


meridium

Web Framework

V3.6.0.0.0



Meridium APM Web Framework V3.6.0.0.0

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About This Document

This file is provided so that you can easily print the content of the Meridium APM Web Framework Help system. This document is not meant to be read electronically using the PDF. If you want to read the documentation electronically, you should use the Help system. This file is set up to facilitate double-sided printing and includes blank pages between sections so that each section will begin on an odd page and will be printed on the *front* of the page.

When you read the documentation via the Help system, you will see links which serve as cross-references to other areas of the documentation. These cross-references are not available in this document.

To access the Meridium APM Web Framework Help system, in the Meridium APM Web Framework, on the **Help Tasks** menu, click the  **Help** link.

Documentation Conventions

Throughout the documentation, we use various stylistic conventions that make it easier to interpret information and instructions. The following table provides a list and description of the conventions that are used throughout the Meridium APM documentation.


Convention	Description	Example
Bold	Identifies labels that appear on the screen. Identifies folder paths and file names when the folder path or file name is included in step-by-step instructions.	The Save As dialog box appears. Click Cancel . In the Catalog folder <code>\\Public\Meridium\Modules\Core\Queries</code> , open the query Field History Records .
<code>\\</code>	Identifies the beginning of a folder path.	The query is located in the following Catalog folder: <code>\\Public\Meridium\Modules\Core\Queries</code> .
Courier New	Identifies text that you must type.	Type <code>root</code> .
<code><></code>	Indicates that the data inside the angle brackets is variable.	Click Expand/Collapse <Record>'s Children , where <code><Record></code> is the ID of the selected record.

Convention	Description	Example
[]	Indicates that the data inside the square brackets is optional.	<p>Type the following text: <Meridium APM Catalog Path>,[Query Parameters]</p> <p>...where:</p> <ul style="list-style-type: none">• <Meridium APM Catalog Path> is the Catalog path of the desired query.• [Query Prompt Value] is a value that you want to supply for a prompt in the query. If you do not pass in query prompt values, you will be prompted to supply them when you run the query.

Basics

Introduction to the Meridium APM Web Framework

The Meridium APM Web Framework lets you view Meridium APM data using Microsoft Internet Explorer and is intended to provide a quick way for users to view and update Meridium APM data without needing access to a Meridium APM Framework machine. You can use the Meridium APM Web Framework to view query results and reports and to search for, create, and modify records. The Meridium APM Web Framework includes the following features:

- **Home Page:** Serves as the starting point for the Meridium APM Web Framework and can be configured to provide hyperlinks to favorite or frequently used features or to display a website of your choice.
- **Catalog:** Provides you with quick access to the queries and reports in the Personal, Public, and Baseline folders that you have permission to access in the Meridium APM Catalog.
- **Search:** Lets you search the database for records that meet specific criteria.
- **Record Manager:** Lets you create, view, modify, and delete records in the database and includes a record hierarchy, which you can use to navigate through records in the database, select a record, and view its details.
- **Help System:** Provides details on using the Meridium APM Web Framework and can be accessed by clicking the  **Help** link on the **Help Tasks** menu.

Through links on a **Home Page** and **Associated Pages** menus in the Record Manager, the Meridium APM Web Framework may provide access to Meridium APM features that are not supported by the Web Framework itself.

- If you click a link to an unsupported feature and the Meridium APM Framework application is not installed on the computer from which you

are accessing the Meridium APM Web Framework, an error message will be displayed, indicating that the page cannot be found.

- If you click a link to an unsupported feature and the Meridium APM Framework application IS installed, the feature will be opened in the Meridium APM Framework application.

Web Framework System Requirements

The Meridium APM Web Framework license is required to take advantage of Meridium APM Web Framework functionality. In addition, your system must contain the basic Meridium APM system architecture and a *Meridium APM Web Framework Server* machine. The Meridium APM Web Framework Server is the computer on which the Meridium APM Web Framework software is installed. The Meridium APM Application Server software should also be installed on the Meridium APM Web Framework machine. The Meridium APM Web Framework will connect to that supporting Application Server instance via a Local Connection.

If you want to use custom translations in the Meridium APM Web Framework application, the Meridium APM Web Framework Server machine must include the Configuration Manager application for the purposes of uploading the translations to the Meridium APM Application Server instance on that machine. Before you can install the Configuration Manager application, the required prerequisites must be installed.

After you have installed and configured the basic system architecture, you will need to perform some configuration tasks specifically for the Meridium APM Web Framework application.

Note: Throughout the Meridium APM documentation, whenever we refer to the Meridium APM Application Server within the context of the Meridium APM Framework, unless otherwise specified, we are referring to the supporting Meridium APM Application Server instance that is installed on the Meridium APM Web Framework Server machine.

[Click here](#) to expand and collapse the hardware and software requirements for the Meridium APM Web Framework.

The following hardware is the *minimum* requirement for any machine that will serve as the Meridium APM Web Framework Server. These requirements

account for the Meridium APM software only. Additional hardware may be required on machines where other components are installed. These requirements may not be sufficient, depending upon how your system is configured.

- Four Processor Cores, 2+ GHz
- 4GB RAM
- 20GB Hard Drive space

If you are using a virtual machine (VM) to host your Meridium APM Web Framework Server, we recommend that:

- You increase the physical server CPU and hard drive space requirements by 20% to ensure that the application will perform equivalently in a virtualized environment.
- You double the physical server memory requirements.
- Each VM have its own dedicated processor cores and memory allocation to ensure appropriate performance.

Meridium, Inc. supports Hyper-V and VMWare platforms.

These requirements may not be sufficient, depending upon how your system is configured. Parameters that affect the hardware requirements include the number of users, modules purchased, database size, and other factors that can vary from one customer to another. For help refining your specific system requirements, consult a member of the Meridium Inc. Global Support Services or Professional Services department.

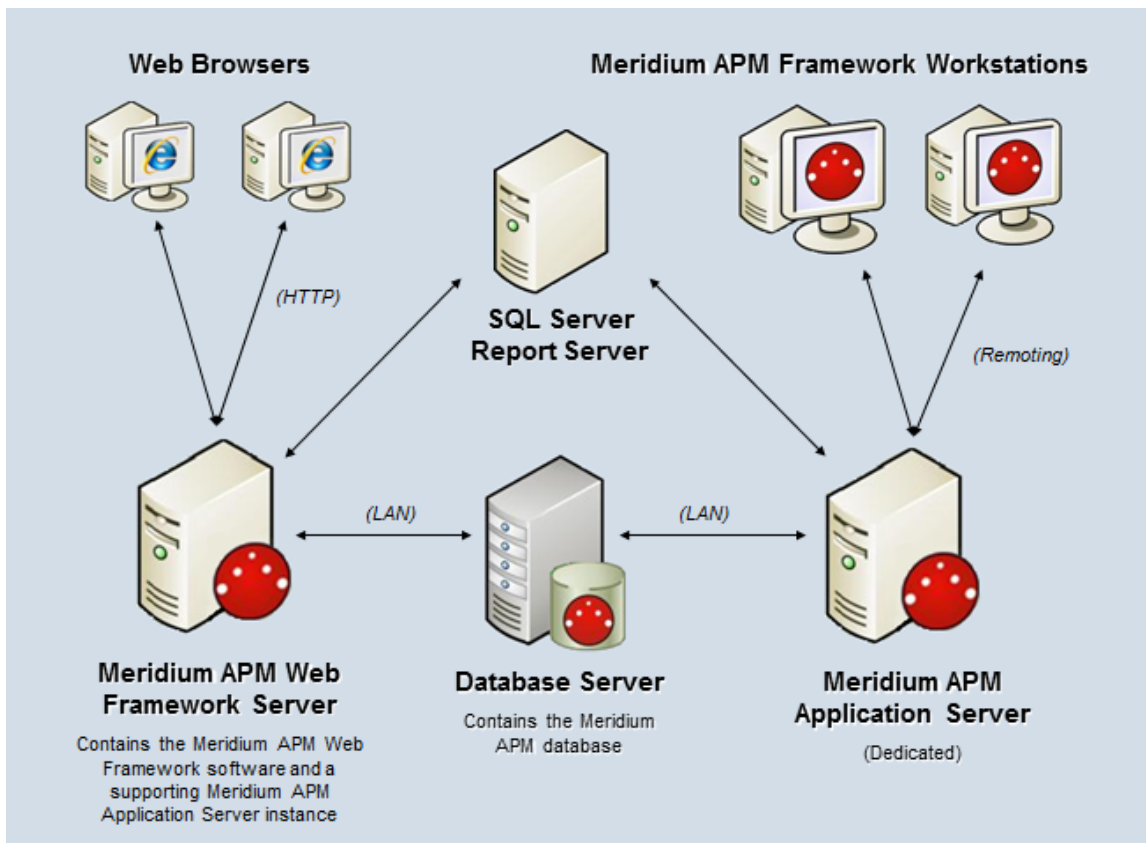
The Meridium APM Web Framework requires that the following software components exist on the machine where it will be installed. If you also install a supporting instance of the Meridium APM Application Server on the same machine, then additional prerequisites may be needed. [Click here for the APM Application Server software requirements.](#) This table is intended to be used as a reference of the behavior of the Meridium APM Application Server and Add-ons installer as it relates to each component. This list contains the components that are required or installed by the installer.

Software Name and Version	Where You Can Obtain It	Behavior of Meridium APM Server and Add-ons Installer
Microsoft.NET 3.5 SP1	Microsoft	If it is not found, the installer will close.
ReportViewer 2008	Meridium	If it is not found, the installer will install it automatically.
Windows 2008 R2 -or- Windows 2012	Microsoft	If it is not found, a message will appear, indicating that the environment is not supported, but you can continue through the installer.
Microsoft WSE 3.0 Runtime	Meridium, Inc. distribution package	If it is not found, the installer will close.
Internet Explorer 8.0, 9.0, 10.0, or 11.0	Microsoft	If it is not found, the installer will close.*
IIS 7.0 or later	Microsoft	If it is not found, the installer will close.
Microsoft Silverlight 3 Note: This software is also required on any workstation that will access the Meridium APM Web Framework application.	Microsoft	The installer does not check for this software.

Software Name and Version	Where You Can Obtain It	Behavior of Meridium APM Server and Add-ons Installer
Merge Modules: Visual C++ 8 CRT (x86) Win SXS MSM Visual C++ 8.0 MFC (x86) WinSXS MSM Visual C++ 10.0 CRT (x64) Visual C++ 9.0 CRT (x86) WinSXS MSM Visual C++ 10.0 ATL (x64) Visual C++ 9.0 ATL (x86) WinSXS MSM	Meridium APM	If this is not found, the installer will install it automatically.

1. Any machine that you will use to access the Web Framework application must have Internet Explorer 8.0, 9.0, 10.0, or 11.0 installed.

The following image provides an illustration of the architecture components that are required for deploying the Meridium APM Web Framework.



Note: While this image depicts only a single, dedicated Meridium APM Application Server, keep in mind that your implementation may contain one or more of these machines. The purpose of this image is to depict the interaction of the Meridium APM Web Framework Server with the basic Meridium APM components, not to provide details on the basic components themselves.

Accessing the Meridium APM Web Framework

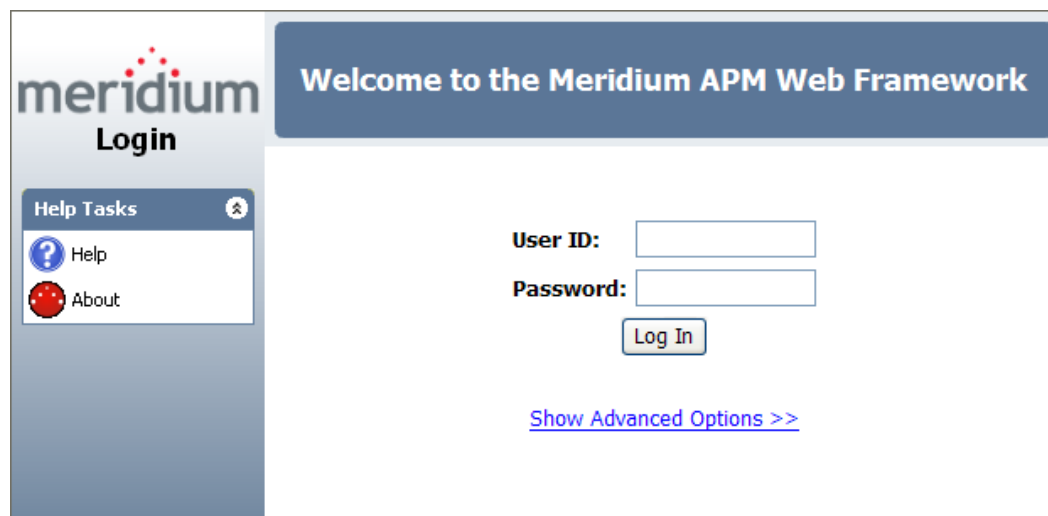
After you navigate to the web address for the Meridium APM Web Framework, before you can begin using the Meridium APM Web Framework, you must first log in.

Note: If automatic login has been enabled, you will be logged in automatically when you access the Meridium APM Web Framework site. Automatic login can be enabled by an administrative user.

To log in to the Meridium APM Web Framework:

1. Launch Internet Explorer, and navigate to the URL <http://<Web Server>/MeridiumWeb>, where <Web Server> is the name of the Meridium APM Web Framework Server on which the Meridium APM Web Framework was installed.

The Login page appears.



2. In the **User ID** text box, type your Meridium APM User ID.
3. In the **Password** text box, type your password. The characters will appear as bullets. Note that passwords are case sensitive.

Note: If your user account was set up without a password, you can leave the **Password** text box blank and log in using just your User ID.

4. Click the **Show Advanced Options** link.

The **Data Source** list and **Application Server** name appear.

- If the Application Server name has not been specified in the file web.config, **(Local)** will appear as the Application Server.
- If the Application Server has been specified in the file web.config, the name of the Application Server will appear.

5. In the **Data Source** list, select the desired data source. The list contains the Meridium APM data sources that have been set up on the Application Server to which the Meridium APM Web Framework has been configured to connect. Note that the default data source as specified in the Data Source Manager is selected by default.

Note: If you attempt to log in to a data source that you do not have permission to access, instead of being taken to the **Home Page**, you will remain on the **Login** page and a message will be displayed, indicating that there was an error retrieving Security Groups. You will need to select a data source that you do have permission to access and log in again.

6. Click the **Log In** button.

You are connected to the Meridium APM database, and the **Home Page** appears.

Note: You can log in to the Meridium APM Web Framework only if the license for the application is active. If the license is not active or has expired, a message will appear, indicating that the license is not active or that it has expired. If one of these messages appears, you should refresh your browser, and try logging in again. If the message persists, you will need to contact an administrative user.

Installation, Upgrade, and Configuration

First-Time Deployment Workflow

Deploying and configuring the Meridium APM Web Framework application 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 will need to deploy the Meridium APM Web Framework on top of the basic Meridium APM 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 Meridium APM Web Framework functionality.

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

Step	Task	Required/Optional	Notes
1	Ensure the Meridium APM Web Framework machine meets the hardware and software requirements.	Required	None
2	Install the Meridium APM Web Framework software on the Web Framework Server.	Required	None

Step	Task	Required/Optional	Notes
3	Specify settings in the file web.config on the Meridium APM Web Framework Server. You will need to specify the following settings: <ul style="list-style-type: none"> • Web Framework login options • Application Server and database connection settings • Report Server identity information • Reference Document configuration settings 	Required	Some settings are required and others are optional. For details, read the documentation on the file web.config. You can complete this step using the Meridium APM System Administration tool.
4	Specify the default Meridium APM Web Framework Server for users who want to open query results in the Meridium APM Web Framework. You can do so via the Configuration Manager application.	Optional	None
5	Configure Security Groups for Meridium APM Web Framework users.	Required	None
6	Configure home pages for users. You can do so via the Configuration Manager application.	Optional	None
7	Configure Keyword Searches. You can do so via the Configuration Manager application.	Required	None
8	Configure the Has Reference Documents relationship.	Optional	This step is required only if you want to create Reference Document records in the Meridium APM Web Framework.

Upgrade Workflow

Upgrade Workflow

You can upgrade to V3.6.0.0.0 using the instructions that are provided in this section of the documentation. To access these instructions, click the starting version from which you are upgrading:

- V3.5.1
- V3.5.0 SP1 LP
- V3.5.0
- V3.4.5

Upgrading the Meridium APM Web Framework from V3.5.1 to V3.6.0.0.0

The Meridium APM Web Framework will be upgraded from V3.5.1 to V3.6.0.0.0 automatically when you upgrade the components in the basic Meridium APM system architecture.

Upgrading the Meridium APM Web Framework from V3.5.0 SP1 LP to V3.6.0.0.0

The following table lists the steps that are required to upgrade and configure the Meridium APM Web Framework application for V3.6.0.0.0. These steps assume that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Step	Task	Required/Optional	Notes
1	Upgrade the Meridium APM Web Framework software on the Web Framework Server. During this step, you can also optionally install the Configuration Manager application for the purposes of uploading custom translations to the supporting instance of the Application Server installed on that machine.	Required	None
2	Specify settings in the file web.config on the Meridium APM Web Framework Server. You will need to specify the following settings: <ul style="list-style-type: none"> • Web Framework login options • Application Server and database connection settings • Report Server identify information • Reference Document configuration settings 	Required	None

Upgrading the Meridium APM Web Framework from V3.5.0 to V3.6.0.0.0

The following table lists the steps that are required to upgrade and configure the Meridium APM Web Framework application for V3.6.0.0.0. These steps assume that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Step	Task	Required/Optional
1	Upgrade the Meridium APM Web Framework software on the Web Framework Server.	Required

Step	Task	Required/Optional
2	Specify settings in the file web.config on the Meridium APM Web Framework Server. You will need to specify the following settings: <ul style="list-style-type: none"> • Web Framework login options • Application Server and database connection settings • Report Server identify information • Reference Document configuration settings 	Required
3	Install the Meridium APM Configuration Manager application on the Meridium APM Web Framework Server for the purposes of uploading custom translations to the supporting instance of the Application Server on that machine.	Optional

Upgrading the Meridium APM Web Framework from V3.4.5 to V3.6.0.0.0

The following table lists the steps that are required to upgrade and configure the Meridium APM Web Framework application for V3.6.0.0.0. These steps assume that you have completed the steps for upgrading the components in the basic Meridium APM system architecture.

Step	Task	Required/Optional	Notes
1	Ensure that the Meridium APM Web Framework Server contains Internet Explorer 9.	Optional	While IE 8 is also supported, IE 9 is newly supported.
2	Upgrade the Meridium APM Web Framework software on the Web Framework Server. During this step, you can also optionally install the Configuration Manager application for the purposes of uploading custom translations to the supporting instance of the Application Server installed on that machine.	Required	None

Step	Task	Required/Optional	Notes
3	<p>Specify settings in the file <code>web.config</code> on the Meridium APM Web Framework Server. You will need to specify the following settings:</p> <ul style="list-style-type: none">• Web Framework login options• Application Server and database connection settings• Report Server identify information• Reference Document configuration settings	Required	None

Installation, Upgrade, and Configuration Steps

Distributing Microsoft Silverlight

Microsoft Silverlight 3 is required to support certain features in the Meridium APM Web Framework. When a user of the Meridium APM Web Framework accesses a feature that requires Silverlight, an error message will appear if Silverlight is not installed on that workstation. The message will provide a link, from which users will be able to access the Silverlight installer that has been distributed on the Meridium APM Web Server. This link will be functional *only* if you have manually distributed the Silverlight installer to the Meridium APM Web Framework Server, as described in these instructions.

Note: If you prefer not to distribute Silverlight on the Meridium APM Web Framework Server, as an alternative, you can instruct all users of the Meridium APM Web Framework to install Silverlight on their individual workstations.

To distribute the Silverlight installer on the Meridium APM Web Framework Server:

1. Navigate to the following location, and download the Silverlight 3 installer to a location that is accessible from the Meridium APM Web Framework Server: <http://silverlight.net/getstarted/silverlight3/>

The download will include the file `Silverlight.exe`.

2. On the Meridium APM Web Framework Server, copy the file **Silverlight.exe** to the folder `<root>\WebComponents\SilverlightInstall`, where `<root>` is the drive and root folder in which the Meridium APM Web Framework is installed (e.g., `C:\Program Files\Meridium`).

Installing the Meridium APM Web Framework

The following instructions provide details on installing the Meridium APM Web Framework on the Meridium APM Web Framework machine. These instructions assume that:

- Your system meets the hardware and software requirements.
- You want to install a supporting instance of the Meridium APM Application Server on the Meridium APM Web Framework machine.
- You want to install the Configuration Manager application on the Meridium APM Web Framework machine for the purposes of uploading custom translations to the supporting instance of the Meridium APM Application Server on that machine.

Note: IIS will be reset automatically by the installer before the installation process begins.

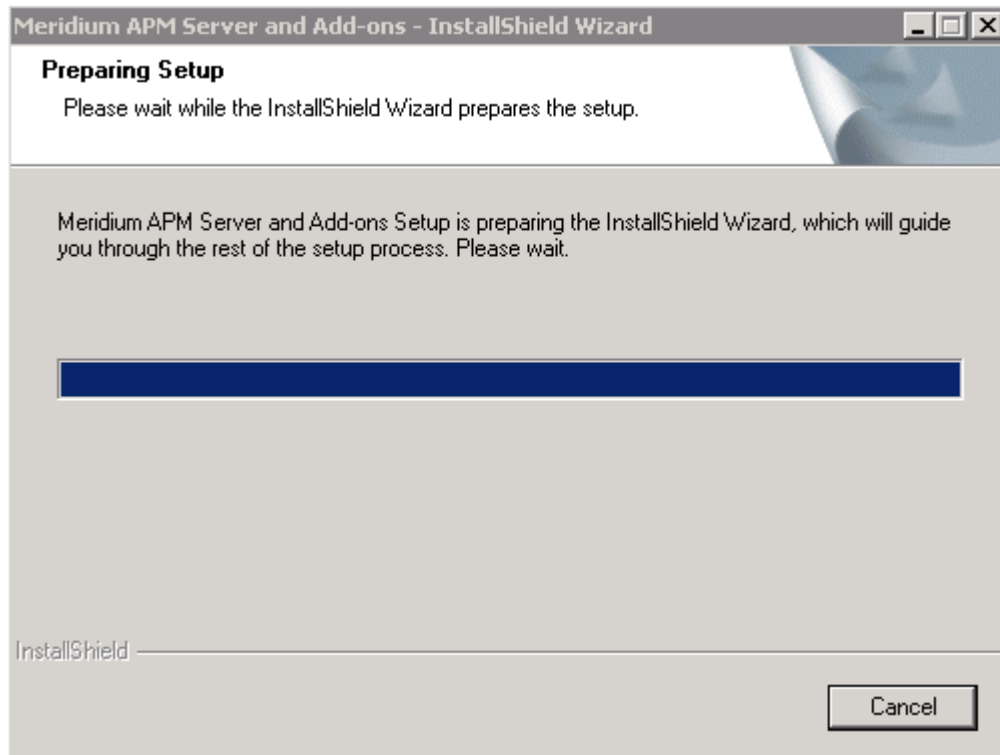
To install the Meridium APM Web Framework:

1. On the machine that will serve as the Meridium APM Web Framework Server, insert the Meridium APM distribution DVD, and navigate to the folder `General Release\Meridium APM Framework and Server Setup\Setup\Meridium APM Server and Add-ons`.
2. Double-click the file `Setup.exe`.

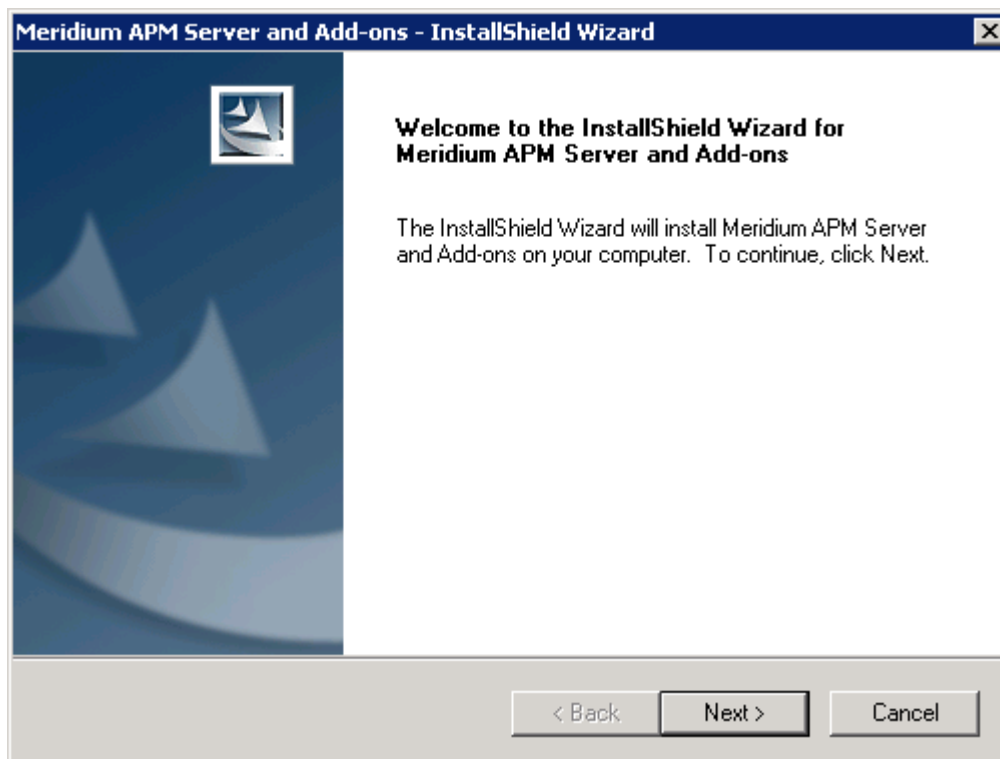
A message appears, asking if you want to allow the installer to make changes to your machine.

3. Click the **Yes** button.

The **Meridium APM Server and Add-ons** installer appears, displaying the **Preparing Setup** screen, which contains a progress bar.

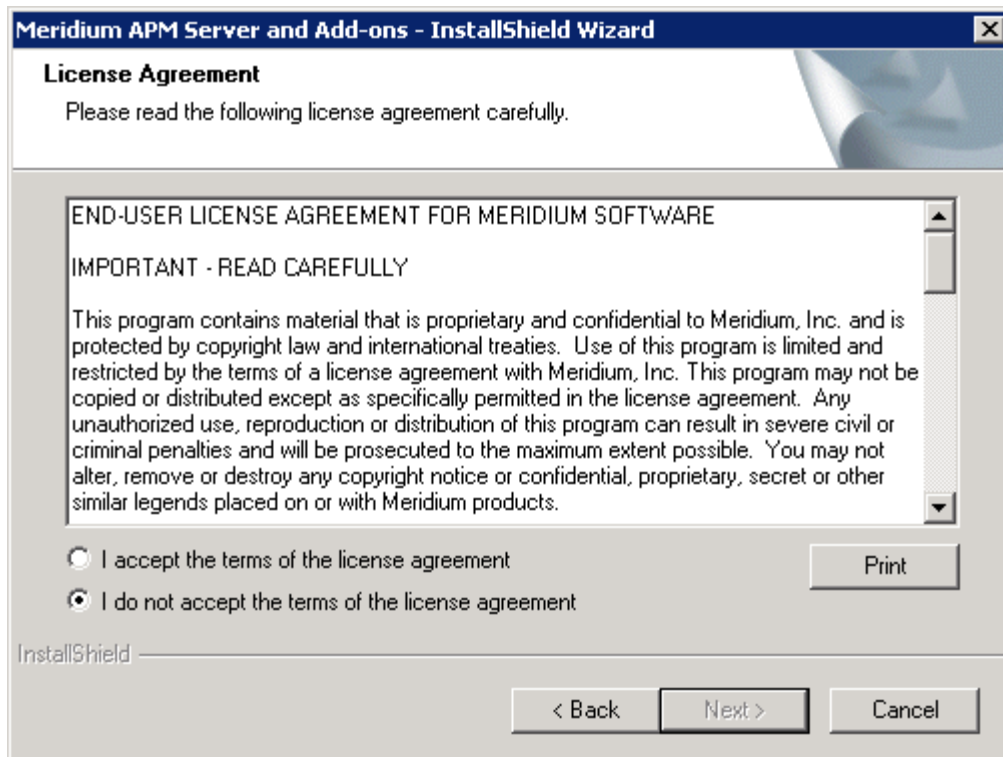


After the progress bar reaches the end, the Welcome screen appears.



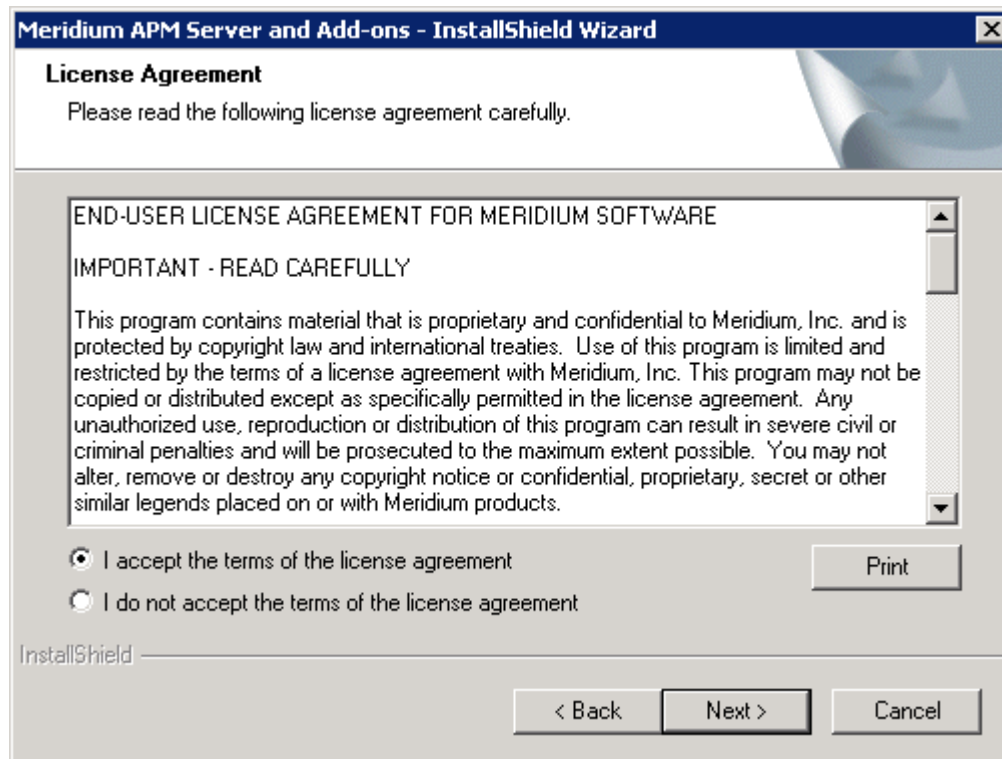
4. Click the **Next** button.

The License Agreement screen appears.



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

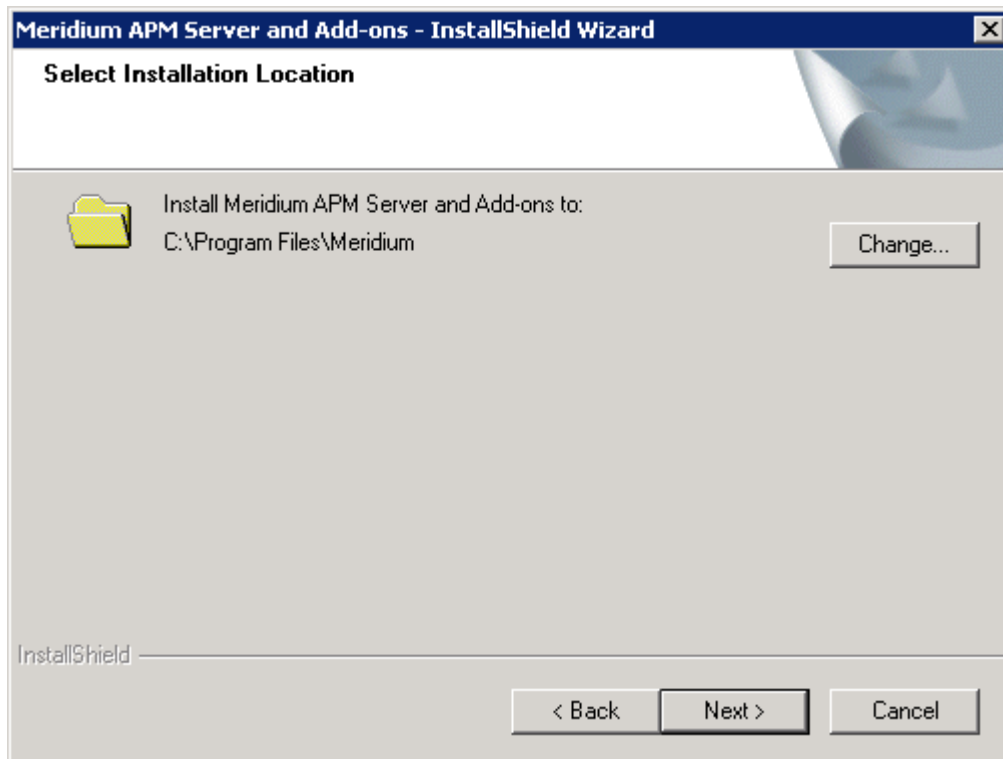
The **Next** button becomes enabled.



Hint: If you want to print the license agreement, click the **Print** button.

6. Click the **Next** button.

The **Select Installation Location** screen appears, prompting you to select the location where the Meridium APM Web Framework software will be installed. By default, the software will be saved to the following folder: C:\Program Files\Meridium.

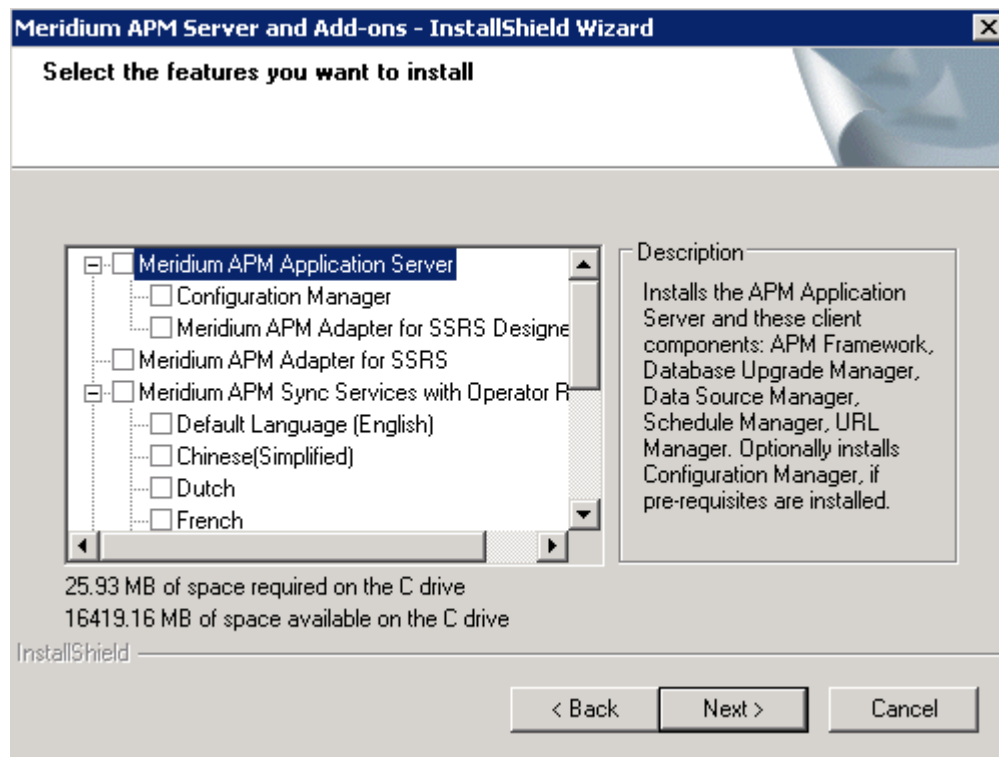


7. If you are satisfied with the default location where the software will be installed, click the **Next** button.

-or-

If you want to change the location where the software will be installed, click the **Change** button, and navigate to the location where you want to install the software. The folder path that you select will be displayed in place of the default folder path. When you are satisfied with the installation location, click the **Next** button.

The **Select the features you want to install** screen appears, and the **Meridium APM Application Server** node is highlighted automatically in the tree.



IMPORTANT: The **Select the features you want to install** screen lets you specify which features you want to install on the Meridium APM Web Framework Server machine. *These instructions* assume that you want to install the Meridium APM Web Framework, Configuration Manager application, and the Meridium APM Application Server software. When the Meridium APM Application Server software is installed, the Meridium APM System Administration Tool and the following APM Framework applications are also installed automatically: APM Framework, Database Upgrade Manager, Data Source Manager, Schedule Manager, and URL Manager. Corresponding options for these applications are not listed in the tree because these components must be installed with the APM Application Server software.

8. In the tree, select the **Meridium APM Application Server** check box.

The subnodes are selected automatically.



Note: The Configuration Manager application can be installed on the Meridium APM Web Framework Server machine only if the necessary prerequisites are already installed. If you do not want to install the Configuration Manager application on the Meridium APM Web Framework Server at this time, you can clear the **Configuration Manager** check box. You can install the Configuration Manager application at a later time.

9. Clear the Meridium APM Adapter for SSRS Designer check box.
10. Scroll down in the list of components, and select the Meridium APM Web Framework check box.

IMPORTANT: While additional options are available for selection in the tree on the **Select the features you want to install** screen, these options are not meant to be installed on the Meridium APM Web Framework Server machine, and these instructions are limited to installing the Meridium APM Web Framework, Configuration Manager application, and the Meridium APM Application Server software (with APM Framework applications). This installer is also used to install the additional components *on other machines*.

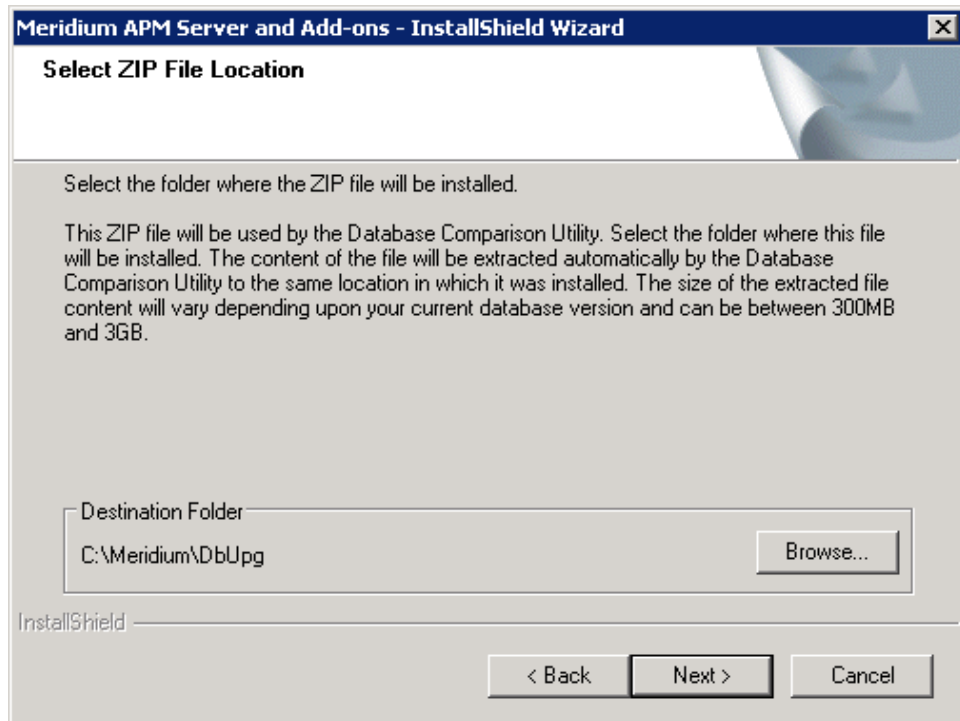
11. Click the Next button.

A message appears, indicating that the installer is checking your machine for the required prerequisites for the features that you want to install.

- If one or more prerequisites are missing on the machine, the **Meridium Installer** screen will appear and display a message that indicates which prerequisites still need to be installed on the machine before you can install the feature that is dependent on that prerequisite. This message also indicates what you can do to continue.

If you see this screen, you should read the message in detail, and either click the **Back** button to clear the selection whose prerequisites are missing, and then continue through the installation without installing that component, or close the installer, install the missing prerequisite, and then run the installer again later.

- If all the prerequisites for the selected components are installed on the machine, or you have selected components that do not require any prerequisites, the **Select ZIP File Location** screen appears.



The **Select ZIP File Location** screen lets you specify the location where you want the ZIP file of database content to be installed. This ZIP file is used by the Database Comparison Utility. By default, the ZIP file will be installed in the folder **C:\Meridium\DbUpg**. You can, however, select a different location.

12. Read the information on this screen and note the estimated size of the extracted files from this ZIP file. You should use this information to determine where you want install the ZIP file.

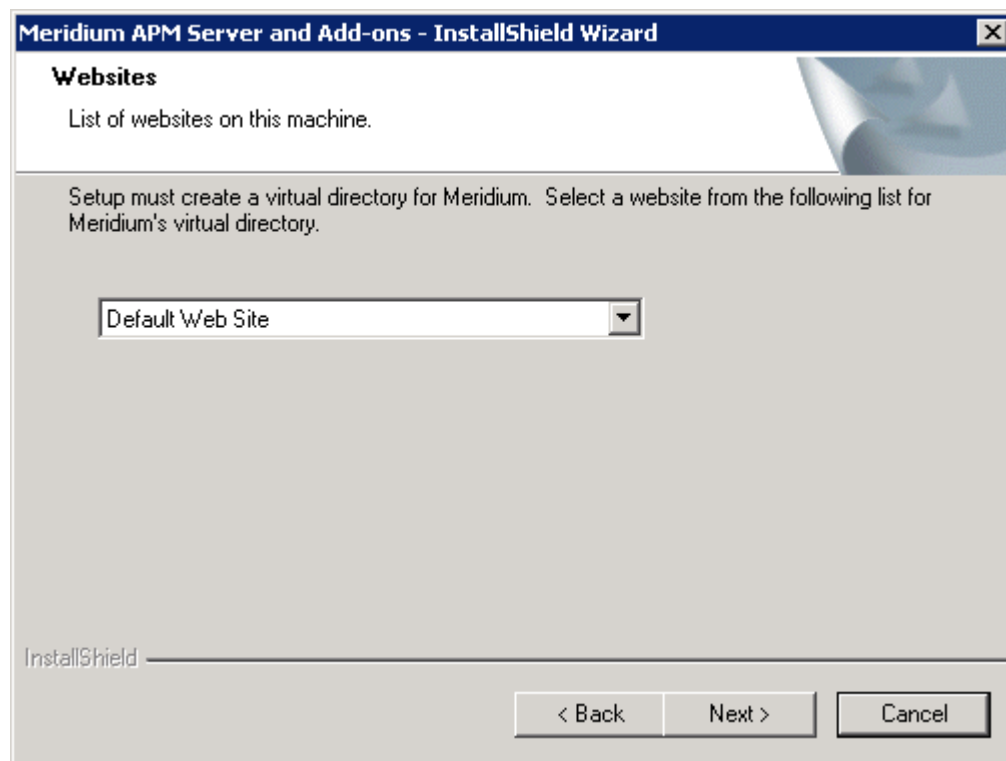
13. If you want the ZIP file to be installed in the default location, accept the default setting.

