

The **Inspection Event Configuration Wizard** appears, displaying the **Select Auto Generate Options** screen.

4. Proceed through the builder, and modify selections as desired. The builder provides the same options that were presented when you <u>originally created the Event Configuration</u>.

Deleting an Event Configuration

To delete an Event Configuration:

- 1. In the Meridium APM Framework, access the Inspection Configuration page.
- 2. In the **Event Configurations** list, select the Event Configuration that you want to delete.
- 3. On the **Event Tasks** menu, click the **Delete Selected** link.

A confirmation message appears, asking if you are sure that you want to delete the selected Event Configuration for the specified family.

4. Click the **Yes** button to delete the Event Configuration.

If there is a configured explorer associated with the Event Configuration, a message will be displayed, asking if you also want to delete the configured explorer associated with the Event Configuration. Note that the configured explorer is created during one step of the event configuration creation process. You can delete an Event Configuration for a family and still retain the configured explorer that was set up during the Event Configuration process.

If you click the **Yes** button, the configured explorer will be deleted from the Catalog. If you click the **No** button, the configured explorer will not be deleted, but the Event Configuration will still be deleted.

Recording a User's Certification

To record a user's certification:

- 1. In the Meridium APM Framework, access the Inspection Administration page.
- 2. Click the Manage Inspection Resources, Roles, and Certifications link.

The **Inspection Manage Resources** page appears, displaying a list of all queries and searches in the **Profile Queries** folder in the Catalog.

3. Click the All Human Resources link.

The **Saved Search: All Human Resources** page appears, displaying a list of all Human Resource records in the database.

4. In the row containing the user for which you want to record certifications, click the **Manage Resource Certifications** link.

The Human Resource record appears in the Record Manager in the master/detail datasheet. The Human Resource record is the master record, and any Personnel Certification records you create will be the detail records.

- 5. In the detail grid, create the desired Personnel Certification records.
- 6. On the **Common Tasks** menu, click the **Save** link.

The Personnel Certification records are saved and linked to the Human Resource record.

Modifying a User's Certification

To modify a user's certification:

- 1. In the Meridium APM Framework, access the Inspection Administration page.
- 2. Click the Manage Inspection Resources, Roles, and Certifications link.

The **Inspection Manage Resources** page appears, displaying a list of all queries and searches in the **Profile Queries** folder in the Catalog.

3. Click the Human Resources with certification link.

The **Saved Search: Human Resources with certification** page appears, displaying a list of all Human Resources records that are linked to a Personnel Certification record.

4. In the row containing the user whose certification that you want to modify, click the hyperlink in the **Last Name** column.

The Record Manager appears, displaying the Human Resource record in the master/detail datasheet.

- 5. In the detail grid, modify the certifications as desired.
- 6. On the **Common Tasks** menu, click the **Save** link.

Accessing the Inspection Alerts Page

You can use the **Inspection Alerts** page to view all of the Conditional Alerts records in your database, <u>create a new Conditional Alerts record</u>, or <u>modify an existing Conditional Alerts record</u>.

To access the Inspection Alerts page:

• In the Meridium APM Framework, on the <u>Inspection Administration page</u>, click the Manage Inspection Alerts link.

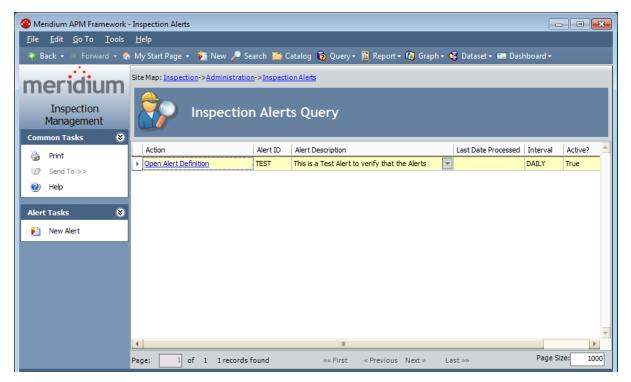
The **Inspection Alerts** page appears.

The following image shows an example of the **Inspection Alerts** page.

| 😵 Meridium APM Framework | - Inspection Alerts | | | | | |
|---|--|--------------------|--|---------------------|---------------------|---------|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | | | |
| 😌 Back 👻 🋞 Forward 👻 🔮 | 🏠 My Start Page 👻 🎽 New 🔎 Sea | arch ╞ C | atalog 🔞 Query + 🛅 Report + 🕜 Graph + 🌢 | 🖥 Dataset 🕶 🎫 Dasl | nboard - | |
| meridium | Site Map: <u>Inspection</u> -> <u>Administration</u> | -> <u>Inspecti</u> | on Alerts | | | |
| Inspection Management Common Tasks 😵 | Inspectior | n Alert | s Query | | | |
| Print | Action | Alert ID | Alert Description | Last Date Processed | Interval | Active? |
| Send To >> | Open Alert Definition | TEST | This is a Test Alert to verify that the Alerts | | DAILY | True |
| Bend to >> Help | | | | | | |
| | | | | | | |
| Alert Tasks 🛛 😵 | | | | | | |
| 🛐 New Alert | | | | | | |
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| | • | | Ш | | | Þ |
| | Page: 1 of 1 1 records f | ound | «« First « Previous Next » La | ist »» | Page Siz | e: 1000 |

Aspects of the Inspection Alerts Page

The **Inspection Alerts** page contains a grid that displays the results of the <u>All Inspection</u> <u>Alerts</u> query that is stored in the following Catalog location: \\Public\Meridium\Modules\Inspection\Conditional Alert Queries.

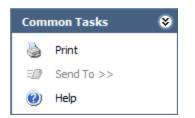


One row is displayed in the grid for each Conditional Alerts record in your database. With the exception of the **Action** column, which displays a hyperlink that you can use to view the Conditional Alerts record in Record Manager, the following columns that correspond with the following Conditional Alerts field are displayed in the grid.

| Column label | Conditional Alerts field |
|------------------------|--------------------------|
| Alert Description | Description |
| Last Date Processed | Last Date Processed |
| Interval | Interval |
| Active? | Active? |

The **Inspection Alerts** page contains the following task menus: <u>Common Tasks</u> and <u>Alert</u> <u>Tasks</u>.

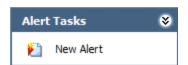
Common Tasks



The **Common Tasks** menu on the **Inspection Alerts** page contains the following links:

- **Print:** Displays the **Preview** window, which shows you a preview of the results of the Inspection Alerts Querypage as it will appear on the printed page.
- Send To: This link is always disabled.
- Help: Displays the context-sensitive Help topic for the Inspection Alerts page.

Alert Tasks



The Alert Tasks menu on the **Inspection Alerts** page contains the following link:

• **New Alert:** Displays the datasheet for a new Conditional Alerts record in Record Manager.

About Email Alerts

After you create a Conditional Alerts record, you must execute the Meridium APMprovided strategy rule MI_ProcessConditionalAlerts, which will search for all records in the Conditional Alerts family and generate an email message for each record it finds based on the conditions specified in those records. You can create Conditional Alerts records for any reason and at any time.

For example, suppose you configure a query that returns a list of all Inspection Task records that contain a Next Date that falls within the next month. You might want to send an email message to the users who are responsible for performing those inspections to remind them that the inspections are due. To do so, you would need to:

- 1. Create and save the query.
- 2. Create a Conditional Alerts record that points to the saved query and is assigned to the responsible users.
- 3. Execute the strategy rule MI_ProcessConditionalAlerts, which will find the Conditional Alerts record and send an email message to the users that are specified in the Conditional Alerts record.

Creating a Conditional Alerts Record

To create a new Conditional Alerts record:

- 1. In the Meridium APM Framework, access the Inspection Administration page.
- 2. Click the Manage Inspection Alerts link.

The **Inspection Alerts** page appears. If any Conditional Alerts records contain the value *Inspection* in the Alert Source field, they will appear on this page. Otherwise, you will see a message indicating that no Conditional Alerts records were found.

3. On the Alert Tasks menu, click the New Alert link.

The Record Manager appears, displaying the Conditional Alert datasheet.

- 4. Complete the datasheetas desired.
- 5. On the **Common Tasks** menu, click the **Save** link.

Note: An email message containing the results of the specified query will not be sent until you <u>execute the MI_ProcessConditionalAlerts strategy rule</u>.

Modifying a Conditional Alerts Record

To modify a Conditional Alerts record:

- 1. In the Meridium APM Framework, access the Inspection Administration page.
- 2. Click the Manage Inspection Alerts link.

The **Inspection Alerts** page appears. If any Conditional Alerts records contain the value *Inspection* in the Alert Source field, they will appear on this page.

3. In the row containing the Conditional Alerts record that you want to modify, click the **Open Alert Definition** link.

The Conditional Alerts record appears in the Record Manager.

4. Modify the record as desired, and then on the **Common Tasks** menu, click **Save** link to save your changes.

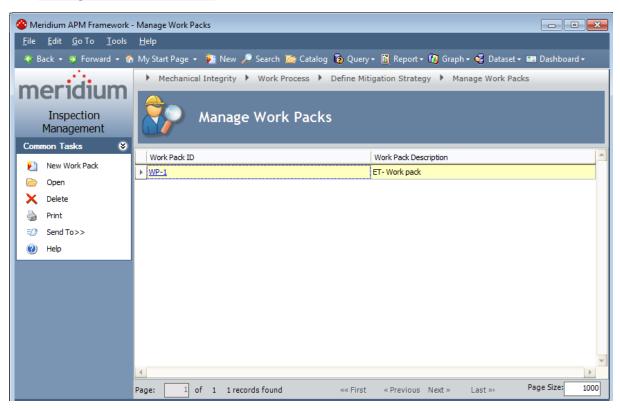
Accessing the Manage Work Packs Page

You can access the **Manage Work Packs** page to view and manage all of the Work Pack records that exist in the database.

To access the Manage Work Packs page:

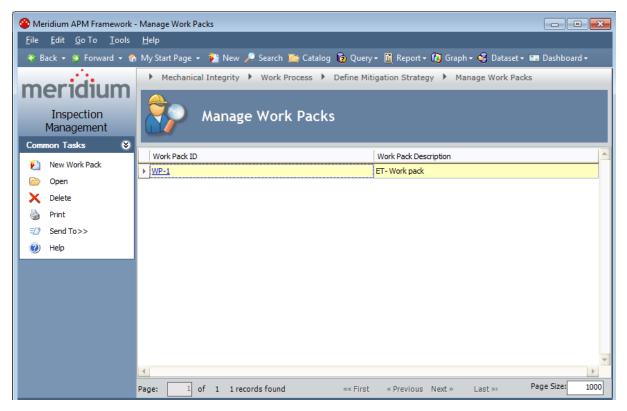
• In the Meridium APM Framework, on the Inspection Start Page, click the Manage Work Packs link.

The Manage Work Packs page appears.



Aspects of the Manage Work Packs Page

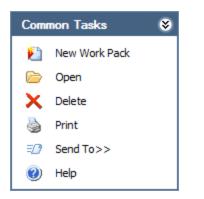
You can use the **Manage Work Packs** page to view and manage all of the Work Pack records that exist in the database.



The Manage Work Packs page contains the following items:

- Manage Work Packs workspace: Contains a grid that displays all of the Work Pack records that exist in the database.
- <u>Common Tasks menu</u>: Contains links that let you perform actions related to Work Pack records.

Common Tasks Menu



The **Common Tasks** menu on the **Manage Work Packs** page contains the following links:

- New Work Pack: Displays the Inspection Work Pack page, where you can create a new Work Pack record.
- Open: Opens the selected Work Pack record on the Inspection Work Pack page.
- Delete: After asking for confirmation, deletes the selected Work Pack record.
- **Print:** Displays the **Preview** window, which shows you a preview of the **Manage Work Packs** page as it will appear on the printed page.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Manage Work Packs page.

Creating a Work Pack Hierarchy

Depending upon the number of levels that you want to create in your <u>Work Pack hier</u>archy, you will use one of two pages:

- <u>Manage Work Packs</u>: You can use this page to <u>create a new Work Pack record that</u> will appear at the root level in your Work Pack hierarchy.
- Inspection Work Pack: You can use this page to:
 - Create a new Work Pack record that will appear below the root level in your Work Pack hierarchy.
 - Link a Work Pack record in your hierarchy to an existing Work Pack record.

Creating a Work Pack Record Using the Manage Work Packs Page

You can use the **Manage Work Packs** page to create a Work Pack record that will appear at the root level in your <u>Work Pack hierarchy</u>. You must use the <u>Inspection Work Pack</u> <u>page</u> to <u>create a Work Pack record that will appear below the root level in your Work</u> <u>Pack hierarchy</u>.

To create a Work Pack record that will appear at the root level in your Work Pack hierarchy:

- 1. In the Meridium APM Framework, access the Manage Work Packs page.
- 2. On the Common Tasks menu, click the New Work Pack link.

The Inspection Work Pack page is displayed.

| Meridium APM Framework | - Inspection Work Pack - <empty> (New)</empty> | | |
|---|--|--|------------------------|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | |
| 🍣 Back 👻 🏐 Forward 👻 🦿 | 🖌 My Start Page 👻 🎽 New 🔎 Search 🍺 | 📂 Catalog 🔞 Query + 🛅 Report + 🕼 Graph + 🧐 Dataset + 💷 | Dashboard - |
| moridium | Site Map: ->Inspection->Manage Work Pack | | |
| meriaium | Work Pack Explorer | Datasheet Work Pack 💽 🛃 🗙 🎍 | |
| Inspection | | Work Pack Details | |
| Management | | Value(s) | |
| Work Pack Tasks 🛛 😵 | | Work Pack ID Work Pack Description | |
| 🙀 Create Sub-Work Pack | | Work fock of Schapton | |
| Link to Existing Wor | | | |
| 👸 Unlink Sub-Work Pack | | Preparation Details | |
| Inspection Tasks 🛛 😵 | | Preparation Details | |
| | 1 1 | | |
| Link to Existing Tasks | | | |
| Generate All Inspect | | | |
| Generate Inspection | | | |
| Unlink Inspection Do | | | |
| ** | | | |
| Navigation Tasks 🛛 📚 | | | |
| Parent Work Pack | | | |
| Inspection Explorer | | | |
| inspection Scope | | | |
| Common Tasks 😽 | | | |
| 🚵 New Work Pack | | | |
| Jave Save | | | |
| 🗙 Delete | | | |
| 실 Print | | | |
| ≡ Send To >> | | | |
| 🕐 Help | | | |
| Associated Pages 😵 | | | |

A blank Work Pack datasheet is displayed in the <u>datasheet area</u>, and a blank Work Pack node is displayed at the root level in the <u>Work Pack Explorer pane</u>.

- 3. On the Work Pack datasheet, specify values in the Work Pack record.
- 4. On the **Common Tasks** menu, click the **Save** link.

The Work Pack record is saved. You can now:

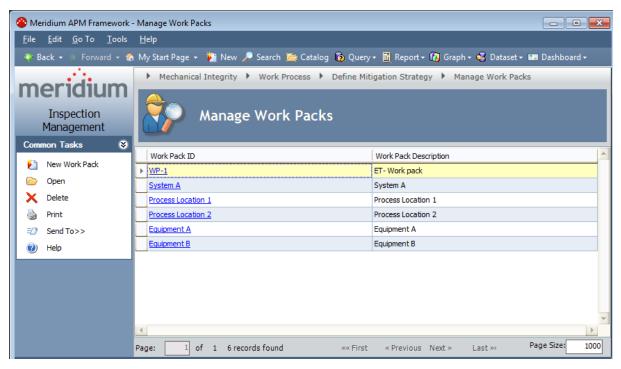
- Link it to an existing Inspection Task record.
- Link it to an existing Work Pack record to build a Work Pack hierarchy.
- <u>Create additional Work Pack records</u> to build a <u>Work Pack hierarchy</u>.

Opening an Existing Work Pack

To open an existing Work Pack:

- 1. In the Meridium APM Framework, access the Manage Work Packs page.
- 2. In the grid in the Manage Work Packs workspace, select the row containing the Work Pack record that you want to open.

In the following image, the row containing the Work Pack record with Work Pack ID *System A* is selected is selected in the grid.



3. On the Common Tasks menu, click the Open link.

The **Inspection Work Pack** page appears for the selected Work Pack record.

| 🍄 Meridium APM Framework - Inspection Work Pack - System A 💼 💼 📧 | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | | | | | | |
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| Inspection Management Work Pack Tasks Create Sub-Wor Unink Sub-Work Inspection Tasks Link to Existing T Unink Task Generate All Ins Generate Inspect Unink Inspectio Parent Work Pack Parent Work Pack | My Start Page • Max New Search Site Map: ->Inspection->Manage Work Pack Site Map: ->Inspection->Manage Work Pack Work Pack Explorer Image System A Image Process Location 1 Image Equipment A Image Process Location 2 Image Equipment B | | | | | | | | |
| inspection Scope | | | | | | | | | |

Accessing the Inspection Work Pack Page

You can use the <u>Inspection Work Pack page</u> to view an existing Work Pack record, <u>create</u> <u>Work Pack records in your Work Pack hierarchy</u>, and perform other tasks to manage your Work Packs. The Work Pack record for which you access the **Inspection Work Pack** page will appear at the root level in the <u>Work Pack Explorer</u>.

To access the Inspection Work Pack page:

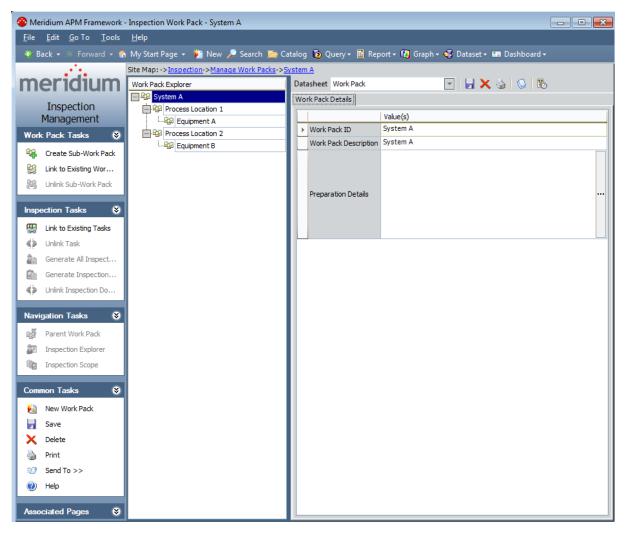
• On the <u>Manage Work Packs page</u>, in the grid in the Manage Work Packs workspace, in the Work Pack ID column, click the hyperlink for the Work Pack record that you want to work with on the **Inspection Work Pack** page.

| 🛞 м | eridium APM Framewo | k - Inspection Work Pack - System A | | | | • × |
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| | | Site Map: ->Inspection->Manage Work Packs-> | Syste | em A | | |
| m | eridium | Work Pack Explorer | Da | atasheet Work Pack | 🔽 🛃 🗙 🎯 🖏 | |
| | Inspection | System A | W | /ork Pack Details | | |
| | Management | Equipment A | | [| Value(s) | |
| Wo | k Pack Tasks 🛛 🔇 | Process Location 2 | | Work Pack ID | System A | |
| 88 | Create Sub-Work Pack | Equipment B | | Work Pack Description | System A | |
| 2 | Link to Existing Wor | | | | | |
| 齃 | Unlink Sub-Work Pack | | | | | |
| | | | | Preparation Details | | |
| Insp | ection Tasks | | | | | |
| 5 | Link to Existing Tasks | | | | | |
| | Unlink Task | | | | | |
| | Generate All Inspect | | | | | |
| Ē. | Generate Inspection | | | | | |
| Q. | Unlink Inspection Do | | | | | |
| Nav | igation Tasks | • | | | | |
| 8.2 | Parent Work Pack | 1 | | | | |
| 1 | Inspection Explorer | | | | | |
| 100 | Inspection Scope | | | | | |
| | | | | | | |
| Con | nmon Tasks 🛛 🔇 | | | | | |
| 1 | New Work Pack | | | | | |
| | Save | | | | | |
| X | Delete | | | | | |
| 6 | Print | | | | | |
| =2 | Send To >> | | | | | |
| | Help | | | | | |
| Ass | ociated Pages | • | | | | |

The Inspection Work Pack page appears.

Aspects of the Inspection Work Pack Page

The **Inspection Work Pack - <Work Pack ID>** page, where **<Work Pack ID>** is the Work Pack ID in the Work Pack record for which you accessed the page, displays the details of the Work Pack record and its associated Inspection Task and Inspection records. Throughout this documentation, we refer to the **Inspection Work Pack - <Work Pack ID>** page as the **Inspection Work Pack** page.



The Inspection Work Pack page contains the following items:

- Work Pack Explorer pane: Displays a <u>hierarchy of Work Pack records</u> and the Inspection Task and Inspection records to which they are linked.
- Datasheet Area: Displays the datasheet for the record that is selected in the Work Pack Explorer pane.
- **Task menu pane:** Contains menus that provide access to functions that allow you to manage Work Packs. The following menus are available:

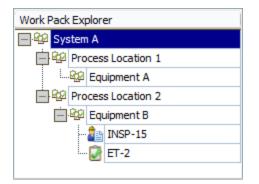
- Work Pack Tasks
- Inspection Tasks
- Navigation Tasks
- <u>Common Tasks</u>
- Associated Pages

Work Pack Explorer Pane

The **Work Pack Explorer** pane on the **Inspection Work Pack** page displays a hierarchical view of Work Pack records and the Inspection Task and Inspection records to which they are linked. When you select a node in the **Work Pack Explorer** pane, the <u>datasheet for</u> <u>the corresponding record</u> is displayed in the datasheet area to the right of the **Work Pack Explorer** pane. The following types of nodes are displayed in the **Work Pack Explorer** pane. The nodes correspond with the records that the nodes represent.

- Work Pack: Displayed at the root level, and *up to* two levels below the root level, in the hierarchy. <u>Depending upon what you will inspect and the type of inspections</u> work that you will perform, the number of Work Pack nodes displayed and the level in your location hierarchy that they represent will vary.
- Inspection: Displayed below the lowest-level Work Pack node. Inspection Task nodes are also displayed at this level.
- Inspection Task: Displayed below the lowest-level Work Pack node. Inspection nodes are also displayed at this level.

The following image shows an example of the **Work Pack Explorer** pane.



The following table lists the types of nodes displayed in the image shown above, and the Record IDs of the records that they represent.

| Node type | Corresponding Record ID |
|--------------------|-------------------------|
| Work Pack | System A |
| Work Pack | Process Location 1 |
| Work Pack | Equipment A |
| Work Pack | Process Location 2 |
| Work Pack | Equipment B |
| Inspection Task | ET-2 |

| Node type | Corresponding Record ID |
|------------|-------------------------|
| Inspection | INSP-15 |

Datasheet Area

The datasheet area on the <u>Inspection Work Pack page</u> displays the datasheet for the record that is selected in the <u>Work Pack Explorer</u>pane.

In the following image, the Inspection Task datasheet for the Inspection Task record *API510-E-Inspection Task* is displayed in the datasheet area.

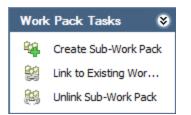
| Work Pack Explorer | Datasheet Inspection Task | 🔽 🛃 🗙 🍇 🤇 | J 🗒 |
|--------------------------|---------------------------|--------------------------------------|--------|
| System A | Details | | |
| Process Location 1 | | lut co | |
| Equipment A | | Value(s) API510-EXTERNAL | UOM |
| Process Location 2 | Task Type | | |
| Equipment B | Task ID | API510-E-Inspection Task | |
| 🎥 INSP-15 | Task Description | API510-E-Inspection Task ···· | |
| API510-E-Inspection Task | Task Details | | |
| | Last Date | 7/22/2005 12:00:00 AM | |
| | Override Interval | | |
| | Desired Interval | 12.0 | Months |
| | Desired Interval Basis | | |
| | Next Date | 7/22/2006 12:00:00 AM | |
| | Next Date Basis | Desired Interval | |
| | Coverage | 0 | |
| | Task Assigned To | | |
| | Reoccurring | | |
| | Modifiable | | |
| | Rejectable | | |
| | Unconstrain Min/Max Dates | | |
| | Min Interval | 12 | Months |
| | Min Date | 7/22/2006 12:00:00 AM | |
| | Max Interval | 24 | Months |
| | Max Date | 7/22/2007 12:00:00 AM | |
| | Source Type | Manual | |
| | Task State | Scheduled without change | |
| | Related Entity ID | HE-1608 CRUDE-HVY. ATMOS. GAS OIL | |
| | Inspection Document Type | | |

Above the datasheet, the following buttons are displayed.

| Button image | Button functionality |
|-----------------|--|
| | Saves any changes that you have made on the Inspection Work Pack page. |
| × | After asking for confirmation, deletes the currently selected record. |
| | Displays the Select Report to Print dialog box where you can choose the report that you want to generate. |

| Button image | Button functionality |
|-----------------|---|
| Ø | Displays the Reference Documents window, where you can manage Refer- ence Document records for the currently selected record. |
| | Displays the Field Change History dialog box if revision history exists for any fields in the currently selected record. |

Work Pack Tasks



The **Work Pack Tasks** menu on the **Inspection Work Pack** page contains the following links:

- Create Sub-Work Pack: Displays a blank Work Pack datasheet in a new window, which you can use create a Work Pack record that will be displayed one level below the Work Pack record that is selected in the Work Pack Explorer pane. This link is enabled only when the selected Work Pack record is displayed at the root level or *one* level below the root level.
- Link to Existing Work Pack: Displays the Link Existing Work Pack window, which you can use to search for Work Pack records to <u>link to the Work Pack record</u> that is currently selected in the Work Pack Explorer pane. This link is enabled only when the selected Work Pack record is:
 - Displayed at the root level or *one* level below the root level.

-and-

- Not already linked to a Work Pack Record.
- Unlink Sub-Work Pack: After displaying a confirmation message, removes the link between the selected Work Pack record and all Work Pack records displayed above it in the Work Pack Explorer pane. This link is enabled only when one or more levels of Work Pack records are displayed above the Work Pack record that is selected in the Work Pack Explorer pane.

Inspection Tasks



The **Inspection Tasks** menu on the **Inspection Work Pack** page contains the following links:

- Link to Existing Tasks: Displays the Inspection Task Search Options dialog box, where you can search for an existing Inspection Task record to link to the Work Pack record. This link is enabled only when a Work Pack record is selected in the Work Pack Explorer pane.
- Unlink Task: After displaying a confirmation message, <u>removes the link between</u> <u>the selected Inspection Task record and the Work Pack record to which it is linked</u>. This link is enabled only when an Inspection Task record is selected in the **Work Pack Explorer** pane.
- Generate All Inspection Documents: After displaying a confirmation message, <u>creates Inspection records from all Inspection Task records</u> that are displayed in the Work Pack Explorer pane. This link is enabled only if a Work Pack record is selected in the Work Pack Explorer pane, and that Work Pack record is linked to one or more Inspection Task records.
- Generate Inspection Document: After displaying a confirmation message, <u>creates</u> an Inspection record from the Inspection Task record that is selected in the Work Pack Explorer pane. This link is enabled only when an Inspection Task record is selected in the Work Pack Explorer pane.
- Unlink Inspection Document: After displaying a confirmation message, <u>removes</u> <u>the link between the selected Inspection record and the Work Pack record</u> to which it is linked. This link is enabled only when an Inspection record is selected in the **Work Pack Explorer** pane.

Navigation Tasks



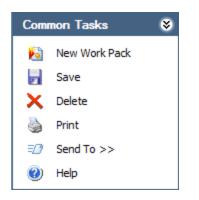
The **Navigation Tasks** menu on the **Inspection Work Pack** page contains the following links:

- Parent Work Pack: Displays the <u>Inspection Work Pack page</u> for the Work Pack record that appears one level above the current Work Pack record in your Work Pack hierarchy. This link is enabled only when you are viewing the Inspection Work Packpage for a Work Pack record that exists at the second or third level in your Work Pack hierarchy.
- Inspection Explorer: Opens the selected Inspection record in the Record Manager. This link is enabled only when an Inspection record is selected in the Work Pack Explorer pane.

Note: When you view an Inspection record in Record Manager, the content of the record hierarchy will differ from what is displayed on the **Inspection Work Pack** page because the content is controlled by the configured explorer that is defined for the Inspection family (e.g., Full Inspection).

• **Inspection Scope:** Displays the <u>Inspection Scope page</u>, which displays the Inspection Scope that includes the selected Inspection Task record. This link is enabled only when an Inspection Task record is selected in the **Work Pack Explorer** pane.

Common Tasks



The **Common Tasks** menu on the **Inspection Work Pack** page contains the following links:

- New Work Pack: Displays a blank Work Pack datasheet in the datasheet area, and a blank root level Work Pack node in the Work Pack Explorer pane on the Inspection Work Pack page.
- Save: Saves any changes that you have made on the Inspection Work Pack page.
- **Delete:** After asking for confirmation, deletes the selected record.
- **Print:** Displays the **Select Report to Print** dialog box, where you can choose the report that you want to generate.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Work Pack page.

Associated Pages

The **Associated Pages** menu on the **Inspection Work Pack** page displays Associated Pages that have been configured for the family of the record that is selected in the **Work Pack Explorer** pane.

Creating a Work Pack Record Using the Inspection Work Pack Page

A Work Pack record is <u>one of three records</u> used to define the inspection work that needs to be completed for equipment and/or locations. You can use the **Inspection Work Pack** page to create a Work Pack record *below* the root level in your <u>Work Pack</u> <u>hierarchy</u>. You must use the <u>Manage Work Packs</u> page to <u>create a root level Work Pack</u> <u>record in your Work Pack hierarchy</u>.

To create a Work Pack record below the root level in your Work Pack hierarchy:

 On the <u>Inspection Work Pack page</u>, in the <u>Work Pack Explorer pane</u>, select the Work Pack record for which you want to create a second or third level Work Pack record. In the following image, the Work Pack record *Process Location 1* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer | | | | | | | |
|--------------------|--------------------|---|--|--|--|--|--|
| - 🖗 Sys | System A | | | | | | |
| ··· 😥 | Process Location 1 | | | | | | |
| | Process Location 2 | | | | | | |
| | | 1 | | | | | |

2. On the Work Pack Tasks menu, click the Create Sub-Work Pack link.

A blank Work Pack datasheet is displayed in a new window.

| <em< th=""><th colspan="7">empty> (new Work Pack)</th></em<> | empty> (new Work Pack) | | | | | | | | | | | |
|---|--|------------|---------|----------|------|--|-----|------|---|------|-------|----------|
| | <em< th=""><th>pty></th><th>(new W</th><th>ork P</th><th>ack)</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></em<> | pty> | (new W | ork P | ack) | | | | | | | |
| Da | tasheet | Work Pa | ck | | • | | B > | 60 | B | | | |
| W | ork Pack | Details | | | | | | | | | | |
| | [| | | Value(s) | | | | | | | | |
| Ľ | | Pack ID | | | | | | | | | | |
| | Work F | Pack Desc | ription | | | | | | | | | |
| | | | | | | | | | | | | |
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| | Prepar | ration Det | ails | | | | | | | | | |
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- 3. On the Work Pack datasheet, specify values in the Work Pack record.
- 4. Click OK.

The window closes, and the **Inspection Work Pack** page returns to focus.

| See Meridium APM Framework - Inspection Work Pack - System A | | | | | | | |
|---|--------------------|----|-----------------------|---|--|--|--|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | | | | |
| 😻 Back 🔹 🛞 Forward 👻 🏀 My Start Page 👻 🎬 New 🔑 Search 🗯 Catalog 🔞 Query 🛛 🛅 Report 🗸 🕼 Graph 🗸 🍕 Dataset 🛪 💷 Dashboard 🗸 | | | | | | | |
| Site Map: ->Inspection->Manage Work Packs->System A | | | | | | | |
| meridium | Work Pack Explorer | Da | tasheet Work Pack | 🔽 🛃 🗙 🍐 🖏 🖏 | | | |
| Inspection | System A | W | ork Pack Details | | | | |
| Management | Equipment A | | [| Value(s) | | | |
| Work Pack Tasks 🛛 🕏 | Process Location 2 | | ▶ Work Pack ID | Equipment A | | | |
| | | | Work Pack Description | Inspection of Equipment A | | | |
| - | | | | System A will require a shutdown for this inspection. | | | |
| Link to Existing | | | | | | | |
| 😂 Unlink Sub-Work | | | Preparation Details | | | | |
| Inspection Tasks 🛛 🕏 | | | | | | | |
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| Link to Existing T | | | | | | | |
| Unlink Task | | | | | | | |
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| Unlink Inspectio | | | | | | | |
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| Navigation Tasks 🛛 😵 | | | | | | | |
| Parent Work Pack | | | | | | | |
| Inspection Explo | | | | | | | |
| Inspection Scope | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | | | | | | |

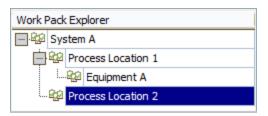
A new Work Pack record is created, and a new Work Pack node is displayed in the **Work Pack Explorer** pane. In the preceding image, the node for the new Work Pack record *Equipment A* is selected in the **Work Pack Explorer** pane, and the details of the Work Pack record are displayed in the datasheet area.

Linking a Work Pack Record to an Existing Work Pack Record

You can create levels in your <u>Work Pack hierarchy</u> below the root level by linking a Work Pack record in your hierarchy to an existing Work Pack record. The following instructions assume that you are viewing the <u>Inspection Work Pack page</u> for the Work Pack record that you want to link to an existing Work Pack record.

To link a Work Pack record to an existing Work Pack record:

1. In the **Work Pack Explorer** pane, select the Work Pack record to which you want to link an existing Work Pack record. In the following image, the Work Pack record *Process Location 2* is selected in the **Work Pack Explorer** pane.



2. On the **Inspection Tasks** menu, click the **Link to Existing Work Pack** link.

| 🔑 Link Existing Work Pack | | × |
|--|---------------------|--------|
| meridium | Simple Search | |
| Search Type Image: Search Image: Simple search Advanced search Image: Advanced search Image: Search Image: Open a search Save this search Image: Save this search Save this search as Image: Delete this search Delete this search | Linked To: | nd Now |
| | Link Selected Cance | el |

The Link Existing Work Pack window is displayed.

Work Pack is selected in the **Search In** list. You cannot modify this selection.

3. Perform a search, and in the search results, select the row containing the Work Pack record that you want to link to the currently selected Work Pack record. In the following image, the row containing the Work Pack record *Equipment B* is selected in the search results.

| Link Existing Work Pack | | X |
|--|---|--|
| meridium | Simple Search | |
| Search Type 😵 | Search In: Work Pack Linked To: Look For: Match Case? | Find Now Stop New Search |
| New search Open a search Save this search Save this search as Delete this search | Family Work Pack Work Pack Work Pack | Record ID Equipment B System A WP-1 |
| | Page: 1 of 1 3 records found «« First | « Previous Next » Last »» Page Size: 1000 Link Selected Cancel |

4. Click the Link Selected button.

The **Link Existing Work Pack** window closes, and the **Inspection Work Pack** page returns to focus.

| 8 M | 1eridium APM Framework | : - Inspection Work Pack - System A | | | | - • • |
|--------------|--|--|-------|--|--|-------|
| <u>F</u> ile | <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | | |
| ۲ | Back 👻 🏐 Forward 👻 1 | 🏠 My Start Page 👻 휅 New 🔑 Search 🗯 Ca | atalo | g 🔞 Query 🗸 🛅 Rep | ort 🔹 🔞 Graph 🔹 🍕 Dataset 🔹 💷 Dashboard 👻 | |
| m | neridium | Site Map: -> <u>Inspection</u> -> <u>Manage Work Packs</u> ->S Work Pack Explorer | Dat | n A tasheet Work Pack ork Pack Details | Image: A state of the state | |
| Wo | Inspection Management vrk Pack Tasks 🛛 😵 🚄 | Process Location 1 Legg Equipment A Process Location 2 | | Work Pack Decails | Value(s) Equipment B Equipment B | |
| | Link to Existing | Legupment B | | Preparation Details | System A will require a shutdown for this inspection. | |
| Ins C | Unlink Task | | ŀ | | | |
| | | | | | | |
| | vigation Tasks Image: Comparison of Compar | | | | | |

A new node is displayed in the **Work Pack Explorer** pane for the Work Pack record that you selected on the **Link Existing Work Pack** window. In the preceding image, the node representing the Work Pack record *Equipment B* is selected in the **Work Pack Explorer** pane, and the datasheet for the record is displayed in the datasheet area.

About Linking Inspection Task Records to Work Pack Records

Inspection Task records store information about the work that you need to perform for equipment and/or locations. You should link Inspection Task records directly to the <u>Work Pack records that represent the level in the location hierarchy at which you will perform inspections</u>. An Inspection Task record can be linked to only one Work Pack record at a time. You can search for existing Inspection Task records to link to a Work Pack records using:

- <u>A search</u>
 - -or-
- <u>A query</u>

Linking Inspection Task Records to Work Pack Records Using a Search

You can use a search to find existing Inspection Task records that you want to link to a Work Pack record. The following instructions assume that you are viewing the <u>Inspection Work Pack page</u> for the Work Pack record to which you want to link an Inspection Task record.

To use a search to find an existing Inspection Task record and link it to a Work Pack record:

1. In the <u>Work Pack Explorer pane</u>, select the Work Pack record to which you want to link an Inspection Task record.

In the following image, the Work Pack record *Process Location 2* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer | | |
|--------------------|--------------------|--|
| - 🖗 System A | | |
| <u>∓</u> 82 | Process Location 1 | |
| + 22 | Process Location 2 | |
| | | |

2. On the **Inspection Tasks** menu, click the **Link to Existing Tasks** link.

The Inspection Task Search Options dialog box appears.

| Inspection Task Search Optic | ons | × |
|------------------------------|----------------|---|
| Inspection Tas | search Options | |
| | | |
| • Search | | |
| C Existing Query | | |
| Clisting Query | | |
| | | |
| | OK Cance | 4 |

The **Search** option is selected by default.

3. Accept the default selection, and click **OK**.

The Link Existing Inspection Task window appears.

| Link Existing Inspection Task | | | | |
|--|---|--|--|--|
| meridium | Advanced Search | | | |
| Search Type 😵 | Search In: Inspection Task Find Now Linked To: Stop Through: New Search New Search | | | |
| Common Tasks Image: Common Tasks Image: Comm | Define Conditions: Field Condition Value Match Case? Add Condition Search Conditions: | | | |
| | Remove Condition Match: All conditions | | | |
| | Link Selected Cancel | | | |

The value in the **Search In** list is *Inspection Task*. You cannot modify this selection.

- 4. If desired, define additional search criteria.
- 5. Click the **Find Now** button.

The search results appear.

| Link Existing Inspection Ta | ısk | |
|--|--|--|
| meridium | Advanced Search | |
| Search Type Image: Simple search Image: Simple search Advanced search Image: Simple search Image: Simple search Image: Simple search Save this search Image: Simple se | Search In: Inspection Task Linked To: Through: Define Conditions: Field V Condition Match Case? Search Conditions: Match: • All conditions | Find Now Stop Stop Value Value Add Condition Add Condition Remove Condition Any condition |
| | Family Inspection Task Inspectin Task Inspectin Task < | Record ID API510-E-Inspection Task ASF Function Task 1 ASF Function Task 2 ASF Function Task 2 ASF SIL Inspection Task * First « Previous Next » Page Size: 1000 Hected Cancel |

- 6. In the search results, select the rows containing the Inspection Task records that you want to link to the selected Work Pack record. In the preceding image, the row containing the Inspection Task record with Record ID *API510-E-Inspection Task* is selected in the search results.
- 7. Click the Link Selected button.

The **Link Existing Inspection Task** window closes, and the **Inspection Work Pack** page returns to focus.

| 😵 Meridium APM Framework - Inspection Work Pack - System A | | | | | | |
|--|---|---------------------------|---|--------|--|--|
| <u>File Edit G</u> oTo <u>T</u> ools <u>H</u> elp | | | | | | |
| 😻 Back 🔹 🗧 Forward 👻 🏠 My Start Page 🔹 🏂 New 🔎 Search 🎉 Catalog 🔞 Query 🖷 Report + 🕼 Graph + 🍕 Dataset + 🚥 Dashboard + | | | | | | |
| | Site Map: -> Inspection-> Manage Work Packs-: | | | | | |
| meridium | Work Pack Explorer | Datasheet Inspection Task | 🔽 🛃 🗙 🍇 🔇 | 5 | | |
| | System A | Details | | | | |
| Inspection | Process Location 1 | | Value(s) | ИОМ | | |
| Management | Process Location 2 | ▶ Task Type | API510-EXTERNAL | 0011 | | |
| Work Pack Tasks 🛛 📚 🚔 | API510-E-Inspection Task | Task ID | API510-E-Inspection Task | | | |
| 斗 Create Sub-Wor | | Task Description | API510-E-Inspection Task ··· | | | |
| Link to Existing | | | | | | |
| 😹 Unlink Sub-Work | | Task Details | | | | |
| | | | | | | |
| Inspection Tasks 🛛 😽 | | Last Date | 7/22/2005 12:00:00 AM | | | |
| 🕮 Link to Existing T | | Override Interval | | | | |
| 🍎 Unlink Task | | Desired Interval | 12.0 | Months | | |
| Generate All Ins | | Desired Interval Basis | 7/22/22006 42 42 42 42 | | | |
| | | Next Date | 7/22/2006 12:00:00 AM Desired Interval | | | |
| Generate Inspec | | Next Date Basis | 0 | | | |
| Unlink Inspectio = | | Coverage | 0 | | | |
| | | Task Assigned To | | | | |
| Navigation Tasks 🛛 😵 | | Reoccurring | | | | |
| 👜 Parent Work Pack | | Rejectable | | | | |
| Inspection Explo | | Unconstrain Min/Max Dates | | | | |
| Construction Scope | | Min Interval | 12 | Months | | |
| | | Min Date | 7/22/2006 12:00:00 AM | | | |
| Common Tasks 🛛 😂 | | Max Interval | 24 | Months | | |
| New Work Pack | | Max Date | 7/22/2007 12:00:00 AM | | | |
| Save | | Source Type | Manual | | | |
| X Delete | | Task State | Scheduled without change | | | |
| Print | | Related Entity ID | HE-1608 CRUDE-HVY. ATMOS. GAS OIL | | | |
| Image: Send To >> | | Inspection Document Type | | | | |
| (i) Help | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | L | | | | |

The Inspection Task record that you selected is linked inked to the selected Work Pack record, and a new Inspection Task node is displayed in the **Work Pack Explorer** pane. In the preceding image, the Inspection Task node for the Inspection Task record *API510-E-Inspection Task* is selected in the **Work Pack Explorer** pane.

Linking Inspection Task Records to Work Pack Records Using a Query

You can use a query to search for existing Inspection Task records that you want to link to Work Pack record. The following instructions assume that you are viewing the <u>Inspection Work Pack page</u> for the Work Pack record to which you want to link an Inspection Task record.

To use a query to search for an existing Inspection Task record and link it to a Work Pack record:

1. In the <u>Work Pack Explorer pane</u>, select the Work Pack record to which you want to link an Inspection Task record.

