

EMail Notification Operations Manual

E-Mail Notification Operations Manual

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Introduction

E-Mail Notification is a package for METDaemon(TM) from On Time Support which allows you to schedule the delivery of E-Mail to your customers or other personnel. Messages may include notifications of various metrology activities such as the notification that instruments are due for calibration. These messages are automatically sent via a schedule which you determine using a simple web-based interface. The following is a list of preliminary features:

- Sends HTML formatted email messages that may (or may not!) contain data to a list of recipients on a scheduled basis.
- Recipient lists may be as a group of people, or individuals, or both.
- Individuals may be grouped into configurable groups, with no limit to the number of groups or how many groups a person may be a member of.
- Schedules are configurable, similar to what scheduling methods are available to users of Microsoft OS's, and typical UNIX OS's.
- Initially, a couple of different HTML formats are provided, and the customer may create new ones (or modify the existing formats).
- Initially, the report formats are in HTML, with a pleasing tabular-style display. These may be modified by the administrator.
- Administration of this system is accomplished using a modern web browser that supports JavaScript, CSS 1.0, and DOM 1.0 (Mozilla 1+, IE 5.5+(IE6+ is recommended), Netscape 7.1+).

OD	ASSET#	MANUFACTURER	MODEL	DESCRIPTION	SERIAL#	DUE_DATE
*	SAMPLE-742-1	FLUKE	742-1	1 OHM RESISTANCE STD	742010001	03-29-1999
*	SAMPLE-8842	FLUKE	8842	DMM	884200987	08-13-1999
*	SAMPLE-11	FLUKE	11	DIGITAL MULTIMETER_BLA	1100110001	06-02-2000
*	SAMPLE-OPFLAT-test	HOKE	36	MECHANICAL STANDARD	8096098098	07-07-2002
*	SAMPLE-5700	FAKE1	FAKE	FAKE	FAKE	04-28-2003
*	sample-c2	vk	c2	mechanical standard	r4e90uys	01-21-2004
*	sdfasdfasfav	dfdsf	fgfds	dsfgs	dsfgs	03-12-2004
*	SAMPLE-100	hhh	hhh	hhh	hh	04-06-2004
*	SAMPLE-5500	FLUKE	spl-002	CALIBRATOR	4820000	06-21-2004
*	SAMPLE-10	FLUKE	10	DIGITAL MULTIMETER	10101010	06-21-2004
*	SAMPLE-732	FLUKE	732	DC REFERENCE STD	732000001	07-21-2004
	SAMPLE-5725	FLUKE	5725A	BOOST AMPLIFIER	572500001	12-17-2004

Chapter 1. Preparing For Installation

Email Notification comes preinstalled with METDaemon. However, Email Notification must be activated by installing the appropriate license. To install the EMN license, please refer to the "Installing Licenses" section of METDaemon Documentation.

You will need a "License Code" and "Authorization Code" from On Time Support or an authorized representative to activate Email Notification.

Obtaining the Software/Updates

When new versions of Email Notification become available, a new METDaemon 'JAR' will be made available for download at <http://www.ontimesupport.com> or on CD-ROM by contacting On Time Support at:

On Time Support, Inc.
25132 Oakhurst Dr.
Spring, TX 77386
PH: 281-296-6066
FAX: 281-465-9478
sales@ontimesupport.com
support@ontimesupport.com

Chapter 2. Using the Application


Email Notification relies on features provided by METDaemon. Please be sure METDaemon is configured correctly with all the required information for sending an automated email report. This includes:

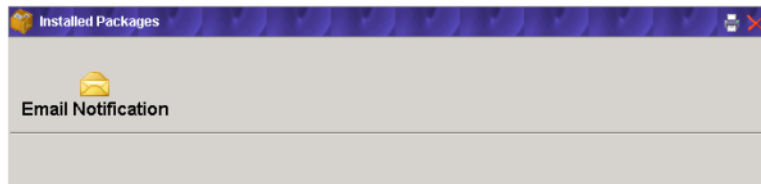
- Network Configuration
- Datasources
- SQL Reports
- Report Formats
- All Required Licenses


Please refer to METDaemon Documentation to configure the previous options correctly.