-or-

If you want the ZIP file to be installed in a different location, click the **Browse** button, and navigate to the location where you want the ZIP file to be installed. The selected file path will appear in the **Destination Folder** section in place of the default file path.

14. Click the **Next** button.

The **Websites** screen appears.

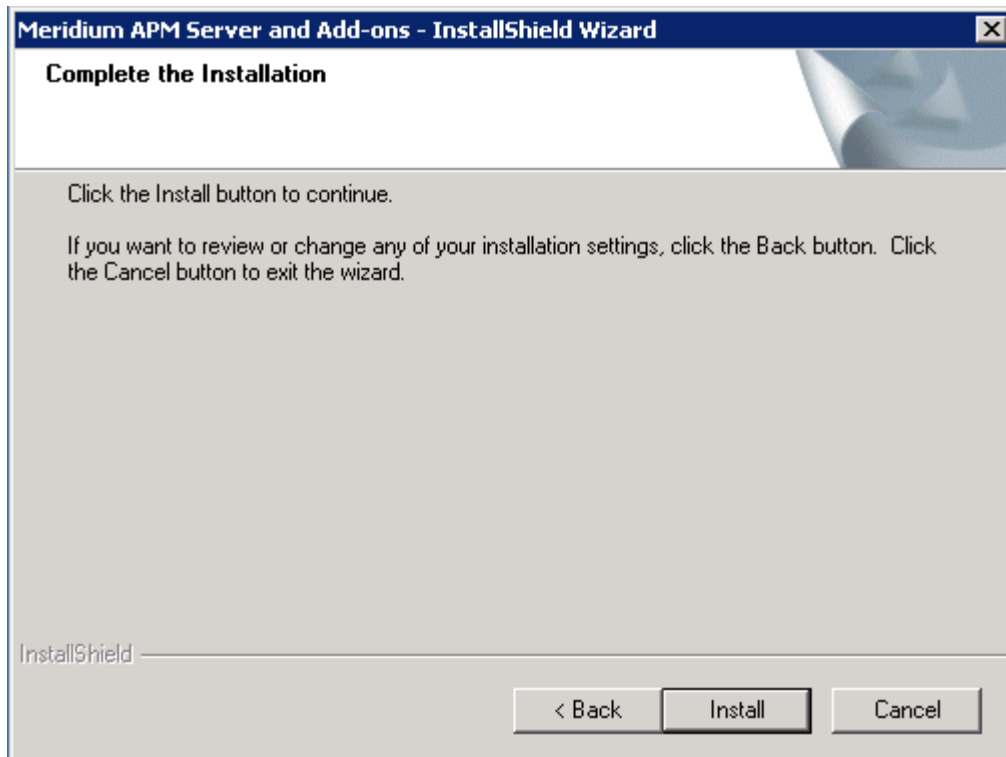


The **Websites** screen lets you specify where the installer will create a virtual directory for Meridium APM. This website is configured in the IIS Manager. The websites list contains all the websites that are configured on the machine. The default website is *Default Web Site*. Throughout this documentation, we assume that you have chosen to install Meridium APM under the *Default Web Site*.

15. In the list of websites, select the website where you want the installer to create a virtual directory.

16. Click the **Next** button.

The **Complete the Installation** screen appears.

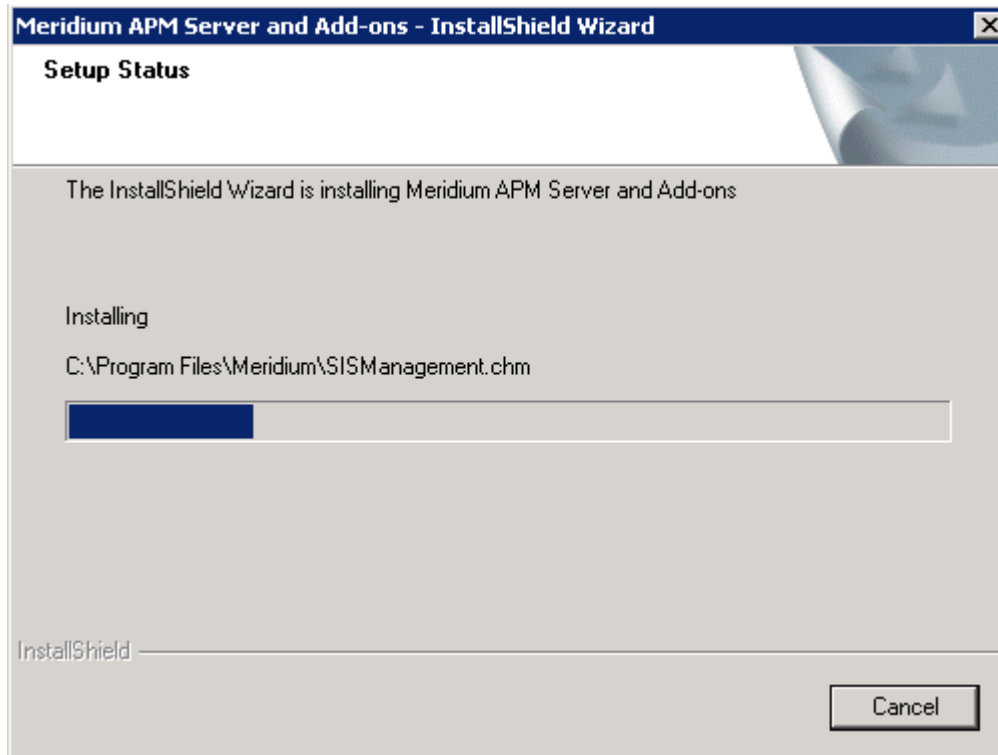


The **Complete the Installation** screen contains a message, indicating that if you want to modify any of the settings that you specified in the preceding screens in the installer, you can use the **Back** button to do so, or if you do not want to complete the installation, you can click **Cancel**.

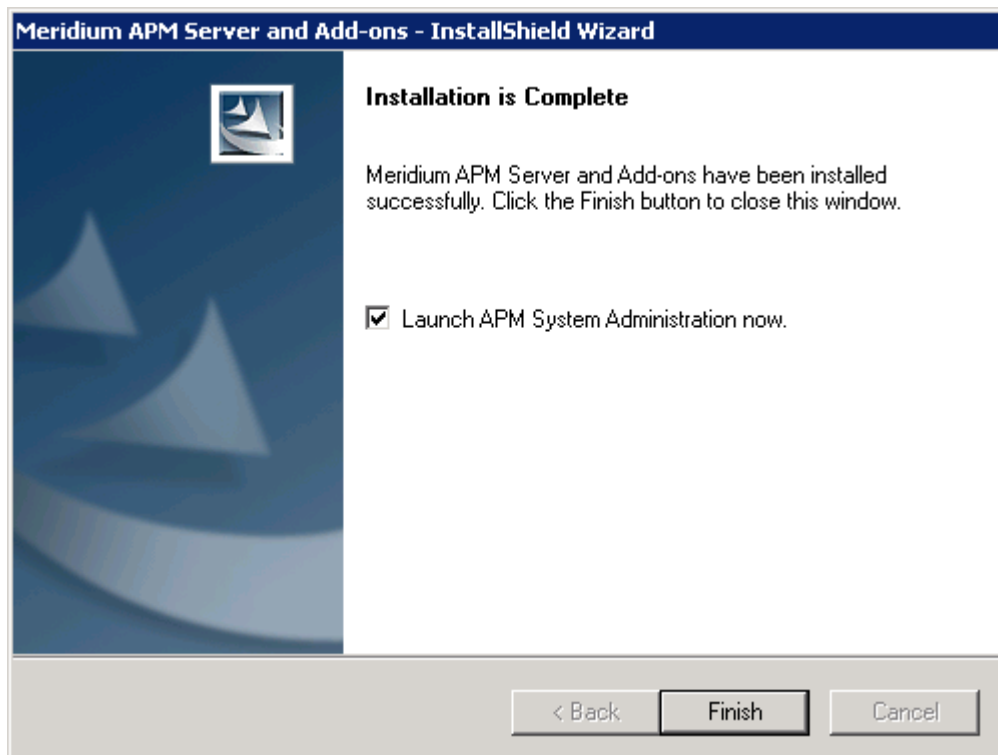
These instructions assume that you are ready to complete the installation process.

17. Click the **Install** button.

The **Setup Status** screen appears, which displays a progress bar that shows the progress of the installation process.



After the progress bar reaches the end, a message appears, indicating that your server is being configured. After your server is configured, the **Installation is Complete** screen appears.



This screen contains a message, indicating that Meridium APM Server and Add-ons has been installed successfully. You can also select to optionally launch the APM System Administration tool when the installer window closes. By default, this option is set to Yes.

18. If you want the APM System Administration tool to be launched as soon as you click the **Finish** button, accept the default selection and move on to the next step.

-or-

If you do not want the APM System Administration tool to be launched at this time, clear the **Launch APM System Administration now** check box.

19. Click the **Finish** button.

The Meridium APM Server and Add-ons installer closes. Additionally, if you selected the **Launch APM System Administration now** check box, the **APM System Administration** window appears. At this point, you should refer back to the checklist.

Upgrading the Meridium APM Web Framework Server

Upgrading the Meridium APM Web Framework Server from V3.5.1 to V3.6.0.0.0

The following instructions provide details on upgrading the Meridium APM Web Framework. These instructions assume:

- That you are an Administrator with full access to the Meridium APM Web Framework Server machine.
- You understand that when you upgrade the Meridium APM Web Framework software, you are also upgrading the supporting instance of the Meridium APM Application Server on that machine (with APM Framework applications).

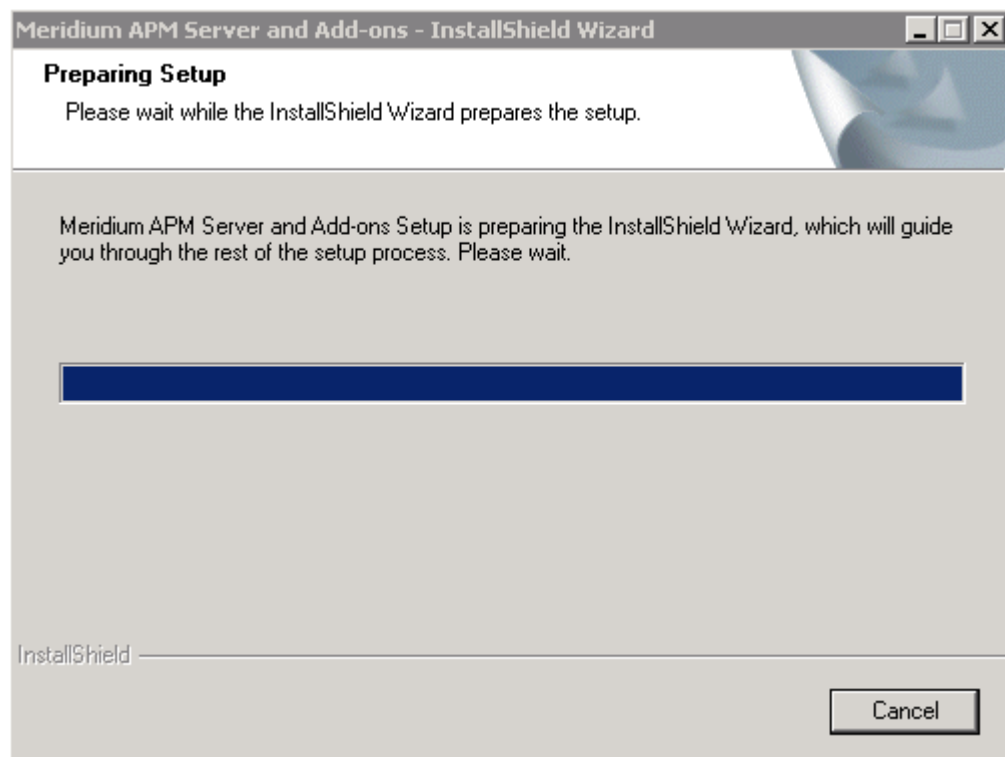
To upgrade the Meridium APM Web Framework Server:

1. On the Meridium APM Web Framework Server, insert the Meridium APM distribution DVD, and navigate to the folder **General Release\Meridium APM Framework and Server Setup\Setup\Meridium APM Server and Add-ons**.
2. Double-click the file **setup.exe**.

A message appears, asking if you want to allow setup.exe to make changes to your machine.

3. Click the **Yes** button.

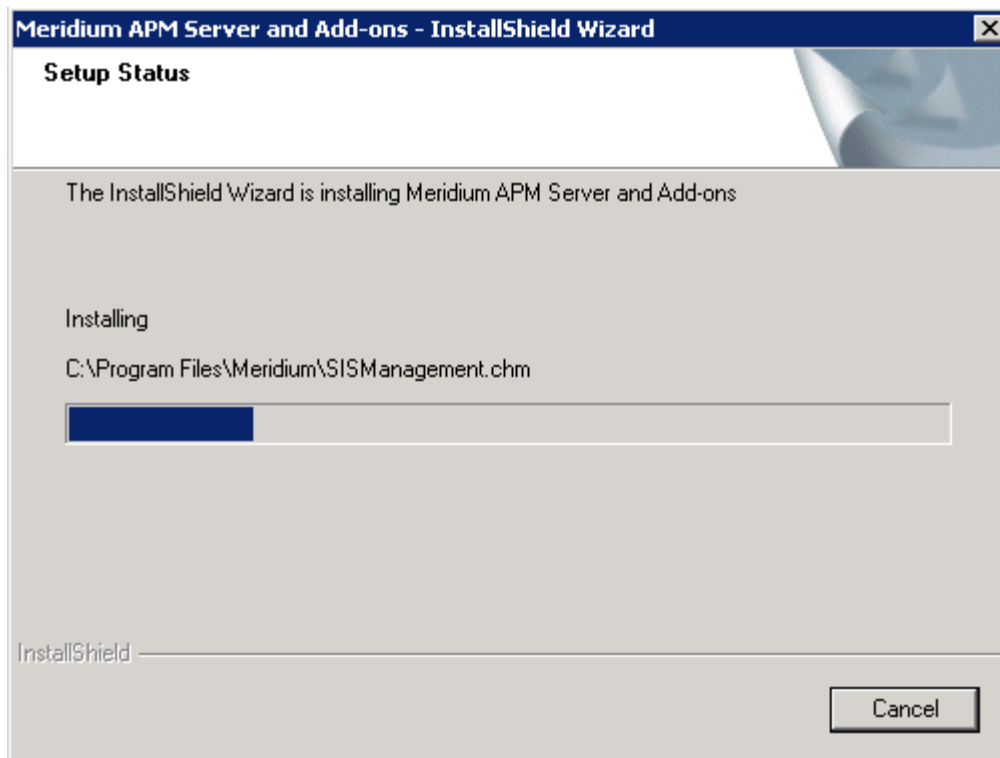
The **Meridium APM Server and Add-ons** installer appears, displaying the **Preparing Setup** screen, which contains a progress bar.



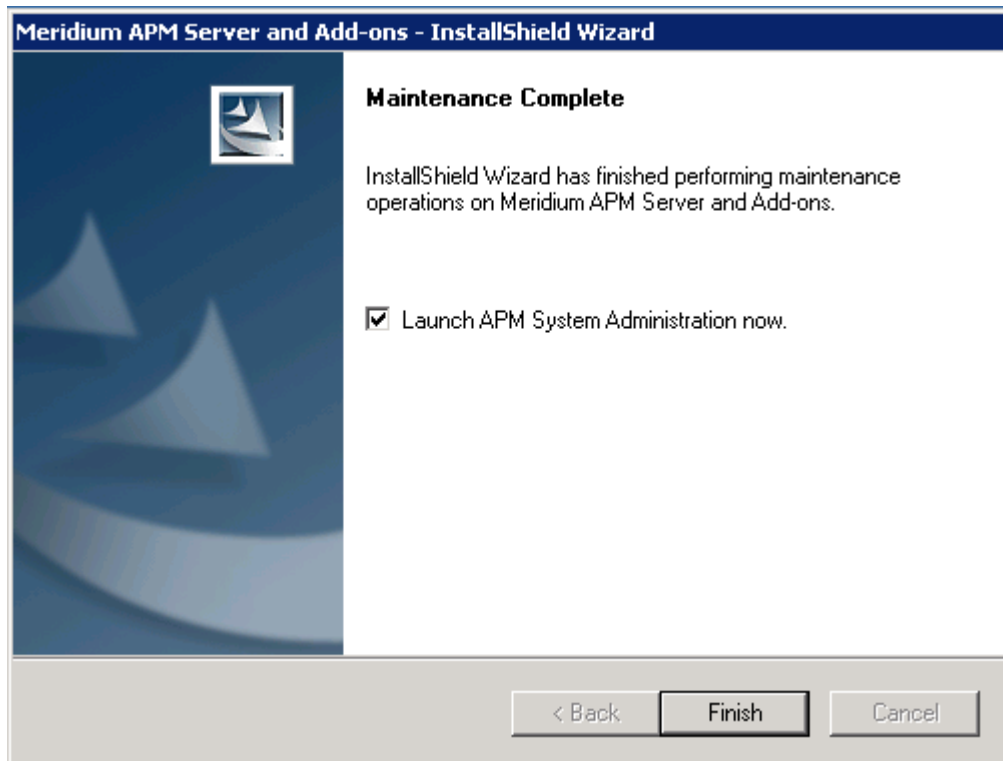
After the progress bar reaches the end, a message appears, asking if you want to upgrade your server.

4. Click the **Yes** button.

The **Setup Status** screen appears, displaying a progress bar that indicates the status of the upgrade process.



After the progress bar reaches the end, the **Maintenance Complete** screen appears.



This screen contains a message, indicating that the software has been installed successfully. You can also select to optionally launch the APM System Administration tool when the installer window closes. By default, this option is set to Yes.

5. If you want the APM System Administration tool to be launched as soon as you click the **Finish** button, accept the default selection and move on to the next step.

-or-

If you do not want the APM System Administration tool to be launched at this time, clear the **Launch APM System Administration now** check box.

6. Click the **Finish** button.

The **Meridium APM Server and Add-ons** installer closes. Additionally, if you selected the **Launch APM System Administration now** check box, the **APM System Administration** window appears. At this point, you should refer back to the checklist.

Upgrading the Meridium APM Web Framework Server from V3.5.0 SP1 LP to V3.6.0.0.0

The following instructions provide details on upgrading the Meridium APM Web Framework. These instructions assume:

- That you are an Administrator with full access to the Meridium APM Web Framework Server machine.
- You understand that when you upgrade the Meridium APM Web Framework software, you are also upgrading the supporting instance of the Meridium APM Application Server on that machine (with APM Framework applications).

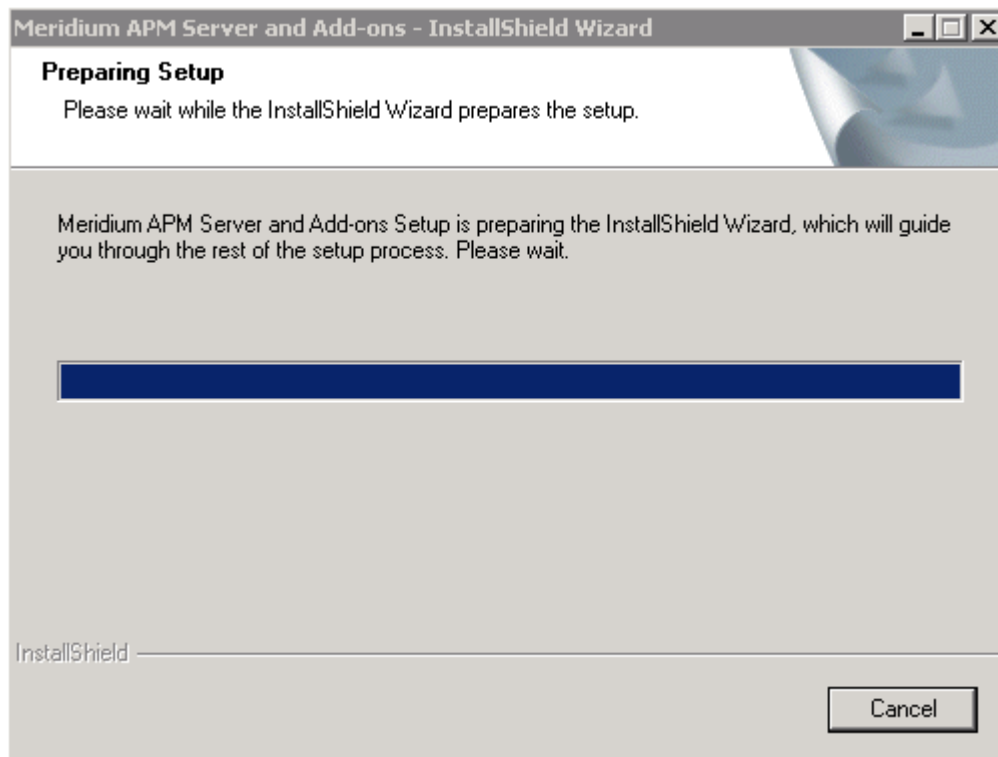
To upgrade the Meridium APM Web Framework Server:

1. On the Meridium APM Web Framework Server, insert the Meridium APM distribution DVD, and navigate to the folder **General Release\Meridium APM Framework and Server Setup\Setup\Meridium APM Server and Add-ons**.
2. Double-click the file **setup.exe**.

A message appears, asking if you want to allow setup.exe to make changes to your machine.

3. Click the **Yes** button.

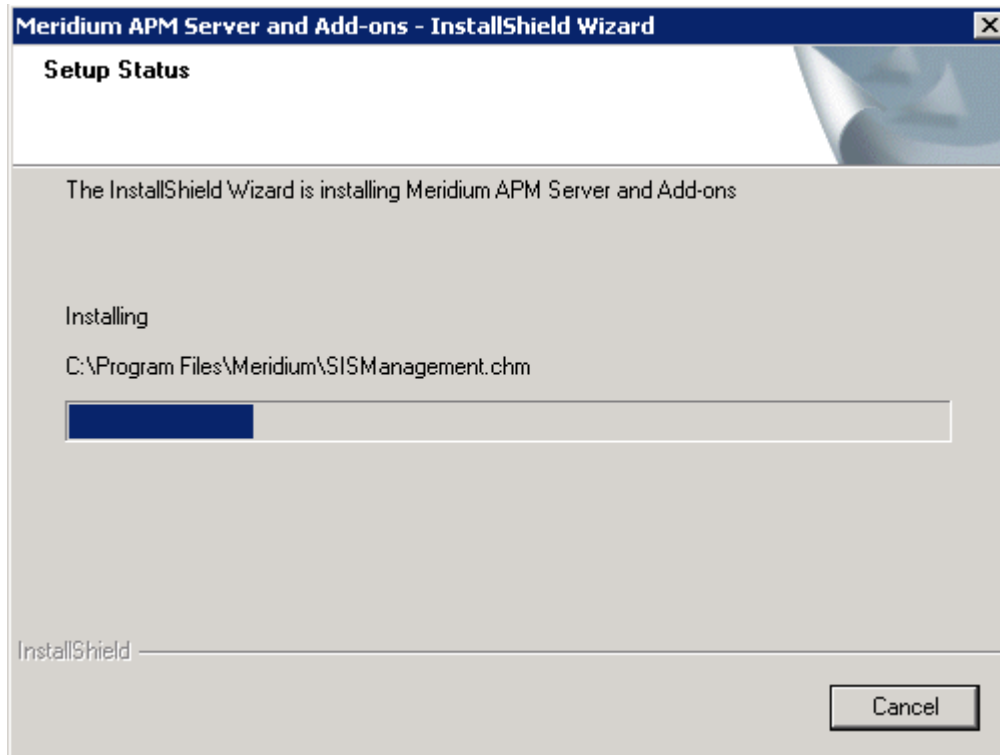
The **Meridium APM Server and Add-ons** installer appears, displaying the **Preparing Setup** screen, which contains a progress bar.



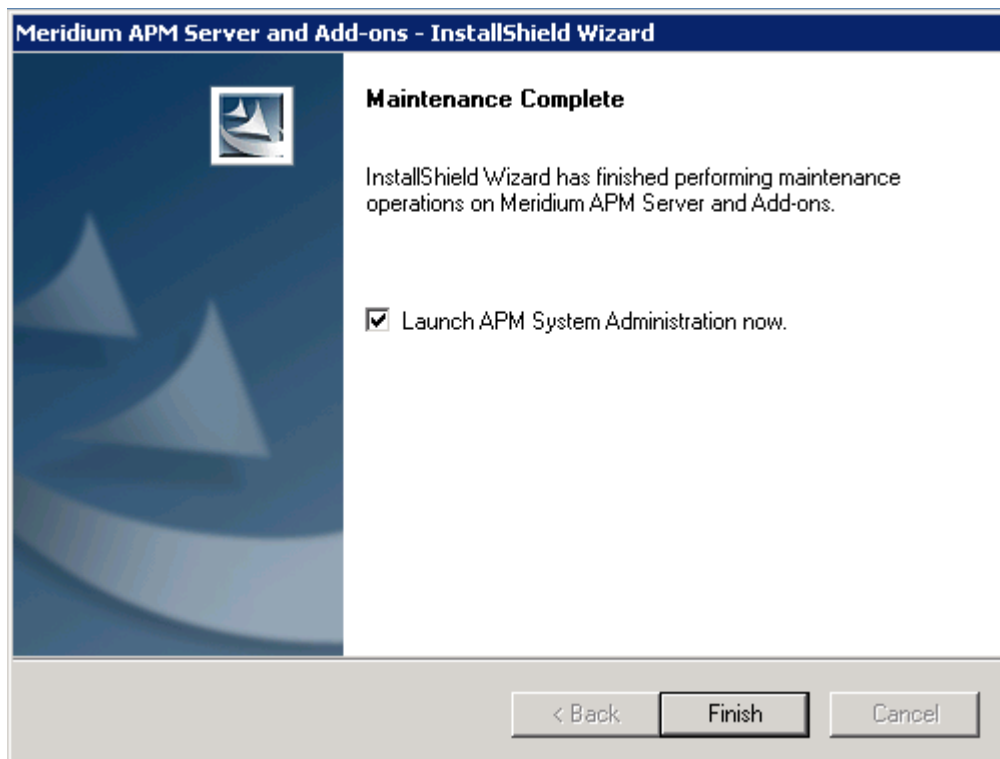
After the progress bar reaches the end, a message appears, asking if you want to upgrade your server.

4. Click the Yes button.

The **Setup Status** screen appears, displaying a progress bar that indicates the status of the upgrade process.



After the progress bar reaches the end, the Maintenance Complete screen appears.



This screen contains a message, indicating that the software has been installed successfully. You can also select to optionally launch the APM System Administration tool when the installer window closes. By default, this option is set to Yes.

5. If you want the APM System Administration tool to be launched as soon as you click the **Finish** button, accept the default selection and move on to the next step.

-or-

If you do not want the APM System Administration tool to be launched at this time, clear the **Launch APM System Administration now** check box.

6. Click the **Finish** button.

The **Meridium APM Server and Add-ons** installer closes. Additionally, if you selected the **Launch APM System Administration now** check box, the **APM System Administration** window appears. At this point, you should refer back to the checklist.

Upgrading the Meridium APM Web Framework Server from V3.5.0 to V3.6.0.0.0

The following instructions provide details on upgrading the Meridium APM Web Framework. These instructions assume:

- That you are an Administrator with full access to the Meridium APM Web Framework Server machine.
- You understand that when you upgrade the Meridium APM Web Framework software, you are also upgrading the supporting instance of the Meridium APM Application Server on that machine (with APM Framework applications).

To upgrade the Meridium APM Web Framework Server:

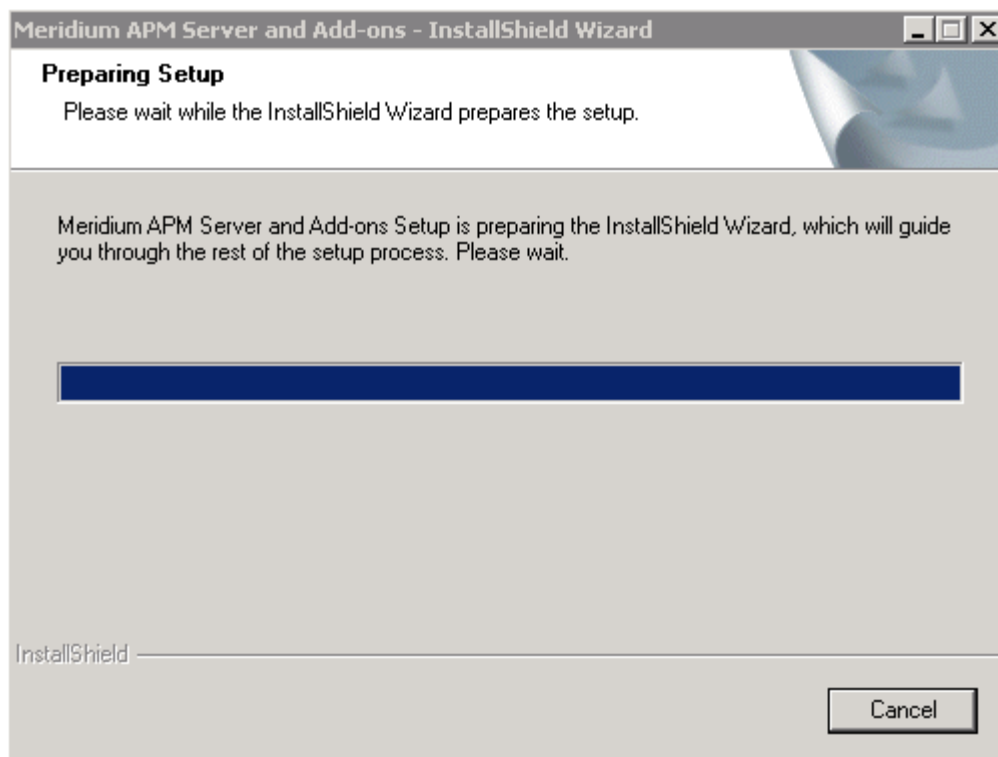
1. On the Meridium APM Web Framework Server, insert the Meridium APM distribution DVD, and navigate to the folder **General Release\Meridium APM Framework and Server Setup\Setup\Meridium APM Server and Add-ons**.

2. Double-click the file **setup.exe**.

A message appears, asking if you want to allow setup.exe to make changes to your machine.

3. Click the **Yes** button.

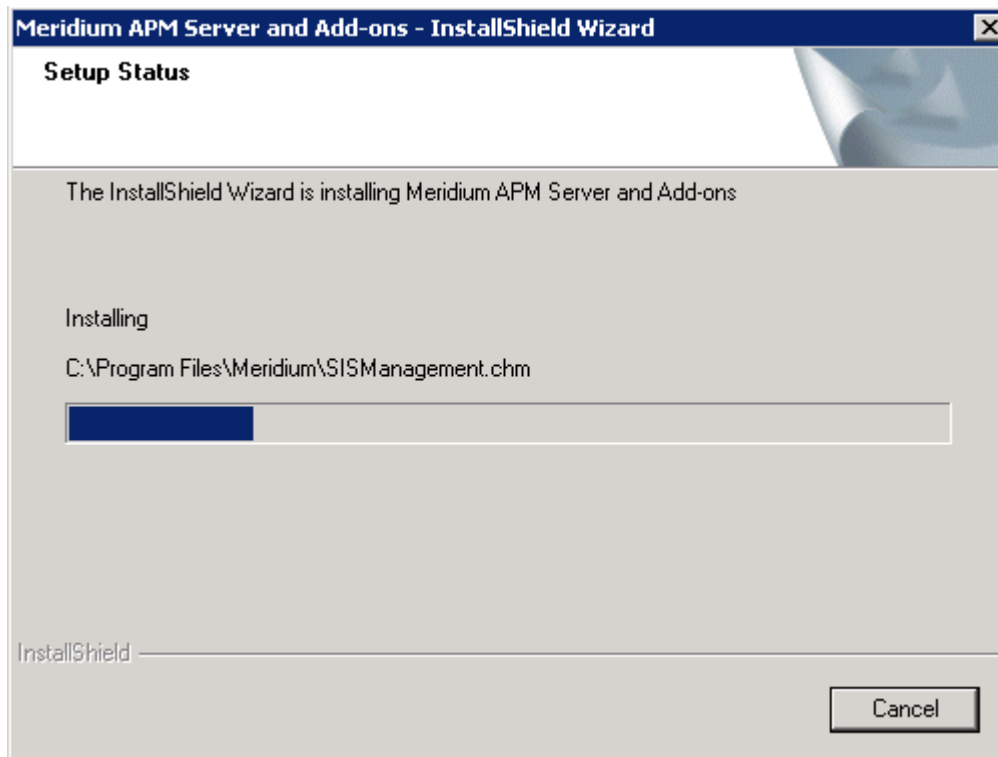
The **Meridium APM Server and Add-ons** installer appears, displaying the **Preparing Setup** screen, which contains a progress bar.



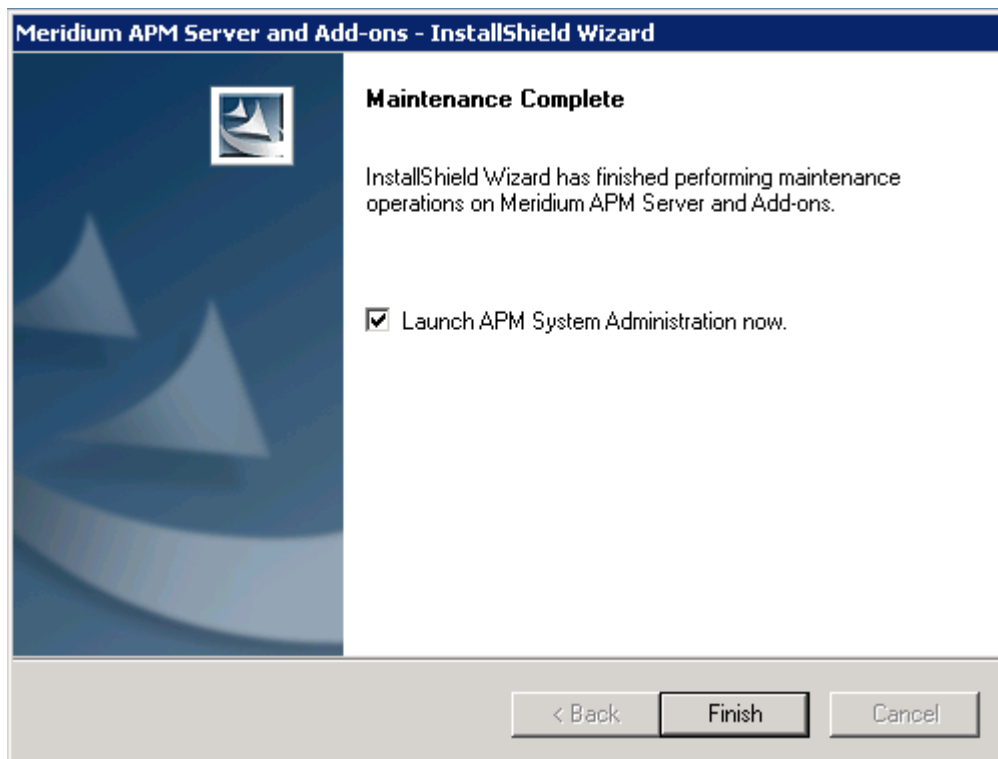
After the progress bar reaches the end, a message appears, asking if you want to upgrade your server.

4. Click the **Yes** button.

The **Setup Status** screen appears, displaying a progress bar that indicates the status of the upgrade process.



After the progress bar reaches the end, the Maintenance Complete screen appears.



This screen contains a message, indicating that the software has been installed successfully. You can also select to optionally launch the APM System Administration tool when the installer window closes. By default, this option is set to Yes.

5. If you want the APM System Administration tool to be launched as soon as you click the **Finish** button, accept the default selection and move on to the next step.

-or-

If you do not want the APM System Administration tool to be launched at this time, clear the **Launch APM System Administration now** check box.

6. Click the **Finish** button.

The **Meridium APM Server and Add-ons** installer closes. Additionally, if you selected the **Launch APM System Administration now** check box, the **APM System Administration** window appears. At this point, you should refer back to the checklist.

Upgrading the Meridium APM Web Framework Server from V3.4.5 to V3.6.0.0.0

The following instructions provide details on upgrading the Meridium APM Web Framework software on the Meridium APM Web Framework Server. These instructions assume:

- You understand that when you perform an upgrade on the Meridium APM Web Framework Server, the old version of Meridium APM will be uninstalled automatically before the new version is installed.
- That you want to optionally install the Configuration Manager application for the purposes of uploading custom translations to the supporting instance of the Application Server installed on the Meridium APM Web Framework machine.

Note: IIS will be reset automatically by the installer before the old version of Meridium APM is uninstalled and before the installation process begins.

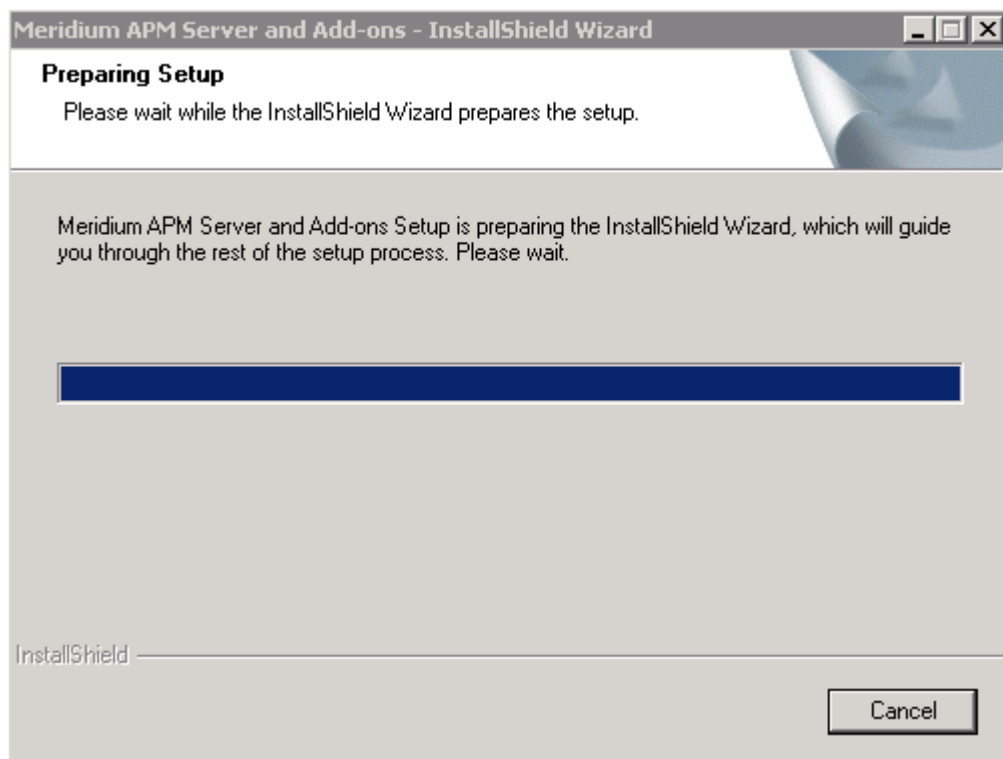
To upgrade the Meridium APM Web Framework Server:

1. On the Meridium APM Web Framework Server machine, insert the Meridium APM distribution DVD, and navigate to the folder **General Release\Meridium APM Framework and Server Setup\Setup\Meridium APM Server and Add-ons**.
2. Double-click the file **Setup.exe**.

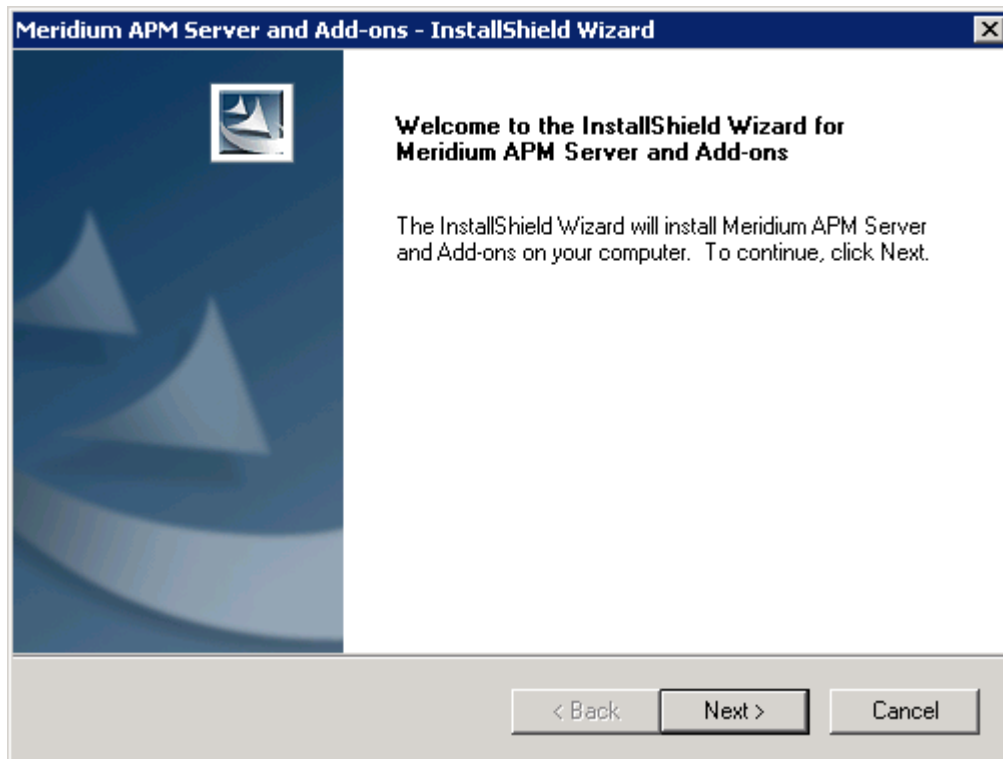
A message appears, asking if you want to allow the installer to make changes to your machine.