In the following image, the Work Pack record *Process Location 2* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer | | |
|--------------------|--------------------|--|
| | | |
| <u>∓</u> 82 | Process Location 1 | |
| + Q2 | Process Location 2 | |
| | | |

2. On the **Inspection Tasks** menu, click the **Link to Existing Tasks** link.

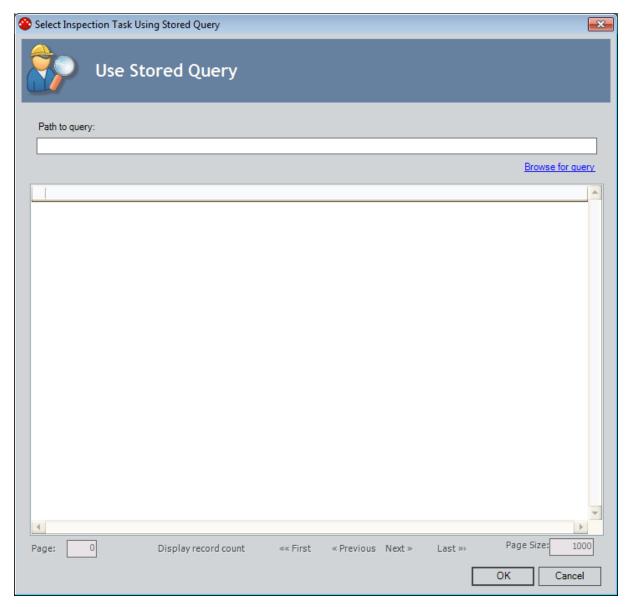
The Inspection Task Search Options dialog box appears.

| Inspection Task Search Options | | |
|--|----------------|--|
| Inspection Task | Search Options | |
| Search Existing Query | | |
| | OK Cancel | |

The **Search** option is selected by default.

3. Select the **Existing Query** option, and click **OK**.

The Select Inspection Task Using Stored Query window appears.



4. Below the Path to query text box, click the Browse for query link.

The **Save As** dialog box appears.

5. Navigate to the Catalog location containing the query that you want to use, select the query, and click the **Open** button.

The **Path to query** text box is populated with the Catalog location of the query that you selected, and the results of the query are populated in the grid. In the following image, the **Path to query** text box is populated with the Catalog location **Public\Meridium\Modules\Inspection\Task Queries\Bob's Inspection Tasks**, and the results of this query are displayed in the grid.

| Use Stored Query | |
|--|--|
| Path to query: | |
| Public\Meridium\Modules\Inspection\Task Queries\ | |
| | Browse for quer |
| Task ID | Asset ID |
| API510-E-Inspection Task | HE-1608 CRUDE-HVY. ATMOS. GAS OIL |
| Task 01 Eqp-Machine | |
| Insp1-7540 | PMP-7540 SOUTH COOLING WATER |
| Insp1-7540 | PMP-7540 SOUTH COOLING WATER |
| Insp2-7540 | PMP-7540 SOUTH COOLING WATER |
| Insp2-7540 | PMP-7540 SOUTH COOLING WATER |
| Insp1-11A | Piping-11-A |
| Insp1-11A | Piping-11-A |
| Insp-8269 | PMP-8269 COOLING WATER |
| Insp-8269 | PMP-8269 COOLING WATER |
| Insp1-3820 | PMP-3820 ABSORBER TOP - MID INTERCOOLER |
| Insp1-3820 | PMP-3820 ABSORBER TOP - MID INTERCOOLER |
| TestData-11 | 19-01200 FUEL GAS |
| TestData-10 | 19-01200 FUEL GAS |
| TestData-10 | 19-01200 FUEL GAS |
| TestData-11 | 19-01200 FUEL GAS |
| Insp1-8281 | PMP-8281 ACID BLOWDOWN PUMP |
| Insp 1-828 1 | PMP-8281 ACID BLOWDOWN PUMP |
| • | F |
| age: 1 of 1 65 records found | «« First « Previous Next » Last »» Page Size: 1000 |

6. In the grid containing the query results, select the rows containing the Inspection Task records that you want to link to the Work Pack record, and click **OK**.

The **Select Inspection Task Using Stored Query** window closes and the **Inspection Work Pack** page returns to focus.

| 😵 Meridium APM Framework - Inspection Work Pack - System A | | | | | | |
|--|---|---------------------------|---|--------|--|--|
| <u>File Edit G</u> oTo <u>T</u> ools <u>H</u> elp | | | | | | |
| 😻 Back 🔹 🗧 Forward 👻 🏠 My Start Page 🔹 🏂 New 🔎 Search 🎉 Catalog 🔞 Query 🖷 Report + 🕼 Graph + 🍕 Dataset + 🚥 Dashboard + | | | | | | |
| | Site Map: -> Inspection-> Manage Work Packs-: | | | | | |
| meridium | Work Pack Explorer | Datasheet Inspection Task | 🔽 🛃 🗙 🍇 🔇 | 5 | | |
| | System A | Details | | | | |
| Inspection | Process Location 1 | | Value(s) | ИОМ | | |
| Management | Process Location 2 | ▶ Task Type | API510-EXTERNAL | 0011 | | |
| Work Pack Tasks 🛛 📚 🚔 | API510-E-Inspection Task | Task ID | API510-E-Inspection Task | | | |
| 斗 Create Sub-Wor | | Task Description | API510-E-Inspection Task ··· | | | |
| Link to Existing | | | | | | |
| 😹 Unlink Sub-Work | | Task Details | | | | |
| | | | | | | |
| Inspection Tasks 🛛 😽 | | Last Date | 7/22/2005 12:00:00 AM | | | |
| 🕮 Link to Existing T | | Override Interval | | | | |
| 🍎 Unlink Task | | Desired Interval | 12.0 | Months | | |
| Generate All Ins | | Desired Interval Basis | 7/22/22006 42 42 42 42 | | | |
| | | Next Date | 7/22/2006 12:00:00 AM Desired Interval | | | |
| Generate Inspec | | Next Date Basis | 0 | | | |
| Unlink Inspectio = | | Coverage | 0 | | | |
| | | Task Assigned To | | | | |
| Navigation Tasks 🛛 😵 | | Reoccurring | | | | |
| 👜 Parent Work Pack | | Rejectable | | | | |
| Inspection Explo | | Unconstrain Min/Max Dates | | | | |
| Construction Scope | | Min Interval | 12 | Months | | |
| | | Min Date | 7/22/2006 12:00:00 AM | | | |
| Common Tasks 🛛 😂 | | Max Interval | 24 | Months | | |
| New Work Pack | | Max Date | 7/22/2007 12:00:00 AM | | | |
| Save | | Source Type | Manual | | | |
| X Delete | | Task State | Scheduled without change | | | |
| Print | | Related Entity ID | HE-1608 CRUDE-HVY. ATMOS. GAS OIL | | | |
| Image: Send To >> | | Inspection Document Type | | | | |
| (i) Help | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | L | | | | |

The Inspection Task record that you selected is linked inked to the selected Work Pack record, and a new Inspection Task node is displayed in the **Work Pack Explorer** pane. In the preceding image, the Inspection Task node for the Inspection Task record *API510-E-Inspection Task* is selected in the **Work Pack Explorer** pane.

Removing the Link Between an Inspection Task Record and a Work Pack Record

The following instructions assume that you are viewing the <u>Inspection Work Pack page</u> for the Work Pack record whose link to an Inspection Task record you want to remove.

To remove the link between an Inspection Task record and a Work Pack record:

1. In the <u>Work Pack Explorer pane</u>, select the Inspection Task record whose link to a Work Pack record you want to remove. In the following image, the Inspection Task record *API510-3-Inspection Task* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer | | |
|--------------------|--------------------------|--|
| - 😥 System A | | |
| | Process Location 1 | |
| - 22 | Process Location 2 | |
| L | API510-E-Inspection Task | |
| | | |

2. On the Inspection Tasks menu, click the Unlink Task link.

A confirmation message appears, asking if you are sure that you want to remove the link between the records.

| Unlink Task | |
|---|---|
| This will unlink the task "API510-E-Ins | spection Task" from the work pack. Are you sure you want to this? |
| [| Yes No |

3. Click the Yes button.

The link between the Inspection Task record and the Work Pack record is removed, and the associated Inspection Task node is no longer displayed in the **Work Pack Explorer** pane.

| Work Pack Explorer | |
|------------------------|--|
| System A | |
| Process Location 1 | |
| 🕂 🚱 Process Location 2 | |
| | |

Generating a Report Containing Inspection Task Details

You can generate a report that summarizes the details of all Inspection Task records that are linked to a given Work Pack record for distribution to the appropriate resources to estimate the cost of performing the inspection work.

The following instructions assume that:

- The report *Workpack Inspection Scope Summary Report* has been associated with the Work Pack family via the Configuration Manager.
- You are viewing the **Inspection Work Pack** page for the Work Pack record for whose associated Inspection Tasks you want to generate a report.

To generate a report containing details about the Inspection Task records that are linked to a Work Pack record:

1. In the <u>Work Pack Explorer pane</u>, select the Work Pack record for whose associated Inspection Tasks you want to generate a report. In the following image, the Work Pack record *Process Location 2* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer | | |
|--------------------------|--|--|
| System A | | |
| cess Location 1 | | |
| Process Location 2 | | |
| API510-E-Inspection Task | | |
| ASF SIL Inspection Task | | |
| ASF Task | | |
| | | |

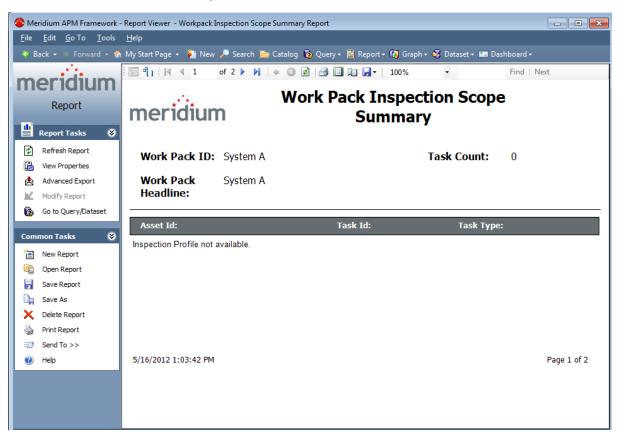
2. On the **Common Tasks** menu, click the **Print** link.

The Select Report to Print dialog box appears.

| Select Report to Print | E | X |
|--|----------------|---|
| Select Report | | |
| Print a copy of the datasheet Print a report: | ▼ OK Cancel | |

The **Print a report** option is selected by default.

3. In the **Print a report** list, select *Workpack Inspection Scope Summary Report*, and click **OK**.



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

You can print the report and distribute it to the appropriate resources so that they can estimate the cost of performing the work associated with the Inspection Tasks.

About Generating Inspection Records from Inspection Task Records

After the cost of the work associated with all Inspection Task records for a given Work Pack record has been estimated, you can determine which inspections you will perform and which you will not. Then, you can create Inspection records to represent the work that you *will* perform.

For example, suppose a Work Pack includes tasks to inspect all pieces of equipment in a particular system. If you receive an estimate from an inspector that exceeds your budget, you might need to trim the inspection work and inspect *only* the pieces of equipment whose previous inspections revealed defects.

On the Inspection Work Pack page, you can generate Inspection records for the from Inspection Task records by:

- Generating an Inspection record from a single Inspection Task record.
- <u>Generating Inspection records from *all* Inspection Task records that are linked to the Work Pack record.</u>

Generating an Inspection Record from a Single Inspection Task Record

The following instructions assume that you want to generate an Inspection record from a single Inspection Task record that is linked to a Work Pack record for which you are viewing the <u>Inspection Work Pack page</u>. You can also <u>generate Inspection records from</u> <u>all the Inspection Task records</u> that are linked to a Work Pack record.

To generate an Inspection record from a single Inspection Task record:

1. In the **Work Pack Explorer** pane, select the Inspection Task record from which you want to generate an Inspection record. In the following image, the Inspection Task record *INSPTSK-D0003-097-1* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer | | |
|------------------------|--|--|
| System A | | |
| Process Location 1 | | |
| Equipment A | | |
| Process Location 2 | | |
| Equipment B | | |
| 🔯 INSPTSK-D0003-097-1 | | |
| 🔯 INSPTSK-E0039C-097-1 | | |
| 🔯 INSPTSK-F0001-097-1 | | |
| | | |

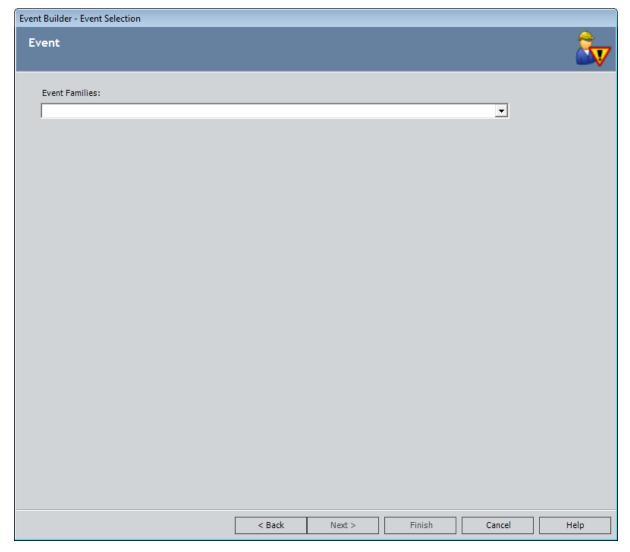
2. On the Work Pack Tasks menu, click the Generate Inspection Document link.

The **Event Builder** appears. Depending upon whether or not the selected Inspection Task record contains a value in the Inspection Document type field, one of the following screens is displayed:

• If the Inspection Task record contains a value in the Inspection Document Type field, the **Event Record** screen is displayed. The **Event Record** screen displays datasheet for the new Inspection record. The following image shows an example of what the **Event Record** screen looks like. In this case, skip to step 5 of these instructions.

| vent Record | | |
|-----------------------------|---|-----|
| Datasheet Visual Inspection | | |
| /isual Inspection Details | | |
| | Value(s) | |
| Inspection Reference | INSP-39 | |
| Asset ID | 000000001056788 | |
| Asset ID Link | Open Asset Datasheet | |
| Functional Location ID | MRD-ROA-REFN-RF097-D0003-097 | |
| Functional Location ID Link | Open Functional Location Datasheet | |
| Inspection Headline | | = |
| Commencement Date | 4/2/2013 | |
| Completion Date | 4/2/2013 | |
| Tasks Addressed | RBI - CUI -HIGH ~ INSPTSK-D0003-097-1 RBI - CUI -HIGH | |
| Inspection Task Complete | | |
| Degradation Mechanism | Criticality Calculator External Corrosion | |
| Type of Inspection | | |
| Extent | | |
| Scope | | |
| Reason for Inspection | | |
| Equipment Operating State | | |
| Inspection Summary | | ••• |
| Inspection Document Status | Draft | - |
| | | |
| | | |

• If the Inspection Task record does not contain a value in the Inspection Document Type field, the **Event Record** screen is displayed. The following image shows an example of what the **Event** screen looks like. In this case, proceed with step 3 of these instructions.



- 3. In the **Event Families** list, select the family to which the new Inspection record should belong.
- 4. Click the **Next** button.

The **Event Record** screen appears, displaying the datasheet for the new Inspection record.

- 5. On the datasheet, specify values in the <u>Inspection record</u>.
- 6. Click the **Finish** button.

The **Event Builder** closes, and the **Inspection Work Pack** page returns to focus.

| Seridium APM Framework - | - Inspection Work Pack - System A | | | |
|---|---|--------------------------------|---|----|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | | |
| 🍣 Back 👻 🌖 Forward 👻 🐔 | 1 My Start Page 👻 🎽 New 🔎 Search 📂 Cata | log 🔞 Query + 👖 Report + 🕼 Gra | iph 🗸 🥰 Dataset 🗝 🗔 Dashboard 🗸 | |
| 100 | Site Map: ->Inspection->Manage Work Packs->Syst | rem A | | |
| meridium | Work Pack Explorer | Datasheet Visual Inspection | 🔽 🔓 🗙 🍐 🕲 🗒 | |
| | System A | Visual Inspection Details | | |
| Inspection Management | Process Location 1 | | Value(s) | |
| | Equipment A | Inspection Reference | INSP-39 | |
| 🐐 Create Sub-Wor 🔺 | Equipment B | Asset ID | 0000000001056788 | |
| Link to Existing | INSPTSK-E0039C-097-1 | Asset ID Link | Open Asset Datasheet | |
| 👸 Unlink Sub-Work | | Functional Location ID | MRD-ROA-REEN-RE097-D0003-097 | |
| | INSP-39 | | Open Functional Location Datasheet | |
| Inspection Tasks 🛛 😵 | | Functional Location ID Link | | |
| Link to Existing T | | Inspection Headline | | |
| 🏟 Unlink Task | | Commencement Date | 4/2/2013 | |
| 🗿 Generate All Ins ≡ | | Completion Date | 4/2/2013 | |
| Generate Inspec | | Tasks Addressed | RBI - CUI -HIGH ~ INSPTSK-D0003-097-1 RBI - CUI -HIGH | |
| 🏟 Unlink Inspectio | | Inspection Task Complete | | = |
| | | Degradation Mechanism | Criticality Calculator External Corrosion | |
| Navigation Tasks 🛛 🕉 | | Type of Inspection | | |
| Parent Work Pack | | Extent | | |
| 1 Inspection Explo | | | | |
| Inspection Scope | | Scope | | |
| | | Reason for Inspection | | |
| Common Tasks 🛛 😻 | | Equipment Operating State | | |
| New Work Pack | | Inspection Summary | | |
| Save | | Inspection Document Status | Draft | |
| X Delete | | Inspection Report Owner | | |
| A Print | | Inspection Lock | | |
| Send To >> | | Reviewers Name | | |
| | | Reviewers Comments | | •• |
| 🕐 Help | | Final Inspection Lock | | - |

An Inspection record is created and linked to the selected Work Pack record. The link between the Work Pack record and the Inspection Task record from which the Inspection record was created is removed. A new Inspection node is displayed in the **Work Pack Explorer** pane, and the Inspection Task node that represented the Inspection Task record that was used to create the Inspection record is no longer displayed in the **Work Pack Explorer** pane.

Generating Inspection Records from All Inspection Task Records

Before you can generate Inspection records from all Inspection Task records that are linked to a Work Pack record, those Inspection Task records must contain a value in the *Inspection Document Type* field. The value in this field will be used to create the corresponding Inspection record in the appropriate family.

The following instructions assume that you want to generate Inspection records from ALL Inspection Task records that are linked to a Work Pack record for which you are viewing the <u>Inspection Work Pack page</u>. You can also <u>generate an Inspection record</u> from a single Inspection Task record that is linked to a Work Pack record.

To generate Inspection records from ALL Inspection Task records that are linked to a Work Pack record:

1. In the **Work Pack Explorer** pane, select the Work Pack record from whose associated Inspection Task records you want to generate Inspection records. In the following image, the Work Pack record *Equipment B* is selected in the **Work Pack Explorer** pane.

| Work Pack Explorer |
|--------------------|
| System A |
| Process Location 1 |
| Equipment A |
| Process Location 2 |
| Equipment B |
| - 🔯 ET-1 |
| 🔯 ET-2 |

2. On the Inspection Tasks menu, click the Generate All Inspection Documents link.

A confirmation message appears, asking if you are sure that you want to generate the Inspection records.

3. Click the **Yes** button.

The **Generate Inspection Documents** window appears, displaying the status of the process.

| Generate Inspection Documents | | × |
|--|-------|---|
| Done | | |
| | | |
| Generating Inspection Document for ET-1 Succeeded. Generating Inspection Document for ET-2 Succeeded. | | |
| | | - |
| | Close | |

4. When the process is complete, click the **Close** button.

The Generate Inspection Documents window closes and the Inspection Work Pack Page returns to focus.

| 😵 Meridium APM Framework | c - Inspection Work Pack - System A | | _ 0 × |
|---|--|---------------------------------|-------------------------------------|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | <u>H</u> elp | | |
| 🍣 Back 👻 🛞 Forward 👻 1 | 🏠 My Start Page 👻 🎽 New 🔎 Search | 🛊 Catalog 👩 Query - 🛅 Report - | 🖓 Graph 🗸 🥰 Dataset 🗸 🛅 Dashboard 🗸 |
| . · · · · | Site Map: -> Inspection-> Manage Work Page | -> <u>System A</u> | |
| meridium | Work Pack Explorer | Datasheet Work Pack | 🔽 🛃 🗙 🍓 🖏 🖏 |
| Inspection | System A | Work Pack Details | |
| Management | Equipment A | Value(s) | |
| Work Pack Tasks 🛛 😵 🧧 | Process Location 2 | Work Pack ID Equipment | |
| Create Sub-Wor | Equipment B | Work Pack Description Equipment | |
| Link to Existing | INSP-24 | | |
| Wink Sub-Work | | | |
| | | Preparation Details | |
| Inspection Tasks 🛛 😵 | | | |
| 🕮 Link to Existing T | 1 | | |
| 🏟 Unlink Task | | | |
| 🚋 Generate All Ins | | | |
| Generate Inspec | | | |
| 🏟 Unlink Inspectio | Į. | | |

The Inspection records are created and linked to the selected Work Pack record. The links between the Work Pack record and the Inspection Task records from which the Inspection records were created are removed. New Inspection nodes are displayed in the **Work Pack Explorer** pane, and the Inspection Task nodes that represented the Inspection Task records that were used to create the Inspection records are no longer displayed in the **Work Pack Explorer** pane.

Generating a Report that Includes a List of General Finding Records

For each <u>Inspection record that is created from an Inspection Task record</u>, the Meridium APM system will also create a General Finding record based on the Inspection Profile and Inspection Method records that are included in the Inspection Scope containing that Inspection Task record. You can generate a report that include a list of these General Finding records, and distribute it to the individuals responsible for performing the inspections so they can record their findings on the printed report.

The following instructions assume that:

- The report *Workpack Inspection Findings Summary Report* is associated with the Work Pack family via the Configuration Manager.
- You are viewing the **Inspection Work Pack** page for the Work Pack record for whose associated General Findings records you want to generate a report.

To generate a report that contains a list of General Finding records:

- 1. In the <u>Work Pack Explorer pane</u>, select the Work Pack record for whose associated General Findings records you want to generate a report.
- 2. On the **Common Tasks** menu, click the **Print** link.

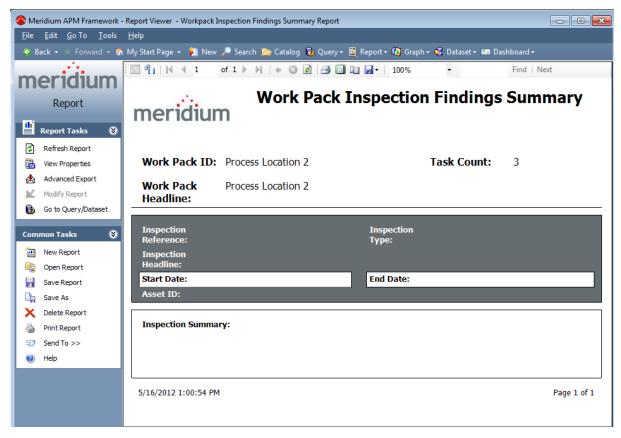
| Select Report to Print | X |
|--|-----------|
| Select Report | |
| Print a copy of the datasheet Print a report: | • |
| | OK Cancel |

The **Select Report to Print** dialog box appears.

The Print a report option is selected by default.

3. In the **Print a report** list, select *Workpack Inspection Findings Summary Report*, and click **OK**.

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



You can print the report and distribute it to the appropriate resources to record their findings on the printed report.

Removing the Link Between an Inspection Record and a Work Pack Record

The following instructions assume that you are viewing the <u>Inspection Work Pack page</u> for the Work Pack record whose link to an Inspection record you want to remove.

To remove the link between an Inspection record and a Work Pack record:

1. In the <u>Work Pack Explorer pane</u>, select the Inspection record whose link to a Work Pack record you want to remove. In the following image, the Inspection record *INSP-17* is selected in the **Work Pack Explorer** pane.

| Work F | Pack Explorer |
|--------|-------------------------|
| - 22 | System A |
| Ė | Process Location 1 |
| | Equipment A |
| Ė | Real Process Location 2 |
| | Equipment B |
| | 😥 ET-1 |

2. On the Inspection Tasks menu, click the Unlink Inspection Document link.

A confirmation message appears, asking if you are sure that you want to remove the link between the records.

3. Click the **Yes** button.

The link between the Inspection record and the Work Pack record is removed, and the node for the associated Inspection record is no longer displayed in the **Work Pack Explorer** pane.

| Work F | Pack | Explorer |
|--------|------|--------------------|
| - 20 | Sys | stem A |
| Ė | Q0 | Process Location 1 |
| | L., | 😡 Equipment A |
| Ė | ę, | Process Location 2 |
| | _ | 🕸 Equipment B |
| | | |
| | | |

Deleting a Work Pack Record

The following instructions explain how to delete a Work Pack record from the <u>Manage</u> <u>Work Packs page</u> or the <u>Inspection Work Pack page</u>.

To delete a Work Pack record:

- 1. In the Meridium APM Framework, <u>access the Manage Work Packs page</u> or the <u>Inspection Work Pack page</u>.
- 2. On the <u>Manage Work Packs page</u>, in the list of Work Pack records, select the row containing the record that you want to delete.

-or-

On the Inspection Work Pack page, in the Work Pack Explorer pane, select the Work Pack record that you want to delete.

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

A confirmation message appears, asking if you are sure that you want to delete the Work Pack record.

4. Click the **Yes** button.

The Work Pack record is deleted.

About Time-Based Inspection Settings

Time-based inspection settings specify the <u>intervals</u> at which inspections should occur for various pieces of equipment. Time-based inspection settings are used in one of the following ways, depending upon whether or not the Risk Based Inspection (RBI) license is active in conjunction with the Inspection Management license. When the RBI license is:

- *Active*, the inspection intervals associated with the time-based inspection settings will be considered by the Meridium APM System when populating the Desired Interval field in Inspection Task records created in *RBI*.
- *Not active*, the inspection intervals associated with the time-based inspection settings will be used to determine the value that is populated in the Desired Interval field in Inspection Task records created in *Inspection*.

Note: The Meridium APM Inspection Best Practice assumes that the RBI license is active and that you will create Inspection Task records for the equipment that you analyze in RBI and Inspection via the *RBI module*.

A time-based inspection setting consists of the following records:

- One Time Based Inspection Setting record that identifies the family or record for which you will define inspection intervals.
- One or more Time Based Inspection Interval records that identify the various inspection intervals that should be used when inspecting the equipment identified by the Time Based Inspection Setting record. The number of Time Based Inspection Interval records that are created will vary, depending on the number of inspection intervals that you define.

You can define time-based inspection settings at the following levels:

• Unit: Settings defined at this level are applied to all Equipment records that are linked to a particular Functional Location record <u>representing a Unit</u>.

For example, consider *Unit A*, a Functional Location record that represents a Unit that is linked to the following Equipment records:

- Equipment 1
- Equipment 2

The time-based inspection settings that you define for *Unit A* will be applied to *Equipment 1* and *Equipment 2*. In other words, when an Inspection Task record that is linked to *Equipment 1* or *Equipment 2* has a Task Type value that corresponds with a time-based inspection setting that you defined for *Unit A*, that setting will be used to populate values in the Inspection Task record that is linked to *Equipment 1* and *Equipment 2*.

• <u>Criticality Calculator RBI Components family</u>: Settings defined at this level are applied to *all* Equipment records that are linked to a particular type of Criticality Calculator RBI Components record, regardless of the Unit in which they reside.

For example, suppose that you defined time-based inspection settings for the Criticality RBI Component - Exchanger Bundle family. Now, consider that the Functional Location and Equipment records listed in the following table are linked to the following Criticality Calculator RBI Components records.

| The Functional Loca- tion record that rep- resents: | is linked to the Equipment record: | that is linked to these types of Criticality Calculator RBI Components records: |
|---|---------------------------------------|---|
| Unit A | Equipment 1 | Criticality RBI Component - Exchanger Bundle |
| | | Criticality RBI Component - Exchanger Header |
| Unit A | Equipment 2 | Criticality RBI Component - Piping |
| Unit B | Equipment 3 | Criticality RBI Component - Exchanger Bundle |
| | | Criticality RBI Component - Piping |

The time-based inspection settings that you defined for the Criticality RBI Component - Exchanger Bundle family will be applied to *Equipment 1* and *Equipment 3*. In other words, when an Inspection Task record that is linked to *Equipment 1* or *Equipment 3* has a Task Type value that corresponds with a time-based inspection setting that you defined for the Criticality RBI Component - Exchanger Bundle family, that setting will be used to populate values in the Inspection Task record that is linked to *Equipment 1* and *Equipment 3*.

• Unit and Criticality Calculator RBI Components family: Settings defined at this level are applied to all Equipment records that reside in a particular Unit and that are linked to a particular type of Criticality Calculator RBI Components record.

For example, using the same data shown in the preceding table, the time-based inspection settings that you define for the Functional Location record *Unit A* and the *Criticality RBI Component - Piping* family will be applied to *Equipment 2* because *Equipment 2* is linked to both Unit A and a record in the Criticality RBI Component - Piping family. In other words, when an Inspection Task record that is linked to *Equipment 2* has a Task Type value that corresponds with a time-based inspection setting that you defined for *Unit A* and the *Criticality RBI Component - Piping* family, that setting will be used to populate values in the Inspection Task record that is linked to *Equipment 2*.

• **Equipment:** Settings defined at this level are applied to a single Equipment record.

For example, if you defined time-based inspection settings for *Equipment 1*, the settings will be applied to that record *only*. In other words, when an Inspection

Task record that is linked to *Equipment 1* has a Task Type value that corresponds with a time-based inspection setting that you defined for *Equipment 1*, that setting will be used to populate values in the Inspection Task record that is linked to *Equipment 1*.

About Inspection Intervals

An *inspection interval* identifies the interval of time at which inspections should occur on equipment in your facility. Various factors will impact the inspection intervals that you will define at various levels in your location hierarchy.

For example, jurisdictional regulations might dictate that a particular inspection must be conducted on a particular piece of equipment every two months. Your organizational policy, however, might dictate that this particular inspection must be conducted on a particular piece of equipment every 30 days. In this case, you would define an inspection interval of 30 days.

An inspection interval is stored in the Interval field in a <u>Time Based Inspection Interval</u> <u>record</u>, and this value is considered by the Meridium APM system when populating the value in the Desired Interval field in Inspection Task records.

Default inspection intervals are represented by the time-based inspection settings that you define via the <u>Time-Based Inspection Settings page</u>.

Creating Time-Based Inspection Settings at the Unit Level

When you create time-based inspection settings at the Unit level, you are defining the frequency at which certain inspections will be performed on a piece of equipment that resides in a given Unit.

You can also modify existing time-based inspection settings.

To create time-based inspection settings at the Unit level:

1. In the Meridium APM Framework, <u>access the **Time-Based Inspection Settings** <u>page</u>.</u>

The **Time-Based Inspection Settings** page appears. The **Unit/Component Family Settings** tab is selected by default in the **Manage Time-Based Inspection Settings** workspace. A red outline has been added to the following image to highlight this tab.

| nspection->Administration->Time-Based I | nspection Settings | | | | |
|---|---|---|-------------------|-------------|-------|
| Manage Time | -Based Inspection Setting | şs | | | |
| Unit/Component Family Settings Equipm | nent Settings | Task Types for 1 Selected Setting | | | 4 |
| Unit | Component Family | Task Type | Interval (Months) | Description | Â. |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | Cathodic Protection Survey as defined | 2 | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | Corrosion Under-Insulation inspection | | | = |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING LOW CONF | | | 4 |
| | Criticality RBI Component - Exchanger Header | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | | ENV CRACKING VERY HIGH CONF | | | |
| | chicking Kbr component Triping | External inspection as defined in API 5 | 4 | | |
| | | External inspection as defined in API 6 | | | |
| | | Generic Meridium task type to cover in | | | |
| | | Generic Meridium task type to cover n | | | |
| | | High Conf Insp For Tank Bottom | | | |
| | | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Tu | | | |
| | | Internal inspection as defined in API 5 | | | |
| • | III | | | | * |

2. On the Setting Tasks menu, click the Add Setting link.

A new row is added to the grid that is displayed on the **Unit/Component Family Settings** tab.

| | | S | | |
|---------------------------------------|--|--|-------------------|-------------|
| Init/Component Family Settings Equipm | ent Settings | Task Types for 1 Selected Setting | Tabas (Mastha) | Deseriation |
| Unit | Component Family | Task Type Cathodic Protection Survey as defined | Interval (Months) | Description |
| ? <unit undefined=""></unit> | <select a="" component="" family=""></select> | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical She | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Hei | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Piping | External inspection as defined in API 5 | | |
| | children von som | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | High Conf Piping Insp for Loc Cor | | |
| | | High Confidence Insp for Exchanger T | | |
| | | Internal inspection as defined in API 5 | | |

3. In the **Unit** cell, select the Unit for which you want to create time-based inspection settings. For example, in the following image, the Unit *MRD-ROA-REFN-RF097-ZL0003-097* is selected in the list.

| Unit Component Family Task Type Interval (Months) Description MRD-ROA-REFN-RF097-ZL0003-097 <select a="" component="" family=""> Cathodic Protection Survey as defined Interval (Months) Description MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Cylindrical She Corrosion Under-Insulation Inspection Image: Corrosion Under-Insulation Inspection Image: Corrosion Under-Insulation Inspection MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk ENV CRACKING MED CONF Image: Corrosion Under-Insulation Inspection Image: Corrosion Under-Insulation Inspection MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Piping ENV CRACKING MED CONF Image: Corrosion Under-Insulation Inspection as defined in API 5 Image: Corrosion Under-Insulation Inspection as defined in API 5 Image: Corrosion Under-Insulation Inspection as defined in API 6 Image: Corrosion Under-Insulation Inspection as defined in API 6 Image: Corrosion Under-Insulation Inspection as defined in API 6 Image: Corrosion Under-Insulation Inspection Image: Corrosion Under-Insulation Inspection Image: Corrosion Under-Insulation Imag</select> | nit/Component Family Settings Equipme | nt Settings | Task Types for 1 Selected Setting | | |
|---|---------------------------------------|---|---|-------------------|-------------|
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Cylindrical She MRD-ROA-REFN-RF097-ZL0003-097 Criticality PRD Component - Relief Valve MRD-ROA-REFN-RF104-E0010-104 Criticality RD Component - Rupture Disk MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Piping MRD-ROA-REFN-RF104-S0005-104 Criticality RBI Component - Piping MRD-ROA-REFN-RF104-S0005-104 Criticality RBI Component - Exchanger He: MRD-ROA-REFN-RF104-S0005-104 Criticality RBI Component - Piping External inspection as defined in API 5 External inspection as defined in API 6 Generic Meridium task type to cover ni Generic Meridium task type to cover ni High Conf Piping Insp for General Cor Lit b 0 / 6 Piping Insp for General Cor | Unit | Component Family | Task Type | Interval (Months) | Description |
| MRD-R0A-REFN-RF097-2L0003-097 Criticality RBI Component - Cylindrical She MRD-R0A-REFN-RF097-2L0003-097 Criticality PRD Component - Relief Valve MRD-R0A-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk MRD-R0A-REFN-RF104-E0010-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-E0010-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger He: MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping External inspection as defined in API 5 External inspection as defined in API 6 Generic Meridium task type to cover ni Image: Component in the full in | MRD-ROA-REFN-RF097-ZL0003-097 | <select a="" component="" family=""></select> | Cathodic Protection Survey as defined | | |
| MRD-R0A-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk MRD-R0A-REFN-RF104-E0010-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger He: MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping ENV CRACKING VERY HIGH CONF External inspection as defined in API 5 External inspection as defined in API 6 Generic Meridium task type to cover ni Generic Meridium task type to cover ni High Conf Piping Insp for General Cor | MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical She | Corrosion Under-Insulation inspection | | |
| MRD-R0A-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk MRD-R0A-REFN-RF104-E0010-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger He: MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping External inspection as defined in API 5 External inspection as defined in API 6 Generic Meridium task type to cover in Generic Meridium task type to cover in High Conf Piping Insp for General Cor High Conf Piping Insp for General Cor | MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | ENV CRACKING HIGH CONF | | |
| MRD-R0A-REFN-RF104-E0010-104 Criticality RBI Component - Piping MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger He: MRD-R0A-REFN-RF104-SB0005-104 Criticality RBI Component - Piping External inspection as defined in API 5 Image: Criticality RBI Component - Piping External inspection as defined in API 6 Image: Criticality RBI Component - Piping External inspection as defined in API 6 Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality RBI Component - Piping Image: Criticality R | MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Piping External inspection as defined in API 5 External inspection as defined in API 6 Generic Meridium task type to cover in Generic Meridium task type to cover ni High Conf Piping Insp for General Cor | MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| External inspection as defined in API 6 Generic Meridium task type to cover in Generic Meridium task type to cover in High Conf Insp For Tank Bottom High Conf Piping Insp for General Cor | MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Hea | ENV CRACKING VERY HIGH CONF | | |
| Generic Meridium task type to cover in | MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Piping | External inspection as defined in API 5 | | |
| Generic Meridium task type to cover n High Conf Insp For Tank Bottom High Conf Piping Insp for General Cor Ut to 0 of Piping Insp for General Cor | | | External inspection as defined in API 6 | | |
| High Conf Insp For Tank Bottom | | | Generic Meridium task type to cover in | | |
| High Conf Piping Insp for General Cor | | | Generic Meridium task type to cover n | | |
| | | | High Conf Insp For Tank Bottom | | |
| High Conf Pining Insp for Loc Cor | | | High Conf Piping Insp for General Cor | | |
| | | | High Conf Piping Insp for Loc Cor | | |
| High Confidence Insp for Exchanger Ti | | | High Confidence Insp for Exchanger T | | I |

4. In the **Task Types** pane, in the row for each task type for which you want to specify an <u>inspection interval</u>, type an inspection interval in the **Interval (Months)** cell. For example, in the following image, an interval of *12* months has been defined for the Task Type *External inspection as defined in API 510* associated with the Unit *MRD-ROA-REFN-RF097-ZL0003-097*.

| Manage Time | -Based Inspection Setting | s | | | |
|---------------------------------------|---|--|-------------------|-------------|---|
| Init/Component Family Settings Equipm | ent Settings | Task Types for 1 Selected Setting | | | |
| Unit | Component Family | Task Type | Interval (Months) | Description | |
| MRD-ROA-REFN-RF097-ZL0003-097 | <select a="" component="" family=""></select> | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | External inspection as defined in API 510 | 12 | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | External inspection as defined in API 653 | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | Generic Meridium task type to cover intru: | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | Generic Meridium task type to cover non-i | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Header | High Conf Insp For Tank Bottom | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Piping | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Tube | | | |
| | | Internal inspection as defined in API 510 | | | |
| | | Internal inspection as defined in API 653 | | | |
| | | INTR RBI - INT CORR INSP - HI CONF | | | |
| | | INTR RBI - INT CORR INSP - MED CONF | | | [|
| | | INTR RBI - INT CORR INSP - VERY HI CC | | | |
| | | INTR RBI - INT CORR INSP -LOW CONF | | | |

- 5. In the **Description** cell in the row for each task type for which you have specified an inspection interval, type a description if you want to add comments.
- 6. Repeat steps 2 through 5 for each Unit for which you want to define time-based inspection settings.
- 7. On the Setting Tasks menu, click the Save link.

The **Saving Settings** dialog box is displayed, indicating the progress of the save operation. The dialog box closes automatically, and the following records are created and saved to the database:

- One Time Based Inspection Setting record for each Unit defined in the grid on the **Unit/Component Family Settings** tab.
- One Time Based Inspection Interval record for each inspection interval defined in the grid in the **Task Types** pane.

Continuing with the example used in these instructions, the records in the families listed in the following table would be created.

| Family | Record ID |
|----------------------------|---|
| Time Based Inspection Set- | MRD-ROA-REFN-RF097-ZL0003-097 - <select a="" com-<="" td=""></select> |
| ting | ponent Family> - |

| Family | Record ID |
|-------------------------------------|--|
| Time Based Inspection Inter- val | External inspection as defined in API 510 - 12 |

When you create time-based inspection settings at the Criticality Calculator RBI Components family level, you are defining the frequency at which certain inspections will be performed on a piece of equipment that is associated with certain RBI Components (i.e., linked to a record in a particular Criticality Calculator RBI Components family).

You can also modify existing time-based inspection settings.

To create time-based inspection settings at the Criticality Calculator RBI Components family level:

1. In the Meridium APM Framework, <u>access the **Time-Based Inspection Settings** page.</u>

The **Time-Based Inspection Settings** page appears. The **Unit/Component Family Settings** tab is selected by default in the **Manage Time-Based Inspection Settings** workspace. A red outline has been added to the following image to highlight this tab.

| nspection->Administration->Time-Based Ir | nspection Settings | | | | |
|--|---|---|-------------------|-------------|---|
| Manage Time | -Based Inspection Setting | ġs | | | |
| Unit/Component Family Settings Equipm | ient Settings | Task Types for 1 Selected Setting | | | |
| Unit | Component Family | | Interval (Months) | Description | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | Cathodic Protection Survey as defined | 2 | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | Corrosion Under-Insulation inspection | | | = |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING LOW CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Header | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | | ENV CRACKING VERY HIGH CONF | | | |
| 1* | | External inspection as defined in API 5 | 4 | | |
| | | External inspection as defined in API 6 | | | |
| | | Generic Meridium task type to cover in | | | |
| | | Generic Meridium task type to cover no | | | |
| | | High Conf Insp For Tank Bottom | | | |
| | | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Tu | | | |
| | | | | | |
| 4 | III > | Internal inspection as defined in API 5 | | | |
| | | | " | | |

2. On the Setting Tasks menu, click the Add Setting link.

A new row is added to the grid that is displayed on the **Unit/Component Family Settings** tab.

| it/Component Family Settings Equipm | ent Settings | Task Types for 1 Selected Setting | | |
|-------------------------------------|---|---|-------------------|-------------|
| Unit | Component Family | Task Type | Interval (Months) | Description |
| <unit undefined=""></unit> | <select a="" component="" family=""></select> | Cathodic Protection Survey as defined | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical She | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Hea | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Piping | External inspection as defined in API 5 | | |
| | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | | | |

3. In the **Component Family** cell, select in the list the family for which you want to create time-based inspection settings. For example, in the following image, the *Criticality RBI Component - Piping* family has been selected in the list in the **Component Family** cell.

| nit/Component Family Settings Equipm | ent Settings | Task Types for 1 Selected Setting | | |
|--------------------------------------|---|---|-------------------|-------------|
| Unit | Component Family | Task Type | Interval (Months) | Description |
| ? <unit undefined=""></unit> | Criticality RBI Component - Piping 🗸 | Cathodic Protection Survey as defined | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | | External inspection as defined in API 5 | | |
| | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | 1 |
| | | High Conf Insp For Tank Bottom | | 1 |
| | | High Conf Piping Insp for General Cor | | |
| | | | | |
| | | High Conf Piping Insp for Loc Cor | | |

4. In the **Task Types** pane, in the row for each task type for which you want to specify an <u>inspection interval</u>, type an inspection interval in the **Interval (Months)** cell. For example, in the following image, an interval of *12* months has been defined for the Task Type *External inspection as defined in API 510* associated with the *Criticality RBI Component - Piping* family.

| Init/Component Family Settings | quipment Settings | Task Types for 1 Selected Setting | Interval (Months) | Description | |
|--------------------------------|---|---|-------------------|-------------|---|
| Unit | Component Family | Task Type | Interval (Months) | Description | |
| <unit undefined=""></unit> | Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF097-ZL0003 | 097 Criticality RBI Component - Cylindrical Shell | External inspection as defined in API 510 | 12 | | |
| MRD-ROA-REFN-RF097-ZL0003 | 097 Criticality PRD Component - Relief Valve | External inspection as defined in API 653 | | | |
| MRD-ROA-REFN-RF104-E0010-1 | 04 Criticality PRD Component - Rupture Disk | Generic Meridium task type to cover intru | | | |
| MRD-ROA-REFN-RF104-E0010-1 | .04 Criticality RBI Component - Piping | Generic Meridium task type to cover non- | | | |
| MRD-ROA-REFN-RF104-SB0005 | -104 Criticality RBI Component - Exchanger Header | High Conf Insp For Tank Bottom | | | |
| MRD-ROA-REFN-RF104-SB0005 | -104 Criticality RBI Component - Piping | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Tube | | | |
| | | Internal inspection as defined in API 510 | | | |
| | | Internal inspection as defined in API 653 | | | |
| | | INTR RBI - INT CORR INSP - HI CONF | | | |
| | | INTR RBI - INT CORR INSP - MED CONF | |] | |
| | | INTR RBI - INT CORR INSP - VERY HI CO | | | _ |

- 5. In the **Description** cell in the row for each task type for which you have specified an inspection interval, type a description if you want to add comments.
- 6. Repeat steps 2 through 5 for each Criticality Calculator RBI Components family for which you want to define time-based inspection settings.
- 7. On the Setting Tasks menu, click the Save link.