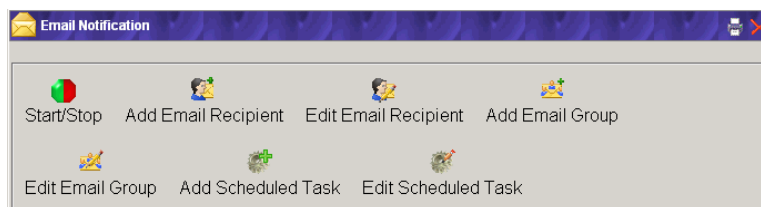
Navigating the Application

To administrate Email Notification, you must first open a browser and log in to METDaemon Administration.

Using either the top toolbar or left navigation menu, select the "Configure Installed Packages"  button. This will show a list of all installed packages.



Select the "Email Notification"  button. You will now see a page consisting of all available actions for Email Notification.



This menu is used for all available Email Notification operations.

Operation



Starting/Stopping the Application



To activate Email Notification, a valid EMN license must be installed.

To install an Email Notification license, please refer to the "Installing Licenses" section of METDaemon Documentation.


Select the "Start/Stop"  button to access the Start/Stop options.

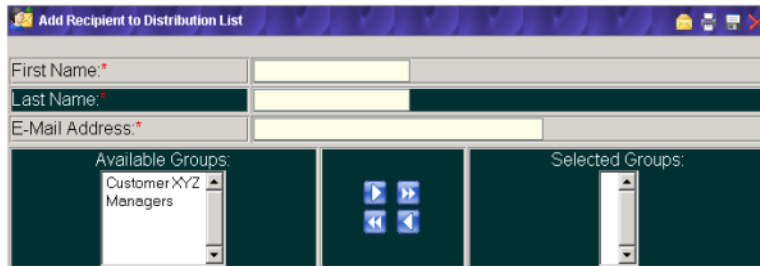
The first item, "Current Email Notification Status:" indicates whether or not the Email Notification service is currently active.

The next item, "Turn Email Notification:" has 2 options: "On" or "Off". To turn the service on, select the "On"  button. Or select the "Off"  button to turn the service off.

To return to the Email Notification options menu, close the "Start/Stop" form by either selecting the "Close"  button at the top right of the form, OR select the "Back to EMN Menu"  button at the top right of the form.

Adding an Email Recipient


Select the "Add Email Recipient"  button on the Email Notification options menu. The "Add Recipient to Distribution List" form will be displayed.




"First Name" is a required field.


"Last Name" is a required field.


"Email Address" is a required field. The email address entered here can be of almost any valid email address format such as "username@domain.com", or "lastname.firstname@server.domain.com", or "First-Name LastName <username@domain.com>".

"Available Groups" is an optional field. It will show a list of groups(if any exist) that this new recipient can be added to. Double-click the group name to transfer the group to the "Selected Groups" list. OR, you may select the group(single-click) and then select the "Move Selected Item Right"  button to transfer the group to the "Selected Groups" list. If this recipient is to be apart of ALL available groups,


 button.

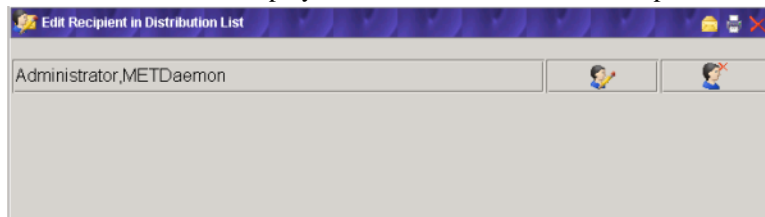
After all required fields are completed and all groups have been selected, select the "Save"  button in the top right of the form. When saving the new recipient is successful, you will get a confirmation stating "Recipient Successfully Added to System" and the form will reset(clear) and is now ready to add another recipient, if desired.

To return to the Email Notification options menu, close the "Add Recipient to Distribution List" form by either selecting the "Close"  button at the top right of the form, OR select the "Back to EMN Menu"

 button at the top right of the form.

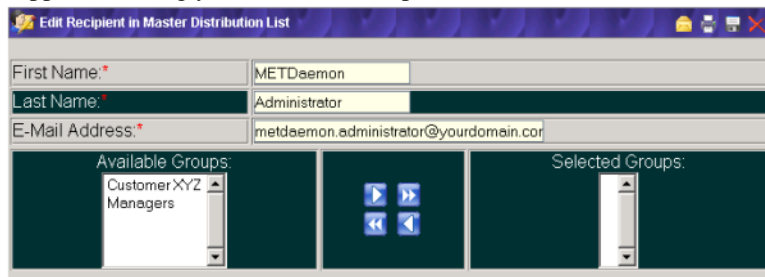
Editing/Deleting an Email Recipient

Select the "Edit Email Recipient"  button on the Email Notification options menu. The "Edit Recipient in Distribution List" form will be displayed with a list of valid email recipients to choose from.