3. Click the **Yes** button.

The **Meridium APM Server and Add-ons** installer appears, displaying the **Preparing Setup** screen, which contains a progress bar.



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

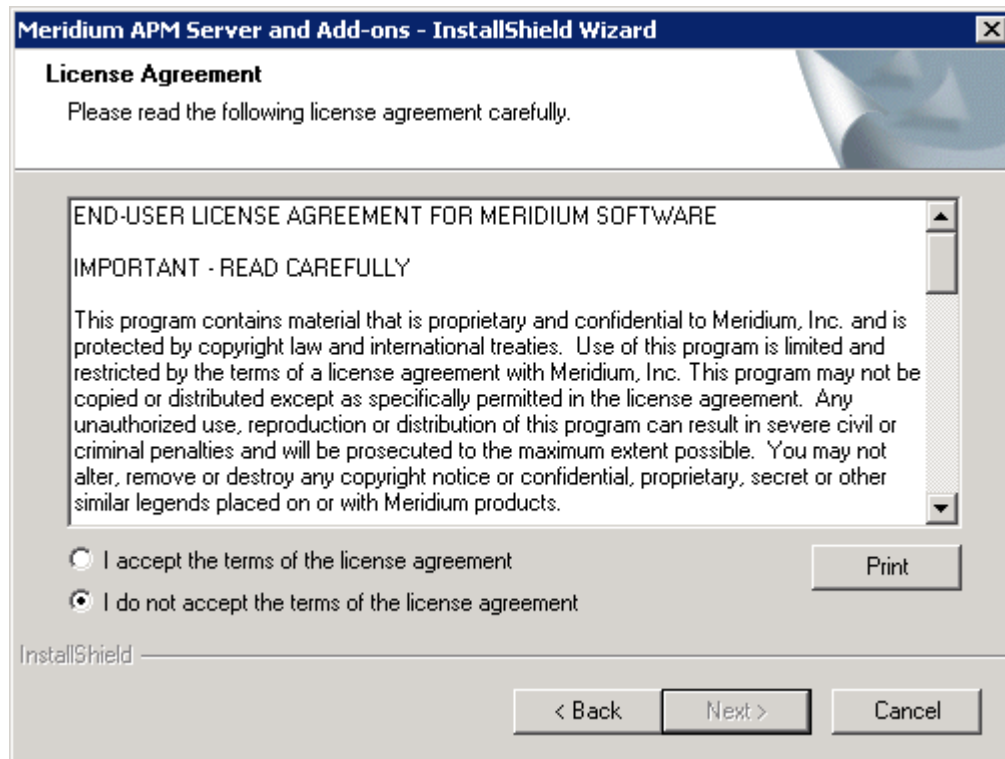


4. Click the **Next** button.

A message appears indicating that an older version of Meridium APM has been detected on the machine. This message also indicates that the older version will be uninstalled automatically before the newer version is installed and asks if you want to continue.

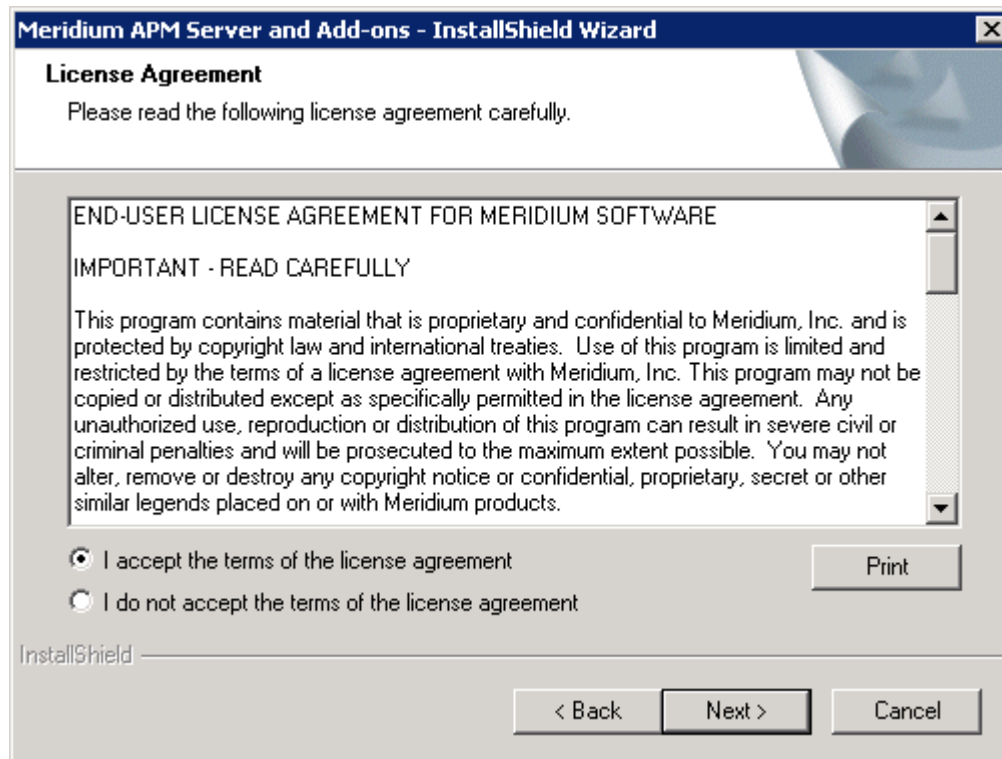
5. Click the **Yes** button.

The **License Agreement** screen appears.



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

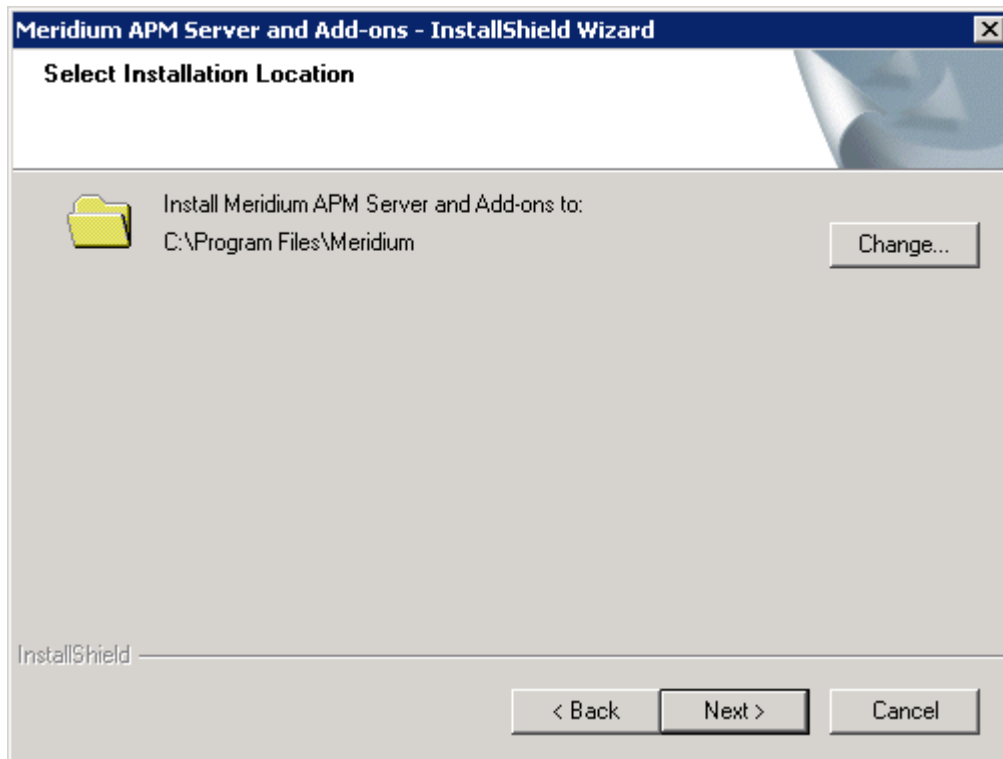
The Next button becomes enabled.



Hint: If you want to print the license agreement, click the **Print** button.

7. Click the **Next** button.

The **Select Installation Location** screen appears, prompting you to select the location where the new version of the Meridium APM Server and Add-ons will be installed after the older version is uninstalled. By default, the Meridium APM Server and Add-ons software will be saved to the following folder: C:\Program Files\Meridium.

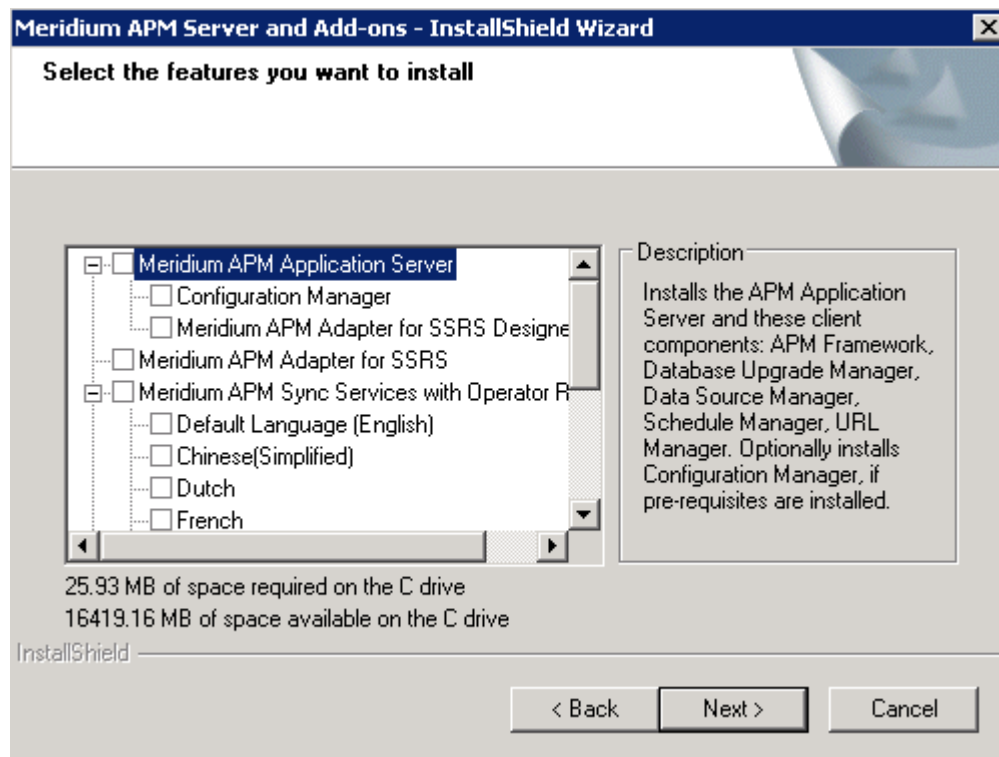


8. If you are satisfied with the default location where the software will be installed, click the **Next** button.

-or-

If you want to change the location where the software will be installed, click the **Change** button, and navigate to the location where you want to install the software. The folder path that you select will be displayed in place of the default folder path. When you are satisfied with the installation location, click the **Next** button.

The **Select the features you want to install** screen appears, and the **Meridium APM Application Server** node is highlighted automatically in the tree.



IMPORTANT: The **Select the features you want to install** screen lets you specify which features you want to install on the Meridium APM Web Framework Server machine after the older version is uninstalled. *These instructions* assume that you want to deploy only the Meridium APM Web Framework software, a supporting instance of the Application Server, and the Configuration Manager (for the purposes of uploading custom translations to the supporting instance of the Application Server). When the Meridium APM Web Framework software is installed, the Meridium APM System Administration Tool is installed automatically. When the Meridium APM Application Server software is installed, the following APM Framework applications are also installed automatically: APM Framework, Database Upgrade Manager, Data Source Manager, Schedule Manager, and URL Manager. Corresponding options for these applications are not listed in the tree because these components must be installed with the Meridium APM Application Server software.

9. In the tree, select the Meridium APM Application Server check box.

The subnodes are selected automatically.



10. If you want to install the Meridium APM Configuration Manager application, accept the default selection.

-or-

If you do not want to install the Meridium APM Configuration Manager application, clear the **Configuration Manager** check box. Keep in mind that you can run this installer again and install the Configuration Manager at a later time.

Note: The Configuration Manager application can be installed only if the necessary prerequisites are already installed. These instructions assume that you are ready to install the Configuration Manager application.

11. Clear the **Meridium APM Adapter for SSRS Designer** check box. Keep in mind that you can run this installer again and install the Meridium APM Adapter for SSRS at a later time.
12. Scroll down in the list of features, and select the **Meridium APM Web Framework** check box.

IMPORTANT: While additional options are available for selection in the tree on the **Select the features you want to install** screen, these options are not meant to be installed on the Meridium APM Web Framework Server machine, and these instructions are limited to upgrading the Meridium APM Web Framework and Meridium APM Application Server and Add-ons software with APM Framework applications and the desired languages. This installer can be used to upgrade the additional components *on other machines*.

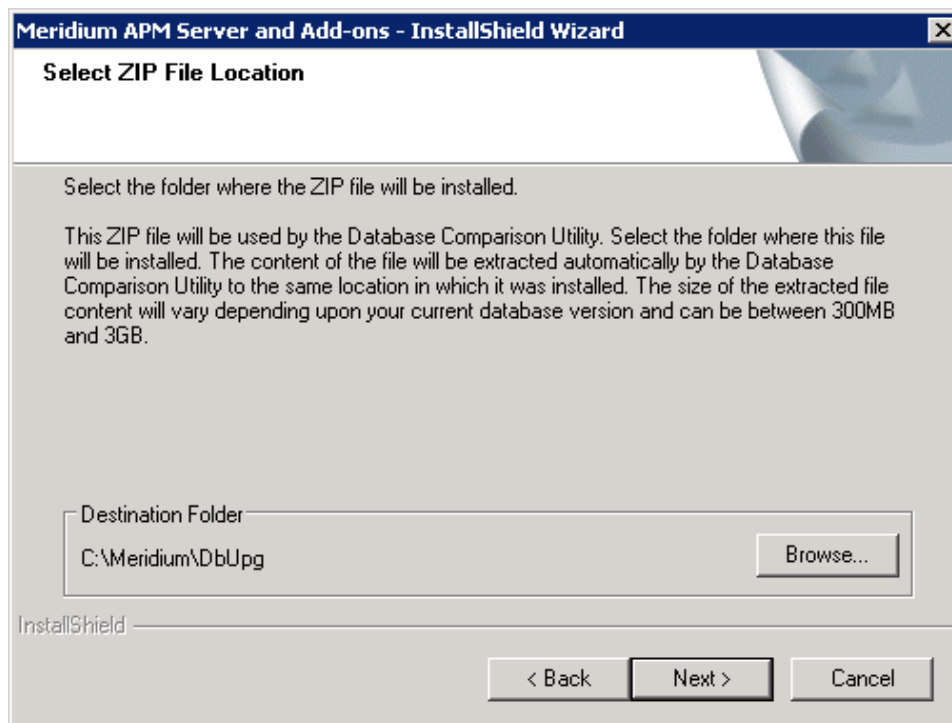
13. Click the **Next** button.

A message appears, indicating that the installer is checking your machine for the required prerequisites for the features that you want to install after the older version is uninstalled.

- If one or more prerequisites are missing on the machine, the **Meridium Installer** screen will appear and display a message that indicates which prerequisites still need to be installed on the machine before you can install the feature that is dependent on that prerequisite. This message also indicates what you can do to continue.

If you see this screen, you should read the message in detail, and either click the **Back** button to clear the selection whose prerequisites are missing, and then continue through the installation without installing that component, or close the installer, install the missing prerequisite, and then run the installer again later.

- If all the prerequisites for the selected components are installed on the machine, or you have selected components that do not require any prerequisites, the **Select ZIP File Location** screen appears.



The **Select ZIP File Location** screen lets you specify the location where you want the ZIP file of database content to be installed. This ZIP file is used by the Database Comparison Utility. By default, the ZIP file will be installed in the folder

C:\Meridium\DbUpg. You can, however, select a different location.

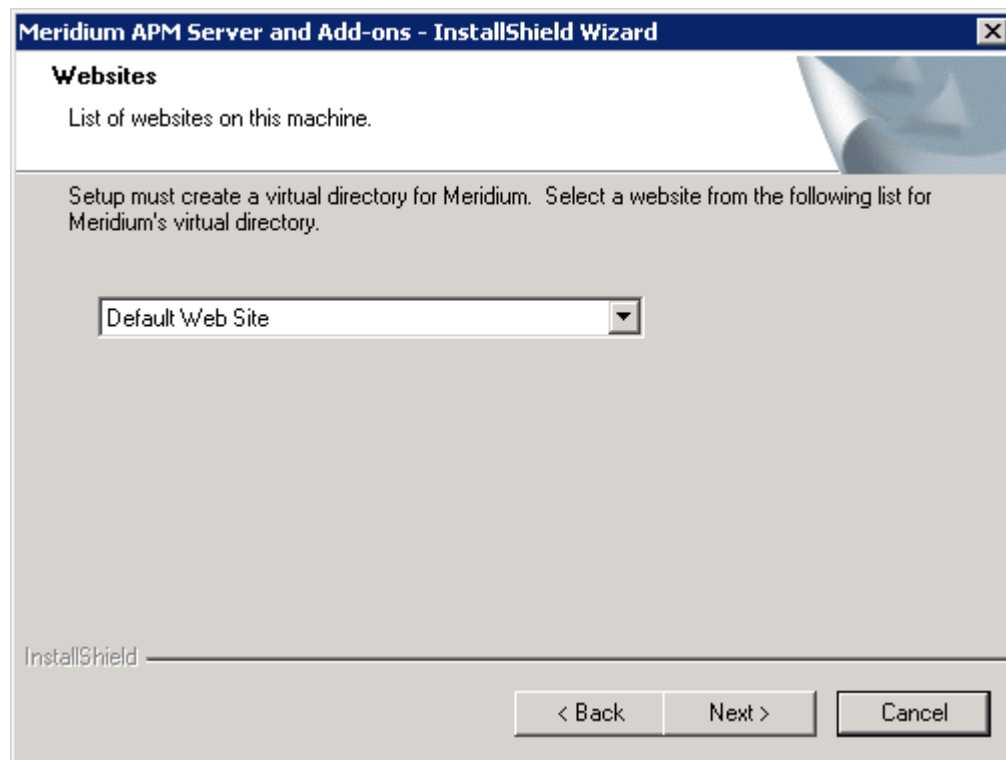
14. Read the information on this screen and note the estimated size of the extracted files from this ZIP file. You should use this information to determine where you want install the ZIP file.
15. If you want the ZIP file to be installed in the default location, accept the default setting.

-or-

If you want the ZIP file to be installed in a different location, click the **Browse** button, and navigate to the location where you want to ZIP file to be installed. The selected file path will appear in the **Destination Folder** section in place of the default file path.

16. Click the **Next** button.

The **Websites** screen appears.

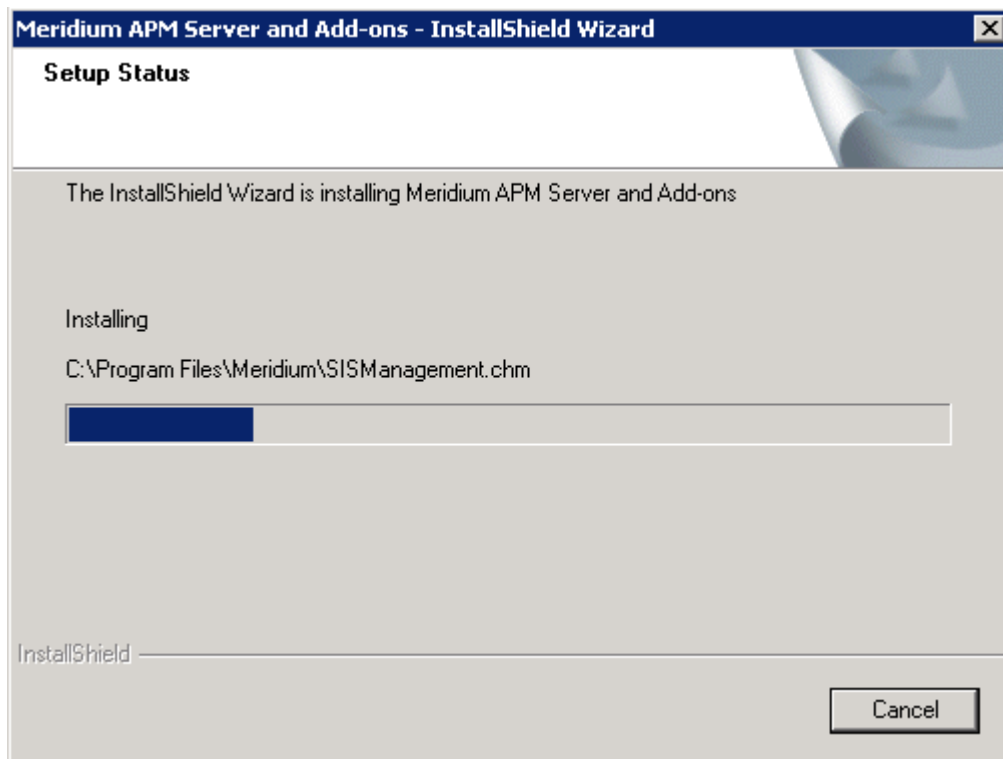


The **Websites** screen lets you specify where the installer will create a virtual directory for Meridium APM. This website is configured in the IIS Manager on the APM Application Server machine. The websites list contains all the websites that are configured on the APM Application Server machine. The default website is *Default Web Site*. Throughout this documentation, we assume that you have chosen to install Meridium APM under the *Default Web Site*.

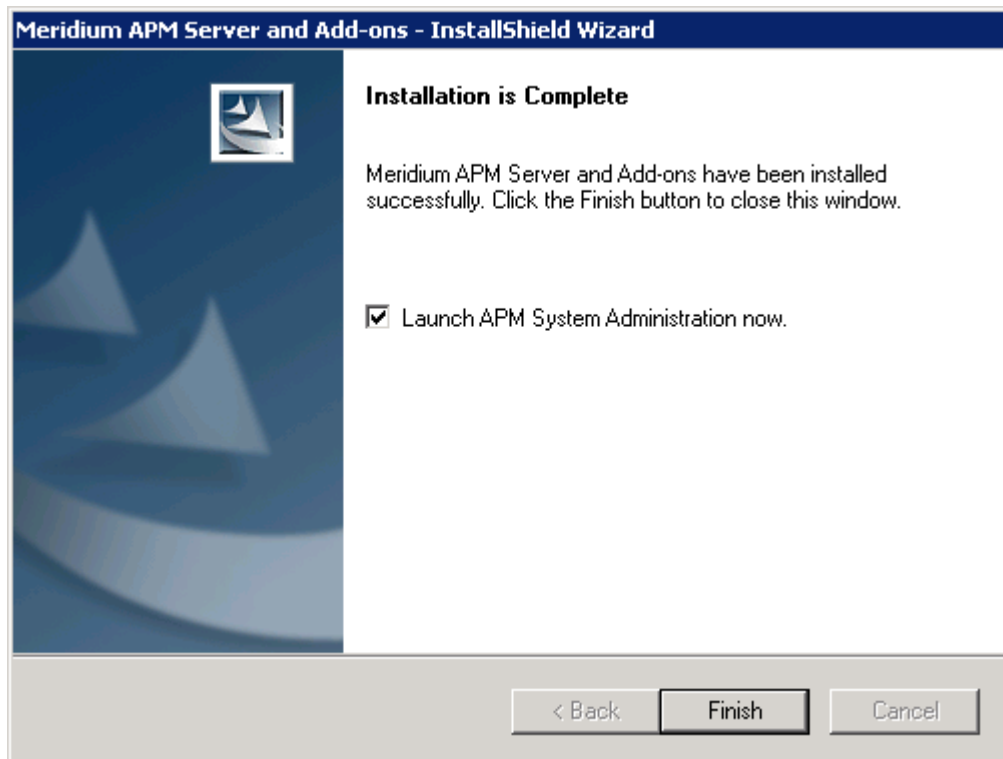
17. In the list of websites, select the website where you want the installer to create a virtual directory.

18. Click the **Next** button.

A message appears indicating that the older version of Meridium APM is being removed. After the older version of Meridium APM is removed, the **Setup Status** screen appears and contains a progress bar that shows the progress of the Meridium APM Server and Add-ons installation process.



After the progress bar reaches the end, a message appears, indicating that your server is being configured. After your server is configured, the **Installation is Complete** screen appears.



This screen contains a message, indicating that Meridium APM Server and Add-ons has been installed successfully. You can also select to optionally launch the APM System Administration tool when the installer window closes. By default, this option is set to Yes.

19. If you want the APM System Administration tool to be launched as soon as you click the **Finish** button, accept the default selection and move on to the next step.

-or-

If you do not want the APM System Administration tool to be launched at this time, clear the **Launch APM System Administration now** check box.

20. Click the **Finish** button.

The Meridium APM Server and Add-ons installer closes. Additionally, if the **Launch APM System Administration now** check box was selected, the **APM System Administration** window appears. At this point, you should refer back to the checklist.

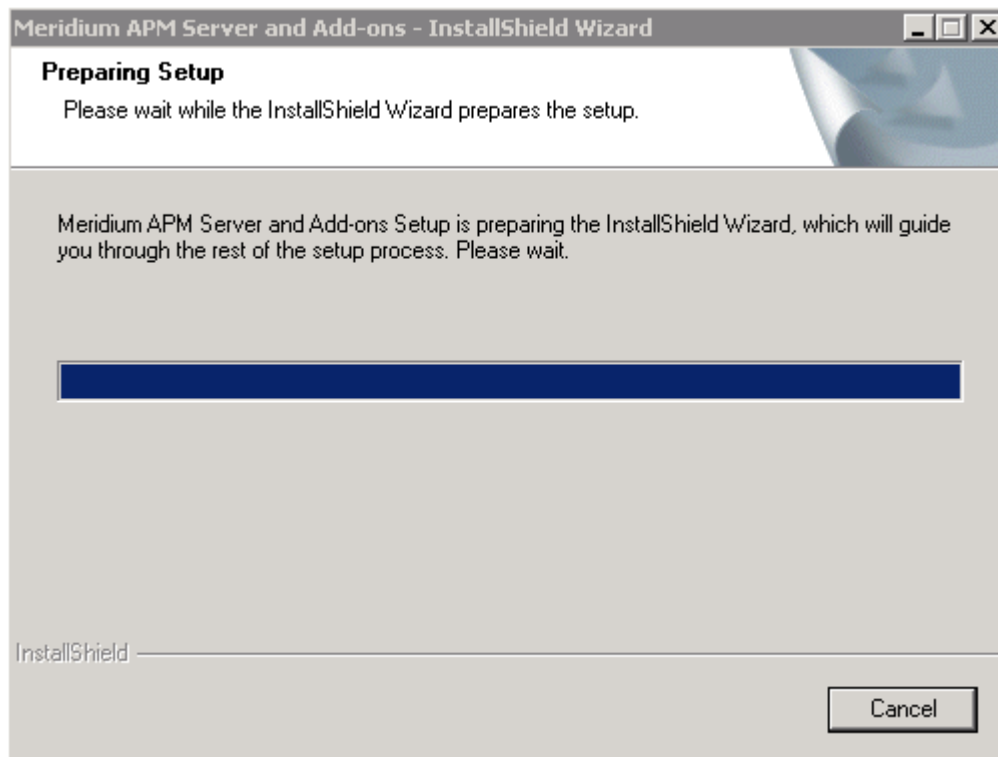
Installing the Configuration Manager Application on the Meridium APM Web Framework Server

The following instructions provide details on installing the Configuration Manager application on the Meridium APM Web Framework Server after the Meridium APM Web Framework has already been upgraded to the latest version. These instructions assume that you want to install the Configuration Manager application on the Meridium APM Web Framework Server for the purposes of uploading custom translations to the supporting instance of the Application Server on that machine.

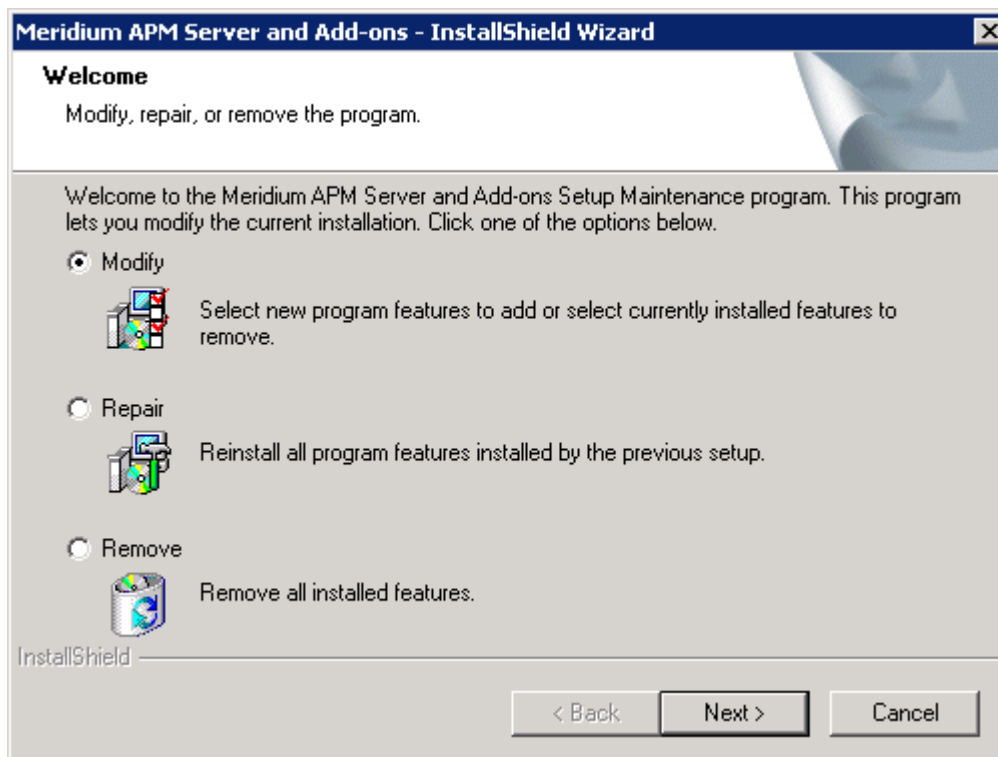
To install the Configuration Manager application on the Meridium APM Web Framework Server:

1. On the Meridium APM Web Framework Server machine, where you want to install the Configuration Manager application, access the Programs and Features window from the Control Panel.
2. In the grid, select the **Meridium APM Server and Add-on** item, and then click the **Change** button.

The **Meridium APM Server and Add-ons** installer appears, displaying the **Preparing Setup** screen, which contains a progress bar.



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

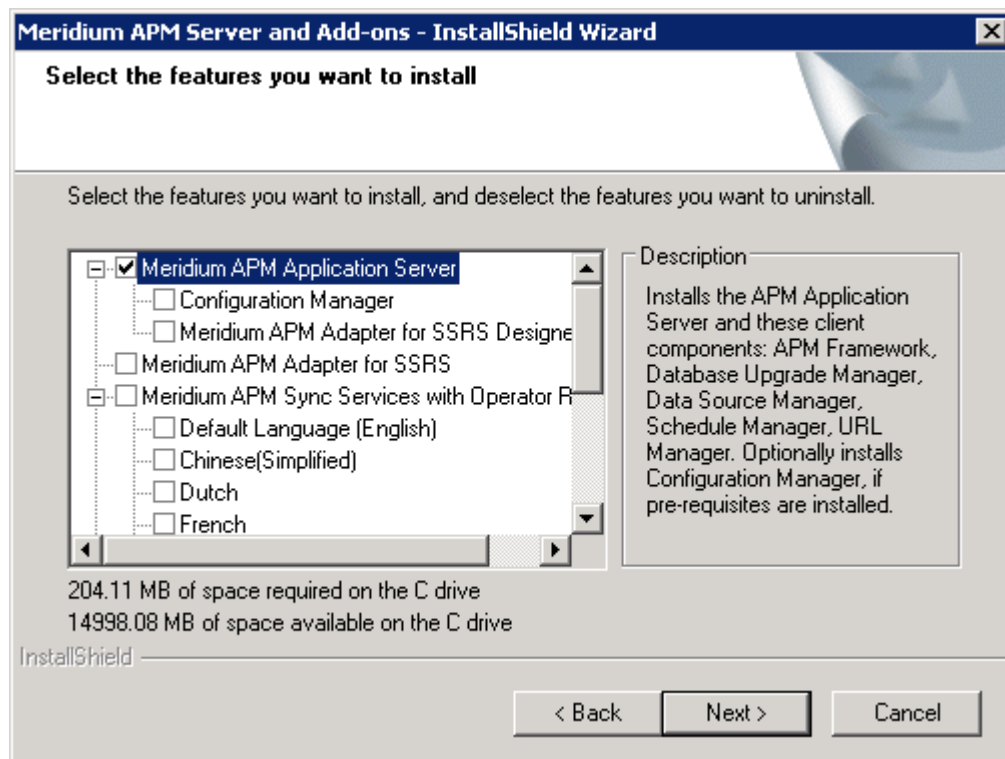


The Welcome screen contains the following options:

- **Modify:** Runs the installer in modify mode, which allows you to install additional components on the machine or uninstall specific components. This option is selected by default. These instructions assume that you want to run the installer in modify mode.
- **Repair:** Runs the installer in repair mode, which allows you to update the components that are installed on the machine.
- **Remove:** Uninstalls *all* the Meridium APM components that are installed on the machine.

2. Accept the default selection, **Modify**, and then click the **Next** button.

The **Select the features you want to install** screen appears, and the Meridium APM Application Server node is highlighted automatically in the tree.



The components that are currently installed on the machine are selected in the tree. If you want to *remove* one or more of these components, you can clear the check box. These instructions, however, assume that you want *install* the Configuration Manager application.

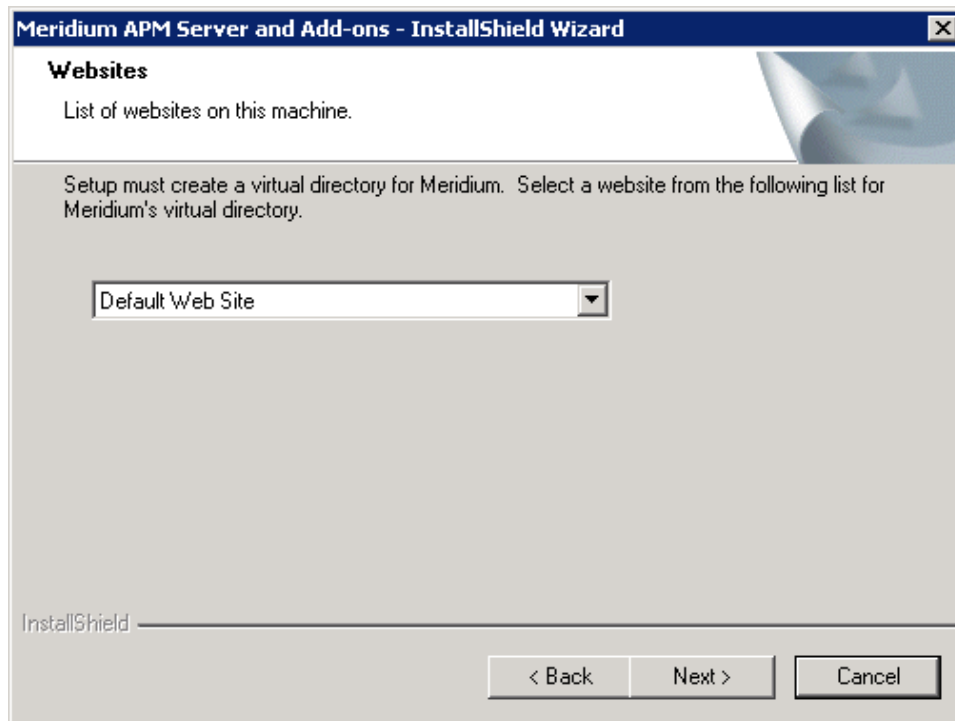
3. Select the **Configuration Manager** check box.
4. Click the **Next** button.

A message appears, indicating that the installer is checking your machine for the required prerequisites for the features that you want to install.

- If one or more prerequisites are missing on the machine, the **Meridium Installer** screen will appear and display a message that indicates which prerequisites still need to be installed on the machine before you can install the feature that is dependent on that prerequisite. This message also indicates what you can do to continue.

If you see this screen, you should read the message in detail, and either click the **Back** button to clear the selection whose prerequisites are missing, and then continue through the installation without installing that component, or close the installer, install the missing prerequisite, and then run the installer again later.

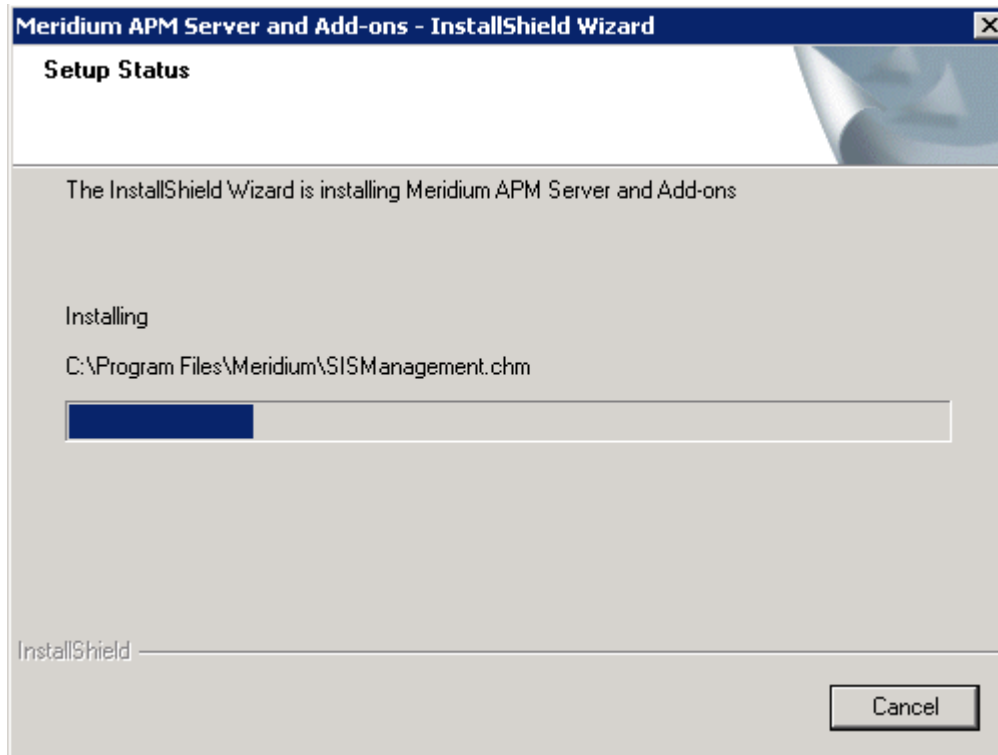
- If all the prerequisites for the selected components are installed on the machine, or you have selected components that do not require any prerequisites, the **Websites** screen appears.



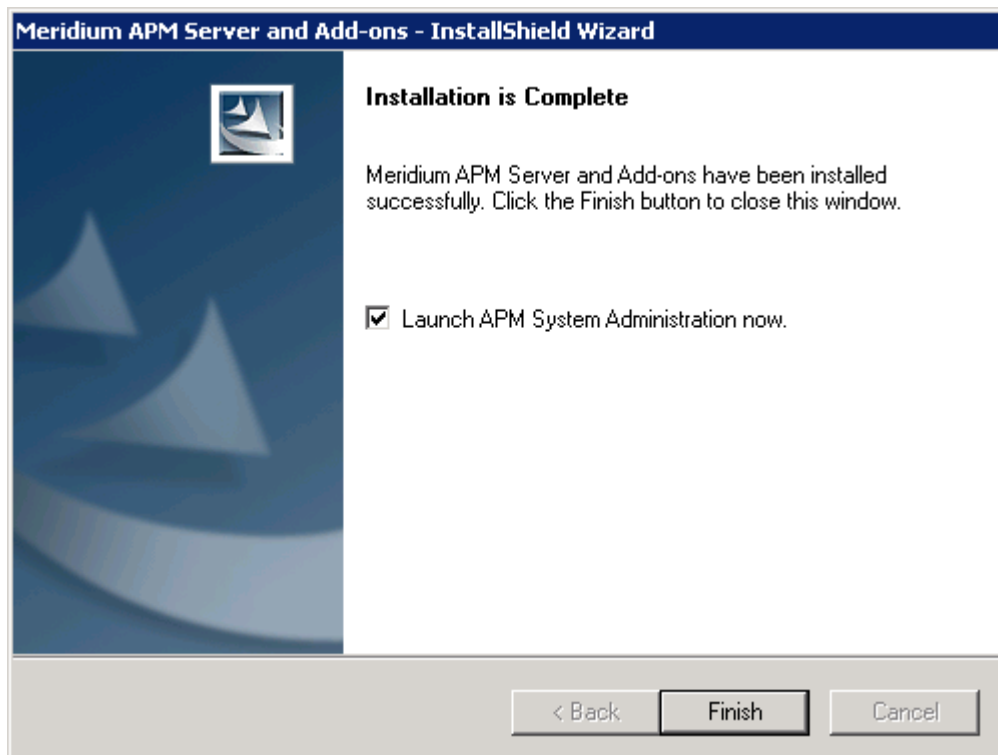
The **Websites** screen lets you specify where the installer will create a virtual directory for Meridium APM. This website is configured in the IIS Manager on the APM Application Server machine. The websites list contains all the websites that are configured on the APM Application Server machine. The default website is *Default Web Site*. Throughout this documentation, we assume that you have chosen to install Meridium APM under the *Default Web Site*.

5. In the list of websites, select the website where you want the installer to create a virtual directory.
6. Click the **Next** button.

The **Setup Status** screen appears, which displays a progress bar that shows the progress of the Meridium APM Server and Add-ons installation process.



After the progress bar reaches the end, a message appears, indicating that your server is being configured. After your server is configured, the **Installation is Complete** screen appears.



This screen contains a message, indicating that the software has been installed successfully. You can also select to optionally launch the APM System Administration tool when the installer window closes. By default, this option is set to **Yes**.