The **Saving Settings** dialog box is displayed, indicating the progress of the save operation. The dialog box closes automatically, and the following records are created and saved to the database:

- One Time Based Inspection Setting record for each Criticality Calculator RBI Components family defined in the grid on the **Unit/Component Family Settings** tab.
- One Time Based Inspection Interval record for each inspection interval defined in the grid in the **Task Types** pane.

Continuing with the example used in these instructions, the records in the families listed in the following table would be created.

| Family | Record ID |
|----------------------------|---|
| Time Based Inspection Set- | <unit undefined=""> - Criticality RBI Component - Piping</unit> |
| ting | - |

| Family | Record ID |
|-------------------------------------|--|
| Time Based Inspection Inter- val | External inspection as defined in API 510 - 12 |

When you create time-based inspection settings at the Unit *and* Criticality Calculator RBI Components family level, you are defining the frequency at which certain inspections will be performed on a piece of equipment that resides in a given Unit *and* is associated with certain RBI Components.

You can also modify existing time-based inspection settings.

To create time-based inspection settings at the Unit *and* Criticality Calculator RBI Components family level:

 In the Meridium APM Framework, <u>access the Time-Based Inspection Settings</u> <u>page</u>.

The **Time-Based Inspection Settings** page appears. The **Unit/Component Family Settings** tab is selected by default in the **Manage Time-Based Inspection Settings** workspace. A red outline has been added to the following image to highlight this tab.

| nspection->Administration->Time-Based Inspection Settings | | | | |
|---|--|-------------------|-------------|-------|
| Manage Time-Based Inspection Setting | S | | | |
| Unit/Component Family Settings Equipment Settings | Task Types for 1 Selected Setting | | | |
| Unit Component Family | | Interval (Months) | Description | Â |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Cylindrical Shell | Cathodic Protection Survey as defined | 2 | | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality PRD Component - Relief Valve | Corrosion Under-Insulation inspection | | | Ξ |
| MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Piping | ENV CRACKING LOW CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger Header | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | | |
| р• — — — — — — — — — — — — — — — — — — — | External inspection as defined in API 5 | 4 | | |
| | External inspection as defined in API 6 | | | |
| | Generic Meridium task type to cover in | | | |
| | Generic Meridium task type to cover n | | | |
| | High Conf Insp For Tank Bottom | | | |
| | High Conf Piping Insp for General Cor | | | |
| | High Conf Piping Insp for Loc Cor | | | |
| | High Confidence Insp for Exchanger Ti | | | |
| | Internal inspection as defined in API 5: | |] | |
| < > | · · · · · | 1 | | |

2. On the Setting Tasks menu, click the Add Setting link.

A new row is added to the grid that is displayed on the **Unit/Component Family Settings** tab.

| Init/Component Family Settings Equipme | ent Settings | Task Types for 1 Selected Setting Task Type | Interval (Months) | Description |
|--|---|--|-------------------|-------------|
| Unit | Component Family | Cathodic Protection Survey as defined | Interval (Months) | |
| ? <unit undefined=""></unit> | <select a="" component="" family=""></select> | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical She | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Hea | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Piping | External inspection as defined in API 5 | | |
| - | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | High Conf Piping Insp for Loc Cor | | |
| | | High Confidence Insp for Exchanger T | | |
| | | Internal inspection as defined in API 5 | | |

3. In the **Unit** and **Component Family** cells, select the Unit and Criticality Calculator RBI Components family for which you want to create time-based inspection settings. For example, in the following image, the Unit *MRD-ROA-REFN-RF097-ZL0003-097* has been selected in the **Unit** cell, and the *Criticality RBI Component - Piping* family has been selected in the **Component Family** cell.

| Manage Time | -Based Inspection Setting | s | | | |
|---------------------------------------|---|---|-------------------|-------------|---|
| Jnit/Component Family Settings Equipm | ent Settings | Task Types for 1 Selected Setting | | | |
| Unit | Component Family | Task Type | Interval (Months) | Description | _ |
| RRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Piping 🗸 | Cathodic Protection Survey as defined | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | Corrosion Under-Insulation inspection | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Header | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | | External inspection as defined in API 5 | | | |
| • | | External inspection as defined in API 6 | | | |
| | | Generic Meridium task type to cover in | | | |
| | | Generic Meridium task type to cover n | | | |
| | | High Conf Insp For Tank Bottom | | | |
| | | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | |] | |
| | | High Confidence Insp for Exchanger To | | | |
| | | Internal inspection as defined in API 5 | | 1 | |

4. In the **Task Types** pane, in the row for each task type for which you want to specify an <u>inspection interval</u>, type an inspection interval in the **Interval (Months)** cell. For example, in the following image, an interval of *12* months has been defined for the Task Type *External inspection as defined in API 510* associated with the Unit *MRD-ROA-REFN-RF097-ZL0003-097* and the *Criticality RBI Component - Piping* family.

| | e-Based Inspection Setting | 5 | | | |
|------------------------------------|---|--|-------------------|-------------|---|
| nit/Component Family Settings Equi | pment Settings | Task Types for 1 Selected Setting | | | |
| Unit | Component Family | Task Type | Interval (Months) | Description | _ |
| MRD-ROA-REFN-RF097-ZL0003-09 | 7 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF097-ZL0003-09 | 7 Criticality RBI Component - Cylindrical Shell | External inspection as defined in API 510 | 12 |] | |
| MRD-ROA-REFN-RF097-ZL0003-09 | 7 Criticality PRD Component - Relief Valve | External inspection as defined in API 653 | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | Generic Meridium task type to cover intru: | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | Generic Meridium task type to cover non-i | | | |
| MRD-ROA-REFN-RF104-SB0005-10 | 4 Criticality RBI Component - Exchanger Header | High Conf Insp For Tank Bottom | |] | |
| MRD-ROA-REFN-RF104-SB0005-10 | 4 Criticality RBI Component - Piping | High Conf Piping Insp for General Cor | |] | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Tube | | | |
| | | Internal inspection as defined in API 510 | | 1 | |
| | | Internal inspection as defined in API 653 | | | |
| | | INTR RBI - INT CORR INSP - HI CONF | | | |
| | | INTR RBI - INT CORR INSP - MED CONF | | | |
| | | INTR RBI - INT CORR INSP - VERY HI CO | | 1 | |

- 5. In the **Description** cell in the row for each task type for which you have specified an inspection interval, type a description if you want to add comments.
- 6. Repeat steps 2 through 5 for each Unit and Criticality Calculator RBI Components family for which you want to define time-based inspection settings.
- 7. On the Setting Tasks menu, click the Save link.

The **Saving Settings** dialog box is displayed, indicating the progress of the save operation. The dialog box closes automatically, and the following records are created and saved to the database:

- One Time Based Inspection Setting record for each Unit and Criticality Calculator RBI Components family defined in the grid on the Unit/Component Family Settings tab.
- One Time Based Inspection Interval record for each inspection interval defined in the grid in the **Task Types** pane.

Continuing with the example used in these instructions, the records in the families listed in the following table would be created.

| Family | Record ID |
|----------------------------|---|
| Time Based Inspection Set- | MRD-ROA-REFN-RF097-ZL0003-097 - Criticality RBI |
| ting | Component - Piping - |

| Family | Record ID |
|-------------------------------------|--|
| Time Based Inspection Inter- val | External inspection as defined in API 510 - 12 |

Creating Time-Based Inspection Settings at the Equipment Level

When you create time-based inspection settings at the equipment level, you are defining the frequency at which certain inspection tasks will be performed on a particular piece of equipment. You can also <u>modify existing time-based inspection settings</u> at the equipment level.

To create time-based inspection settings at the equipment level:

1. In the Meridium APM Framework, <u>access the **Time-Based Inspection Settings** <u>page</u>.</u>

The **Time-Based Inspection Settings** page appears. The **Unit/Component Family Settings** tab is selected by default in the **Manage Time-Based Inspection Settings** workspace. A red outline has been added to the following image to highlight this tab.

| nspection->Administration->Time-Based In | nspection Settings | | | | | |
|--|---|--|-----------------------------------|-------------|--|--|
| Manage Time | -Based Inspection Setting | 32 | | | | |
| Unit/Component Family Settings Equipm | Unit/Component Family Settings Equipment Settings | | Task Types for 1 Selected Setting | | | |
| Unit | Component Family | Task Type | Interval (Months) | Description | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | Cathodic Protection Survey as defined | 2 | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | Corrosion Under-Insulation inspection | | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING HIGH CONF | | | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING LOW CONF | | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Header | ENV CRACKING MED CONF | | | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | | | |
| | | External inspection as defined in API 5 | 4 | | | |
| | | External inspection as defined in API 6 | | | | |
| | | Generic Meridium task type to cover in | | | | |
| | | Generic Meridium task type to cover n | | | | |
| | | High Conf Insp For Tank Bottom | | | | |
| | | High Conf Piping Insp for General Cor | | | | |
| | | High Conf Piping Insp for Loc Cor | | | | |
| | | High Confidence Insp for Exchanger Ti | | | | |
| | | Internal inspection as defined in API 5: | |] | | |
| • | III | ٠! | " | | | |

2. In the **Manage Time-Based Inspection Settings** workspace, select the **Equipment Settings** tab. A red outline has been added to the following image to highlight this tab. Creating Time-Based Inspection Settings at the Equipment Level

| t/Component Family Settir | as Equipment Settings | Task Types for 1 Selected Setting | _ | _ |
|---------------------------|-----------------------|---|-------------------|-------------|
| Unit | Equipment ID | Task Type | Interval (Months) | Description |
| | HXST 120 | Cathodic Protection Survey as defined | | |
| | HXST 155 | Corrosion Under-Insulation inspection | 12 | |
| • | HXST 26 | ENV CRACKING HIGH CONF | | |
| • | HXST 49 | ENV CRACKING LOW CONF | | |
| • | HXST 60 | ENV CRACKING MED CONF | | |
| • | HXST 80 | ENV CRACKING VERY HIGH CONF | | |
| | | External inspection as defined in API 5 | | |
| | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | | | |

3. On the Setting Tasks menu, click the Add Setting link.

The **Find Items** window appears.

| 🔎 Find Items | | | × |
|--|--|-----------|--------------------------------------|
| meridium | Simp | le Search | |
| Search Type Compared Simple search Simple search | Search In: Linked To: Look For: | Equipment | Find Now Stop New Search |
| | ☑ Include Search Field Category: Class: Type: | ALL | ®_ |
| | | | |
| | | Select | Cancel |

Equipment is selected in the **Search In** list by default. You can modify this selection.

4. Click the **Find Now** button.

In the search results, one row is displayed in the grid for each Equipment record in your database.

| 🔎 Find Items | | |
|-------------------|--------------------------------|--|
| meridium | Simple Search | |
| Search Type 😵 | Search In: Equipment | Find Now |
| 🗊 Advanced search | Look For: | |
| | Match Case? | New Search |
| | ☑ Include Search Fields | |
| | Category: ALL | • |
| | Class: ALL | - |
| | Type: ALL | • |
| | | |
| | | Decend ID |
| | Family | Record ID |
| | Equipment Equipment | ~ PURGE GAS EXCHANGER ~ HXST 102 |
| | Equipment | ~ PURGE GAS EXCHANGER ~ HXST 62 |
| | Equipment | ~ RCA TRACKING ITEM EQUIPMENT ~ RCA TRACKING |
| | Equipment | ~ REACTOR EFFLUENT CHARGE ~ HXST 110 |
| | 4 | |
| | Page: 1 of 1 256 records found | «« First « Previous Page Size: 1000 |
| | s | elect Cancel |

5. Select the rows containing the Equipment records for which you want to create time-based inspection settings, and click the **Select** button. For example, in the following image, the Equipment records with the Record IDs ~ *PURGE GAS EXCHANGER* ~ *HXST 102* and ~ *PURGE GAS EXCHANGER* ~ *HXST 62* are selected.

| 差 Find Items | | |
|--|---|--|
| meridium | Simple Search | |
| Search Type Search Simple search Advanced search | Search In: Equipment Linked To: Look For: Match Case? ✓ Include Search Fields Category: ALL Class: ALL | Find Now Stop New Search |
| | Type: ALL | • |
| | | Record ID ~ P.O DI & D4 OVERHEAD ~ HXST 53 ~ PURGE GAS EXCHANGER ~ HXST 102 ~ PURGE GAS EXCHANGER ~ HXST 62 ~ RCA TRACKING ITEM EQUIPMENT ~ RCA TRACKING ~ REACTOR EFFLUENT CHARGE ~ HXST 110 * First * Previous |
| | Selec | t Cancel |

The **Find Items** window closes, and the **Time-Based Inspection Settings** page returns to focus. One row is added to the grid displayed on the **Equipment Settings** tab for each Equipment record that you selected.

| t/Component Family Setti | ngs Equipment Settings | Task Types for 1 Selected Setting |
|--------------------------|------------------------|---|
| Unit | Equipment ID | Task Type Interval (Months) Description |
| 2 | HXST 102 | Cathodic Protection Survey as defined |
| | HXST 120 | Corrosion Under-Insulation inspection |
| • | HXST 155 | ENV CRACKING HIGH CONF |
| • | HXST 26 | ENV CRACKING LOW CONF |
| • | HXST 49 | ENV CRACKING MED CONF |
| • | HXST 60 | ENV CRACKING VERY HIGH CONF |
| • | HXST 62 | External inspection as defined in API 5 |
| • | HXST 80 | External inspection as defined in API 6 |
| | | Generic Meridium task type to cover in |
| | | Generic Meridium task type to cover n |
| | | High Conf Insp For Tank Bottom |
| | | High Conf Piping Insp for General Cor |
| | | High Conf Piping Insp for Loc Cor |

6. On the **Equipment Settings** tab, select the row(s) in the grid associated with the Equipment record for which you want to define settings. For example, in the following image, the rows associated with Equipment records *HSXT 102* and *HXST 62* are selected on the **Equipment Settings** tab.

| Manag | ge Time-Based Inspectio | n Settings |
|--------------------------|---------------------------|---|
| nit/Component Family Set | ttings Equipment Settings | Task Types for 2 Selected Settings |
| Unit | Equipment ID | Task Type Interval (Months) Description |
| ? | HXST 102 | Cathodic Protection Survey as defined |
| <i>y</i> | HXST 120 | Corrosion Under-Insulation inspection |
| <i>y</i> | HXST 155 | ENV CRACKING HIGH CONF |
| J | HXST 26 | ENV CRACKING LOW CONF |
| J | HXST 49 | ENV CRACKING MED CONF |
| r Jr | HXST 60 | ENV CRACKING VERY HIGH CONF |
| ? | HXST 62 | External inspection as defined in API 5 |
| J | HXST 80 | External inspection as defined in API 6 |
| | | Generic Meridium task type to cover in |
| | | Generic Meridium task type to cover n |
| | | High Conf Insp For Tank Bottom |
| | | High Conf Piping Insp for General Cor |
| | | High Conf Piping Insp for Loc Cor |
| | | High Confidence Insp for Exchanger Ti |

7. In the **Task Types** pane, in the row for each task type for which you want to specify an <u>inspection interval</u>, type an inspection interval in the **Interval (Months)** cell. For example, in the following image, an interval of *12* months has been defined for the Task Type *Corrosion Under-Insulation inspection* for the Equipment records *HXST 102* and *HXST 62*.

| | | Task Types for 2 Selected Settings | |
|------------------------------|--------------------------|--|-------------------------------|
| it/Component Family Settings | | Task Type | Interval (Months) Description |
| Unit | Equipment ID HXST 102 | Cathodic Protection Survey as defined | |
| • | HXST 120 | Corrosion Under-Insulation inspection | 12 |
| | HXST 155 | ENV CRACKING HIGH CONF | |
| | HXST 26 | ENV CRACKING LOW CONF | |
| | HXST 49 | ENV CRACKING MED CONF | |
| , / | HXST 60 | ENV CRACKING VERY HIGH CONF | |
| ? | HXST 62 | External inspection as defined in API | 5 |
| | HXST 80 | External inspection as defined in API | 6 |
| | | Generic Meridium task type to cover in | n |
| | | Generic Meridium task type to cover n | 11 IIII |
| | | High Conf Insp For Tank Bottom | |
| | | High Conf Piping Insp for General Cor | |
| | | High Conf Piping Insp for Loc Cor | |
| | | | |

- 8. In the **Description** cell in the row for each task type for which you have specified an inspection interval, type a description if you want to add comments.
- 9. Repeat steps 6 through 8 for each Equipment record for which you want to define time-based inspection settings.
- 10. On the Setting Tasks menu, click the Save link.

The **Saving Settings** dialog box is displayed, indicating the progress of the save operation. The dialog box closes automatically, and the following records are created and saved to the database:

- One Time Based Inspection Setting record for each Equipment record defined in the grid on the **Equipment Settings** tab.
- One Time Based Inspection Interval record for each inspection interval defined in the grid in the **Task Types** pane.

Continuing with the example used in these instructions, the records listed in the following table would be created.

| Family | Record ID |
|------------------------------|--|
| Time Based Inspection Set- | HXST 102 |
| ting | HXST 62 |
| Time Based Inspection Inter- | Corrosion Under-Insulation inspection - 12 |
| val | Corrosion Under-Insulation inspection - 12 |

About Modifying Existing Time-Based Inspection Settings

You can modify the:

- Level at which an existing time-based inspection setting is defined.
 -or-
- Inspection interval defined for an existing time-based inspection setting.

Modifying the Level at Which Existing Time-Based Inspection Settings are Defined

You can modify the level at which a time-based inspection setting is defined when the time-based inspection setting is defined at any of the following levels:

- <u>Unit</u>
- <u>Criticality Calculator RBI Components family</u>
- Unit and Criticality Calculator RBI Components family

For example, suppose that you have defined time-based inspection settings for Unit A *and* the Criticality RBI Component - Exchanger Bundle family, but your facility recently moved the equipment associated with the Criticality RBI Component - Exchanger Bundle family to *Unit B*. In this case, you might want to change the level with which these time-based inspection settings are associated to account for this change in location.

To modify the level at which existing time-based inspection settings are defined:

1. Access the <u>Time-Based Inspection Settings page</u>.

In the Manage Time-Based Inspection Settings workspace, the Unit/Component Family Settings tab is selected by default, as shown in the following image.

Modifying the Level at Which Existing Time-Based Inspection Settings are Defined

| Init/Component Family Settings Equipment Settings Unit Component Family MRD-ROA-REFN-RF097-ZL0003-097 Criticality PRD Component - P MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - P MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - P MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - P MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - P MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - P | Relief Valve | Cathodic Protection Survey as defined Corrosion Under-Insulation inspection ENV CRACKING HIGH CONF ENV CRACKING LOW CONF | Interval (Months) 2 | Description | |
|---|--|---|---------------------|-------------|--|
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - P MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - C MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - P | iping Cylindrical Shell Rupture Disk | Corrosion Under-Insulation inspection ENV CRACKING HIGH CONF ENV CRACKING LOW CONF | 2 | | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - C MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - R | ylindrical Shell Rupture Disk | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - F | Rupture Disk | ENV CRACKING LOW CONF | | | |
| | | | | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Pi | iping | | | | |
| | | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Pi | liping | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - E: | xchanger Header | External inspection as defined in API 5 | 4 | | |
| | | External inspection as defined in API 6 | | | |
| | | Generic Meridium task type to cover in | | | |
| | | Generic Meridium task type to cover n | | | |
| | | High Conf Insp For Tank Bottom | | | |
| | | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Ti | | | |
| | | Internal inspection as defined in API 5 | | | |
| | | Internal inspection as defined in API 6 | | | |
| | | INTR RBI - INT CORR INSP - HI CONF | |] | |

2. In the grid on the **Unit/Component Family Settings** tab, select the row that contains the time-based inspection setting whose level you want to modify.

For example, in the following image, the time-based inspection setting associated with Unit*MRD-ROA-REFN-RF104-E0010-104* and the*Criticality RBI Component - Piping* family is selected in the grid on the**Unit/Component Family Settings**tab.

| it/Component Family Set | tings Equipment Settings | Task Types for 1 Selected Setting | | |
|-------------------------|---|---|-------------------|-------------|
| Unit | Component Family | Task Type | Interval (Months) | Description |
| MRD-ROA-REFN-RF09 | 7-ZL0003-097 Criticality PRD Component - Relief Valve | Cathodic Protection Survey as defined | 2 | |
| MRD-ROA-REFN-RF09 | 7-ZL0003-097 Criticality RBI Component - Piping | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF09 | 7-ZL0003-097 Criticality RBI Component - Cylindrical Shel | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104 | 4-E0010-104 Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104 | 1-E0010-104 Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF104 | 4-SB0005-104 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104 | 4-SB0005-104 Criticality RBI Component - Exchanger Hea | ler External inspection as defined in API 5 | 4 | |
| | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | High Conf Piping Insp for Loc Cor | | |
| | | High Confidence Insp for Exchanger T | | |
| | | Internal inspection as defined in API 5 | | |

3. Depending upon the level you want to modify, select a value in the list in the cell that corresponds with the level that you are modifying. The following tables lists the levels, their corresponding cells, and the values that you can select in their corresponding lists.

| Level | Cell | Acceptable values |
|---|------------------|--|
| Unit | Unit | A different Unit <i>or</i> the value <i><unit undefined=""></unit></i> if you do not want a Unit to be associated with the time-based inspection setting. |
| Criticality Cal- culator RBI Components | Component Family | A different Criticality Calculator RBI Components family <i>or</i> the value <i><select a="" component<="" i=""> <i>Family></i> if you do not want a Criticality Calculator RBI Com- ponents family to be asso- ciated with the time-based inspection setting.</select></i> |

4. On the **Setting Tasks** menu, click the **Save** link.

The **Saving Settings** dialog box is displayed, indicating the progress of the save operation. The dialog box closes automatically, and the associated Time Based Inspection Setting record is updated.

Modifying the Inspection Interval Defined for Existing Time-Based Inspection Settings

You can modify the inspection interval defined for any existing time-based inspection setting. For example, suppose that you defined an inspection interval for a particular type of inspection based upon an organizational policy, and that policy has changed. You could modify the existing time-based inspection setting to reflect the interval that is now defined by the organizational policy. The following instructions assume that you are viewing the <u>Time-Based Inspection Settings page</u>.

To modify inspection intervals defined for existing time-based inspection settings:

- 1. In the **Manage Time-Based Inspection Settings** workspace, select one of the following tabs, depending upon the level at which the existing time-based inspection setting is defined:
 - Unit/Component Family Settings: Select this tab if you want to modify the inspection interval for a time-based inspection setting at the Unit and/or Criticality Calculator RBI Components family level.
 - **Equipment Settings:** Select this tab if you want to modify the inspection interval for a time-based inspection setting at the equipment level.

For example, in the following image, the **Unit/Component Family Settings** tab is selected.

Modifying the Inspection Interval Defined for Existing Time-Based Inspection Settings

| nit/Component Family Settings Equipment Settings | | | |
|---|---|-------------------|-------------|
| | Task Types for 1 Selected Setting | | |
| Unit Component Family | Task Type | Interval (Months) | Description |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality PRD Component - Relief Valve | Cathodic Protection Survey as defined | 2 | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Piping | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Cylindrical Shell | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger Header | External inspection as defined in API 5 | 4 | |
| | External inspection as defined in API 6 | | |
| | Generic Meridium task type to cover in | | |
| | Generic Meridium task type to cover no | | |
| | High Conf Insp For Tank Bottom | | |
| | High Conf Piping Insp for General Cor | | |
| | High Conf Piping Insp for Loc Cor | | |
| | High Confidence Insp for Exchanger Tu | | |
| | Internal inspection as defined in API 5 | | |
| | Internal inspection as defined in API 6 | | |

2. In the grid on the selected tab, select the row for the record and/or family whose associated inspection interval you want to modify.

For example, in the following image, the time-based inspection setting associated with the Unit *MRD-ROA-REFN-RF104-E0010-104* and the *Criticality RBI Component - Piping* family is selected in the grid on the **Unit/Component Family Settings** tab.

| Manage Time | e-Based Inspection Setti | ngs | | |
|------------------------------------|---|---|-------------------|-------------|
| it/Component Family Settings Equip | ment Settings | Task Types for 1 Selected Setting | _ | _ |
| Unit | Component Family | Task Type | Interval (Months) | Description |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality PRD Component - Relief Valve | Cathodic Protection Survey as defined | 2 | |
| MRD-ROA-REFN-RF097-ZL0003-097 | ' Criticality RBI Component - Piping | Corrosion Under-Insulation inspection | | |
| MRD-ROA-REFN-RF097-ZL0003-097 | Criticality RBI Component - Cylindrical Shell | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF104-E0010-104 | Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| | Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | |
| MRD-ROA-REFN-RF104-SB0005-104 | Criticality RBI Component - Exchanger Heade | r External inspection as defined in API 5 | 4 | |
| | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover ne | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | High Conf Piping Insp for Loc Cor | | |
| | | High Confidence Insp for Exchanger Tu | | |
| | | Internal inspection as defined in API 5 | | |
| | | Internal inspection as defined in API 6 | | |
| | | INTR RBI - INT CORR INSP - HI CONF | | |

3. In the **Task Types** pane, in the row for the inspection type whose inspection interval you want to modify, type the inspection interval that you want to use in the **Interval (Months)** cell.

For example, in the preceding image, the inspection interval for the task type *External inspection as defined in API 510* is *4 months*. Suppose your new organizational policy recommends that this type of inspection be completed every *2 months*. In this case, you would type the value *2* in the **Interval (Months)** cell. A red outline has been added to the following image to highlight this task type and its associated inspection interval.

Modifying the Inspection Interval Defined for Existing Time-Based Inspection Settings

| pection->Administration->Time-Based Inspection Settings | |
|---|---|
| Manage Time-Based Inspection Setting | gs |
| Unit/Component Family Settings Equipment Settings | Task Types for 1 Selected Setting |
| Unit Component Family | Task Type Interval (Months) Description |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality PRD Component - Relief Valve | Cathodic Protection Survey as defined 2 |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Piping | Corrosion Under-Insulation inspection |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Cylindrical Shell | ENV CRACKING HIGH CONF |
| MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF |
| MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Piping | ENV CRACKING MED CONF |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF |
| MRD-ROA-REFN-RF104-5B0005-104 Criticality RBI Component - Exchanger Header | External inspection as defined in API 5 2 |
| | External inspection as defined in API 6 |
| | Generic Meridium task type to cover in |
| | Generic Meridium task type to cover n |
| | High Conf Insp For Tank Bottom |
| | High Conf Piping Insp for General Cor |
| | High Conf Piping Insp for Loc Cor |
| | High Confidence Insp for Exchanger Ti |
| | Internal inspection as defined in API 5 |
| | Internal inspection as defined in API 6: |
| | INTR RBI - INT CORR INSP - HI CONF |
| | |

4. On the **Setting Tasks** menu, click the **Save** link.

The **Saving Settings** dialog box is displayed, indicating the progress of the save operation. The dialog box closes automatically, and the associated Time Based Inspection Interval record is updated.

Deleting Time-Based Inspection Settings

The following instructions assume that you are viewing the <u>Time-Based Inspection Set</u>tings page.

To delete time-based inspection settings:

- 1. In the **Manage Time-Based Inspection Settings** workspace, select one of the following tabs, depending upon the level at which the time-based inspection setting you want to delete is defined:
 - Unit/Component Family Settings: Select this tab if you want to delete a time-based inspection setting at the Unit and/or Criticality Calculator RBI Components family level.
 - Equipment Settings: Select this tab if you want to delete a time-based inspection setting at the equipment level.

For example, in the following image, the **Unit/Component Family Settings** tab is selected in the **Manage Time-Based Inspection Settings** workspace.

| pection->Administration->Time-Based Inspection Settings | | | | |
|---|---|--|--|--|
| Manage Time-Based Inspection Settings | | | | |
| Unit/Component Family Settings Equipment Settings | Task Types for 1 Selected Setting | | | |
| Unit Component Family | Task Type Interval (Months) Description | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality PRD Component - Relief Valve | Cathodic Protection Survey as defined 2 | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Piping | Corrosion Under-Insulation inspection | | | |
| MRD-ROA-REFN-RF097-ZL0003-097 Criticality RBI Component - Cylindrical Shell | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | | |
| MRD-ROA-REFN-RF104-E0010-104 Criticality RBI Component - Piping | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF104-SB0005-104 Criticality RBI Component - Exchanger Header | External inspection as defined in API 5 4 | | | |
| | External inspection as defined in API 6 | | | |
| | Generic Meridium task type to cover in | | | |
| | Generic Meridium task type to cover n | | | |
| | High Conf Insp For Tank Bottom | | | |
| | High Conf Piping Insp for General Cor | | | |
| | High Conf Piping Insp for Loc Cor | | | |
| | High Confidence Insp for Exchanger Ti | | | |
| | Internal inspection as defined in API 5 | | | |
| | Internal inspection as defined in API 6: | | | |
| | INTR RBI - INT CORR INSP - HI CONF | | | |
| < > | 4 <u> </u> | | | |

2. In the grid on the selected tab, select the row for the record and/or family whose time-based inspection setting you want to delete. For example, in the following image, the time-based inspection setting associated with Unit *MRD-ROA-REFN-RF104-E0010-104* and the *Criticality RBI Component - Piping* family is selected in the grid on the **Unit/Component Family Settings** tab.

| Manage Ti | me-Based Inspection Settir | ngs | | | |
|-------------------------------|---|---|-------------------|-------------|--|
| nit/Component Family Settings | Equipment Settings | Task Types for 1 Selected Setting | | | |
| Unit | Component Family | Task Type | Interval (Months) | Description | |
| MRD-ROA-REFN-RF097-ZL000 | 3-097 Criticality PRD Component - Relief Valve | Cathodic Protection Survey as defined | 2 | | |
| MRD-ROA-REFN-RF097-ZL000 | 3-097 Criticality RBI Component - Piping | Corrosion Under-Insulation inspection | | | |
| MRD-ROA-REFN-RF097-ZL000 | 3-097 Criticality RBI Component - Cylindrical Shell | ENV CRACKING HIGH CONF | | | |
| MRD-ROA-REFN-RF104-E0010 | -104 Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | | |
| MRD-ROA-REFN-RF104-E0010 | -104 Criticality RBI Component - Piping | ENV CRACKING MED CONF | | | |
| MRD-ROA-REFN-RF104-SB000 | 5-104 Criticality RBI Component - Piping | ENV CRACKING VERY HIGH CONF | | | |
| MRD-ROA-REFN-RF104-SB000 | 5-104 Criticality RBI Component - Exchanger Header | External inspection as defined in API 5 | 4 | | |
| | | External inspection as defined in API 6 | | | |
| | | Generic Meridium task type to cover in | | | |
| | | Generic Meridium task type to cover n | | | |
| | | High Conf Insp For Tank Bottom | | | |
| | | High Conf Piping Insp for General Cor | | | |
| | | High Conf Piping Insp for Loc Cor | | | |
| | | High Confidence Insp for Exchanger Tu | | | |
| | | Internal inspection as defined in API 5 | | | |
| | | Internal inspection as defined in API 6 | | | |
| | | INTR RBI - INT CORR INSP - HI CONF | |] | |

3. On the Setting Tasks menu, click the Delete Setting link.

A confirmation message appears, asking if you are sure that you want to delete the selected time-based inspection setting.

4. Click the **Yes** button.

The **Time-Based Inspection Settings** page returns to focus. The associated row is removed from the grid, and the associated Time Based Inspection Setting record and its associated Time Based Inspection Interval records are deleted from the database.

| | | Task Types for 1 Selected Setting | _ | _ |
|-------------------------------|--|---|-------------------|-------------|
| t/Component Family Se Unit | ttings Equipment Settings Component Family | Task Type | Interval (Months) | Description |
| - | 7-ZL0003-097 Criticality RBI Component - Cylindrical Shell | Cathodic Protection Survey as defined | | |
| MRD-ROA-REFN-RF09 | 7-ZL0003-097 Criticality PRD Component - Relief Valve | Corrosion Under-Insulation inspection | 12 | |
| MRD-ROA-REFN-RF09 | 7-ZL0003-097 Criticality RBI Component - Piping | ENV CRACKING HIGH CONF | | |
| MRD-ROA-REFN-RF10 | 4-E0010-104 Criticality PRD Component - Rupture Disk | ENV CRACKING LOW CONF | | |
| MRD-ROA-REFN-RF10 | 4-SB0005-104 Criticality RBI Component - Piping | ENV CRACKING MED CONF | | |
| MRD-ROA-REFN-RF10 | 4-SB0005-104 Criticality RBI Component - Exchanger Header | ENV CRACKING VERY HIGH CONF | | |
| | | External inspection as defined in API 5 | | |
| | | External inspection as defined in API 6 | | |
| | | Generic Meridium task type to cover in | | |
| | | Generic Meridium task type to cover n | | |
| | | High Conf Insp For Tank Bottom | | |
| | | High Conf Piping Insp for General Cor | | |
| | | High Conf Piping Insp for Loc Cor | | |
| | | High Confidence Insp for Exchanger To | | |
| | | Internal inspection as defined in API 5 | | |

Inspection Management Workflow

After various <u>administrative tasks</u> have been completed, you are ready to start recording inspection data and making recommendations for future actions. The steps in the following table suggest one possible workflow for doing so. You are not required to follow these steps in this order, but they provide a general idea of the tasks you can accomplish using Inspection Management.

Note: If you are performing an inspection using one of the Inspection families whose captions contains the word *Checklist*, you can skip steps 2 and 3 of the following workflow.

| Step | Task | Notes |
|------|--|--|
| 1 | Identify the equipment or location that needs to be inspected, and make sure that a record exists to identify the equip- ment or location. | None |
| 2 | If you are going to inspect a piece of equipment, make sure that an admin- istrative user has created an <u>Inspection</u> <u>Profile</u> for the equipment to determine which parts of the equipment (i.e., sub- components) can be inspected and the methods that should be used to inspect them. | Typically, you will want to con- figure Inspection Profiles only for equipment and not for loc- ations. |
| 3 | If you are inspecting a piece of equip- ment, <u>define the scope of work for the</u> <u>inspection</u> . To do so, you will create an Inspection Task record and link it to the Inspection Profile records and Inspec- tion Method records that represent the parts of the equipment that should be inspected and how. Note that you are not required to define an Inspection Scope if you want to inspect <i>all</i> sub- components using <i>all</i> inspection meth- ods that are defined by the Inspection Profile for the equipment. Also, if you are inspecting a location, because you will not have created an Inspection Profile for it, you will not be able to define the scope of work. | If you do not define the Inspec- tion Scope, you can still create an Inspection Task record for the equipment or location and generate the Inspection record from the Inspection Task record. This documentation, however, explains how to define the Inspection Scope each time that you need to perform an inspec- tion. |

| Step | Task | Notes |
|------|--|--|
| 4 | <u>Create an Inspection record from the</u> <u>Task record that belongs to the inspec</u> - <u>tion scope that you defined in step 3</u> . | If the Task record is linked to a Work Pack record, you can gen- erate the Inspection record dir- ectly from the Inspection Task record while viewing the Work Pack record. |
| 5 | Inspect the equipment or location according to the details laid out in the Task record from which the Inspection record was generated. | None |

| Step | Task | Notes |
|------|--|---|
| 6 | Record your findings from the inspec- tion. | To do so, you can: Write the findings on a printed document that was generated from an inspection report in Meridium APM. If you choose this option, we recommend that you transfer the written findings to Meridium APM records (i.e., the Inspection record, Checklist Finding records, and General Finding records) so that users can retrieve information about completed inspections. -Or- Record the findings in Meridium APM records sin precords. For example, you can record general inspection information in the Inspection record, such as the type of inspection that was performed, the inspection, and reason for inspection. You can also record specific findings in General Finding records, or Checklist Finding records, or Checklist Finding records that are linked to the Inspection record. |
| 7 | Assign users to the inspection team to indicate the people who are involved with the inspection. | None |
| 8 | Create Inspection Recommendation records to capture any recommended follow-up procedures. | None |

| Step | Task | Notes |
|------|---|-------|
| 9 | Lock the Inspection record to prevent other users from modifying it. | None |
| 10 | Set the Inspection record to Pending Approval. | None |
| 11 | Review the Inspection record, any linked General Finding records, and any linked Inspection Recommendation records. | None |
| 12 | When you are satisfied with the find- ings, <u>set the Inspection record to</u> <u>Approved</u> . You can also change the Inspection Recommendation records from their current status (e.g., Created) to the appropriate status (e.g., Reviewed). | None |
| 13 | Publish the Inspection record for all users to see. | None |

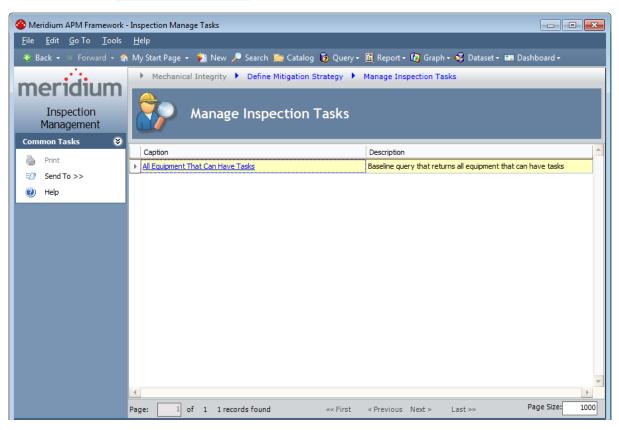
Note that these steps could be performed by the same person or by different people, depending on how you assign inspection roles and family-level permissions. This documentation does not assume that you have assigned inspection roles in any specific way. It describes only the steps that can be completed using Inspection Management. When a task must be completed by a specific user (i.e., only the Inspection Supervisor can set an Inspection record to Approved), we note the requirement.

Viewing Inspection Tasks

To view Inspection Task records:

1. On the Inspection Management Start Page, click the Manage Tasks link.

The **Inspection Manage Tasks** page appears, displaying a list of all queries and searches in the **Task Queries** folder in the Catalog.



2. Click the All Equipment That Can Have Tasks link.

The **Saved Search: All Equipment That Can Have Tasks** page appears, displaying a list of all records that can be linked to a Task record through the Has Tasks relationship.

Note: In the Meridium APM baseline database, this page displays in the page title the catalog item *caption* for the query with which it is associated. This documentation assumes that you have not modified this query caption.

| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | ; <u>H</u> elp | | | |
|---|-------------------------|---|------------------------|---------------------------|
| 🍣 Back 👻 🍥 Forward 👻 | 🏠 My Start Page 👻 🎽 New | 🔎 Search 📂 Catalog 🧓 Query - | 🛅 Report + 🕜 Graph + 🍳 | 💈 Dataset 🚽 🌇 Dashboard 🚽 |
| Inspection Management | Saved | ent Inspection Profile Searches->Save | | |
| | Action | Equipment ID | Family | Equipment Key |
| 🍓 Print | Manage Tasks | PV-1737C LUBE PRODUCT | Pressure Vessel | 2005251 |
| E Send To >> | Manage Tasks | PV-1744C LUBE HIGH TEMP | Pressure Vessel | 2005252 |
| 🕐 Help | Manage Tasks | PV-1745C LUBE LOW TEMP | Pressure Vessel | 2005253 |
| | Manage Tasks | PV-1739C PW PRODUCT | Pressure Vessel | 2005254 |
| | Manage Tasks | PV-1747 P/W SURGE DRUM | Pressure Vessel | 2005255 |
| | Manage Tasks | PV-1748C P/W H.P./H.T. | Pressure Vessel | 2005256 |
| | Manage Tasks | PV-1749C P/W HP/HT | Pressure Vessel | 2005257 |
| | Manage Tasks | PV-1750 COMP INTERSTAGE KO | Pressure Vessel | 2005258 |
| | Manage Tasks | PV-1751 COMP INTERSTAGE KO | Pressure Vessel | 2005259 |
| | Manage Tasks | PV-1741C MW PRODUCT | Pressure Vessel | 2005260 |
| | Manage Tasks | PV-1758 TEMPERED WATER EXP | Pressure Vessel | 2005261 |
| | Manage Tasks | PV-1759 ON-SITE KO DRUM | Pressure Vessel | 2005262 |
| | Manage Tasks | PV-1760 FUEL GAS KO DRUM | Pressure Vessel | 2005263 |
| | Manage Tasks | PV-1752 M/W SURGE DRUM | Pressure Vessel | 2005264 |
| | Manage Tasks | PV-1753C M/W H.P. SEPARATOR | Pressure Vessel | 2005265 |
| | Manage Tasks | PV-1754C M/W HT SEPARATOR | Pressure Vessel | 2005266 |
| | | | | |

3. In the row containing the record whose related Task records you want to view, click the **Manage Tasks** link.

The **Task List** page appears, displaying all Task records that are linked to the record that you selected on the **Manage Tasks** page.

About Creating and Modifying an Inspection Scope

Note: You do not need to define Inspection Profiles if you plan to create records only in the Inspection families whose caption contains the word *Checklist*. The <u>process</u> for recording subcomponent findings for these families does not rely on Inspection Profile or Inspection Method records.

You can create a new Inspection Scope or modify an existing Inspection Scope using the **Inspection Scope Builder**.

When you use the **Inspection Scope Builder** to <u>modify an existing Inspection Scope</u>, after you select the equipment and the existing Inspection Task record that belong to the Inspection Scope that you want to modify, you will then be directed to the **Inspection Scope** page for the selected equipment.

When you use the **Inspection Scope Builder** to <u>create a new Inspection Scope</u>, you will need to:

- Select the equipment for which you want to create a new Inspection Scope.
- Select the subcomponents (i.e., Inspection Profile records that you want to inspect.)
- Select the inspection methods that you want to use for the selected subcomponents.
- Create a new Inspection Task record that you want to include in the new Inspection Scope.

After you complete these steps, you will be directed to the **Inspection Scope** page for the selected equipment.