To delete a recipient, select the "Delete Recipient"  button to the right of the recipients name.


To edit a recipient, select the "Edit Recipient"  button to the right of the recipients name. The following form will appear allowing you to edit this recipient.





"First Name" is a required field.



"Last Name" is a required field.

"Email Address" is a required field. The email address entered here can be of almost any valid email address format such as "*username@domain.com*", or "*lastname.firstname@server.domain.com*", or "*FirstName LastName <username@domain.com>*".


Groups are optional. "Available Groups" will show a list of groups(if any exist) that this recipient can be added to. Double-click the group name to transfer the group to the "Selected Groups" list. OR, you may select the group(single-click) and then select the "Move Selected Item Right"  button to transfer the

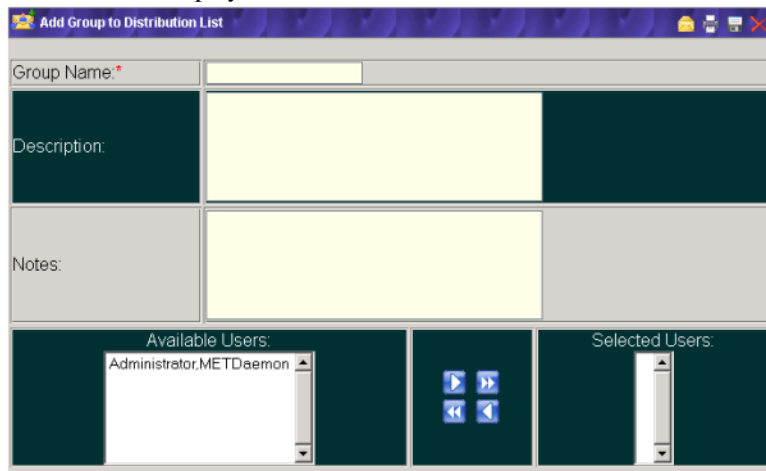
group to the "Selected Groups" list. If this recipient is to be apart of ALL available groups, select the "Move All Items Right"  button.

After all changes have been made, select the "Save"  button in the top right of the form. When updating of recipient information is successful, you will get a confirmation stating "Recipient Information Updated" and the form will repopulate with this recipients new information.

To return to the Email Notification options menu, close the "Edit Recipient in Distribution List" form by either selecting the "Close"  button at the top right of the form, OR select the "Back to EMN Menu"  button at the top right of the form.

Adding an Email Recipient Group


Select the "Add Email Group"  button on the Email Notification options menu. The "Add Group to Distribution List" form will be displayed.





"Group Name" is the only required field on this form, so you can create an empty group if desired.

"Description" is an optional field for describing this group.



"Notes" is an optional field for any additional notes for this group.

"Available Users" will show a list of recipients(if any exist) that can be added to this group. Double-click the recipients name to transfer the recipient to the "Selected Users" list. OR, you may select the recipients name(single-click) and then select the "Move Selected Item Right"  button to transfer the


recipient to the "Selected Users" list. If this group is to contain ALL available recipients, select the "Move All Items Right"  button.

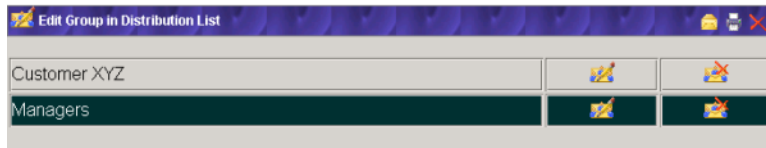
After all required fields are completed and all recipients have been selected, select the "Save"  button in the top right of the form. If saving the new group is successful, you will get a confirmation stating "Group Successfully Added to System" and the form will reset(clear) and is now ready to add another group, if desired.

To return to the Email Notification options menu, close the "Add Group to Distribution List" form by


either selecting the "Close"  button at the top right of the form, OR select the "Back to EMN Menu"  button at the top right of the form.

