

**Meridium APM Glossary** 

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Meridium APM Glossary 3.6.1.4.0

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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 (<a href="https://www.me-ridium.com/documentation/WebHelp/WebHelpMaster.htm">https://www.me-ridium.com/documentation/WebHelp/WebHelpMaster.htm</a>).

**Note**: If you do not have access to the Meridium APM Documentation Website, contact Meridium Global Support Services.

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## **About the Master Glossary**

The **Meridium APM Master Glossary** contains descriptions of high-level terms that are used throughout the Meridium APM software and documentation. This glossary contains terms that apply to various areas of the Meridium APM system and is not limited to the terms used in a specific application or module. More detailed, module-specific terms are defined within the module documentation.

# **Administrative Applications**

See Meridium APM Administrative Applications.

#### **Administrative User**

A term that is used throughout the Meridium APM documentation to mean a Meridium APM user who has administrative privileges and who performs administrative responsibilities in the system. For example, an administrative user in Metrics and Scorecards might be responsible for managing cube privileges.

Note that an administrative user for one module will not necessarily be an administrative user for another module. Note also that all <u>Super Users</u> can perform all administrative tasks. To be an administrative user, however, you do not have to be a Super User. You may be granted administrative privileges in a specific area of the product.

See also System Administrator.

## AHM

Asset Health Manager

### **AMSAA**

**Army Material Systems Analysis Activity** 

## **AMS Analytics**

A Meridium APM module that lets you retrieve data from AMS Analytics data sources so that you can view it in Meridium APM. AMS Analytics data sources store information that is reported about assets and processes, such as alerts and alarms, to provide an indication of their overall health.

### **AMS Asset Portal**

A term once used to refer to AMS Analytics. You may see this term throughout the product in various places. Any object identified by the term *AMS Asset Portal* is used by the AMS Analytics module.

See also AMS Analytics.

### **APM**

Asset Performance Management

#### **APM Foundation Work Process**

The work process upon which all other Meridium APM Work Processes are built. It consists of the following five components:

- Asset Criticality Analysis (ACA)
- Core Analysis
- Recommendation Management
- Asset Health Manager (AHM)
- EAM Interfaces
  - SAP Interfaces
  - Oracle EBS eAM Interfaces
- Online Analytic Interfaces
  - AMS Analytics
  - Process Data Integration
- Operator Rounds
- Lubrication Management

# **Application Server**

See Meridium APM Application Server Machine.

## **Application Update Feature**

A feature that allows Meridium APM Framework workstations to be upgraded automatically when they connect to a Meridium APM Application Server machine that contains a version of Meridium APM that is more recent than the version currently installed on the Meridium APM Framework workstation.

## Army Material Systems Analysis Activity (AMSAA)

A Reliability Growth model that uses a relationship between cumulative operating time and cumulative failures to develop a Reliability Growth Analysis.

### **ASI**

**Asset Strategy Implementation** 

### **ASI for SAP**

The optional component that allows you to transfer data from Meridium APM to SAP using <u>Asset Strategy Implementation (ASI)</u>.

## **ASM**

**Asset Strategy Management** 

## **Asset Criticality Analysis (ACA)**

A Meridium APM Framework Tool that lets you conduct an ACA Analysis, which consists of an Asset Criticality Analysis record and all the records that are linked to that record. Using ACA you can evaluate the criticality of the systems and individual pieces of equipment and locations that make up those systems by defining the consequences and probability of the failure events that may occur. After you have determined which of your equipment, process locations, and systems are critical, you can use Meridium APM modules to further analyze and safeguard those pieces of equipment, locations, and systems.

### **Asset Health Manager (AHM)**

A Meridium APM module that allows you to view a graphical representation of the overall health of a piece of equipment. The health is determined by data that exists about that piece of equipment in various Meridium APM records. Using AHM, you can determine which records contain information that indicates the piece of equipment's health and then create a Health Indicator record that is linked to those records.

# Asset Performance Management (APM)

The formalized practices, processes, data collection, and software required to track and understand equipment operations and failures and to implement the appropriate maintenance schedules.

## **Asset Safety Work Process**

The Meridium APM work process that is focused on maintaining safe processes. The Asset Safety work process includes the following modules:

- Hazards Analysis
- SIS Management
- Calibration Management

#### **Asset Strategy Implementation (ASI)**

The Meridium APM module that lets you build *Implementation Packages*, which are containers of records that dictate the work that you want to perform and the Asset Strategies that contain the original work requests (Action Revision records). Using ASI, you can determine where you want to track the physical work that needs to be performed, your Meridium APM system or an external SAP system. Then, by implementing these Implementation Packages, you can create those physical work items (Meridium APM records or SAP items).

For example, if you want to track work items in Meridium APM, you can create Measurement Location records or Meridium APM Task records. If, however, you want to track work against items in your SAP system, you can also use ASI to create items such as Maintenance Plans, Maintenance Items, and Task Lists.

#### Asset Strategy Management (ASM)

The Meridium APM module that lets you create a strategy, which is a set of actions that represent a plan to optimize asset performance to achieve business benefits.

Using Asset Strategy Management (ASM), you can create the following types of strategies:

- Asset Strategy: The combination of Actions and Failure Risks that are associated with an asset.
- **System Strategy:** A collection of Asset Strategies that are defined for assets that work together in a system.
- **Unit Strategy:** A collection of System Strategies that are defined for systems that work together in a unit.

In other words, ASM allows you to create Asset Strategies to define ways in which assets can fail and the actions that you want to perform to prevent those failures and reduce the consequences if they were to occur. After your database contains multiple Asset Strategies, you can bundle those Asset Strategies into a System Strategy. Likewise, after your database contains multiple System Strategies, you can bundle those System Strategies into a Unit Strategy. A Unit Strategy, therefore, represents a global plan for multiple assets within a single system.

#### **Asset Strategy Optimization (ASO)**

The Meridium APM module that lets you extend the analytical capabilities of the <u>Asset Strategy Management (ASM) module</u> by providing the following additional features:

- A detailed cost analysis for all actions, including the ability to define planned and unplanned correction costs.
- The ability to define resources, such as spare parts and human resources, that are needed to perform actions.
- Time to Failure (TTF) and Time to Repair (TTR) information based on Monte Carlo simulation results.
- Integration with the Meridium APM Reliability Analytics module.
- A diagramming tool that allows you to represent the physical structure of your system.
- The option to define global events.

While ASO is its own separate module, it is intended to *extend* the capabilities available in ASM by providing a more detailed analysis. You will, therefore, access ASO directly from an existing Asset Strategy, System Strategy, or Unit Strategy. Then, using ASO, you can use the additional features in the previous list to determine the most optimal strategy for a piece of equipment or location, which can then be promoted back into ASM.

In other words, ASO and ASM work together to provide a more comprehensive view of your equipment and locations to help you determine the best way to manage them to reduce cost and risk.

**Note:** The ASO module and all of its content (e.g., families) are available only if the ASM module is active.

### **Asset Strategy Work Process**

The Meridium APM work process that is focused on proactive equipment and location management plans that are designed for the purpose of mitigating risks. The Asset Strategy work process includes the following modules:

- Asset Strategy Management (ASM)
- Asset Strategy Implementation (ASI)
- Asset Strategy Optimization (ASO)
- Reliability Centered Maintenance (RCM), Failure Modes and Effects Analysis (FMEA), or Reliability Centered Maintenance and Optimization (RCMO)

#### **Associated Page**

A link that is configured for a specific family via the URL Manager that provides access to internal or external locations, such as a page in Meridium APM, a webpage, or an external file. You can configure Associated Pages for any entity family so that when users view a record belonging to that family, links will appear on the **Associated Pages** menu to provide users with access to those items. Associated Pages are meant to provide additional information or functionality related to the record that is currently being viewed.