7. If you want the APM System Administration tool to be launched as soon as you click the **Finish** button, accept the default selection and move on to the next step.

-or-

If you do not want the APM System Administration tool to be launched at this time, clear the **Launch APM System Administration now** check box.

8. Click the **Finish** button.

The Meridium APM Server and Add-ons installer closes. Additionally, if the **Launch APM System Administration now** check box was selected, the **APM System Administration** window appears. At this point, you should refer back to the checklist.

Specifying Settings in the File `web.config`

The following instructions provide details on using the APM System Administration tool to modify the file `web.config` and configure various settings that are used by the Meridium APM Web Framework. These instructions assume that you have accessed the APM System Administration tool on the Meridium APM Web Framework Server for a new installation of the Meridium APM Web Framework.

To specify settings in the file `web.config` file using the APM System Administration tool:

1. On the **APM System Administration** window, in the **Configuration** section, click the **APM Web Framework `web.config`** link.

The contents of the file `web.config` appear to the right in the **Web.config Changes** section.

File Location: C:\Program Files\Meridium\WebComponents\Web.config

Web.config Changes

Application Server:

Default Data Source:

Guest User Name:

Guest Password:

Redirect Browsers To UNC Files:

User Name

Password

By default, the **Redirect Browsers to UNC Files** text box contains the value *true*.

2. In the **Application Server** text box, type the name of the Meridium APM Application Server to which the Meridium APM Web Framework Server will connect (even if that Application Server is installed on the Meridium APM Web Framework Server).
3. In the **Redirect Browsers to UNC Files** text box, if you want the web browser to be redirected to the UNC path when a user accesses a Reference Document that is stored on a non-HTTP-based file share, accept the default value, *true*. Otherwise, replace the value *true* with *false*.
4. In the **User Name** and **Password** text boxes, type the user name and password for the Windows user account that will be used for accessing reports on the SQL Server Report Server.

Note: You will need to specify a user name and password if your SQL Server Report Server is on a machine that is separate from the Meridium APM Web Framework Server, as defined by the recommended Meridium APM deployment scenario. The user that you specify here must be granted the necessary permissions on the Report Server.

5. If you want to use automatic login:

- a. In the **Default Data Source** text box, type the name of the data source that will be logged into automatically.
- b. In the **Guest User Name** text box, type the name of the Meridium APM user that should be used for automatic login. This is the user name that will be used when users log in automatically.
- c. In the **Guest Password** text box, type the password that corresponds to the Security User who is specified in the **Guest User Name** text box. This is the password that will be used in conjunction with the guest user name when users log in automatically.
- d. At the bottom of the **APM System Administration** window, click the **Open File** link.

The `web.config` file appears.

1.
 - e. In the file, locate the following text: `<!--<authentication mode="Windows" />-->`
 - f. Uncomment the authentication mode tag by deleting `<!--` and the corresponding `-->` from the beginning and end of the string.

After you are finished, the code will look like this:

```
<authentication mode= "Windows"/>
```

1.
 - g. In the file, locate the following text: `<authentication mode="Forms">`

- h. Comment out the authentication mode tag by inserting a `<!--` and a the corresponding `-->` at the beginning and end of the *authentication* string.

After you are finished, the code will look like this:

```
<!--<authentication mode = "Forms">  
  
<forms name="MeridiumWeb" loginUrl="Login.aspx"  
timeout="20">  
  
</forms>  
  
</authentication-->
```

- i. Save the file, and close it.
6. At the bottom of the **APM System Administration** window, click the **Save** button.

Your changes are saved to the file `web.config`.

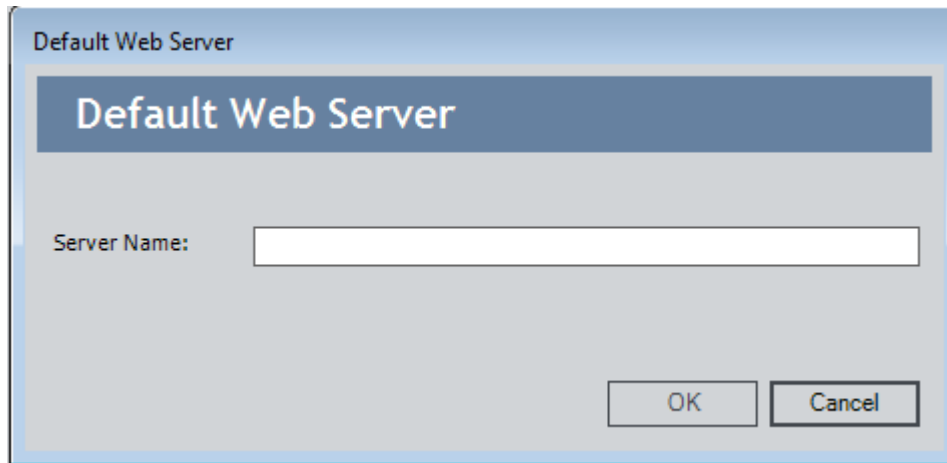
Defining the Meridium APM Web Framework Server

The Meridium APM Web Framework Server is the machine on which the Meridium APM Web Framework is installed. When Meridium APM Framework users create Conditional Alerts records to send query results to users via an email message, they can choose to include a link that will open the query results in the Meridium APM Web Framework. This link will include the Meridium APM Web Framework Server that you will need to identify via the Configuration Manager application. The following instructions provide details on defining the Meridium APM Web Framework Server for this purpose.

To define the Meridium APM Web Framework Server:

1. On the Configuration Manager main menu, click **Tools**, point to **Global Preferences**, and then click **Default Web Server**.

The **Default Web Server** dialog box appears.



2. In the **Server Name** text box, type the name of the Meridium APM Web Framework Server.
3. Click **OK**.

The setting is saved.

Configuring Home Pages for Meridium APM Framework Users

About Configuring Home Pages for the Meridium APM Web Framework

Meridium APM Web Framework Home Pages are similar to the Home Pages that can be accessed via the Meridium APM Framework application. Like Meridium APM Framework Home Pages, Meridium APM Web Framework Home Pages can be configured to provide users with quick access to favorite or frequently used features and documents or to provide access to external websites. The way in which you configure them, however, is different.

Home pages for the Meridium APM Web Framework can be configured for Security Groups via the Configuration Manager application. When a user logs in to the Meridium APM Web Framework, the **Home Page** will be the first page that is displayed. At the top of the **Home Page**, the **Home Page** list will display the Security Groups in which the user is a member and for which a Home Page has been configured. From the **Home Page** list, users can select a different Home Page to view other than the one that is currently displayed.

Note: Meridium APM Web Framework Home Pages can be configured for *Security Groups* only. They cannot be configured for individual *Security Users*.

Meridium APM Web Framework Home Pages can be configured using the following formats:

- URL
- HTML

Configuring Meridium APM Web Framework Home Pages to Display a Website

The Meridium APM Web Framework Home Page can be configured to display any website. When a Home Page is configured in this way, the target website will be displayed within the display area of the Home Page in the Meridium APM Web Framework.

The following image shows how the Meridium APM Web Framework Home Page would look if it were configured for the Everyone Security Group to display the Meridium, Inc. website.



Note: After you configure a Meridium APM Web Framework Home Page to display a website, we recommend that you test the website in the Meridium APM Web Framework. Not all website domain settings will allow their website to be displayed within the Meridium APM Web Framework.

To configure a Home Page based to display a website:

1. In the Configuration Manager, on the **Application Groups** window, double-click the existing Security Group for which you want to configure a Home Page.

The **Application Group** dialog box appears, displaying the information that is currently associated with the Security Group.

2. Click the **Edit Meridium APM Web Framework Home Page** link.

The **Meridium APM Web Framework Home Page** window appears.

3. From the **Home Page Type** options, select the **URL** option.

Note: Only one type of Home Page can be configured for each Security Group.

4. In the **Home Page Content** text box, type or paste the URL address of the website that you want displayed on the Meridium APM Web Framework Home Page.

5. Click **OK**.

The **Meridium APM Web Framework Home Page** window closes.

6. On the **Application Group** dialog box, click the **Save** button.

The settings that you specified are saved to the database.

7. Click the **Close** button to return the **Application Groups** window.

The Home Page and any other settings that you specified for the Security Group are saved to the database.

Configuring a Meridium APM Web Framework Home Page Based on HTML Code

A Meridium APM Web Framework Home Page can be configured to display a webpage that has been created using standard HTML code. We recommend that you use an HTML Editor to write the HTML code. After you have constructed the HTML code, you can paste the code in the **Home Page Content** text box on the **Meridium APM Web Framework Home Page** dialog box.

Note: Unlike links that appear elsewhere in the Meridium APM Web Framework, Home Page links that contain the Meridium APM scheme will not open in the Meridium APM Web Framework, even if the feature is supported. For example, if a URL behind a link on an **Associated Pages** menu is constructed using Meridium APM Framework URL syntax to open a record in the Meridium APM Framework application, when a user clicks that link in the Meridium APM Web Framework, the record will be opened in the Meridium APM Web Framework. If the URL behind a Home Page link is constructed using Meridium APM Framework URL syntax to open a record in the Meridium APM Framework application, when a user clicks that link, the record will be opened in the Meridium APM Framework application. If you want to configure a Home Page link to open a feature in the Meridium APM Web Framework, the URL must be constructed using the Meridium APM Web Framework syntax. For syntax help, see the URLs section of this Help system.

A Meridium APM Web Framework Home Page can be configured to use external files. For example, you might want to configure the **Home Page** to display images that are external to the **Home Page** itself. To use external files, the HTML code must contain references to the desired files, which then must be stored in the appropriate location. Where you store the external files is up to you. As long as the files are stored in a location that can be accessed by the web server and the path in the HTML code is correct, they should work properly in Home Pages.

If you want to store external files on the web server in the Meridium APM Web Framework directory, you can store them in the folder: `<root>\Apm\Registry`, where `<root>` is the location on the web server where the Meridium APM Web Framework is installed. The folder `<root>\Apm\Registry` is the root reference location for Home Page files. This means that if you store external files in this folder, you will be able to reference them within the home Page HTML code using the file name only.

Note: Keep in mind that because <root>\Apm\Registry is a folder that is created and managed by the Meridium APM Web Framework installer, it may be deleted whenever the Meridium APM Web Framework is installed. If you want to store external Home Page files in this folder, you will need to create a backup of this folder whenever you uninstall the Meridium APM Web Framework. Otherwise, you should store files in some other location.

To configure a Meridium APM Web Framework Home Page based on HTML code:

1. In the Configuration Manager, on the **Application Groups** window, double-click the existing Security Group for which you want to configure a Home Page.

The **Application Group** window appears, displaying the information that is currently associated with the Security Group.

2. Click the **Edit Meridium APM Web Framework Home Page** link.

The **Meridium APM Web Framework Home Page** window appears.

3. In the **Home Page Content** text box, type or paste the HTML code that defines the webpage that will be displayed on the **Home Page**.
4. Click the **OK** button.

The **Meridium APM Web Framework Home Page** window closes.

5. On the **Application Group** window, click the **Save** button.

The Meridium APM Web Framework Home Page and any other changes that you made to the Security Group are saved to the database.

Configuring Keyword Searches

About Configuring Keyword Searches for the Web Framework

In the Meridium APM Web Framework, users can perform a Keyword Search, which allows them to specify a keyword and search for it within records in the

Meridium APM database. The search results will contain records that contain the specified keyword. For example, if a user searches for the keyword *pump*, the search results will contain records that contain the value *pump*, *centrifugal pump*, *pump-101*, and so on.

In order for this feature to work, you must specify the fields that will be searchable by keyword. For example, assume that the Inspection family contains the following fields:

- Inspectors ID
- Reviewers ID
- Reason for Inspection
- Type of Inspection

If you want APM Web Framework users to be able to search for records with the word *Compliance* in the *Reason for Inspection* field, you would need to identify the *Reason for Inspection* field as a searchable field.

To be able to use a Keyword Search in the APM Web Framework, you will need to complete the following steps:

1. Add the desired field to the Keyword Search index.
2. Build the Keyword Search index.

Note: Only character and text fields can be added to the Keyword Search index.

About the Keyword Search Index

The *Keyword Search index* stores the following information about fields that have been configured as searchable:

- The Entity Key of the record to which the field belongs.
- The Family Key of the family to which the field belongs.
- The value that is stored in the field.

- The date that the value was last updated.

In the database, these values are stored in the table MI_TEXT_DATA in the following fields:

- ENTY_KEY
- FMLY_KEY
- TXDA_DATA_TX
- LAST_UPDT_DT

In the documentation, rather than referring to the specific database table, we refer to this feature as the *Keyword Search index*.

The Keyword Search index is created automatically when you install Meridium APM or upgrade from a previous version of Meridium APM. It is populated, however, each time you build the Keyword Search index. Each time you build the Keyword Search index, a separate entry is made from each record that contains a value in a field that has been added to the Keyword Search index.

For example, suppose you have added the Equipment ID field from the Equipment family. If one Equipment record exists with the Equipment ID *Equipment 1*, when you build the Keyword Search index, it will be populated with the following information:

- The Entity Key of the Equipment record.
- The Family Key of the Equipment family.
- The value *Equipment 1*.
- The date that the record was saved to the database.

After the Keyword Search index contains this information, APM Web Framework users can perform a Keyword Search, searching for the term *Equipment 1*, and find this Equipment record.

In some cases, a single family will contain multiple records. In this case, the Keyword Search index will contain multiple rows, where each row identifies one of those records. Each row will contain ALL values that exist in the indexed

fields for that family. For example, suppose you have added these fields to the Keyword Search index:

Equipment Family	Functional Location Family
Equipment ID	Functional Location
Manufacturer	Maintenance Plan

Now, suppose that your database contains two Equipment records with these field values:

Entity Key	Family Key	Equipment ID	Manufacturer
123456	246810	Equipment 1	Atlantic
654321	246810	Equipment 2	Pacific

Suppose your database also contains two Functional Location records with these field values:

Entity Key	Family Key	Functional Location	Maintenance Plan
456789	108642	Functional Location 1	Maintenance Plan A
987654	108642	Functional Location 2	Maintenance Plan B

In other words, your database contains four records that belong to a family with at least one indexed field: two Equipment records and two Functional Location records. Using this example, when you build the Keyword Search index, it will contain these four rows:

ENTY_KEY	FMLY_KEY	TXDA_DATA_TX	LAST_UPDT_DT
123456	246810	Equipment 1 Atlantic	2/19/2010
654321	246810	Equipment 2 Pacific	2/19/2010
456789	108642	Functional Location 1 Maintenance Plan A	2/19/2010
987654	108642	Functional Location 2 Maintenance Plan B	2/19/2010

In this table, you can see that a separate row exists for each unique *record*, and that row identifies the values that are stored in all indexed fields from that

family. For example, because *two* Equipment records exist in the database, *two* rows exist in the Keyword Search index, where:

- One row identifies the first Equipment record. This row stores the value in the *Equipment ID* field and in the *Manufacturer* field in this Equipment record.
- One row identifies the second Equipment record. This row stores the value in the *Equipment ID* field and in the *Manufacturer* field in this Equipment record.

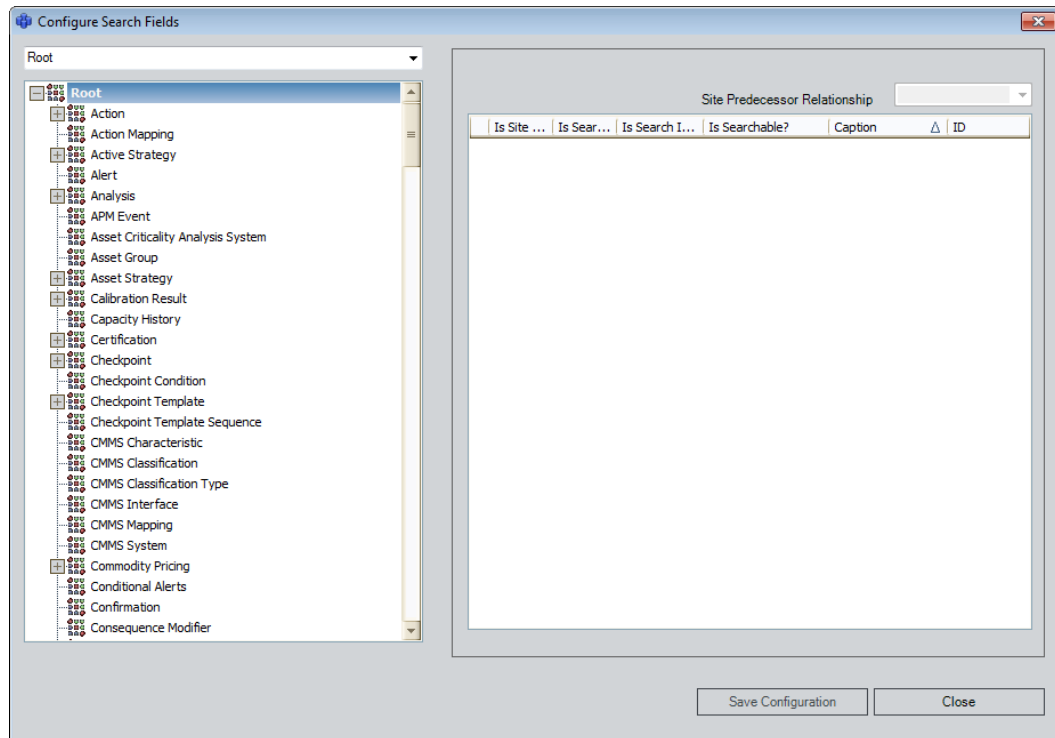
Adding Fields to the Keyword Search Index

Note: When you add a field to the Keyword Search index, in the table MI_FMLY_FIELDS, in the row representing that field, the value in the column FAFD_TEXT_SEARCH_FLD_FLG is set to Y. If you later update the value in that field, in the same table, in the row representing that field, the value in the column FAFD_TEXT_SEARCH_LAST_UPDT_DT is set to the date that the updated value was saved.

To add fields to the Keyword Search index:

1. On the Configuration Manager menu bar, click **Tools**, point to **Manage Full Text Search**, and then click **Configure Search Fields**.

The **Configure Search Fields** window appears.



On the left side of the window, a drop-down list appears above the family hierarchy. You can select a family from the list to find and expand it in the tree. Families appear in the drop-down list in alphabetical order. Below the drop-down list is a hierarchical view of all the entity families in the database. The Root family is at the highest level and serves as the parent of all families. Below the Root level, families may be organized into various sublevels.

- Using the drop-down list or the family hierarchy, select the family whose fields you want to add to the Keyword Search index. Both options work similar to how they work on the **Entity Family** pane of the Configuration Manager main window.

The selected family is highlighted in the hierarchy, and its character and text fields appear on the right side of the window.

- On the right side of the window, in the rows containing the fields that you want to add to the Keyword Search index, in the **Is Searchable** column, select the check box.
- Click the **Save Configuration** button.
- Click the **Close** button to close the **Configure Search Fields** window.

The fields are added to the Keyword Search index. At this point, you will need to build the Keyword Search index.

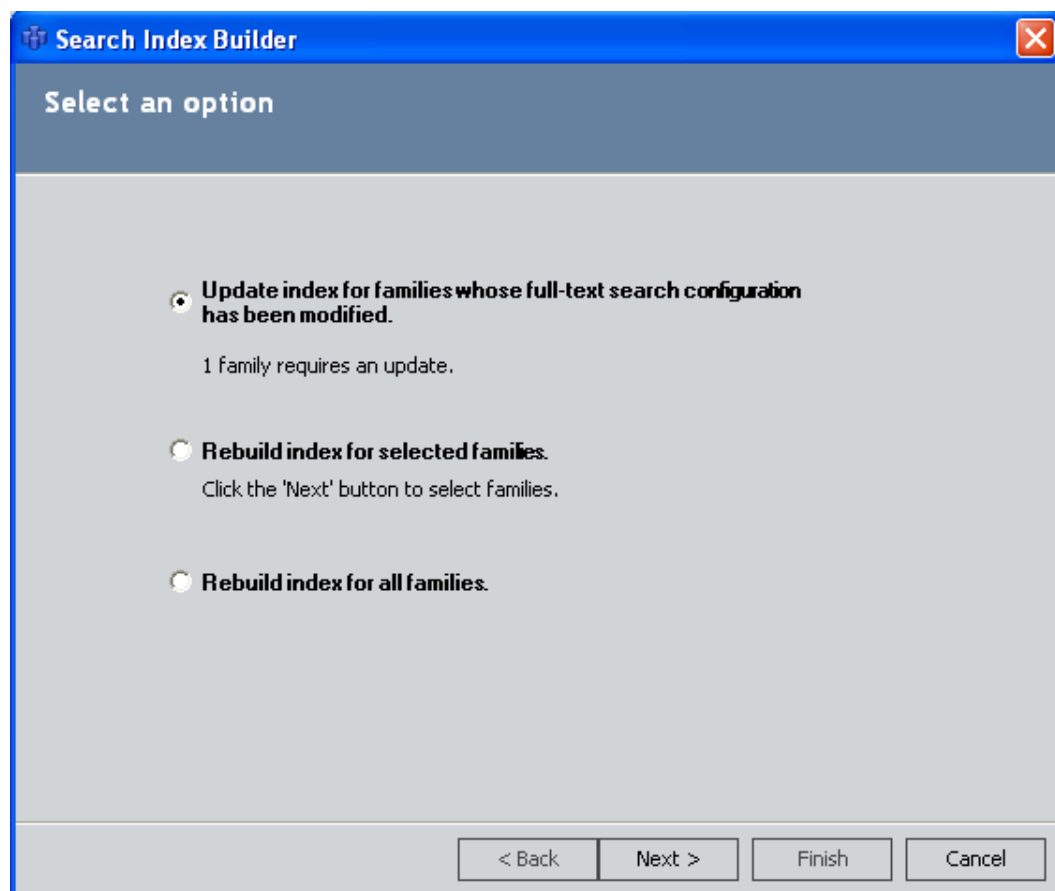
Building the Keyword Search Index

After you have configured the fields that you want to be searchable in the APM Web Framework by adding them to the Keyword Search index, you will need to build the Keyword Search index.

To build the Keyword Search index:

1. On the Configuration Manager menu bar, click **Tools**, point to **Manage Full Text Search**, and then click **Build Search Index**.

The **Search Index Builder** appears, displaying the **Select an option** screen.



2. Select one of the following options:

- **Update index for families whose full-text search configuration has been modified:** Builds the Keyword Search index automatically for the families whose fields you have added to the Keyword Search index since it was last built. This option is disabled if no fields have been added to the Keyword Search index since it was last built.
 - **Rebuild index for selected families:** Lets you build the Keyword Search index for the families that you select in the **Search Index Builder**.
 - **Rebuild index for all families:** Builds the Keyword Search index for all families, including those whose fields you have added to the Keyword Search index since it was last built and those whose fields you have not added since it was last built.
3. If you selected one of the first two options on the **Select an option** screen, click the **Next** button.

-or-

If you selected the last option on the **Select an option** screen, click the **Finish** button.

One of the following screens appears, depending on what you selected on the **Select an option** screen:

- If you selected **Update index for families whose full-text search configuration has been modified**, the **Update Index Information** screen appears, displaying a list of families whose fields have been added to the Keyword Search index since it was last built. In this case, proceed with step 4 of these instructions.
- If you selected **Rebuild index for selected families**, the **Select Families to Rebuild Index** screen appears, displaying the entity family hierarchy, where you can select the families for which you want to build the Keyword Search index. In this case, proceed with step 4 of these instructions.
- If you selected **Rebuild index for all families**, a Windows Command Prompt window appears. In this case, skip to step 5 of these instructions.

4. Complete one of the following steps, depending on the screen that you see:

- If you see the **Update Index Information** screen, click the **Finish** button.

-or-

- If you see the **Select Families to Index** screen, in the entity family hierarchy, select the check box next to the families for which you want to build the Keyword Search index, and click the **Finish** button.

The Windows Command Prompt window appears, displaying the progress of the indexing operation.

Note: If you accessed the Configuration Manager using a user name with a password that is not blank, the **Meridium APM Login** dialog box will appear in front of the Windows Command Prompt window. You will need to retype your password in order to proceed with the indexing operation.

5. On the Windows Command Prompt window, when you see the message *Press any key to terminate*, press any key, and then close the Command Prompt window.

The Keyword Search index is built for the selected families.

Configuring the Has Reference Documents Relationship

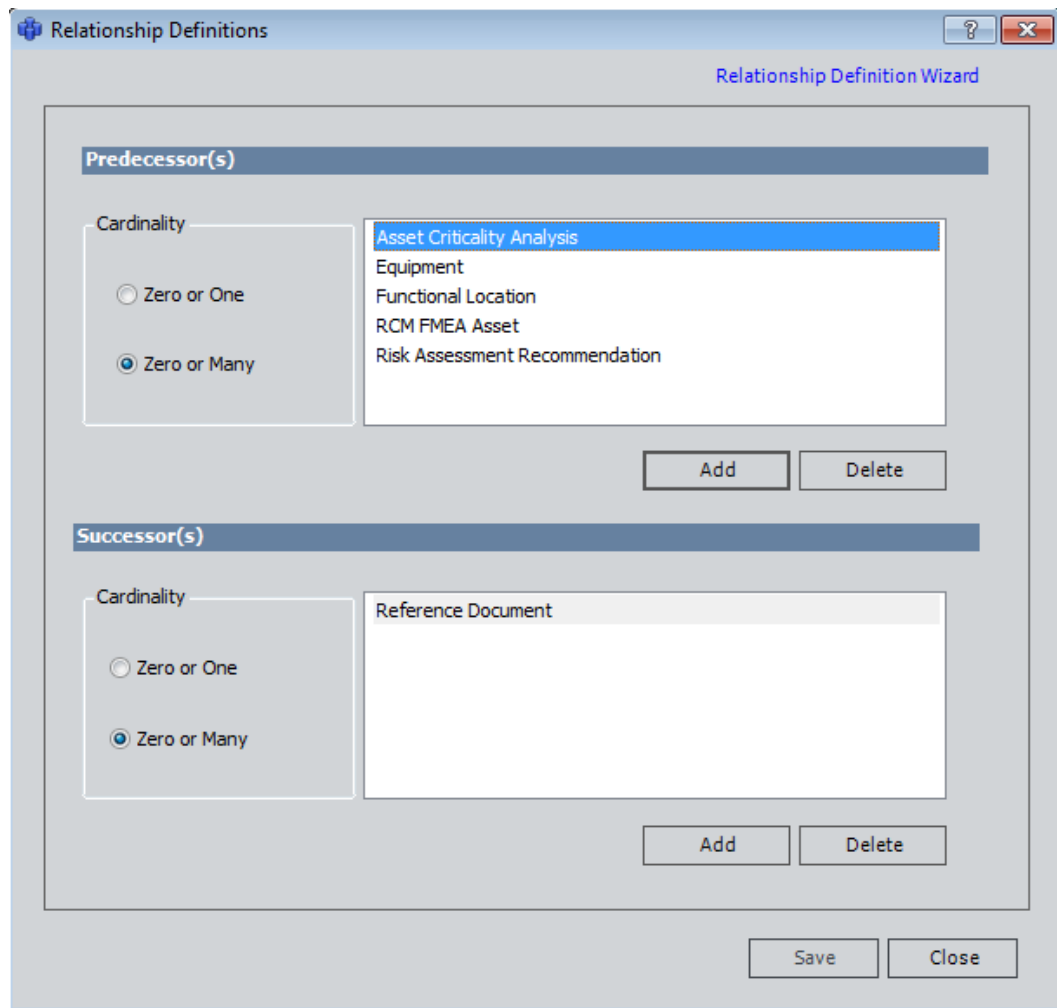
To enable reference document functionality for records in a given family, that family must be related to the Reference Document family through the Has Reference Documents relationship. After you create the appropriate relationship definition, via the Record Manager, users will be able to manage reference documents for any record in any family for which the relationship has been established.

Note: Various relationship definitions are provided for the Has Reference Documents relationship family in the baseline database. Reference document functionality will be available automatically for any predecessor family that already participates in one of these baseline relationship definitions. The following instructions, however, can be used to enable reference document functional for custom families and for baseline families for which the relationship definition is not already configured.

To set up the Has Reference Documents relationship definition:

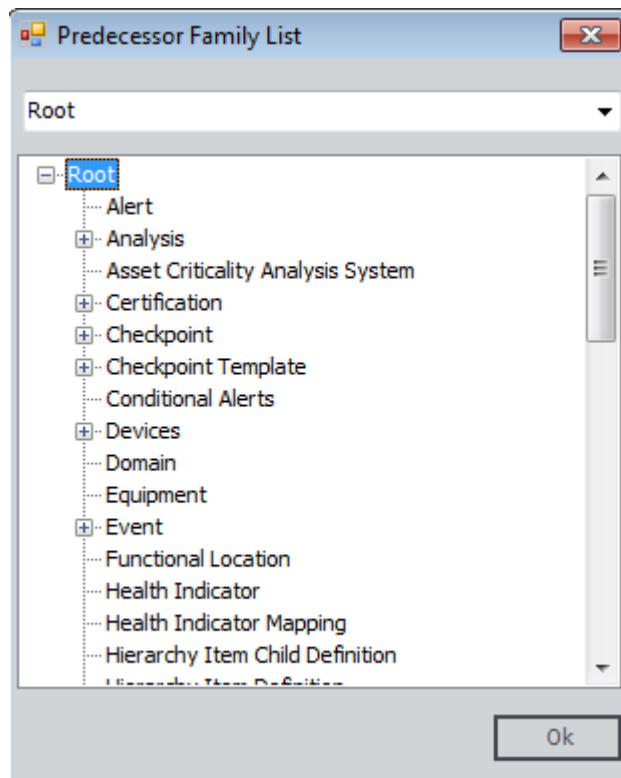
1. In the Configuration Manager, in the Entity Family/Relationship Family pane, click the Relationship Family tab.
2. Select the Has Reference Documents relationship family.
3. In the Tasks section, click the Manage Relationship Definitions link.

The Relationship Definitions window appears.



4. In the Predecessor(s) section, click the **Add** button.

The Predecessor Family List dialog box appears, displaying a list of all predecessor families.



5. Select a family from the list. This should be the family for which you want to enable reference documents functionality.
6. Click OK.
7. On the **Relationship Definitions** window, in the **Predecessors(s)** section, for the family you added, select **Zero or Many**.
8. In the **Successor(s)** section, click the **Add** button.

The **Successor Family List** dialog box appears, displaying a list of all successor families.

9. Select the **Reference Document** family, and click **OK**.
10. On the **Relationship Definitions** window, in the **Successor(s)** section, select **Zero or Many**.
11. Click the **Save** button.

The relationship definition is saved.

User Instructions

Navigating the Meridium APM Web Framework

Navigating the Meridium APM Web Framework

When you first log in to the Meridium APM Web Framework, you will see the **Home Page**. On the **Home Page** and on every page in the Meridium APM Web Framework, you will see the task menu pane. The name of the page that you are currently viewing will be displayed at the top of the task menu pane. Below the page name, you will see menus that let you perform tasks on the current page and navigate to other locations in the product.

The **Help Tasks** and **Navigation Tasks** menus will always appear on the task menu pane, regardless of your location in the application.

In addition to using the options that are available on the task menus, in most cases, you can use the Internet Explorer features, such as the **Back** and **Forward** buttons, to navigate throughout the Meridium APM Web Framework.

As a general rule, if the Meridium APM Web Framework does not provide its own method for completing a task that you can complete using Internet Explorer features, you should use the Internet Explorer feature. For example, if you want to stop a search from running, you can click the Internet Explorer **Stop** button.

When the Meridium APM Web Framework provides a way to accomplish a task that is similar to a function also provided through Internet Explorer, such as printing datasheets, the Meridium APM feature typically provides added or extended functionality.

About the Task Menu Pane

The task menu pane appears on every page in the Meridium APM Web Framework and contains at least the **Navigation Tasks** and **Help Tasks** menus. As you navigate through the Meridium APM Web Framework, the task menu

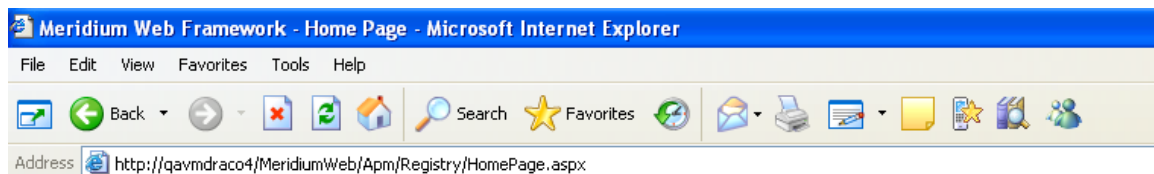
pane will also contain additional tasks menus offering tasks that are specific to the page that you are currently viewing. All the links on the task menus display the name of the link and the associated icon.

The task menu pane can be collapsed and will remain collapsed as you navigate throughout the Meridium APM Web Framework. When you collapse the task menu pane, only the icons on the task menus are visible. The icons are also links, so you can continue to use them as you would if the task menu pane were expanded.

The following image shows a Home Page that has been configured to display the Meridium, Inc. website. The task menu pane is expanded by default and displays the Navigation Tasks and the Help Tasks menus.



Note that in this image, the name of the page appears below the Meridium APM logo. The name of the page will also appear on the title bar of the Internet Explorer window, as shown in the following image.

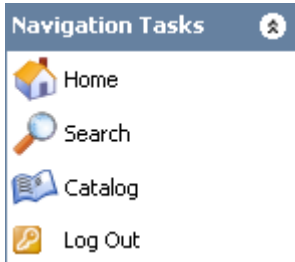


When the task menu pane is collapsed, you can use the title bar to identify which page you are viewing. Throughout this documentation, we use the names


that are displayed on the task menu pane and in the title bar to identify pages in the Meridium APM Web Framework.


Navigation Tasks Menu


The **Navigation Tasks** menu appears on all pages in the Meridium APM Web Framework and provides access to the Meridium APM Web Framework features.




The **Navigation Tasks** menu contains the following links:

 **Home:** Takes you to the **Home Page**.

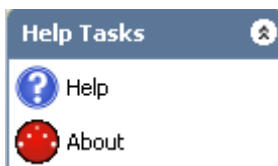
 **Search:** Takes you to the **Keyword Search** page.

 **Catalog:** Takes you to the **Catalog** page.


 **Log Out:** Logs you out of the Meridium APM Web Framework and displays the **Login** page.


Help Tasks Menu

The **Help Tasks** menu appears on all pages in the Meridium APM Web Framework and provides access to the Meridium APM Web Framework Help system and version information.



The **Help Tasks** menu contains the following links:

 **Help:** Displays the Meridium APM Web Framework Help window and shows the Help topic for the page that you are currently viewing. If you click this link when the Meridium APM Web Framework Help window is already open, it will be brought into focus, and the Help system will be refreshed to show the topic for the page you are currently viewing.

 **About:** Displays the About Meridium APM window, which provides version and copyright information about the Meridium APM Web Framework application.

Collapsing and Expanding the Task Menu Pane

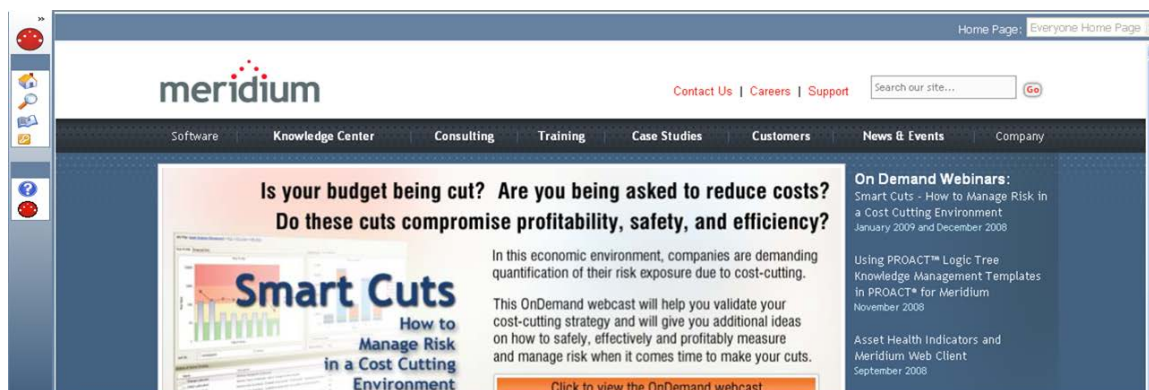
You can collapse the task menu pane at any time to increase the size of the main display area on your screen. After the task menu is collapsed, it will remain collapsed as you navigate throughout the Meridium APM Web Framework.

To collapse the task menu pane:

- On the task menu pane, click the « button.

The task menu pane collapses, and only the icons remain visible. The icons are links, so you can continue to use them as you would if the task menu pane were expanded.

The following image shows an example of the Home Page with the task menu pane collapsed. After the task menu pane is collapsed, you can identify the page that you are currently viewing by the name that appears on the title bar of the Internet Explorer window.



To expand the task menu pane:

- On the collapsed task menu pane, click the  button.

The task menu pane expands, and the names of the links and the name of the page become visible again.

Changing the Column Sort Order

If desired, you can change the sort order of columns throughout the Meridium APM Web Framework. The following instructions provide details on changing the current sort applied to a column.

Note: On the **Search** page, in the search results, sorting is disabled on the **Record ID** column. You can sort items in the **Family** column only.

To sort the items in a column:

1. Click the column header on the column that you want to sort.

An icon appears in the column header indicating the current sort applied to the column.

- ▲ Indicates that the column is sorted in ascending alphanumeric order.
- ▼ Indicates that the column is sorted in descending alphanumeric order.

2. Click the column header a second time.

The sort indicator changes to indicate the new sort applied to the column, and the values in the column are re-sorted.


Sending a Link to Someone Via Email

The **Send E-mail** option is available in various places throughout the Meridium APM Web Framework and lets you send a link to the current page to an email recipient. For example, on the **Record Manager** page, you can send a link to the datasheet that you are currently viewing to another user via email. The

email recipient can then click the link and view the datasheet on the **Record Manager** page.

Note: Email recipients must have the appropriate privileges to view the item specified in the URL. If the email recipient does not have the appropriate permissions (e.g., View permissions to a specific family), the user will not be able to view the specified item.

To send a link to someone via email:

1. On the appropriate task menu, click the  Send E-mail link.

A blank email message appears, containing a link to the page that you are currently viewing.

Note: Internet Explorer will display a blank email message for the program that you have specified on the **Programs** tab of the **Internet Options** window.

2. Modify the email message as desired, and then click the **Send** button.

The email message is sent to the specified recipient.

The email recipient will see an email where the subject line is the name of the item that will be displayed when the link is executed, a link, and any additional information that you specified in the message.

After the email recipient clicks the link in the email, an Internet Explorer window will appear, displaying the **Login** page and a session timeout message. The user will need to log in to the Meridium APM Web Framework before they can view the page to for which the link was configured.

Changing Column Widths

The option to adjust the width of a column or pane is available throughout the Meridium APM Web Framework.

To adjust the width of a column or pane:


- Click the divider and drag it to the left or right as desired.

Printing Items

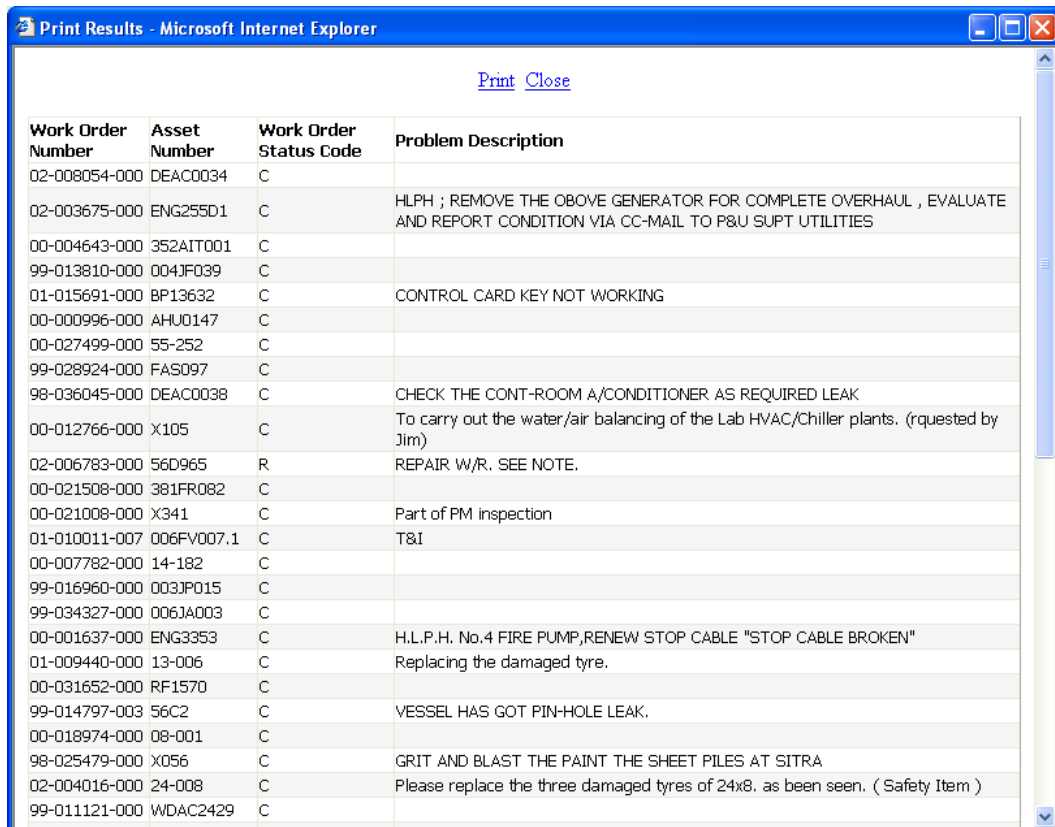
The Print option is available in various places throughout the Meridium APM Web Framework and lets you print items that you are currently viewing. For example, on the **Query** page, you can print the query results that you are currently viewing.

Note: These instructions do not provide details on printing reports. For details on printing reports, see the **Printing Reports** topic in this Help system.

To print items from the Meridium APM Web Framework:

1. On the appropriate task menu, click the  **Print** link.

The **Print Results** window appears, displaying the content of the item in print format. Note that you may need to scroll down in the window to view the contents of the item in its entirety.