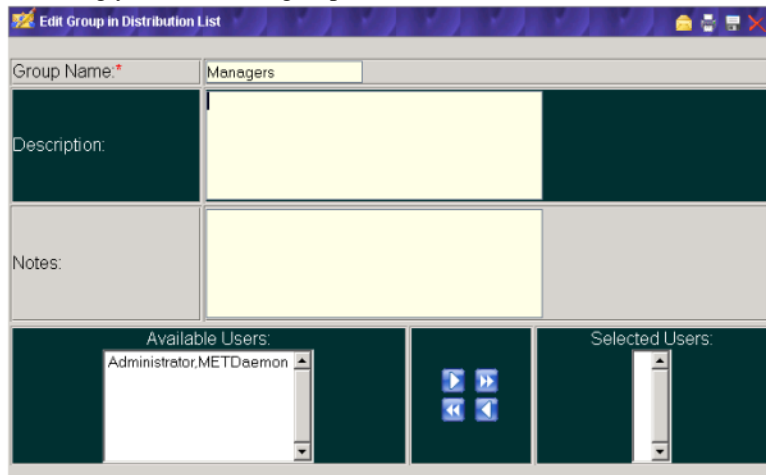
Editing/Deleting an Email Recipient Group

Select the "Edit Email Group"  button on the Email Notification options menu. The "Edit Group in Distribution List" form will be displayed with a list of valid email groups to choose from.



To delete a group, select the "Delete Group"  button to the right of the groups name.


To edit a group, select the "Edit Group"  button to the right of the groups name. The following form will appear allowing you to edit this group.




"Group Name" is the only required field on this form, so you can create an empty group if desired.

"Description" is an optional field for describing this group.


"Notes" is an optional field for any additional notes for this group.


"Available Users" will show a list of recipients that can be added to this group. Double-click the recipients name to transfer the recipient to the "Selected Users" list. OR, you may select the recipients name(single-click) and then select the "Move Selected Item Right"  button to transfer the recipient

to the "Selected Users" list. If this group is to contain ALL available recipients, select the "Move All Items Right"  button.

After all changes have been made, select the "Save"  button in the top right of the form. When updat-

ing the group information is successful, you will get a confirmation stating "Group Updated Successfully" and the form will repopulate with this groups new information.


To return to the Email Notification options menu, close the "Edit Group in Distribution List" form by either selecting the "Close"  button at the top right of the form, OR select the "Back to EMN Menu"

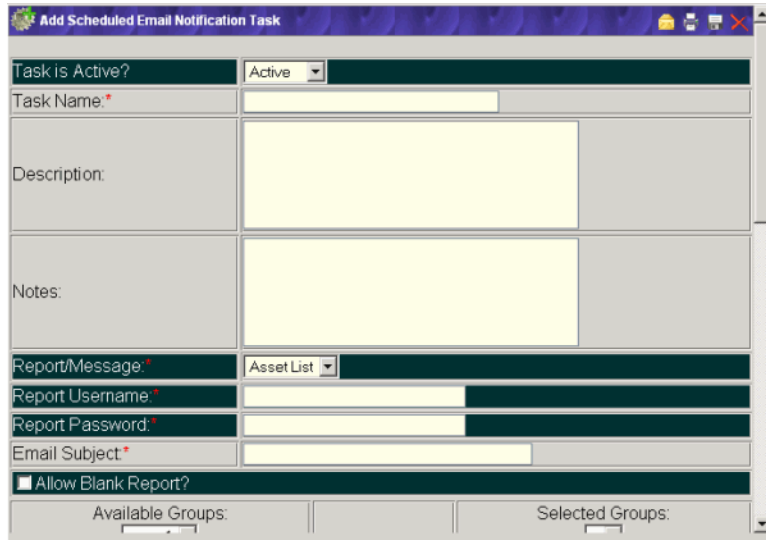
 button at the top right of the form.

Adding a Scheduled Task

Before a task can be added a few requirements must be met:

1. A valid SMTP Relay host address must be configured. Please refer to METDaemon Documentation for instructions on configuring an SMTP Relay host address.
2. A valid SQL Report must be created. Please refer to METDaemon Documentation for instructions on creating a SQL Report.
3. Either:
 - a. There must be at least one System Administrator(with email address) or one Email Recipient added to the system. Please refer to METDaemon Documentation for instructions on adding a System Administrator, or section 4.3.2 of this document for instructions on adding an Email Recipient.
 - b. You must be utilising "Column Aliasing", discussed further in "Advanced Topics".

Select the "Add Scheduled Task"  button on the Email Notification options menu. The "Add Scheduled Email Notification Task" form will be displayed.