After you have configured Associated Pages for a family, they will always appear:

- On a shortcut menu in your search results when you search on that family using a search.
- On the **Associated Pages** menu when you are viewing a record that belongs to that family in the Record Manager.
- On the **Associated Pages** menu when you are viewing a record that belongs to that family in the Bulk Data Form.

Associated Pages also appear on various module-specific pages throughout the Meridium APM Framework application, as appropriate to the page you are viewing.

#### Baseline Metadata, Content, and Functionality

The metadata, content, and functionality that are provided by Meridium APM out-of-the-box (i.e., immediately after installation and setup), before any customization has taken place. *Baseline* families and fields are those that Meridium Inc. provides for you in the Meridium APM database. Baseline Catalog content consists of items (e.g., queries, graphs, and reports) that are provided by Meridium APM in the Catalog folder Baseline. In most cases, the baseline content for a given module will be available only if the module is active.

Baseline metadata, content, and functionality serve as the foundation upon which your Meridium APM implementation is built. You can add to and customize the baseline content to create a custom implementation that is appropriate for the users of your system. Some customer implementations may deviate only slightly from the baseline product; others may have been customized a great deal.

In most cases, throughout the Meridium APM documentation, we limit our discussion to baseline features and functionality. In some cases, we provide tips and hints about how you might want to customize or extend the baseline features. In other places, because we do not know how your implementation has been configured, we describe *only* the baseline features. It is the responsibility of <u>administrative users</u> to communicate to other Meridium APM users any information about custom features and functionality.

#### **Browser**

One of the Meridium APM Framework Tools that lets you view the database hierarchy and access records in the database.

#### **Calibration Management**

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

Using Calibration Management, you can:

- Define the requirements of calibration events.
- Define a schedule on which calibration events should occur.
- Record and evaluate calibration event data.

Calibration Management is configured to work with the *current Calibration Management* model. Throughout the documentation, wherever we refer to *baseline* functionality or families, we mean the baseline features within the current Calibration Management model.

# Caption

A property that specifies how something will be labeled throughout the software interface. For example, a datasheet field caption specifies how a field will be labeled on a datasheet. A family caption specifies what name will appear for the family throughout the interface. Note that most captions can be localized.

# Catalog

The Meridium APM Framework Tool, which serves as the central warehouse for the items that have been saved in the Meridium APM database. Items that can be saved to and accessed through the Catalog include <u>queries</u>, searches, <u>reports</u>, <u>graphs</u>, <u>dashboards</u>, and <u>datasets</u>.

### **Client Machine**

A single user computer which is connected via a network to, and works in conjunction with, one or more shared computers (servers), where data storage and processing is distributed between them in one of a number of ways.

See also Meridium APM Framework Application.

## **CMMS**

Computerized Maintenance Management System

# Computerized Maintenance Management System (CMMS)

A system for tracking work orders and managing asset maintenance.

# **Configuration Manager**

An Administrative Application that lets you define how you want data to be stored in Meridium APM. Using the Configuration Manager, you can define field properties, create entity <u>families</u>, set up relationships between families, create views, create business rules, design <u>datasheets</u>, copy objects from one database to another view, view the data dictionary, and generate the tables that store data.

# **Configured Explorer**

A <u>Catalog</u> item that can be used to provide a customized view of the <u>record hierarchy</u> when a record is opened in the Record Manger. Configured explorers control which families appear in the record hierarchy and which options are available on the shortcut menu when you right-click an item in the hierarchy.

## **Conversion Set**

See Unit of Measure Conversion Set.

# **Core Analysis**

A component of the Meridium APM Work Process that consists of following features:

- Queries
- Datasets
- Graphs
- Reports
- Task Management

#### **Corrosion Rate**

The speed at which a piece of equipment is corroding. In Thickness Monitoring, each TML Corrosion Analysis and Asset Corrosion Analysis will have one or more calculated corrosion rates.

# Cost of Unreliability

An estimate of the total cost caused by component failures and system shutdowns. It includes the cost of maintenance to fix problems and the lost profit opportunity of the reduction in output.

#### Cube

A subset of data, usually constructed from a data warehouse, organized and summarized into a multidimensional structure and defined by a set of dimensions and measures. Cubes are managed via <u>SQL Server Analysis Services</u> and <u>Metrics and Scorecards</u>.

#### Culture

A field in Meridium APM Security User records that identifies a users's preferred language and Security User contains a Culture setting that determines what language will be displayed when that user logs in to the Meridium APM Applications. Throughout the documentation, the value in this field is referred to as the Meridium APM Culture setting.

#### **Dashboard**

A Meridium APM Catalog item that can be used to display information about data in your Meridium APM system and provide a way to navigate to other areas in the Meridium APM Framework. The content of dashboards is driven by queries that are also stored in the Meridium APM Catalog.

#### **Data Source**

A repository of information that can be accessed by Meridium APM. In the Meridium APM documentation, we refer to two types of data sources:

- Meridium APM data source: An Oracle schema or SQL Server database that stores
  the Meridium APM data and metadata. To connect to a Meridium APM database,
  you must create a data sourceconnection via the Meridium APM Data Source Manager. In the Meridium APM documentation, the terms data source and database
  are used interchangeably.
- AMS Analytics data source: In AMS Analytics, the external data source from which the data that is transferred to Meridium APM originates. In the AMS Analytics documentation, the term database refers to the Meridium APM database to which the data is transferred from the AMS Analytics data source.

# **Data Source Manager**

The Meridium APM Administrative Application that lets you define the data sources that will be accessible in the Meridium APM applications. Using the Data Source Manager, you can define connection information for data sources and define a default data source for the Meridium APM applications.

# **Data Type**

A property of family fields that specifies what type of data the field will store. You can choose from the following types: **Binary**, **Character** (the default for new fields), **Date**, **Number**, **Text**, and **Logical**.

## **Database**

See Meridium APM Database or Database Server.

#### **Database Content**

Data and metadata stored in the Meridium APM database. Some content is provided in the <u>baseline Meridium APM database</u>. Other content must be created by customers as needed. Each module has a specific set of baseline content associated with it. A given module must be active for the database content to be visible.

#### **Database Server**

The computer that houses the Meridium APM database and answers requests from the Meridium APM Application Server.

# Database Upgrade Manager

An Administrative Application that you can use to perform an upgrade of the Meridium APM database.

#### **Dataset**

Any set of static data that is either created in Meridium APM and exported for use in another application or imported into Meridium APM from another source. For example, you can create a "snapshot" of Meridium APM query results and export the information as a dataset to be stored on your local computer. Alternatively, you might import into Meridium APM an external file, such as a Microsoft Excel spreadsheet, XML data, or a delimited text file, to view and analyze the data. Datasets imported into Meridium APM are stored in the Catalog and can be linked to your Home Page.