When you create or modify Inspection Scope, if the value that you select in the **Task Type** list on the Inspection Task datasheet corresponds with a Task Types record that is associated with <u>time-based inspection settings</u>, the value in the Desired Interval field in the Inspection Task record to which the Inspection Scope record is linked will be populated automatically with the value in the Interval field in the associated Time Based Inspection Interval record.

Note that in order for <u>time-based inspection settings defined at the Criticality Calculator</u> <u>RBI Components family level</u> to be considered by the Meridium APM system when you create or modify an Inspection Scope, the value populated in the RBI Component Family field in the associated Inspection Profile record must match the family for which the time-based inspection settings have been defined. You can select the Criticality Calculator RBI Components family with which an Inspection Profile record is associated in the **RBI Component Family** list in the **Inspection Profile** grid:

• On the Select Inspection Scope screen in the Inspection Scope Builder.

-or-

• On the Inspection Profile page.

If more than one inspection interval is defined for a particular task type, the Desired Interval field will be populated with the most conservative (i.e., lowest), non-zero inspection interval among those that have been defined. For example, suppose that you define an Inspection Scope that includes the inspection task type *CUI*, which is associated with the following Meridium APM records and families:

- The Functional Location record that represents Unit A.
- Criticality Calculator RBI Components families *Criticality RBI Component Exchanger Bundle* and *Criticality RBI Component Exchanger Header*.
- The Equipment record with the Record ID HXST 55.

Now, suppose that the time-based inspection settings listed in the following table have been created:

| Time- Based Inspection Setting | Unit | Component Family | Equipment | Task Type | Inspection Interval |
|---|--------|--|-----------|-----------|------------------------|
| 1 | N/A | Criticality RBI Com- ponent - Exchanger Bundle | N/A | CUI | 48 |
| 2 | Unit A | N/A | N/A | CUI | 36 |
| 3 | Unit A | Criticality RBI Com- ponent - Exchanger Bundle | N/A | CUI | 24 |
| 4 | Unit A | Criticality RBI Com- ponent - Exchanger Header | N/A | CUI | 10 |
| 5 | Unit A | N/A | HXST 55 | CUI | 12 |

In this case, the Desired Interval field in the associated Inspection Task record will be populated automatically with the value *10* (i.e., the most conservative inspection interval).

Note: If you do not define inspection intervals (i.e., create time-based inspection settings) for *any* inspection task types that are included in an Inspection Scope, the Desired Interval field in the associated Inspection Task record will be populated with the value zero (0), by default.

Creating a New Inspection Scope

The following instructions assume that you want to create a new Inspection Scope from the **Inspection Management Start Page**. When you do so, the **Inspection Scope Builder** is displayed.

You can also create a new Inspection Scope from the **Inspection Profile** page. When you do so, the **Inspection Scope Builder** is displayed, but the **Select Equipment** screen is bypassed. The Meridium APM system assumes that you want to define the Inspection Scope for the equipment that you are currently working with on the **Inspection Profile** page. If you are initiating the process from the **Inspection Profile** page, you can skip steps 1 through 6, and begin with step 7.

To create a new Inspection Scope:

1. On the **Inspection Management Start Page**, click the **Manage Inspection Scope** link.

The Inspection Scope Builder appears, displaying the Welcome screen.

| Inspection Scope Builder | |
|--------------------------|---|
| meridium | Welcome to the Inspection Scope Builder |
| | This builder will guide you through the process of selecting the scope for an inspection task. |
| | |
| | |
| | |
| | |
| | |
| | Don't show this page again. |
| | To continue, click Next. |
| < Bac | k Next > Finish Cancel Help |

2. Click the **Next** button.

The **Select Equipment** screen appears.

| Inspection Scope Builder | | |
|--------------------------|-------------------|-------------|
| Select Equipment | | |
| | | |
| Simple Search Advanced S | iearch | |
| Search In: | | Find Now |
| Linked To: | | Stop |
| Look For: | Match Case? | New Search |
| | Hatti Case: | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| < B | ack Next > Finish | Cancel Help |

- 3. In the **Search In** list, select the *Equipment* family. You can define additional search criteria if you want.
- 4. Click the **Find Now** button.

The search results appear, displaying all Equipment records that meet the specified search criteria.

5. In the search results, select the row containing the Equipment record that represents the equipment that needs to be inspected, and click the **Next** button.

The **Select New or Existing Task** screen appears.

| Inspection Scope Builder | | | | | |
|--------------------------|--------------|--------|--------|--------|------|
| Select New or Ex | cisting Task | | | | |
| | | | | | |
| Create a new task | | | | | |
| C Select an existing tas | k | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| I | | | | | |
| | | | | | |
| | < Back | Next > | Finish | Cancel | Help |

6. Select the **Create a new task** option, and click the **Next** button.

The **Select Inspection Scope** screen appears, displaying the **Inspection Profile** and **Inspection Methods** grids.

| | ected | Item Category | Item Description | Item ID | Sequer | nce RBI Component | RBI Component Family | - |
|------|--------------|-------------------|------------------|------------|--------|-------------------|----------------------|---------|
| | | Tube Sheet (TUBE | tube sheet-test | TUBE SHEET | | | | |
| | | Tubes (TUBES) | tubes-test | TUBES | | | | |
| | | Valves (VALVES) | valves-test | VALVES | | | | |
| | | All (ALL) | all-test | ALL | | | | |
| | | Bundle (BUNDLE) | bundle-test | BUNDLE | | | | |
| | | Head (HEAD) | head-test | HEAD | | | | |
| | | Couplings (COUPL | couplings-test | COUPLINGS | | | | |
| | | Insulation (INSUL | insulation-test | INSULATION | | | | |
| | | EXTERNALS (EXTE | externals-test | EXTERNALS | | | | |
| 44 | | Nozzles (NOZZLES) | nozzles-test | NOZZLES | | | | • |
| - | tion Methods | Category | ĺ | ID | 1 | Description | RBI Degradation Me | rhanism |
| Joer | ected | Category | ļ | 10 | | Description | KDI Degradadon Me | chanism |
| | | | | | | | | |

In the **Inspection Profile** grid, the cells in the **Selected** column are disabled for Inspection Profile records that are linked to one or more Inspection Method records. In this image, the cells in **Selected** column are disabled to indicate that Inspection Method records are linked to the Inspection Profile records with the Item ID *BUNDLE* and *COUPLINGS*.

- 7. In the **Inspection Profile** grid, make the selections that you want, according to the following guidelines:
 - For Inspection Profile records that are *not* linked to Inspection Method records, select the check boxes in the **Selected** column in the rows containing the Inspection Profile records that you want to include in the Inspection Scope.
 - For Inspection Profile records that *are* linked to at least one Inspection Method record, select the check boxes in the **Selected** column in the rows containing the Inspection Profile records that you want to include in the Inspection Scope.

The Inspection Method records that are linked to the selected Inspection Profile records appear in the **Inspection Method** section.

| | Selected | Item Cat | tegory | Item Description | Item ID | Seque | ence | RBI Component | RBI Compo | nent Family | - |
|-----|------------------|------------|--------------|------------------|------------|-------|---------|---------------|-----------|-----------------|------|
| | | Tube She | et (TUBE | tube sheet-test | TUBE SHEET | | | | | | |
| | | Tubes (T | UBES) | tubes-test | TUBES | | | | | | |
| | | Valves (V | ALVES) | valves-test | VALVES | | | | | | - |
| | | All (ALL) | | all-test | ALL | | | | | | |
| Þ | | Bundle (B | BUNDLE) | bundle-test | BUNDLE | | | | | | |
| | | Head (HE | EAD) | head-test | HEAD | | | | | | _ |
| | | Coupling | s (COUPL | couplings-test | COUPLINGS | | | | | | |
| | | Insulation | n (INSUL | insulation-test | INSULATION | | | | | | |
| | | EXTERNA | ALS (EXTE | externals-test | EXTERNALS | | | | | | |
| 144 | | | NOZZLES) | nozzles-test | NOZZLES | | | | | | |
| | | 14 | | | | | | | | | r |
| Ins | spection Methods | | 1 | | | | 1 | | 1 | | |
| | Selected | | Category | | ID | | Descrip | otion | RBI De | gradation Mecha | nism |
| ► | | | - | Current Field Me | | | | | | | |
| | | | | ning Thickness T | VI | | | | | | |
| | | | Visual Inspe | ction (VI) | VI | | | | | | |

- 8. In the **Inspection Method** grid, select the check boxes in the **Selected** column in the rows containing the Inspection Method records that you want to include in the Inspection Scope.
- 9. Repeat steps 8 and 9 to select all of the Inspection Profile records and Inspection Method records that you want to include in the Inspection Scope.
- 10. Click the **Next** button.

The **Create a New Task** screen appears, displaying the Inspection Task datasheet.

| reate a New Task | | | |
|---------------------------|-------------------------|---------|----------|
| Datasheet Inspection Task | 🔽 🔞 🚽 🔡 🗙 🛍 🍐 (| | |
| Details | | | |
| [| Value(s) | UOM | ^ |
| Task Type | | | |
| Task ID | | | |
| Task Description | | <u></u> | |
| Task Details | | | |
| Last Date | 4/3/2012 12:00:00 AM | | |
| Override Interval | | | |
| Desired Interval | 0 | Months | = |
| Desired Interval Basis | | | |
| Next Date | 4/3/2012 12:00:00 AM | | |
| Next Date Basis | | | |
| Coverage | 0 | | |
| Task Assigned To | | | |
| Reoccurring | | | |
| Modifiable | | | |
| Rejectable | | | |
| Unconstrain Min/Max Dates | | | |
| Min Interval | 0 | Months | |
| Min Date | 1/1/0001 12:00:00 AM | | - |
| | | | |

11. Complete the available fields.

Note: If you select in the **Task Types** list an inspection task type that is associated with a time-based inspection setting (i.e., a Time Based Inspection Interval record exists whose Task Type value matches the Task Type value in the Inspection Task record), values are populated automatically in the Desired Interval and Desired Interval Basis fields in the Inspection Task record.

12. Click the **Finish** button.

The **Inspection Scope** page appears, displaying the datasheet that was viewed when the Inspection Task record was last accessed and the Inspection Profile and Inspection Method records that you selected in the **Inspection Scope Builder**. You can modify any of the available fields.

Modifying an Existing Inspection Scope

When you modify an existing Inspection Scope, you can change:

- Which Inspection Profile records are included in the Inspection Scope.
- Which Inspection Method records are included in the Inspection Scope.

You cannot, however, change which Equipment record or Task record is included in the Inspection Scope.

If you choose to create a new Task record when defining an Inspection Scope, doing so will create a new Inspection Scope.

The following instructions assume that you want to modify an existing Inspection Scope from the **Inspection Management Start Page**. When you do so, the **Inspection Scope Builder** is displayed, where you can select the existing Equipment record and Task record that belongs to the existing Inspection Scope that you want to modify.

You can also view an existing Inspection Scope from the **Inspection Profile** page. When you do so, the **Inspection Scope Builder** is displayed, but the **Select Equipment** screen is bypassed. The Meridium APM system assumes that you want to view the Inspection Scope for the equipment that you are currently working with on the **Inspection Profile** page. If you are initiating the process from the **Inspection Profile** page, you can skip steps 1 through 6, and begin with step 7.

To modify an existing Inspection Scope:

1. On the **Inspection Management Start Page**, click the **Manage Inspection Scope** link.

The **Inspection Scope Builder** appears, displaying the Welcome screen.

| Inspection Scope Builder | |
|--------------------------|---|
| meridium | Welcome to the Inspection Scope Builder |
| | This builder will guide you through the process of selecting the scope for an inspection task. |
| | |
| | |
| | |
| | |
| | ☐ Don't show this page again. To continue, click Next. |
| < Bac | k Next > Finish Cancel Help |

2. Click the **Next** button.

The **Select Equipment** screen appears.

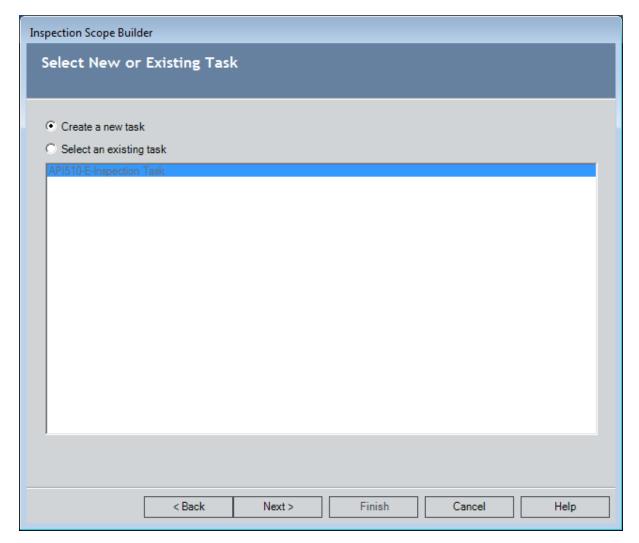
| Inspection Scope Builder | | |
|---------------------------------|-------------------|-------------|
| Select Equipment | | |
| | | |
| Simple Search Advanced Search | | |
| Search In: | • | Find Now |
| Linked To: | | Stop |
| Look For: | Match Case? | New Search |
| | Matur Case: | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| < B | ack Next > Finish | Cancel Help |

- 3. In the **Search In** list, select the *Equipment* family.
- 4. If desired, define additional criteria.
- 5. Click the **Find Now** button.

The search results appear, displaying all Equipment records that meet the specified search criteria.

6. In the search results, select the row containing the Equipment record that is part of the Inspection Scope that you want to modify, and click the **Next** button.

The Select New or Existing Task screen appears.



- 7. Select the **Select an existing task** option, and select the Task record that belongs to the Inspection Scope that you want to modify.
- 8. Click the **Finish** button.

The **Inspection Scope**page appears, displaying the datasheet that was viewed when the Task record was last accessed and the **Inspection Profile** and **Inspection Methods** grids. You can modify the Inspection Scope by including or excluding the desired Inspection Profile and Inspection Method records.

Aspects of the Inspection Scope Page

You can access the **Inspection Scope - <Equipment Record ID>** page, where **<Equipment Record ID>** is the Record ID of the Equipment record that is linked to the Inspection Task record that appears on the page, by <u>creating a new Inspection Scope</u> or <u>viewing an existing Inspection Scope</u>. Throughout the Inspection Management documentation, this page is referred to as the *Inspection Scope* page.

The Inspection Scope page contains the following items:

- Inspection Scope for <Equipment Record ID>: A label that displays the Record ID of the Equipment record that is linked to the Inspection Task record that appears on the page.
- **Reference Documents link:** A link that displays the **Reference Documents** dialog box, where you can manage the Reference Document records that are linked to the Equipment record.
- Task Record ID: A label that displays the Record ID of the Task record that is displayed on the page.
- **Task datasheet:** The section that displays the datasheet for the Inspection Task record that belongs to the Inspection Scope.
- **Inspection Profile section:** The section that displays a grid containing the Inspection Profile records that are linked to the Equipment record.
- **Inspection Methods section:** The section that displays a grid containing the Inspection Method records that are linked to the Inspection Profile record that is selected in the **Inspection Profile** section.
- Task menus: Menus that provide specific functionality. The following menus are available: Common Tasks menu and Associated Pages menu.

Inspection Profile Section

The **Inspection Profile** section on the <u>Inspection Scope page</u> contains a grid, which contains a row for each Inspection Profile record that is linked to the Equipment record identified by the **Inspection Scope for <Equipment Record ID>** label that appears below the Site Map.

The following columns of information are displayed in the **Inspection Profile** section:

- Selected: Contains a check box, which you can select to indicate that the Inspection Profile record is included in the Inspection Scope. Note, however, that if the Inspection Profile record is linked to one or more Inspection Method records, you can select only the Selected check box for the individual Inspection Method records. The Selected check box for the Inspection Profile record will be selected automatically when one or more Inspection Method records are selected.
- **Item Description:** Displays the value in the Item Description field in the Inspection Profile record.
- **Item Category:** Displays the value in the Item Category field in the Inspection Profile record.
- Item ID: Displays the value in the Item ID field in the Inspection Profile record.
- **Sequence:** Displays the value in the Sequence field in the Inspection Profile record.
- **RBI Component:** Displays the value in the RBI Component field in the Inspection Profile record.
- **RBI Component Family:** Displays the value in the RBI Component Family field in the Inspection Profile record.

Below the grid are buttons that you can use to navigate between the rows in the grid.

Inspection Methods Section

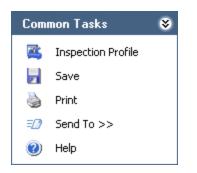
The **Inspection Methods** section on the <u>Inspection Scope page</u> contains a grid, which contains a row for each Inspection Method record that is linked to the Inspection Profile record that is selected in the <u>Inspection Profile section</u>.

The following columns of information are displayed in the **Inspection Methods** section:

- **Selected:** Contains a check box, which you can select to indicate that the Inspection Method record is included in the Inspection Scope.
- **Category:** Displays the value in the Category field in the Inspection Method record.
- **ID:** Displays the value in the ID field in the Inspection Method record.
- **Description:** Displays the value in the Description field in the Inspection Method record.
- **RBI Degradation Mechanism:** Displays the value in the RBI Degradation Mechanism field in the Inspection Method record.

Below the grid are buttons that you can use to navigate between the rows in the grid.

Common Tasks



The **Common Tasks** menu on the **Inspection Scope** page contains the following links:

- **Inspection Profile:** Displays the **Inspection Profile** page, which displays Inspection Profile records that are linked to the Equipment record that is displayed on the **Inspection Scope** page.
- Save: Saves any changes that you have made in either the Inspection Profile section or the Inspection Methods section.
- **Print:** Displays the **Preview** window, which shows you a preview of the **Inspection Scope** page as it will appear on the printed page.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Scope page.

Associated Pages

The **Associated Pages** menu on the **Inspection Scope Page** displays Associated Pages that are configured for the family of the record that is linked to the Inspection Task record that appears on the page.

Adding an Inspection Profile Record to an Inspection Scope

You can add Inspection Profile records to an Inspection Scope in one of two ways:

- If the Inspection Profile record is not linked to any Inspection Method records, you can add the Inspection Profile record directly.
- If the Inspection Profile record is linked to one or more Inspection Method records, you must add the Inspection Method records, which will add the corresponding Inspection Profile record automatically.

The following instructions explain how to add an Inspection Profile record directly.

To add an Inspection Profile record to an Inspection Scope:

- 1. Access the **Inspection Scope** page by <u>viewing an existing Inspection Scope</u> or by <u>creating a new Inspection Scope</u>.
- 2. In the **Inspection Profile** section, in the row containing the Inspection Profile record that you want to add to the Inspection Scope, select the **Selected** check box.
- 3. On the **Common Tasks** menu, click the **Save** link.

The Inspection Profile record is added to the Inspection Scope.

Adding an Inspection Method Record to an Inspection Scope

The following instructions explain how to add an Inspection Method record to an Inspection Scope. Note that if an Inspection Method record is linked to an Inspection Profile record, adding the Inspection Method record to the Inspection Scope will add the corresponding Inspection Profile record automatically.

To add an Inspection Method record to an inspection scope:

- 1. Access the **Inspection Scope** page by <u>viewing an existing Inspection Scope</u> or by <u>creating a new Inspection Scope</u>.
- 2. In the **Inspection Methods** section, in the row containing the Inspection Method record that you want to add to the Inspection Scope, select the **Selected** check box.
- 3. On the **Common Tasks** menu, click the **Save** link.

The Inspection Method record and the Inspection Profile record to which it is linked are added to the Inspection Scope.

Removing an Inspection Profile or Inspection Method Record from an Inspection Scope

To remove an Inspection Profile or Inspection Method record from an Inspection Scope:

- 1. Access the **Inspection Scope** page by <u>viewing an existing Inspection Scope</u> or by <u>creating a new Inspection Scope</u>.
- 2. If you want to remove an Inspection Profile record from the Inspection Scope, in the **Inspection Profile** section, in the row containing the Inspection Profile record that you want to remove, clear the **Selected** check box. Note that if the Inspection Profile record is linked to one or more Inspection Method records, you will need to remove all Inspection Method records to which it is linked in order to remove the Inspection Profile record completely.
- 3. If you want to remove an Inspection Method record, in the **Inspection Methods** section, in the row containing the Inspection Method record that you want to remove from the Inspection Scope, clear the **Selected** check box.
- 4. On the **Common Tasks** menu, click the **Save** link.

The Inspection Profile records and Inspection Method records are removed from the Inspection Scope.

Creating Inspection Records

To create an Inspection record:

1. On the <u>Inspection Management Start Page</u>, click the **Build an Inspection Docu**ment link.

The **Event Builder** appears, displaying the **Welcome** screen.

2. Click the **Next** button.

The **Equipment Selection** screen appears.

3. In the **Search In** list, select the family that represents the item that you inspected (i.e., *Equipment* or *Functional Location*), and click the **Find Now** button.

The results of the search are displayed.

4. Select the row containing the equipment or location that you inspected, and click the **Next** button.

The Event Selection screen appears.

- 5. In the **Event Families** list, select the family representing the type of inspection that you performed.
- 6. Click the **Next** button.

The Task(s) Selection screen appears.

Since the <u>Inspection Management workflow</u> assumes that you performed an inspection because a Task record(s) indicated that the inspection was due, this screen will list the Task record to which your inspection responded.

7. Select the **Existing** option.

(i) **Hint:** If your list of existing tasks is long enough such that you cannot easily locate the desired record, you can click the **Filter Tasks** link to perform an Advanced Search or open an existing search to locate the desired task(s). In the search results, you can select the record(s) that you want to appear in the list of existing tasks and then click the **Open** button. When you do so, the existing tasks list will include only the record(s) that you selected. If you no longer want to view the limited list of tasks, you can click the **Remove Filter** link to view the complete list.

- 8. Select the check box next to the Task record(s) to which you responded.
- 9. Click the **Next** button.

The **Event Datasheet** screen appears, displaying the Inspection datasheet.

- 10. <u>Complete the fields as desired</u>.
- 11. Click the **Finish** button.

If you created an Inspection record in a family whose caption contains the word *Checklist* (e.g., API 510 External Checklist), the Inspection record appears on the **Inspection Finding Checklist** page. In addition, Checklist Finding records are created automatically and linked to the Inspection record. Each Checklist Finding record is displayed as a <u>separate row</u> in the **Inspection Finding Checklist** work-space.

-or-

If you created an Inspection record in a family whose caption does *not* contain the word *Checklist* (i.e., Bundle Inspection), the Inspection record appears in the Record Manager. Also, if the Event Configuration for the current Inspection family is configured to display General Finding or Observation records, in the tree, you will see a General Finding or Observation record for each subcomponent of the piece of equipment that you selected.

Either way, if a configured explorer has been configured for the Inspection family, you will see the configured explorer.

Aspects of the Inspection Finding Checklist Page

The **Inspection Finding Checklist** page appears when you select in the **Event Builder** one of the Inspection families whose caption contains the word *Checklist* (e.g., API 510 External Checklist).

| S Meridium APM Framework - Inspection Finding Checklist | | | | | | | |
|---|--|---|---|---|--|--|--|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | Help | | | | | | |
| 🍣 Back 👻 🏵 Forward 👻 🗌 | 🛛 My Start Page 👻 🎽 New 🔑 Search 🚞 | Catalog 👩 Query - 🛅 Report - 🔞 G | raph 🗝 🥰 Dataset 👻 💷 Dashboard 🕶 | | | | |
| | API 510 External Cheddist Inspection Do X □- • INSP-15 (API 510 External Cheddist) · • Asset Corrosion Analysis · • • Bundle Sub-Inspection | Undefined Unit Undefined S Mechanical Integrity Execut Inspection Finding Checklist | ystem AQA Test TML Plot Strategy Create Inspection Docur | ment 🔺 | | | |
| Management | General Finding | Inspection is open | | | | | |
| Common Tasks 🛛 😽 | Inspection Team Member | Save & Close Inspection | | | | | |
| 💫 New | Pressure Test Sub-Inspection Reference Document | Completion Date: 4/2/2013 | Inspection Report Owner: testInspector, testInspector testInsp | Type of Inspection: EXCHANGER BUNDLE/TUBE INSPECT. | | | |
| ave Save | | Asset ID: | Reviewers Name: | Extent: | | | |
| Save and New | | ~ ~ AQA Test TML Plot | Herndon, Super Secured ajh 🗸 | 100% Visual tube sheet/EC,IRIS 25% 👻 | | | |
| 🗙 Delete | | Degradation Mechanism: | Tasks Addressed: | Actual Work Time (Hours): | | | |
| Documents | | Erosion • | QA INSP TASK | 5 | | | |
| Send To >> | | Generate Represented Inspections | | | | | |
| 🕐 Help | | General | Value Finding Sumn | nary | | | |
| Associated Pages 🛛 😣 | | Corrosion | N/A 🔻 🛃 | | | | |
| | | Distortion | N/A 🔹 🛃 | | | | |
| | | Weld Defect | N/A 🔹 🛃 | | | | |
| | | Other | N/A 🔻 🛃 | | | | |
| | | Insulation | N/A 🔹 🛃 | | | | |
| | | Leaks | N/A 🔹 🚺 | | | | |
| | | Vibration | N/A • 🛃 | | | | |
| | | Ladder/Stairway | N/A - 1 | | | | |
| | | Platform | N/A v | | | | |
| | | Guy Wires | N/A v | | | | |
| | | | | | | | |
| | | Electrical Ground | N/A • 📸 | | | | |
| | | Coating/Painting | N/A 🔹 🎦 | | | | |

The Inspection Finding Checklist page contains the following items:

• **Record hierarchy:** Contains nodes representing the Inspection record and the successor records to which it is linked. The record hierarchy contents are controlled by the configured explorer that is defined for the root Inspection family. The pane is labeled according to the configured explorer that is driving the contents of the pane.

Note: If you select a node other than the root Inspection node, the datasheet for the corresponding record will be displayed in place of the **Inspection Finding Checklist** workspace.

- Inspection Finding Checklist workspace: Contains the following items:
 - A gray <u>header area</u> that displays fields in the Inspection record.
 - Various sections containing rows where you can record findings for subcomponents of the piece of equipment that you inspected. Each row

represents a <u>Checklist Finding record</u>. Throughout this documentation, these sections are referred to as *finding sections*.

- Task menu pane: Contains the following task menus:
 - Common Tasks
 - Associated Pages

Header Area

The items in the header area in the **Inspection Finding Checklist** workspace on the **Inspection Finding Checklist** page will vary based upon the type of Inspection record for which you access the page (i.e., the record that is represented by the root node in the tree). Certain items will appear for *every* Inspection record type that you can view on the **Inspection Finding Checklist** page. Additional items will be displayed for:

- PRD Pop Test Checklist records.
- Checklists records that do *not* belong to the PRD Pop Test Checklist or External PRD Checklist subfamily.

The following items will appear for *any* Inspection record that you can open on the **Inspection Finding Checklist** page:

- Actual Work Time (Hours) text box
- Asset ID text box
- Completion Date text box
- Degradation Mechanism list
- Extent list
- Inspection Report Owner list
- Reviewers Name list
- Save & Close Inspection/Reopen Inspection button
- Tasks Addressed list
- Type of Inspection list

The following additional items will appear *only* when you are viewing a PRD Pop Test Checklist record on the **Inspection Finding Checklist** page:

- As Found Pop Pressure (Pounds/Sq Inch Gage) text box
- As Left Pop Pressure (Pounds/Sq Inch Gage) text box
- Design Set Pressure (Pounds/Sq Inch Gage) text box
- Leak Category list
- Leak Test Results list
- Over Pressure Test Results list

The following image shows an example of what the header area in the **Inspection Finding Checklist** workspace will look like when you open a PRD Pop Test Checklist record on the **Inspection Finding Checklist** page.

| Inspection Finding Checklist | | |
|--|--|---|
| Inspection is open Save & Close Inspection | | |
| Completion Date: | Inspection Report Owner: | Type of Inspection: |
| 7/15/2013 | testInspSuper, testInspSuper testInspSuper - | Pop Test w/Visual Inspection 🔹 |
| Asset ID: | Reviewers Name: | Extent: |
| ~ ~ AQA Test TML Plot | testInspSuper, testInspSuper testInspSuper - | As received Pop test w/Visual inspection |
| Degradation Mechanism: | Tasks Addressed: | Actual Work Time (Hours): |
| Leak | QA INSP TASK | 4 |
| Over Pressure Test Results: | Leak Test Results: | Leak Category: |
| Fail | Leak | Minor |
| Design Set Pressure (Pounds/Sq Inch Gage): | As Found Pop Pressure (Pounds/Sq Inch Gage): | As Left Pop Pressure (Pounds/Sq Inch Gage): |
| 25 | 26 | 24 |

When you open any Inspection record *except* an External PRD Checklist *or* PRD Pop Test Checklist record on the **Inspection Finding Checklist** page, the header area will contain the **Generate Represented Inspections** check box in addition to the items that appear for *all* Inspection records that you can open on this page. The following image shows an example of what the header area in the **Inspection Finding Checklist** workspace will look like in this case.

| Inspection Finding Checklist | | |
|----------------------------------|---------------------------------------|--|
| Inspection is open | | |
| Save & Close Inspection | | |
| Completion Date: | Inspection Report Owner: | Type of Inspection: |
| 5/1/2013 | Herndon, Super Secured ajh 🗸 | Internal Visual Inspection |
| Asset ID: | Reviewers Name: | Extent: |
| ~ NO.1 STEAM REHEATER ~ HXST 152 | Herndon, Super Secured ajh 🗸 | 100% Visual Coverage of internal surface 🔹 |
| Degradation Mechanism: | Tasks Addressed: | Actual Work Time (Hours): |
| Brittle Fracture 🗸 | · · · · · · · · · · · · · · · · · · · | 5 |
| Generate Represented Inspections | | |

The items that are displayed on the **Inspection Finding Checklist** page are associated with <u>fields that are defined for the family of the Inspection record</u> that is represented by the root node in the tree.

The Meridium APM system is hard-coded to display *only* these fields in the header area. If you add fields to the Inspection family of the root Inspection record, those fields will not appear in the header area. In addition, the header area displays the *field* captions, not the datasheet captions.

About Finding Sections

On the **Inspection Finding Checklist** page, the finding sections appear below the gray <u>header area</u>. Each finding section contains rows representing individual Checklist Finding records. In the following image, the **General** finding section is outlined in red.

| I | nspection Finding Checklist | | | | | | | * |
|---|-------------------------------------|-------|----------|----------|---------------------------------|---|---|---|
| | Inspection is open | | | | | | | |
| | Save & Close Inspection | | | | | | | |
| | Completion Date: | | Inspecti | on Repo | rt Owner: | Type of Inspection: | | |
| l | 3/15/2013 | 15 | Herndo | n, Supe | r Secured ajh 🗸 | INTERNAL VISUAL INSPECTION | • | |
| 1 | Asset ID: | | Reviewe | | | Extent: | | |
| L | ~ ~ Z_PLA Causing Asset 5 Equipment | ID | testInsp | pSuper, | testInspSuper testInspSuper 🔹 | 25% Visual Coverage of internal surface | • | |
| 1 | Degradation Mechanism: | | Tasks A | ddressed | d: | Actual Work Time (Hours): | | |
| l | Creep | • | | | • | 4 | | Ε |
| [| Generate Represented Inspections | | | | | | | |
| | General | Value | | | Finding Summary | | | |
| | Corrosion | N/A | • | 1 | | | | |
| | Distortion | N/A | • | 1 | | | | |
| | Weld Defect | N/A | • | 1 | | | | |
| | Other | N/A | • | 1 | | | | |
| | Insulation | N/A | • | 1 | | | | |
| | Leaks | N/A | • | 1 | | | | |
| | Vibration | N/A | • | 1 | | | | |
| | Ladder/Stairway | N/A | • | 1 | | | | |
| | Platform | N/A | • | 1 | | | | |
| | Guy Wires | N/A | • | 1 | | | | |
| | Electrical Ground | N/A | • | 1 | | | | |
| | Coating/Painting | N/A | • | 1 | | | | |
| | Exp Joint or Bellows | N/A | • | 1 | | | | |
| | Gauge/Sight Glass | N/A | • | 1 | | | | |
| | Connections | Value | | | Finding Summary | | | |
| | Other | N/A | • | 1 | | | | |
| | Small Branches | N/A | • | 1 | | | | Ŧ |

In each finding section, the rows are labeled according to the subcomponents that belong to the equipment or location that you inspected. The <u>sections and rows that are</u> <u>displayed for an Inspection record</u> are based on System Code Tables and referenced System Codes that are configured for each Checklists family in the Meridium APM baseline database. This concept is best understood through an <u>example</u>.

To the right of each row label, you will see the following columns:

• Value: Contains a list from which you can select the finding value for that subcomponent. In the baseline database, each list contains the following values: *Yes*, *No*, *N/A*. The content of the list is controlled by the System Codes that belong to the System Code Table MI_CHECKLIST_FINDING_TYPES. In other words, each value in the list is the description of a separate System Code belonging to this System Code Table. The list is populated automatically with the description of the *default* System Code. If no System Codes are set as the default System Code, the list is empty by default.

Note: The label of this column (*Value* in the baseline database) is the field caption of the field with the ID MI_FIND_CHECK_VALUE_C, which belongs to the Checklist Finding family.

• Finding Summary: Contains a text box where you can type additional comments about your findings for that subcomponent. To the left of each Finding Summary text box, you will see the subtron, which you can click to create a new Inspec-

tion Recommendation record, which will be linked to the Inspection record automatically. Several values will be <u>mapped automatically to the Inspection</u> <u>Recommendation record</u>.

Note: The label of this column (*Finding Summary* in the baseline database) is the field caption of the field with the ID MI_FIND_001_SUMMARY_T, which belongs to the Finding family.

How are the Sections and Rows Created on the Inspection Checklist Page?

The <u>sections and rows on the **Inspection Finding Checklist** page</u> are built from System Code Tables and referenced System Codes. Consider an example using an *API 653 External Checklist Finding* record.

The baseline Meridium APM database contains the following corresponding System Code Table:

- **ID:** MI_API_653_EXTERNAL_CHECKLIST_FINDING_SECTIONS
- Description: API 653 External Checklist Finding Section

This System Code Table contains the following System Codes:

- General
- Connections
- Supports

The following image illustrates this System Code Table and its System Codes.

| Table Properties | | | | | |
|---------------------------------|-----------------------------------|--------------------|-----------|----------|-------------|
| | | | | | |
| ID MI_API_653_EXTERNAL | | LIST_FINDING_SECTI | ONS | | |
| | | | | | |
| Description | API 653 External Checklist Findir | ng Section | | | ۱ |
| Display Format | | | | | |
| Code Only | | | | | |
| Description | Only | | | | |
| Code and D | escription | | Save | Audit 1 | Information |
| | | | | | |
| System Code(s) | for Table MI_API_653_EXTE | RNAL_CHECKLIST_ | _FINDING_ | SECTIONS | (API 653 |
| | | | | | |
| ID | Description | Def | Active | Seq | |
| GENERAL | General | No | Yes | 1 | |
| CONNECTIONS | Connections | No | Yes | 2 | |
| SUPPORTS | Supports | No | Yes | 3 | |

Each of the System Codes that belongs to this System Code Table contains referenced System Codes. For example, the System Code *Supports* contains the following referenced System Codes:

How are the Sections and Rows Created on the Inspection Checklist Page?

- Anchor Bolts
- Dike/Retaining Wall
- Foundation
- Other

The following image illustrates this System Code and its referenced System Codes.

| Table Properties | | | | | | | |
|---------------------------------|------------------------------|------------------------|-----------|-----|--------|-------|-------------|
| ID | NT 401 650 | | | | 2010 | | |
| 10 | ID MI_API_653_EXTERNAL_CHECK | | | | DNS | | |
| Description | API 653 Exte | ernal Checklist Findin | a Section | | | | |
| | | | | | | | 3 |
| Display Format | | | | | | | |
| Code Only | | | | | | | |
| Description | Only | | | | | | |
| | | | | | | | |
| Code and D | escription | | | | Save | Audit | Information |
| | | | | | | | |
| System Code Inf | ormation fo | or SUPPORTS (Su | pports) | | | | |
| | | | | | | | |
| ID | | Description | | Def | Active | Seq | |
| SUPPORTS | | Supports | | No | Yes | 3 | |
| | | | | | | | |
| Referenced Syst | em Code(s) | for SUPPORTS (| Supports | ;) | | | |
| | | | | | | | |
| ID | | Description | | | | | |
| ANCHOR BOLTS | | Anchor Bolts | | | | | |
| DIKE/RETAINING | | Dike/Retaining Wall | | | | | |
| FOUNDATION | | Foundation | | | | | |
| OTHER | | Other | | | | | |
| | | | | | | | |
| | | | | | | | |

Together, the System Code Tables, System Codes, and referenced System Codes determine which <u>sections and rows you will see on the **Inspection Finding Checklist** page</u>. Using this example:

- Each System Code belonging to the System Code Table MI_API_653_EXTERNAL_ CHECKLIST_FINDING_SECTIONS becomes a *finding section* on the **Inspection Finding Checklist** page.
- In each finding section, each referenced System Code becomes a *separate row* (representing a Checklist Finding record).

You can see in the image below that the System Code *Supports* corresponds to a section, and the referenced System Code *Anchor Bolts* corresponds to a row in the **Supports** section.

| Supports | Value |
|---------------------|-------|
| Other | N/A 🔹 |
| Foundation | N/A 🔹 |
| Anchor Bolts | N/A 🔹 |
| Dike/Retaining Wall | N/A 🔹 |

Note: The sequence value of the System Codes determines the order in which the corresponding sections appear on the **Inspection Checklist** Finding page. In addition, only *active* System Codes are displayed on the page.

About Baseline Sections and Rows

When you open on the **Inspection Finding Checklist** page an Inspection record whose caption includes the word *Checklist*, the finding sections and rows displayed in the **Inspection Finding Checklist** workspace represent subcomponents belonging to the item that you are inspecting. Since the subcomponents that you will need to inspect will differ based upon the type of inspection you are performing, the items that appear in the **Inspection Finding Checklist** workspace will differ based upon the Inspection subfamily to which the record you are viewing belongs. In this section of the documentation, you will find lists of the items that appear by default for each of the following baseline Inspection families:

- API 510 External Checklist
- API 510 Internal Checklist
- <u>API 510 Internal Exchanger Checklist</u>
- API 570 External Checklist
- API 653 External Checklist
- API 653 Internal Checklist
- External PRD Checklist
- PRD Pop Test Checklist

Each of these families is hard-coded to use a particular <u>System Code Table</u> to create the finding sections and rows that appear on the **Inspection Finding Checklist** page. If you create custom Checklists subfamilies, however, you must add the Checklist System Code Table ID field (i.e., a field in the Checklists family) to the custom family, type in this field the System Code Table ID for the System Code Table that stores the finding items that are associated with the family, and modify the family rules so that the code can identify the System Code Table that will be used to build the finding sections and rows when you open a record belonging to the custom Checklists family.

Because this documentation assumes that you follow the Meridium APM Best Practice (i.e., you use the entity and relationship families that are delivered to the baseline Meridium APM database), no further details are provided for using the Checklist System Code Table ID field or creating custom Checklists subfamilies.

API 510 External Checklist

When you open on the **Inspection Finding Checklist** page an *API 510 External Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| General | Value | Finding Summary | |
|----------------------|-------|-----------------|--|
| Corrosion | N/A 🔻 | | |
| Distortion | N/A 🔻 | | |
| Weld Defect | N/A 🔹 | 1 | |
| Other | N/A 🔹 | 1 | |
| Insulation | N/A 🔹 | 1 | |
| Leaks | N/A 🔻 | 1 | |
| Vibration | N/A 🔹 | 1 | |
| Ladder/Stairway | N/A 🔹 | 1 | |
| Platform | N/A 🔹 | 1 | |
| Guy Wires | N/A 🔹 | 1 | |
| Electrical Ground | N/A 🔻 | | |
| Coating/Painting | N/A 🔻 | | |
| Exp Joint or Bellows | N/A 🔻 | | |
| Gauge/Sight Glass | N/A 🔻 | | |
| Connections | Value | Finding Summary | |
| Other | N/A 🔻 | | |
| Small Branches | N/A 🔻 | | |
| Nozzles | N/A 🔹 | | |
| Manways | N/A 🔻 | ٠ | |

The following list provides the name of each *section* (e.g., Connections) and its corresponding *rows* (e.g., Bolting) that appear by default when you access the **Inspection Finding Checklist** page for an API 510 External Checklist record:

- Connections
 - Bolting
 - Flanges
 - Leak Clamps
 - Manways
 - Nozzles
 - Other
 - Reinforcing Pads
 - Small Branches

- General
 - Coating/Painting
 - Corrosion
 - Distortion
 - Electrical Groud
 - Exp Joint or Bellows
 - Gauge/Sight Glass
 - Guy Wires
 - Insulation
 - Ladder/Stairway
 - Leaks
 - Other
 - Platform
 - Vibration
 - Weld Defect
- Relief Devices
 - Leaks
 - Manual Operation Lever
 - Other
 - Restricted Inlet/Outlet
- Supports
 - Anchor Bolts
 - Davit
 - Fireproofing
 - Foundation
 - Other
 - Saddle/Skirt

Each *section* corresponds with a System Code in the System Code Table MI_API_510_ EXTERNAL_CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_API_510_EXTERNAL_CHECKLIST_FINDING_SECTIONS.

API 510 Internal Checklist

When you open on the **Inspection Finding Checklist** page an *API 510 Internal Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| Shell | Value | Finding Summary |
|------------------|-------|---|
| Corrosion | N/A 🔻 | • |
| Erosion | N/A 🔻 | • |
| Distortion | N/A • | • |
| Surface Deposits | N/A • | • |
| Surface Cracking | N/A • | • |
| Blistering | N/A • | • |
| Weld Defect | N/A • | • |
| Other | N/A • | • |
| Head | Value | Finding Summary |
| Corrosion | N/A • | • |
| Erosion | N/A • | • |
| Distortion | N/A • | • |
| Surface Deposits | N/A • | • |
| Surface Cracking | N/A 🔹 | • |
| Blistering | N/A • | • |
| Weld Defect | N/A • | • |
| Other | N/A • | •• |
| Nozzles | Value | Finding Summary |
| Corrosion | N/A 👻 | 1 · · · · · · · · · · · · · · · · · · · |
| | | |

The following list provides the name of each *section* (e.g., Head) and its corresponding *rows* (e.g., Blistering) that appear by default when you access the **Inspection Finding Checklist** page for an API 510 Internal Checklist record:

- Head
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Other
 - Surface Cracking
 - Surface Deposits
 - Weld Defect

- Internals
 - Attachment Welds Cracked
 - Baffle/Weir Corrosion
 - Distributor Damaged
 - Distributor Fouling
 - Impingement Plates Damaged
 - Impingement Plates Missing
 - Mixer/Agitator Components
 - Mixer/Agitator Distortion
 - Other
 - Thermowells Bent/Broken
 - Tray Corrosion
 - Tray Damaged Components
 - Tray Fouling
- Linings
 - Cladding Bulged
 - Cladding Cracked
 - Cladding Damaged
 - Coating Bulged
 - Coating Damaged
 - Liner Bulged
 - Liner Cracked
 - Liner Damaged
 - Other
- Nozzles
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Flange Face Damaged
 - Fouling
 - Other
 - Surface Cracking

- Surface Deposits
- Weld Defect
- Shell
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Other
 - Surface Cracking
 - Surface Deposits
 - Weld Defect

Each *section* corresponds with a System Code in the System Code Table MI_API_510_INTERNAL_CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_API_510_INTERNAL_CHECKLIST_FINDING_SECTIONS.