"Task Name" is a required field. Task names must be unique.

"Description" is an optional field for describing this task

"Notes" is an optional field for any additional notes for this task

"Report/Message" is a required field. Select the report to send from a list of configured reports.


"Report Username" is a required field. This is the username used to access the database.

"Report Password" is a required field. This is the password used to access the database.

"Email Subject" is a required field. This is the text that will be used for the 'Subject' line of the email.

"Allow Blank Report" can be checked if you want a report to be sent even if it contains no data.

At least one user and/or group **MUST** be selected from the "Available Groups" or "Available Users" lists.

"Start This Task On" is a required field and defines the "Start Date" for this task. Select the "Open Calendar"  button to use the built in calendar.



If you want the task to start today, select "Today" from the calendar. If a date earlier than today is selected, the task will run at the next scheduled interval, described below.

"At" is used to define the start hour and start minute for this task, in 24 hour format. Default is 00:00(midnight).

Task Scheduling

There are 5 types of schedules to choose from:

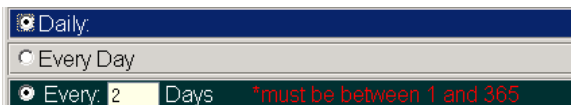
1. One Time Only:

A One Time Only schedule is a single shot event that will not repeat automatically.



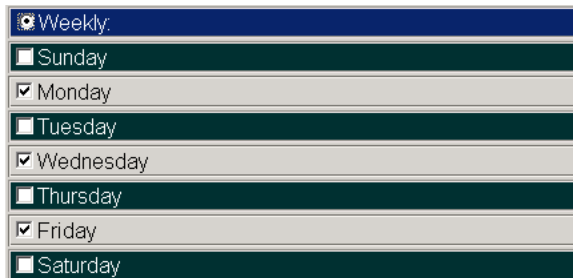
2. Daily:

A Daily schedule can be configured to run every day, or every X days (X being any positive integer between 1 and 365, such as every 2 days) and will repeat automatically.



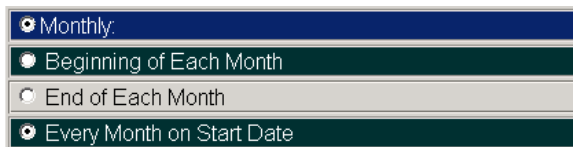
3. Weekly:

A Weekly schedule is convenient when wanting to email a report on certain days of the week (such as Monday and Friday) and will repeat automatically.



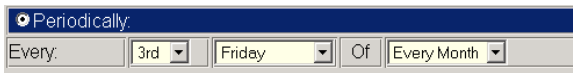
4. Monthly:

A Monthly schedule can be configured to run at the Beginning of the Month, the End of the Month, or Every Month on the chosen "Start Date" and will repeat automatically






5. Periodically:

A Periodic schedule is used for selecting the Day, Week, and Month a task should run (Such as the 3rd Friday in May, or the 1st Monday of Every Month, etc.) and will repeat automatically.




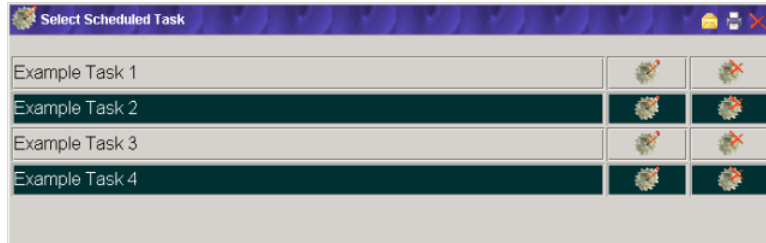
If a Schedule Type is not explicitly selected and configured, the task will default to a One Time Only task.

After all changes have been made, select the "Save"  button in the top right of the form. When saving the new task is successful, you will get a confirmation stating "Task: <taskname> Added Successfully", along with the Next Execution Date for the task. The form will reset(clear) and is now ready to add another task, if desired.


To return to the Email Notification options menu, close the " Add Scheduled Email Notification Task" form by either selecting the "Close"  button at the top right of the form, OR select the "Back to EMN Menu"  button at the top right of the form.