#### **Datasheet**

A template that defines all the fields that will be displayed for records in a given family when you view a record for that family. Datasheets organize data into logical sections, rows, and columns and provide a means for viewing and editing the information associated with a specific record. Datasheets can be customized to include specific fields for specific types of records. You can view the datasheet for a record via the <a href="Record Manager">Record Manager</a>, the Bulk Data Form, or some other Meridium APM-provided customized view of the record.

#### Device

A tool that facilitates the collection of data stored in a format that is supported by Meridium APM so that the data can be transferred between Meridium APM and the device itself. A device can be a physical piece of hardware, such as a handheld, data-collection instrument, or a file, such as a spreadsheet or text file.

# **AMS Device Manager**

An AMS Analytics data source whose data is transferred to the Meridium APM database via the connection between the Meridium APM Application Server and the web server for the AMS Device Manager.

# **Distribution Analysis**

A statistical analysis of data to determine the distribution by frequency of data values between the upper and lower limits of the dataset. A Distribution Analysis characterizes how failures are distributed over the life of equipment. Note that this refers to a particular failure mode over one or more pieces of equipment.

### E2G

**Equity Engineering Group** 

### **EAM**

Enterprise Asset Management

#### **EAM Interfaces**

A suite of Meridium APM products that allows you to transfer data between your EAM system and your Meridium APM system. The following EAM Interfaces are available:

- Maximo Interfaces
- Oracle EBS eAM Intefaces
- SAP Interfaces

# **Energy Information Administration (EIA)**

An organization that collects and maintains U.S. energy statistics. For more details, visit <a href="http://www.eia.doe.gov/">http://www.eia.doe.gov/</a>.

#### **Entity Family**

An organizational unit that is used for classifying entity records, which represent individual elements within your organization. Records belonging to entity families will store information related to physical or intellectual items (equipment, people, analyses, inspections, etc.) in your company or facility.

For example, *Axial Compressor* would be an entity family. An individual Axial Compressor record would be one entity belonging to that family. Each entity family has a corresponding entity family *table* in the Meridium APM database. Entity family records are what you view and manage in the Meridium APM Record Manager.

# **Entity Key**

The unique, numeric value that identifies an entity within a given Meridium APM datavase. The Entity Key is assigned to an entity when it is created and cannot be modified.

#### **ENTY ID**

A field that stores a value that is constructed using the ID Template defined for a family. The ENTY\_ID field is a system field that is created automatically by Meridium APM and exists in every record in the database. The ENTY\_ID field cannot be viewed or modified via the Configuration Manager application, but it can be included in queries and is displayed in various places throughout Meridium APM. In most places where the ENTY\_ID is displayed, it is labeled *Record ID*. For example, when you perform a search in the Meridium APM Framework application, the search results will include a column labeled *Record ID*, which displays values that exist in the ENTY\_ID field of each record. Because this field is often labeled *Record ID*, we usually refer to it as the *Record ID* field throughout the Meridium APM documentation.

See also Record ID.

# **Equipment**

The items in your organization that you want to monitor, inspect, evaluate, and analyze using the Meridium APM analytical tools. Meridium APM provides the baseline Equipment family for you to store records about your pieces of equipment.

# **Equipment Taxonomy**

The classification system used for identifying equipment.

## Extensible Markup Language (XML)

A standard for defining, representing, and dynamically sharing information across the Internet.

#### **Failure Elimination Work Process**

The Meridium APM work process that is focused on identifying past failures and eliminating future failures. The Failure Elimination Work process includes the following modules:

- Production Loss Accounting
- Generation Management
- Metrics and Scorecards
- Root Cause Analysis
- Reliability Analytics

#### Failure Modes and Effects Analysis (FMEA)

The Meridium APM module that lets you identify the potential failures of pieces of equipment, describe the possible effect of each failure, and make recommendations for actions that can be taken to prevent the failures from occurring. Whereas an RCM analysis evaluates a system with respect to its function for the purpose of determining how to avoid functional failures, a Failure Modes and Effects Analysis (FMEA) analysis focuses on the equipment itself and analyzes how each piece of equipment can fail and the effect of each failure. In other words, an RCM analysis is conducted for the purpose of maintaining the function of a system. An FMEA analysis is conducted for the purpose of maintaining the system itself.

## **Family**

A classification that defines a group of similar records. Families are created for the purpose of organizing the layout of the database. Meridium APM uses two types of families: <a href="mailto:entity families">entity families</a> and <a href="mailto:relationship families">relationship families</a>.

# Family Hierarchy

The structured, multi-level relationships between families in the database.

### Family-Level Privileges

Permissions that are defined in the <u>Configuration Manager</u> application at the family level and control a user's ability to access *data* associated with a given family. For each family, you can assign the following level of privileges to a <u>Security User</u> or Group:

- View: The Security User or Group can view records that belong to the family.
- **Update:** The Security User or Group can modify records that belong to the family.
- Insert: The Security User or Group can create records in the family.
- Delete: The Security User or Group can delete records that belong to the family.

#### **Field**

An organizational unit within a family that stores a specific piece of data. Together, the fields that are defined for a family determine what type of data will be collected for records within a given family. All fields are of a certain <u>data type</u>. Rules can be written for fields to determine how they will behave. Fields can be displayed on <u>datasheets</u> so that when users create records in a family, they can enter data into the fields.

#### Field-Level Rules

Rules that can be defined for family fields to determine how those fields will behave under certain circumstances. Field-level rules can be defined via the Rules Wizard in the Configuration Manager application or via custom rules in the family rule project.

## Generation Management (GM)

An optional Meridium APM module that uses the Meridium APM Framework Tools to help you record and report power generation and loss data for each unit in your company. Using GM, you can easily enter your data into records.

### GM

**Generation Management** 

# Graph

A visual representation of data that can be created and viewed on the **Graph Viewer** page.

# **Growth Analysis**

See Reliability Growth Analysis.

### Handheld Device

See Device.

## **Hazards Analysis**

A Meridium APM module that lets you examine the processes that are performed by the assets in a facility to identify existing and potential hazards that are associated with those processes under both normal and abnormal conditions. Using Hazards Analysis, you can conduct the following types of Hazards Analyses: <a href="HAZOP Analysis">HAZOP Analysis</a> or What If Analysis.

## **HAZOP Analysis**

In <u>Hazards Analysis</u>, a type of Hazards Analysis that lets you document the *known* hazardous scenarios that are associated with a process, assess the likelihood of those scenarios occurring, and determine the best way to mitigate the risks associated with the scenarios.

### HF

Hot Fix (e.g., V3.1.0 HF1)

### **Home Page**

- In the Meridium APM Framework application, a Home Page is a user-specific or group-specific start page that appears to provide users with quick access to commonly performed tasks. Home Pages can be customized to serve the specific needs of users and groups.
- In the Meridium APM Web Framework, a Home Page is a group-specific start page that appears to provide users with quick access to commonly performed tasks or a webpage. An administrative user is responsible for configuring group Home Pages for the Meridium APM Web Framework.

## Hyperlink

A feature on the interface, usually consisting of underlined text, that opens a linked item or page when clicked. Within Meridium APM, you can create hyperlinks in various places (e.g., Home Pages, queries) to provide direct access to specific features.

## **ID Template**

A record in the <u>Configuration Manager</u> that specifies how ID fields will be arranged and whether or not each will be included in the IDs of records within a given family.