Work Order Number	Asset Number	Work Order Status Code	Problem Description
02-008054-000	DEAC0034	C	
02-003675-000	ENG255D1	C	HLPH ; REMOVE THE ABOVE GENERATOR FOR COMPLETE OVERHAUL , EVALUATE AND REPORT CONDITION VIA CC-MAIL TO P&U SUPT UTILITIES
00-004643-000	352AIT001	C	
99-013810-000	004JF039	C	
01-015691-000	BP13632	C	CONTROL CARD KEY NOT WORKING
00-000996-000	AHU0147	C	
00-027499-000	55-252	C	
99-028924-000	FAS097	C	
98-036045-000	DEAC0038	C	CHECK THE CONT-ROOM A/CONDITIONER AS REQUIRED LEAK
00-012766-000	X105	C	To carry out the water/air balancing of the Lab HVAC/Chiller plants. (rquested by Jim)
02-006783-000	56D965	R	REPAIR W/R. SEE NOTE.
00-021508-000	381FR082	C	
00-021008-000	X341	C	Part of PM inspection
01-010011-007	006FV007.1	C	T&I
00-007782-000	14-182	C	
99-016960-000	003JP015	C	
99-034327-000	006JA003	C	
00-001637-000	ENG3353	C	H.L.P.H. No.4 FIRE PUMP,RENEW STOP CABLE "STOP CABLE BROKEN"
01-009440-000	13-006	C	Replacing the damaged tyre.
00-031652-000	RF1570	C	
99-014797-003	56C2	C	VESSEL HAS GOT PIN-HOLE LEAK.
00-018974-000	08-001	C	
98-025479-000	X056	C	GRIT AND BLAST THE PAINT THE SHEET PILES AT SITRA
02-004016-000	24-008	C	Please replace the three damaged tyres of 24x8. as been seen. (Safety Item)
99-011121-000	WDAC2429	C	

Note: On the Record Manager page, the Preview window (as shown in this image) displays the name **Print Record** in the title bar.

2. Click the **Print** link.

The **Print** dialog box appears.


3. Select the desired printing options, and click the **Print** button.

The search results are printed to the selected printer.

Collapsing and Expanding an Explorer Pane

If desired, you can collapse the **Record Explorer** and **Catalog Explorer** pane to increase the amount of workspace on the page. You can also change the width of these panes.

To collapse a pane:

- In the upper right corner of the pane, click the  button.

The pane collapses, as shown in the following image of the **Record Manager** page.

The screenshot shows the Meridium Record Manager interface. On the left is a sidebar with the Meridium logo and 'Record Manager' title. Below the logo are four task categories: 'Navigation Tasks' (Home, Search, Catalog, Log Out), 'Record Manager Tasks' (Print, Documents, Send E-mail), 'Associated Pages', and 'Help Tasks' (Help, About). The main workspace is titled '03-0001-1 Main Leg (Piping Circuit Process Tag)'. It features a 'Datasheet' dropdown menu set to 'Piping Circuit Process Tag' and several icons. Below this is a table with three tabs: 'Process Tag Identification', 'Fluid Information', and 'Process Conditions'. The 'Process Tag Identification' tab is active, showing a table with the following data:

	Value(s)
Location ID	03-0001-1
Location Description	Main Leg
Location Criticality	
Product Molecular State	
Process Product Description	
Environment	
Area Electrical Classification	
Barometric Pressure	
Max Ambient Temperature	
Min. Ambient Temperature	

To expand the pane:

- In the upper left corner of the workspace, click the  button.

The pane expands.

Logging Out of the Meridium APM Web Framework

When you log out of the Meridium APM Web Framework, your current session will be terminated, and the **Login** page will be displayed, where you will need to log in again to use the Meridium APM Web Framework features.

Note: If automatic login is enabled, after you log out, if you want to log back in, you will need to do so *manually* from the **Login** page. If you want to log back in *automatically*, you will need to *relaunch* your browser. Simply refreshing your browser will not log you back in.

To log out of the Meridium APM Web Framework:


- On the **Navigation Tasks** menu, click the **Log Out** link.

You are logged out of the Meridium APM Web Framework, and the **Login** page appears.

Note: If you have unsaved changes on the page that you are currently viewing, a message will appear, asking if you want to save those changes before continuing. You will need to respond to that message before you can be logged out.

Home Page

Accessing the Home Page

After you log in to the Meridium APM Web Framework, the **Home Page** is the first page you will see. You can access the **Home Page** from any page in the Meridium APM Web Framework by clicking the  **Home** link on the **Navigation Tasks** menu.

The following image shows an example of the **Home Page** as it appears when you log in to the Meridium APM Web Framework. In this case, a Home Page has not been configured for the current user.



Overview of the Home Page

Each Meridium APM Security User can belong to one or more Security Groups, which are intended to help organize users according to their roles and responsibilities in your company. Each Security Group can have its own Meridium APM Web Framework Home Page, which can be viewed by the members of that group. Home Pages help facilitate the sharing of information (e.g., queries, records, and reports) with your colleagues.

An administrative user is responsible for configuring a Meridium APM Web Framework Home Page for the Security Groups of which you are a member. The Meridium APM Web Framework Home Page is different from the Home Page that can be accessed via the Meridium APM Framework application. It can be configured to provide users with quick access to favorite or frequently used Meridium APM features and documents or to display an external website.

When you log in to the Meridium APM Web Framework, the **Home Page** is the first page that you will see. At the top of the **Home Page**, you will see the **Home Page** list, which contains an alphabetical list of the Security Groups to which you belong and for which a Meridium APM Web Framework Home Page has been configured.

- If a Meridium APM Web Framework Home Page has not been configured for a Security Group to which you belong, the Security Group will not appear in the **Home Page** list.

- If a Meridium APM Web Framework Home Page has not been configured for ANY of the Security Groups to which you belong, the Meridium APM Web Framework will display a message indicating that no **Home Page** has been configured. Additionally, the **Home Page** list will be disabled and will display the value **None**.

When you log in to the Meridium APM Web Framework for the first time, the Home Page for the *first* Security Group in the **Home Page** list is displayed automatically. If desired, you can view a different Home Page by selecting the desired Security Group in the **Home Page** list. The next time that you log in, you will see the Home Page that you last viewed before you logged out.

The Home Page contains two task menus: **Navigation Tasks** and **Help Tasks**.

Viewing a Different Home Page

If desired, you can view a Home Page other than the one that is currently displayed.

To view a different Home Page:

1. On the **Home Page**, in the upper right corner, locate the **Home Page** list.



2. Expand the **Home Page** list.
3. Select the name of the Security Group whose Home Page you want to view.

The page is refreshed and displays the Meridium APM Web Framework Home Page for the group that you selected. Note that the name of the Security Group whose Home Page you are viewing appears in the **Home Page** list.

Searching for Records

About Searching for Records

The Meridium APM Web Framework provides two types of searches that you can use to locate records that you want to work with in the Record Manager:

- **Keyword Search:** Lets you search records in multiple families for those that contain specific keywords. You can optionally filter these results by a specific family if desired.
- **Advanced Search:** Lets you search for records that exist in a given family. You can optionally filter these results by a related family or a keyword that appears in the Record ID of a record.

Keyword Search

Accessing the Keyword Search Page

Unlike an Advanced Search that lets you search for records that exist in a specific family, a *Keyword Search* lets you search for specific records by keywords that are stored in those records. A *keyword* can be a phrase, a word, or single character that sets apart the record(s) for which you are searching from the others in the database. You can think of a keyword as a unique characteristic of a record or group of records. For example, if you want to find a specific record or group of records whose descriptions contain the words "regular" and "maintenance," you would use these words as your *keywords* because they are used to identify the desired records. Additionally, if you want to find records that belong to System 123, your keywords could be 123.

Before you can perform a Keyword Search, an administrative user will need to configure the *Keyword Search index* for the families in which you want to search for records. The Keyword Search index specifies which fields in a family are searchable by keyword. Only character and text fields can be added to a Keyword Search index. You cannot search a date field using the Keyword Search feature. If a Keyword Search index has not yet been configured, when you try to search for records, a message will appear, indicating that no results match your search criteria.

In other words, when you perform a Keyword Search, the results will display only the records that contain the specified keyword(s) in a field that is included in the Keyword Search index for that family. For example, if you want to locate a Pump record whose Description field contains the phrase *Regular Maintenance* but the Description field is not included in the Keyword Search index for the Pump family, your search results will not contain that record (unless those keywords are stored in a different field that IS part of the Keyword Search index for that family).

How keywords are used within a Keyword Search depends on the other set of criteria that you specify in the list to the right of the **Search For** text box. For example, continuing with a previous example, if you were to search for the keywords *123* and select the **Any Word** option in the list, your search results would return records that contain the numbers 1 or 2 or 3 in the fields that are part of that family's Keyword Search index.

Additionally, some words that you include in your search may be ignored. This may be because they are considered *noise words* by the Keyword Search feature. Some examples of noise words include: *and, about, for, get, had, the, with, where, and to.*

Hint: You will know if a Keyword Search index has been built for a family if the name of that family appears in the **Optionally Filter by** list.

To access the Keyword Search page:

- On the **Navigation Tasks** menu, click the **Search** link.

-or-

On the **Advanced Search** page, on the **Search Tasks** menu, click the **Keyword Search** link.

The **Keyword Search** page appears.

Aspects of the Keyword Search Page

The Keyword Search page contains the following items:

- **Search Criteria section:** Lets you define the search criteria and search for the desired records. The search criteria sections contains the following items:
 - **Search For:** Lets you specify the keywords for which you want to search. You can type letters, numbers, and symbols in this text box. To the right of this text box, a list appears that contains the options that you can use to specify *to what extent* you want to search for the characters that you type in the **Search For** text box. The characters that you type in the **Search For** text box are used in conjunction with the selection that you make in the list to the right of the text box to create a search string that is sent to the database. The list contains the following options:
 - **Any Word:** Specifies that you want to search for ANY keyword that you type in the **Search For** text box. In other words, if you type **Pump 1 2 3** in the **Search For** text box, the search string that is sent to the database will look like this: *Pump or 1 or 2 or 3*. This is the default option.
 - **All Words:** Specifies that you want to search for ALL the keywords that you type in the **Search For** text box. In

other words, if you type **Pump 1 2 3** in the **Search For** text box, the search string that is sent to the database will look like this: *Pump AND 1 AND 2 AND 3*.

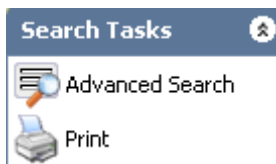
- **Exact Phrase:** Specifies that you want to search for the *exact* string of keywords that you type in the **Search For** text box. In other words, if you type **Pump123** in the **Search For** text box, the search string that is sent to the database will look like this: *"Pump123."*
- **Optionally Filter by:** Lets you specify a filter to apply to the search results. This list contains the families whose search index has been configured. If you select a family in this list, the results will display only records that exist in that family that meet the specified search criteria.
- **Search:** Searches for records that match the search criteria and displays the results in the search results section.
- **Search Results section:** Contains the following items:
 - **Filter by grid:** Displays the list of families whose records contain the specified search criteria. To the right of the family name, the number of records returned for that family is displayed in parenthesis. You can select a family in this list to display the results for that family in the results grid to the right. The list always contains the default category **All**. You can click this option to view ALL the records that are included in the search results.
 - **Results grid:** Displays the records that contain the specified search criteria. Each row in the grid represents one record. For each record, the following information is displayed:
 - **Family:** The name of the family in which the record exists.
 - **Record ID:** The Record ID of the record. The Record ID appears as a hyperlink that you can click to open the record in the Record Manager. If a family does not have a Template ID defined, the Record ID column will be empty.

Above the results grid, text appears that indicates the filter that is applied to the results. This value corresponds to the currently selected row in the **Filter by** grid.

Below the search results section are options that you can use to navigate your search results.

- **Task Menu pane:** The **Keyword Search** page contains the following task menus:
 - **Navigation Tasks** menu
 - **Search Tasks** menu
 - **Help Tasks** menu

Search Tasks



The **Search Tasks** menu on the **Keyword Search** page contains the following links:

- **Advanced Search:** Displays the **Advanced Search** page, where you can search for records by family.
- **Print:** Displays the **Print Results** window, where you can view the search results in print format and then print them. This link is enabled only after search results appear in the results grid.

Performing a Keyword Search

In the Meridium APM Web Framework, you can search for records by the keywords that are stored in fields in those records and optionally refine your search results to only records in a specified family.

Note: Keyword search results will include records in *Active* families only. Records belonging to *Inactive* families that contain the specified keywords will not be included in the results.

To perform a Keyword Search in the Meridium APM Web Framework:

1. On the **Keyword Search** page, in the **Search For** text box, type the values for which you want to search records in the database.
2. In the list to the right of the **Search For** text box, select the desired search option. You can choose from the following options:
 - Any Word
 - All Words
 - Exact Phrase
3. If desired, in the **Optionally Filter by** list, select the family to which you want to limit your search.
4. Click the **Search** button.

The search results appear in the results grid. From the search results section, you can filter the results, open a record or print the search results.

Filtering the Search Results

After you perform a Keyword Search, the results appear in the search results section, which contains the **Filter by** grid and the results grid. By default, the results grid displays the search results for all families. If desired, you can change the filter that is applied to the search results to display only records in the search results that exist for a specified family.

For example, your search results could contain 330 records, and you want to see only records in the Equipment family. In this case, you would select the Equipment family in the **Filter by** grid to view only the 165 Equipment records in the search results.

Filter by	Equipment	
	Family	Record ID
All (330)	Equipment	~ #1 DEPROP. O.H. COND. ~ HXST 112
Equipment (165)	Equipment	~ #1 DEPROP. O.H. COND. ~ HXST 18
Shell and Tube Heat Exchanger (165)	Equipment	~ #1 DEPROP. O.H. COND. ~ HXST 72
	Equipment	~ #1 STEAM REHEATER ~ HXST 130
	Equipment	~ #1 STEAM REHEATER ~ HXST 36
	Equipment	~ #1 STEAM REHEATER ~ HXST 90
	Equipment	~ #4 SULFUR CONDENSER ~ HXST 129
	Equipment	~ #4 SULFUR CONDENSER ~ HXST 34
	Equipment	~ #4 SULFUR CONDENSER ~ HXST 89
	Equipment	~ #4 SULFUR CONDENSER ~ HXST 98
	Equipment	~ AIR AFTERCOOLER (C-454) ~ HXST 141
	Equipment	~ AIR AFTERCOOLER (C-454) ~ HXST 153
	Equipment	~ AIR AFTERCOOLER (C-454) ~ HXST 47
	Equipment	~ AMMONIA COND ~ HXST 165
	Equipment	~ AMMONIA COND ~ HXST 58
	Equipment	~ AMMONIA REBOILER ~ HXST 159
	Equipment	~ AMMONIA REBOILER ~ HXST 52
	Equipment	~ Asset Description ~ HXST 37
	Equipment	~ C-488 LUBE/SEAL OIL COOLER ~ HXST 105
	Equipment	~ C-488 LUBE/SEAL OIL COOLER ~ HXST 106
	Equipment	~ C-488 LUBE/SEAL OIL COOLER ~ HXST 16
	Equipment	~ C-488 LUBE/SEAL OIL COOLER ~ HXST 65
	Equipment	~ C-488 LUBE/SEAL OIL COOLER ~ HXST 66
	Equipment	~ C-489 LUBE/SEAL OIL COOLER ~ HXST 107
	Equipment	~ C-489 LUBE/SEAL OIL COOLER ~ HXST 108
	Equipment	~ C-489 LUBE/SEAL OIL COOLER ~ HXST 67

To filter the search results:

- In the search results section on the **Keyword Search** page, in the **Filter by** grid, select the family whose search results you want to view.

The results grid refreshes and displays only the records in the specified family, and the text above the results grid changes to indicate the filter that is currently applied to the search results.

Advanced Search

Accessing the Advanced Search Page

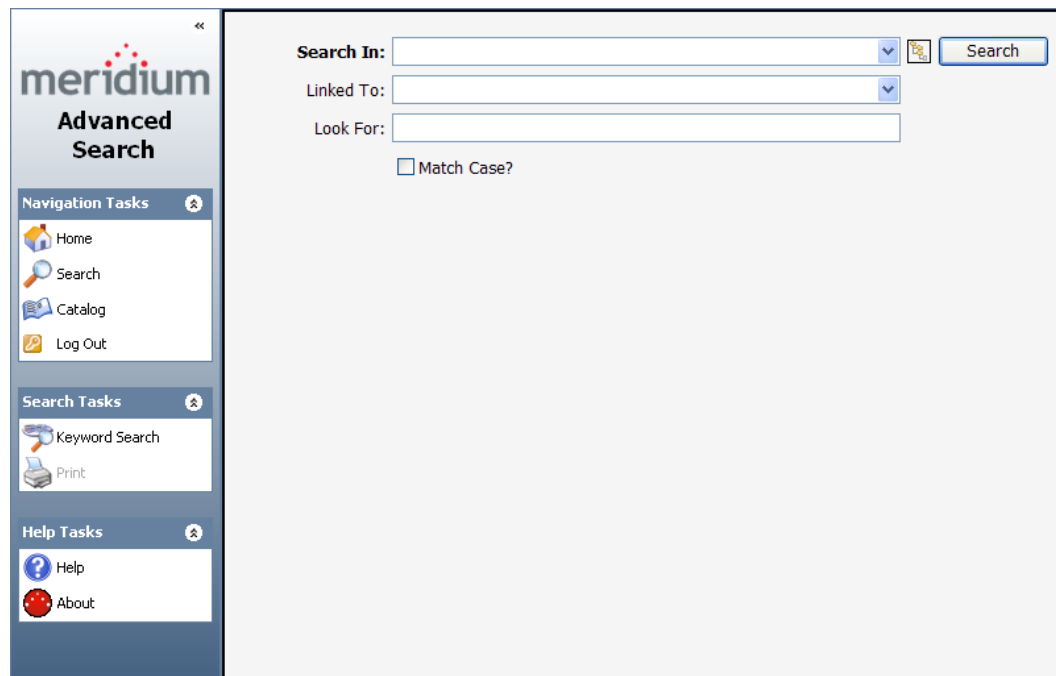
Unlike a Keyword Search, which lets you search for specific records by the characters that are stored in the fields in those records, an Advanced search lets you search for records in a specific family and optionally filter by a related family and a keyword that appears in the Record ID of a record.

To access the Advanced Search page:

1. Access the **Keyword Search** page.

2. On the **Search Tasks** menu, click the **Advanced Search** link.


The **Advanced Search** page appears.



Aspects of the Advanced Search Page

The **Advanced Search** page contains options that let you define Advanced Search criteria, view search results, and perform tasks related to the search results.

The **Advanced Search** page contains the following items:

- **Search criteria section:** Lets you define the terms of your search. The search criteria section contains the following items:
 - **Search In:** Lets you specify the family whose records you want to search. You can select a family from the list, or you can click the hierarchy icon  to view the family hierarchy.
 - **Linked To:** Contains a list of the families that are linked to the family that you selected in the **Search In** list. If the selected family is not related to any other families, this list will be empty.

You can select a family from the list to optionally filter the search results.

- **Look For:** Lets you specify a keyword to optionally limit your results to records containing that word within the Record ID. If you specify a keyword, your results will contain records that match your family criteria and contain the keyword that you specified.
 - **Match Case?:** Lets you specify that you want to return only the records that contain the keyword that you specified using the exact case that you specified in the **Look For** text box. If you do not want the search to be case-sensitive, clear the **Match Case?** check box.
 - **Search:** Searches the database for the specified search criteria and displays the results in the search results section.
- **Search results grid:** After you have performed a search, displays the records in the database that match the criteria you defined in the search criteria section.
 - **Task menu pane:** Displays the following task menus: **Navigation Tasks**, **Search Tasks**, and **Help Tasks**.

About the Search Results Grid on the Advanced Search Page

After you perform an Advanced Search, the search results will appear in the search results grid on the **Advanced Search** page. The following image shows an example of the search results grid after a search has been performed on all the records in the Piping Circuit Process Tag family.

Family	Record ID
Piping Circuit Process Tag	03-0001-1 Main Leg
Piping Circuit Process Tag	039-0001-1 North Run
Piping Circuit Process Tag	071-0001-1 West Leg
Piping Circuit Process Tag	19-0001-04 Sour Water Overhead Line
Piping Circuit Process Tag	19-0001-05 Recycle Gas
Piping Circuit Process Tag	19-0001-12 Fuel Gas
Piping Circuit Process Tag	19-0001-13 HX-4858 TO PV-9873
Piping Circuit Process Tag	19-0001-26 REACTOR FEED
Piping Circuit Process Tag	19-0001-29 INJECTION POINT
Piping Circuit Process Tag	19-0001-33 REFLUX
Piping Circuit Process Tag	19-0001-45 Reactor Feed
Piping Circuit Process Tag	19-0001-63 PV-883 TO FRN-574
Piping Circuit Process Tag	19-0001-66 TNK-784 TO HX-8364
Piping Circuit Process Tag	19-0001-69 REGENERATION SYSTEM

Page of 1 14 records found << Previous 1 Next >>Page Size:

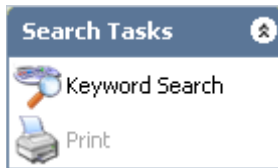
Note: If your search criteria includes a related family or keywords, additional columns will be displayed in the search results.

Each row of the search results represents one record. In the preceding image, all records in the list belong to the Piping Circuit Process Tag family, as indicated by the family name in the left column of the search results. The Record ID of the first record shown in the results is *03-0001-1 Main Leg*. You can open the associated record in the Record Manager by clicking the hyperlinked record ID.

If desired, you can adjust the width of columns in the search results by clicking the column divider and dragging it to the left or right as desired.

Note that options that help you navigate the search results appear at the bottom of the page.

Search Tasks Menu



The Search Tasks menu on the **Advanced Search** page contains the following links:



Keyword Search: Displays the **Keyword Search** page, where you can search records in multiple families for those that contain specific keywords and optionally filter these results by a specific family if desired.




Print: Displays the **Print Results** window, where you can view the search results in print format and then print them. This link is enabled only after search results appear in the results grid.

Performing an Advanced Search

In the Meridium APM Web Framework, you can search for records within a selected family and optionally refine your search results by specifying a related family or by specifying a keyword within the record IDs of all the records.

To perform an Advanced Search in the Meridium APM Web Framework:

1. On the **Advanced Search** page, in the **Search In** list, select the desired family. Your search results will include only the records that belong to this family. The list will display only the families to which you have been granted View privileges in the Configuration Manager. You must select a value in the **Search In** list.

Hint: You can also click the  icon to view the family hierarchy on the **Select Family** dialog box, from which you can select the desired family.

After you select a family in the **Search In** list:

- If the family that you selected is related to one or more families, the **Linked To** list will display the related families.

-or-

- If the family that you selected is not related to any other families, the **Linked To** list will remain empty, and you can proceed to step 3.
2. In the **Linked To** list, if desired, select a family that is related to the family that you selected in the **Search In** list. If you select a family in the **Linked To** list, your results will include only the records that belong to the family in the **Search In** list that are also linked to a record belonging to a family in the **Linked To** list.

Note that the **Linked To** list contains *only* the families that are related to the family selected in the **Search In** list and to which you have been granted View privileges in the Configuration Manager. In addition, the list will display a family only if you have been granted View permissions to the relationship family that relates that family to the family selected in the **Search In** list.

For example, if you selected **Pump** in the **Search In** list, and the Pump family is related to the Failure family through the Has Failure relationship, the **Linked To** list will display **Failure** only if you have View permissions to the Failure family and the Has Failure relationship family.

3. In the **Look For** field, if desired, type a keyword to limit your results to records containing that word within the Record ID. If you specify a keyword, your results will contain records that match your family criteria and contain the keyword that you specified.
4. If you want the search to be case-sensitive, select the **Match Case?** check box. Selecting the check box indicates that you want to return only the records that contain the keyword that you specified using the exact case that you specified in the **Look For** text box.

-or-

If you do not want the search to be case-sensitive, do not select the **Match Case?** check box.

Note: The **Match Case?** check box appears only if you are logged in to an Oracle data source. If you are logged in to a SQL Server data source, the **Match Case?** check box will not be visible.

- Click the **Search** button.

The Meridium APM Web Framework performs the search, and the results appear in the results grid. If you included a **Linked To** family in your search criteria, an additional column will be displayed in the search results and will contain the linked Record ID hyperlinks. From the results, you can open a record in the Record Manager. You can also print the results.

Working with Search Results

Navigating the Search Results

The following options appear at the bottom of the results to help you navigate your search results.

Option	Name	Description
Page <input type="text"/> of ___	Page text box	Displays the number of pages in the search results and the current page number that you are viewing in the format Page X of N , where X is the current page and N is the total number of pages. If desired, you can change the page number manually by typing the desired page number in the text box.
___ records found	Records found	Indicates the total number of records found using the specified search criteria.
<< Previous	Previous	Displays the previous page of the search results. This link is enabled when there is more than one page of search results and when you are currently viewing any page other than the first page.
1 2 3 4 5 6 7 8 9 10	Page number hyperlinks	Displays a specific page in the search results.
Next >>	Next	Displays the next page of the search results. This link is enabled when there is more than one page of search results and when you are currently viewing any page other than the last page.

Option	Name	Description
Page Size: <input data-bbox="380 275 480 321" type="text"/>	Page size text box	Displays the current number of records that are displayed per page. By default, the search results will display 50 records per page. If desired, you can change the page size in the search results.

Changing the Page Size in the Search Results

By default, the search results section will display 50 records per page. If desired, you can change the page size in the search results to increase or decrease the number of records that are displayed on each page. The Search page can display up to 1,000 records per page.

Note: You can view records on other pages by clicking the page number hyperlinks at the bottom of the search results. You can also click the **Previous** and **Next** links to view results on the previous and next page.

To change the page size in the search results:

1. On the **Search** page, at the bottom of the page, locate the **Page Size** text box.
2. Highlight the current value, and press the Delete key.
3. Type a value representing the number of records that you want to view per page, and press Enter.

The page is refreshed and displays the specified number of records.

Note: The **Search** page can display up to 1,000 records per page. If you enter a number greater than 1,000, a message will appear indicating that you must use a number between 1 and 1,000, and the page size will be reset to the last valid value. For example, if you change the page size from 75 to 1,003, the page size will be reset to 75.

Opening Records from Your Search Results

Search results include hyperlinked record IDs that let you open records in the Record Manager. These instructions provide details for opening a record from your search results.

To open a record from your search results:

- In the search results grid, in the Record ID column, click the hyperlinked Record ID of the record that you want to open.

The record appears on the Record Manager page.

The screenshot displays the Meridium Record Manager interface. On the left is a navigation sidebar with sections for 'Navigation Tasks' (Home, Search, Catalog), 'Record Manager Tasks' (Print, Documents, Send E-mail), and 'Help Tasks' (Help, About). The main area is split into two panes. The left pane, titled 'Record Explorer', shows a tree view with '03-0001-1 Main Leg (Piping Circuit)' selected. The right pane, titled '03-0001-1 Main Leg (Piping Circuit Process Tag)', shows a 'Datasheet' for 'Piping Circuit Process Tag'. The datasheet has three tabs: 'Process Tag Identification', 'Fluid Information', and 'Process Conditions'. The 'Process Tag Identification' tab is active, showing a table with the following data:

Field Name	Value(s)
Location ID	03-0001-1
Location Description	Main Leg
Location Criticality	
Product Molecular State	
Process Product Description	
Environment	
Area Electrical Classification	
Barometric Pressure	
Max Ambient Temperature	
Min. Ambient Temperature	

Record Manager

Accessing the Record Manager Page

The Record Manager is a tool that lets you create, view, modify, and delete records in the database. You can access the Record Manager page by performing a search and then opening a record from the search results. You may also be able to access the Record Manager from hyperlinks on a Home Page or from links in query results.

The Record Manager page includes a datasheet, which displays the content of an individual record in a formatted view. You can use the datasheet to view, modify, and add information to the record.

The screenshot displays the Meridium Record Manager interface. On the left is a navigation sidebar with sections: 'Navigation Tasks' (Home, Search, Catalog, Log Out), 'Record Manager Tasks' (Print, Documents, Send E-mail), 'Associated Pages', and 'Help Tasks' (Help, About). The main area is split into 'Record Explorer' and a 'Datasheet'. The Record Explorer shows a tree view with '03-0001-1 Main Leg (Piping Circuit Process Tag)', 'Piping Circuit', and 'Unit'. The Datasheet is titled '03-0001-1 Main Leg (Piping Circuit Process Tag)' and has a dropdown menu set to 'Piping Circuit Process Tag'. It features three tabs: 'Process Tag Identification', 'Fluid Information', and 'Process Conditions'. The 'Process Tag Identification' tab is active, showing a table with the following data:

Process Tag Identification	Value(s)
Location ID	03-0001-1
Location Description	Main Leg
Location Criticality	
Product Molecular State	
Process Product Description	
Environment	
Area Electrical Classification	
Barometric Pressure	
Max Ambient Temperature	
Min. Ambient Temperature	

Aspects of the Record Manager

Overview of the Record Manager Page

The Record Manager page consists of three main components:

- **Task menus:** Let you perform various tasks on the Record Manager page, navigate to other features in the Meridium APM Web Framework, and access the Meridium APM Web Framework Help system and version information. The Record Manager page contains the following task menus:
 - Navigation Tasks
 - Record Manager Tasks
 - Help Tasks

- **Record Hierarchy:** Displays a hierarchical view of the records that exist in the database.
- **Record Manager workspace:** Displays the datasheet for the record that is selected in the record hierarchy. From here you can modify, create, save, and delete records. Some features in the Record Manager workspace may be disabled based upon your security privileges. Note that you use the **Datasheet** list to view other datasheets that are defined for the selected record family.

Note: The Meridium APM Web Framework supports only standard datasheets. Custom form datasheets cannot be opened in the Meridium APM Web Framework. Only the standard datasheets for a family will appear in the **Datasheet** list.

Record Manager Tasks Menu



The Record Manager Tasks menu contains the following links:

- **Print:** Displays the **Print Record** window, from which you can print the record.
- **Documents:** Displays the **Reference Documents** window, where you can manage Reference Document records. The **Documents** link is disabled if the record you are currently viewing is not linked to any Reference Document records.
- **Send E-mail:** Displays a blank email message containing a link to the page that you are currently viewing.

Associated Pages Menu

The **Record Manager** page displays the **Associated Pages** menu if any Associated Pages have been configured via the URL Manager for the family of the record that you are currently viewing.

Note: When the task menu pane is collapsed, the **Associated Pages** menu will not display any text. Instead, the menu will display the **»** button, which expands the task menu pane. To view the links on the **Associated Pages** menu, you must expand the task menu pane.

- If a link on the **Associated Pages** menu is configured to open a Meridium APM feature that is available in the Meridium APM Web Framework, such as a query, the link will open that feature in the Meridium APM Web Framework.
- If a link on the **Associated Pages** menu is configured to open a Meridium APM feature that is unavailable in the Meridium APM Web Framework, such as the **Metrics Manager Start Page**:
 - If the Meridium APM Framework application has been installed on your workstation, you will be prompted to log in to the Meridium APM Framework. After you log in, you will be directed to the page determined by the URL behind the Associated Pages link.
 - If the Meridium APM Framework application has not been installed on your workstation, an error message will appear indicating that the page cannot be displayed.

Note that while you can perform a search in the Meridium APM Web Framework, if a link is configured to open a *saved* search, which is not supported in the Meridium APM Web Framework, you will be prompted to log in to the Meridium APM Framework application.

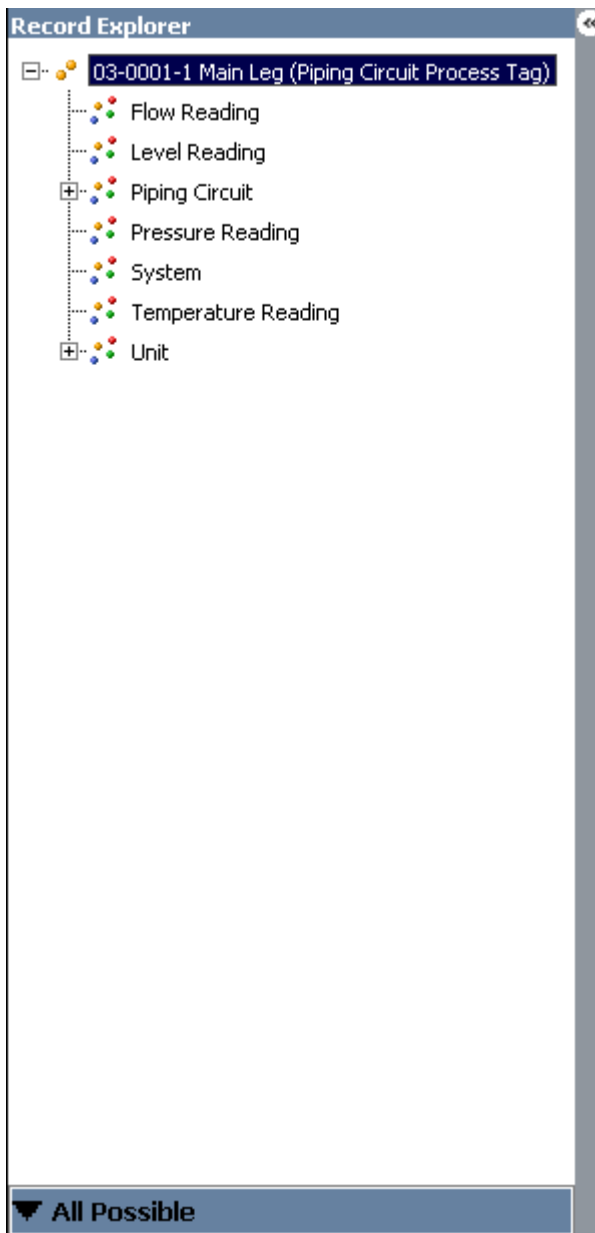
The Record Hierarchy

Overview of the Record Hierarchy

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

A configured explorer is a Catalog item that can be used to provide a customized view of the record hierarchy when a record is opened in the Record Manager. Configured explorers control which families appear in the record hierarchy. When you open a record in the Record Manager, if a family has an associated configured explorer, the tree will display the contents that have been pre-defined based on a configured explorer, and the pane will be labeled according to the name of the configured explorer (as it appears in the Catalog). Configured explorers may also be displayed when you open records via hyperlinks on Home Pages, in query results, or on **Associated Pages** menus.

The following image displays an example of the record hierarchy as it appears in the **Record Explorer** pane.





Throughout this documentation, we assume that the record hierarchy is displayed using the standard Record Explorer, and we provide details on the features and functions of the record hierarchy as it appears in the standard Record Explorer pane. Most of these features will also apply to configured explorers, but some features may be slightly different.

About the Record Hierarchy

The record hierarchy displays the records in the database and how they relate to one another. When you open a record in the Record Manager, it appears as the root record at the top of the record hierarchy in the Record Explorer

pane. Below the root record, the record hierarchy displays the families that are related to the family of the root record and any records that are linked to the root record. The record hierarchy uses the following icons to help you distinguish between families and records:

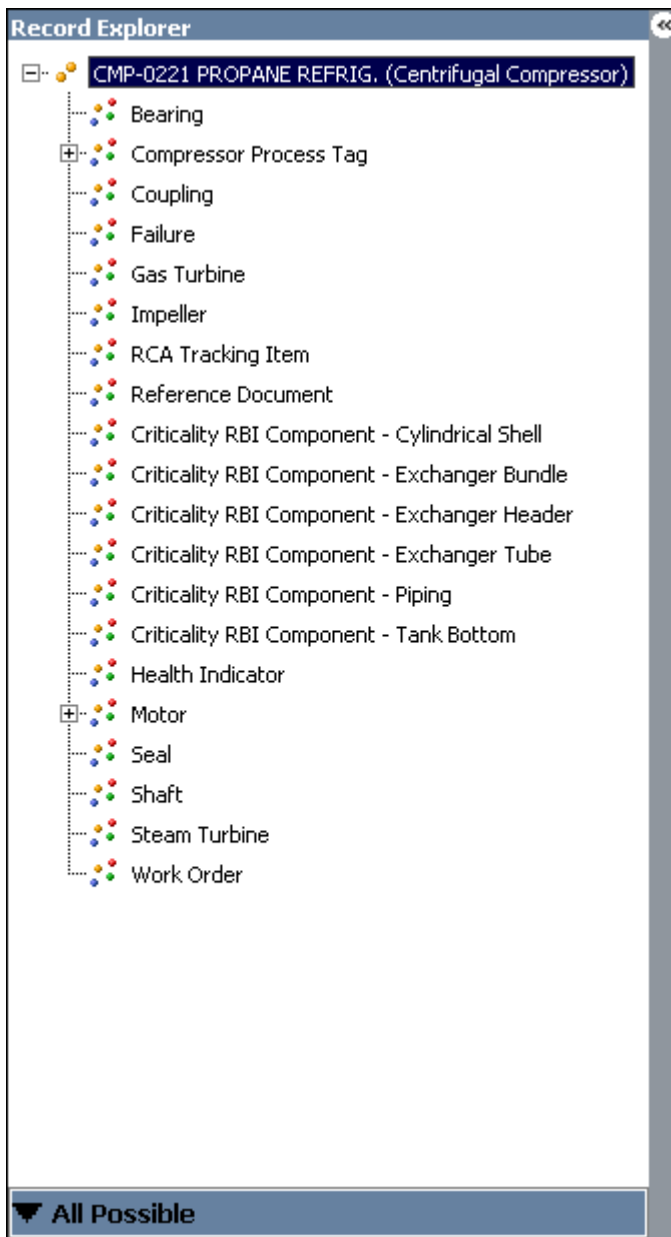
-  **(Family Icon):** Designates a family that is related to the root record family.
-  **(Record Icon):** Designates a record that is linked to the root record.

A plus sign (+) to the left of a family icon indicates that one or more records belonging to that family are linked to the root record. The absence of a plus sign means that no linked records exist for that family. You can expand the family to view additional related families and linked records by clicking the plus sign or by clicking the family name. A minus sign (-) indicates that a family is fully expanded.

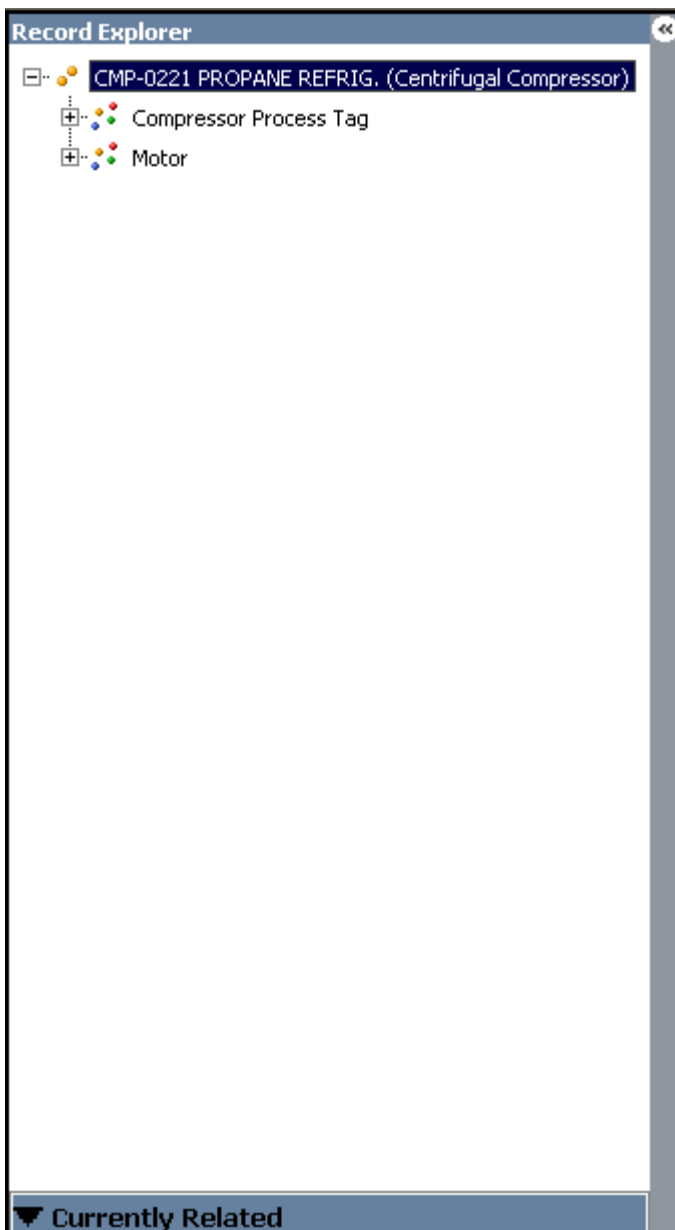
When you reach the record level, you can click any record name to view the contents of that record on the datasheet configured for that family.

By default, the record hierarchy displays all the families for which a relationship exists even if no records exist for these families. For example, if the root record is a member of the Centrifugal Compressor family and that family is linked to multiple families, those families will appear in the record hierarchy even if no records exist in that family.

The text at the bottom of the **Record Explorer** pane indicates the current filtering option that is applied to the record hierarchy. If desired, you can change the filter that is applied to the record hierarchy. For example, the record hierarchy in following image contains the Centrifugal Compressor family and all the families that are related to this family.



The following image shows the record hierarchy after the filter has been changed. Now, the record hierarchy is displaying only the families that are related to the Centrifugal Compressor family for which a linked record exists.



After you change the filter, the next time that you open a record in any family, the filter that you selected will appear by default.


Each branch in the tree will display up to 100 related records at a time. If a family or record is linked to more than 100 records, a **Next 100** node will appear at the bottom of the list. You can expand the node to view additional records. After you expand the node to view the additional records, a **Previous 100** node will appear. You can click this node to view the previous records.

When you right-click a node in the record hierarchy, a shortcut menu appears.

- If you right-click a *family*, the menu displays the **Create a new record and link to root entity** option, which lets you create a new record for the selected family and link it to the root record.
- If you right-click a *record*, the menu displays the **Make it a root record** option, which lets you make the selected record the root record.

Changing Filters in the Record Explorer Pane

To change the filter applied to the record hierarchy:

- At the bottom of the **Record Explorer** pane, click the  icon, and then on the submenu, click:
 - **Show all possible Records:** Displays all the families that are related to the root record family.
- or-
- **Show Related Records:** Displays only the related families that contain a record that is linked to the root record.

The set of records that you selected will appear in the record hierarchy.

Note: A configured explorer will be displayed if one has been associated with the family to which the selected record belongs.

Making Records Root Records

When you open a record from search results, the selected record will be displayed automatically at the root level in the record hierarchy. If other records are displayed in the record hierarchy, you can make any of those records the root record.

To make a record the root record:

1. In the record hierarchy, right-click the record that you want to make the root record.

The shortcut menu appears, displaying the **Make it a root record** option.

Note: You must save a record before you can make it the root record.