Editing a Scheduled Task

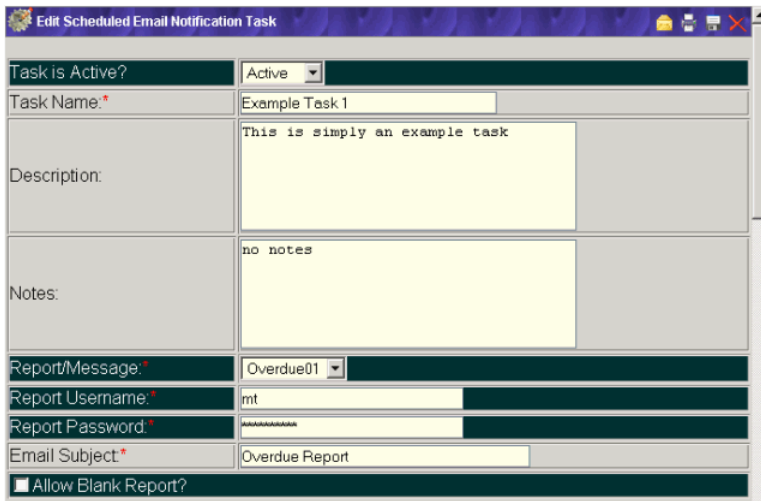
Select the "Edit Scheduled Task"  button on the Email Notification options menu. The "Select Scheduled Email Notification Task" form will display a list of tasks, if any.



To delete a task, select the "Delete Task"  button to the right of the task name.

To edit a task, select the "Edit Task"  button to the right of the task name. The following form will

appear allowing you to edit this task.



"Task Name" is a required field. Task names must be unique.

"Description" is an optional field for describing this task

"Notes" is an optional field for any additional notes for this task

"Report/Message" is a required field. Select the report to send from a list of configured reports.


"Report Username" is a required field. This is the username used to access the database.

"Report Password" is a required field. This is the password used to access the database.

"Email Subject" is a required field. This is the text that will be used for the 'Subject' line of the email.

"Allow Blank Report" can be checked if you want a report to be sent even if it contains no data.

At least one user and/or group **MUST** be selected from the "Available Groups" or "Available Users" lists.

"Start This Task On" is a required field and defines the "Start Date" for this task. Select the "Open Calendar"  button to use the built in calendar.



If you want the task to start today, select "Today" from the calendar. If a date earlier than today is selected, the task will run at the next scheduled interval, described below.

"At" is used to define the start hour and start minute for this task, in 24 hour format. Default is 00:00(midnight).

Task Scheduling

There are 5 types of schedules to choose from:

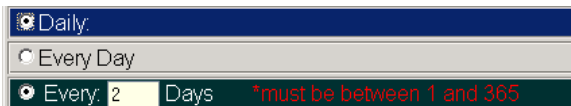
1. One Time Only:

A One Time Only schedule is a single shot event that will not repeat automatically.



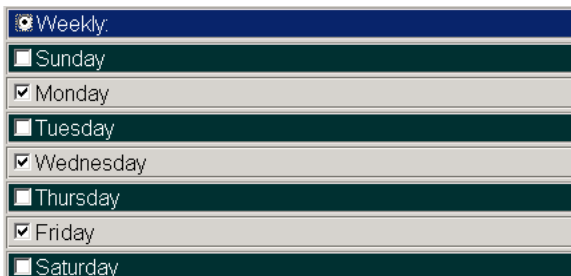
2. Daily:

A Daily schedule can be configured to run every day, or every X days (X being any positive integer between 1 and 365, such as every 2 days) and will repeat automatically.



3. Weekly:

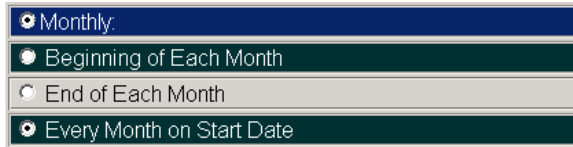
A Weekly schedule is convenient when wanting to email a report on certain days of the week (such as Monday and Friday) and will repeat automatically.



4. Monthly:

A Monthly schedule can be configured to run at the Beginning of the Month, the End of the Month,

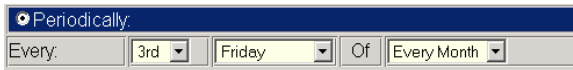
or Every Month on the chosen "Start Date" and will repeat automatically




A screenshot of a radio button menu with four options. The first option, "Monthly:", is selected and highlighted in blue. The other options are "Beginning of Each Month", "End of Each Month", and "Every Month on Start Date".