### IIS

**Internet Information Services** 

### **Inspection Management**

The Meridium APM module that lets you document, manage, and analyze data associated with the inspections of the physical equipment in your facility. The Inspection Management functionality is fully integrated with other Meridium APM features to support compliance with safety regulations, optimize inspection strategies, and give you access to other useful analytical tools. Using Inspection Management, you can manage various items, such as Inspection Alerts, Inspection Documents, and Inspection Tasks.

# Key Performance Indicator (KPI)

Metrics and Scorecards, coupled with success criteria, that have been identified as the most important variable reflecting mission success, or organizational or system performance.

### **KPI**

**Key Performance Indicator** 

### Layer of Protection Analysis (LOPA)

In <u>SIS Management</u>, a type of risk assessment that you can use to assess the safety integrity level that is associated with a <u>safety instrumented system</u>. Using a Layer of Protection Analysis (LOPA), you can assess the risks associated with each instrumented function that is defined for a safety instrumented function at a granular level, including evaluating the events that indicate that a failure is likely to occur.

### **LDAP**

**Lightweight Directory Access Protocol** 

## LDAP Integration

A feature of Meridium APM that allows you to synchronize Meridium APM with Microsoft Active Directory to enable automatic login and continuous updating of user information. LDAP integration can be enabled via the <a href="Configuration Manager">Configuration Manager</a> application.

#### License Activation

A process by which Meridium APM modules and products are enabled so that they can be used. Licenses can be activated via the Meridium APM Configuration Manager application.

# Lightweight Directory Access Protocol (LDAP)

A protocol that is used for querying and managing directories that run over TCP/IP. Microsoft Active Directory represents one implementation of LDAP. Meridium APM supports integration with Microsoft Active Directory to facilitate automatic login and synchronization of user information.

### Link

A connection between two records in the database. A link can be created between to records when they belong to families that are related to one another through a relationship definition.

#### **Location Hierarchy**

The organizational structure of physical locations.

The Meridium APM product is built upon the fundamental premise that within your company, there are multiple locations, which can be organized in a hierarchy to represent the fact that some locations belong to other locations. For example, three systems might belong to the same unit, meaning that units resides on a *higher* level of the hierarchy than systems.

This concept of *levels* of locations should be familiar to you regardless of the number of levels you have or the names that you assign to them within your company.

Regardless of the number or type of locations that exist in your company, in order to track them in the Meridium APM system, you will need to use the Functional Location family and the fields in each Functional Location record to define which location it represents. Remember that because there is only one Functional Location family, you will need to use it to store data about all of your Functional Location records, where the values in each Functional Location record identify which type of location it is.

#### **Local Connection**

A communication method that allows you to access files directly on the Application Server. The only time you will need to use a Local connection is if you log in to the Configuration Manager on the Application Server itself to debug business rules. Business rules debugging can be performed only via a Configuration Manager application that is running on the Application Server using a Local connection.

# **Login Information**

The information that is required to access Meridium APM, including your user ID and password.

### **LOPA**

See Layer of Protection Analysis.

## **Lost Profit Opportunity (LPO)**

The profit that the company loses when the production fails in an oversold market. Represents the difference between the market price of the product and the cost of producing it.

### LPO

**Lost Profit Opportunity** 

# **Lubrication Management**

A module where you can track checkpoints for the assets in your factory that requiring regular lubrication. Using Lubrication Management, you can track routes, manage lubricants, and record reading values for lubrication requirements and create recommendations based on those reading values.

# **AMS Machinery Manager**

An AMS Analytics data source whose data is transferred to the Meridium APM database via the connection between the Meridium APM Application Server and the web server for the AMS Machinery Manager.

#### **Macros**

Business rules that are stored in the Meridium APM Rules Library and can be invoked outside of standard record functions via URLs to support workflows and invoke actions independently of creating, updating, or deleting records. A macro can be any static public method and can perform any function you like.

## Maximo Interfaces

A feature that allows you to transfer data between your Maximo system and your Meridium APM system. The Maximo Interfaces feature provides a set of pre-defined interfaces that support equipment and work order data transfer.

# **Mechanical Integrity Work Process**

The Meridium APM work process that is focused on mitigating the risk of loss of containment by implementing condition assessment activities. The Mechanical Integrity work process consists of the following modules:

- Criticality Calculator
- Risk Based Inspection (RBI)
- Inspection Management
- Thickness Monitoring (TM)

## Menu Bar

A feature of the user interface that contains many of the commands necessary to operate the application, divided into logical menus. For example, the main menu bar in the Meridium APM Framework application contains five menus: **File**, **Edit**, **Go To**, **Tools**, and **Help**.

#### Meridium APM

An <u>Asset Performance Management</u> solution provided by Meridium, Inc. The term *Meridium APM* encompasses all products, components, modules, applications, and data distributed and licensed by Meridium, Inc. to make up a comprehensive APM solution.

# Meridium APM Administrative Applications

The Meridium APM applications that are meant to be used by Meridium APM <u>administrative users</u>. The Administrative Applications include:

- Configuration Manager
- URL Manager
- Schedule Manager
- Data Source Manager
- Database Upgrade Manager

#### Meridium APM Application Server Machine

A computer in the Meridium APM system where the Meridium APM Application Server software is installed. Each Meridium APM Application Server instance is either:

• **Dedicated:** An instance that receive and process requests from Meridium APM Framework workstations. Computers on which dedicated Meridium Application Server instances are installed do not have any other Meridium APM components installed on them.

-or-

• **Supporting:** An instance that exists to support another Meridium APM component and is installed on a computer in combination with the component that it supports. An example of a supporting Meridium APM Application Server is the one that is installed on the Meridium APM Web Framework machine.

**Note:** Typically, when we refer to the *Meridium APM Application Server machine*, we are referring to a computer that contains a *dedicated* Meridium APM Application Server instance. Computers where a supporting Meridium APM Application Server instance is installed are typically referred to by the name of the application that the Application Server instance supports. For example, a supporting Meridium APM Application Server instance exists on the Meridium APM Web Framework machine.

#### Meridium APM Database

The warehouse that stores the metadata (the Meridium APM database object definitions that include tables and indexes) and tables that contain data that can be viewed and modified in the Meridium APM system. Throughout the Meridium APM documentation, we use the generic term *Meridium APM database* to mean *either* an Oracle schema or a SQL Server database that contains the Meridium APM database tables and metadata.

# Meridium APM Database Comparison Tool

A tool that lets you view the differences that exist between the content of two databases.

## Meridium APM Device

A <u>handheld device</u> on which a Meridium APM mobile application, such as Meridium APM <u>Operator Rounds</u>, in installed.

# Meridium APM Framework Application

The software application that you use to access all the features of Meridium APM. Through the Meridium APM Framework, you can navigate all the Meridium APM tools, such as <u>queries</u>, graphs, and <u>the Catalog</u>, and you can use all the Meridium APM modules, such as RCM, Metrics and Scorecards, and Inspection Management.

## Meridium APM Mobile Framework

Software that is installed on handheld devices to provide an infrastructure for deploying handheld applications (e.g., Operator Rounds) that have been built upon the Meridium APM Mobile Sync Services platform.

# Meridium APM Mobile Sync Services

A solution for Meridium APM handheld applications (e.g., <u>Operator Rounds</u>) that is built upon the Microsoft Sync Framework. The Meridium APM Mobile Sync Server provides a connection between handheld devices and the Meridium APM Application Server so that data can be synchronized between the devices and the Meridium APM database.