2. Click **Make it a root record**.

The page refreshes, the record that you selected appears at the top of the record hierarchy, and its datasheet is displayed in the Record Manager workspace. The record hierarchy now shows other families and records as they relate to the new root record.

The Record Manager Workspace

Aspects of the Record Manager Workspace

The term *record* refers to all the data associated with a single, individual entity in your system. Your database will contain records for things such as peices of equipment, fiscal years, work orders, locations, events, and people. The data associated with a record is organized into a datasheet, which defines the physical layout of the fields defined for the family to which the entity belongs.

On the **Record Manager** page, the datasheet appears in the workspace to the right of the **Record Explorer** pane.

Record Explorer CMP-0221 PROPANE REFRIG. (Centrifugal Compressor)

Datasheet: Centrifugal Compressor

Asset Identification		Compressor Design Information	
Field Name	Value(s)		
Asset ID	CMP-0221		
Asset Description	PROPANE REFRIG.		
Asset Type	Centrifugal Compressor		
Asset Manufacturer	CARRIER		
Asset Model Number	18P601		
Asset Serial Number	4006		
Asset Installation Date			
Asset Status	Active		
Critical Asset ?	<input type="checkbox"/>		
Spared ?	<input type="checkbox"/>		
Asset Service	ISOBUTANE		
Asset P&ID Drawing Number			
Shutdown Req. for Maintenance?	<input type="checkbox"/>		
Asset Additional Information			

All Possible

Families can use multiple datasheets. When you open a record from the search results, the Meridium APM Web Framework will automatically display the default datasheet for the family of the selected record. All the standard datasheets that are defined for the family will appear in the **Datasheet** list, where you can select a different datasheet to view if desired.

Note that because the Meridium APM Web Framework supports only standard datasheets, if the default datasheet for a family is a custom form, the first datasheet in the **Datasheet** list for the family will be displayed.

All the standard datasheets that exist for a family will appear in the **Datasheet** list, where you can select a datasheet other than the current one to view in the Record Manager.

Note: Some datasheets may be disabled based on your security permissions.

Fields that are included in a datasheet may be grouped into various sections, which can appear as different tabs on the datasheet. For example, the datasheet in the preceding image contains three tabs: **Process Tag Identification**, **Fluid Information**, and **Process Conditions**.

At the top of the datasheet, several icons appear. These icons are links that provide access to functions that are associated with the selected record. The following icons appear in the datasheet area:



Create New: Displays the **Select Family** page, where you can choose the family for which you want to create a new record.



Save: Saves the changes you have made to the current record that you are currently viewing.



Save and New: Saves the changes you have made to the current record and then displays a new record in the same family on the **Record Manager** page.






Delete: After displaying a confirmation message asking if you really want to delete the record, deletes the selected record from the database.

Fields on Datasheets

Each datasheet displays fields that are defined for that family and that have been configured to be included on the datasheet. Each field on a datasheet has specific properties that determine how you will enter data or if you are allowed to enter data at all. You will need to be familiar with these properties when you create and modify records.

The following types of fields can be included on a datasheet in the Meridium APM Web Framework:


- **Character fields:** Fields that appear as text boxes and accept a string of alphanumeric characters.
- **Text fields:** Fields that appear as text boxes and accept only text. Text fields contain a  button to the right of the cell. You can click the  button to open the **Modify Text** dialog box, where you can work with the text in that cell.
- **Numeric fields:** Fields that appear as text boxes and accept only numbers. If you type letters in a numeric field, an error message will be displayed when you move to a different field.

- **Date fields:** Fields that accept dates. Date fields contain the  button, which you can click to display the Calendar, from which you can choose a date. You can also type a date into a date field.

January 2010						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						


12	:	00	:	00	AM	▼
----	---	----	---	----	----	---

Clear	OK	Cancel
-------	----	--------


- **Drop-down list fields:** Fields that require you to select a value from a list of more than one value. List fields contain the  button, which you can click to access the list of available values.
- **Logical fields:** Fields that contain a check box. A selected check box means *Yes*, *True*, or *On*. A cleared check box means *No*, *False*, or *Off*.
- **Disabled fields:** Fields that cannot be modified manually and are populated automatically based on values entered into other fields or actions taken within the system. Any character, text, numeric, date, list, or logical field can be disabled. You will know a field is disabled if a text box does not appear in the associated field.
- **Required fields:** Fields that must contain a value before the record can be saved. Required fields are colored red or some other color, as determined by an administrative user. Any character, text, numeric, date, list, or logical fields can be required.
- **Multi-Value fields:** Fields that store more than one value. Numeric, character, and date fields can be multi-value fields, which may be formatted as a text box or contain a drop-down list (i.e., as in a drop-down list field). Multi-value fields may have colored backgrounds, as determined by an administrative user. If a multi-value field contains a drop-down list, a check box will appear to the left of each value in the list. You can select the check box for each desired value. When these values appear in the multi-value field, they are separated by commas. The number of values allowed in a multi-value field is determined by an administrative user.

Each field may have a rule or properties defined for it that controls how the field behaves and how the data in that field is displayed. For example, a rule may be defined for a numeric field that automatically causes the value in the field to be formatted as currency, or so that after you enter a value in a field, a calculation is performed and that field is automatically updated with the calculated value. Additionally, a property may be defined for a character field that displays the text as a hyperlink.

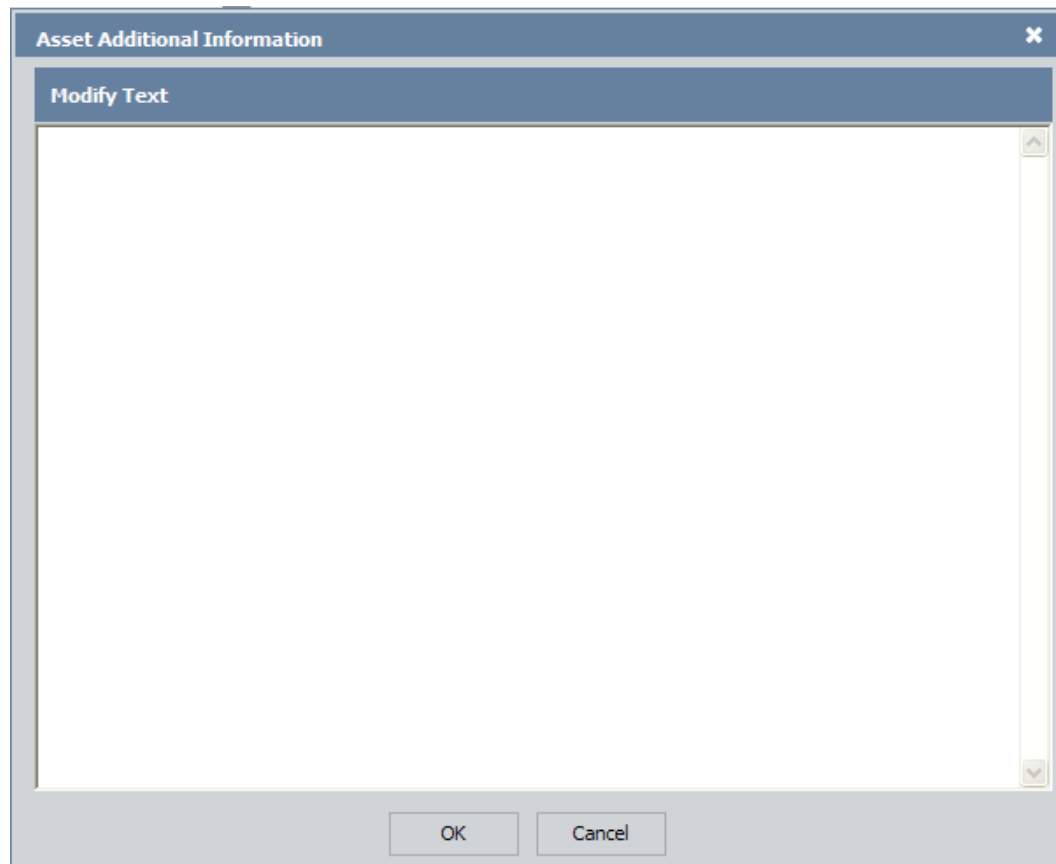
Using the Modify Text Dialog Box

The **Modify Text** dialog box is useful for entering larger amounts of text. The following instructions provide details on using the **Modify Text** dialog box. These instructions assume that you have located the desired text field that contains a  button, indicating that the **Modify Text** dialog box is available.

To use the **Modify Text** dialog box:

1. In the field where you want to add or modify text, click the  button.

The **Modify Text** dialog box appears, and the name of the field from which you accessed the dialog box is displayed in the title bar. For example, the following image shows the **Modify Text** box as it appears when it is accessed from the Asset Additional Information field.



2. Type the desired text in the text box.
3. Click OK.



The **Modify Text** dialog box closes and the text that you typed appears in the field from which you accessed the dialog box.

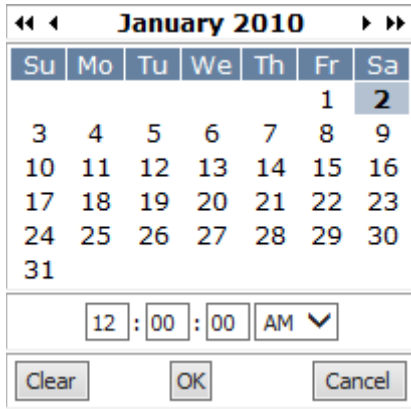
Note: Clicking **Cancel** or the **X** button (located in the top right corner of the dialog box) will close the **Modify Text** dialog box and discard your changes.

The Calendar Feature

About the Calendar Feature

The Calendar feature appears in date fields on datasheets and lets you select a date and time and display that value in the field from which you accessed the Calendar feature. The Calendar feature, however, is not available in ALL fields that store date and time values. You will know that the Calendar feature is

available if a  button appears in the field. When you click the  button, the Calendar feature appears, as shown in the following image.



January 2010						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

12 : 00 : 00 AM

Clear OK Cancel

After you select the desired date and time in the Calendar feature, the date and time will appear in the field from which you accessed the Calendar feature. The default format in which the date and time values are displayed is:

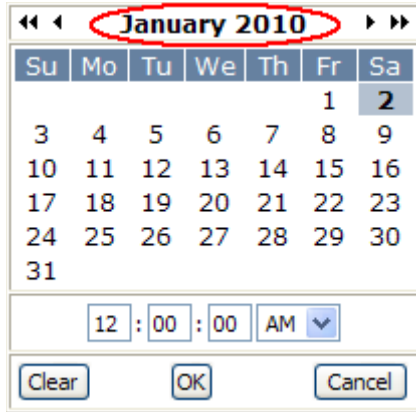
M/DD/YYYY H:MM:SS PM

For example, 8/18/2010 1:17:34 PM.

If, however, you have specific language selected in the Culture field of your Meridium APM Security User record, the date format associated with that locale will be used. For example, if your Meridium APM Culture setting is *Spanish*, the date and time may be displayed as: 2010/08/18 1:17:34 PM.

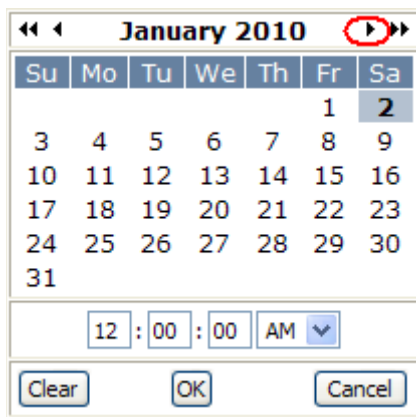
The Calendar feature contains the following items:

- **Current month and year:** A label that appears at the top of the Calendar feature and displays either the current month and year or the month and year that exists in the date field.



When you access the Calendar feature:

- If the date field is empty, the current month and year will be displayed.
- If the date field already contains a value, that month and year will be displayed.
- **Next Month:** Appears as a ► icon, which allows you to view the next month in the year that is currently displayed.



- **Previous Month:** Appears as a ◀ icon, which allows you to view the previous month in the year that is currently displayed.

Calendar interface for January 2010. The title bar shows navigation icons: a double left arrow, a left arrow, the text "January 2010", a right arrow, and a double right arrow. The double right arrow icon is circled in red. Below the title bar is a table with columns for days of the week (Su, Mo, Tu, We, Th, Fr, Sa) and rows for dates (1-31). The date 2 is selected. Below the calendar is a time selection area with fields for hour (12), minute (00), second (00), and a dropdown menu set to AM. At the bottom are three buttons: Clear, OK, and Cancel.

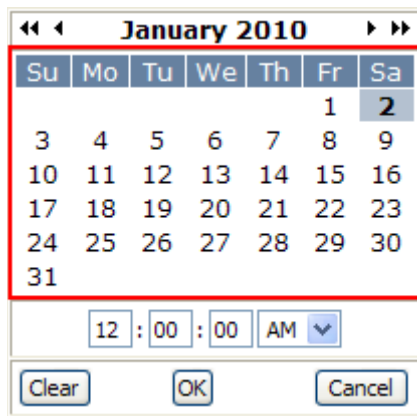
- **Next Year:** Appears as a **»»** icon, which allows you to view the next year that follows the year that is currently displayed.

Calendar interface for January 2010. The title bar shows navigation icons: a double left arrow, a left arrow, the text "January 2010", a right arrow, and a double right arrow. The double left arrow icon is circled in red. Below the title bar is a table with columns for days of the week (Su, Mo, Tu, We, Th, Fr, Sa) and rows for dates (1-31). The date 2 is selected. Below the calendar is a time selection area with fields for hour (12), minute (00), second (00), and a dropdown menu set to AM. At the bottom are three buttons: Clear, OK, and Cancel.

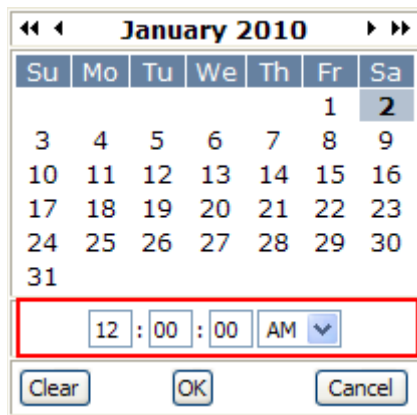
- **Previous Year:** Appears as a **««** icon, which allows you to view the previous year that comes before the year that is currently displayed.

Calendar interface for January 2010. The title bar shows navigation icons: a double left arrow, a left arrow, the text "January 2010", a right arrow, and a double right arrow. The double left arrow icon is circled in red. Below the title bar is a table with columns for days of the week (Su, Mo, Tu, We, Th, Fr, Sa) and rows for dates (1-31). The date 2 is selected. Below the calendar is a time selection area with fields for hour (12), minute (00), second (00), and a dropdown menu set to AM. At the bottom are three buttons: Clear, OK, and Cancel.

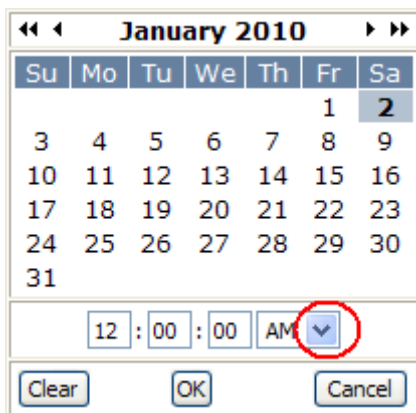
- **Calendar:** Lets you select the desired day for the currently displayed month and year.



- **Time text boxes:** Lets you select the desired time and specify A.M. or P.M. The default values in the text boxes are 12:00:00 AM.



You can modify these values by typing the desired values in the text boxes. You can modify the *A.M.* or *P.M.* value by selecting it from the list.



- **Clear button:** Clears the selected date and time from the Calendar feature and then closes the Calendar feature.
- **OK button:** Closes the Calendar feature and displays the selected date and time in the field from which you accessed the Calendar feature.
- **Cancel button:** Closes the Calendar feature and discards your selection.

Selecting a Date and Time Using the Calendar Feature

You can use the Calendar feature to select the desired date and time and display those values in the field from which you accessed the Calendar feature. Alternatively, you can type the desired date and time in a date field.

To select a date and time using the Calendar feature:

1. Using the options on the Calendar feature, select the desired, month, year, and day.
2. Below the calendar, in the time text boxes, type the desired hour, minute, and second values.
3. In the *A.M./P.M.* list, select the desired value.
4. Click **OK**.

The Calendar feature closes, and the date and time that you selected appear in the field.

Creating New Records

About Creating New Records in the Record Manager

The Record Manager offers two primary ways of creating new records. In the Record Manager, you can:

- Create a new record without linking it to an existing record.
- Create a new record and link it to an existing record.

Additionally, whenever you save a new or existing record, you have the option of saving your changes and immediately creating a new record in the same family.


The instructions in this section of the documentation provide details on creating records via the Record Manager. You may also be able to create records via links on Home Pages or **Associated Pages** menus.

Creating a New Record Without Linking it to Another Record

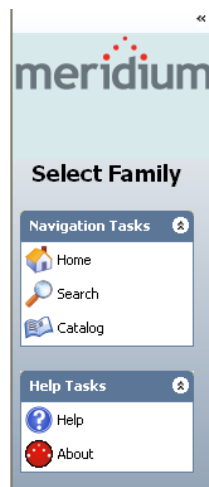
These instructions provide details on creating a new record in the Record Manager. When you create a record in this way, it will not be linked to any other records.

Note: While these instructions provide details for accessing the **Select Family** page via the Record Manager, you can also access the **Select Family** page via a link on the **Home Page** that has been configured to open this page directly.

To create a new record:


1. In the Record Manager workspace, click the  icon.


The **Select Family** page appears.



2. In the **Select Family** list, select the family in which to create the new record.
3. Click **OK**.

The **Record Manager** page appears, displaying a blank datasheet for the selected family.

4. On the datasheet, complete the desired information.
5. Click the Save  icon.

Note: To save the current record and create a new record in one step, you can click the  icon. The record that you are currently viewing will be saved, and an empty datasheet will be displayed, where you can create a new record in the same family.


Creating a New Record and Linking it to an Existing Record

In the Record Manager, you can create a new record and link it to the root record. The following instructions provide details on performing this task.

To create a new record in the record hierarchy and link it the root record:

1. Open the record that you want to use as the root record.
2. In the record hierarchy, right-click the family that you want to use for creating the new record.
3. On the shortcut menu, click **Create a new record and link to root entity**.

A blank record appears in the Record Manager workspace, and a child record **<empty>** appears in the record hierarchy under the family that you selected.

4. On the datasheet, complete the desired information.
5. Click the Save  icon.

The record is saved to the database. In the record hierarchy, the name of the record is updated with the Record ID of the new record.

Viewing a Different Datasheet

If multiple standard datasheets exist for a family, they will appear in the **Datasheet** list. If desired, you can view a different datasheet other than the one that is currently displayed.

To view a datasheet other than the one that is currently displayed:

1. In the Record Manager workspace, above the datasheet area, expand the **Datasheet** list.

The contains all the standard datasheets for the selected family.


2. In the list, select the datasheet that you want to view.

The Record Manager workspace refreshes and displays the selected datasheet.


Modifying Records

In the Record Manager, you can open an existing record and enter new data into empty fields and delete or modify existing data.

To modify records in the Record Manager:

1. Open the record that you want to modify.
2. On the datasheet, click inside the datasheet field that you want to modify.
3. Type or select the desired information.
4. After you have modified all of the desired fields, click the  icon.

Your changes are saved to the database.

Note: To save the current record and create a new record in one step, you can click the  icon. The record that you are currently viewing will be saved, and an empty datasheet will be displayed, where you can create a new record for the family that you are currently viewing.

Deleting Records

To delete a record from the database via the Record Manager page:

- In the Record Manager workspace, click the Delete icon. 

The page refreshes, and the record is deleted from the database.

Managing Reference Documents

Introduction to Reference Documents

Reference documents allow you to associate files or websites with a record in the Meridium APM database. For example, you might take pictures of a piece of equipment and save them on your local machine or company network. Then, when you create an Equipment record representing that piece of equipment in the Meridium APM Web Framework, you can link those images as reference documents to the Equipment record so that when other users open the Equipment record, they will be able to view the images.

Each time you associate a reference document file with a record, a Reference Document record will be created and linked to that record. You can link Reference Document records to any record belonging to a family for which the Has Reference Documents relationship has been defined via the Configuration Manager. The Meridium APM system supports two different types of reference documents:

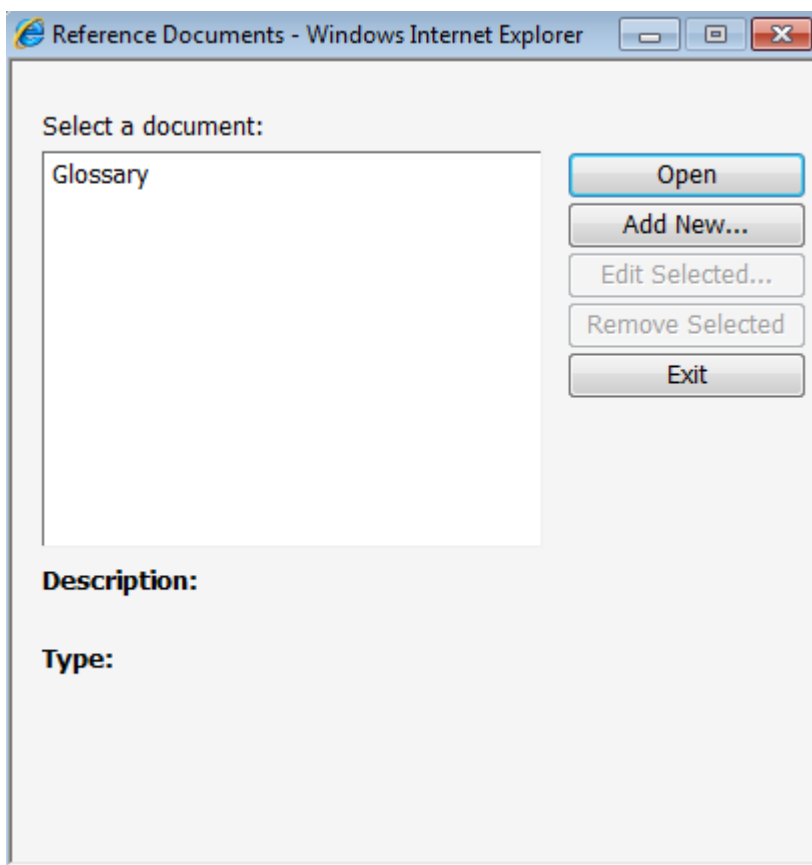
- **Internal Reference Documents:** Reference document files that are stored in the Meridium APM database.
- **External Reference Documents:** Reference document files and websites that reside outside of the Meridium APM database and are referenced from a Reference Document record. External reference documents can be accessed only by users who have permission to access the location in

which they are stored. For example, only you will be able to view an external reference document that is stored in a location that only *you* can access, such as your local drive. Other users would be able to view an external reference document that is stored in a public location, such as a network drive.

Reference document functionality is available in the Record Manager on the **Reference Documents** window, from which you can create, view, modify, and delete reference documents. A similar feature is available in the Meridium APM Framework.

About the Reference Documents Window

The **Reference Documents** window serves as the primary user interface for managing reference documents.



You can access the **Reference Documents** window from the Record Manager at the top of the datasheet area if the Has Reference Documents relationship definition has been defined for the family of the record that you are currently

viewing. You can click the **Documents** link on the **Record Manager Tasks** menu to access the **Reference Documents** window.

The **Reference Documents** window provides various options that allow you to:

- View the actual reference document file that is currently associated with the current record (e.g., if the reference document file is a Word document, you can view the Word document in Microsoft Word).
- Create a new Reference Document record to link to the current record.
- Edit a Reference Document record that is linked to the current record.
- Remove the link between a Reference Document record and the current record.

When you highlight a reference document in the list of documents, the description and file type appear in the area below the list.


Viewing the File Associated with a Reference Document

If you want to open the actual file defined in a Reference Document record, you have several options:

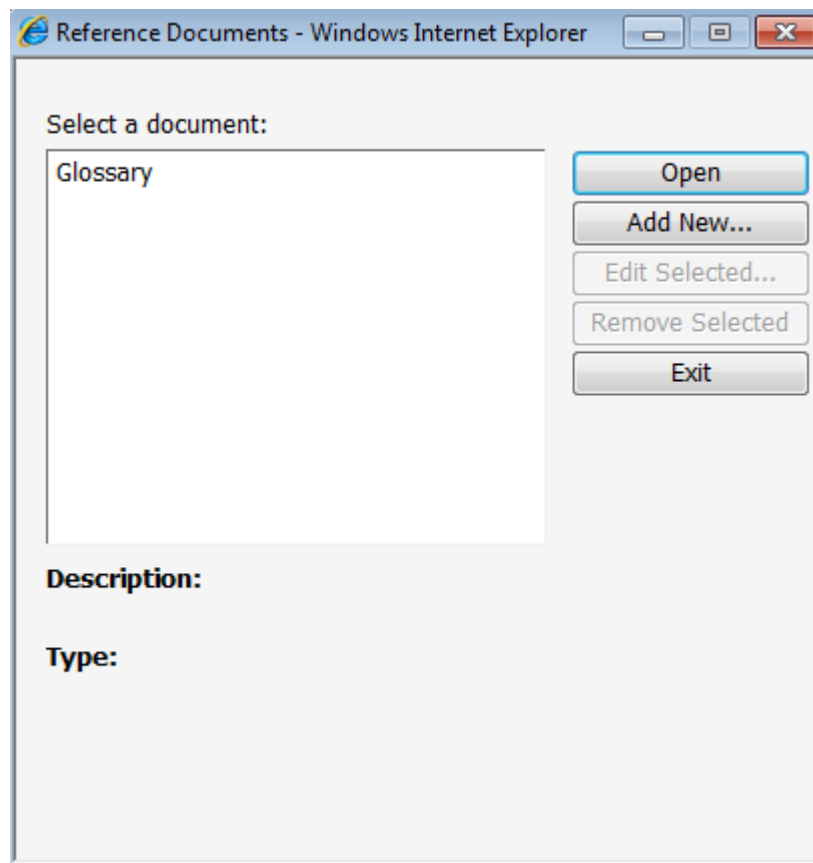
- You can access the Reference Document record in the Record Manager and open the file from there.
- You can access the **Reference Documents** window and open the file from there.

The following instructions explain how to view the reference document from the **Reference Documents** window.

To view the file defined by a Reference Document record:

1. In the Meridium APM Web Framework, open the record that is linked to the Reference Document record whose file you want to open.
2. On the **Record Manager Tasks** menu, click the  **Documents** link.

The Reference Documents window appears.



3. In the **Select a document** list, highlight the Reference Document record whose file you want to open.

The following information appears automatically.

- **Description:** The description of the file that was entered when the Reference Document record was created.
- **Type:** The file type that was specified in the file path when the Reference Document record was created.

4. Click the **Open** button.

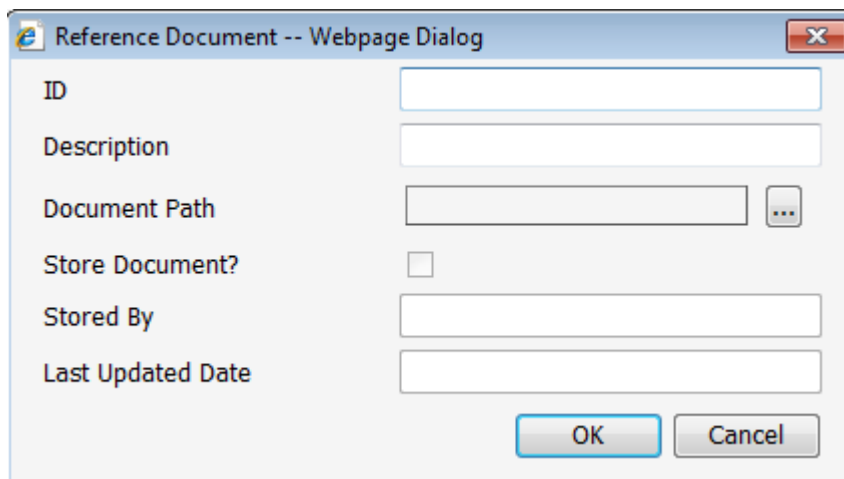
The file specified in the Reference Document record opens in the appropriate application. For example, if the Reference Document defines a Microsoft Word file, the document would open in Microsoft Word.

Creating New Reference Document Records

To create a new Reference Document record and link it to the current record:


1. In the Meridium APM Web Framework, on the **Reference Documents** window, click the **Add New** button.

The **Reference Document** window appears, displaying a new Reference Document record.

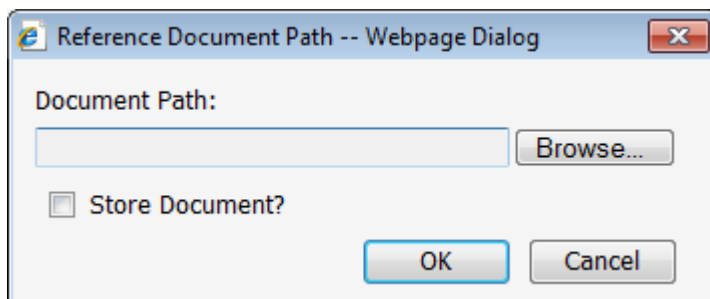


The screenshot shows a dialog box titled "Reference Document -- Webpage Dialog". It has a standard Windows-style title bar with a close button. The dialog contains the following fields and controls:

- ID**: A text input field.
- Description**: A text input field.
- Document Path**: A text input field followed by a browse button (three dots).
- Store Document?**: A checkbox.
- Stored By**: A text input field.
- Last Updated Date**: A text input field.
- OK** and **Cancel**: Two buttons at the bottom right.

2. In the **ID** text box, type a name for the file.
3. In the **Description** text box, type a description of the file.
4. In the **Document Path** text box, click the  button.

The **Reference Document Path** dialog box appears.



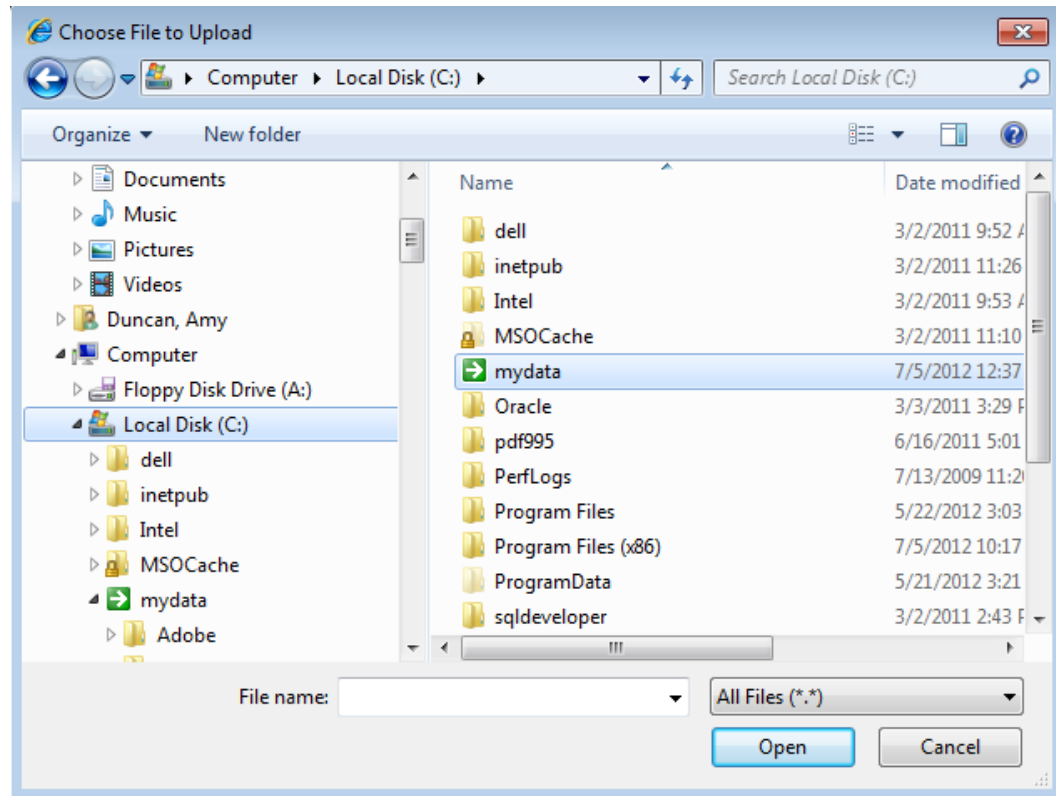
The screenshot shows a dialog box titled "Reference Document Path -- Webpage Dialog". It has a standard Windows-style title bar with a close button. The dialog contains the following fields and controls:

- Document Path:** A label above a text input field.
- Browse...:** A button next to the text input field.
- Store Document?**: A checkbox.
- OK** and **Cancel**: Two buttons at the bottom.

In the **Document Path** text box, you can type the path to the reference document, or you can click the **Browse** button to browse for the document. These instructions assume that you want to browse for the document.

5. Click the **Browse** button.

The **Choose File to Upload** window appears.



6. Navigate to the location where the desired file resides, select the file, and click the **Open** button.

The **Document Path** text box is populated with the path of the selected file.

- If you are creating an internal reference document, this is the location from which the file will be uploaded to be stored in the Meridium APM database.
- If you are creating an external reference document, this is the location in which the document will be referenced. Only users who have

permission to access this location will be able to view this reference document.

7. If you want to create an internal reference document, select the **Store Document?** check box. If you do not select this check box, an external reference document will be created.

Note: If you are creating an internal reference document, when you save the Reference Document record, the Stored By and Last Updated Date fields will be populated automatically.

8. Click OK.

The **Document Path** field is populated with a hyperlink to the document path.

9. Click OK.

The new Reference Document record is created. If you created an internal reference document, the file that you specified will be uploaded to the database when the record is created. Depending upon the size of the file, the upload process may take several seconds. If so, a progress bar will appear to indicate the progress of the upload process. When the Reference Document record has been created and the file has been uploaded (if needed), the **Reference Document** window closes, revealing the **Reference Documents** window. The name of the new Reference Document record appears in the list of reference documents

Modifying Existing Reference Document Records

Note: The following instructions provide details on editing the properties of a Reference Document record (e.g., path, location, description) via the **Reference Documents** window. Note that you can also open the Reference Document record in Record Manager and modify it from there. To modify the file itself, however, you must access it from its source location.

To edit a Reference Document record from the Reference Documents window:

1. In the Meridium APM Web Framework, on the **Reference Documents** window, highlight the Reference Document record that you want to edit, and click the **Edit Selected** button.

The **Reference Document** window appears.

2. Modify the path, location, description, and additional properties as desired, and click **OK**.

Your changes are saved.

Unlinking Reference Document Records from a Record

Note: The following instructions provide details on removing the link between a Reference Document record and another record. Note that when unlink a Reference Document record from its root record, neither the Reference Document record nor the file itself are deleted.

To unlink a Reference Document record from another record:

1. In the Meridium APM Web Framework, on the **Reference Documents** window, highlight the document that you want to unlink, and click the **Remove Selected** button.

A confirmation message appears, asking if you really want to remove the link.

2. Click the **Yes** button.

The link between the Reference Document record and the associated record is removed.

Catalog

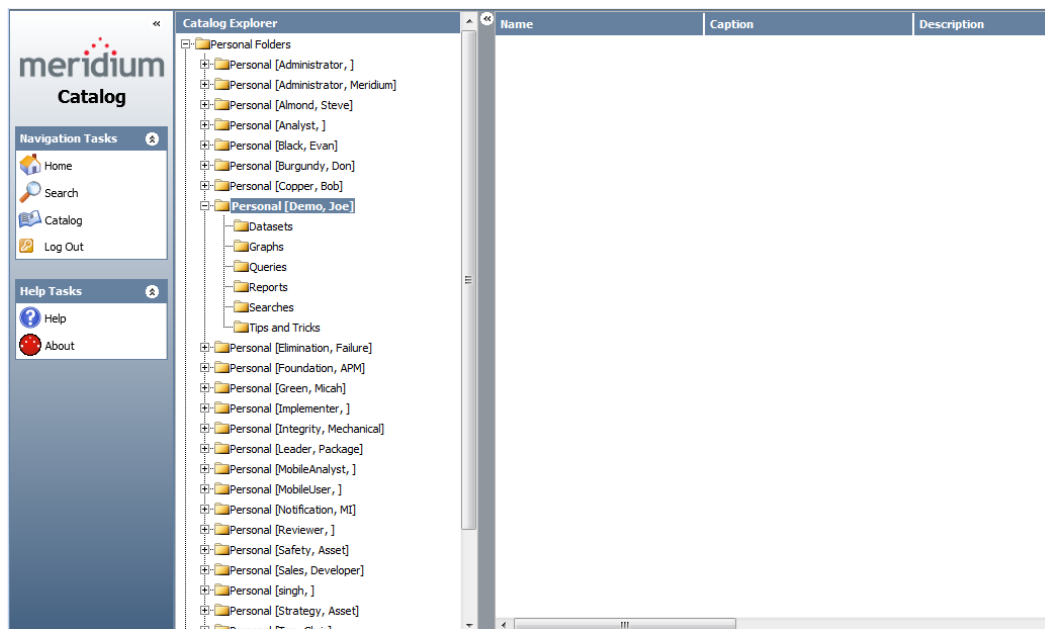
Accessing the Catalog

The **Catalog** is accessible via the **Navigation Tasks** menu on any page in the Meridium APM Web Framework.

To access the **Catalog** in the Meridium APM Web Framework:

- On the **Navigation Tasks** menu, click the  **Catalog** link.

The **Catalog** page appears, and if this is the first time that you have accessed the **Catalog** page, your **Personal** folder is selected by default. Otherwise, the last folder that you were viewing is selected.

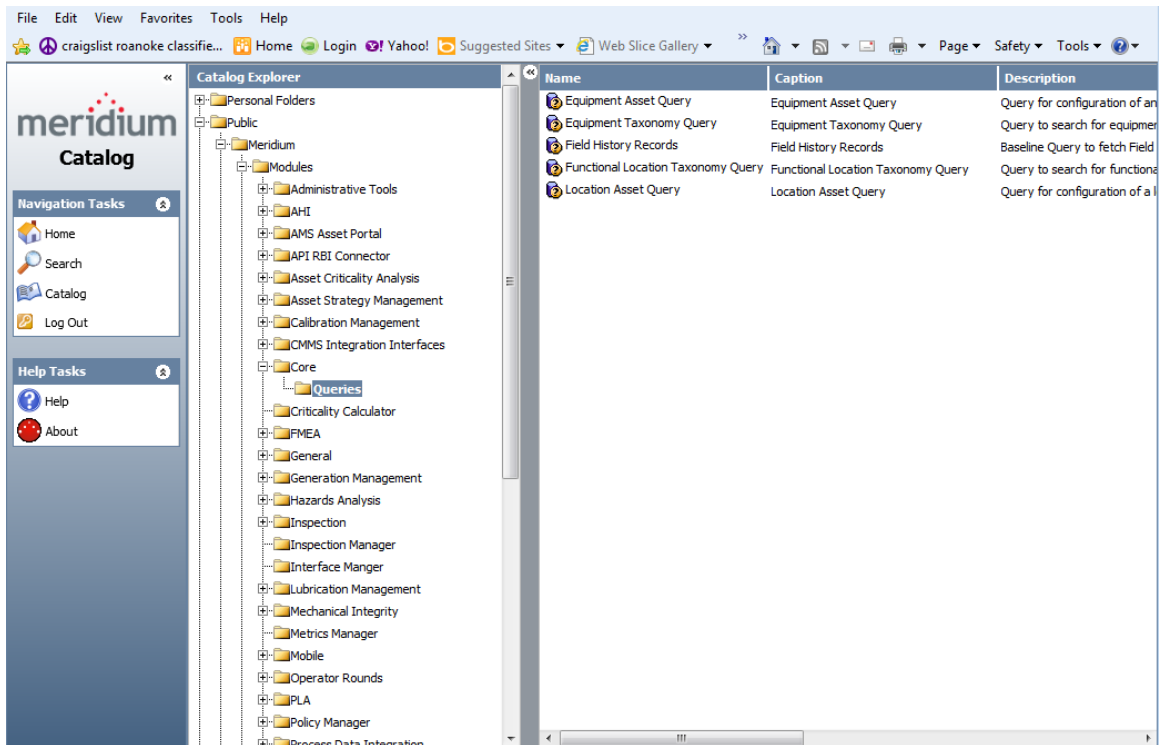


Aspects of the Catalog

Overview of the Catalog

The **Catalog** is divided into two panes:

- The left pane, which displays the **Catalog** hierarchy.
- The right pane, which displays the content of the folder that you selected in the **Catalog** hierarchy.



The Catalog page contains two task menus: **Navigation Tasks** and **Help Tasks**.

About the Catalog Hierarchy

When you first view the **Catalog** page, you will see the Catalog hierarchy displayed in the **Catalog Explorer** pane to the left. The Catalog hierarchy displays a hierarchy of folders that contain items. In this hierarchy, you will see at least your Personal folder, which is expanded by default. Additionally, you will have access to the folders that are associated with any Security Groups to which you belong.

- If you are logged in to the Meridium APM Web Framework as a Super User, a member of the MI Catalog Administrator Security Group, or a member of the MI Power User Role Security Group, you will see Personal folders belonging to other users.
- If you are logged in to the Meridium APM Web Framework as a Super User, a member of the MI Catalog Administrator Security Group, a member of the MI Power User Role Security Group, or a non-Super User who has been given explicit permissions to the Public folder, you will see the Public folder and its subfolders.

- If you are logged in to the Meridium APM Web Framework as a Super User, a member of the MI Catalog Administrator Security Group, or a member of the MI Power User Role Security Group, you will see the Baseline folder and its subfolders.

You can expand and collapse the hierarchy by clicking the plus (+) and minus (-) signs that appear to the left of the folder names. A plus sign indicates that a folder is not expanded and contains subfolders. A minus sign indicates that a folder is fully expanded. The absence of a plus or minus sign indicates that a folder does not contain any subfolders. When you select a folder, the items in that folder appear in the right pane of the **Catalog** page.

If desired, you can collapse or change the width of the **Catalog Explorer** pane to increase amount of workspace in the right pane.

Catalog Items

Supported Item Types



The right pane of the **Catalog** page displays the items that appear in the folder that is selected in the Catalog hierarchy. Catalog items are objects that are stored in the Meridium APM database. The Meridium APM Web Framework supports the following items:

- Select queries.
- Crosstab queries.
- SQL Server Reporting Services reports.

Note: Additional Catalog item types are supported in the Meridium APM Framework. Any item that exists in the Meridium APM Catalog but is not supported in the Meridium APM Web Framework will not be displayed when you select that folder in the Meridium APM Web Framework Catalog.