5. Periodically:

A Periodic schedule is used for selecting the Day, Week, and Month a task should run (Such as the 3rd Friday in May, or the 1st Monday of Every Month, etc.) and will repeat automatically.



A screenshot of a "Periodically:" scheduling form. It includes a label "Every:" followed by a dropdown menu set to "3rd", another dropdown menu set to "Friday", the text "Of", and a final dropdown menu set to "Every Month".

After all changes have been made, select the "Save"  button in the top right of the form. When updating of the task is successful, you will get a confirmation stating "Task Updated Successfully", along with the Next Execution Date for the task.

You will be returned to the list of tasks to be edited.

Chapter 3. Examples of Operation


The following examples assume that METDaemon and Email Notification are already installed and operational. To follow along with these examples, please be sure METDaemon is running, then open a browser and log in to METDaemon Administration.

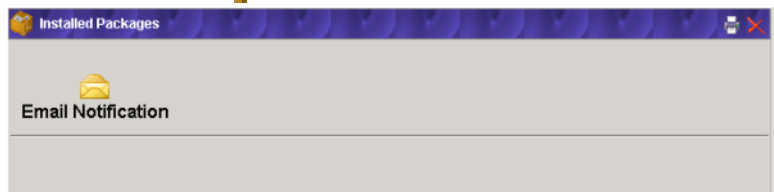
Creating a Monthly Task for Overdue Instruments


In this example we will configure a task to send an email report consisting of overdue and soon to be overdue instruments on the last day of the month at 8am to a list of recipients.

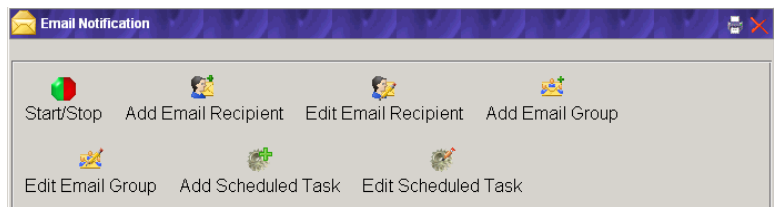
First, a report must be created that will return the desired results, in this case we want all instruments that are overdue for calibration, and all instruments that will be due within the next 60 days. Please refer to METDaemon Documentation for instructions on adding a SQL report to the system, and use the following SQL statement:


```
SELECT (SELECT '*' WHERE C2303<=NOW(*)) OD, I4201 ASSET#, I4202 Manufacturer, I4203 MODEL, I4204 DESCRIPTION, I4206 SERIAL#, DATEFORMAT(C2303,'MM-DD-YYYY') DUE_DATE, FROM MT.INVENTORY,MT.CALIBRATION WHERE MT.INVENTORY.MTAG=MT.CALIBRATION.MTAG AND C2339='1' AND I4299='A' AND C2303<=(NOW(*)+60) ORDER BY C2303,I4202
```

After an appropriate report has been created, using either the top toolbar or left navigation menu, select the "Configure Installed Packages"  button. This will show a list of all installed packages.



Select the "Email Notification"  button. You will now see a page consisting of all available actions for Email Notification.



Select the "Add Scheduled Task"  button on the Email Notification options menu. The "Add Scheduled Email Notification Task" form will be displayed.

"Task Name" is a required field. Task names must be unique.

"Description" is an optional field for describing this task

"Notes" is an optional field for any additional notes for this task

"Report/Message" is a required field. Select the report to send from a list of configured reports.


"Report Username" is a required field. This is the username used to access the database.

"Report Password" is a required field. This is the password used to access the database.

"Email Subject" is a required field. This is the text that will be used for the 'Subject' line of the email.

"Allow Blank Report" can be checked if you want a report to be sent even if it contains no data.

At least one user and/or group **MUST** be selected from the "Available Groups" or "Available Users" lists.

"Start This Task On" is a required field and defines the "Start Date" for this task. Select the "Open Calendar"  button to use the built in calendar.



We want the task to start today, so we select "Today" from the calendar. If a date earlier than today is selected, the task will run at the next scheduled interval, described below.


"At" is used to define the start hour and start minute for this task, in 24 hour format. Default is

00:00(midnight). We want this task to run at 8am, so we select HH: 8 and MM: 00.

Select "Monthly" from the list of schedule types. We want this report to run on the last day of the month, so select "End of Each Month" from the list of monthly options.