# Meridium APM System Administration Tool

A tool that provides an interface for specifying settings in configuration files that are used by Meridium APM components. You can use this tool to set up and configure your Meridium APM system.

#### Meridium APM Web Framework

The Meridium APM software that is installed on a web server and allows users to access Meridium APM via a web browser (e.g., Internet Explorer). The Meridium APM Web Framework is similar in appearance and behavior to the Meridium APM Framework application but offers only some of the functionality that is available through the Meridium APM Framework application.

#### Meridium APM Web Framework Server

The computer in your system where the <u>Meridium APM Web Framework</u> software is installed. The Meridium APM Web Framework Server may be the same computer as the <u>Meridium APM Application Server</u>, or it may be a different physical workstation.

#### Meridium APM Web Services

A solution that allows you to extract, transform, and load data. Using Meridium APM Web Services you can build custom applications or integrate with third-party ETL tools to manage data between Meridium APM and your CMMS or other data source.

## Meridium RCMO®

A web-based application that allows you to conduct RCM and FMEA Analyses on equipment and systems in your facility. The Meridium RCMO® application is integrated with SAP Enterprise Asset Management (EAM).

#### Metadata

Data about data. In Meridium APM, the term *metadata* refers to the data that defines Meridium APM data. For example, entity family metadata is the information that defines an <u>entity family</u>, such as the family caption and physical table name. Typically, users interact with metadata via an interface designed for that purpose. But Meridium APM metadata can be managed and manipulated in its raw form via the Import/Export Metadata tool in the <u>Configuration Manager</u>.

## **Metric View**

A multi-dimensional metric <u>cube</u> that has been saved with some parameters selected (e.g., dimensions and levels) so that it can be viewed repeatedly using the same criteria.

#### **Metrics and Scorecards**

The Meridium APM module that integrates performance management theory with sophisticated data analysis tools to prompt and facilitate actions that will improve organizational performance. The main tools that you will use within the Metrics and Scorecards module include Metric Views, Key Performance Indicators (KPIs), and Scorecards.

# Minimum Thickness (T-Min)

In pieces of equipment that corrode or wear down over time, a value that serves as a recommendation for when the asset should be discarded. Assets that wear down past the minimum thickness create an unacceptable safety or failure risk.

## Module

A group of functionality and metadata that supports a certain set of features and work processes. Meridium APM is segmented into different modules, each of which is licensed separately and requires <u>activation</u>. Examples of Meridium APM modules include Metrics and Scorecards, RCM, and Inspection Management.

#### Multi-Value Fields

Fields that can contain more than one value. The number of values allowed in a multivalue field is determined by the Number of Values Per Field property, which can be defined for each field in the Configuration Manager application. Multi-value fields can be useful in cases where you want fields to store multiple, yet distinct, values. Character, date, and numeric fields can be configured to contain more than one value. Binary, text, and logical fields can not be configured as multi-value fields.

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North American Electric Reliability Corporation

## .NET Framework

The Microsoft operating system platform on which Meridium APM is developed.

# North American Electric Reliability Corporation (NERC)

An organization that develops and enforces standards for the power industry and monitors the performance of North American energy producers. For more details, visit <a href="http://www.nerc.com/">http://www.nerc.com/</a>.

# Operating System (OS)

A program that provides the software platform on top of which other programs can run. Meridium APM runs on the Windows® operating system.

# **Operator Rounds**

A module that lets you transfer data between the Meridium APM Framework application and a <u>handheld device</u>. Using Operator Rounds, you can track routes and readings for measurement locations and create recommendations based on those readings.

## **Oracle EBS eAM Intefaces**

A feature that allows you to transfer data between your Oracle EBS eAM system and your Meridium APM system.

## OS

**Operating System** 

## PLA

**Production Loss Accounting** 

## PMO

Preventive Maintenance Optimization

## **Policy Manager**

A Meridium APM module that allows you to develop and execute strategies based upon historical data and dynamic data, which is obtained by monitoring conditions in real time. Using Policy Manager, you can define *policies* that:

- Retrieve information about current conditions.
- Allow you to identify emerging trends of an asset.
- Apply some logic to that data based on historical trends.
- Initiate actions that will mitigate future risk.

### **Predecessor**

In a relationship definition, the family that is the *first part* of the rule. The predecessor family is usually the single part (piece of equipment [predecessor] has many pieces of sub-equipment) or exists before the successor (plant itself [predecessor] exists before equipment [successor] is installed).

### **PROACT®** for Meridium

A methodology that allows you to conduct a root cause analysis using the Meridium APM RCA module. The acronym *PROACT* represents the following steps, where we have capitalized the letters that make up the acronym:

- PReserve failure data.
- Order the analysis.
- Analyze failure data.
- Communicate findings and recommendations.
- Track and reevaluate.

### **Proactive Maintenance**

A maintenance strategy where repairs are performed based on the root cause of failure with a goal of reducing or eliminating potential future failures.

## **Process Data Integration**

A Meridium APM Framework feature that allows you to collect data from OPC-compliant process historians, which are specialized databases used for recording real-time process data, such as temperature or pressure. For example, Process Data Integration allows you to collect data from the PI Server software, which is a process historian developed by OSIsoft.

### **Production Analysis**

A type of Reliability Analysis that allows you to evaluate the reliability of the process in which individual pieces of equipment are involved. Production Analyses analyze production output data to help you see patterns in the output and to determine the reliability of the process as a whole. Production Analyses provide a visual representation of production output and allow you to quantify the production loss and the cost associated with it.

### **Production Loss Accounting (PLA)**

The Meridium APM module that allows you to:

- Enter production data on a daily basis.
- Identify production losses and associate them with the production events that caused them.
- Determine what types or categories of events cause your company to lose the most production.

By entering and evaluating production data, you can more easily identify ways in which you can reduce unplanned downtime and increase production in the future, which will result in reduced cost and increased profit.

### **PRT**

Production resource/tool

#### **Public Folder**

A folder in the <u>Catalog</u> that is available to all users who have the proper access permissions. You can specify that an item (such as a record or query) be stored in a Public folder when you save the item.

All users automatically have Execute permissions to all items that are stored in the Public Catalog folder or any subfolder within the Public folder. This means that users can open and execute Catalog items (e.g., queries and reports) as a part of any workflow or by using any hyperlink (e.g., a Home Page link or a link on the <u>Associated Pages</u> menu). To access items through the Catalog itself or to save or modify items in the Public folder, however, users must be granted explicit permissions to the Public folder in the Catalog.

### Query

A feature that lets you question the database. Query results provide the answers to your question. Via the **Query Builder** or the query design, you can construct expressions to query the database about anything that is tracked through records in the Meridium APM system. Several types of queries, from basic to advanced, are available to suit multiple purposes.

## **Query Builder**

A tool that takes you step-by-step through creating a query by prompting you to answer questions regarding the content of the query you want to create. The query is then generated and displayed in the query design, where it can be edited.

## **RCA**

Root Cause Analysis

### RBI

Risk Based Inspection

## **RCM**

**Reliability Centered Maintenance** 

#### Recommendation

A record that suggests or advises that some action be performed. A recommendation is not as definite as a task because, while it serves to advise that some action be performed, it does not necessarily ensure that the action will be scheduled and executed.