API 510 Internal Exchanger Checklist

When you open on the **Inspection Finding Checklist** page an *API 510 Internal Exchanger Checklist* record, the finding sections and rows that are displayed in the **Inspection Find-ing Checklist** workspace look like this:

| Shell | Value | Finding Summary |
|------------------|-------|---|
| Corrosion | N/A • | • |
| Erosion | N/A 🔹 | 1 ··· · |
| Distortion | N/A 🔹 | * |
| Surface Deposits | N/A • | * |
| Surface Cracking | N/A • | * |
| Blistering | N/A • | * |
| Weld Defect | N/A • | 1 ··· · |
| Other | N/A 🔹 | * |
| Head | Value | Finding Summa ry |
| Corrosion | N/A • | * |
| Erosion | N/A • | * |
| Distortion | N/A • | 1 ··· · |
| Surface Deposits | N/A • | 1 ··· · |
| Surface Cracking | N/A • | 1 ··· · |
| Blistering | N/A • | 1 ··· · |
| Weld Defect | N/A • | 1 ··· · |
| Other | N/A 🔹 | * |
| Nozzles | Value | Finding Summary |
| Corrosion | N/A 👻 | 1 · · · · · · · · · · · · · · · · · · · |
| | | |

The following list provides the name of each *section* (e.g., Channel/Bundle) and its corresponding *rows* (e.g., Blistering) that appear by default when you access the **Inspection Finding Checklist** page for an API 510 Internal Exchanger Checklist record:

- Channel/Bundle
 - Blistering
 - Channel Cover
 - Corrosion
 - Distortion
 - Erosion
 - Other
 - Surface Cracking
 - Surface Deposits

- Tube Corrosion
- Tube Cracking
- Tube Distortion
- Tube Erosion
- Tube Fouling
- Tube to Tubesheet Joint Cracked
- Tubesheet Damaged
- Weld Defect
- Head
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Other
 - Surface Cracking
 - Surface Deposits
 - Weld Defect
- Internals
 - Attachment Welds Cracked
 - Baffle/Weir Corrosion
 - Distributor Damaged
 - Distributor Fouling
 - Impingement Plates Damaged
 - Impingement Plates Missing
 - Mixer/Agitator Components
 - Mixer/Agitator Distortion
 - Other
 - Thermowells Bent/Broken
 - Tray Corrosion
 - Tray Damaged Components
 - Tray Fouling
- Linings
 - Cladding Bulged
 - Cladding Cracked

- Cladding Damaged
- Coating Bulged
- Coating Damaged
- Liner Bulged
- Liner Cracked
- Liner Damaged
- Other
- Nozzles
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Flange Face Damaged
 - Fouling
 - Other
 - Surface Cracking
 - Surface Deposits
 - Weld Defect

• Shell

- Blistering
- Corrosion
- Distortion
- Erosion
- Other
- Surface Cracking
- Surface Deposits
- Weld Defect

Each *section* corresponds with a System Code in the System Code Table MI_API_510_INTERNAL_EXCHANGER_CHECKLIST_FINDING_SE. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_API_510_INTERNAL_EXCHANGER_CHECKLIST_FINDING_SE.

API 570 External Checklist

When you open on the **Inspection Finding Checklist** page an *API 570 External Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| General | Value | Finding Summary |
|----------------------|-------|---|
| Corrosion | N/A 🔹 | 1 · · · · · · · · · · · · · · · · · · · |
| Other | N/A 🔹 | * |
| Leaks | N/A 🔹 | * |
| Vibration | N/A 🔹 | * |
| Coating/Painting | N/A 🔹 | * |
| Misalignment | N/A 🔻 | 1 · · · · · · · · · · · · · · · · · · · |
| Soil-Air Interface | N/A 🔹 | * |
| Connections | Value | Finding Summary |
| Other | N/A 🔹 | * |
| Small Branches | N/A 🔹 | * |
| Bolting | N/A 🔹 | * |
| Flanges | N/A 🔹 | * |
| Leak Clamps | N/A 🔹 | 1 · · · · · · · · · · · · · · · · · · · |
| Valves | N/A 🔻 | 1 · · · · · · · · · · · · · · · · · · · |
| Socket Welds | N/A 🔹 | 1 · · · · · · · · · · · · · · · · · · · |
| Threaded Connections | N/A 🔻 | 1 · · · · · · · · · · · · · · · · · · · |
| Expansion Joints | N/A 🔹 | 1 · · · · · · · · · · · · · · · · · · · |
| Supports | Value | Finding Summary |
| Other | N/A 🔻 | |
| | | |

The following list provides the name of each *section* (e.g., Connections) and its corresponding *rows* (e.g., Bolting) that appear by default when you access the **Inspection Finding Checklist** page for an API 570 External Checklist record:

- Connections
 - Bolting
 - Expansion Joints
 - Flanges
 - Leak Clamps
 - Other
 - Small Branches
 - Socket Welds

- Threaded Connections
- Valves
- General
 - Coating/Painting
 - Corrosion
 - Leaks
 - Misalignment
 - Other
 - Soil-Air Interface
 - Vibration
- Insulation
 - Banding
 - Damage
 - Jacket
 - Other
 - Penetrations
 - Seals/Joints/Caulking
- Supports
 - General
 - Other
 - Pipe Hangers
 - Support Shoes

Each *section* corresponds with a System Code in the System Code Table MI_API_570_ EXTERNAL_CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_API_570_EXTERNAL_CHECKLIST_FINDING_SECTIONS.

API 653 External Checklist

When you open on the **Inspection Finding Checklist** page an *API 653 External Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| General | Value | | Finding Summary | |
|----------------------------|-------|---|-----------------|--|
| Corrosion | N/A • | 1 | | |
| Other | N/A 🔹 | 1 | | |
| Leaks | N/A 🔹 | 1 | | |
| Ladder/Stairway | N/A 🔹 | 1 | | |
| Platform | N/A 🔻 | 1 | | |
| Electrical Ground | N/A 🔻 | 1 | | |
| Coating/Painting | N/A 🔻 | 1 | | |
| Agitator/Mixer | N/A 👻 | 1 | | |
| Bottom | N/A 🔹 | 1 | | |
| Cathodic Protection | N/A 🔹 | 1 | | |
| Dissimilar Flange Rating | N/A 🔹 | 1 | | |
| Level Gauge | N/A 🔹 | 1 | | |
| Painted Inactive Corrosion | N/A • | 1 | | |
| Roof | N/A 🔹 | 1 | | |
| Secondary Containment | N/A 🔹 | 1 | | |
| Shell | N/A 🔹 | 1 | | |
| Connections | Value | | Finding Summary | |
| Other | N/A 🔹 | 1 | | |
| Small Branches | N/A 🔹 | 1 | | |

The following list provides the name of each *section* (e.g., Connections) and its corresponding *rows* (e.g., Flanges) that appear by default when you access the **Inspection Finding Checklist** page for an API 653 External Checklist record:

- Connections
 - Flanges
 - Inadequate Thread Engagement
 - Manways/Hatches
 - Nozzles
 - Other
 - Pipe Manifolds
 - Reinforcing Pads

- Small Branches
- Swing Lines
- General
 - Agitator/Mixer
 - Bottom
 - Cathodic Protection
 - Coating/Painting
 - Corrosion
 - Dissimilar Flange Rating
 - Electrical Ground
 - Ladder/Stairway
 - Leaks
 - Level Gauge
 - Other
 - Painted Inactive Corrosion
 - Platform
 - Roof
 - Secondary Containment
 - Shell
- Supports
 - Anchor Bolts
 - Dike/Retaining Wall
 - Foundation
 - Other

Each *section* corresponds with a System Code in the System Code Table MI_API_653_ EXTERNAL_CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_API_653_EXTERNAL_CHECKLIST_FINDING_SECTIONS.

API 653 Internal Checklist

When you open on the **Inspection Finding Checklist** page an *API 653 Internal Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| Shell | Value | Finding Summary | |
|------------------|-------|-----------------|---|
| Corrosion | N/A 🔻 | | |
| Erosion | N/A 🔹 | 1 | |
| Distortion | N/A 🔹 | 1 | |
| Surface Deposits | N/A 🔹 | 1 | |
| Surface Cracking | N/A 🔹 | 1 | |
| Blistering | N/A 🔹 | 1 | |
| Weld Defect | N/A 🔹 | 1 | |
| Other | N/A 🔹 | 1 | |
| Roof | Value | Finding Summary | |
| Corrosion | N/A 🔹 | 1 | |
| Erosion | N/A 🔹 | 1 | |
| Distortion | N/A 🔹 | 1 | |
| Surface Deposits | N/A 🔹 | 1 | |
| Surface Cracking | N/A 🔹 | 1 | |
| Blistering | N/A 🔹 | 1 | |
| Weld Defect | N/A 🔹 | 1 | |
| Other | N/A 🔹 | | |
| Nozzles | Value | Finding Summary | |
| Corrosion | N/A 🔻 | 1 | |
| | | | _ |

The following list provides the name of each *section* (e.g., Bottom) and its corresponding *rows* (e.g., Corrosion) that appear by default when you access the **Inspection Finding Checklist** page for an API 653 Internal Checklist record:

- Bottom
 - Corrosion
 - Distortion
 - Erosion
 - Other
 - Surface Cracking
 - Surface Deposits
 - Vacuum Box Testing
 - Weld Defect

- Internals
 - Baffle/Weir Corrosion
 - Distributor Damaged
 - Level Gauge Operable
 - Other
 - Pontoon Corrosion
 - Roof Support Corrosion
 - Sump Corrosion
 - Swing Line Damage
 - Thermowells Bent/Broken
 - Vacuum Breaker Operable
- Linings
 - Cladding Bulged
 - Cladding Cracked
 - Cladding Damaged
 - Coating Bulged
 - Coating Damaged
 - Liner Bulged
 - Liner Cracked
 - Liner Damaged
 - Other
- Nozzles
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Flange Face Damaged
 - Fouling
 - Other
 - Surface Cracking
 - Surface Deposits
 - Weld Defect
- Roof

- Blistering
- Corrosion
- Distortion
- Erosion
- Other
- Surface Cracking
- Surface Deposits
- Weld Defect
- Shell
 - Blistering
 - Corrosion
 - Distortion
 - Erosion
 - Other
 - Surface Cracking
 - Surface Deposits
 - Weld Defect

Each *section* corresponds with a System Code in the System Code Table MI_API_653_INTERNAL_CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_API_653_INTERNAL_CHECKLIST_FINDING_SECTIONS.

External PRD Checklist

When you open on the **Inspection Finding Checklist** page an *External PRD Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| General | Value | Finding Summary | |
|------------------------------------|-------|-----------------|--|
| Corrosion | N/A 🔹 | | |
| Other | N/A 🔹 | 1 | |
| Leaks | N/A 🔹 | 1 | |
| Vibration | N/A 🔹 | 1 | |
| Misalignment | N/A 🔹 | 1 | |
| Block Valves Sealed Open | N/A 🔹 | 1 | |
| Device Leaked Through | N/A 🔹 | | |
| Piping Obstruction | N/A 🔹 | | |
| Rupture Disc Orientation Corrected | N/A 🔹 | | |
| Supported | N/A 🔹 | | |
| Spring Tamper Seal Intact | N/A 🔻 | | |
| Connections | Value | Finding Summary | |
| Other | N/A 🔻 | | |
| Bolting | N/A 🔹 | | |
| Flanges | N/A 🔻 | | |
| Inadequate Thread Engagement | N/A 🔹 | | |
| Threaded Connections | N/A 🔻 | | |
| Bellows Vent | N/A 🔹 | | |
| Gauges | N/A 🔻 | | |

The following list provides the name of each *section* (e.g., Connections) and its corresponding *rows* (e.g., Bellows Vent) that appear by default when you access the **Inspection Finding Checklist** page for an External PRD Checklist record:

- Connections
 - Bellows Vent
 - Bolting
 - Drain Open
 - Flanges
 - Gauges
 - Inadequate Thread Engagement
 - Manual Operating Lever
 - Other

- Threaded Connections
- Vent Piping
- General
 - Block Valves Sealed Open
 - Corrosion
 - Device Leaked Through
 - Leaks
 - Misalignment
 - Other
 - Piping Obstruction
 - Rupture Disc Orientation Corrected
 - Spring Tamper Seal Intact
 - Supported
 - Vibration

Each *section* corresponds with a System Code in the System Code Table MI_EXTERNAL_ PRD_CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_ EXTERNAL_PRD_CHECKLIST_FINDING_SECTIONS.

PRD Pop Test Checklist

When you open on the **Inspection Finding Checklist** page a *PRD Pop Test Checklist* record, the finding sections and rows that are displayed in the **Inspection Finding Check-list** workspace look like this:

| As Found | Value | Finding Summary | |
|-----------------------------|-------|-----------------|------|
| Other | N/A 🔹 | | |
| Inlet Nozzle/Piping Fouled | N/A 🔹 | 1 | |
| Outlet Nozzle/Piping Fouled | N/A 🔹 | • | |
| Pre-Pop OK | N/A 🔹 | • | |
| Stem/Guide/Bellows | N/A 🔻 | • | |
| Valve Rework | Value | Finding Summary | |
| Other | N/A 🔹 | | |
| Flange Face Damaged | N/A 🔹 | |) |
| Seat | N/A 🔹 | • |) |
| Lapping | N/A 🔹 | • | |
| Spring | N/A 🔹 | | ••) |
| Corrosion | Value | Finding Summary | |
| Other | N/A 🔻 | 1 | |
| Flanges | N/A 🔹 | * | |
| Seat | N/A 🔻 | • |) |
| Spring | N/A 🔹 | • | |
| Inlet Nozzle | N/A 🔻 | • | |
| Outlet Nozzle | N/A 🔻 | • | |
| External Surface | N/A 🔹 | |] |
| Stem | N/A 🔻 | • | •• |
| Guide | N/A 🔹 | • |) |
| Bellows | N/A 🔻 | ۰ | |

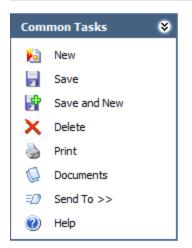
The following list provides the name of each *section* (e.g., As Found) and its corresponding *rows* (e.g., Inlet Nozzle/Piping Fouled) that appear by default when you access the **Inspection Finding Checklist** page for a PRD Pop Test Checklist record:

- As Found
 - Inlet Nozzle/Piping Fouled
 - Other
 - Outlet Nozzle/Piping Fouled
 - Pre-Pop OK
 - Stem/Guide/Bellows
- Corrosion

- Bellows
- External Surface
- Flanges
- Guide
- Inlet Nozzle
- Other
- Outlet Nozzle
- Seat
- Spring
- Stem
- Valve Rework
 - Flange Face Damaged
 - Lapping
 - Other
 - Seat
 - Spring

Each *section* corresponds with a System Code in the System Code Table MI_PRD_PT_ CHECKLIST_FINDING_SECTIONS. Each System Code references additional System Codes that make up the *rows* in each section. If you want to display additional items in this workspace, you can add System Codes manually to the System Code Table MI_PRD_PT_ CHECKLIST_FINDING_SECTIONS.

Common Tasks



The **Common Tasks** menu on the **Inspection Finding Checklist** page contains the following links:

- New: Displays the Event Builder, where you can create a new Inspection record.
- Save: Saves the Inspection record and all Checklist Finding records to which it is linked.
- Save and New: After saving the Inspection record and all Checklist Finding records to which it is linked, displays the Event Builder, where you can create a new Inspection record.
- **Delete:** After asking for confirmation, deletes the Inspection record.

Note: You can delete the Inspection record only if it not linked to a Recommendation record.

- Print: Displays the Select Report to Print dialog box, which you can use to generate a Checklist Inspection report.
- **Documents:** Displays the Reference Documents window, where you can view, edit, and add reference documents for the current record.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Finding Checklist page.

Associated Pages

The **Associated Pages** menu on the **Inspection Finding Checklist** page displays links defined by the Associated Pages that are configured for the record that is currently selected in the record hierarchy.

Workflow for Recording Inspection Results

After you have completed an inspection, you can use the Inspection Management module to record your results. The workflow that you will use to record your results will be different depending upon the type of inspection that you performed. In each workflow, the first step is the same: *create an Inspection record*. The second step differs, however, in the records you will use to record *specific subcomponent* findings.

The following workflow applies to the following types of inspections:

- Bundle inspections
- Full inspections
- General inspections
- Pressure test inspections

| Step | Task | Notes |
|------|---|---|
| 1 | Create an Inspection record to store gen- eral information | The family in which you create the Inspection record should correspond to the type of inspection you performed. |
| | about the inspection, such as the start and completion date, the type of inspection, and a summary of | The Inspection record will be linked automatically to the Equipment or Functional Location record rep- resenting the equipment or location that you inspec- ted. |
| | your findings. | You can create this type of Inspection record from either of the following locations: |
| | | The Inspection Management Start Page. |
| | | The Inspection Work Pack page. To create an Inspection record from the Inspection Work Pack page, you will need to generate the Inspection record from an Inspection Task record. |

Workflow for Recording Inspection Results

| Step | Task | Notes |
|------|---|--|
| 2 | Record specific sub- component findings in General Finding and Observation records. | If the Event Configuration is set up correctly, when you create an Inspection record that is linked to an Equipment record, General Finding records will be created automatically according to the Inspection Scope for the equipment. |
| | | For example, if the Inspection Task record that was used to create the Inspection record is linked to <i>five</i> Inspection Profile records and each of those records is linked to <i>two</i> Inspection Method records, <i>ten</i> General Finding records will be created auto- matically, one per Inspection Method record that was included in the Inspection Scope. You can then record your findings for each subcomponent in a separate record. This is useful if parts of the equip- ment passed the inspection and other parts failed the inspection. If you had only one record to record your findings, you would be unable to fully rep- resent the inspection results. |

The following workflow applies to the following types of inspections:

- External and internal pressure vessel inspections (following API 510 standards)
- Internal exchanger inspections (following API 510 standards)
- External piping inspections (following API 570 standards)
- External and internal tank inspections (following API 653 standards)
- External visual and functional inspections of pressure relief device (PRDs)

| Step | Task | Notes |
|------|--|--|
| 1 | Create an Inspection record to store gen- eral information about the inspec- tion, such as the start and completion date, the type of inspection, and a summary of your findings. | The family in which you create the Inspection record should correspond to the type of inspection you performed. The Inspection record will be linked automatically to the Equipment or Functional Location record representing the equipment or location that you inspected. You can create this type of Inspection record from any of the following locations: The Inspection Management Start Page. The Inspection Work Pack page. To create an Inspection record from the Inspection Work Pack page, you will need to generate the Inspection Task record. The Inspection Finding Checklist page. |
| 2 | Record specific sub- component findings in Checklist Finding records. | None |

Recording Findings in General Finding and Observation Records

In some cases, you might inspect an equipment or location as a whole. In other cases, however, you might inspect parts of the equipment or location separately. When you inspect parts of the equipment or location, you might have different results for different parts of that equipment or location.

For example, if you need to inspect a tank, you might want to inspect the internal surfaces separately from the external surfaces. On a more granular level, you might want to inspect the top separately from the bottom. The findings of each inspection might be very different, whereas if you inspected the automobile as a whole, you would have only one finding.

You can record the findings for each subcomponent in a separate <u>General Finding</u> or Observation record.

To record findings for subcomponents:

- 1. Access the Inspection record that corresponds to the inspection for which you want to record more detailed findings about the subcomponents that you inspected.
- 2. In the record hierarchy, expand the General Finding or Observation family to view the records that were <u>created automatically when you created the Inspection</u> <u>record</u>.
- 3. Select each General Finding or Observation record, and record the findings for that subcomponent.

Note that in the Type field in a Finding record, you can choose from the following options:

- **Observation:** The inspector did not notice any significant, negative conditions.
- **Degradation:** The inspector noticed deterioration beyond what is expected for the subcomponent, considering normal as-designed use.
- **Potential Failure:** The inspector noticed conditions that may lead to the subcomponent's failure.
- Failure: The subcomponent is no longer performing its designed function.
- Not Inspected: The subcomponent was not inspected.

Recording Findings in Checklist Finding Records

The following instructions assume that you are viewing the **Inspection Finding Checklist** page for the Inspection record representing the inspection for which you want to record subcomponent findings. You can access this page by <u>creating the Inspection record</u> or by <u>opening an existing Inspection record</u>.

To record findings in Checklist Finding records:

- 1. On the **Inspection Finding Checklist** page, in the row containing the subcomponent for which you want to record a finding, in the **Finding Value** list, select the value representing your finding.
- 2. In the same row, in the **Comments** text box, type any comments describing your findings.

Opening Existing Inspection Documents

To open an existing Inspection Document:

1. On the Inspection Management Start Page, click the Manage Inspection Documents link.

The **Inspection Manage Documents** page appears, displaying a list of all queries and searches that are stored in the <u>Document Queries folder</u> in the Catalog. Each row represents a different query or search you can run to retrieve a list of Inspection Documents associated with the criteria in that query.

| le <u>E</u> dit <u>G</u> oTo <u>T</u> o | ols <u>H</u> elp | |
|---|--|---|
| Back + 🛞 Forward | 🗸 🏠 My Start Page 👻 🎽 New 🔎 Search 🚞 Catalog 🔞 Query 🗉 Report 🗸 | 🚯 Graph 🕶 🥰 Dataset 🕶 📟 Dashboard 🗸 |
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| Print | Caption | Description |
| 20 | All Equipment That Can Have API 510 External Checklist Inspections | Baseline query that returns all Equipment That Can Have API 510 External Checklist |
| Send To >> | All Equipment That Can Have API 510 Internal Checklist Inspections | Baseline query that returns all Equipment That Can Have API 510 Internal Checklist I |
| Help | All Equipment That Can Have API 510 Internal Exchanger Checklist Inspections | Baseline query that returns all Equipment That Can Have API 510 Internal Exchange |
| | All Equipment That Can Have API 570 External Checklist Inspections | Baseline query that returns all Equipment That Can Have API 570 External Checklist |
| | All Equipment That Can Have API 653 External Checklist Inspections | Baseline query that returns all Equipment That Can Have API 653 External Checklist |
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| | All Equipment That Can Have Bundle Inspections | Baseline query that returns all Equipment That Can Have Bundle Inspections |
| | All Equipment That Can Have External PRD Checklist Inspections | Baseline query that returns all Equipment That Can Have External PRD Checklist Ins |
| | All Equipment That Can Have Full Inspections | Baseline query that returns all Equipment That Can Have Full Inspections |
| | All Equipment That Can Have General Inspections | Baseline query that returns all Equipment That Can Have General Inspections |
| | All Equipment That Can Have Inspections | Baseline query that returns all equipment that can have inspection documents |
| | All Equipment That Can Have Pressure Test Inspections | Baseline query that returns all Equipment That Can Have Pressure Test Inspections |
| | All Inspection Records | Baseline query that returns all the existing Inspection Reports |
| | All Inspection Records for selected equipment | Baseline query that returns all the existing Inspection Reports for selected equipmen |

- 2. Click one of the following links:
 - All Equipment That Can Have <Inspection Type> Inspections: This link will display a page showing a list of all Equipment or Functional Location records for which you can create Inspection records represented by the <Inspection Type> value (based upon the relationship definitions that are configured via the Configuration Manager). For example, if you click the All Equipment That Can Have Full Inspections link, the page that appears will display a list of all Equipment or Functional Location records for which you can create a Full Inspection Icocation records for which you can create a Full Inspection record. You can click the Existing Documents link in any row in the results grid on this page to display existing Inspection records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equipment or Functional Location records that are associated with the Equi

Note: The PRD Pop Test Checklist family does *not* have a corresponding query that you can use to display Equipment and Functional Location records for which you can create an Inspection record of this type. If you want to open an existing PRD Pop Test Checklist record, you can use the **All Inspection Records** or **All Inspection Records for selected equipment** link.

- All Inspection Records: This link will display a page listing all Inspection records that exist in the database, regardless of inspection type, equipment, or location.
- All Inspection Records for selected equipment: This link will display a page with a prompt for the equipment or location whose existing Inspection Documents you want to view.

A new page appears, displaying results that correspond to the link that you clicked on the previous page. If you see the **Enter Parameter Values** dialog box, you can specify the equipment or location whose existing Inspection Document you want to open. In this case:

• If you want to open an Inspection Document for a *location*, in the first prompt field, type the Location ID of the desired Functional Location record.

-or-

• If you want to open an Inspection Document for a piece of *equipment*, in the first prompt field, type the Equipment ID of the desired Equipment record.

Note: Each Saved Search page that you can access via one of the links listed above is configured to display in the page title the catalog item *caption* for the query with which the query results are associated. This documentation assumes that you have *not* modified these query captions.

3. On the page that appears, click the **Load Inspection** link in any row to view the results of that Inspection Document.

Note: If you also see a **New Documents** or **New <Inspection Type>** link, you can click it to create a new Inspection record.

Assigning a User to the Inspection Team

To assign a user to the inspection team:

- 1. <u>Open the Inspection record</u> to which you want to assign team members.
- 2. In the record hierarchy, right click the Inspection Team Member family, and click **Create a new Inspection Team Member to link to [root record]**, where **[root record]** is the Inspection Event record.

The <empty> (new Inspection Team Member) window appears.

- 3. In the **Full Name** list, select the desired user. The list displays all users who have been assigned the Inspector role.
- 4. Complete the remaining fields as desired.
- 5. Click OK.

The Inspection Team Member record is saved and linked to the Inspection record. When you view the inspection report, information about the team member will appear in the Inspection Team Members section.

Generating Represented Inspections

Inspection Groups that you create using the Risk Based Inspection (RBI) moduleallow you to group RBI Components based upon certain criteria and perform inspections for a subset of the equipment in the group rather than for *every* piece of equipment in the group. Grouping Element records that represent the RBI Components that are included in an Inspection Group are designated as one of the following types based upon evaluation by the Meridium APM system when Inspection Groups are generated:

- **Representative RBI Component:** RBI Components for which you *must* perform an inspection on the associated piece of equipment in order to meet the inspection requirements that are defined by American Petroleum Institute specifications. Grouping Element records that are classified as Representative RBI Components meet the following criteria:
 - The Selected for Inspection field in the Grouping Element record contains the value *True*.
 - The Grouping Element record is linked to at least one other Grouping Element record and is the predecessor in the Represents Inspections relationship definition.
- **Represented RBI Component:** RBI Components whose inspection requirements (defined by American Petroleum Institute specifications) will be satisfied by the inspection of the piece of equipment that is associated with a Representative RBI Component in the Inspection Group. Grouping Element records that are classified as Represented RBI Components meet the following criteria:
 - The Selected for Inspection field in the Grouping Element record contains the value *False*.
 - The Grouping Element record is linked to one other Grouping Element record and is the successor in the Represents Inspections relationship definition.

The distinction between these categories is important because when you create an Inspection Task record from an RBI Recommendation record that was generated from an Inspection Group and then <u>build an Inspection Document</u> that includes that Inspection Task record, you will have the option to generate Inspection records automatically for the Equipment records that are associated with Represented RBI Components. Throughout this documentation, we refer to these Inspection records as *Represented Inspections*.

Note the following details about Represented Inspections:

- These Inspection records will *always* belong to the General Inspection family.
- In these Inspection records, the value in the *Is a Represented Inspection* field is set to *True*.
- The Inspection Confidence value in these Inspection records will be set automatically to the *nextmost conservative* value than the one in the Inspection record that you created. For example, if the value in the Inspection Confidence field is set to *High* in the Inspection record that you created (associated with a Representative

RBI Component), the value in this field in Represented Inspections that are generated automatically will be set to *Medium*.

Additionally, when you generate Represented Inspections, the value in the Represented Inspections Generated field in the Inspection record that you created (i.e., the one that is associated with the Represented RBI Component) is set to *True*.

To generate Represented Inspections:

• On the datasheet configured for the Inspection record with which you have associated an Inspection Task record generated from an RBI Recommendation record that was created from an Inspection Group, select the **Generate Represented Inspections** check box.

-or-

If the Inspection record belongs to a family that contains *Checklist* in its caption (e.g., API 510 External Checklist), on the **Inspection Finding Checklist** page, in the header area, select the **Generate Represented Inspections** check box.

Note: You can generate Represented Inspections only while the Inspection record is new (i.e., you have *not* saved the Inspection record yet).

Values Mapped to Represented Inspections

Represented Inspections represent Inspection records that are associated with equipment items whose inspection requirements are satisfied by the inspection of the piece of equipment associated with a Representative RBI Component in an Inspection Group. The following table lists the fields and values that are mapped to these Inspection records.

| This Inspection field: | is populated with: | from this source: |
|----------------------------|--|--|
| Asset | The value in the Asset field. | The associated Grouping Element record. |
| Inspection Con- fidence | The Inspection Con- fidence value that is the next most con- servative value than the source record Inspection Confidence value. | The Inspection record that is asso- ciated with the piece of equipment for which inspections will occur (i.e., the Inspection record from which you generated the Represented Inspections). |
| | For example, if the Inspection Confidence value in the source record is <i>Medium</i> , the Inspection Confidence value in the asso- ciated Represented Inspection will be <i>High</i> . | |

| This Inspection field: | is populated with: | from this source: |
|---|--|---|
| This Inspection field: Inspection Head- line ¹ | One of the following values, depending upon the value in the Inspection Headline field in the source Inspection record: • Actual inspec- tion performed on Asset <record id="">, where <record ID> is the Record ID of the Equipment record stored in the Asset ID field in the source Inspec- tion record. This value is pop-</record </record> | from this source: The Inspection record that is asso- ciated with the piece of equipment for which inspections will occur (i.e., the Inspection record from which you generated the Represented Inspections). |
| | | |
| | -or- | |
| | Actual inspec- tion performed on Asset <lnspection headline="">, where <lnspec- tion Headline> is the value that is stored in the Inspection Head-</lnspec- </lnspection> | |

| This Inspection field: | is populated with: | from this source: |
|----------------------------|--|--|
| | line field in the source Inspec- tion record. This value is pop- ulated in the Inspection Head- line field in the Represented Inspection when the Inspection Headline field in the source Inspection record <i>does</i> con- tain a value. | |
| Type of Inspection | The value in the Type of Inspection field. | The Inspection record that is asso- ciated with the piece of equipment for which inspections will occur (i.e., the Inspection record from which you generated the Represented Inspections). |
| Degradation Mech- anism | The value in the Degradation Mech- anism field. | The Inspection record that is asso- ciated with the piece of equipment for which inspections will occur (i.e., the Inspection record from which you generated the Represented Inspections). |

If the Represented Inspection was generated from an Inspection record whose family caption includes the word *Checklist*, no Inspection Headline value will be copied from the source Inspection record.

About Inspection Task and Recommendation Records

Based on the results of an inspection, you might need to suggest that further action be taken. For example, if you inspect an area of a warehouse and notice that the roof is leaking, you may want to suggest that the ceiling tiles be replaced.

You can create a new Inspection Task record that indicates that the ceiling tiles need to be replaced, or you could create an Inspection Recommendation record to record the recommendation to replace the ceiling tiles. Your business processes will dictate whether you should create an Inspection Task record or a Recommendation record. For example, inspectors may need to report all recommendations to a supervisor for approval. The supervisor might then be responsible for approving the recommendation, creating an associated Inspection Task record, and assigning that Inspection Task record to the appropriate inspector.

Additionally, if the Thickness Monitoring license is active and TM Analyses exist for the Equipment records that you analyze in Inspection Management, you can specify that Inspection Task records be updated based upon Thickness Measurement records that you create in TM. Specifically, the value in the Last Date field in the Inspection Task record will be populated with the value in the Measurement Taken Date field in the Thickness Measurement records that you create via the **TM Measurement Data Entry** page.

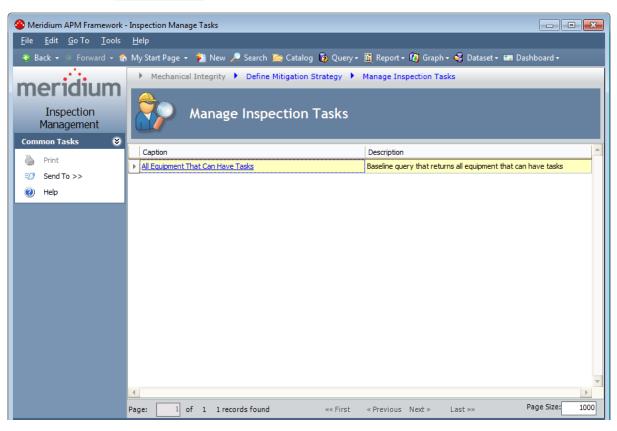
This documentation does not assume which method you are going to use but explains how to create Inspection Task records and how to create Inspection Recommendation records.

Creating an Inspection Task Record

To create an Inspection Task record:

1. On the Inspection Management Start Page, click the Manage Tasks link.

The **Inspection Manage Tasks** page appears, displaying a list of all queries and searches in the **Task Queries** folder in the Catalog.



2. Click the All Equipment That Can Have Tasks link.

The **Saved Search: All Equipment That Can Have Tasks** page appears, displaying all records that can be linked to an Inspection Task record.

Note: In the Meridium APM baseline database, this page displays in the page title the catalog item *caption* for the query with which it is associated. This documentation assumes that you have not modified this query caption.

| Inspection Management Common Tasks Image: Send To >> Image: Send To >> Help | lap: Inspection->Equipment Ins Saved Sea ction anage Tasks anage Tasks anage Tasks anage Tasks anage Tasks anage Tasks anage Tasks | spection Profile Searches->Saved arch : All Equipme Equipment ID PV-1737C LUBE PRODUCT PV-1744C LUBE HIGH TEMP PV-1745C LUBE LOW TEMP PV-1739C PW PRODUCT PV-1747 P/W SURGE DRUM | d Search : All Equipment That Car | n Have Tasks |
|--|---|---|--|---|
| Inspection Management Common Tasks | ction anage Tasks anage Tasks anage Tasks anage Tasks anage Tasks anage Tasks anage Tasks | Equipment ID PV-1737C LUBE PRODUCT PV-1744C LUBE HIGH TEMP PV-1745C LUBE LOW TEMP PV-1739C PW PRODUCT PV-1747 P/W SURGE DRUM | ent That Can Hav Family Pressure Vessel Pressure Vessel Pressure Vessel Pressure Vessel | /e Tasks Equipment Key 2005251 2005252 2005253 2005254 |
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| | anage Tasks | PV-1747 P/W SURGE DRUM | | |
| | | | Pressure Vessel | 2005255 |
| | anage Tasks | | | |
| | | PV-1748C P/W H.P./H.T. | Pressure Vessel | 2005256 |
| | anage Tasks | PV-1749C P/W HP/HT | Pressure Vessel | 2005257 |
| Ma | anage Tasks | PV-1750 COMP INTERSTAGE KO | Pressure Vessel | 2005258 |
| | anage Tasks | PV-1751 COMP INTERSTAGE KO | Pressure Vessel | 2005259 |
| Ma | anage Tasks | PV-1741C MW PRODUCT | Pressure Vessel | 2005260 |
| Ma | anage Tasks | PV-1758 TEMPERED WATER EXP | Pressure Vessel | 2005261 |
| Ma | anage Tasks | PV-1759 ON-SITE KO DRUM | Pressure Vessel | 2005262 |
| Ma | anage Tasks | PV-1760 FUEL GAS KO DRUM | Pressure Vessel | 2005263 |
| Ma | anage Tasks | PV-1752 M/W SURGE DRUM | Pressure Vessel | 2005264 |
| Ma | anage Tasks | PV-1753C M/W H.P. SEPARATOR | Pressure Vessel | 2005265 |
| Ma | anage Tasks | PV-1754C M/W HT SEPARATOR | Pressure Vessel | 2005266 |
| 4 | | | | • |

3. In the row containing the equipment or location for which you want to create a new Inspection Task record, click the **Manage Tasks** link.

If the Equipment or Functional Location record is already linked to a Task record, the **Task List** page appears, displaying all existing Task records that are linked to the selected Equipment or Functional Location record.

-or-

If the Equipment or Functional Location record is not linked to any Task records, a message appears, asking if you want to continue to the **Task List** page, which will display a list of *all* Task records.

4. Click the Yes button.

The **Task List** appears, displaying *all* existing Task records.

You can use the **Task List** page to create a new Inspection Task record for the selected equipment or location.

Creating an Inspection Recommendation Record

To create an Inspection Recommendation record:

- 1. <u>Open the Inspection record</u> for which you want to create a recommendation.
- 2. In the record hierarchy, right-click the Inspection Recommendation family, and select **Create a new Inspection Recommendation to link to [root record]**, where **[root record]** is the name of the record you opened from the search results.

-or-

If you are viewing the **Inspection Finding Checklist** page, in the row representing the finding that is prompting you to recommend further action, click the **but**ton.

50.

The new Inspection Recommendation window appears.

- 3. Complete the fields as desired.
- 4. Click OK.

The Inspection Recommendation record is saved. In addition, if the root Inspection record is linked to an Equipment record, the Asset ID field is populated with the ID of that Equipment record. If the root Inspection record is linked to a Functional Location record, the Functional Location ID field is populated with the ID of the Functional Location record. Note that these values are also visible on the Inspection datasheet in the **Asset ID** and **Functional Location ID** cells.

Values Mapped from Checklist Finding Records to Inspection Recommendation Records

If you create an Inspection Recommendation record from the <u>Inspection Finding Check-list page</u>, the following fields in the Inspection Recommendation record are populated automatically with values in the Checklist Finding record from which it was created:

- **Recommendation Headline:** Populated with a concatenation of the following values:
 - The label of the section containing the Checklist Finding record.
 - The label of the row containing the Checklist Finding record.

For example, suppose an Inspection Recommendation record was created from the Checklist Finding record represented by the row in the following image.

| General | Value | Finding Summary |
|-----------|---------|-----------------|
| Corrosion | Yes 🔻 👔 | Corrosion found |

You can see that the section label is *General*, and the row label is *Corrosion*.

Using this example, the value in the Recommendation Headline field in the Inspection Recommendation record would be *General Corrosion*, as shown in the following image.

| D | Datasheet Inspection Recommendation | | | lation 💌 | |
|----|-------------------------------------|---|-------------------|----------|----------|
| In | Inspection Recommendation Alert | | | | |
| | | [| | | Value(s) |
| | Recommendation ID | | REC-1325 | | |
| | Recommendation Headline | | General Corrosion | | |

• **Recommendation Description:** Populated with the value in the Finding Summary field in the Checklist Finding record.

Locking an Inspection

After you complete an Inspection record and want to flag it for approval, you should lock it so that others cannot modify it. Locking the Inspection record ensures that the information that you supplied does not get deleted or modified. After you lock an Inspection record, you cannot unlock it. You can lock Inspection records defined for any of the following families:

- Bundle Inspection
- Full Inspection
- General Inspection
- Pressure Test Sub-Inspection

To lock an Inspection record:

- 1. <u>Open the Inspection record</u> that you want to lock.
- 2. Select the **Inspection Lock** check box.

Note: You can select the **Inspection Lock** check box only if your name is stored in the Inspection Report Owner field.

All fields *except* for the following become disabled:

- Inspection Document Status
- Inspection Lock
- Reviewers Name
- Reviewers Comments
- Final Inspection Lock
- Published

In addition, the record hierarchy shortcut menu options that allow you to link new or existing Recommendation records to the Inspection record are disabled.

After the Inspection record is locked, you can <u>flag it for approval</u>.

Flagging an Inspection for Approval

When an Inspection record is ready to be approved, you should flag it for approval. Doing so will make the record appear on the **Review and Approve Inspections** page.

To flag an Inspection for approval:

- 1. <u>Open the Inspection record</u> that you want to flag for approval.
- 2. If one is not already selected, select a reviewer in the **Reviewers Name** list.
- 3. In the Inspection Document Status field, select Pending Approval.
- 4. On the **Common Tasks** menu, click the **Save** link.

Approving an Inspection

After an Inspection record has been set to Pending Approval, you can review and approve it, indicating that you accept the findings and are satisfied with the information provided by the inspector.

To approve inspection results:

1. On the Inspection Start Page, click the Review and Approve Documents link.

The **Review and Approve Inspection Documents** page appears.

This page displays a list of all queries and searches in the <u>Review Queries</u> folder in the Catalog. Each row represents a different query you can run to return Inspection records that need to be reviewed. For each Inspection family, you can select a query that returns:

- Records that contain a specific value in the *Inspection Document Status* field and the *Reviewers Name* field.
- Records that contain a specific value in the *Inspection Document Status* field and are assigned to the user who is currently logged in to Meridium APM.
- Records that contain *any* value in the *Inspection Document Status* field and are assigned to the user who is currently logged in to Meridium APM.
- 2. To run a query, in the row containing the query that you want to run, click the hyperlinked query caption.
- 3. If you selected a query that returns only records with specific values in the Inspection Document Status field and the Reviewers Name field, a prompt appears. The prompt may contain a field for the reviewer's name and document status or just the document status.
- 4. In the prompt, select the values that correspond to the type of Inspection records that you want to review.

The **Review and Approve Inspections** page appears, displaying a list of all Inspection records that meet the criteria that you selected on the previous page.

- 5. If you want to approve the inspection without reviewing any findings or recommendations, in the row containing the Inspection record that you want to approve:
 - a. In the Inspection Document Status list, select Approved.
 - b. Type any desired comments in the **Reviewers Comments** field.
 - c. Select the **Final Inspection Lock** check box, which disables all fields except the **Final Inspection Lock** field.

-or-

If you want to review any findings or recommendation associated with the inspection before approving the inspection:

a. In the row containing the inspection whose findings and recommendations you want to review, click the **Open Inspection** link.

The Inspection record appears in the Record Manager.

- b. Use the tree to expand any findings and recommendations.
- c. When you are satisfied with the inspection, including any associated findings and recommendations, in the **Inspection Document Status** list, select **Approved**.
- d. Select the **Final Inspection Lock** check box, which disables all fields except the **Final Inspection Lock** field.

Note: You can also modify the status of the Inspection Recommendation, if desired (e.g., change the value in the Status field to Approved).

6. Save the Inspection record.

At this point, if the Inspection record was created based on the information in a Task record, you might want to update that Task record so it contains an appropriate Last Date and Next Date. You can do so by <u>executing the strategy rule MI_InspectionTasksUpdate</u>.

Publishing an Inspection

You can publish inspections using the Inspection datasheet for any of the following Inspection families:

- Bundle Inspection
- Bundle Sub-Inspection
- Full Inspection
- General Inspection
- Pressure Test Inspection
- Pressure Test Sub-Inspection

To publish an Inspection record:

- 1. <u>Open the Inspection record</u> that you want to publish.
- 2. Select the **Published** check box.
- 3. On the **Common Tasks** menu, click the **Save** link.

Viewing Published Inspections

To view published inspections:

- On the Inspection Management Start Page, click the Published Documents link. The Published Inspection Documents page appears.
- 2. In the row containing the record that you want to view, click the **Load Inspection** link.

The Inspection record appears in the Record Manager.

About Inspection Reports

The baseline Inspection Management module includes reports that can be used to view information about an inspection. When you view an inspection report, you are viewing a main report and various subreports that exist in the Catalog. These reports are based upon supporting queries that gather information from the Inspection record and records to which it is linked. The results are displayed on the **Report Viewer** page.