Item Properties

For each item, the following columns of information appear in the right pane on the **Catalog** page. These properties can be managed and modified via the Meridium APM Framework.

- **Name:** The name of the item.
- **Caption:** The label that is used to identify the Catalog item in most places throughout the Meridium APM system. Catalog item captions can be translated. If a translation exists for the Culture associated with your Security User account, you will see that translation when you view the item in the Catalog.
- **Description:** A brief description of the item.
- **Type:** The type of item, which is also identified by an icon that appears to the left of the name. The following types of items are available in the Meridium APM Web Framework Catalog:
 -  **Query:** An expression that pulls data from the database and displays the results on the screen.
 -  **Report:** An object that runs an existing query or opens a dataset and formats the output based on a predefined template.
- **Owner:** The name of the user who first saved the item.
- **Last Update By:** The name of the user who last modified the item.
- **Last Update Date:** The date the item was last modified.
- **Created By:** The name of the user who created the item.
- **Created Date:** The date the item was created.

Opening Catalog Items

About Opening Catalog Items

You can navigate through the Catalog and open any item that is displayed in the Catalog folders.

In addition to opening items from the Catalog, access may be provided to Catalog items through links on the **Home Page** or **Associated Pages** menus. The

instructions in this area of the documentation provide details on opening queries and reports directly from the Catalog.

Opening Queries from the Catalog

To open a query from the Catalog:

1. In the Catalog hierarchy, navigate to the folder containing the query that you want to open.

All the supported queries and SQL Server Reporting Services reports that are stored in the folder that you selected appear in the right pane on the **Catalog** page.

2. In the right pane, click the name of the query that you want to open.

The query that you selected appears on the **Query** page.

Opening Reports from the Catalog

To open a report from the Catalog:

1. In the Catalog hierarchy, navigate to the folder containing the report that you want to view.

All the supported queries and SQL Server Reporting Services reports that are stored in the folder that you selected appear in the right pane on the **Catalog** page.

2. In the right pane, click the name of the report that you want to open.

The report that you selected appears on the **Report** page.

Queries

Running Queries

Queries are expressions consisting of parameters and operators that pull information out of the database to display it on the screen. After a query has been created in the Meridium APM Framework application and saved to a folder in the Catalog, the query can be accessed via folders in the Meridium APM Web Framework Catalog hierarchy on the **Catalog** page.

Note: You may also be able to open queries from links on the Home Page and **Associated Pages** menus that have been configured to open specific queries.

Only the Select and Crosstab query types are supported in the Meridium APM Web Framework. When you run a query, the query results are displayed on the Query page.

Note: When running a query in the Meridium APM Web Framework, you will not be able to type a value in a prompt that displays a list of values, even if the prompt is configured to accept manual entries (i.e., the prompt is configured as non-exclusive).

Overview of the Query Page

The Query page displays the results of a query that has been run in the Meridium APM Web Framework.

Asset ID	Asset Status
HX-973	Active
HX-1529	Active
HX-1797	Active
HX-1799	Active
HX-1803	Active
HX-2027	Active
HX-2145	Active
HX-3044	Active
HX-2140	Active
HX-2115	Active
HX-2939D	Active
HX-2939F	Active
HX-2946	Active
HX-1052	Active
HX-2248A	Active
HX-1813	Active
HX-2114	Active
HX-2283	Active
HX-2287	Active
HX-2117	Active
HX-2521	Active
HX-2030	Active
HX-2031	Active
HX-1816	Active

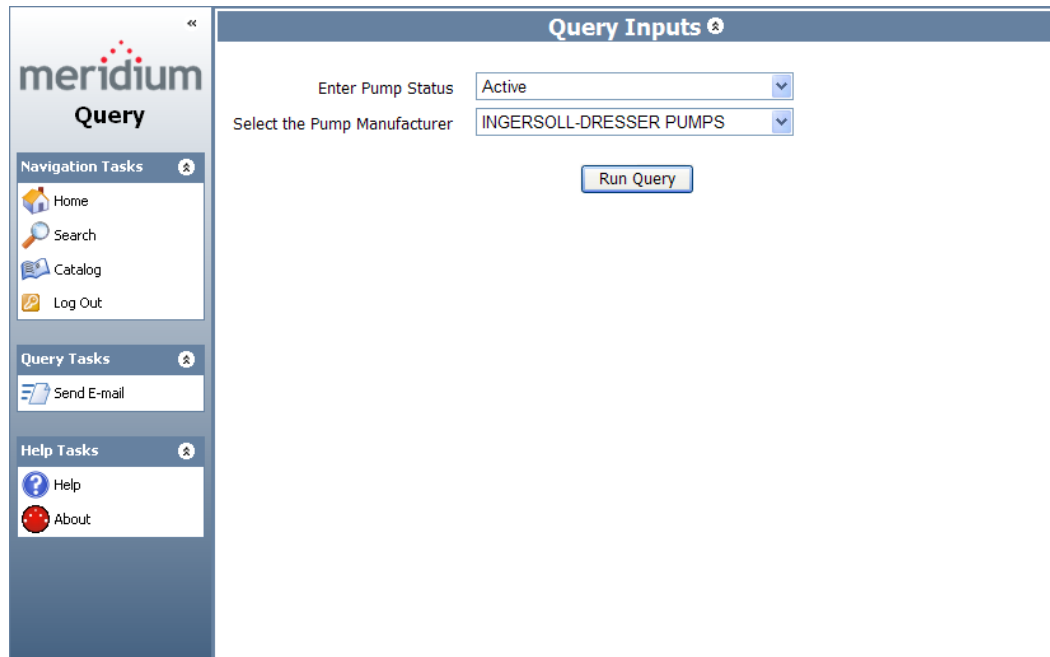
Page of 3 108 records found << Previous 1 2 3 Next >> Page Size:

The following options appear at the bottom of the page and allow you to navigate the query results.

Page of 3 108 records found << Previous 1 2 3 Next >> Page Size:

In some cases, queries can be configured to prompt users for information before returning any results.

- If you open a query that has been configured to prompt users for information, you will see the **Query Inputs** section at the top of the **Query** page, displaying a prompt where you can type or select the parameter values for the query. You can then click the **Run Query** button, and the query results will appear below the **Query Inputs** prompt.



Note: To hide the prompt, in the **Query Inputs** section, click the  icon.

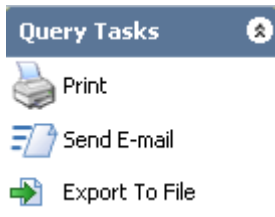
- If you open a query that has not been configured to prompt users for query parameter values, the **Query Inputs** section will not appear on the Query page.

On the Query page you can:


- Sort the results.
- Print the results.
- Send a link to someone via email.
- Export the results.
- Change the page size of the results.


The Query page contains the following task menus: **Navigation Tasks**, **Query Tasks**, and **Help Tasks**.


Query Tasks Menu



The Query Tasks menu contains the following links:

 **Print:** Displays the **Print Results** window, where you can view the results in print format and then print the query results.

 **Send E-mail:** Displays a blank email message containing a link to the page that you are currently viewing.


 **Export To File:** Displays the **Export** dialog box where you can select the type of file that you want to save, and then export the query.



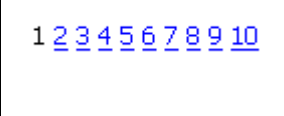

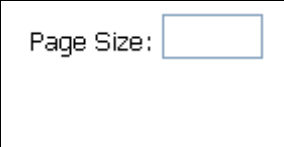
Working with Query Results

Navigating Query Results

The query results are displayed according to the formatting that was applied to the query when it was saved to the Catalog in the Meridium APM Framework application.

The following information appears at the bottom of the results to help you navigate your query results.

Icon	Name	Description
	Page text box	Displays the number of pages in the results set and the current page number that you are viewing in the format Page X of N , where X is the current page and N is the total number of pages. If desired, you can change the page number manually by typing the desired page number in the text box.

Icon	Name	Description
	Records found	Displays the number of records that the query contains in the format <#> records found. Note that when you open the query, the number of records found may not be equal to the number of records displayed per page.
	Previous	Displays the previous page in the results set.
	Page number hyperlinks	Displays a specific page in the search results.
	Next	Displays the next page in the results set.
	Page Size dialog box	Displays the current number of records that are displayed per page. By default, the query results will display 50 records per page. If desired, you can change the page size.

About Links in Query Results

If a query has been configured to include a link, you will see the hyperlink in the results on the **Query** page.

To open a link in a query:

- Open the desired query, and then click the hyperlink.
 - If the URL behind the link is configured to open a feature that is supported by the Meridium APM Web Framework, that feature will appear in the Meridium APM Web Framework.
 - If the URL behind the link is configured to open a feature that is not supported by the Meridium APM Web Framework and the Meridium APM Framework application is installed on the computer that you are using to access the Meridium APM Web Framework, that feature will appear in the Meridium APM Framework application.
 - If the URL behind the link is configured to open a feature that is not supported by the Meridium APM Web Framework and the Meridium APM Framework application is not installed on the

computer that you are using to access the Meridium APM Web Framework, a message will appear, indicating that the feature specified in the URL cannot be opened.

Exporting Queries

To export a query to a file on your computer:

1. On the Query Tasks menu, click the  Export To File link.

The Export dialog box appears.

2. In the Data source list, select the desired format. You can choose from:
 - MS Excel
 - Text (Comma separated values)
 - XML

3. Click the Export button.

The File Download dialog box appears.

4. Click the Save button.

The Save As dialog box appears, asking if you want to open or save the query.

Note: You can click the Open button to view the query in the selected format before you save it. These instructions assume that you want to save the query.

5. Navigate to the folder where you want to save the query, and then click the Save button.

The Download complete dialog box appears, and the query is saved to the specified location.

6. If you want to view the query, on the **Download complete** dialog box, click the **Open** button; otherwise, click the **Close** button.

The **Export** dialog box remains on the **Query** page, where you can choose to export the query to another file.

-or-

Click the **Close** button to return to the **Query** page.

Changing the Page Size in Query Results

By default, the query results will display 50 records per page. If desired, you can change the page size in the query results to increase the number of records that are displayed on each page. The **Query** page can display up to 1,000 records per page.

Note: You can also view records on successive or preceding pages by clicking the **Next** or **Previous** links.

To change the page size in query results:

1. At the bottom of the **Query** page, locate the **Page Size** text box.
2. Highlight the current value, and then press the **Delete** key.
3. Type the number of records that you want to view per page, and then press **Enter**.

The page is refreshed and displays the specified number of records.

Note: The greater the number of query results, the longer it will take for the results to appear on a single page. The **Query** page can display up to 1,000 records per page. If you enter a number greater than 1,000, a message will appear indicating that you must use a number between 1 and 1,000, and the page size will be reset to the last valid value. For example, if you change the page size from 50 to 75 and then change the page size from 75 to 1,003, the page size will be reset to 75.

Bulk Data Form

Overview of the Bulk Data Form

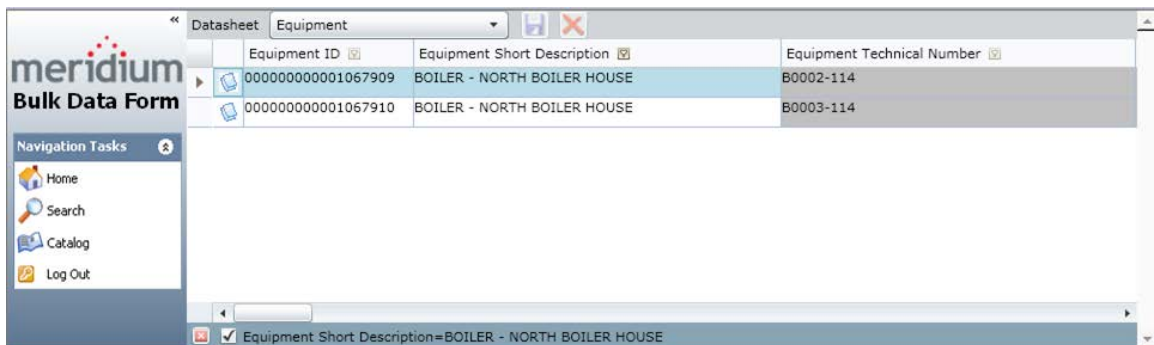
About the Bulk Data Form

The *Bulk Data Form* lets you view multiple records at a time in a grid-like format. Unlike the Record Manager, where you can view one record at a time, the Bulk Data Form lets you view the details of multiple records at a time. This can be useful if you want to compare data for multiple entities without having to switch between records and remember the information in each record. The Bulk Data Form supports the same field and rule types that are supported by the Record Manager.

At least one non-custom form datasheet must exist for a family before that family can be opened in the Bulk Data Form. If a master/detail datasheet is specified as the default datasheet for a family and you try to open that family in the Bulk Data Form, the Bulk Data Form will display the family using the first non-custom form that appears after the default datasheet in that family's list of datasheets.

Using the Bulk Data Form, you can filter the records that appear in the results, create new records, modify existing records, or delete records from the database. Like in the Record Manager, to create, modify, or delete records in the Bulk Data Form, you must have the necessary create, update, and delete privileges on that family.

The following image shows an example of the **Bulk Data Form** page.



Accessing the Bulk Data Form

You can access the Bulk Data Form via a link in one of the following items:

- Associated Pages menu.
- Query results.

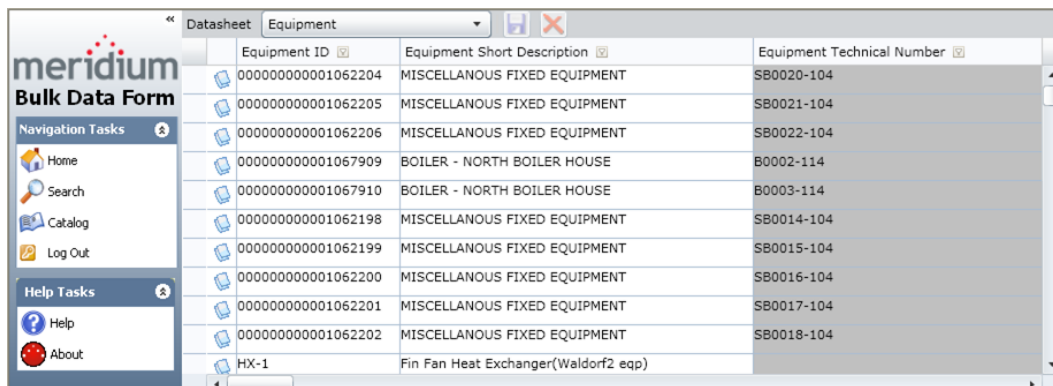
An administrative user is responsible for configuring these links.

To view records in the Bulk Data Form, you must have at least View privileges on the family whose records you want to view.

To access the Bulk Data Form:

- On the Associated Pages menu or in the query results, click the link that is configured to display the records in the Bulk Data Form.

The Bulk Data Form page appears.



The screenshot shows the Meridium Bulk Data Form interface. On the left, there is a navigation sidebar with 'meridium Bulk Data Form' and sections for 'Navigation Tasks' (Home, Search, Catalog, Log Out) and 'Help Tasks' (Help, About). The main area displays a table titled 'Equipment' with the following columns: Equipment ID, Equipment Short Description, and Equipment Technical Number. The table contains 13 rows of data.


Equipment ID	Equipment Short Description	Equipment Technical Number
00000000001062204	MISCELLANEOUS FIXED EQUIPMENT	SB0020-104
00000000001062205	MISCELLANEOUS FIXED EQUIPMENT	SB0021-104
00000000001062206	MISCELLANEOUS FIXED EQUIPMENT	SB0022-104
00000000001067909	BOILER - NORTH BOILER HOUSE	B0002-114
00000000001067910	BOILER - NORTH BOILER HOUSE	B0003-114
00000000001062198	MISCELLANEOUS FIXED EQUIPMENT	SB0014-104
00000000001062199	MISCELLANEOUS FIXED EQUIPMENT	SB0015-104
00000000001062200	MISCELLANEOUS FIXED EQUIPMENT	SB0016-104
00000000001062201	MISCELLANEOUS FIXED EQUIPMENT	SB0017-104
00000000001062202	MISCELLANEOUS FIXED EQUIPMENT	SB0018-104
HX-1	Fin Fan Heat Exchanger(Waldorf2 eqp)	

Aspects of the Bulk Data Form Page

Equipment ID	Equipment Short Description	Equipment Technical Number
000000000001062204	MISCELLANOUS FIXED EQUIPMENT	SB0020-104
000000000001062205	MISCELLANOUS FIXED EQUIPMENT	SB0021-104
000000000001062206	MISCELLANOUS FIXED EQUIPMENT	SB0022-104
000000000001067909	BOILER - NORTH BOILER HOUSE	B0002-114
000000000001067910	BOILER - NORTH BOILER HOUSE	B0003-114
000000000001062198	MISCELLANOUS FIXED EQUIPMENT	SB0014-104
000000000001062199	MISCELLANOUS FIXED EQUIPMENT	SB0015-104
000000000001062200	MISCELLANOUS FIXED EQUIPMENT	SB0016-104
000000000001062201	MISCELLANOUS FIXED EQUIPMENT	SB0017-104
000000000001062202	MISCELLANOUS FIXED EQUIPMENT	SB0018-104
HX-1	Fin Fan Heat Exchanger(Waldorf2 eqp)	

The Bulk Data Form page contains the following items:

- Bulk Data Form grid:** Contains a list of records that are specified in the URL that you used to access the **Bulk Data Form** page. Each row in the grid represents one record, and each column in the grid represents one field in that family. As in the Record Manager, if a field in a record is disabled, it will be disabled in the Bulk Data Form as shown in the **Equipment Technical Number** column in the preceding image.

In each column header in the grid, the  icon appears, which displays a menu with options that you can use to filter the records by the values in that column.

Equality

- 000000000001062186
- 000000000001061427
- 000000000001061837
- Cal-1010
- Cal-1011

Greater or Equal
Value:

Less or Equal
Value:

Additionally, via the column headers in the grid, you can:

- Change the sort order that is applied to values in a column.
- Change the width of the columns.

At the top of the grid, the **Datasheet** toolbar appears and contains the following items:

- **Datasheet list:** Contains the list of datasheets that are available for the selected family. If desired, you can view a datasheet other than the one that is currently displayed by selecting the desired datasheet in the list.



: Saves any changes that you have made to the records in the grid.




: Deletes the record in the currently selected row.

Below the grid, a scroll bar appears that you can use to view subsequent columns in the grid.

- **Task Menu Pane:** Contains the **Navigation Tasks** menu and the **Help Tasks** menu.

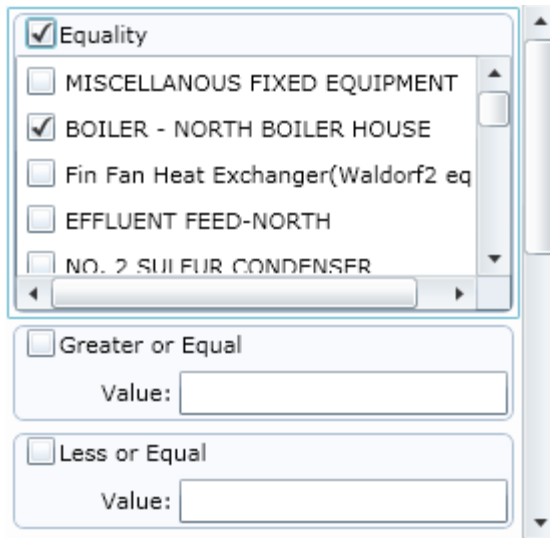
About Filtering in the Bulk Data Form

The grid on the **Bulk Data Form** pages contains options that you can use to filter the records that appear in the grid by the values that are stored in those records. Each column in the grid represents one field in the associated record. In each column header, the  icon appears and displays a menu with the following options, which you can use to filter the records by the values in *that* column:

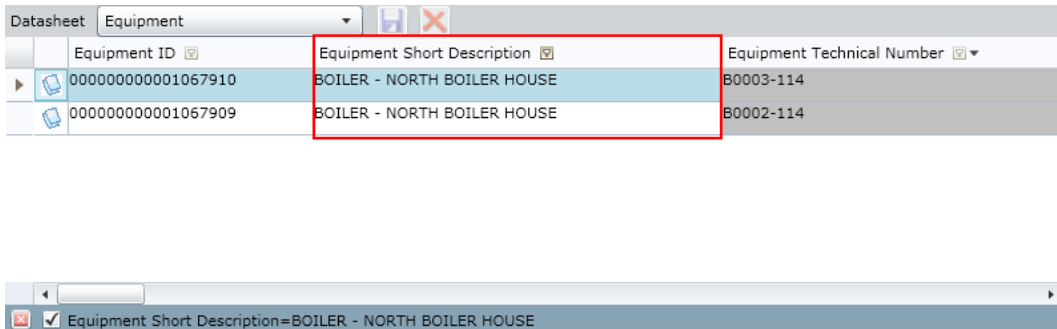
- **Equality:** Contains the **Equality** check box and the list of field values that appear in the column from which you accessed the filter menu. The **Equality** check box lets you specify that you want to see only the records whose field contains the value that is equal to the one that you select in the list of values. For an example of using the **Equality** option, [click here](#).

Assume that you want to see only the records whose Description field contains the value *BOILER - NORTH BOILER HOUSE*. In this case, in the

Description column, on the filter menu, in the **Equality** section, you would specify the criteria as shown in the following image:



...and the grid would contain only records whose description contained a value that is exactly *BOILER - NORTH BOILER HOUSE* similar to the following image:



- Greater or Equal:** Contains the **Greater or Equal** check box and the **Value** text box. The **Greater or Equal** check box lets you specify that you want to see only the records whose field contains a value that is greater than or equal to the value that you type in the **Value** text box. The **Value** text box lets you type the value by which the records should be filtered. For an example of using the **Greater or Equal** option, click [here](#).

Assume that you want to see only records whose Equipment Technical ID field contains a value that is greater than *MSC*. In this case, in the **Equipment Technical ID** column, in the **Greater or Equal** section on the

filter menu, you would specify the criteria as shown in the following image:

A screenshot of a filter menu. It features a checked checkbox labeled "Greater or Equal" and a text input field containing the value "MSC".

...and the grid would contain only records whose technical IDs begin with letters that appear *after* M in the alphabet. In this example, you would see records whose technical numbers begin with *PLC* or *RF* similar to the following image:

A screenshot of a "Dataseheet" titled "Equipment". The table below shows a list of equipment records. The "Equipment TechnicalID" column is highlighted with a red box. At the bottom of the interface, a filter is applied: "Equipment Technical Number >= MSC".

Equipment ID	Equipment Short Description	Equipment TechnicalID	SAP Category
000000000001057929	MISCELLANEOUS FIXED EQUIPMENT	PDC0003SV-097	F
000000000001058787	LOOP SYSTEMS	ZL0003-097	I
000000000001058807	LOOP SYSTEMS	ZL0032-097	I
000000000001062092	MISC INST(LAB,ANALYZERS,ETC)	PLC0038-104	M
000000000001062107	RELIEF VALVES	PSV0006-104	F
000000000001062115	VALVE - PRESSURE SAFETY	PSV0014-104	F
000000000001062170	ROTARY FEEDER NORTHWEST NORTH BOILER	RF0001-104	M
000000000001062171	ROTARY FEEDER NORTHEAST NORTH BOILER	RF0002-104	M
000000000001062172	ROTARY FEEDER SOUTHEAST NORTH BOILER	RF0003-104	M
000000000001062173	ROTARY FEEDER SOUTHWEST NORTH BOILER	RF0004-104	M
000000000001062185	MISCELLANEOUS FIXED EQUIPMENT	SB0001-104	M

- **Less or Equal:** Contains the **Less or Equal** check box and the **Value** text box. The **Less or Equal** check box lets you specify that you want to see only the records whose values are less than or equal to the value that you type in the **Value** text box. The **Value** text box lets you type the value by which the records should be filtered. For an example of using the **Less or Equal** option, click [here](#).

Assume that you want to see only records whose Equipment Technical ID field contains a value that is less than *MSC*. In this case, in the **Equipment Technical ID** column, in the **Less or Equal** section on the filter menu, you would specify the criteria as shown in the following image:

A screenshot of a filter menu. It features a checked checkbox labeled "Less or Equal" and a text input field containing the value "MSC".

...and the grid would contain only records whose technical IDs begin with letters that appear *before* M in the alphabet. In this case, you would see records whose technical numbers begin with *GBT* or *FL* as shown in the following image:

Equipment ID	Equipment Short Description	Equipment TechnicalID	SAP Category
000000000001000014	PUMP - CENTRIFUGAL	G0042-001	R
000000000001000016	MOTOR - ELECTRIC FOR 1001GM0042	GM0042-001	E
000000000001060839	BOILER - STEAM - NORTH BOILER GAS FIRED	B0001-104	F
000000000001060924	EXCHANGER - U-BEND	E0010-104	F
000000000001061125	FLOW INSTRUMENTS	FL0051-104	I
000000000001061286	STEAM TURBINE - 2116GBT0001	GBT0001-104	R
000000000001061357	DIVERTER VALVES - TOP NORTH BOILER, FRESH LIME	HCV0617-104	I
000000000001061427	LOOP SYSTEMS	HL0061-104	I
000000000001061837	MOTOR STARTERS - 5KV CLASS & >	MCS0001B-104	E
000000000001067909	BOILER - NORTH BOILER HOUSE	B0002-114	F
000000000001067910	BOILER - NORTH BOILER HOUSE	B0003-114	F

- Range Filter:** Contains the **Range Filter** check box and the **From** and **To** text boxes. The **Range Filter** check box lets you specify that you want to see only the records whose field contains a value that falls between (or include) the range that you define using the values that you type in the **From** and **To** text boxes. The **From** and **To** text boxes let you type the values by which the records should be filtered. For an example of using the **Range Filter** option, click here.

Assume that you want to see only the records whose SAP Category field contains a value between C and I. In this case, in the **SAP Category** column, in the **Range Filter** section on the filter menu, you would specify the criteria as shown in the following image:

...and the grid would contain only records whose SAP category is between the letters C and I in the alphabet. In this case, you would see records whose SAP category is *F* or *I* as shown in the following image:

Equipment ID	Equipment Short Description	Equipment Technical	SAP Category
000000000001067910	BOILER - NORTH BOILER HOUSE	B0003-114	F
000000000001062107	RELIEF VALVES	PSV0006-104	F
000000000001062115	VALVE - PRESSURE SAFETY	PSV0014-104	F
000000000001060839	BOILER - STEAM - NORTH BOILER GAB	B0001-104	F
000000000001060924	EXCHANGER - U-BEND	E0010-104	F
000000000001057929	MISCELLANOUS FIXED EQUIPMENT	PDC0003SV-097	F
000000000001061125	FLOW INSTRUMENTS	FL0051-104	I
000000000001061357	DIVERTER VALVES - TOP NORTH BOIL	HCV0617-104	I
000000000001058787	LOOP SYSTEMS	ZL0003-097	I
000000000001058807	LOOP SYSTEMS	ZL0032-097	I
000000000001061427	LOOP SYSTEMS	HL0061-104	I

between (C I)

- **Text Searching:** Contains the following options, which you can use to search for the desired records:
 - **Text Searching check box:** Lets you specify that you want to search for the records that contain the search criteria specified in the **Search Type** list and **Find** text box.
 - **Search Type list:** Lets you specify the degree to which you want to search for the value that you type in the **Find** text box. This list contains the following options:
 - **Starts With:** Specifies that you want to search for records whose field contains a value that *begins with* the value in the **Find** text box.
 - **Ends With:** Specifies that you want to search for records whose field contains a value that *ends with* the value in the **Find** text box.
 - **Contains:** Specifies that you want to search for records whose field contains a value that *includes* the value in the **Find** text box.
 - **Equals:** Specifies that you want to search for records whose field contains a value that *matches exactly* the value in the **Find** text box.

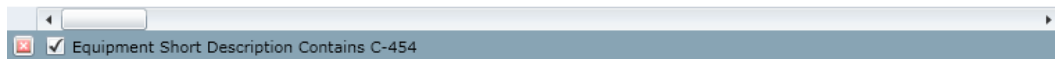
- **Find text box:** Lets you specify the value by which the records should be filtered.

For an example of using the **Text Searching** option, click here.

Assume that you want to see records whose Equipment Short Description field contains the value *C-454*. In this case, in the **Equipment Short Description** column, in the **Text Searching** section on the filter menu, you would specify the criteria as shown in the following image:

...and the grid would contain only records whose Equipment Short Description field contains the value *C-454*. In this case, the grid would look something like the following:

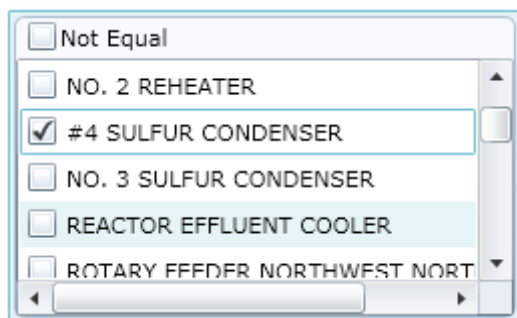
Equipment ID	Equipment Short Description	Equipment Technical	SAP Category	SAP Category
HXST 47	AIR AFTERCOOLER (C-454)			
HXST 153	AIR AFTERCOOLER (C-454)			
HXST 141	AIR AFTERCOOLER (C-454)			



- **Not Equal:** Contains the **Not Equal** check box and the list of field values that appear in the column from which you accessed the filter options menu. The **Not Equal** check box lets you specify that you want to see only the records whose field does not contain the value that is equal to the one that you select in the list of values. For an example of using the **Not Equal** option, click here.

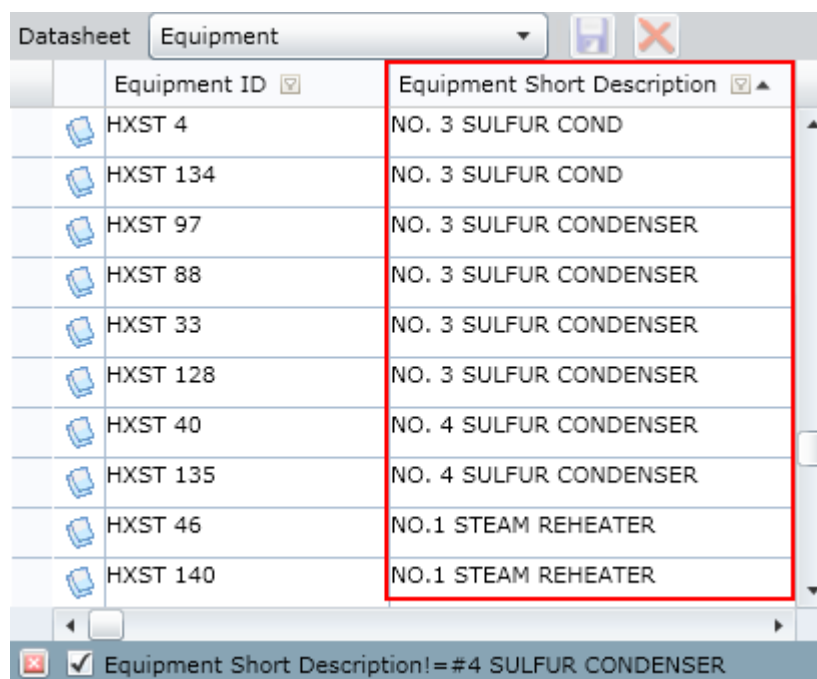
Assume that you want to view only the records whose Equipment Short Description field is not equal to the value *#4 SULFUR CONDENSER*. In this case, in the **Equipment Short Description** column, in the **Not Equal**

section on the filter menu, you would specify the criteria as shown in the following image:



A screenshot of a filter menu. At the top, there is a checkbox labeled "Not Equal" which is checked. Below it is a list of equipment types with checkboxes: "NO. 2 REHEATER", "#4 SULFUR CONDENSER" (checked), "NO. 3 SULFUR CONDENSER", "REACTOR EFFLUENT COOLER", and "ROTARY REHEATER NORTHWEST NORTH".

...and the grid would contain only the records whose Equipment Short Description field is not *#4 SULFUR CONDENSER*. In this case, the grid would contain records whose Equipment Short Description field contains the value *NO. 3 SULFUR CONDENSER* or *NO. 2 SULFUR CONDENSER* and even *NO. 4 SULFUR CONDENSER* but not *#4 SULFUR CONDENSER* as shown in the following image:



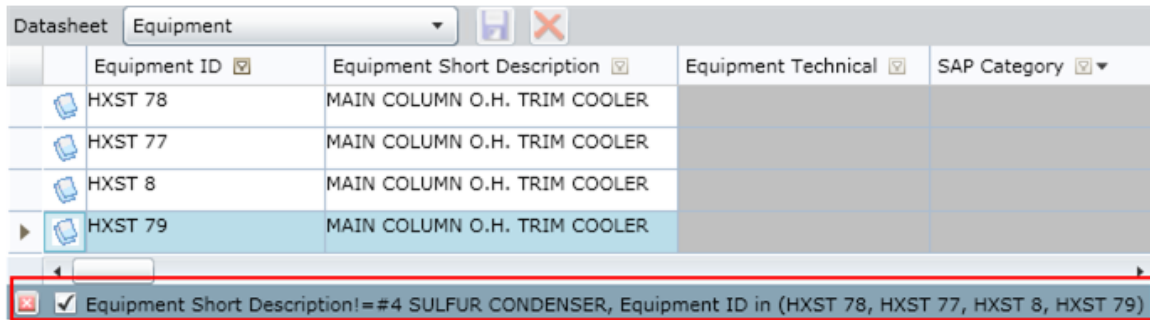
A screenshot of a data grid titled "Datashheet" with a dropdown menu set to "Equipment". The grid has two columns: "Equipment ID" and "Equipment Short Description". The "Equipment Short Description" column is highlighted with a red box. The records are as follows:

Equipment ID	Equipment Short Description
HXST 4	NO. 3 SULFUR COND
HXST 134	NO. 3 SULFUR COND
HXST 97	NO. 3 SULFUR CONDENSER
HXST 88	NO. 3 SULFUR CONDENSER
HXST 33	NO. 3 SULFUR CONDENSER
HXST 128	NO. 3 SULFUR CONDENSER
HXST 40	NO. 4 SULFUR CONDENSER
HXST 135	NO. 4 SULFUR CONDENSER
HXST 46	NO.1 STEAM REHEATER
HXST 140	NO.1 STEAM REHEATER

At the bottom of the grid, there is a filter bar with a checked checkbox and the text "Equipment Short Description != #4 SULFUR CONDENSER".

When you access the Bulk Data Form, if a filter is applied to the records by default, you will still be able apply your own filter to the records and remove the default filter from the records. However, the next time that you access the records using the URL, the default filter will appear.

When a filter is applied to the records in the grid, a description of the filter that is defined will appear at the bottom of the page. You can select multiple filter options at a time to define the desired filter so that you see only the records that you want to see at that time. If you apply more than one filter, the additional filter descriptions appear at the bottom of the page, separated by commas. For example, in the following image, you can see that there are two filtering options defined for this filter: **Equipment Short Description != #4 SULFUR CONDENSER** and **Equipment ID in (HXST 78, HXST 77, HXST 8, HXST 79)**.



Equipment ID	Equipment Short Description	Equipment Technical	SAP Category
HXST 78	MAIN COLUMN O.H. TRIM COOLER		
HXST 77	MAIN COLUMN O.H. TRIM COOLER		
HXST 8	MAIN COLUMN O.H. TRIM COOLER		
HXST 79	MAIN COLUMN O.H. TRIM COOLER		

Equipment Short Description != #4 SULFUR CONDENSER, Equipment ID in (HXST 78, HXST 77, HXST 8, HXST 79)

To the left of the filter description, the following icons appear:

- : Removes the filter from the grid, and you will need to re-define the filter to apply it to the grid again.
- : Indicates that the filter is currently applied to the grid. You can *clear* a filter from the grid (without *removing* the filter altogether) by clearing this check box. To re-apply the filter to the grid, select this check box.

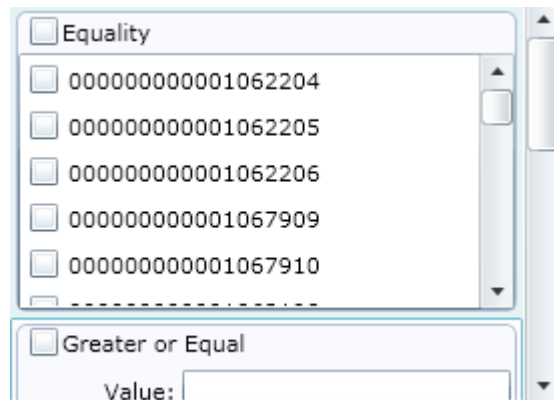
Applying a Filter in Bulk Data Form

The following instructions provide details on applying a filter to the grid on the **Bulk Data Form** page. These instructions assume that you have read the details for each filter option and understand its use.

To apply a filter in the Bulk Data Form:

1. Access the **Bulk Data Form** page.
2. In the column whose values you want to use to apply a filter to the records in the grid, click the icon.

The filter menu appears.











3. In the section that corresponds to the type of filter that you want to apply, specify the criteria that you want to use.
4. Select the check box in that section that corresponds to the type of filter.

The specified filter is applied to the records in the grid, and the description of the filter appears at the bottom of the page. If desired, you can continue to apply additional filters in this way.


Note: Selecting the check box that represents a section on the filter menu indicates that you are ready to apply the filter to the records. Meaning, when you define a filter, you should specify the criteria related to that filter option *before* selecting the check box that corresponds to that filter option. For example, if you want to use the **Search Type** filter, you should define the search criteria first and *then* select the **Search Type** check box to apply the filter. If you perform these steps in the reverse order, the grid will be empty until you specify the remaining criteria.

Creating New Records in the Bulk Data Form


To create a new record in the Bulk Data Form, you must have create privileges on the family in which you want to create a new record. Additionally, if the URL that you used to access the Bulk Data Form displays query results, you will not be able to create new records in the Bulk Data Form. You will know if you can create a new record in the Bulk Data Form if a new blank row appears at the bottom of the grid as shown in the following image.


Datasheet		Equipment		
	Equipment ID	Equipment Short Description		
	HXST 1	SLACK WAX HEATER		
	HXST 10	DEWAXED OIL\150# STEAM HEATER		
	HXST 100	CHARGE MIX SOLVENT EXCH.		
	HXST 101	TREAT GAS SPILLBACK COOLER (N)		
	HXST 102	PURGE GAS EXCHANGER		
				

To create a new record in the Bulk Data Form:

1. Access the **Bulk Data Form** page.
2. At the bottom of the grid, locate the new record row as indicated by the  icon to the left of the record row.
3. Complete the fields as desired.

The  icon is enabled.

4. You can continue to create new records in this way, and when you are finished, at the top of the grid, click the  icon.

Your changes are saved as indicated by the  icon to the left of the record row.

Note: If an error occurs when you try to save the record(s), a message will appear, indicating that there was an error while saving and providing a list of the fields that caused the error. For example, if a record contains a required field, and you do not provide a value in that field, when you try to save the record, an error message will appear, and you will need to correct the problem before you can save that record.

Modifying Existing Records in the Bulk Data Form

To modify records in the Bulk Data Form, you must have Update privileges on the family whose records you want to modify. If you do not have Update privileges on the family, when the records appear, all fields will be disabled.




To modify existing records in the Bulk Data Form:

1. Access the **Bulk Data Form** page.
2. Locate the row containing the record that you want to modify.

Hint: To do so, you may want to apply a filter to the records.


3. Locate the column that corresponds to the field in the record whose value you want to modify, and then click in the cell.
4. Modify the value as desired.

When you navigate to another cell in the grid:

- The icon to the left of the record row changes to , which indicates that the row contains unsaved changes.
 - The  icon on the **Datasheet** toolbar is enabled.
5. When you are finished modifying the desired records, on the **Datasheet** tool bar, click the  icon.

Your changes are saved.

Deleting Records Via the Bulk Data Form

To delete records via the Bulk Data Form, you must have delete privileges on the family whose records you want to delete. Additionally, if the URL that you used to access the Bulk Data Form displays query results, you will not be able to delete records in the Bulk Data Form. You will know if you can delete a record if the  icon at the top of the grid is enabled.

To delete a record in the Bulk Data Form:

1. Access the **Bulk Data Form** page.
2. In the grid, locate the row containing the record that you want to delete and select it.

Hint: To locate the desired record, you may need to apply a filter to the records.

3. At the top of the grid, click the  icon.

A confirmation message appears, asking if you are sure you want to delete the selected record and its links to other records.

4. Click **OK**.

The record is deleted from the Meridium APM database and is removed from the grid.

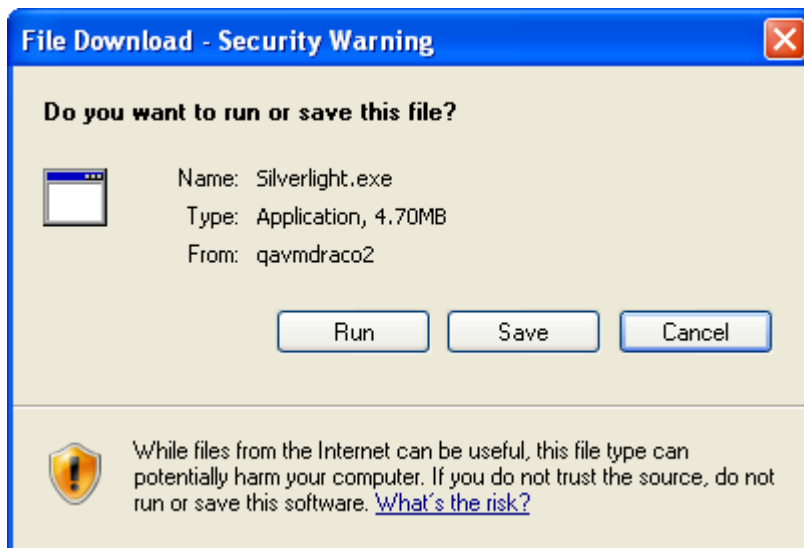
What Happens If Silverlight is Not Installed?

The first time that you access the **Bulk Data Form** page, before the records are displayed, a message will appear, indicating that you need to install Silverlight 3 on your computer before you can view the Bulk Data Form. Before you can view the Bulk Data Form, *you will need to install this software*.

If you see this message:

1. Click the hyperlinked message text.

The **File Download - Security Warning** dialog box appears, indicating that you are attempting to install Silverlight.exe and asks if you want to run or save the file.



Note: The **From** value on this dialog box is the name of the web server where Meridium APM Web Framework is installed.