Various features in Meridium APM use Recommendation records, including <a href="Inspection Management">Inspection Management</a> and Reliability. In most cases, where Recommendation records are used by a specific module, the module has its own Recommendation family, such as the Reliability Recommendation family. In RCM and FMEA Analyses, RCM FMEA Recommendation records participate as a node on the analysis tree.

### Record

A record is a set of data that represents a physical entity, which can be things such as:

- Equipment.
- Locations (physical, functional, and organizational).
- People.
- Events (e.g., inspections, failures, shutdowns, maintenance requests, recommendations, and repairs).
- Stages of a project.
- Job descriptions.
- · Elements of a workflow.
- Drawings.
- · Processes.

You can access records in many ways throughout the Meridium APM Framework application and in the Meridium APM Web Framework. The <u>Record Manager</u> and the Bulk Data Form, however, are always available regardless of the module with which you are currently working.

# **Record Hierarchy**

A Meridium APM feature that provides a visual representation of the records in the database and how they relate to one another. The record hierarchy can be displayed in the standard **Record Explorer** pane or a pane that is configured to display a customized view of records using a configured explorer.

## **Record ID**

The term that is used in various places in the Meridium APM products and throughout the Meridium APM documentation to refer to the ENTY\_ID field in a record.

See also ENTY\_ID.

# **Record Manager**

A data-management tool that combines explorer and datasheet functionality to let you view, modify, create, and delete records in the Meridium APM database.

## **Reference Documents**

A file or website external to Meridium APM that is referenced in a Reference Document record, which can be linked to another record in the database.

## **Relationship Family**

A family that exists for the purpose of defining the relationship between two entity families. A relationship family stores the <u>relationship definitions</u> and fields that will be used to create <u>links</u> between records in the Meridium APM database.

See also Relationship Definition.

## **Relationship Definition**

For a specific <u>relationship family</u>, a rule that specifies which two entity families are related, which family is the <u>predecessor</u>, which family is the successor, and the cardinality of each. Relationship families can contain multiple relationship definitions.

See also Relationship Family.

# **Reliability Analytics**

The Meridium APM module that applies reliability-engineering principles in order to help you make tactical (short term) and strategic (long term) decisions for maintenance and operational asset management activities.

### Reliability Centered Maintenance (RCM)

The Meridium APM module based upon the Reliability Centered Maintenance (RCM) method, that stresses the value of maintaining or preserving the function as opposed to maintaining a piece of equipment for the purpose of preserving the piece of equipment. That is, as long as the function is preserved, a complete failure of a piece of equipment may be acceptable. RCM provides a means for determining optimal maintenance and operational strategies, based on the probability and consequence of the analyzed failure modes.

# **Reliability Distribution Analysis**

A tool that determines the probability of failure at a certain point in time. There are four types of <u>Distribution Analysis</u> available in the application: Weibull, Normal, Lognormal, and Exponential.

# **Reliability Growth Analysis**

A Reliability Analysis that describes changes in the reliability of components with time and predicts future failure time.

# Remoting

A communication infrastructure that uses the HTTP protocol over the <u>IIS</u> port (usually port 80) to connect client workstations to the Application Server.

## Report

A way of formatting a query, search, or other data for display, export, or printing purposes. Reports can be saved to the Meridium APM Catalog and executed repeatedly.

#### Risk Assessment Feature

The Meridium APM feature that allows you to assess:

- The probability that a failure will present safety, environmental, operational, or financial risk.
- The severity and cost of the risk if it were presented.

The Meridium APM Risk Assessment feature is a combination of:

- An interface that displays a risk matrix and other risk information.
- Entity families, relationship families, and records that determine:
  - The values that you will see in the risk matrix.
  - The calculations that will be performed based on the values that you select.

Meridium APM provides a set of baseline records that determine the values that you will see on the interface and the calculations that are performed on those values. You can access this interface through modules such as:

- Asset Strategy Management (ASM)
- Reliability Centered Maintenance (RCM)
- Failure Modes and Effects Analysis (FMEA)

#### Risk Assessment Interface

A component of the Meridium APM Risk Assessment feature that displays a risk matrix and other risk information. You can access the Risk Assessment interface in various places throughout Meridium APM. The way in which you access it will determine the window title that appears on the interface. For example, when you access the interface from an RCM FMEA Failure Effect node in the RCM Explorer pane, the window is titled Unmitigated Risk Assessment. When you access it by creating a new Risk in ASM, however, you will see the Create Risk Wizard, in which the second step displays the risk matrix and other risk information.

Throughout this documentation, we use the term *Risk Assessment interface* to refer generically to the window that displays the risk matrix and other risk information.

The Risk Assessment interface will contain different items depending on how you access it.

### **Risk Based Inspection**

The Meridium APM module that allows you to analyze the risk of an asset's components failing due to specific degradation mechanisms. Using RBI, you can set up RBI Systems to organize the components that you want to analyze. Within an RBI System, you can begin creating RBI Analyses for each of the RBI Components that belong to the RBI System. Each analysis will yield values indicating the overall risk of the RBI Component failing due to the degradation mechanisms that are defined for it.

After you conduct an RBI Analysis, if the risk values are unacceptable, you can analyze hypothetical scenarios using What If Analyses and Future Risk Analyses to see how additional actions or factors might affect the risk. For example, you might create a What If Analysis to see what the risk level would be if you changed the operating pressure. Or, you might create a Future Risk Analysis to see what the risk level might be in five years.

Based on the analysis results, you can create RBI Recommendation records to capture recommended actions that might lower the risk associated with an RBI Component. You can then create Task records or SAP Notifications from those RBI Recommendation records to track the work and make sure that the recommended actions are implemented.

After the recommended actions are implemented, you can conduct a new RBI Analysis to determine if the new operating procedures or environment have actually reduced the risk.

#### **Risk Matrix**

A tool that allows you to make selections that are used in calculations to determine an overall risk rank value.

Meridium APM provides a baseline risk matrix that you can use when evaluating risk. This risk matrix displays values that are configured in records that Meridium APM provides. In addition, the values that you select in the risk matrix are used in calculations, which are also determined based on the values in these records.

In Meridium APM, the risk matrix is displayed in the <u>Risk Assessment interface</u>, which is a component of the <u>Meridium APM Risk Assessment feature</u>.

## Root Cause Analysis (RCA)

The Meridium APM module that lets you use the PROACT® for Meridium APM methodology to create an RCA Analysis, which allows you to track and analyze causes of asset failures. When you use RCA, you are using Meridium APM tools to facilitate a standard process that is based on the PROACT methodology.

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Code that controls the behavior of records and fields.

# Rule Project

A group of code items and rules stored in Microsoft Visual Studio for Applications. Each Meridium APM family and strategy has its own rule project.

### **Rules Editor**

A tool that allows you to create basic logical rules. Rules support all Visual Basic .NET operations. To execute a strategy, the system uses the inputs and the rule logic and generates outputs. Super Users and members of the MI SM Administrator Security Group can customize the rule logic in the Rules Editor. The Rules Editor used in the Strategy module is the Microsoft® Visual Studio for Applications editor.

# **Rules Library**

A repository of <u>rule projects</u> that can be defined and referenced within other code. The Rules Library allows you to define rules in one central location and use and extend those rules wherever they are needed.

#### Safety Instrumented System

A system that is comprised of instruments that are designed specifically to:

- Monitor the conditions of a process.
- Recognize conditions that are indicative of failure.
- Prevent risks by reacting to conditions that are indicative of a failure.