The following table lists the main reports that correspond with each Inspection subfamily, the query and subreports that are associated with each main report, and the sections that are included in each main report. Note that the subreports are not meant to be run independently of the associated main report.

| Inspection subfamily | Query Behind Main Report | Main Report(s) | Contributing Reports | Sections Included in Main Report |
|---------------------------|-----------------------------------|-------------------------------------|---|---|
| Bundle Inspec- tion | MI_ INSPBUN- D | Bundle Inspec- tion Report | Asset Corrosion Analysis Report Finding Report Inspection Recom- mendation Report Inspection Team Member Report Reference Docu- ment Report | Bundle Inspec- tion Asset Corrosion Analysis Findings Findings Pressure Test Sub Inspections Recom- mendations Inspection Team Members Reference Docu- ments |

| Inspection subfamily | Query Behind Main Report | Main Report(s) | Contributing Reports | Sections Included in Main Report |
|-------------------------|-----------------------------------|---|--|---|
| Check- lists | Checklist Report Query | Checklist Inspec- tion Report | Asset Corrosion Analysis Report Bundle Sub Inspection Report Checklist Find- ing Report Finding Report Inspection Recom- mendation Report Inspection Team Member Report Pressure Test Sub Inspection Report Reference Docu- ment Report | Asset Corrosion Analysis <u>Bundle Sub- Inspections</u> <u>Checklist Find- ings</u> <u>Findings</u> <u>Findings</u> <u>Recom- mendations</u> <u>Inspection Team</u> <u>Members</u> <u>Pressure Test</u> <u>Sub Inspections</u> <u>Reference Docu- ments</u> |
| Check- lists | Checklist Report Query | Blank Checklist Inspec- tion Report | Checklist Find- ing Report | • <u>Checklist Find-</u> ings |

| Inspection subfamily | Query Behind Main Report | Main Report(s) | Contributing Reports | Sections Included in Main Report |
|----------------------------|-----------------------------------|--------------------------------------|--|--|
| Full Inspec- tion | MI_ INSPFULL | Full Inspec- tion Report | Asset Corrosion Analysis Report Bundle Sub Inspection Report Finding Report Inspection Recom- mendation Report Inspection Team Member Report Pressure Test Sub Inspection Report Reference Docu- ment Report | Full Inspection Asset Corrosion Analysis Findings Fecom- mendations Pressure Test Sub Inspections Bundle Sub- Inspections Inspection Team Members Reference Docu- ments |
| General Inspec- tion | MI_INSP_ GEN | General Inspec- tion Report | Asset Corrosion Analysis Report Finding Report Inspection Recom- mendation Report Press Test Sub Inspection Report Inspection Team Member Report Reference Docu- ment Report | <u>General Inspec-tion</u> Asset Corrosion Analysis <u>Findings</u> <u>Findings</u> <u>Recom-mendations</u> <u>Pressure Test</u> <u>Sub Inspections</u> <u>Bundle Sub- Inspections</u> <u>Inspection Team</u> <u>Members</u> <u>Reference Docu-ments</u> |

About Inspection Reports

| Inspection subfamily | Query Behind Main Report | Main Report(s) | Contributing Reports | Sections Included in Main Report |
|-------------------------------------|-----------------------------------|---|---|---|
| Pressure Test Inspec- tion | MI_ INSPPTST | Pressure Test Inspec- tion Report | Asset Corrosion Analysis Report Finding Report Inspection Recom- mendation Report Inspection Team Member Report Reference Docu- ment Report | Pressure Test Inspection Asset Corrosion Analysis Findings <u>Findings</u> <u>Recom-</u> mendations <u>Inspection Team</u> <u>Members</u> <u>Reference Docu-</u> <u>ments</u> |

About Running Inspection Reports

You can run inspection reports from of the following locations:

• From the Inspection Reports page.

-or-

• From the Record Manager.

-or-

• From the Inspection Finding Checklist page.

The location that you choose will depend upon your workflow and the type of inspection report you want to view.

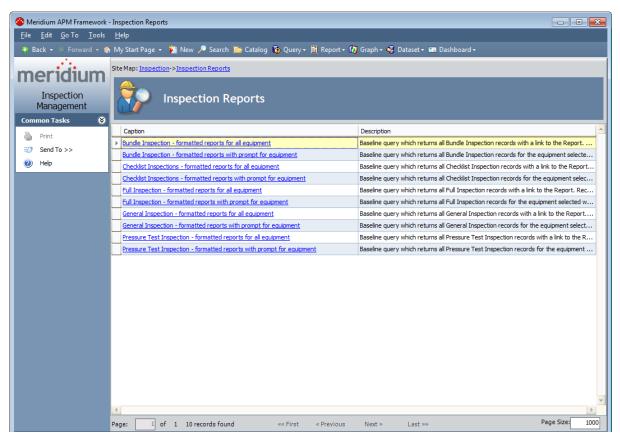
Note: When you run a report from the **Inspection Finding Checklist** page, you can generate a report for the Inspection record for which you accessed the page *or* generate a blank report for the Checklists family to which the Inspection record belongs.

Accessing the Inspection Reports Page

To access the Inspection Reports page:

• On the Inspection Management Start Page, click the Inspection Reports link.

The Inspection Reports page appears.



Aspects of the Inspection Reports Page

The **Inspection Reports** page appears when you click the **Inspection Reports** link on the **Inspection Management Start Page**.

| 谷 Meridium APM Framework | - Inspection Reports | | | | |
|--|--|---|--|--|--|
| Eile <u>E</u> dit <u>G</u> o To <u>T</u> ools <u>H</u> elp | | | | | |
| 😂 Back 👻 🛞 Forward 👻 🔮 | 1 My Start Page 👻 🎉 New 🔎 Search 🚞 Catalog 🔞 Query 🛛 🗓 Report 🕇 | 🕼 Graph 🗸 🍕 Dataset 🛛 💷 Dashboard 🗸 | | | |
| meridium | Site Map: Inspection->Inspection Reports | | | | |
| Inspection Management | Inspection Reports | | | | |
| Common Tasks 🛛 😽 | Caption | Description | | | |
| 🍓 Print | Bundle Inspection - formatted reports for all equipment | Baseline guery which returns all Bundle Inspection records with a link to the Report | | | |
| ≡2 Send To >> | Bundle Inspection - formatted reports with prompt for equipment | Baseline query which returns all Bundle Inspection records for the equipment selecte | | | |
| 🕐 Help | Checklist Inspections - formatted reports for all equipment | Baseline guery which returns all checklist Inspection records with a link to the Report | | | |
| | Checklist Inspections - formatted reports with prompt for equipment | Baseline query which returns all Checklist Inspection records for the equipment selec | | | |
| | Full Inspection - formatted reports for all equipment | Baseline guery which returns all Full Inspection records with a link to the Report. Rec | | | |
| | Full Inspection - formatted reports with prompt for equipment | Baseline guery which returns all Full Inspection records for the equipment selected w | | | |
| | General Inspection - formatted reports for all equipment | Baseline guery which returns all General Inspection records with a link to the Report | | | |
| | General Inspection - formatted reports with prompt for equipment | Baseline guery which returns all General Inspection records for the equipment select | | | |
| | Pressure Test Inspection - formatted reports for all equipment | Baseline query which returns all Pressure Test Inspection records with a link to the R | | | |
| | Pressure Test Inspection - formatted reports with prompt for equipment | Baseline query which returns all Pressure Test Inspection records for the equipment | | | |
| | | | | | |
| | 4 | × • | | | |
| | Page: 1 of 1 10 records found «« First « Previous | Next » Last »» Page Size: 1000 | | | |

The **Inspection Reports** page contains the **Inspection Reports** grid that displays one row for each query that is stored in the Catalog folder \\Public\Meridium\Modules\Inspection\Manage Report Queries. The **Inspection Reports** grid contains the following columns:

- Caption: Displays the hyperlinked query caption.
- **Description:** Displays the query description.

You can click any hyperlinked caption to run the associated query. If you click the hyperlinked caption for a *baseline* query, you will be directed to another page from which you can run the desired report.

By default, for *each* Inspection subfamily, the grid displays two queries:

• One query that returns a list of *all* Inspection records in that family, regardless of the record to which they are linked. After you run this query, from the list of Inspection records that appears, you can run the report for the desired Inspection record.

• One query that returns a list of all Inspection records in that family, where the Inspection records are linked to a *specific* record that you specify. After you run this query, you will need to specify the desired record. Then, from the list of Inspection records that are linked to that record, you can run the report for the desired Inspection record.

For example, for the Full Inspection family, the grid displays the following queries:

- One query that returns a list of all Full Inspection records that exist in the database. From this list, you can run the report for the desired Full Inspection record.
- One query that returns a list of all Full Inspection records that are linked to a specific Equipment or Functional Location record. After you run this query, you will need to select the desired Equipment or Functional Location record. Then, from the list of Full Inspection records that are returned, you can run the report for the desired Full Inspection record.

The **Inspection Reports** page also contains one task menu: <u>Common Tasks</u>.

Common Tasks Menu



The **Common Tasks** menu on the **Inspection Reports** page contains the following links:

- Print: This button is always disabled on the Inspection Reports page.
- Send To: Displays a submenu with options that let you provide a link to the current page on your desktop (create shortcut), in an email message, or on a Home Page.
- Help: Displays the context-sensitive Help topic for the Inspection Reports page.

Running Inspection Reports From the Inspection Reports Page

To run an inspection report from the Inspection Reports page:

1. In the **Inspection Reports** grid on the <u>Inspection Reports page</u>, in the row containing the query that you want to run, click the hyperlinked query caption.

A new page appears, displaying a list of Inspection records whose associated report you can run.

• If you selected a query from the **Inspection Reports** page that returns Inspection records that are linked to a specific Equipment or Functional Location record, prompts appear for you to specify the desired Equipment or Functional Location record. In this case, proceed to step 2 of these instructions.

-or-

- If you selected a query from the **Inspection Reports** page that returns all Inspection records belonging to a certain family, prompts do not appear. In this case, proceed to step 4 of these instructions.
- 2. If you want to run a report that is associated with an Inspection record that is linked to a Functional Location record, in the **Location ID** text box, type the value that is stored in the Functional Location ID field in the desired Functional Location record.

-or

If you want to run a report that is associated with an Inspection record that is linked to an Equipment record, in the **or Asset ID** text box, type the value that is stored in the Asset ID field in the desired Equipment record.

3. Click the **Run Query** button.

The results appear below the query prompts, displaying a list of all Inspection records that are linked to the Equipment or Functional Location record that you specified in the prompt.

4. In the row representing the inspection whose report you want to run, click the **View Report** link.

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

Running Inspection Reports From the Record Manager

The following instructions assume that you want to run one of the following inspection reports:

- Bundle Inspection
- Full Inspection
- General Inspection
- Pressure Test Inspection

Although you can run a *Checklist Inspection* report via the **Select Report to Print** dialog box in the Record Manager, this documentation assumes you will run Checklist Inspection reports from the Inspection Finding Checklist page or from the Inspection Reports page.

To run an inspection report from the Record Manager:

- 1. In Record Manager, open the Inspection record whose report you want to run.
- 2. On the **Associated Pages** menu, click **Inspection**, and then on the submenu, click **View Printable Report**.

Note: The report is accessible only if it has been associated with the corresponding family via the Configuration Manager.

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

Running Inspection Reports From the Inspection Finding Checklist Page

These instructions provide details about running *Checklist Inspection* reports. To run other types of inspection reports (e.g., Full Inspection), see the instructions on running reports from the Inspection Reports page or from the Record Manager.

Checklist Inspection reports are configured in the baseline Meridium APM database for each of the following families:

- API 510 External Checklist
- API 510 Internal Checklist
- API 510 Internal Exchanger Checklist
- API 570 External Checklist
- API 653 External Checklist
- API 653 Internal Checklist
- External PRD Checklist

In addition to running reports for existing Checklists records, you can also generate *blank* Checklist Inspection reports to print and distribute to the appropriate resources so they can record their findings on the printed report. The following instructions may be used to generate a blank Checklist Inspection report *or* a Checklist Inspection report for an existing Checklists record.

To run a report from the Inspection Finding Checklist page:

- 1. On the Inspection Finding Checklist page, open:
 - The Inspection record whose report you want to run.

-or-

• An Inspection record belonging to the Checklists sub-family for which you want to generate a blank report.

| 😵 Meridium APM Framework - Inspection Finding Checklist | | | | | |
|--|--|--|--|---------------------|--|
| <u>F</u> ile <u>E</u> dit <u>G</u> o To <u>T</u> ools | Help | | | | |
| 😂 Back 👻 🏵 Forward 👻 🏠 | 🚸 Back 🔹 🗧 Forward 🗸 🏠 My Start Page 🔹 🎽 New 🔎 Search 🎽 Catalog 🔞 Query - 🗓 Report = 🔞 Graph = 🍕 Dataset = 📰 Dashboard = | | | | |
| Inspection Management Common Tasks New Save Save Save Save Delete Print | API 510 External Checklist Inspection Docu. | Mechanical Integrity Inspection Finding Check Inspection is closed Reopen Inspection Completion Date: 4/2/2013 Asset ID: ~ ~ QA TM Apply CCR Degradation Mechanism: Generate Represented Inspect | Inspection Report Owner: testInspector, testInspector te Reviewers Name: Tasks Addressed: | Type of Inspection: | |
| Documents Send To >> | | General | Value | Finding Summary | |
| 🕖 Help | | Corrosion | N/A 🛃 | | |
| Associated Pages 😵 | | Distortion | N/A | | |
| | | Weld Defect | N/A 📂 | | |
| | | Other | N/A 🛃 | | |
| | | Insulation | N/A 📂 | | |
| | | Leaks | N/A 🛃 | | |
| | | Vibration | N/A 📂 | | |
| | | Ladder/Stairway | N/A 🐩 | | |
| | | Platform | N/A 🥵 | | |

2. On the **Common Tasks** menu, click the **Print** link.

The **Select Report to Print** dialog box appears. The **Print a report** option is selected by default.

| S | elect Report to Print | |
|---|--|--|
| | Select Report | |
| | Print a copy of the datasheet Print a report: | |
| | Checklist Inspection Report | |
| | OK Cancel | |

- 3. In the **Print a report** list:
 - Accept the default selection, *Checklist Inspection Report*, if you want to run a report for an existing Checklists record.

-or-

- Select the value *Blank Checklist Inspection Report* if you want to generate a blank report for the Checklists family to which the current Inspection record (i.e., the Inspection record displayed as the root node in the explorer) belongs.
- 4. Click OK.
- 5. The report appears on the **Report Viewer** page. From this page, you can print the report to distribute it or to keep it as a record.

About Interpreting the Inspection Reports

In the baseline database, one report is provided for each of the following Inspection families:

Checklists

Note: The Checklist Inspection report is configured for each Checklists sub-family (e.g., API 510 External Checklist).

- Bundle Inspection
- Full Inspection
- General Inspection
- Pressure Test Inspection

While each family has its own report, many of the sections in the reports are common to all of the reports. This section of the documentation describes the sections that are included in the baseline reports and indicates whether or not the section is common to all reports.

Note: Documentation for the Asset Corrosion Analysis section is not provided.

Bundle Inspection Section

The **Bundle Inspection** section appears only if you are viewing a report for a Bundle Inspection record. This section displays information that is stored in the Bundle Inspection record. An example of the **Bundle Inspection** section is shown in the following image.

| Bundle Inspection | | | | |
|---------------------------------|---|----------------|---|--------------------------|
| | | | | |
| Inspection Reference | INSP-4 | | | |
| Functional Location ID | 016-E-E3104B | CRUDE-HVY. AT | MOS. GAS OIL | |
| Asset ID | HE-1609 CRUD | E-HVY. ATMOS. | GAS OIL | |
| Inspection Start Date | 04/10/2006 | | | |
| Inspection Finish Date | 04/13/2006 | | | |
| Inspection Headline | Bundle Inspecti | ion HE1609 | | |
| Reason For Inspection | REQUEST | | | |
| Type of Inspection | API570-VISUAL | -EXTERNAL | | |
| | | | | |
| | | | | |
| Signatures | | | | |
| Inspection Report Owner | Herndon, Super Secured Reviewer Name testInspSuper, testInspS | | | |
| Inspection Summary | This is a large text test for inspection reports. Note: data for the reports and sub reports comes from the inspection datasheets for observations, recommendations, and reference documents. | | | |
| Reviewer Comments | This is a large text test for inspection reports. Note: data for the reports and sub reports comes from the inspection datasheets for observations, recommendations, and reference documents. | | | |
| Bundle Inspection Details | ; | | | |
| Total Number of Tubes in | Bundle | 150 | | |
| Tubes Plugged at Inspecti | on Start | 6 | | |
| Tubes (Previously Plugge | d) Replaced | 0 | | |
| Tubes Replaced Not Prev | | 0 | | |
| Total Number of Tubes Replaced | | 0 | | |
| Tubes Plugged at Inspection End | | 6 | | |
| Percentage Heat Transfer | | 4.00 | | |
| Bundle Inspection Summa | ry | reports and su | text test for inspection rep b reports comes from the i recommendations, and refe | nspection datasheets for |

The following table lists the items that are included in the **Bundle Inspection** section and their corresponding Bundle Inspection fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Bundle Inspection field |
|--|---|
| Asset ID | Asset ID |
| Bundle Inspection Summary | Inspection Summary |
| Functional Location ID | Functional Location ID |
| Inspection Finish Date | Completion Date |
| Inspection Headline | Inspection Headline |
| Inspection Reference | Inspection Reference |
| Inspection Start Date | Commencement Date |
| Inspection Summary | Inspection Summary |
| Inspection Report Owner | Inspection Report Owner |
| Percentage Heat Transfer Area Loss | Percentage Heat Transfer Area Loss |
| Reason for Inspection | Reason for Inspection |
| Reviewer Comments | Reviewers Comments |
| Reviewer Name | Reviewers Name |
| Total Number of Tubes in Bundle | Total Number of Tubes in Bundle |
| Total Number of Tubes Replaced | Total Number of Tubes Replaced at Inspection End |
| Tubes (Previously Plugged) Replaced | Tubes (Plugged At Start) Replaced |
| Tubes Plugged at Inspection End | Total Number of Tubes Plugged at Inspection End |
| Tubes Plugged at Inspection Start | Tubes Plugged at Inspection Start |
| Tubes Replaced Not Previously Plugged | Tubes (Not Previously Plugged) Replaced |
| Type of Inspection | Type of Inspection |

Bundle Sub Inspections Section

The **Bundle Sub Inspections** section appears if you are viewing a report for one of the following records:

- Checklists (unless you are viewing a *blank* Checklist Inspection report)
- Full Inspection

This section displays information that is stored in the Bundle Sub-Inspection records that are linked to the Full Inspection or Checklists record. An example of the **Bundle Sub Inspections** section is shown in the following image.

| Bundle Sub Inspections | | |
|---------------------------------------|------------------|--|
| Bundle Tag | Tag-0123 | |
| Total Number of Tubes in Bundle | 150.00 | |
| Tubes Plugged at Inspection Start | 6.00 | |
| Tubes (Previously Plugged) Replaced | 0.00 | |
| Tubes Replaced Not Previously Plugged | 0.00 | |
| Total Number of Tubes Replaced | 5.00 | |
| Tubes Plugged At Inspection End | 6.00 | |
| Percentage Heat Transfer Area Loss | 4.00 | |
| Bundle Inspection Summary | No issues found. | |

The following table lists the items that are included in the **Bundle Sub Inspections** section and their corresponding Bundle Sub-Inspection fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Bundle Sub-inspection field |
|--------------------------------|-------------------------------|
| Bundle Inspection Sum- mary | Inspection Summary |
| Bundle Tag | Asset ID |
| Percentage Heat Transfer | Percentage Heat Transfer Area |
| Area Loss | Loss |
| Total Number of Tubes in | Total Number of Tubes in |
| Bundle | Bundle |
| Total Number of Tubes | Total Number of Tubes |
| Replaced | Plugged at Inspection End |
| Tubes (Previously | Tubes (Plugged At Start) |
| Plugged) Replaced | Replaced |
| Tubes Plugged at Inspec- | Total Number of Tubes |
| tion End | Plugged at Inspection End |

| Report item | Bundle Sub-inspection field |
|--|--|
| Tubes Plugged at Inspec- tion Start | Tubes Plugged at Inspection Start |
| Tubes Replaced Not Pre- viously Plugged | Tubes (Not Previously Plugged) Replaced |

Checklist Findings Section

The **Checklist Findings** section appears only if you are viewing a Checklist Inspection report. The items that appear in this section depend upon the <u>finding sections</u> that are associated with the Inspection family for which you ran the report and will vary based on what type of Checklist Inspection report you are viewing. If you are viewing a Checklist Inspection report that is:

- Associated with a particular Inspection record, this section displays values that are stored in the Checklist Finding records that are linked to the Inspection record.
- A *blank* Checklist Inspection report, the finding sections associated with the Inspection family for which you ran the report will appear, but the cells in the **Value** and **Finding Summary** columns will be empty.

The following image shows an example of the **Checklist Findings** section that is displayed when you run a Checklist Inspection Report for a particular Inspection record.

| Checklist Fir Category | Name | Value | Finding Summary |
|---------------------------|----------------------|-------|---|
| | | | |
| General | Corrosion | Yes | Found corrosion on the exterior. Created a Recommendation record. |
| | Distortion | Yes | Found distortion on the exterior. Created a Recommendation record. |
| | Weld Defect | N/A | |
| | Other | N/A | |
| | Insulation | Yes | |
| | Leaks | N/A | |
| | Vibration | N/A | |
| | Ladder/Stairway | N/A | |
| | Platform | N/A | |
| | Guy Wires | N/A | |
| | Electrical Ground | Yes | |
| | Coating/Painting | N/A | |
| | Exp Joint or Bellows | N/A | |
| | Gauge/Sight Glass | N/A | |
| Connections | Other | N/A | |
| | Small Branches | N/A | |
| | Nozzles | N/A | |
| | Manways | N/A | |
| | Reinforcing Pads | N/A | |
| | Bolting | N/A | |
| | Flanges | N/A | |
| | Leak Clamps | N/A | |
| Supports | Other | N/A | |
| | Foundation | N/A | |
| | Anchor Bolts | N/A | |
| | Saddle/Skirt | N/A | |

Findings Section

The **Findings** section appears in *all* reports *except* blank Checklist Inspection reports and displays information that is stored in the General Finding records that are linked to the <u>Inspection record</u>. An example of the **Findings** section is shown in the following image.

| Findings | |
|--------------------------|--|
| Profile Item | Insulation |
| Location Details | Insulation for Water Heater. |
| Headline | Insulation needs to be inspected. |
| Summary | Equipment is in good working order. No issues found. |
| Туре | OBSERVATION |
| Deterioration Mode | NONE |
| Deterioration Mechanism | NONE |
| Predictable | Ν |
| Predicted | N |
| Action Taken Code | NONE |
| Action Taken Description | No Action Taken. |

The following table lists the items that are included in the **Findings** section and their corresponding General Finding fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | General Finding field |
|--------------------------|--------------------------|
| Action Taken Code | Action Taken Code |
| Action Taken Description | Action Taken Description |
| Deterioration Mechanism | Deterioration Mechanism |
| Deterioration Mode | Deterioration Mode |
| Headline | Headline |
| Location Details | Location Details |
| Predictable | Predictable |
| Predicted | Predicted |
| Profile Item | Inspection Profile Item |
| Summary | Finding Summary |
| Туре | Туре |

Full Inspection Section

The **Full Inspection** section appears only if you are viewing a report for a Full Inspection record. This section displays information that is stored in the Full Inspection record. An example of a **Full Inspection** section is shown in the following image.

| Full Inspection | |
|-------------------------|-------------------------------------|
| Inspection Reference | INSP-5 |
| Functional Location ID | 19-0001-04 Sour Water Overhead Line |
| Asset ID | 19-00400 SOUR WATER |
| Inspection Start Date | 01/22/2007 |
| Inspection Finish Date | 01/22/2007 |
| | |
| | |
| Signatures | |
| Inspection Report Owner | Reviewer Name |

The following table lists the items that are included in the **Full Inspection** section and their corresponding Full Inspection fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Full Inspection field |
|-------------------------|-------------------------|
| Asset ID | Asset ID |
| Functional Location ID | Functional Location ID |
| Inspection Finish Date | Completion Date |
| Inspection Headline | Inspection Headline |
| Inspection Reference | Inspection Reference |
| Inspection Start Date | Commencement Date |
| Inspection Summary | Inspection Summary |
| Inspection Report Owner | Inspection Report Owner |
| Reason For Inspection | Reason of Inspection |
| Reviewer Comments | Reviewers Comments |
| Reviewer Name | Reviewers Name |
| Type of Inspection | Type of Inspection |

General Inspection Section

The **GeneralInspection** section appears only if you are viewing a report for a General Inspection record. This section displays information that is stored in the General Inspection record. An example of a **GeneralInspection** section is shown in the following image.

| General Inspection | | | |
|-------------------------|--|--------------------------|------------------------|
| Inspection Reference | INSP-3 | | |
| Functional Location ID | 016-E-E3104A CRUDE-HVY. ATM | 105. GAS OIL | |
| Asset ID | HE-1608 CRUDE-HVY. ATMOS. G | GAS OIL | |
| Inspection Start Date | 02/01/2006 | | |
| Inspection Finish Date | 02/03/2006 | | |
| Inspection Headline | General Inspection HE1608 | | |
| Reason For Inspection | OPERATING PERFORMANCE | | |
| Type of Inspection | EXTERNAL VISUAL | | |
| | | | |
| Signatures | | | |
| Inspection Report Owner | testInspector, testInspector | Reviewer Name | Herndon, Super Secured |
| Inspection Summary | No external observations found | to relate to performance | |
| Reviewer Comments | agree document state changed to Approved | | |

The following table lists the items that are included in the **General Inspection** section and their corresponding General Inspection fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | General Inspection field |
|------------------------|--------------------------|
| Asset ID | Asset ID |
| Functional Location ID | Functional Location ID |
| Inspection Finish Date | Completion Date |
| Inspection Headline | Inspection Headline |
| Inspection Reference | Inspection Reference |
| Inspection Start Date | Commencement Date |
| Inspection Summary | Inspection Summary |

| Report item | General Inspection field |
|-------------------------|--------------------------|
| Inspection Report Owner | Inspection Report Owner |
| Reason For Inspection | Reason of Inspection |
| Reviewer Comments | Reviewers Comments |
| Reviewer Name | Reviewers Name |
| Type of Inspection | Type of Inspection |

Inspection Team Members Section

The **Inspection Team Members** section appears in *all* reports *except* blank Checklist Inspection reports and displays information that is stored in the Inspection Team Member records that are linked to the <u>Inspection record</u>. An example of the **Inspection Team Members** section is shown in the following image.

| Inspection Team Members | | | |
|--------------------------|----------------------------------|--------------------------------|-----------------|
| Full Name Smith, Jane | Applicable Certification NBIC | Certification ID 1234567890 | Expiration Date |
| Smith, Joe | NBIC | 1234567890 | |
| Smith, John | NBIC | 1234567890 | |

The following table lists the items that are included in the **Inspection Team Members** section and their corresponding Inspection Team Member fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Inspection Team Member field |
|---------------------------|------------------------------|
| Applicable Certification | Applicable Certification |
| Certification ID | Certification ID |
| Certification Expiry Date | Certification Expiry Date |
| Full Name | Full Name |

Pressure Test Inspection Section

The **Pressure Test Inspection** section appears only if you are viewing a report for a Pressure Test Inspection record. This section displays information that is stored in the Pressure Test Inspection record. An example of the **Pressure Test Inspection** section is shown in the following image.

| Pressure Test Inspection | | |
|--|---------------------------------------|-----------------------------|
| Inspection Reference | INSP-8 | |
| Functional Location ID | 016-E-E3104B CRUDE-HVY. ATMOS. GAS OI | L |
| Asset ID | HE-1609 CRUDE-HVY. ATMOS. GAS OIL | |
| Inspection Start Date | 02/05/2009 | |
| Inspection Finish Date | 02/05/2009 | |
| Inspection Headline | TEST inspection for HE-1609 | |
| Reason For Inspection | REQUEST | |
| Type of Inspection | API510-PRESSURE-TEST | |
| | | |
| Signatures | | |
| Inspection Report Owner | Reviewe | r Name |
| Pressure Test Inspection De | etails | |
| | Shell Side | Tube Side |
| Test Media | WATER | STEAM |
| Test Pressure | 2 | 2 |
| Test Duration | 2 | 2 |
| | 3 | 4 |
| Test Media Temp. | - | - |
| | 3 | 4 |
| Test Media Temp. | 3 3 | 4 |
| Test Media Temp. # of Gauges Used | 3 3 2 | 4 4 3 |
| Test Media Temp. # of Gauges Used Witnessed By | 3 3 2 Bailey, Jane | 4 4 3 Bailey, Jane |

The following table lists the items that are included in the **Pressure Test Inspection** section and their corresponding Pressure Test Inspection fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Pressure Test Inspection field | |
|------------------|--------------------------------|--|
| # of Gauges Used | No. of Gauges Used (Shell) | |
| # of Gauges Used | No. of Gauges Used (Tube) | |

| Report item | Pressure Test Inspection field |
|-------------------------|--------------------------------|
| Asset ID | Asset ID |
| Functional Location ID | Functional Location ID |
| Inspection Finish Date | Completion Date |
| Inspection Headline | Inspection Headline |
| Inspection Reference | Inspection Reference |
| Inspection Start Date | Commencement Date |
| Inspection Summary | Inspection Summary |
| Inspection Report Owner | Inspection Report Owner |
| Reason for Inspection | Reason for Inspection |
| Reviewer Comments | Reviewers Comments |
| Reviewer Name | Reviewers Name |
| SRV Set Pressure | SRV Set Pressure (Shell) |
| SRV Set Pressure | SRV Set Pressure (Tube) |
| Test Comments | Test Comments (Shell) |
| Test Comments | Test Comments (Tube) |
| Test Duration | Test Duration (Shell) |
| Test Duration | Test Duration (Tube) |
| Test Media | Test Media (Shell) |
| Test Media | Test Media (Tube) |
| Test Media Temp. | Test Media Temperature (Shell) |
| Test Media Temp. | Test Media Temperature (Tube) |
| Test Pressure | Test Pressure (Shell) |
| Test Pressure | Test Pressure (Tube) |
| Type of Inspection | Type of Inspection |
| Witnessed By | Witnessed By (Shell) |
| Witnessed By | Witnessed By (Tube) |

Pressure Test Sub Inspections Section

The **Pressure Test Sub Inspections** section appears if you are viewing a report for one of the following records:

- Bundle Inspection
- Checklists (except blank Checklist Inspection reports)
- Full Inspection
- General Inspection

This section displays information that is stored in the Pressure Test Sub-Inspection records that are linked to the <u>Inspection record</u>. An example of the **Pressure Test Sub Inspections** section is shown in the following image.

| Pressure Test Sub Inspections | | |
|-------------------------------|-------------------------------|-------------------------------|
| | Shell Side | Tube Side |
| Test Media | WATER | WATER |
| Test Pressure | 5.00 | 5.00 |
| Test Duration | 20.00 | 20.00 |
| Test Media Temp. | 4.50 | 4.50 |
| # of Gauges Used | 2.00 | 2.00 |
| Witnessed By | Administrator, Meridium | Administrator, Meridium |
| SRV Set Pressure | 3.00 | 3.00 |
| Test Comments | No issues with pressure test. | No issues with pressure test. |

The following table lists the items that are included in the **Pressure Test Sub Inspection** section and their corresponding Pressure Test Sub-Inspection fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Pressure Test Sub-Inspection field |
|------------------|------------------------------------|
| #of Gauges Used | No. of Gauges Used (Shell) |
| #of Gauges Used | No. of Gauges Used (Tube) |
| SRV Set Pressure | SRV Set Pressure (Shell) |
| SRV Set Pressure | SRV Set Pressure (Tube) |
| Test Comments | Test Comments (Shell) |
| Test Comments | Test Comments (Tube) |
| Test Duration | Test Duration (Shell) |
| Test Duration | Test Duration (Tube) |
| Test Media | Test Media (Shell) |
| Test Media | Test Media (Tube) |

| Report item | Pressure Test Sub-Inspection field |
|------------------|------------------------------------|
| Test Media Temp. | Test Media Temperature (Shell) |
| Test Media Temp. | Test Media Temperature (Tube) |
| Test Pressure | Test Pressure (Shell) |
| Test Pressure | Test Pressure (Tube) |
| Witnessed By | Witnessed By (Shell) |
| Witnessed By | Witnessed By (Tube) |

Recommendations Section

The **Recommendations** section is included in *all* reports *except* blank Checklist Inspection reports and displays information that is stored in the Inspection Recommendation records that are linked to the <u>Inspection record</u>. An example of the **Recommendations** section is shown in the following image.

| Recommendations | |
|------------------------|---|
| Recommendation ID | REC-242 |
| Headline | test |
| Description | This is an inspection recommendation test |
| Basis | 2 |
| Target Completion Date | 2/6/2009 12:00:00AM |
| Author Name | Herndon, Super Secured |

The following table lists the items that are included in the **Recommendations** section and their corresponding Inspection Recommendation fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Inspection Recommendation field |
|------------------------|---------------------------------|
| Author Name | Author Name |
| Basis | Recommendation Basis |
| Description | Recommendation Description |
| Headline | Recommendation Headline |
| Profile Item | Inspection Profile Item |
| Recommendation ID | Inspection Recommendation ID |
| Target Completion Date | Target Completion Date |

Reference Documents Section

The **Reference Documents** section is included in *all* reports *except* blank Checklist Inspection reports and displays information that is stored in the Reference Document records that are linked to the <u>Inspection record</u>. An example of the **Reference Documents** section is shown in the following image.

| Reference Documents | | |
|-----------------------|--|--|
| Reference Document ID | Description | Document Path |
| Inspection Guide.pdf | Inspection Guide for Water Heater Inspection | C:\Documents and Settings\mdavis\Desktop\Inspe |

The following table lists the items that are included in the **Reference Documents** section and their corresponding Reference Document fields. Note that the table displays field captions, which may differ from datasheet captions.

| Report item | Reference Document field | |
|-----------------------|--------------------------|--|
| Description | Description | |
| Document Path | Document Path | |
| Reference Document ID | ID | |

Inspection Management Associated Pages

The following table lists the Associated Pages that are configured by default for the following baseline Inspection families:

- Bundle Inspection
- Full Inspection
- General Inspection
- Pressure Test Inspection

These links are available only when *one* record is selected.

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

| Caption | Description |
|-------------------------------------|--|
| View Print- able | Launches the Report Viewer, which displays the Inspection record data in a preformatted report. |
| Report | This Associated Page appears on the Inspection submenu. |
| View Asset Inspection History | Displays the Inspection History Summary Query page, which displays all Inspection records that are linked to the same Equipment record to which the current Inspection record is linked. |
| | This Associated Page appears on the Inspection submenu. |
| View Func- tion Inspec- tion | Displays the Inspection History Summary Query page, which displays all Inspection records that are linked to the same Functional Location record to which the current Inspection record is linked. |
| History | This Associated Page appears on the Inspection submenu. |
| Manage | Displays the Inspection Profile record for the selected Equipment record. |
| Profiles | This Associated Page appears on the Inspection submenu. |
| Corrosion Analysis | Displays the Corrosion Analysis page in Thickness Monitoring, which displays any existing corrosion history for the current Equipment or Functional Location record. |
| | The Meridium APM system assumes that either Equipment records or Functional Location records have been set up to have analyses. If both Equipment and Functional Location records have been configured to have analyses, this link will still work, but other parts of the application may produce unexpected results. |
| | This Associated Page appears on the Inspection submenu. |

| Caption | Description |
|------------------------------|--|
| Manage Tasks | Displays the Task List page, which displays a list of all the Task records that are linked to the Equipment or Functional Location record to which the Inspection record is linked. |
| | This Associated Page should be used only by customers whose Inspec- tion records are linked to either an Equipment record or a Functional Location record. It should not be used by customers whose Inspection records are linked to <i>both</i> an Equipment record and a Functional Loca- tion record. |
| | This Associated Page appears on the Inspection submenu. |
| Manage Location Tasks | Displays the Task List page, which displays a list of all the Task records that are linked to the Functional Location record to which the Inspection Event record is linked. |
| | This Associated Page appears on the Inspection submenu. |
| Manage Equipment Tasks | Displays the Task List page, which displays a list of all the Task records that are linked to the Equipment record to which the Inspection record is linked. |
| | This Associated Page should be used only by customers whose Inspec- tion records are linked to <i>both</i> an Equipment record and a Functional Location record. |
| | This Associated Page appears on the Inspection submenu. |
| Open Inspection | Loads the Inspection record in its configured explorer if one has been set up for the Inspection family. |
| Explorer | This Associated Page appears on the Inspection submenu. |
| Open Work Pack | Opens the Work Pack record to which the Inspection Event record is linked. |
| | This Associated Page appears on the Inspection submenu. |

Public Folders

Inspection Management looks for files in specific places in the Meridium APM Catalog to display information, including lists of saved queries and searches. For Inspection Management to work properly, you must store files in these specific locations. The following table provides a list of these Public folders, information about the files they contain by default, and details on how these files are used by Inspection Management. This list is intended to serve as a quick reference to details that are provided elsewhere in this documentation.

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

| This folder: | Stores these files: | Which are used to: |
|--|---|--|
| \\Public\Meridi- um\Modules\Inspection\Conditional Alert Queries | Queries and searches that retrieve Inspection Conditional Alerts. | Generate the list that appears on the Inspec- tion Alerts page. |
| \\Public\Meridi- um\Modules\Inspection\Config Queries | Application con- figuration queries, including: Asset Query, Base Sum- mary Query, Inspec- tion History Summary Query, and Published Docu- ments Query. | Set up required application con- figurations. |
| \\Public\Meridi- um\Modules\Inspection\Document Queries | Queries and searches that retrieve Inspection records. | Generate the list that appears on the Inspec- tion Manage Documents page. |

| This folder: | Stores these files: | Which are used to: |
|--|--|---|
| \\Public\Meridi- um\Modules\Inspection\Explorers | Configured explorers. | Control the display of Inspection Documents in the Record Man- ager and on the Inspec- tion Finding Checklist page. |
| \\Public\Meridi- um\Modules\Inspection\Manage Report Queries | Queries and searches that retrieve Inspection reports. | Generate the list that appears on the Inspec- tion Manage Reports page. |
| \\Public\Meridi- um\Modules\Inspection\Profile Queries | Queries and searches used to retrieve Inspection Profile records. | Generate the list that appears on the Inspec- tion Manage Profiles page. |
| \\Public\Meridi- um\Modules\Inspection\Report Queries | Underlying support queries. | Produce reports. |

| This folder: | Stores these files: | Which are used to: |
|---|---|--|
| \\Public\Meridi- um\Modules\Inspection\Reports | Reports that provide various information related to inspec- tions. This Catalog folder contains the following reports: | Display inspection reports in the Report Viewer. |
| | Asset Cor- rosion Ana- lysis Report | |
| | Blank Check- list Finding Report | |
| | Blank Check- list Inspection Report | |
| | Bundle Inspec- tion Report | |
| | Bundle Sub Inspection Report | |
| | Checklist Find- ing Report | |
| | Checklist Inspection Report | |
| | Finding Report | |
| | Full Inspection Report | |
| | General Inspection Report | |
| | Inspection Recom- mendation Report | |
| | Inspection Team Member Report | |

| This folder: | Stores these files: | Which are used to: |
|--|--|--|
| | Pressure Test Inspection Report | |
| | Pressure Test Sub Inspection Report | |
| | Reference Document Report | |
| | Workpack Inspection Findings Sum- mary Report | |
| | Workpack Inspection Scope Sum- mary Report | |
| \\Public\Meridi- um\Modules\Inspection\Resource Queries | Queries and searches used to retrieve Human Resources involved in the inspection process. | Generate the list that appears on the Inspec- tion Manage Resources page. |
| \\Public\Meridi- um\Modules\Inspection\Review Queries | Queries and searches used to retrieve Inspection Event records for review. | Generate the list that appears on the Review and Approve Inspection Documents page. |

| This folder: | Stores these files: | Which are used to: |
|--|--|---|
| \\Public\Meridium\Modules\Inspection\SSRS | This folder contains reports that were used in a previous release. | This Catalog folder and its contents are not used by the Meridium APM product. |
| \\Public\Meridium\Modules\Inspection\Task Queries | Queries and searches used to retrieve Equipment or Functional Loca- tion records that can be linked to Inspection Task records. | Generate the list that appears on the Inspec- tion Manage Tasks page. |

Personal Folders

In addition to Public folders, Inspection Management can also use queries and searches stored in Personal folders. The queries and searches must be stored in the exact folder structure expected by Inspection Management. For details, refer to the following table. When you follow the Inspection Management workflow, personal queries and searches will be displayed along with public queries and searches.

The Personal folders do not exist by default and must be created manually if you want to use them to store queries and searches that are used by Inspection Management. Items in Personal folders will appear only to the user of the folder in which they are stored, regardless of the permissions defined for the user who is logged in.

The following table provides a list of these Personal folders, information about the files they should contain, and details on how these files are used by Inspection Management.

| This folder: | Should store these files: | Which are used to: |
|---|---|--|
| \\Personal\Inspection\Document Queries | Queries and searches used to retrieve Inspection records that are of interest to the cur- rent user (e.g., Inspections assigned to the cur- rent user). | Generate the list that appears on the Inspec- tion Manage Documents page. |
| \\Personal\Inspection\Profile Queries | Queries and searches used to retrieve Inspection Profiles | Generate the list that appears on the Inspec- tion Manage Profiles page. |

About the Baseline Inspection Queries

The Inspection Management interface is configured to display results of queries that Meridium APM provides as part of the baseline Inspection Management content. The instructions in this documentation assume that you are using the baseline queries and that you have not modified them. If you modify these queries, the instructions will not apply to your implementation.