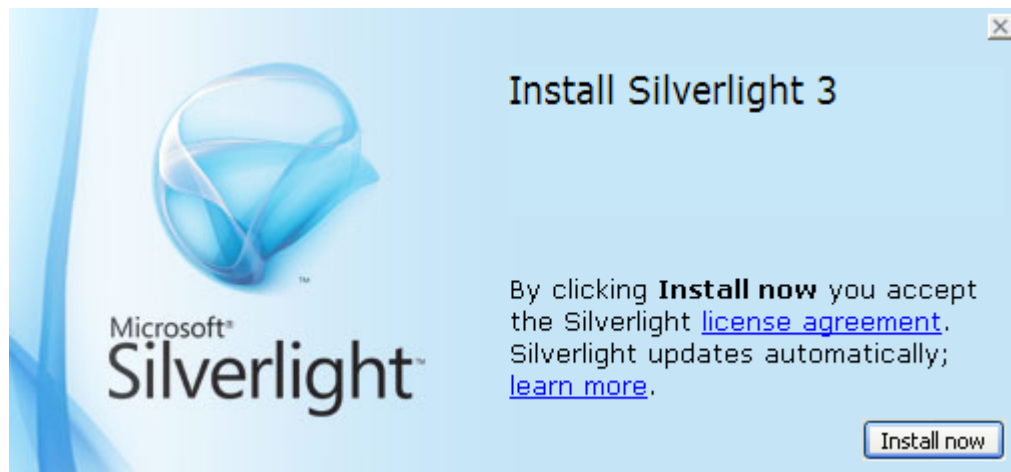
2. Click the **Run** button.

A status bar appears, and then the **Internet Explorer - Security Warning** dialog box appears, asking if you want to run the Microsoft Silverlight Control Installer 3.



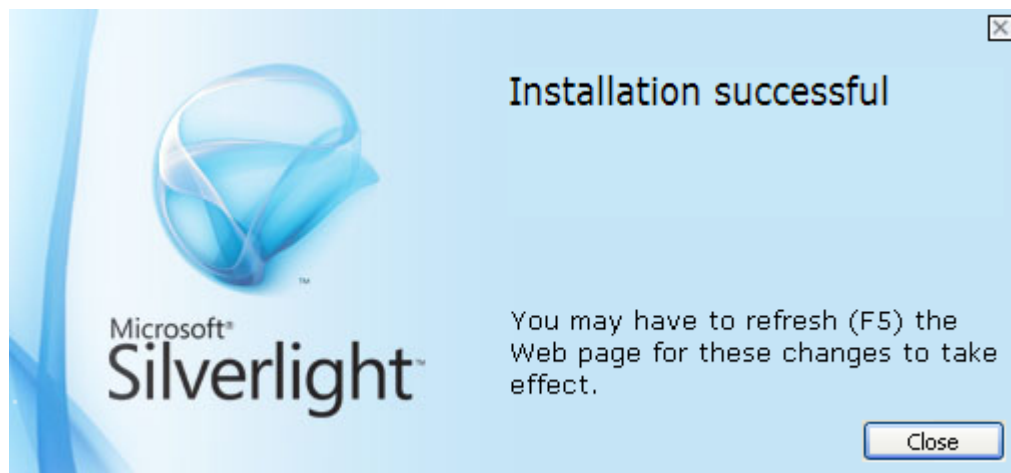
3. Click the **Run** button.

The **Install Silverlight 3** dialog box appears, which contains a link to the license agreement for Silverlight3. If desired, you can click the **license agreement** link to read the license agreement.



4. On the Install Silverlight 3 dialog box, click the Install Now button.

A status message appears, and Microsoft Silverlight 3 is installed. When it is finished, a confirmation message appears, indicating that the software was installed successfully.



5. Click the Close button, and then refresh your browser.

The Bulk Data Form page appears.

Reports

Running Reports

Reports provide you with a way of formatting Meridium APM data for display, export, and printing purposes. Via the Meridium APM Web Framework, you can open SQL Server Reporting Services reports that have been developed in the Meridium APM Framework and saved in the Meridium Catalog. SQL Server Reporting Services is a tool for building and storing reports based upon external data sources, including Meridium APM data sources.

Before you can view a report in the Meridium APM Web Framework, the SQL Server Report Server and the Meridium APM Application Server must be set up appropriately. The Meridium APM Web Framework will connect to the SQL Server Report Server that has been defined in the Configuration Manager application for the data source to which you are connected and display the reports that are stored in that server. When you open a SQL Server Reporting Services report that has not yet been published to the SQL Server Report Server, the report is published to the server when you open it. In addition, if the report contains subreports that are stored in the same Catalog folder as the main report, the subreports will also be published to the server when you open the main report.

After you open a report from the Meridium APM Web Framework Catalog, you can view the report on the **Report** page.

Note: You can also access reports via links on the **Home Page** or **Associated Pages** menus that have been configured to open a specific report.

Overview of the Report Page

The **Report** page displays the results of a report that has been run in the Meridium APM Web Framework.

In some cases, reports are based on queries that have been configured to prompt the user for information before displaying any results.

- If you open a report that is based on a query that contains prompts, the **Report Parameters** section will appear at the top of the **Report** page, displaying a prompt where you can type or select the parameter values

for the report. You can then click the **View Report** button, and the report results will appear below the **Report Parameters** prompt.

Note: To hide the prompts, in the **Report Parameters** section, click the  icon.

- If you open a report that is not based on a query that contains prompts, the **Report Parameters** section will not appear on the **Report** page.

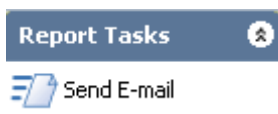
The **Report** page contains two sections:

- **Report workspace:** The main display area that displays the report and contains a toolbar, which you can use to perform tasks related to the report.
- **Task pane:** Displays three task menus:
 - **Navigation Tasks**
 - **Report Tasks**
 - **Help Tasks**


Using the **Report** page, you can perform the following tasks:

- Send a link to someone via email.
- Search for keywords in the report.
- Export the report.
- Print the report.

Report Tasks Menu



The **Report Tasks** Menu contains the following link:

 **Send E-mail:** Displays a blank email message containing a link to the page that you are currently viewing.



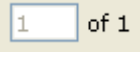


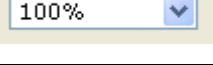
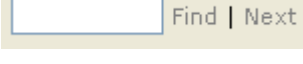
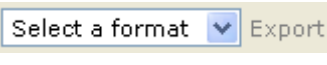

Working with the Report Viewer


Report Viewer Toolbar

The Report Viewer toolbar appears at the top of the report workspace.



The following information and options appear on the toolbar.

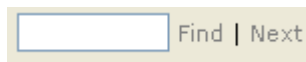
Option	Name	Description
	Go to First Page	Takes you to the first page of the report.
	Go to Previous Page	Takes you to the previous page of the report.
	Page X of N	Indicates which page is currently displayed, where Page X is the current page and of N is the total number of pages in the report.
	Go to Next Page	Takes you to the next page of the report.
	Go to Last Page	Takes you to the last page of the report.
	Zoom	Zooms in on the report to the specified magnification.
	Find	Searches for the specified text within the report.
	Export	Exports the report to the format that you select from the list.
	Refresh	Refreshes the report.

Option	Name	Description
	Print	Prints the report.

Searching for Text in a Report

To search for text in a report:

1. On the report toolbar, locate the Find option.



2. In the text box, type the text that you want to find in the report.

After you begin typing, the **Find** link is enabled.

3. Click the **Find** link.

The page refreshes, and the text that you typed in the text box is highlighted in the report.

-or-

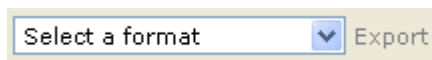
If the text that you are searching for does not exist in the report, a message appears, indicating that the text could not be found.

Hint: Clicking the **Find** link will highlight only the first instance of the word in the report. To continue searching the report, click the **Next** link.

Exporting Reports

To export a report to a file on your computer:

1. On the report toolbar in the report workspace, locate the Export option.



2. In the list, select the desired format. The following formats are available:

- XML file with report data
- CSV (comma delimited)
- TIFF file
- Acrobat (PDF) file
- Web archive
- Excel

After you select a format, the **Export** link is enabled.

3. Click the **Export** link.

The **Report Session** window appears, displaying the **File Download** dialog box, which asks if you want to open or save the file.

Note: You can choose to click the **Open** button and view the report in the selected format before you save the report. These instructions assume that you want to save the report.

4. Click the **Save** button.

The **Save As** dialog box appears.

5. Navigate to the folder where you want to save the report, and click the **Save** button.


The **Download complete** dialog box appears, and the report is saved to the specified location.

6. If you want to view the report, on the **Download complete** dialog box, click the **Open** button; otherwise click the **Close** button.

The **Report** page is brought back into focus.

Printing Reports

To print a report:

1. On the report toolbar, click the  Print icon.

The Print dialog box appears.

Note: A dialog box may appear, asking if you want to install Microsoft SQL Server. Clicking the **Install** button will install an *Active X Control*, which is required for printing reports. Click the **Install** button, and after the Active X Control has been installed, the **Print** dialog box will appear. For information on the Active X Control, see the Internet Explorer Help.

2. Select the desired printer settings, and then click **OK**.

The report prints to the selected printer.

Reference Information

Troubleshooting Tips

I Am Unable to Log In to the Meridium APM Web Framework

When you click the **Log In** button, Meridium APM verifies the user ID and password that you entered against the information that exists in the data source to which you are attempting to connect. If your credentials cannot be verified, an error message will appear, indicating that your name or password is incorrect.

What could cause this to happen?

- A setting on your keyboard is preventing you from entering your login information correctly.
- You are attempting to log in to a data source to which you have not been granted access.
- Internet Information Services (IIS) has not been reset since your Meridium APM user account was activated.

What can a Web Framework user do?

- Check your user name and password again to be sure that you are spelling it correctly, refresh your browser, and try logging in again.

Hint: The Meridium APM Web Framework login information is case sensitive. Press the Caps Lock key to be sure that is in the desired on or off position.

- Make sure that you are logging in to the correct data source. When you first access the **Login** page, a default data source will be selected automatically but will not be displayed. The login credentials that you supply will be validated against the default data source unless you

choose a different one. You may need to select a different data source before you can log in. To do so:

1. Click the **Show Advanced Options** link below the **Log In** button.

The advanced options appear.

2. In the **Data Source** list, select the data source that you have permission to access.
3. Try logging in again.

What can an administrative user do?

- Make sure that the user has permission to log in to the desired data source. Check the user's user name and password to make sure that it is correct, and make sure that the user's account has been activated.
- Reset IIS on the Meridium APM Web Framework Server. If the user's account has been activated or modified since IIS was last reset, that user may not be able to log in until IIS is reset again.

I Do Not See the Data Source that I Need to Use

On the **Log In** page, when you click the **Show Advanced Options** link, the **Data Source** list contains the Meridium APM data sources that have been set up on the Application Server to which the Meridium APM Web Framework has been configured to connect. If you do not see the data source that you need to use, you will not be able to log in to the Meridium APM Web Framework.

What could cause this to happen?

- The data source has not been set up on the Meridium APM Application Server.
- Internet Information Services (IIS) has not been reset on the Meridium APM Web Framework Server since the data source was added to the Meridium APM Application Server.

What can a Web Framework user do?

Close the Internet browser window, access the Meridium APM Web Framework **Login** page again, and try to locate the desired data source. If IIS was reset after you first accessed the Meridium APM Web Framework **Login** page, it should now appear.

What can an administrative user do?

- Log in to Meridium APM via the Meridium APM Data Source Manager, and make sure that the desired data source actually exists on the Application Server.
- Reset IIS, and the next time that the Meridium APM Web Framework user logs in, the data source should appear in the **Data Source** list. If the data source has been added since IIS was last reset, users may not be able to see the data source until IIS is reset again.

I Do Not See the Home Page that I Expect

When you view the **Home Page**, you will either see a configured Home Page for a Security Group in which you are a member or a message indicating that no Home Page has been configured. Additionally, the names of all the Security Groups to which you belong and for which a Home Page has been configured appear in the **Home Page** list. In some cases, you may log in to the Meridium APM Web Framework and see a **Home Page** other than what you were expecting.

What could cause this to happen?

- A Home Page has not been configured for the Security Group that you expected to see.
- A Home Page has not been configured for *any* Security Group in which you are a member.
- Internet Information Services (IIS) has not been reset since a Home Page was configured or modified for a Security Group in which you are a member.

What can a Web Framework user do?

If you see a message indicating that no Home Page has been configured or if you do not see the desired Home Page in the **Home Page** list, close the Internet browser window, access the Meridium APM Web Framework **Home Page** again, and try to locate the desired Home Page. If IIS was reset after you first accessed the Meridium APM Web Framework **Home Page**, the desired Home Page should now appear.

What can an administrative user do?

- Make sure that the user is a member of the desired Security Group.
- Make sure that the Security Group has a configured Home Page.
- Reset IIS on the Meridium APM Web Framework Server. If changes have been made since IIS was last reset, IIS will need to be reset again before those changes can be viewed in the Meridium APM Web Framework.

When I Click a Link, I Do Not See What I Expect

When you click a hyperlink in the Meridium APM Web Framework (e.g., on the **Home Page**), Meridium APM accesses the URL that is configured behind the link.

- If you click a link to a feature that is not supported in the Meridium APM Web Framework and the Meridium APM Framework application is not installed on the computer from which you are accessing the Meridium APM Web Framework, an error message will be displayed, indicating that the page cannot be found.
- If you click a link to a feature that is not supported in the Meridium APM Web Framework and the Meridium APM Framework application IS installed, the feature will be opened in the Meridium APM Framework application.

What could cause this to happen?

- The link has been configured or modified incorrectly.
- You do not have the application installed on your computer that is necessary to access the link.

What can a Web Framework user do?

Refresh the page, and try the link again. If you are still unable to access the link, contact your System Administrator.

What can an administrative user do?

- If the URL should open a feature in the Meridium APM Web Framework, make sure that the feature to which you are linking is supported in the Meridium APM Web Framework and that the URL has been properly configured.
- If the URL should open a feature that is not supported by the Meridium APM Web Framework, make sure the URL is configured to launch the Meridium APM Framework application and that the user who is attempting to access the link has the Meridium APM Framework application installed on their computer.
- If the Meridium APM Framework application is required to access the link and the user does not have the Meridium APM Framework application installed, install the Meridium APM Framework application on the user's computer.

I Am Being Prompted to Install SQL Server

On the **Report** page, on the report toolbar, when you click the **Print** icon for the *first time*, a dialog box may appear, asking if you want to install Microsoft SQL Server.

What could cause this to happen?

You do not have the Active X Control installed on your computer. The Active X Control is necessary for printing reports from the Report Server. Clicking the **Install** button will install an *Active X Control*, which is required for printing reports.

Note: For more information on the Active X Control, see the Internet Explorer Help.

What Can a Meridium APM Web Framework User Do?

Click the **Install** button, and after the Active X Control has been installed (this will only take a moment), the **Print** dialog box will appear, where you can print the report. If you are still unable to print the report, contact your System Administrator.

I Am Unable to Access a Report

When you open a SQL Server Reporting Services report in the Meridium APM Web Framework, the Meridium APM Web Framework connects to the Report Server, opens the report, and displays it in the Web Framework. If the Report Server has not yet been configured, when you try to open a report, an error message will appear.

What could cause this to happen?

- The Report Server is down
- The Report Server has not yet been configured for use with Meridium APM.

What can a Meridium APM Web Framework user do?

Log out of the Meridium APM Web Framework, log in again, and try to access the report. If the Report Server has been set up or restored since you last logged in, you will be able to view the report. If you are still unable to view the report, copy the error message that appears, and contact your System Administrator.

What can an administrative user do?

Make sure that the Report Server is running and that it is configured properly. The Report Server will need to be working before reports can be opened in the Meridium APM Web Framework.

What is IIS?

IIS is the abbreviation for Internet Information Server. The following actions that you can perform in Meridium APM applications require that the IIS be reset

before the result of these actions can be seen in the Meridium APM Web Framework:

- Adding a data source in the Data Source Manager.
- Modifying a data source in the Data Source Manager.
- Modifying a URL in the URL Manager.
- Modifying the file Web.config on the Meridium APM Web Framework Server.
- Modifying a Security User's privileges in the Configuration Manager.
- Modifying a Security Group's privileges in the Configuration Manager.
- Adding or modifying families in the Configuration Manager.

Messages

Page Cannot Be Displayed

Sometimes, an error message may appear that provides *little or no information about what caused the error*. For example, if you navigate to a different tab in a record, an error message may appear, indicating that the page that you are trying to access cannot be displayed.

What could cause this to happen?

Internet Information Services (IIS) was reset while you were working, or the link that you are trying to access is configured incorrectly. If IIS is reset while you are working, an error message may appear where the title bar on the window contains the message *Cannot find server*. If the link that you are trying to access is configured incorrectly, the message that appears will not contain this statement. The following instructions provide information about messages indicating that the server could not be found or the page cannot be displayed.

Note: If IIS was reset while you were working, you may have lost any changes that were not saved prior to the appearance of the error message.

What can a Web Framework user do?

Close the Internet browser window, and access the Meridium APM Web Framework again. If IIS was reset since the last time that you accessed the Meridium APM Web Framework, you should be able to access the feature. If you are still unable to access the feature, contact your System Administrator.

What can a System Administrator do?

If changes have been made since IIS was last reset, reset IIS again, and those changes will be appear in the Meridium APM Web Framework.

Unknown Error on the Server

Sometimes, an error message may appear indicating that an unknown error occurred on the server.

What could cause this to happen?

Internet Information Services (IIS) was reset while you were working.

Note: If IIS was reset while you were working, you may have lost any changes that were not saved prior to the appearance of the error message.

What can a Web Framework user do?

Close the Internet browser window, and access the Meridium APM Web Framework again. If IIS was reset since the last time that you accessed the Meridium APM Web Framework, you should be able to access the feature. If you are still unable to access the feature, contact your System Administrator.

What can a System Administrator do?

If changes have been made since IIS was last reset, reset IIS again, and those changes will be appear in the Meridium APM Web Framework.

Invalid Data

Some actions that you perform in the Meridium APM Web Framework may cause an error message to appear. For example, if you type invalid data in a record

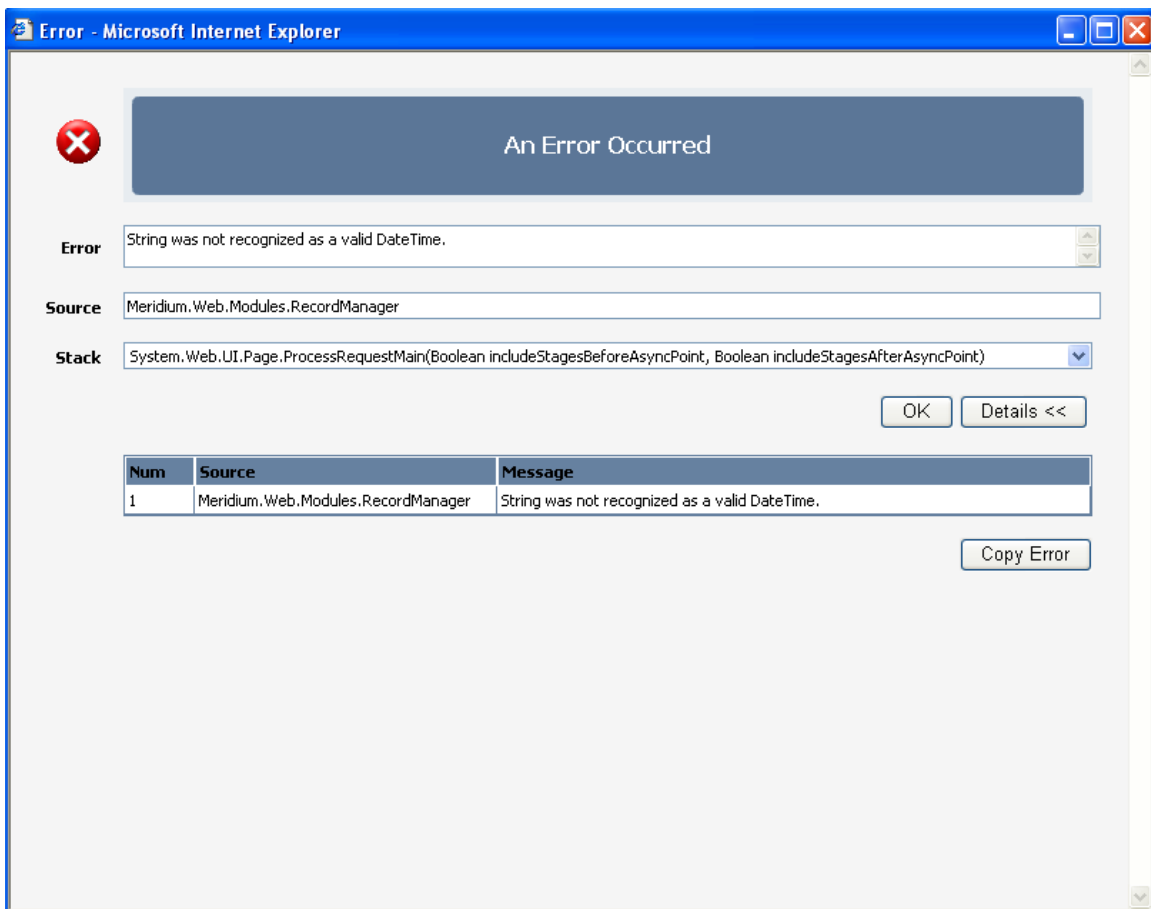
and try to save it, an error message will appear, indicating *the action that caused the error*.

What could cause this to happen?

- You may have typed invalid information in a record.
- The datasheet may not be configured properly.

What can a Meridium APM Web Framework user do?

The following image shows an error message, indicating that an invalid date or time was typed in a field. If an error message like this one appears, you can click **OK** to close the dialog box and continue working. If the message persists, copy the error using the **Copy Error** button, and contact your System Administrator.



What can an administrative user do?

Ask the Web Framework user for the details of the error message, evaluate the problem, and take the appropriate steps to correct it.

Insufficient Privileges

When you attempt to access certain features (e.g., clicking the **Create New** button on the **Record Manager** page), Meridium APM verifies your security privileges against those that are required to access the feature. If you do not have the necessary security privileges, an error message will appear, indicating that you do not have the privileges necessary for accessing the feature.

What could cause this to happen?

- You do not have the security privileges that are required to access the feature.
- Internet Information Services (IIS) has not been reset since you were assigned these privileges.

What can a Meridium APM Web Framework user do?

Log out of the Meridium APM Web Framework, log in again, and try to access the feature. If IIS was reset after you first accessed the Meridium APM Web Framework, you should be able to access the desired feature. If you are still unable to access the feature, contact your System Administrator.

What can an administrative user do?

- Make sure that the user has been assigned the privileges that are necessary to access the feature.
- Reset IIS on the Meridium APM Web Framework Server. If security privileges have been modified since IIS was last reset, reset IIS again, and the changes will appear in the Meridium APM Web Framework.

Service Unavailable

Sometimes when you try to navigate to a different page in the Meridium APM Web Framework, an error message may appear, indicating that service is unavailable.

What could cause this to happen?

Internet Information Services (IIS) was reset while you were working.

Note: If IIS was reset while you were working, you may have lost any changes that were not saved prior to the appearance of the error message.

What can a Web Framework user do?

Close the Internet browser window, and access the Meridium APM Web Framework again. If IIS was reset since the last time that you accessed the Meridium APM Web Framework, you should be able to access the feature. If you are still unable to access the feature, contact your System Administrator.

What can a System Administrator do?

If changes have been made since IIS was last reset, reset IIS again, and those changes will be appear in the Meridium APM Web Framework.

Object Reference Error

Sometimes, an error message may appear, indicating that the object reference was not set to an instance of an object. For example, if you try to navigate to a different page in the Meridium APM Web Framework, you may be navigated to a page displaying the error message *Object reference not set to an instance of an object*.

What could cause this to happen?

Internet Information Services (IIS) was reset while you were working.

Note: If IIS was reset while you were working, you may have lost any changes that were not saved prior to the appearance of the error message.

What can a Web Framework user do?

Close the Internet browser window, and access the Meridium APM Web Framework again. If IIS was reset since the last time that you accessed the Meridium APM Web Framework, you should be able to access the feature. If you are still unable to access the feature, contact your System Administrator.

What can a System Administrator do?

If changes have been made since IIS was last reset, reset IIS again, and those changes will be appear in the Meridium APM Web Framework.

No Web Compatible Datasheets Are Available

When you view a record on the **Record Manager** page, the first datasheet for the family that appears in the **Datasheet** list is displayed in the Record Manager workspace. The Meridium APM Web Framework supports only standard datasheets, and only the standard datasheets for a family will appear in the **Datasheet** list. Custom form datasheets cannot be opened in the Meridium APM Web Framework. If you try to view a datasheet for a family whose datasheets are all custom forms, a message will appear, indicating that there are no web-compatible datasheets available.

What could cause this to happen?

All the datasheets that exist for the family are custom forms.

What can a Meridium APM Web Framework user do?

Access the record for the family using the Meridium APM Framework application. If you do not have the Meridium APM Framework application installed on your computer, you will need access to a computer that does or the Meridium APM Framework application will need to be installed on your computer.

What can an administrative user do?

- Configure a standard datasheet for the family.
- Install the Meridium APM Framework application on the computer from which the Meridium APM Web Framework user accessed the Meridium APM Web Framework.

Meridium APM Framework License Is Not Active

When you log in to the Meridium APM Web Framework, the Meridium APM system verifies that the Meridium APM Web Framework license is active. If the license is not active, an error message will appear on the **Login** page in the Meridium APM Web Framework, indicating that the license is not active.

In some cases, the Meridium APM Web Framework license was previously active but may have expired. In this case, an error message will appear, indicating that the Meridium APM Web Framework license has expired.

What could cause this to happen?

- The Meridium APM Web Framework license is not active.
- The Meridium APM Web Framework license became active after you opened the browser.

What can a Web Framework user do?

- Refresh your browser, and try logging in again.
- Contact an administrative user.

What can an administrative user do?

Activate the license for the Meridium APM Web Framework.

Meridium APM Web Framework License Has Expired

When you log in to the Meridium APM Web Framework, the Meridium APM system verifies that the Meridium APM Web Framework license is active. If the Meridium APM Web Framework license was previously active but has expired, an error message will appear on the **Login** page, indicating that the Meridium APM Web Framework license has expired.

What could cause this to happen?

- The Meridium APM Web Framework license has expired.

- The Meridium APM Web Framework license had expired but became active again after you accessed the browser.

What can a Web Framework user do?

- Refresh your browser, and try logging in again.
- Contact an administrative user.

What can an administrative user do?

Activate the license for the Meridium APM Web Framework.

URLs

About URLs for the Meridium APM Web Framework

The syntax for Meridium APM Web Framework URLs is similar to the syntax used in the Meridium APM Framework URLs. To understand their differences, consider the following example of a Record Manager URL in the Meridium APM Framework application:

```
meridium://Registry/RecordManager?EntityKey=12345&FamilyKey=12345
```

Now consider the same Record Manager URL within the Meridium APM Web Framework:

```
http://WebServer/MeridiumWeb/apm/Registry/RecordManager.aspx?EntityKey=12345&FamilyKey=12345
```

In this Meridium APM Web Framework URL, the portions of the URL that are different from the corresponding Meridium APM Framework URL are shown in bold. You can modify any Meridium APM Framework URL in this way to create a Meridium APM Web Framework URL, provided that the feature is supported by the Meridium APM Web Framework. Specifically, to modify a Meridium APM Framework URL to create a Meridium APM Web Framework URL:

- Change the scheme from **meridium** to **http**.

- Prepend <Web Server>/MeridiumWeb/apm to the path, where <Web Server> is the name of the web server on which Meridium APM Web Framework is installed.
- Add .aspx at the end of the path.

The parameters (the portion following the ?) should be the same for Meridium APM Web Framework URLs as they are for Meridium APM Framework URLs, with the exception of any characters that need to be encoded in the Meridium APM Web Framework URL.

Note: The Meridium APM Web Framework URLs do not support the use of **user ID, password, and data source**. A Meridium APM Web Framework URL will *always* require a user to supply login information, either through a form or through the auto-login feature, depending on how the Meridium APM Web Framework has been configured.

The Meridium APM Web Framework URLs can be used:

- In the Meridium APM Framework application (e.g., on a Home Page or in Query results) to open the corresponding feature in the Meridium APM Web Framework.
- In features that will be made accessible via the Meridium APM Web Framework. For example, if you create a query for use within the Meridium APM Web Framework that will return a list of records, you might want to create a hyperlink on the Record ID column that will open the corresponding record in the Meridium APM Web Framework Record Manager rather than the Meridium APM Framework Record Manager.
- Anywhere else that supports the use of hyperlinks (e.g., email messages and bookmarks in your web browser).

Encoding Characters in the Meridium APM Web Framework URL

Web browsers cannot read certain characters, such as spaces, in URLs. Each character, however, has a corresponding encoded value that *can* be interpreted by web browsers. For URLs to work properly, each character in the URL must be in a format that can be read by the web browser. In cases where the web browser is able to read the character itself, the non-encoded character can be used. In cases where the web browser cannot read the character itself, the

encoded value must be used. Encoding can be done manually, but most web browsers provide an automatic encoding mechanism that can translate non-encoded URLs into encoded URLs at runtime.

Most letters and numbers in the ASCII character set can be properly read by web browser without any special encoding. A certain set of "unsafe" or "reserved" characters must always be encoded. For your easy reference, a list of reserved characters is provided in this documentation.

The Meridium APM Framework application is capable of reading most of the reserved characters. Therefore, special encoding is not needed in the Meridium APM Framework application. To make the corresponding URLs usable within the Meridium APM Web Framework, however, encoding is necessary.

For example, consider the following URL, which opens a query called *Equipment Query* in the Meridium APM Framework application:

```
meridium://Registry/QueryBuilder?QueryPath=Public\Meridium\Queries\
Equipment Query
```

Now consider the corresponding Meridium APM Web Framework URL:

```
http://Server/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPat
h=Public\Meridium\Queries\Equipment Query
```

This URL contains one reserved character: the space in the query name. This character must be encoded in order to be read properly by web browsers. Since the encoded value for the space character is %20, the encoded URL would be:

```
http://Server/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPat
h=Public\Meridium\Queries\Equipment%20Query
```

In most case, any necessary encoding will be done by the web browser when the URL is executed. Therefore, you should be able to construct the Meridium APM Web Framework URLs *without* encoding. When you use them, the web browser will encode the URL for you and display the encoded value in the **Address** field.

For example, consider a Home Page link that is constructed using the following URL:

```
http://Server/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPat
h=Public\Meridium\Queries\Equipment Query
```

When a user clicks the link, Internet Explorer will encode the space automatically and display the following URL in the Address field:

```
http://Server/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPath=Public\Meridium\Queries\Equipment%20Query
```

Keep in mind that encoding of special characters is necessary for URLs to work properly in the Meridium APM Web Framework. While the encoding will be done automatically by the web browser in most cases, if you find that any of your URLs are not working as expected, make sure that all the special characters have been properly encoded. If they have not, you may need to do the encoding manually.

Encoding Characters in the Meridium APM Web Framework URL

The following reserved, or unsafe, characters must be encoded to be properly interpreted by web browsers.

Character	Encoded Value
<space>	%20
<	%3C
>	%3E
#	%23
%	%25
{	%7B
}	%7D
	%7C
\	%5C

Character	Encoded Value
^	%5E
~	%7E
[%5B
]	%5D
`	%60
;	%3B
/	%2F
?	%3F
:	%3A
@	%40
=	%3D

URLs Supported by the Meridium APM Web Framework

The current version of the Meridium APM Web Framework provides only a small portion of the functionality that is available through the Meridium APM Framework application. Therefore, only some of the URLs that are supported in the Meridium APM Framework application are supported in the Meridium APM Web Framework. The URLs that are supported by the Meridium APM Web Framework are listed in the following table.

Path	Feature	Notes
Registry/Homepage	Home Page	This path does not accept parameters.
Registry/Finder	Searches	This path does not accept parameters.
Registry/ReportViewer	Reports	This path requires the ReportPath parameter.
Registry/Catalog	Catalog	This path does not accept parameters.
Registry/RecordManager	Record Manager	This path requires the EntityKey parameter.
Registry/QueryBuilder	Queries	This path requires the QueryPath parameter.
Registry/BulkDataForm	Bulk Data Form	This path requires the EntityKeys or QueryPath parameter.

Note that each URL in this table is identified only by its base path. You may need to add parameters to construct functional URLs. Note, however, that not all permutations of each URL are supported by the Meridium APM Web Framework. For example, in the Meridium APM Web Framework, you can open only Select, Update, and Crosstab queries. Therefore, the following URL will open an existing Update query in the Meridium APM Web Framework:

`http://Server/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPath=(!Public/Meridium APM/Queries/Update Query Name')`

The following URL to an Append query will not allow you to create a new record in the Meridium APM Web Framework:

`http://Server/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPath=(!Public/Meridium APM/Queries/Append Query Name')`

Whenever a user clicks a link in the Meridium APM Web Framework that is constructed from a URL that represents unsupported Meridium APM Web Framework functionality, the Meridium APM system will launch the Meridium APM Framework application and take the user to the associated feature, provided that the Meridium APM Framework application has been installed on that workstation. If it has not been installed, a *Page cannot be displayed* message will be displayed instead.

Similarly, some features that are supported in the Meridium APM Web Framework are not supported in the Meridium APM Framework application. If you construct a Meridium APM Framework URL for a web-only feature, an error message will be displayed when a user clicks the link. Throughout this documentation in our discussion of URL parameters, we note the parameters that are supported in the Meridium APM Web Framework only.

Record Manager URLs

Parameters for the Record Manager URL

The URL for the Record Manager, <http://<WebServer>/MeridiumWeb/apm/Registry/RecordManager.aspx>, accepts the parameters listed in the following table. Note that the URL path alone is not a valid URL. Use the information in the following table to choose parameters that will allow you to construct a usable link.

Parameter Name	Description	Accepted Value(s)	Notes
DatasheetID	Specifies the datasheet that you want to display in the Record Manager.	The Datasheet ID of the desired datasheet.	The Datasheet ID must correspond to a datasheet that has been defined for the specified family in the Configuration Manager. If you do not specify this parameter, the Meridium APM system will use the datasheet that the current user was last using when viewing a record in the specified family or the default datasheet if the user has never opened a record in that family before.

Parameter Name	Description	Accepted Value(s)	Notes
EntityKey	Specifies the Entity Key of the record that you want to open in the Record Manager.	0 numeric Entity Key	You can set this parameter to 0 (zero) if you want to create a new record. If EntityKey=0, the FamilyKey parameter is required. The EntityKey parameter is required.
FamilyKey	Specifies the Family Key for a new record.	numeric Family Key	None

Parameter Name	Description	Accepted Value(s)	Notes
Field ID	Defines fields that you want to populate automatically and the values that you want to use to populate them.	Values that are appropriate for the specified fields.	When you construct a URL to create a new record, you can specify values that will be used to populate fields in that record automatically. The actual parameter names should correspond to fields that you want to populate. <i>You must use the field ID as the parameter name.</i> The parameter values will vary depending on the values that you want to use to populate the fields, but you should make sure to specify values that are appropriate for the field types (e.g., specify numbers for numeric fields).

Examples of the Record Manager URL

- <http://WebServer/MeridiumWeb/apm/Registry/RecordManager.aspx?EntityKey=1234567>

Opens the Record Manager, displaying the record with the Entity Key 1234567.

- <http://WebServer/MeridiumWeb/apm/Registry/RecordManager.aspx?EntityKey=0&FamilyKey=456789>

Opens the Record Manager, displaying a new blank record for the family with the Family Key 456789.

- http://WebServer/MeridiumWeb/apm/Registry/RecordManager.aspx?EntityKey=0&FamilyKey=456789&MI_REC_SHORT_DESCR_CHR=Inspect Equipment

Opens the Record Manager, displaying a new blank record for the family with the Family Key 456789. The field with the ID MI_REC_SHORT_DESCR_CHR is populated automatically with the value *Inspect Equipment*.

- <http://WebServer/MeridiumWeb/apm/Registry/RecordManager.aspx?EntityKey=1234567&DatasheetID=Recommendation>

Opens the Record Manager, displaying the record with the Entity Key 1234567. The datasheet with the ID *Recommendation* is displayed by default.

Query URLs

Parameters for Query URLs

The URL for queries, <http://<WebServer>/MeridiumWeb/apm/Registry/QueryTool.aspx>, requires the parameter listed in the following table. Note that the URL path alone is not a valid URL.

Parameter Name	Description	Accepted Value(s)
QueryPath	Opens the specified query.	The Catalog path and file name of the query you want to open.

Examples of Query URLs

- <http://WebServer/MeridiumWeb/apm/Registry/QueryBuilder.aspx?QueryPath=Public\All Equipment>

Opens on the **Query** page the All Equipment query, which is stored in the Catalog in the folder \\Public.

Bulk Data Form URLs

Parameters for the Bulk Data Form URL

The URL for the Bulk Data Form, <http://<WebServer>/MeridiumWeb/apm/Registry/Bulk Data Form.aspx>, accepts the parameters described in the following table. Note that a link created from the path with no parameters will generate an error. To open the Bulk Data Form, if you are not using the QueryPath parameter, you must define at least the EntityKeys parameter. If you are using the QueryPath parameter, you do not need to define the EntityKey parameter.

Parameter Name	Description	Accepted Value(s)	Notes
EntityKeys	Specifies the Entity Key of the record that you want to open in the Bulk Data Form.	numeric Entity Key(s)	To open more than one record in the Bulk Data Form, you can specify multiple values for this parameter, each separated by a comma. Note that the entities you specify must belong to the same family. To be able to <i>modify</i> records via the Bulk Data Form in the Meridium APM Web Framework, you <i>must</i> use the EntityKeys parameter.
QueryPath	Specifies the query whose results you want to view in the Bulk Data Form.	The Catalog path and file name of the query you want to open.	You must include the query path within parenthesis and single quotation marks. Additionally, within the parenthesis, before the first single quotation mark, you must insert an exclamation mark.

Parameter Name	Description	Accepted Value(s)	Notes
DatasheetID	Specifies the datasheet that you want to display in the Bulk Data Form.	The Datasheet ID of the desired datasheet.	The Datasheet ID must correspond to a datasheet that has been defined for the specified family in the Configuration Manager. If you do not specify this parameter, the default datasheet will be used. You must use this parameter in conjunction with the QueryPath or EntityKeys parameters.
FilterField	Specifies the field name to which you want to apply a filter that will be applied to the records in the Bulk Data Form by default.	Field ID(s)	To apply a filter to more than one field in the Bulk Data Form, you can specify multiple values for this parameter, each separated by a comma and numbered, starting with 0. To use the FilterField parameter, you must also use the FilterType and FilterValue parameters. Note that you can define only one default filter per field per URL.
FilterType	Specifies the type of filter that you want to apply to the specified field.	EQUAL GREATER LESS NOTEQUAL	To apply more than one filter type to a field in the Bulk Data Form, you can specify multiple values for this parameter, each separated by a comma and numbered, starting with 0. The number that you specify should correspond to the number in the FilterField parameter to represent the field to which the filter should be applied. This parameter should be used in conjunction with the FilterField parameter and the FilterValue parameter.

Parameter Name	Description	Accepted Value(s)	Notes
FilterValue	Specifies the value that the specified filter type will use to filter the specified field.	numeric and character strings	To apply more than one filter value to a field in the Bulk Data Form, you can specify multiple values for this parameter, each separated by a comma and numbered, starting with 0. The number that you specify should correspond to the number in the FilterField and FilterType parameters that represent the field and field type to which the FilterValue parameter corresponds.
SortType	Specifies the order in which to sort records in the Bulk Data Form.	A D	You can specify the following values for this parameter: A - Sorts records in ascending order on the field specified for the SortField parameter. D - Sorts records in descending order on the field specified for the SortField parameter. This parameter should be used in conjunction with the SortField parameter but is not required when you specify the SortField parameter. If you omit the SortType parameter, records will be sorted in ascending order on the field specified for the SortField parameter.
SortField	Specifies the field on which to sort records in the Bulk Data Form.	The field ID of the field that you want to use for sorting.	When you use this parameter, you can also include the SortType parameter to indicate the order in which records should be sorted.

Examples of the Bulk Data Form URL

- <http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?EntityKey=1234567>

Opens the Bulk Data Form, displaying the record with the Entity Key 1234567.

- [http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?QueryPath=\(!Public\All Equipment'\)](http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?QueryPath=(!Public\All Equipment'))

Opens the Bulk Data Form, displaying the results of the All Equipment query, which is stored in the Catalog in the folder \\Public.

- <http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?EntityKey=1234567&DatasheetID=Recommendation>

Opens the Bulk Data Form, displaying the record with the Entity Key 1234567. The datasheet with the ID *Recommendation* is displayed by default.

- [http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?QueryPath=\(!Public\All Equipment*\)&FilterField=Temperature&FilterType=EQUAL&FilterValue=100](http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?QueryPath=(!Public\All Equipment*)&FilterField=Temperature&FilterType=EQUAL&FilterValue=100)

Opens the Bulk Data Form, displaying the results of the All Equipment query, which is stored in the Catalog in the folder \\Public. The results are filtered automatically to display only records with the value *100* in the field with the ID *Temperature*.

- [http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?QueryPath=\(!Public\All Equipment*\)&SortField=Temperature&SortType=D](http://WebServer/MeridiumWeb/apm/Registry/BulkDataForm.aspx?QueryPath=(!Public\All Equipment*)&SortField=Temperature&SortType=D)

Opens the Bulk Data Form, displaying the results of the All Equipment query, which is stored in the Catalog in the folder \\Public. The results are sorted automatically in descending order according to the values in the field with the ID *Temperature*.

Report URLs

Parameters for Report URLs

The URL for reports, <http://<WebServer>/MeridiumWeb/apm/Registry/ReportViewer.aspx>, requires

the parameter listed in the following table. Note that the URL path alone is not a valid URL.

Parameter Name	Description	Accepted Value(s)
ReportPath	Opens the specified report on the Reports page.	The Catalog path and file name of the report you want to open.

Examples of Report URLs

- <http://WebServer/MeridiumWeb/apm/Registry/ReportViewer.aspx?QueryPath=Public\\All Equipment>

Opens on the **Reports** page the All Equipment report, which is stored in the Catalog in the folder \\Public.

How to Contact Meridium, Inc.

<p>Global Support Services (For technical product support)</p>	<p>https://www.meridium.com/support</p>
<p>Meridium, Inc. Offices and Regional Contacts (For mailing addresses, phone, and fax numbers)</p>	<p>http://www.meridium.com/company/locations/roanoke.asp</p>