Safety instrumented systems make adjustments to the process to bring the conditions to a mitigated state or even shutdown that process to prevent failures.

A safety instrumented system consists of the following items:

- One or more protective instrument loops.
- · One logic solver.

Using the Meridium APM <u>SIS Management</u> module, you can track the safety instrumented systems that exist in your facility.

## Safety Integrity Level (SIL) Analysis

In SIS Management, an analysis that you can conduct to assess the safety instrumented systems in your facility to ensure that they are adequately safeguarding your assets and processes. A SIL Analysis consists of a SIL Analysis records and all the records that are linked to that record, directly or indirectly. When you conduct a SIL Analysis, you will assess the safety integrity level of a safety instrumented system by evaluating the risk and risk levels associated with each instrumented function that exists for that safety instrumented system.

#### **SAP Interfaces**

The Meridium APM Framework Feature that allows you to transfer data between your SAP system and Meridium APM. Using the SAP Integration Interfaces module, you can:

- Transfer the following data from SAP to Meridium APM:
  - Equipment
  - Functional Location
  - Notification
  - Maintenance Order
- Transfer Recommendation records from Meridium APM to SAP in the form of Notifications.
- Manage Calibration and Inspection Task records in one of two ways:
  - Create the Task records in Meridium APM and transfer the data to SAP. This
    option allows you to update records in Meridium APM and transfer the
    updates to SAP.
  - Create and manage the data in SAP and transfer it to Meridium APM as Task records. This option allows you to make updates in SAP and transfer the updates to Meridium APM.

## Schedule Manager

The Administrative Application where you can view and manage all the schedule items that exist in Meridium APM.

## Schema

The database structure, defined in terms of the structure of tables and fields and the relationship between them. For example, Meridium APM schema refers to the structure of the Meridium APM database.

#### Scorecard

A tool that allows the tracking of important data, including perspectives, objectives, and <a href="KPIs">KPIs</a> that are associated with objectives. A scorecard addresses the four perspectives that should be monitored within an organization, and any others that will help to increase company performance.

## **Security User**

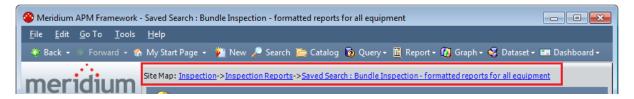
A user account that stores information about an individual in your organization and allows that person to log in to and use the Meridium APM system. A Security User account stores the user's ID and password, which is used for authenticating the user at login. A user account can also store identifying information, such as the individual's name and contact information and details about that person's job within your organization.

## SIS Management

A Meridium APM module that lets you manage the <u>safety instrumented systems</u> that are in place in a facility to monitor and maintain controlled processes and ensure efficiency and safety during those processes. Using SIS Management, you can conduct a <u>Safety Integrity Level (SIL) Analysis</u>, which you can use to assess the safety integrity level of the safety instrumented systems that are already in place in your facility and to uncover areas that may require further safeguarding.

## Site Map

A navigational tool that provides a visual indication of your current location in the Meridium APM Framework application. You can click a link in the Site Map to go to the associate page. For example, the Site Map is outlined in red in the following image.



## SP

Service Pack (e.g., V3.3.0 SP1)

## **Spares Analysis**

A type of Reliability Analysis that uses delivery time and cost, downtime, lost production costs, and failure and repair data to calculate how many spare parts should be kept on hand at any given time.

## **SQL Server Analysis Services**

A Microsoft application that delivers analytical processing and data mining functionality for business intelligence applications by letting you design, create, and manage multidimensional structures (<u>cubes</u>) that contains data aggregated from other data sources. Meridium APM supports SQL Server Analysis Services for use with <u>Metrics and Scorecards</u>.

# **SQL Server Reporting Services**

A Microsoft application that provides server-based reporting functionality for a variety of data sources.

## Start Page

#### Meridium APM Framework Start Page

The page that appears to you when you first log in to the Meridium APM Framework. You can configure nearly any page in the Meridium APM Framework application to be your start page.

#### **Module Start Page**

A page in the Meridium APM Framework application that serves as the starting point for all the functions that you can perform in a given module.

## State Configuration

The combination of states, operations, and rules that dictate a record's available states and the transitions that can be used to change the state. State Configuration is defined via the <a href="Configuration Manager">Configuration Manager</a> application. Meridium APM provides a baseline State Configuration on several families, and you can define State Configuration on any family of your choice.

## Strategy

The combination of a Strategy record and the associated rules, which together determine what should happen when the Strategy is executed.

While a Strategy record can exist without any associated rules, any Strategy that does not have at least one rule will not do anything. A Strategy is classified as one of two types:

- Base Strategy.
- Sub-Strategy of a Base Strategy.

## Strategy Rule

A rule that is associated with a specific Strategy record and tells Meridium APM when and how to carry out a specific action.

# Subfamily

The child of a parent family.

## **Super User**

A user who has permission to access all features and perform administrative functions in the Meridium APM system. Super users are defined as such in their user records in the <u>Configuration Manager</u>.

## System Administrator

The person responsible for maintaining your multi-user computer system. Generally, the system administrator is responsible for installing software, maintaining the physical components of the system, and managing user accounts.

# System Code Tables

The tables that store **System Codes**.

## System Codes

Defined in the <u>Configuration Manager</u>, the System Codes are used throughout the applications to display lists of valid values, populate drop down lists, and otherwise limit or define data. The System Code consists of a table that contains a group of codes and the codes themselves.

## System Reliability Analysis

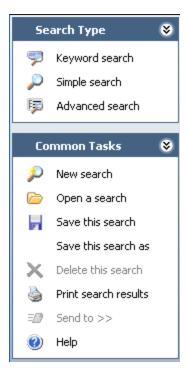
The analytical characterization of a system model. It usually includes a Monte Carlo simulation that runs through several iterations of potential failures of the system components over a given period of time. The simulation can present the probable reliability of an existing system. By modifying the model, what if scenarios can be applied to gauge the impact on reliability.

## **Task Management**

The Meridium APM module that facilitates the management of Task records that are generated as the output of other Meridium APM modules or as the output of Meridium APM Strategies. If a task is defined as an output of a <a href="Strategy">Strategy</a>, Meridium APM will generate the Task record when that Strategy is executed.

#### Task Menu

A menu that appears on the left side of the page in the Meridium APM Framework application and the Meridium APM Web Framework and contains various options that apply to the current page. For example, in the Meridium APM Framework application, two task menus are available on the **Search** page: **Search Type** and **Common Tasks**.



## TCP

Transmission Control Protocol

#### **Thickness Measurement**

A specific reading that is taken and recorded for a given <u>TML</u>. Each TML can have one or more Thickness Measurements associated with it. Thickness Measurements are recorded for each TML over time to allow you to monitor the corrosion of a piece of equipment.

## Thickness Measurement Location (TML)

In <u>Thickness Monitoring</u>, a record representing a specific place on a piece of <u>equipment</u> where <u>Thickness Measurements</u> will be taken and for which minimum thickness calculations can be performed.

## Thickness Monitoring (TM)

The Meridium APM module that allows you to document, manage, and analyze corrosion data for physical plant equipment. Meridium APM Thickness Monitoring provides you with the tools that you need to monitor the corrosion of pieces of equipment in your plant and take preventative actions that will help you avoid the economical, environmental, and human costs of corrosion failures.