Conditional Alert Queries Folder

The query listed in the following table is provided by default in the Catalog folder \Public\Meridium\Modules\Inspection\Conditional Alert Queries. In this table, the value displayed in the **Query**column refers to the query*name*. The baseline query caption is the same as the query name.

| Query | Behavior and Usage |
|--------------------------|---|
| All Inspection Alerts | Returns all Conditional Alert records where the value in the Alert Source field is <i>Inspection</i> . This query contains an Open Alert Definition link, which <u>opens the selected Conditional</u> <u>Alerts record in the Record Manager</u> . The results of this query are displayed on the Inspection Alerts page. |

Config Queries Folder

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

| Query | Behavior and Usage |
|--|--|
| Asset Query | This query is used to identify the records that store information about pieces of equipment for which you perform inspections. In the baseline database, this query returns a count of all Equip- ment records with the Entity Key specified in the query prompt (i.e., one or zero). |
| Base Summary Query | Used by the Inspection History Summary Query. The results of this query are not visible when you follow the Inspection Man- agement workflow; this query exists simply to support a work- flow facilitated by the Inspection History Summary Query. |
| Inspection His- tory Summary Query | Returns a list of all Inspection records that are linked to a cer- tain Equipment or Functional Location record. This query uses the Base Summary Query to determine the Entity Key of the Equipment or Functional Location record. The results of this query are displayed on the Inspection History Summary Query page. |
| Published Docu- ments | Returns a list of all Inspection records whose <u>Published field is</u> <u>set to true</u> . This query contains a Load Inspection hyperlink that lets you open Inspection records in the Record Manager. The results of this query are displayed on the Published Inspec- tion Documents page when it is accessed via the Inspection Management Start Page or a link on a Home Page. |
| Published Docu- ments by Asset | This query returns the same results as the Published Docu- ments query, however, this query contains a prompt on the Asset Key field in the Inspection record. The results of this query are displayed on the Published Inspection Documents page when it is accessed from the navigation bar that is dis- played on various pages throughout Mechanical Integrity mod- ules. |

| Query | Behavior and Usage |
|-------------------------|--|
| User_Key_for_ HR_Key | Returns the Entity Key of each Security User record and the Entity Key of each Human Resource record to which that Secur- ity User record is linked. The results of this query are not vis- ible when you follow the Inspection workflow; this query exists simply to support the workflow facilitated by the following quer- ies, which exist in the <u>Review Queries</u> folder: |
| | Bundle Inspections for Review for Current User - Choose State |
| | Bundle Inspections Pending Approval for Current User |
| | • Full Inspections for Review for Current User - Choose State |
| | Full Inspections Pending Approval for Current User |
| | General Inspections for Review for Current User - Choose State |
| | General Inspections Pending Approval for Current User |
| | Pressure Inspections Pending Approval for Current User |
| | Pressure Test Inspections for Review for Current User - Choose State |

Document Queries Folder

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

| Query | Behavior and Usage |
|--|---|
| All Equipment That Can Have API 510 External Checklist Inspections | Returns all records that are linked to an API 510 External Checklist Inspection record. This query contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing API 510 External Checklist Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have API 510 Internal Checklist Inspections | Returns all records that are linked to an API 510 Internal Checklist Inspection record. This query contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing API 510 Internal Check- list Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have API 510 Internal Exchanger Checklist Inspec- tions | Returns all records that are linked to an API 510 Internal Checklist Inspection record. This query contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing API 510 Internal Exchanger Checklist Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have API 570 External Checklist Inspections | Returns all records that are linked to an API 570 External Checklist Inspection record. This query contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing API 570 External Checklist Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have API 653 External Checklist Inspections | Returns all records that are linked to an API 653 External Checklist Inspection record. This query contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing API 653 External Checklist Inspection records that are linked to the record indicated by the Equipment ID in the query. |

Note: These queries are accessible from the **Inspection Manage Documents** page.

| Query | Behavior and Usage |
|---|--|
| All Equipment That Can Have API 653 Internal Checklist Inspections | Returns all records that are linked to an API 653 Internal Checklist Inspection record. This query contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing API 653 Internal Check- list Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have Bundle Inspections | Returns all records that are linked to a Bundle Inspection record. This query contains a Create New Bundle Inspection Document link, which opens in the Record Manager a new Bundle Inspection record that is linked to the record indic- ated by the Equipment ID column in the query. The query also contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing Bundle Inspection records that are linked to the record indic- ated by the Equipment ID in the query. |
| All Equipment That Can Have External PRD Checklist Inspections | Returns all records that are linked to an External PRD Check- list Inspection record. This query contains an Existing Docu- ments link, which displays on the Inspection History Summary Query page a list of existing External PRD Check- list Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have Full Inspections | Returns all records that are linked to a Full Inspection record. This query contains a Create New Full Inspection Document link, which opens in the Record Manager a new Full Inspec- tion record that is linked to the record indicated by the Equip- ment ID column in the query. The query also contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing Full Inspec- tion records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have General Inspections | Returns all records that are linked to a General Inspection record. This query contains a Create New General Inspec- tion Document link, which opens in the Record Manager a new General Inspection record that is linked to the record indicated by the Equipment ID column in the query. The query also contains an Existing Documents link, which dis- plays on the Inspection History Summary Query page a list of existing General Inspection records that are linked to the record indicated by the Equipment ID in the query. |

| Query | Behavior and Usage |
|---|--|
| All Equipment That Can Have Inspec- tions | Returns all records that are linked to an Inspection record. This query contains a New Documents link, which displays the Select Family dialog box, where you can select the family of the new Inspection record you want to create. After select- ing a family, the Record Manager displays a new record that is linked to the record indicated by the Equipment ID column in the query. The query also contains an Existing Documents link, which displays on the Inspection History Summary Query page a list of existing Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Equipment That Can Have Pressure Test Inspections | Returns all records that are linked to a Pressure Test Inspec- tion record. This query contains a Create New Pressure Test Document link, which opens in the Record Manager a new Pressure Test Inspection record that is linked to the record indicated by the Equipment ID column in the query. The query also contains an Existing Documents link, which dis- plays on the Inspection History Summary Query page a list of existing Pressure Test Inspection records that are linked to the record indicated by the Equipment ID in the query. |
| All Inspection Records | Returns all Inspection records. This query contains a Load inspection link, which opens in Record Manager a new Gen- eral Inspection record that is linked to the record indicated by the Inspection Reference in the query. |
| All Inspection Records For Selec- ted Equipment | Prompts you for the Location ID and Asset ID, and then returns all Inspection Records that are linked to the record that meets the specified criteria. |

Manage Report Queries Folder

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

| Query | Behavior and Usage | | |
|---|---|--|--|
| Bundle Inspec- tion - Formatted Reports for All Equipment | Returns all Bundle Inspection records. This query contains a View Report link, which opens in the Report Viewer the Inspection Document indicated by the Inspection Reference in the query. | | |
| Bundle Inspec- tion - Formatted Reports with Prompt for Equip- ment | Prompts you for a Location ID and Asset ID so you can specify the equipment or location for which you want to view a Bundle Inspection report. | | |
| Checklist Inspec- tions - Formatted Reports for All Equipment | Returns all Checklists records. This query contains a View Report link, which opens in the Report Viewer the Inspection Document indicated by the Inspection Reference in the query. | | |
| Checklist Inspec- tions - Formatted Reports with Prompt for Equip- ment | Prompts you for a Location ID and Asset ID so you can specify the equipment or location for which you want to view a Check- list Inspection Report. | | |
| Full Inspection - Formatted Reports for All Equipment | Returns all Full Inspection records. This query contains a View Report link, which opens in the Report Viewer the Inspection Document indicated by the Inspection Reference in the query. | | |
| Full Inspection - Formatted Reports with Prompt for Equip- ment | Prompts you for a Location ID and Asset ID so you can specify the equipment or location for which you want to view a Full Inspection report. | | |
| General Inspec- tion - Formatted Reports for All Equipment | Returns all General Inspection records. This query contains a View Report link, which opens in the Report Viewer the Inspection Document indicated by the Inspection Reference in the query. | | |

Note: These queries are available from the **Inspection Reports** page.

| Query | Behavior and Usage |
|--|--|
| General Inspec- tion Reports - For- matted Reports with Prompt for Equipment | Prompts you for a Location ID and Asset ID so you can specify the equipment or location for which you want to view a General Inspection report. |
| Pressure Test Inspection - For- matted Reports for All Equipment | Returns all Pressure Test Inspection records. This query con- tains a View Report link, which opens in the Report Viewer the Inspection Document indicated by the Inspection Reference in the query. |
| Pressure Test Inspection - For- matted Reports with Prompt for Equipment | Prompts you for a Location ID and Asset ID so you can specify the equipment or location for which you want to view a Pres- sure Test Inspection report. |

Profile Queries Folder

The query listed in the following table is provided by default in the Catalog folder \\Public\Meridium\Modules\Inspection\Profile Queries. In this table, the value displayed in the **Query**column refers to the query*name*. The baseline query caption is the same as the query name.

| Query | Behavior and Usage | |
|--|--|--|
| All Equipment That Can Have An Inspec- tion Profiles | Returns all Equipment records in your database. This query contains a Manage Profiles link, which opens on the Man- age Equipment Profile page the Inspection Profile records that are linked to the record associated with the item indic- ated by the Equipment ID in the query. | |
| | The results of the All Equipment That Can Have An Inspec- tion Profiles query are available on the Saved Search: All Equipment that can have an Inspection Profiles page. | |

Report Queries Folder

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

| Query | Behavior and Usage | |
|--------------------------------|--|--|
| Checklist Report Query | Generates the report for an Inspection Document associated with a Checklists record. | |
| MI Asset Corrosion Analysis | Generates information in the Asset Corrosion Analysis sec- tion of each <u>main report</u> . | |
| MI Reference Docu- ment | Generates information in the Reference Documents section of each main report. | |
| MI_FIND_CHECK | Generates information in the Checklist Findings section of a Checklist Inspection report. | |
| MI_FIND_GEN | Generates information in the Findings section of each main report. | |
| MI_INSP_GEN | Generates the report for a General Inspection Document. | |
| MI_INSPBSUB | Generates information in the Bundle Sub Inspections section of a Full Inspection report. | |
| MI_INSPBUND | Generates the report for a Bundle Inspection Document. | |
| MI_INSPFULL | Generates the report for a Full Inspection Document. | |
| MI_INSPPSUB | Generates the information in the Pressure Test Sub Inspec- tions section of a Full and General Inspection report. | |
| MI_INSPPTST | Generates the report for a Pressure Test Inspection Docu- ment. | |
| MI_RECINSP | Generates the information in the Recommendations section of each main report. | |
| MI_TEAMINSP | Generates the information in the Inspection Team Members section of each main report. | |

Resource Queries Folder

The queries listed in the following table exist by default in the Catalog folder \\Public\Meridium\Modules\Inspection\Resource Queries. Each query in the this folder includes one or more URLs, which provide specific functionality when the query is run. The following table lists the baseline queries, the functionality of the associated URLs, and the behavior of the associated hyperlinks. In this table, the values listed in the **Query** column refer to the query *names*. The baseline query captions are the same as the query names.

| Query | Behavior and Usage | | | |
|------------------------------------|---|--|--|--|
| All Human Resources | Returns a list of all the Human Resource records in the data- base. | | | |
| | This query contains the following URL Fields: | | | |
| | • Manage Resource Roles (Field Alias: Manage Roles): Dis- plays the Human Resource record in the master/detail datasheet. The detail grid lets you view and create <u>Resource Role records</u> that are linked to the Human Resource record. | | | |
| | • Manage Resource Certifications (Field Alias: Manage Cer- tifications): Displays the Human Resource record in the master/detail datasheet. The detail grid lets you view and create <u>Personnel Certification records</u> that are linked to the Human Resource record. | | | |
| Human Resources with Certification | Returns a list of Human Resource records that are linked to a Personnel Certification record. | | | |
| | This query contains the following URL Field: | | | |
| | Last Name: Displays the Human Resource Record in the master/detail datasheet. The detail grid lets you view and create <u>Personnel Certification</u> records that are linked to the Human Resource record. | | | |
| Human Resources with Roles | Returns a list of Human Resource records that are linked to a Resource Role record. | | | |
| | This query contains the following URL Field: | | | |
| | • Last Name: Displays the Human Resource Record in the master/detail datasheet. The detail grid lets you view and create <u>Resource Role</u> records that are linked to the Human Resource record. | | | |

Note: You can access these queries from the **Inspection Manage Resources** page.

Review Queries Folder

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

Note: These queries are available on the **Review and Approve Inspection Docu**ments page.

| Query | Behavior and Usage | |
|--|---|--|
| Bundle Inspections for | After prompting you to select a reviewer and state, returns | |
| Review - Choose State | a list of all Bundle Inspection records with the selected | |
| and Reviewer | state and reviewer. | |
| Bundle Inspections for | After prompting you to select a state, returns a list of all | |
| Review for Current | Bundle Inspection records for the currently logged-in user | |
| User - Choose State | with the selected state. | |
| Bundle Inspections Pending Approval for Current User | Returns a list of all Bundle Inspection records pending approval for the currently logged-in user. | |
| Full Inspections for | After prompting you for a state and reviewer, returns a lis | |
| Review - Choose State | of all Full Inspection records with the selected state and | |
| and Reviewer | reviewer. | |
| Full Inspections for | After prompting you for a state, returns a list of all Full | |
| Review for Current | Inspection records for the currently logged-in user with | |
| User - Choose State | the selected state. | |
| Full Inspections Pend- ing Approval for Cur- rent User | Returns a list of all Full Inspection records pending approval for the currently logged-in user. | |
| General Inspections | After prompting you for a state and reviewer, returns a list | |
| for Review - Choose | of all General Inspection records with the selected state | |
| State and Review | and reviewer. | |
| General Inspections | After prompting you for a state, returns a list of all Gen- | |
| for Review for Current | eral Inspection records for the currently logged-in user | |
| User - Choose State | with the selected state. | |
| General Inspections Pending Approval for Current User | Returns a list of all General Inspection records pending approval for the currently logged-in user. | |

| Query | Behavior and Usage | |
|---|---|--|
| Pressure Test Inspec- tions for Review - Choose State and Reviewer | After prompting you for a state and reviewer, returns a list of all Pressure Test Inspection records with the selected state and reviewer. | |
| Pressure Test Inspec- tions for Review for Current User - Choose State | After prompting you for a state, returns a list of all Pres- sure Test Inspection records for the currently logged-in user with the selected state. | |
| Pressure Test Inspec- tions Pending Approval for Current User | Returns a list of all Pressure Test Inspection records pending approval for the currently logged-in user. | |

Task Queries Folder

The query listed in the following table is provided in the Catalog folder \\Public\Meridium\Modules\Inspection\Task Queries. In this table, the value listed in the **Query**column refers to the query*name*.The baseline query caption is the same as the query name.

| Behavior and Usage | |
|--|--|
| Returns all records that can be linked to a Task record through the Has Tasks relationship. This query contains a Man- age Tasks link, which opens on the Task List page a list of all Task records that are linked to the record associated with the item indicated by the Equipment ID in the query. This query is available on the Inspection Manage Tasks page. | |
| l t i | |

Inspection

Inspection records store information about inspections that you perform on equipment and locations. The following table provides an alphabetical list and description of the fields that exist in the Inspection family. The information in the table reflects the baseline state and behavior of these fields. This list is not comprehensive.

Note: You can find information about fields unique to the <u>Bundle Sub-Inspection</u> and <u>PRD Pop Test Checklist</u> families in additional topics in this section of the documentation.

| Field | Data Type | Description | Behavior and Usage |
|---------------------|--------------|--|---|
| Actual Work Time | Number | The number of hours it took to complete the inspec- tion. | This field appears on data- sheets configured for Inspection families whose caption contains the word <i>Checklist and</i> on SAP Integ- ration datasheets con- figured for the following families: Bundle Inspection Full Inspection General Inspection Pressure Test Inspec- tion |

| Field | Data Type | Description | Behavior and Usage |
|---------------|--------------|---|--|
| Asset ID | Character | The Record ID of the Equipment record to which the Inspection record is linked. | This field is populated with the Record ID of the Equipment record with which the Inspection record is associated. If you selected an Equipment record on the Equipment screen in the Event Builder when you created the Inspection record, this field will be populated with the Record ID of that Equipment record. If you selected a Functional Location record on the Equipment screen in the Event Builder when you created the Inspection record, this field will be populated with the Record ID of that Equipment record. If you selected a Functional Location record on the Equipment screen in the Event Builder when you created the Inspection record, this field will be populated with the Record ID of that Equipment screen in the Event Builder when you created the Inspection record, this field will be populated with the Record ID of the Reco |
| | | | Equipment record that is linked to that Functional Location record. |
| Asset ID Link | Character | A hyperlink to the Equipment record to which the Inspec- tion record is linked. | When you click this hyper- link, the Equipment record will be opened in Record Manager. |

| Field | Data Type | Description | Behavior and Usage |
|----------------------|--------------|---|--|
| Commencement Date | Date | The date on which the inspection star- ted. | By default, this value is set to the date on which the Inspection record is cre- ated. You can modify this date to reflect the actual start date, as needed. |
| | | | This field is available only on the datasheets that are defined for the families whose caption does <i>not</i> con- tain the word <i>Checklist</i> . |
| | | | If you modify the value in the Completion Date field in a record belonging to a fam- ily whose caption contains the word <i>Checklist</i> , the value in the Com- mencement Date field will be updated automatically to match the value in the Com- pletion Date field. In other words, the commencement date and completion date are always the same. |

| Field | Data Type | Description | Behavior and Usage |
|--------------------|--------------|---|---|
| Completion Date | Date | The date on which the inspection was completed. | By default, this value is set to the date on which the Inspection record is cre- ated. You can modify this date to reflect the actual completion date, as needed. |
| | | | If the value in the Inspection Task Complete field is set to <i>True</i> , when the Inspection record is saved, the value in the Completion Date field will be used to populate the Last Date field in the Task records whose Record IDs appear in the Tasks Addressed field. |
| | | | When the value in the Com- pletion Date field is changed in a record belong- ing to a family whose cap- tion contains the word <i>Checklist</i> , the value in the Commencement Date field will be updated auto- matically to match the value in the Completion Date field. In other words, the commencement date and completion date are always the same. |

| Field | Data Type | Description | Behavior and Usage |
|--------------------------|--------------|---|---|
| Degradation Mechanism | Character | The degradation mechanism that the inspection is meant to prevent. | The Degradation Mech- anism field contains a list of values, where that list is populated differently depending upon the value that is stored in the Tasks Addressed field, and in some cases, the subfamily to which the Inspection record belongs. |
| | | | Regardless of the Inspection subfamily to which the Inspection record belongs, when the value in the Tasks Addressed field identifies a Task record that is linked to a Recommendation record that is linked to an RBI Degradation Mechanisms record, the Degradation Mechanism list displays a list of RBI Degradation Mechanisms records that are included in the RBI Ana- lysis containing that RBI Recommendation record. The Degradation Mech- anism list contains the val- ues in the Degradation Mechanism field in those RBI Degradation Mech- anisms records. |
| | | | Additionally, the Degrad- ation Mechanism field is populated by default using the RBI Degradation Mech- anisms record that is linked to the associated Recom- mendation record. If the value in the Tasks Addressed field is empty <i>or</i> |

| Field | Data Type | Description | Behavior and Usage |
|-------|--------------|-------------|--|
| | | | contains a value that iden- tifies a Task record that is <i>not</i> linked to a Recom- mendation record, the Inspection record subfamily is used to determine the Sys- tem Code Table that will be used to supply values to the Degradation Mechanism list. |
| | | | If the record belongs to any Inspection sub- family <i>except</i> the PRD Pop Test Checklist sub- family, the Degrad- ation Mechanism field displays a list of val- ues that are stored in the System Code Table MI_ DEGRADATION_ MECHANISM_TYPES (Degradation Mech- anism Types). |
| | | | If the record belongs to the PRD Pop Test Checklist subfamily, the Degradation Mech- anism field displays a list of values that are stored in the System Code Table MI_PDM_ FILTER (MI RBI, Poten- tial Degradation Fil- ter). |
| | | | In this case, the Degrad- ation Mechanism field is not populated auto- matically. |
| | | | The value that you select in this field is used in RBI |

| Field | Data Type | Description | Behavior and Usage |
|--------------------------------|--------------|---|--|
| | | | when you assign Inspection records to RBI Degradation Mechanism Evaluation records. |
| Equipment Oper- ating State | Character | The state of the equipment that is being inspected. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_EQUIP_OP_ STATE (MI Inspection, Equip- ment Operating State) Sys- tem Code Table. |
| Extent | Character | The extent to which the inspection was performed. | This field displays a list of values based upon the value that you selected in the Type of Inspection field and the values that exist in the Inspection Extent field in Inspection Strategy records. |
| | | | Specifically, the Extent field displays a list of values that exist in the Inspection Extent field in all Inspection Strategy records whose Inspection Task Type field contains the value that you selected in the Type of Inspection field. |
| | | | For example, if you selected <i>CUI</i> in the Type of Inspec- tion field, the Extent list would display the values that are stored in the Inspec- tion Extent field in all Inspec- tion Strategy records whose Inspection Task Type field contains the value <i>CUI</i> . |

| Field | Data Type | Description | Behavior and Usage |
|----------------------------------|--------------|---|--|
| Final Inspection Lock | Logical | Indicates whether or not the Inspec- tion record has reached a final state. | Typically, the person who is reviewing the Inspection Document (i.e., the person whose name appears in the Reviewers Name field) will set this field to <i>True</i> when the review is complete. |
| Functional Loca- tion ID | Character | The Record ID of the Functional Loca- tion record to which the Inspection record is linked. | This field is populated with the Record ID of the Func- tional Location record with which the Inspection record is associated. |
| | | | If you selected a Functional Location record on the Equipment screen in the Event Builder when you created the Inspection record, this field will be populated with the Record ID of that Functional Location record. If you selected an Equipment record on the Equipment screen in the Event Builder when you created the Inspection record, this field will be populated with the Record ID of that Functional the Event Builder when you created the Inspection record, this field will be populated with the Record ID of the Functional Location record to which that Equipment record is linked. |
| Functional Loca- tion ID Link | Character | A hyperlink to the Functional Location record to which the Inspection record is linked. | When you click this hyper- link, the Functional Loca- tion record will be opened in Record Manager. |

| Field | Data Type | Description | Behavior and Usage |
|--|--------------|---|---|
| Generate Rep- resented Inspec- tions | Logical | Indicates whether or not Inspection records will be cre- ated automatically for equipment that is associated with Inspection Groups that you create using the Risk Based Inspection (RBI) module. | When the value in this field is set to <i>True</i>, <i>Represented Inspections</i> may be created. This field is enabled only when the Inspection record is associated with an Equipment record that is also associated with an Inspection Group <i>and</i> an Inspection Task record was created from an RBI Recommendation record that was created from that Inspection Group. This field is not available on datasheets that are delivered for the External PRD Checklist and PRD Pop Test Checklist subfamilies and will not appear on the Inspection Finding Check-list page when you open an Inspection record belonging |
| | | | to one of these subfamilies. |

| Field | Data Type | Description | Behavior and Usage |
|----------------------------|--------------|---|--|
| Inspection Con- fidence | Character | A value that indic- ates how effective prior inspections were at identifying the degradation mechanism and the rate of degradation. | This field is populated auto- matically based upon the value that you selected in the Type of Inspection field, the value that you selected in the Extent field, and the values that exist in the Inspection Confidence field in Inspection Strategy records. |
| | | | Specifically, the Inspection Confidence field is pop- ulated with the value that exists in the Inspection Con- fidence field in the Inspec- tion Strategy record whose: |
| | | | Inspection Task Type field contains the value that you selec- ted in the Type of Inspection field. |
| | | | Inspection Extent field contains the value that you selected in the Extent field. |
| | | | For example, if you selected <i>CUI</i> in the Type of Inspec- tion field and <i>RT or Strip</i> <i>25% of the Locations by Cat- egory</i> in the Extent field, the Inspection Confidence field would display the value that is stored in the Inspection Confidence field in the Inspection Strategy record whose Inspection Task Type and Inspection Extent fields contain those values. |
| | | | This field is not available on the baseline Inspection data-sheets. |

| Field | Data Type | Description | Behavior and Usage |
|---------------------------------|--------------|--|---|
| | | | The value that you select in this field is used in RBI when you assign Inspection records to RBI Degradation Mechanism Evaluation records. |
| Inspection Docu- ment Status | Character | The status of the Inspection Docu- ment. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_STATUS (Status Codes - CORE) Sys- tem Code table. |
| | | | When an Inspection record is created, the value is set to <i>Draft (DRAFT)</i> by default. You can change it to <i>Pend- ing Approval</i> when you are ready for the reviewer to review it. Likewise, the reviewer can change it to <i>Approved (APPROVED)</i> after they have reviewed it. |
| Inspection Head- line | Character | A short description of the inspection. | This field does not contain a value by default. You can type a value in this field manually. |

| Field | Data Type | Description | Behavior and Usage |
|---------------------------|--------------|--|--|
| Inspection Lock | Logical | Indicates whether or not the Inspec- tion record is locked. When this field is set to <i>False</i> , the Inspection record is unlocked. When this field is set to <i>True</i> , the Inspection record is locked. | After you lock and Inspec- tion record, you cannot unlock it. When an Inspection record is locked, all fields <i>except</i> for the following fields will be disabled: Inspection Document Status Inspection Lock Reviewers Name Reviewers Comments Final Inspection Lock Published After the Inspection record is locked, you can flag it for approval using the Inspec- tion Document Status field. In addition, the record hier- archy shortcut menu options that allow you to link new or existing Recom- mendation records to the Inspection Event record are disabled. You can lock an Inspection Report Owner field contains the first and last name asso- ciated with your Security User account. |
| Inspection Refer- ence | Character | A value used to identify the Inspec- tion record. | This value is generated auto- matically by the Meridium APM System. |

| Field | Data Type | Description | Behavior and Usage |
|----------------------------|--------------|--|---|
| Inspection Report Owner | Character | The first and last name of the Meridium APM Security User who performed the inspection. | This field contains a list of Security Users who have been assigned the Inspector role. When you create the Inspection record, you will need to select the name of the Meridium APM Security User who performed the inspection. |
| Inspection Sum- mary | Text | A summary of the inspection. | This field does not contain a value by default. You can type in this field manually. |

| Field | Data Type | Description | Behavior and Usage |
|-----------------------------|--------------|---|--|
| Inspection Task Complete | Logical | Indicates whether or not the Inspec- tion record is closed and the asso- ciated Task records have been updated. When this field is set to <i>True</i> , the Inspection record is closed. | This field appears on data- sheets configured for Inspection families whose caption does <i>not</i> contain the word <i>Checklist</i> (e.g., General Inspection). For Inspection families whose caption <i>does</i> contain the word <i>Checklist</i> , the value in this field is modified using a button on the Inspection Finding Checklist page, which is labeled Save & <i>Close Inspection</i> or <i>Reopen</i> <i>Inspection</i> depending upon the value that is populated in this field. |
| | | | When you close an Inspec- tion record: |
| | | | • The value in the Com- pletion Date field will be used to populate the Last Date field in the Task record whose Record ID appears in the Tasks Addressed field. |
| | | | If your database has been configured cor- rectly, a Task Exe- cution record will be created automatically and linked to the Inspection and Inspec- tion Task records whose Record IDs appear in the Tasks Addressed field. The value in the Date Executed field in the Task Execution record will be set auto- |

| Field | Data Type | Description | Behavior and Usage |
|--------------------------------|--------------|--|--|
| | | | matically to the date on which the Inspec- tion record was closed. |
| | | | Additionally, when you close an Inspection record via the Inspection Finding Checklist page: |
| | | | The fields that are displayed in the Inspection Finding Checklist workspace become disabled. |
| | | | The Inspection Lock field in the Inspection record is set auto- matically to <i>True</i>. |
| | | | In order to close an Inspec- tion record via the Inspec- tion Finding Checklist page, the Inspection Report Owner field must contain a value <i>and</i> that value must match the first and last name associated with your Security User account. |
| Is a Represented Inspection | Logical | Indicates whether or not the Inspec- tion record is asso- ciated with a piece of equipment whose inspection requirements are satisfied by the physical inspection of <i>another</i> piece of equipment based on Inspection Group data. | This field is available <i>only</i> in the General Inspection fam- ily (a subfamily of the Inspection family). When the value in this field is set to <i>True</i> , the Inspection record is considered a <u>Rep- resented Inspection</u> (i.e., its inspection requirements are satisfied by the physical inspection of <i>another</i> piece of equipment). |

| Field | Data Type | Description | Behavior and Usage |
|---|--------------|---|---|
| Published | Logical | Indicates whether or not the Inspec- tion Document is published. When this field is set to <i>True</i> , the Inspection Document is con- sidered published. | When an Inspection Docu- ment has been published, it can be <u>accessed from the</u> <u>Published Inspection Docu- ments page</u> . |
| Reason for Inspection | Character | Indicates why the inspection was per- formed. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_EVENT_ REASON (CORE, Reason for Event) System Code Table. |
| Represented Inspections Generated | Logical | Indicates whether or not additional Inspection records have been created automatically for equipment that is associated with Rep- resented RBI Com- ponents based on Inspection Group data. | When the value in this field is set to <i>True</i> , the Inspection record is associated with a Representative RBI Com- ponent for which <u>Rep- resented Inspections</u> exist for the related Equipment records. |
| Reviewers Com- ments | Text | The reviewer's com- ments about the Inspection Docu- ment. | This field does not contain a value by default. You can type a value in this field if desired. |
| Reviewers Name | Character | The first and last name of the Meridium APM Security User that is responsible for reviewing the Inspection Docu- ment. | This field contains a list of Security Users who have been assigned the Inspec- tion Supervisor role. When you create the Inspection record, you should specify in this field the Security User who will be respons- ible for reviewing the Inspec- tion record. |

| Field | Data Type | Description | Behavior and Usage |
|-------|--------------|--|---|
| Scope | Text | The recommended scope for this type of inspection. | This field displays a value based upon the value that you selected in the Type of Inspection field, the value that you selected in the Extent field, and the values that exist in the Recom- mended Inspection Scope field in Inspection Strategy records. |
| | | | Specifically, the Scope field displays the value that exists in the Recommended Inspection Scope field in all Inspection Strategy records whose: |
| | | | Inspection Task Type field contains the value that you selec- ted in the Type of Inspection field. |
| | | | Inspection Extent field contains the value that you selected in the Extent field. |
| | | | For example, if you selected <i>CUI</i> in the Type of Inspec- tion field and <i>RT or Strip</i> 25% of the Locations by Cat- egory in the Extent field, the Scope field would display the value that is stored in the Recommended Inspec- tion Scope field in the Inspection Strategy record whose Inspection Task Type and Inspection Extent fields contain those values. |

| Data Type | Description | Behavior and Usage |
|--------------|---|---|
| Character | The tasks that are addressed by the inspection. | You can select Task records associated with the Inspec- tion record from the list of Task Record IDs: |
| | | When you <u>create an</u> <u>Inspection record</u> <u>using the Event</u> <u>Builder</u>, on the Task (s) Selection screen. |
| | | When you <u>open an</u> <u>existing Inspection</u> <u>record</u>: |
| | | Defined for a family whose caption includes the word Check- list, on the Inspection Find- ing Checklist page, in the Tasks Addressed list. |
| | | Defined for a family whose caption does not include the word Checklist, in Record Man- ager, in the Tasks Addressed list in the Inspec- tion datasheet. |
| | | Character The tasks that are addressed by the |

| Field | Data Type | Description | Behavior and Usage |
|-------------------------|--------------|--|--|
| Type of Inspec- tion | Character | The type of inspec- tion that was per- formed. | This field displays a list of values that are stored in the Task Type ID field in Task Types records whose Refer- ence field contains the value <i>INSPECTION_</i> <i>STRATEGY</i> . |
| | | | The values that appear in this list depend upon the type of Inspection record that you are viewing. For Inspection records belong- ing to: |
| | | | The PRD Pop Test Checklist subfamily, the values in this list are populated using the System Code Table MI_PRD_ INSPECTION_TYPE_ FILTER (PRD Inspec- tion Type Filter). |
| | | | Any Inspection sub- family except the PRD Pop Test Checklist sub- family, this list is pop- ulated with the Task Type ID value in each Task Types record that does not cor- respond with a value in the System Code Table MI_PRD_ INSPECTION_TYPE_ |
| | | | FILTER (PRD Inspec- tion Type Filter). |

Bundle Sub-Inspection

Bundle Sub-Inspection records store information about inspections that you perform on tube bundle equipment. The following table provides an alphabetical list and description of the fields that exist in the Bundle Sub-Inspection family. The information in the table reflects the baseline state and behavior of these fields.

| Field | Data Type | Description | Behavior and Usage |
|--------------------------------|-----------|---|--|
| Action This Inspection | Character | The action that was per- formed on the tube bundle dur- ing the inspection. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_ BUNDLE_ACTION (Inspection; Inspec- tion/Maintenance Actions taken on an exchanger bundle) System Code Table. The value <i>No Action (NO</i> <i>ACTION)</i> is selected in the list by default. |
| Asset ID | Character | The Record ID of the Equipment record to which the Bundle Sub- Inspection record is linked. | The Bundle Sub-Inspection data- sheet caption for this field is <i>Bundle</i> <i>Tag</i> . |
| Bundle Type | Character | The type of the tube bundle equipment. | This field is populated with a list of the IDs and Descriptions of the Sys- tem Codes that are stored in the MI_ BUNDLE_TYPE (Inspection; Bundle Types) System Code Table. |
| Bundle Inspec- tion Summary | Text | A summary of the inspection. | You can use this field to record any additional information about the inspection that is not stored in another field in the Bundle Sub- Inspection record. |

| Field | Data Type | Description | Behavior and Usage |
|--|-----------|---|---|
| Percentage Heat Transfer Area Loss | Number | The per- centage of the area of the tube bundle that will exper- ience heat transfer loss due to plugged tubes. | This value is calculated using the fol- lowing formula: Percentage Heat Transfer Area Loss = (Total Number of Tubes Plugged At Inspection End / Total Number of Tubes In Bundle) x 100 |

| Field | Data Type | Description | Behavior and Usage |
|---------------------------------------|-----------|--|--|
| Total Number Of Tubes In Bundle | Number | The number of tubes in the tube bundle. | This value is used to calculate the value in the Percentage Heat Trans- fer Area Loss field. This field con- tains the value <i>0</i> (zero) by default. |
| | | | If you enter a value in this field, save the record, and then modify the value, the following fields will be pop- ulated with the value <i>O</i> (zero), because if you modify the value in the Total Number Of Tubes In Bundle field after saving the record, you should re-enter values in these fields: |
| | | | Tubes Plugged At Inspection Start |
| | | | Tubes (Plugged At Start) Replaced |
| | | | Tubes Plugged During This Inspection |
| | | | Tubes (Not Previously Plugged) Replaced |
| | | | Total Number of Tubes Replaced at Inspection End |
| | | | The value in this field must be greater than or equal to the: |
| | | | Value in the Tubes Plugged At Inspection Start field. |
| | | | Value in the Tubes Plugged During This Inspection field. |
| | | | Sum of the values in the Tubes Plugged At Inspection Start and Tubes Plugged During This Inspection fields. |

| Field | Data Type | Description | Behavior and Usage | | |
|------------------------------|-----------|---------------------------------|---|--|---|
| Total Number of Tubes | Number | f Tubes of tubes in | of tubes in | This field is populated based upon the following values: | |
| Plugged At Inspection End | | the tube bundle that were | Tubes Plugged At Inspection Start | | |
| | | plugged at the end of | Tubes Plugged During Inspec- tion | | |
| | | the inspec- tion. | Tubes (Plugged At Start) Replaced | | |
| | | | Depending upon which of these fields contain values, this field is pop- ulated as follows: | | |
| | | | | | If only the Tubes Plugged At Inspection Start field contains a value, the Total Number of Tubes Plugged At Inspection End field is populated with that value. |
| | | | | If the Tubes Plugged At Inspection Start and Tubes Plugged During Inspection fields contain values, the Total Number of Tubes Plugged At Inspection End field is populated with the sum of these values. | |
| | | | If all three fields contain values, the Total Number of Tubes Plugged At Inspection End field is populated with the sum of the values in the Tubes Plugged At Inspection Start and Tubes Plugged During Inspection <i>minus</i> the value in the Tubes (Plugged At Start) Replaced field. | | |
| | | | This field is disabled when the Action This Inspection field contains a value. | | |

| Field | Data Type | Description | Behavior and Usage |
|---|-----------|---|---|
| Total Number of Tubes Replaced at Inspection End | Number | The total number of tubes in the tube bundle that have been replaced at the end of a given inspec- tion. | This field contains the value <i>0</i> (zero) by default. This field is disabled when the Action This Inspection field contains a value. When the Action This Inspection field contains the value: <i>Partial Retube (PARTIAL RETUBE)</i>, this field is populated with the sum of the values in the Tubes (Plugged At Start) Replaced and Tubes (Not Previously Plugged) Replaced fields. If only one of these fields contains a value, the Total Number of Tubes Replaced at Inspection End field is populated with that value. <i>Bundle Replaced (BUNDLE REPLACED)</i> or <i>Total Retube (TOTAL RETUBE)</i>, this field is populated with the value in the Total Number of Tubes In Bundle field. |

| Field | Data Type | Description | Behavior and Usage |
|--|--|---|--|
| Tubes Plugged At Inspection | Inspection of | The number of tubes in | This field contains the value <i>0</i> (zero) by default. |
| Start | | the tube bundle that | The value in this field must be: |
| | | were plugged before the | Greater than or equal to the value in the Tubes (Plugged At Start) Replaced field. |
| | | inspection started. | Less than or equal to the value in the Total Number Of Tubes In Bundle field. |
| | | | This value is used to calculate the value in the Percentage Heat Trans-fer Area Loss field. |
| Tubes (Plugged At Start) Replaced | Number | The number of tubes in the tube bundle that were <i>plugged</i> before the inspection started but were <i>replaced</i> during the inspection. | This field is enabled <i>only</i> when the value in the Action This Inspection field is <i>Partial Retube (PARTIAL RETUBE)</i> . This value must be <i>less than</i> or equal to the value in the Tubes Plugged At Inspection Start field. This field contains the value <i>O</i> (zero) by default. |
| Tubes Plugged During This Inspection | ring This of tubes in pection the tube bundle that were | the tube bundle that | This field is enabled only when the Action This Inspection field contains a value other than <i>No Action (NO ACTION)</i> . This field contains the value <i>0</i> (zero) by default. |
| | | ing the | The value in this field must be <i>less than</i> or equal to the value in the Total Number Of Tubes In Bundle field. |
| | | | When the value in the Action This Inspection field is <i>Bundle Replaced</i> <i>(BUNDLE REPLACED)</i> , this field is populated with the value <i>0</i> (zero). |

| Field | Data Type | Description | Behavior and Usage |
|--|-----------|---|---|
| Tubes (Not Pre- viously Plugged) Replaced | Number | The number of tubes in the tube bundle that were not <i>plugged</i> before the inspection started but were <i>replaced</i> during the inspection. | This field is enabled only when the value in the Action This Inspection field is <i>Partial Retube (PARTIAL RETUBE)</i> . This field contains the value <i>0</i> (zero) by default. |

PRD Pop Test Checklist

PRD Pop Test Checklist records store information about the external functional inspections that you perform on pressure relief devices (PRDs). The following table provides an alphabetical list of the fields that are unique to this type of Inspection record. *All* of the fields listed in this table appear on the datasheet that is delivered for the PRD Pop Test Checklist family. For information about fields that are common to all Inspection records, see the Inspection family field description topic.

| Field | Data Type | Description | Behavior and Usage |
|-------------------------------|--------------|--|---|
| As Found Pop Pres- sure | Number | The pressure at which the PRD opens at the time of the inspec- tion. | This field accepts non-negative, numeric values <i>only</i> (e.g., 10). |
| As Left Pop Pres- sure | Number | The pressure at which the PRD opens after maintenance has been performed on the PRD (e.g., clean- ing). | This field accepts non-negative, numeric values <i>only</i> (e.g., 10). |
| Design Set Pressure | Number | The pressure at which the PRD was designed to open. | This field accepts non-negative, numeric values <i>only</i> (e.g., 10). |
| Leak Cat- egory | Character | The type of leak that is associated with the PRD. | On the datasheet, this field appears as list that contains the following values: |
| | | | Minor |
| | | | • Moderate |
| | | | • Stuck Open |
| | | | This list is populated with the descriptions of the System Codes that are stored in the MI_ INSPECTION_LEAK_CATEGORY (Inspection Leak Category) Sys- tem Code Table. |
| | | | This field is enabled and can retain a value <i>only</i> when the Leak Test Results field contains the value <i>Leak</i> . |

| Field | Data Type | Description | Behavior and Usage |
|------------------------------------|--------------|---|--|
| Leak Test Results | | | On the datasheet, this field appears as a list that contains the following values: |
| | | during the inspection. | • No Leak |
| | | | • Leak |
| | | | This list is populated with the descriptions of referenced System Codes for the MI_INSP_ RESULTS_LEAK System Code that is stored in the System Code Table with the ID <i>MI_RBI_REFERENCES</i> . |
| Over Pres- sure Test Results | Character | Indicates whether or not the PRD passed the pressure test that you performed dur- ing the inspection. | On the datasheet, this field appears as a list that contains the following values: • Pass • Fail |
| | | | This list is populated with the descriptions of referenced System Codes for the MI_INSP_ RESULTS_OVER_PRESSURE System Code that is stored in the System Code Table with the ID <i>MI_RBI_REFERENCES</i> . |

General Finding

General Finding records store information about the results of an inspection at the subcomponent level. The following table provides an alphabetical list and description of the fields that exist in the General Finding 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 |
|-----------------------------|--------------|---|--|
| Action Taken Code | Character | The action taken to address the finding of an inspection. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_ Action (CORE, Actions Taken) System Code Table. |
| Action Taken Description | Text | A description of the action taken to address the finding of an inspection. | You can use this field to record any additional information about the action that is not stored in another field in the General Finding record. |
| Deterioration Mechanism | Character | The Degrad- ation Mech- anism that was observed dur- ing the inspec- tion. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_ DAMAGE_MECHANISM (Inspection, Damage Mechanism) System Code Table. The datasheet caption for this field is <i>As Found Degradation Mech-</i> <i>anism</i> . |
| Deterioration Mode | Character | How the Degradation Mechanism was observed during the inspection. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_ DAMAGE_MODE (Inspection, Damage Mode) System Code Table. |

| Field | Data Type | Description | Behavior and Usage |
|--|--|--|---|
| Expected RBI Degradation Mechanism | Character The Potential Degradation Mechanism associated with the Inspec- tion Method | | This field contains the value that is stored in the RBI Degradation Mech- anism field in the Inspection Method record that corresponds with the selection in the Inspection Method Item field. |
| | | ltem. | If the Inspection Method record that corresponds with the selection in the Inspection Method Item field does not contain a value in the RBI Degradation Mechanism field, this field does not contain a value. |
| | | | This field is always disabled. |
| Finding Sum- mary | Text | A summary of the findings of the inspection. | You can use this field to record any additional information about the findings that are not stored in another field in the General Finding record. |
| Headline | Character | A short descrip- tion of the find- ings of the inspection. | This field does not contain a value by default. You can type a value in this field if desired. |
| Inspection Method Item | Character | The Inspection Method that corresponds with the Inspec- tion Profile for which findings are being recor- ded. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_ INSPECTION_METHOD_CATEGORY (Inspection Method Category) Sys- tem Code Table. This field is enabled only when the Inspection Profile Item field contains a value. |
| Inspection Profile Item | Character | The Inspection Profile that rep- resents the subcomponent for which find- ings are being recorded. | This field is populated with a list of the Inspection Profiles that you have defined for the particular Inspection Scope. |

| Field | Data Type | Description | Behavior and Usage |
|--------------------|--------------|---|--|
| Predictable | Character | Indicates whether or not past events could have pre- dicted the find- ings of the inspection. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_YES_ NO (MI Core, Yes-No) System Code Table. |
| Predicted | Character | Indicates whether or not the findings were predicted by a past event. | This field displays a list of the IDs and Descriptions of the System Codes that are stored in the MI_YES_ NO (MI Core, Yes-No) System Code Table. |
| RBI Com- ponent | | | This field contains the value that is stored in the RBI Component field in the Inspection Profile record that corresponds with the selection in the Inspection Profile Item field. |
| | | ltem. | If the Inspection Profile record that corresponds with the selection in the Inspection Profile Item field does not contain a value in the RBI Component field, this field does not contain a value. |
| | | | This field is always disabled. |
| Туре | Character | The type of inspection find- ings for which you are cre- ating a General Finding record. | This field displays a list of the IDs of the System Codes that are stored in the MI_FINDING_TYPE (MI Inspec- tion, Provides categories for an inspection finding) System Code Table. |

Checklist Finding

Checklist Finding records store information about the results of an inspection at the subcomponent level. These records are used on the <u>Inspection Finding Checklist page</u>, which appears when you create or open an Inspection record belonging to an Inspection family whose caption contains the word *Checklist*.