A screenshot of a web form showing a vertical list of four radio button options. The first option, "Monthly", is selected and highlighted with a blue background. The other options are "Beginning of Each Month", "End of Each Month", and "Every Month on Start Date".

After all changes have been made, select the "Save"  button in the top right of the form. When saving of the task is successful, you will get a confirmation stating "Task Saved Successfully", along with the Next Execution Date for the task.

The task will execute on schedule and send the results in an HTML formatted email message to the list of users and/or groups selected for the task.

Chapter 4. Advanced Topics

Dynamic Addressing

Previously, the only method described for specifying the recipients for an EMail Notification task were by selecting from lists of groups and users. While this method of building a distribution list may be acceptable for small numbers of recipients, it can become difficult to manage these lists when you have a large number of assets in your metrology database, or equipment movements are frequent.

Dynamic addressing utilizes email addresses embedded in a report. When a report executes as part of an EMail Notification task, these addresses are "pulled" from the report and are used to distribute the report. When a report contains these addresses is executed, multiple copies of the report are created, and each address receives the same report, but only with the information associated with the address. This process is described in more detail later.

Dynamic addressing works well in conjunction with other On Time Support applications such as Barcode Magician and Metrology Xplorer. For example, you may use Barcode Magician to allow factory-floor personnel to update your metrology database with location and equipment custodian information, with this information used later to dynamically send the proper calibration due notices based on these location movements. You may also embed links to Metrology Xplorer in your reports, triggering equipment owners to verify information in the metrology database after receiving an inventory report.

To utilize dynamic addressing, refer to the steps listed under the report type you would like to use.

Dynamic Addressing using SQL Query Reports

To activate dynamic addressing with SQL query style reports, you must add a column to your query that will result in a column named "email" that contains the recipient email address. To achieve this, perform the following steps:

1. Determine the source of the email addresses. This source **MUST** be a column in the database, and **MUST** be part of the query. Since you may have different sources of email addresses in your metrology database, it is important to make this determination with the goal of the report in mind. For example, if you are reporting on an inventory list, you wouldn't want to send these lists to email addresses for the manufacturers of the equipment.
2. With the source of the addresses identified, make sure that these addresses fit the addressing scheme that your email system utilizes. For example, if it is necessary to include the domain name in all of your email communications like this: "jane.doe@mycompany.com", and the addresses in your database follow this format: "jane.doe", the message deliveries will fail. Take this opportunity to correct improper addressing schemes.
3. Construct the query as appropriate for the DBMS (Database management system) used, and using linking as necessary to include the column containing the email addresses. The column that includes the email addresses **MUST** be named "email" (without the quotes). If the column is not named this way, then it won't be recognized as a source for dynamic addressing.
4. It is recommended that you **TEST** the query using the tool appropriate for the DBMS the report will be executed against. For example, if you are using Sybase ASA 8, utilize the "ISQL" tool to execute the query and verify that the source column for email addresses is named "email" (without the quotes).
5. Create the SQL Query report as normal, using the query you have constructed and tested.

6. Create the task as normal, using the report you created, but **DO NOT** specify recipients for the task - the recipient list will be dynamically generated by the SQL query.

When the task executes and the report (query) is executed, the following process occurs for every row in the resultset returned by the query:

1. If a column named "email" is detected in the resultset from the DBMS, the value for this row is recognized as the "owner" of the row.
2. If the "owner" (email address) of the row has not already appeared in the report, then a new copy of the report is created (new report is associated with the email address) and this row is added to this new report.
3. If the owner of the row has appeared before in this resultset, then the row is added to the report for that email address.
4. When all rows have been scanned, each individual report is sent to the email address associated with that copy of the report.

Some things to note regarding the report execution/dynamic addressing process:

- If a row in the resultset contains a blank or NULL value for the "email" column, then that row is discarded from ALL reports. It is important that this behavior is considered when developing your reports to fit your processes. This can be troublesome if you only send "cal-due" notices via dynamic addressing, and a handful of your metrology assets do not have email addresses assigned. These assets would not appear in those reports, and thus nobody would be informed of a "cal-due" status for them.
- Dynamic addressing consumes more memory than "normal" reports. For every unique recipient that appears in the resultset, a fresh copy of the report is created and that row is included in the new report. For example, if you create a query that contains 100 rows with 10 unique email addresses (each email address is associated with 10 rows), then 10 reports will be created, each with the 10 rows associated with the unique email address, and 10 emails will be sent.