#### Title Bar

The area at the top of a window or dialog box and provides a name for the application or feature and, in most case, provides a minimize, maximize, and close button. Throughout the Meridium APM documentation, we use the label in the title bar to identify windows, pages, dialog boxes, and screens throughout the Meridium APM system.

#### T-Min Calculator

A tool designed to calculate the pressure minimum thickness for a datapoint or asset. The resulting values may be used in the <u>corrosion rate</u>, next inspection date, and retirement date calculations. Data returned by a query from the asset, datapoint, and task datasheets are used to perform minimum thickness calculations. The results provided are the calculated pressure minimum thickness, structural minimum thickness, and a user-defined minimum thickness. The calculator will choose the most conservative value, but you can enter a value based upon your knowledge of the codes and system.

## TM

Thickness Monitoring

#### TM Analysis

In Thickness Monitoring, a term used to describe the records and links that are involved in conducting a corrosion analysis. To conduct a corrosion analysis on a piece of equipment, you must:

- 1. Identify the piece of equipment to analyze.
- 2. Establish TMLs on that piece of equipment.
- 3. Collect measurement data for those TMLs.

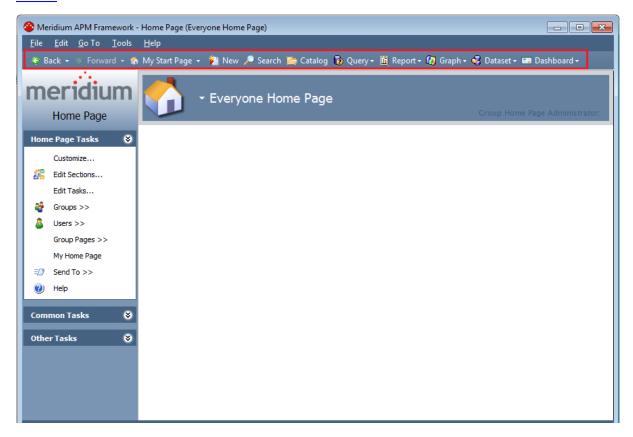
In the Meridium APM Thickness Monitoring module, you will complete these tasks by creating records, populating them with the desired information, and linking them together to establish relationships between them. As you complete these tasks, Meridium APM will create other records automatically to store calculations based upon the records that you created. In the Meridium APM documentation, we refer to ALL these records and links collectively as a *TM Analysis*.

## **TML**

**Thickness Measurement Location** 

#### **Toolbar**

A feature of the user interface that contains buttons, which let you perform various tasks. For example, the Meridium APM Framework toolbar contains 11 buttons: **Back**, **Forward**, **My Start Page**, **New**, **Search**, **Catalog**, **Query**, **Report**, **Graph**, **Dataset**, **Dashboard**.



## Type-Ahead

In lists, a feature that offers to complete a word that is only partially typed in. In some cases, the entire word is displayed, and in others only the options that match the text you type appears. This feature is also referred to as *auto complete* or *autofill*.

For example, in the **Search In** list on the **Search** page, when you begin typing a family name, the family name that begins with the letters you type will appear in the text box as you type.

Another example of this feature can be found in a drop-down list field in a record, where if you begin typing a value that appears in that list, the value will be selected automatically in the list.

# Unit of Measure (UOM)

A property of numeric fields that indicates the units associated with the value(s) stored in that field. While values can be stored only in one UOM (i.e., the UOM defined for a given field), they can be <u>converted for display</u> into any UOM for which an appropriate <u>conversion</u> has been defined.

### **Unit of Measure Conversion Set**

A group of <u>UOM conversions</u> that allows you to specify how values that are stored in one UOM will be converted for display in another UOM for one or more users.

### **Unit of Measure Conversions**

Values defined in the <u>Configuration Manager</u> that convert one unit of measure to another. For example, you might define a unit of measure conversion to convert inches to centimeters.

# UOM

**Unit of Measure** 

#### **URL**

The abbreviation of Uniform Resource Locator, which is an address that identifies a resource and specifies the method (i.e., the scheme) that will be used for accessing that resource. In Meridium APM, the term URL refers to addresses that identify documents in Meridium APM and the scheme that specifies that these documents should be opened in Meridium APM. Meridium APM URLs are internal to Meridium APM and use the scheme meridium. In the same way that web-based URLs can be used to launch pages in web browsers, Meridium APM URLs can be used to construct links that launch features in Meridium APM. For example, the URL meridium://Inspection will launch the Inspection Manager Start Page in the Meridium APM Framework. In addition, Meridium APM supports the use of URLs that employ the http scheme for launching webpages from the Meridium APM applications.

# **URL Manager**

The Meridium APM application that is used to register URLs and to manage <u>Associated Pages</u>.

### **URL Path**

The portion of a URL that specifies the main area that will be accessed by the URL. For example, in the following URL, the path is shown in bold: meridium://ThicknessMonitoring/Analysis?EntyKey=2808497.

#### User

A generic term used to refer to any person who uses the software. When used alone, his term does not denote any specific information about the person's permissions, privileges, or responsibilities in the system.

See also Administrative User, Super User, System Administrator, Security User.

# Visual Basic.Net (VB.Net)

The programming language in which Meridium APM rules are written. The VB.Net code for family rules projects, Rules Library projects, and Strategy rules can be viewed and modified using <u>VSTA</u>, the tool that Meridium APM provides as the rules-authoring interface.

### Visual Studio Tools for Applications (VSTA)

The tool that serves as the interface where you can view and modify all the <u>VB.Net</u> code in a given rule project. This tool is accessible via the <u>Configuration Manager</u> and serves as the interface for viewing and modifying both family rule projects and Rules Library Projects. In addition, Meridium APM provides an optional component called VSTA for Strategy which can be installed on non-administrative Client workstations to provide users with access to Strategy rules.

# **VSTA**

Visual Studio Tools for Applications

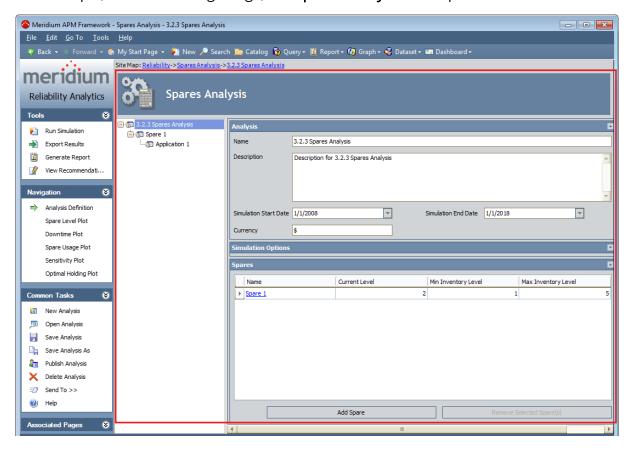
### **Work Process**

A set of tools and processes designed to help you achieve a focused APM objective. The Meridium APM solution includes five work processes:

- APM Foundation Work Process
- Asset Strategy Work Process
- Asset Safety Work Process
- Failure Elimination Work Process
- Mechanical Integrity Work Process

# Workspace

The area on the right side of the Meridium APM Framework main window. The options and controls in the workspace are specific to the page that you are currently viewing. For example, in the following image, the **Spares Analysis** workspace is outlined in red.



# **XML**

Extensible Markup Language