The following table provides an alphabetical list and description of the fields that exist in the Checklist Finding family. The information in the table reflects the baseline state and behavior of these fields.

| Field | Data Type | Description | Behavior and Usage |
|----------|--------------|--|--|
| Category | Character | The category into which the subcomponent can be grouped (e.g., Linings). | On the Inspection Finding Checklist page, each section corresponds to a category and is labeled with the description of a System Code that belongs to one of the following Sys- tem Code Tables: |
| | | | MI_API_510_INTERNAL_ CHECKLIST_FINDING_ SECTIONS (API 510 Internal Checklist Finding Section) |
| | | | MI_API_510_INTERNAL_ EXCHANGER_CHECKLIST_ FINDING_SE (API 510 Internal Exchanger Checklist Finding Section) |
| | | | MI_API_570_EXTERNAL_ CHECKLIST_FINDING_ SECTIONS (API 570 External Checklist Finding Section) |
| | | | MI_API_653_EXTERNAL_ CHECKLIST_FINDING_ SECTIONS (API 653 External Checklist Finding Section) |
| | | | MI_API_653_INTERNAL_ CHECKLIST_FINDING_ SECTIONS (API 653 Internal Checklist Finding Section) |
| | | | MI_EXTERNAL_PRD_ CHECKLIST_FINDING_ SECTIONS (External PRD Check- list Finding Section) |
| | | | MI_PRD_PT_CHECKLIST_ FINDING_SECTIONS (PRD Pop Test Checklist Finding Sec- tions) |
| | | | The specific sections that are dis- played on the page are based upon the family to which the Inspection record belongs. |

| Field | Data Type | Description | Behavior and Usage |
|-------|--------------|-------------|--|
| | | | For example, if the Inspection record belongs to the <i>API 510</i> <i>Internal Checklist</i> family, the sec- tions that are displayed are labeled with the descriptions of the System Codes that belong to the <i>MI_API_</i> <i>510_INTERNAL_CHECKLIST_</i> <i>FINDING_SECTIONS (API 510 Internal</i> <i>Checklist Finding Section)</i> System Code Table. |

| Field | Data Type | Description | Behavior and Usage |
|-------|--------------|---|--|
| Name | Character | A short descrip- tion of the item you were inspect- ing or the con- dition for which you were look- ing (e.g., Anchor Bolts, Leaks). | On the Inspection Finding Checklist page, in each finding section, the first column displays a subset of val- ues that are stored in the MI_ CHECKLIST_FINDING_ITEMS (Check- list Finding Items) System Code Table. The specific values that are displayed in each finding section are based upon the family to which the Inspection record belongs, the Sys- tem Codes that belong to the cor- responding System Code Table, and the System Codes that those System Codes reference. |
| | | | For example, suppose you are view- ing an Inspection record belonging to the API 510 Internal Checklist fam- ily. This family corresponds to the <i>MI_API_510_INTERNAL_CHECKLIST_</i> <i>FINDING_SECTIONS (API 510 Internal</i> <i>Checklist Finding Section)</i> System Code Table, which contains various System Codes, such as <i>Head</i> . Each of the System Codes belonging to this System Code Table references another System Code, such as <i>Blis-</i> <i>tering</i> . |
| | | | Using this example, on the Inspec- tion Finding Checklist page, you would see the <i>Head</i> section, which would contain a row with the value <i>Blistering</i> in the first column. |
| Value | Character | The specific find- ing for the inspected item or condition (e.g., Yes). | On the Inspection Finding Checklist page, in each finding section, the Finding Value column displays a list of values that are stored in the MI_ CHECKLIST_FINDING_TYPES (Check- list Finding Types) System Code Table. |

Work Pack

Work Pack records store preparation information about inspection work that needs to be performed for equipment and/or locations. The following table provides an alphabetical list and description of the fields that exist in the Work Pack family. The information in the table reflects the baseline state and behavior of these fields.

| Field | Data Type | Description | Behavior and Usage |
|--------------------------|-----------|--|--|
| Work Pack Description | Character | A description of the Work Pack record | This is a required field. You must enter a value in this field before you can save a Work Pack record. |
| Work Pack ID | Character | The Record ID of the Work Pack record | This is a required field. You must enter a value in this field before you can save a Work Pack record. |
| Preparation Details | Text | Preparation inform- ation about the inspec- tion work associated with the Work Pack record | You should enter any pre- paration details about the inspections in this field. For example, if a unit needs to be shut down for an inspection asso- ciated with a Work Pack record, you might type the value <i>Unit A shut</i> <i>down required</i> in this field. |

Time Based Inspection Interval

Time Based Inspection Interval records store information about the inspection intervals that you define when you create <u>time-based inspection settings</u>. The following table provides an alphabetical list and description of the fields that exist for the Time Based Inspection Interval family. The information in the table reflects the baseline state and behavior of these fields. All fields in the family appear on the Time Based Inspection Interval datasheet by default.

| Field | Data Type | Description | Behavior and Usage |
|-------------|--------------|--|---|
| Description | Text | Details about the inspection interval. | This field is populated with the value that you type in the Descrip- tion cell on the Time-Based Inspection Settings page when you create or modify time-based inspection settings. |
| Interval | Number | The interval by which the asso- ciated piece of equipment should be inspected, in months. | This field is populated with the value that you type in the Interval (Months) cell on the Time-Based Inspection Settings page when you create or modify time-based inspection settings. |
| Task Type | Character | The type of inspec- tion that should be performed on the piece of equipment at the interval indic- ated in the Interval field. | This field is populated with the value that is stored in the Task Type ID field in the Task Types record associated with the time- based inspection setting (i.e., the task type for which an inspection interval is defined on the Time- Based Inspection Settings page). |

Time Based Inspection Setting

Time Based Inspection Setting records store information about the Equipment record, Functional Location record, and/or Criticality Calculator RBI Components family that is associated with the <u>time-based inspection settings</u> that you have defined. The following table provides an alphabetical list and description of the fields that exist for the Time Based Inspection Setting family. The information in the table reflects the baseline state and behavior of these fields. All fields in the family appear on the Time Based Inspection Setting datasheet by default.

| Field | Data Type | Description | Behavior and Usage |
|---------------------|-----------|---|--|
| Component Family | Character | The caption of the Criticality Calculator RBI Components family that is asso- ciated with the Time Based Inspection Set- ting record. | This field is populated with the value defined in the Com- ponent Family cell on the Time-Based Inspection Set- tings page when you create or modify time-based inspection settings. |
| Equipment ID | Number | The Record ID of the Equipment record that is associated with the Time Based Inspection Setting record. | This field is populated with the value defined in the Equip- ment ID cell on the Time- Based Inspection Settings page when you create or modify time-based inspection settings. |
| Unit | Number | The Record ID of the Functional Location record that is asso- ciated with the Time Based Inspection Set- ting record. | This field is populated with the value defined in the Unit cell on the Time-Based Inspection Settings page when you create or modify time-based inspec- tion settings. |

Inspection Profile

Inspection Profile records represent subcomponents of a piece of equipment on which inspections are performed. The following table provides an alphabetical list and description of the fields that exist in the Inspection Profile family. All fields in the Inspection Profile family, with the exception of those noted in the table, appear on the Inspection Profile datasheet (displayed on the **Inspection Profile** tab on the **Inspection Profile** page), by default.

| Field | Data Type | Description | Behavior and Usage |
|---------------------------|--------------|---|--|
| Item Category | Character | The type of sub- component (e.g., pipes) that exists on the piece of equip- ment needing inspec- tion. | On the datasheet, this field appears as a list that contains the System Code IDs and Descrip- tions in the MI_ INSPECTION_PROFILE_ CATEGORY (Inspection, Profile Category) System Code Table. The <u>Profile</u> <u>Configuration setting</u> determines how this field will be populated. You can modify the value in this field using the data- sheet. |
| Item Description | Character | A description of the subcomponent. | You can specify a value for this field using the datasheet. |
| Item ID | Character | The ID of the sub- component. | This field is populated automatically based upon the value in the Item Category field. You can modify the value in the Item ID field using the datasheet. |
| Predecessor Entity Key | Number | The Entity Key of the Equipment record to which the Inspection Profile record is linked. | By default, this field is <i>not</i> displayed on the data- sheet and is populated automatically when you create a new Inspection Profile record. |

| Field | Data Type | Description | Behavior and Usage |
|-------------------------|--------------|---|--|
| RBI Component | Character | The Record ID of the Criticality Calculator RBI Components record that is asso- ciated with the Inspec- tion Profile record. | On the datasheet, this field appears as a list that contains the Record IDs of all Criticality Cal- culator RBI Components records that are linked to the associated Equip- ment record. This field is null, by default. |
| | | | This field is enabled only when the Risk Based Inspection license is act- ive. |
| RBI Component Family | Character | The Criticality Cal- culator RBI Com- ponents subfamily that is associated with the Inspection Profile record. | On the datasheet, this field appears as a list that contains the cap- tions of all Criticality Cal- culator RBI Components subfamilies that exist in the baseline Meridium APM database. This field is populated auto- matically when you select a value in the RBI Com- ponent list. You can modify the selection in this list using the data- sheet. |
| Sequence | Number | The order in which the subcomponent should be inspected, relative to other sub- components on the piece of equipment. | You can specify a value for this field using the datasheet. |

Inspection Method

Inspection Method records represent the method that will be used to inspect a subcomponent of a piece of equipment that is represented by a linked Inspection Profile record. The following table provides an alphabetical list and description of the fields that exist in the Inspection Method family. All fields in the Inspection Method family, with the exception of those noted in the table, appear on the Inspection Method datasheet (displayed on the **Inspection Method** tab on the **Inspection Profile** page), by default.

| Field | Data Type | Description | Behavior and Usage |
|-------------|--------------|---|---|
| Category | Character | The method that should be used to inspect the sub- component that is rep- resented by an Inspection Profile record to which the Inspection Method record is linked. | On the datasheet, this field appears as a list that contains the Sys- tem Code IDs and Descriptions in the MI_INSPECTION_ METHOD_CATEGORY (Inspection Method Category) System Code Table. The <u>Method Configuration</u> <u>setting</u> determines how this field will be populated. You can modify the value in this field using the datasheet. |
| Description | Character | A description of the Inspection Method. | You can specify a value for this field using the datasheet. |
| ID | Character | The ID of the inspection method. | This field is populated automatically based upon the value in the Category field. You can modify the value in the ID field using the datasheet. |

| Field | Data Type | Description | Behavior and Usage |
|-------------------------------------|--------------|---|---|
| Predecessor Asset Entity Key | Number | The Entity Key of the Equipment record that is linked to the Inspec- tion Profile record to which the Inspection Method record is linked. | By default, this field does <i>not</i> appear on the datasheet and is populated auto- matically when you create an Inspection Method record. |
| Predecessor Pro- file Entity Key | Number | The Entity Key of the Inspection Profile record to which the Inspection Method record is linked. | By default, this field does <i>not</i> appear on the datasheet and is populated auto- matically when you create an Inspection Method record. |
| RBI Degradation Mechanism | Character | The Potential Degrad- ation Mechanisms record that is asso- ciated with the Inspec- tion Method record. | On the datasheet, this field appears as a list that contains the Record IDs of all Potential Degradation Mechanisms records that are linked to the Criticality Calculator RBI Components record that is asso- ciated with the Inspec- tion Profile record to which the Inspection Method record is linked. You can specify a |
| | | | value for this field using the datasheet. |

System Code Tables Used by Inspection Management

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

| Table ID | Table Description | Function |
|--|--|---|
| INSM | Inspection Interval Types | Used to populate the Desired Interval Basis list in Inspection Task records. |
| INST | Inspection Status Code | Unknown |
| MI_ACTION | CORE, Actions Taken | Used to populate the Action Taken Code list in General Find- ing records. Note that only sys- tem codes that contain the reference INSPECTION_FINDING_ ACTION appear in the Action Taken Code list. |
| MI_API_510_ EXTERNAL_ CHECKLIST_ FINDING_SECTIONS | API 510 External Check- list Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. |
| MI_API_510_ INTERNAL_ CHECKLIST_ FINDING_SECTIONS | API 510 Internal Check- list Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. |
| MI_API_510_ INTERNAL_ EXCHANGER_ CHECKLIST_ FINDING_SE | API 510 Internal Exchanger Checklist Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. |
| MI_API_570_ EXTERNAL_ CHECKLIST_ FINDING_SECTIONS | API 570 External Check- list Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. |
| MI_API_653_ EXTERNAL_ CHECKLIST_ FINDING_SECTIONS | API 653 External Check- list Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. |

| Table ID | Table Description | Function | |
|--|---|---|--|
| MI_API_653_ INTERNAL_ CHECKLIST_ FINDING_SECTIONS | API 653 Internal Check- list Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. | |
| MI_BUNDLE_ACTION | Inspection; Inspection / Maintenance Actions taken on a exchanger bundle | Used to populate the Action This Inspection list in Bundle Sub- Inspection records. | |
| MI_BUNDLE_TYPE | Inspection; Bundle Types | Used to populate the Bundle Type list in Bundle Sub-Inspec- tion records. | |
| MI_BUSINESS_ IMPACT | CORE, Impact to com- pany's production car- rying out equipment work | Used to populate the Business Impact list in Inspection Recom- mendation records. | |
| MI_CHECKLIST_ FINDING_ITEMS | Checklist Finding Items | Used to display <u>values in the first</u> <u>column</u> on the Inspection Finding Checklist page. | |
| MI_CHECKLIST_ FINDING_TYPES | Checklist Finding Types | Used to populate the Finding Value lists on the <u>Inspection Find-</u> <u>ing Checklist page</u> . | |
| MI_COMPLIANCE_ STANDARD | CORE, Compliance Standard | Used to populate the Cer- tification Type list in Personnel Certification records. Note that only the System Codes that con- tain the reference INSPECTION_ PERS_CERTS appear in the Cer- tification Type list. | |
| MI_CORE_ REFERENCES | CORE, Used to limit val- ues by common com- ponents | Used to populate the Status list in Inspection Recommendation records. | |
| MI_DAMAGE_ MECHANISM | Inspection, Damage Mechanisms | Used to populate the Damage Mechanism list in General Find- ing records. | |
| MI_DAMAGE_MODE | Inspection, Damage Mode | Used to populate the Damage Mode list in General Finding records. | |

| Table ID | Table Description | Function | |
|--|--|--|--|
| MI_DEGRADATION_ MECHANISM_TYPES | Degradation Mech- anism Types | Used to populated the Degrad- ation Mechanism list in Inspec- tion records. | |
| MI_EQUIP_OP_STATE | MI Inspection, Equip- ment Operating State | Used to populate the Equipment Operating State list in Inspection records. Note that only the Sys- tem Codes that contain the ref- erence INSPECTION_EQUIPMENT_ STATE appear in the Equipment Operating State list. | |
| MI_EVENT_REASON | CORE, Reason for Event | Used to populate the Reason for Inspection list in Inspection records. Note that: | |
| | | References that have been added to the INSPECTION_ REASON1 System Code Table are available in a Full Inspection record, and ref- erences that have been added to the INSPECTION_ REASON2 System Code Table are available in a Gen- eral Inspection record. | |
| | | All System Codes in the MI_ EVENT_REASON System Code appear in the Reason for Inspection list in Bundle Inspection and Pressure Test Inspection records. | |
| MI_EXTERNAL_PRD_ CHECKLIST_ FINDING_SECTIONS | External PRD Checklist Finding Section | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. | |
| MI_FINDING_TYPE | MI Inspection, Provides categories for an inspection finding | Used to populate the Type list in General Finding records. | |

| Table ID | Table Description | Function |
|--|---|---|
| MI_FREQUENCIES | CORE, Frequencies | Used to populate the Frequency of Alert After Due Date list in Inspection Recommendation records. Note that only the Sys- tem Codes that contain the ref- erence INSPECTION ALERT INTERVAL appear in the Fre- quency of Alert After Due Date list. |
| MI_INSPECTION_ METHOD_CATEGORY | MI_INSPECTION_ METHOD_CATEGORY | Used to populate the Category list in Inspection Method records. |
| MI_INSPECTION_ METHOD_ REFERENCE | MI Inspection, Stores system codes that rep- resent Inspection Meth- ods | Unknown |
| MI_INSPECTION_ PROFILE_CATEGORY | Inspection, Profile Cat- egory | Used to populate the Item Cat- egory list in Inspection Profile records. |
| MI_INSPECTION_ PROFILE_REFERENCE | MI Inspection, Stores the equipment family ID's in order to limit the Profile Categories shown for a piece of equipment. Built dur- ing implementation when equipment model known | Unknown |
| MI_INSPECTION_ REFERENCES | Ml Inspection, Inspec- tion Reference Codes - Inspection - Used to limit values in System Code Tables to values used in the inspection solution | Unknown |
| MI_INSPECTION_ STRATEGY | MI Inspection Strategy | Unknown |

| Table ID | Table Description | Function |
|--|--|---|
| MI_PDM_FILTER | MI RBI, Potential Degradation Filter | Used to populate the Degrad- ation Mechanism list in Inspec- tion records belonging to the PRD Pop Test Checklist subfamily. |
| MI_PRD_ INSPECTION_TYPE_ FILTER | PRD Inspection Type Filter | Used to populate the Type of Inspection list in PRD Pop Test Checklist records. |
| MI_PRD_PT_ CHECKLIST_ FINDING_SECTIONS | PRD Pop Test Checklist Finding Sections | Used to display <u>sections and rows</u> on the Inspection Finding Check- list page. |
| MI_PRIORITY | CORE, baseline priority types | Used to populate the Recom- mendation Priority list in Inspec- tion Recommendation records. |
| MI_ RECOMMENDATION_ TYPE | CORE, Recom- mendation Type | Used to populate the Recom- mendation Type list in Inspection Recommendation records. |
| | | Note that the Recommendation Type field is not included on the baseline Inspection Recom- mendation datasheet. |
| MI_RESOURCE_ROLE | List of user roles | Used to populate the Role list in Resource Role records. |
| MI_STATUS | Status Codes - CORE | Used to populate the Inspection Document Status list in Inspec- tion records. Note that only the System Codes that contain the ref- erence INSPECTION_DOCUMENT_ STATUS appear in the Inspection Document Status list. |
| MI_TASK_TYPE_ REFERENCE | CORE, Reference val- ues to limit task type lists when creating ta | Used to populate the list in the Reference list in Task Types records. |
| MI_TEST_MEDIA | Fluids used for testing | Used to populate the Test Media list in Pressure Test Sub-Inspec- tion records. |
| MI_YES_NO | MI Core, Yes-No | Used to populate the Predictable list in General Finding records. |

URL Paths for Inspection Management

The following table lists and describes the paths for the Inspection Management module. 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 |
|--------------------------------------|-----------------------------|---|
| Inspection Start Page | Inspection | Displays the Inspection Start Page . This path does not accept parameters. |
| Inspection Admin- istration Page | Inspection/Administration | Displays the Inspection Administration page. This path accepts <u>parameters</u> . |
| Inspection Alerts Page | Inspection/Alerts | Executes the All Inspection Alerts query and displays the results on the Inspection Alerts page. This path does not accept parameters. |
| Event Builder | Inspection/Builder | Displays the Event Builder , where you can create a new Inspection record. This path accepts the same para- meters as the Event Builder URL. Note that when you use the Inspection/Builder path, the list of families on the Event screen is limited to only Inspection families that are related to the selec- ted Equipment or Functional Location record. |
| Inspection Finding Checklist Page | Inspection/ChecklistFinding | Serves as the root address for accessing the Inspection Finding Checklist page. This path requires <u>parameters</u> . |
| Inspection Con- figuration Page | Inspection/Configuration | Displays the Inspection Con- figuration page, where you can configure administrative settings for Inspection. This path does not accept para- meters. |

| Feature | URL Path | Description |
|----------------------------|------------------------------|---|
| Search Page | Inspection/Finder | Displays the Search page. This path accepts the same parameters as search URLs. |
| Inspection Scope | Inspection/InspectionScoping | Displays the Inspection Scope Builder , where you can select the Task record, Equipment record, Inspec- tion Profile records, and Inspection Method records that are included in the Inspection Scope that you want to define. This path accepts <u>parameters</u> . |
| Manage Work Packs Page | Inspection/ManageWorkPacks | Displays the Manage Work Packs page, where you can select the Work Pack record that you want to open. This path does not accept para- meters. |
| Work Pack Page | Inspection/EditWorkPack | Serves as the path for URLs that provide access to spe- cific Work Pack records. This path requires <u>parameters</u> . |
| Inspection Man- agement | Inspection/Manage | Serves as the path for URLs that provide access to man- aging Inspection com- ponents. This path requires parameters. |
| Inspection Task Records | Inspection/ProposedTasks | Serves as the path for URLs that provide access to man- aging Inspection Task records. This path requires <u>parameters</u> . |

| Feature | URL Path | Description |
|---|----------------------|--|
| Published Inspec- tion Documents Page | Inspection/Published | Runs the Published Docu- ments query and displays the results on the Published Inspection Documents page. Note that while this URL does not require that you define parameters, if the Published Documents query contains one or more prompts, you can pass in val- ues for the prompts via this URL. |
| Inspection Queries | Inspection/Query | Runs the specified query and displays the results in Inspection Management. This path requires para- meters. |
| Inspection Reports | Inspection/Report | Serves as the path for URLs that provide access to Inspection reports. This path requires <u>parameters</u> . |
| Human Resource Records | Inspection/Resources | Serves as the path for URLs that provide access to Inspection resources. This path requires <u>parameters</u> . |
| Review and Approve Inspec- tion Documents Page | Inspection/Review | Displays the Review and Approve Inspection Docu- ments page, where you can access Inspection records that are ready to be reviewed and approved. |
| Inspection Manage Documents Page | Inspection/Search | Displays the Inspection Man- age Documents page, where you can manage Inspection Documents. |
| Inspection History Summary Query Page | Inspection/Summary | Runs the Inspection History Summary query and dis- plays the results on the Inspection History Sum- mary Query page. |

| Feature | URL Path | Description |
|------------------|------------------------------|--|
| TM Analysis Page | Inspection/ThicknessAnalysis | Serves as the path for access- ing the TM Analysis page for a specified Equipment or Functional Location record. This path requires <u>para-</u> <u>meters</u> . |

Parameters for the Manage Inspection URL

The path **meridium://Inspection/Manage** serves as the starting point for constructing a URL that will create a new Inspection Document, display the inspection history, or provide access to Inspection Profiles. The following table lists and describes the parameters that are accepted by the path. Note that a link constructed from the path with *no* parameters will be nonfunctional.

| Parameter Name | Description | Accepted Value (s) | Notes |
|---------------------|--|--|---|
| EquipmentKey | Specifies the Equip- ment or Functional Location record whose inspections you want to manage. | The Entity Key of the desired Equipment or Functional Loca- tion record. | This parameter is required. |
| InspectionFamilyKey | Specifies the family of the type of Inspec- tion record that you want to cre- ate. | The Family Key of the desired family. | When Mode- e=CreateDocument, you can optionally use this parameter to create a specific type of Inspec- tion record. If you do not specify the Inspec- tionFamilyKey parameter when using the CreateDocument value, you will be prompted to select a valid Inspection Event family before pro- ceeding to create the Inspection record. |
| InspectionKey | Specifies the Inspec- tion record that you want to view. | The Entity Key of the desired Inspection record. | None |

| Parameter Name | Description | Accepted Value (s) | Notes |
|----------------|--|--|---|
| Mode | Specifies the type of operation which should occur. | CreateDocuments EditDocuments Profiles | CreateDocument: Generates a new Inspection record that is linked to the record with the Entity Key that is specified by the EquipmentKey para- meter. EditDocuments: Passes the specified EquipmentKey to the Summary Query con- figured on the Inspec- tion Configuration page and displays the results of the Sum- mary Query for the specified Equipment or Functional Loca- tion record on the Inspection History Summary Query page. Profiles: Displays the Manage Equipment Profiles page, where you can manage the Inspection Profile of the Equipment record with the Entity Key that is specified by the EquipmentKey para- meter. |

Examples of the Manage Inspection URL

 meridium://Inspection/Manage?EquipmentKey=1234567&Mode=CreateDocument

Creates a new Inspection record that is linked to the Equipment record with the Entity Key 1234567.

meridium://Inspection/Manage?EquipmentKey=1234567&Mode=CreateDocument
 &InspectionFamilyKey=12345

Creates a new Inspection record in the family with the Family Key 12345. The Inspection record will be linked to the Equipment record with the Entity Key 1234567.

• meridium://Inspection/Manage?EquipmentKey=1234567&Mode=EditDocuments

Allows you to edit an Inspection record that is linked to the Equipment record with the Entity Key 1234567.

• meridium://Inspection/Manage?EquipmentKey=1234567&Mode=Profiles

Displays the Inspection Profile for the Equipment record with the Entity Key 1234567.

meridium://Inspection/Manage?InspectionKey=1234567

Displays the Inspection record with the Entity Key 1234567.

Parameters for the Inspection Administration Page URL

There is one root URL associated with the **Inspection Administration** page: **meridi-um://Inspection/Administration**. A link constructed from the path alone will display the **Inspection Administration** page. The following table lists the parameter accepted by the path.

| Parameter Name | Description | Accepted Value(s) | Notes |
|-------------------|---|-------------------|-------|
| View | Specifies that the Time-Based Inspec- tion Settings page should be dis- played. | TimeBased | None |

Examples of the Inspection Administration Page URL

• meridium://Inspection/Administration?View=TimeBased

Displays the **Time-Based Inspection Settings** page.

Parameters for the Inspection Finding Checklist Page URL

There is one root URL associated with the **Inspection Finding Checklist** page: **meridi-um://Inspection/ChecklistFinding**. The following table lists and describes the parameters that are accepted by the path. Note that a link constructed from the path with *no* parameters will be nonfunctional.

| Parameter Name | Description | Accepted Value(s) | Notes |
|--------------------------|--|--|-------------------------------------|
| ChecklistFamilyEntityKey | Specifies the Entity Key of the Inspection record that you want to view on the Inspection Finding Checklist page. | The Entity Key of the desired Inspection record. | This para- meter is required. |
| ExplorerPath | Specifies the Catalog path to the configured explorer that is defined for the family of the Inspection record that you want to view on the Inspection Finding Checklist page. | The Catalog path to the desired con- figured explorer. | None |

Examples of the Inspection Finding Checklist Page URL

• meridium://Inspection/ChecklistFinding?ChecklistFamilyEntityKey=123456

Displays on the **Inspection Finding Checklist** page the Inspection record with the Entity Key 123456.

 meridium://Inspection/ChecklistFinding?ChecklistFamilyEntityKey=123456& ExplorerPath=Public\Meridium\Modules\Inspection\Explorers\Inspection Explorer

Displays on the **Inspection Finding Checklist** page the Inspection record with the Entity Key 123456. The contents of the record hierarchy are controlled by the configured explorer with the name *Inspection Explorer*.

Parameters for the Inspection Scope URL

There is one root URL associated with an Inspection Scope: **meridi-um://Inspection/InspectionScoping**. A link constructed from the path alone will open the **Inspection Scope Builder**, where you can select the Task record, Equipment record, Inspection Profile records, and Inspection Method records that are included in the Inspection Scope that you want to define. The following table lists and describes the parameters that are accepted by the path.

| Parameter Name | Description | Accepted Value(s) | Notes |
|-------------------|---|---|---|
| EquipmentKey | Specifies the Equip- ment record that you want to include in the Inspection Scope. | The Entity Key of the desired Equipment record. | None |
| TaskEntityKey | Specifies the Task record that you want to include in the Inspection Scope. | The Entity Key of the desired Task record. | lf you use the TaskEntityKey para- meter, you must also use the EquipmentKey parameter. |

Examples of the Inspection Scope URL

• meridium://Inspection/InspectionScoping

Displays the Welcome screen of the **Inspection Scope Builder**. You can use the **Inspection Scope Builder** to select the Equipment record, Task record, Inspection Profile records, and Inspection Method records that you want to include in the Inspection Scope.

meridium://Inspection/InspectionScoping?EquipmentKey=1234567

Displays the **Select New or Existing Task** screen of the **Inspection Scope Builder**, where you can select the Task record that you want to include in the Inspection Scope. The Equpiment record with the Entity Key 1234567 will be included in the Inspection Scope automatically.

 meridium://Inspection/InspectionScoping?EquipmentKey=1234567&TaskEntityKeyy=7654321

Displays the **Inspection Scope** page, where you can define the Inspection Scope that includes the Equipment record with the Entity Key 1234567 and the Task record that includes the Entity Key 7654321.

Manage Work Packs Page URL

There is one root URL associated with the **Manage Work Packs** page: **meridi-um://Inspection/ManageWorkPacks**. A link constructed from the path alone will open the **Manage Work Packs** page, where you can select the Work Pack record that you want to open. This URL does not accept any parameters.

Inspection Work Pack Page URL

There is one root URL associated with the **Inspection Work Pack** page: **meridi-um://Inspection/EditWorkPack**. This URL requires the parameter **WorkPackKey**, which specifies the Entity Key of the Work Pack record that you want to view. A link constructed from the path alone will be nonfunctional.

Parameters for the Proposed Tasks URL

The path **meridium://Inspection/ProposedTasks** serves as the starting point for constructing a URL that will access Inspection Task records. The following table lists and describes the parameters that are accepted by the path. Note that a link constructed from the path with NO parameters will be nonfunctional.

| Parameter Name | Description | Accepted Value(s) | Notes |
|----------------|--|---|--|
| EquipmentKey | Specifies the Equip- ment or Functional Location record that is linked to the Task records that you want to manage. | The Entity Key of the desired Equipment or Func- tional Loca- tion record. | Use this parameter if you want to view all the Task records that are linked to a specific Equipment or Functional Loca- tion record. |

| Parameter Name | Description | Accepted Value(s) | Notes |
|----------------|--|----------------------|---|
| EquipmentTasks | Specifies that you want to view the Task records that are linked to the <i>Equip-</i> <i>ment</i> record to which the specified Inspec- tion record is linked. | TRUE | This parameter must be used in con- junction with the InpsectionKey para- meter. You should use this parameter if the spe- cified Inspection record is linked to both an Equipment record and a Func- tional Location record. |
| | | | If the specified Inspection record is linked to either an Equipment record or a Functional Loca- tion but not both, you can omit this parameter. |
| | | | This parameter also accepts the value <i>False</i> , but specifying <i>False</i> has the same effect as omitting the parameter. |

| Parameter Name | Description | Accepted Value(s) | Notes |
|----------------------|---|--|--|
| LocationTasks | Specifies that you want to view the Task records that are linked to the <i>Func- tional Location</i> record to which the specified Inspection record is linked. | TRUE | This parameter must be used in con- junction with the InpsectionKey para- meter. You should use this parameter if the spe- cified Inspection record is linked to both an Equipment record and a Func- tional Location record. If the specified Inspection record is linked to either an Equipment record or a Functional Loca- tion but not both, you can omit this parameter. This parameter also accepts the value <i>False</i> , but specifying <i>False</i> has the same effect as omitting the parameter. |
| ExecuteAllStrategies | Specifies whether all strategy rules should be executed for the equipment or loc- ation before redir- ecting to the Task List page. | TRUE | If you omit this para- meter, strategy rules will not be executed. |
| InspectionKey | Specifies the Inspec- tion record whose associated Task records you want to manage. | The Entity Key of the desired Inspection record. | None |

Examples of the Proposed Tasks URL

meridium://Inspection/ProposedTasks?EquipmentKey=1234567

Opens the **Task List** page, displaying the Task records that are linked to the Equipment record with the Entity Key 1234567.

• meridium://Inspection/ProposedTasks?InspectionKey=1234567

Opens the **Task List** page, displaying Task records that are linked to the Equipment records that are linked to the Inspection record with the Entity Key 1234567.

 meridium://Inspection/ProposedTasks?InspectionKey=1234567&EquipmentTasks=TRUE

Opens the **Task List** page, displaying Task records that are linked to the *Equipment* record that is linked to the Inspection record with the Entity Key 1234567.

 meridium://Inspection/ProposedTasks?InspectionKey=1234567&LocationTasks=TRUE

Opens the **Task List** page, displaying Task records that are linked to the *Functional Location* record that is linked to the Inspection record with the Entity Key 1234567.

- meridium://Inspection/ProposedTasks?InspectionKey=1234567&ExecuteAllStrategies=TRUE
- If the Inspection record with the Entity Key 1234567 is linked to an Equipment or Functional Location record that is linked to one or more Task records, executes all strategy rules associated with the Equipment or Functional Location record and then displays the associated Task records on the Task List page.
- If the Inspection record with the Entity Key 1234567 is not linked to an Equipment or Functional Location record that is linked to one or more Task records, displays a message indicating that Tasks cannot be accessed because none are associated with the associated Equipment or Functional Location record.
- meridium://Inspection/ProposedTasks?EquipmentKey=1234567&ExecuteAllStrategies=TRUE
- If the Equipment record with the Entity Key 1234567 is linked to one or more Task records, executes all strategy rules associated with the Equipment record and then displays the associated Task records on the Task List page.
- If the Equipment record with the Entity Key 1234567 is not linked to one or more Task records, executes all strategy rules associated with the Equipment record and then displays *all* Task records in the database on the Task List page.

Parameters for the Inspection Query URL

A link constructed from the address **meridium://Inspection/Query** will run the query specified by the **Path** parameter and display the results in Inspection Management.

| Parameter Name | Description | Accepted Value(s) | Notes |
|-------------------|---|--|-------------------------------------|
| Path | Specifies the query that you want to run. | The Catalog path and file name of the desired query. | This para- meter is required. |

Note: In addition to the Path parameter, you can include any prompt IDs and values as parameters for the specified query.

Examples of the Inspection Query URL

 meridium://Inspection/Query?Pathh=Public\Meridium\Modules\Inspection\InspectionQuery

Runs the query InspectionQuery, which is stored in the Catalog folder \\Public\Meridium\Modules\Inspection.

Parameters for the Inspection Search URL

The path **meridium://Inspection/Search** lets you construct links that will display a list of queries that you can run. In most cases, the queries will come from the public Inspection folder or from a user's personal Inspection folder. The following table lists and describes the parameters that are accepted by this path.

| Para- meter Name | Descrip- tion | Accepted Value(s) | Notes |
|------------------------|--|----------------------|--|
| Mode | Specifies the list of queries that you want to display. | EditDocuments | If Mode=EditDocuments, the link will display the Inspection Manage Docu- ments page, where you will see a list of queries that exist in the Catalog folder \\Public\Meridi- um\Modules\Inspection Man- agement\Document Queries and in the current user's personal \\In- spection\Document Queries folder. |
| Mode | Specifies the list of queries that you want to display. | Profiles | If Mode=Profiles, the link will display the Inspection Manage Profiles page, where you will see a list of queries that exist in the Catalog folder \\Public\Meridi- um\Modules\Inspection Man- agement\Profile Queries and in the current user's personal \\In- spection\Profile Queries folder. |
| Mode | Specifies the list of queries that you want to display. | ReviewDocu- ments | If Mode=ReviewDocuments, the link will display the Inspection Manage Documents page, where you will see a list of queries that exist in the Cata- log folder \\Public\Meridi- um\Modules\Inspection Management\Document Queries and in the current user's personal \\In- spection\Document Queries folder. |

Parameters for the Inspection Search URL

| Para- meter Name | Descrip- tion | Accepted Value(s) | Notes |
|------------------------|--|-------------------|--|
| Mode | Specifies the list of queries that you want to display. | Resources | If Mode=Resources, the link will dis- play the Inspection Manage Resources page, where you will see a list of queries that exist in the Cata- log folder \\Public\Meridi- um\Modules\Inspection Management\Resource Queries and in the current user's personal \\In- spection\Resource Queries folder. |
| Mode | Specifies the list of queries that you want to display. | Tasks | If Mode=Tasks, the link will display the Inspection Manage Tasks page, where you will see a list of queries that exist in the Catalog folder \\Public\Meridi- um\Modules\Inspection Man- agement\Task Queries and in the current user's personal Inspec- tion\Task Queries folder. |
| Mode | Specifies the list of queries that you want to display. | Reports | If Mode=Reports, the link will display the Inspection Reports page, where you will see a list of queries that exist in the Catalog folder \\Public\Meridi- um\Modules\Inspection Man- agement\Reports. |

Examples of the Inspection Search URL

meridium://Inspection/Search?Mode=EditDocuments

Displays the **Inspection Manage Documents** page, which displays searches and queries that exist in the Catalog folder \\Public\Meridium\Modules\Inspection Management\Document Queries and the current user's personal \\Inspection\Document Queries folder.

• meridium://Inspection/Search?Mode=Profiles

Displays the **Inspection Manage Profiles** page, which displays searches and queries that exist in the Catalog folder \\Public\Meridium\Modules\Inspection Management\Profile Queries and the current user's personal \\Inspection\Profile Queries folder.

• meridium://Inspection/Search?Mode=ReviewDocuments

Displays the **Inspection Manage Documents** page, which displays searches and queries that exist in the Catalog folder \\Public\Meridium\Modules\Inspection Management\Document Queries and the current user's personal \\Inspection\Document Queries folder.

meridium://Inspection/Search?Mode=Resources

Displays the **InspectionManage Resource** page, which displays searches and queries that exist in the Catalog folder \\Public\Meridium\Modules\Inspection Management\Resource Queries and the current user's personal \\Inspection\Resource Queries folder.

• meridium://Inspection/Search?Mode=Tasks

Displays the **InspectionManage Tasks** page, which displays searches and queries that exist in the Catalog folder \\Public\Meridium\Modules\Inspection Management\Task Queries and the current user's personal \\Inspection\Task Queries folder.

• meridium://Inspection/Search?Mode=Reports

Displays the **InspectionManage Reports** page, which displays searches and queries that exist in the Catalog folder \\Public\Meridium\Modules\Inspection Management\Reports.

Parameters for the Inspection Reports URL

The URL for accessing Inspection reports is **meridium://Inspection/Report**. This path accepts one parameter that lets you specify the Inspection Event record for which you want to open a report.

| Parameter Name | Description | Accepted Value(s) |
|-------------------|---|--|
| InspectionKey | Specifies the Inspection record for which you want to open an Inspection report. The Meridium APM sytem will open the <i>default</i> report for the Inspection family of the specified entity, as defined in the Con- figuration Manager application. | The Entity Key of the desired Inspection record. |

Examples of the Inspection Reports URL

• meridium://Inspection/Report?InspectionKey=12233454

Opens the default Inspection report for the Inspection record with the Entity Key 12233454.

Parameters for the Inspection Resources URL

The URL for accessing Inspection resources, **meridium://Inspection/Resources**, accepts parameters that let you specify additional information regarding the Human Resource records that you want to access. We list and describe these parameters in the following table.

| Parameter Name | Description | Accepted Value(s) | Notes |
|-------------------|--|---|---|
| EntityKey | Specifies the Human Resource records that you want to access. | The Entity Key of the desired Human Resource record. | The specified Human Resource record will appear, and the Human Resource with Role Details datasheet or the Human Resource with Cert Details data- sheet will be displayed, depending on the Mode parameter. |
| Mode | Specifies the data- sheet that you want to view. | Roles Certifications | Roles: Causes Meridium APM to load the Human Resource with Role Details datasheet. Certifications: Causes Meridium APM to load the Human Resource with Cert Details datasheet. |

Examples of the Inspection Resources URL

meridium://Inspection/Resources?Mode=Roles&EntityKey=12345

Opens the Human Resource record with the Entity Key 12345. The Human Resource with Role Details datasheet is displayed.

• meridium://inspection/Resources?Mode=**Certifications**&EntityKey=12345

Opens the Human Resource record with the Entity Key 12345. The Human Resource with Cert Details datasheet is displayed.

Parameters for the Inspection Review URL

A link constructed from the address **meridium://Inspection/Review** will run the query specified by the Path parameter and display the results on the **Review and Approve Inspection Documents** page in Inspection Management. The specified query must return records from only one Inspection family. It can be in Formatted or Unformatted mode.

| Parameter Name | Description | Accepted Value (s) | Notes |
|-------------------|---|---|-------------------------------------|
| Path | Specifies the query whose results will be displayed on the Review and Approve Inspection Documents page. | The Catalog path and file name of the desired query. | This para- meter is required. |

Note: In addition to the Path parameter, you can include any prompt IDs and values as parameters for the specified query.

Examples of the Inspection Review URL

meridium://Inspection/Review?Path=Public\folder1\folder2\Full Inspections

Displays the results of the Full Inspections query, which is stored in the Catalog folder \\Public\folder1\folder2.

Parameters for the Inspection Summary URL

The URL for creating a URL to access the Inspection Summary Query, **meridium://Inspection/Summary**, will run the Inspection History Summary Query, which is stored in the Catalog folder \\Public\Meridium\Modules\Inspection\Config Queries. The path accepts one parameter, which lets you pass an Entity Key to the query.

| Parameter Name | Description | Accepted Value(s) |
|-------------------|---|---|
| EquipmentKey | Specifies the Equipment or Functional Location record whose linked Inspec- tion records you want to view. | The Entity Key of the desired Equipment or Functional Location record. |

Note: In addition to the EquipmentKey parameter, you can include any prompt IDs and values as parameters for the specified query.

Examples of the Inspection Summary URL

• meridium://Inspection/Summary?EquipmentKey=12345

Executes the configured Inspection History Summary Query and returns the list of Inspection records that are linked to the Equipment record with the Entity Key 12345.

Parameters for the Inspection Thickness Analysis URL

The path of the Inspection Thickness Analysis URL, meridi-

um://Inspection/ThicknessAnalysis, accepts an Entity Key and then opens the **TM Analysis** page for the record that has been specified. Note that a URL constructed from this path with NO parameters will not be functional.

| Parameter Name | Description | Accepted Value(s) | Notes |
|-------------------|--|--|---|
| AssetKey | Specifies the equipment for which you want to access the TM Ana- lysis page. | The Entity Key of the desired Equipment record. | lf you specify the AssetKey para- meter, you do not need to specify the ServiceKey parameter. |
| ServiceKey | Specifies the location for which you want to access the TM Ana- lysis page. | The Entity Key of the desired Functional Location record. | If you specify the ServiceKey para- meter, you do not need to specify the AssetKey parameter. If both para- meters are specified, The Meridium APM sytem will use the AssetKey. |

Examples of the Inspection Thickness Analysis URL

• meridium://Inspection/ThicknessAnalysis?AssetKey=12345

Opens the **TM Analysis** page for the Equipment record with the Entity Key 12345.

 meridium://Inspection/ThicknessAnalysis?AssetKey=12345&ServiceKey=123445455

Opens the **TM Analysis** page for the Equipment record with the Entity Key 12345.

meridium://Inspection/ThicknessAnalysis?ServiceKey=123456567

Opens the **TM Analysis** page for the Functional Location record with the Entity Key 1234567.

Inspection Document

The collection of information stored in any Inspection record and each record that is linked to that record, which are best viewed together using the configured explorer that is defined for the Inspection family.

Inspection Interval

The interval of time at which a particular inspection should occur on a given piece of equipment. You can define inspection intervals for each type of inspection that you will perform. This value is stored in a Time Based Inspection Interval record that you can create using the <u>Time-Based Inspection Settings page</u>.

Time-Based Inspection Settings

Defines the inspection intervals that will be used for particular pieces of equipment. Time-based inspection settings are the combination of a Time Based Inspection Setting record and its associated Time Based Inspection Interval records, both of which you can create using the <u>Time-Based Inspection Settings page</u>.

Unit

A Functional Location record that represents a unit in the location hierarchy. In these records, the Is a Unit? field is set to *True*.