Mail

The ThingWorx Mail extension provides the ability to read and send e-mails from ThingWorx through external SMTP mail servers that are made available to it. You can create one or more mail Things in ThingWorx to store configuration information used to send e-mails.

The services provided by the Mail extension can be used directly or in conjunction with the ThingWorx Notifications on page feature. The ThingWorx Mail extension is available from the ThingWorx Marketplace.

📋 Note

Make sure that you have a **FileRepository** Thing in which e-mail attachments can be stored.

You must import on page the `Mail_extension.zip` extension to ThingWorx. After importing the Mail extension, a Thing Template named `MailServer` appears in the **Thing Templates** list.

After you have finished configuring the extension, you can click **Monitoring ▸ LOGS ▸ SecurityLog** to find the details of any e-mail that was not delivered.

If the e-mail is not received, check out the troubleshooting tips in KCS Article CS236135.

Configuration

To create and configure a new Mail Thing, do the following:

1. In ThingWorx, create a new Thing and assign the `MailServer` template.
2. Click the **Configuration** view.

The following screen appears:

Note

The default values in these fields above are examples. Change them as needed for your organization.

3. Enter the following details used to connect to the SMTP server:

📋 **Note**

As many of these settings are dependent on how the server is set up, contact your administrator or see documentation associated with the server to determine the proper settings.

JDBC Settings	Description
SMTP Server	Address of the server from which e-mails are sent
SMTP Server Port	Port through which ThingWorx logs in to the mail server to send e-mails
POP3 Server	Address of the server from which e-mails are received
POP3 Server Port	Port through which ThingWorx logs in to the mail server to check and retrieve e-mails
Use TLS	Indicates whether to use TLS (Transport Layer Security)
Use SSL	Indicates whether to use SSL (Secure Sockets Layer)
Mail Account User	The user name for the e-mail account that is used to send and retrieve e-mails on the given mail server. This is different than the **from** field value, which is used for the sender address when sending e-mails. The **from** field value need to be a valid e-mail account.
Mail Account Password	The password for the e-mail account. For Gmail (and in other cases), the specified e-mail account can be updated to allow less secure app sign-in (see KCS Article CS200624).
Default From Field	Refers to the e-mail address to use as the **from** address when no address is specified when invoking the **SendMessage** services. This is primarily used when sending Notifications e-mails.
Connection Timeout	Refers to how long ThingWorx should wait while trying to log in to the mail server before throwing an exception. The time should be entered in milliseconds
Operation Timeout	Refers to how long ThingWorx should remain

	open without reading any data. The time should be entered in milliseconds.
Socks Host	The host name of a SOCKS proxy server if used with the mail server.
Socks Port	The port through which ThingWorx connects to the SOCKS proxy server, if used.
Attachment File Repository	The name of the **FileRepository** Thing to use for processing attachments when reading e-mails from the mail server.
No-Reply Address	The address for sending an e-mail from an anonymous or generic address. No reply e-mails are allowed to this address. 📝 **Note** If the e-mail server requires authentication of your **No-Reply Address**, enter the address and its password in the **Mail Account User** and **Mail Account Password** fields.

Reply Address	The address to which an e-mail recipient would reply. If the e-mail recipient replies to an e-mail that you have sent, the e-mail address that you have set in **Reply Address** field will appear.
Error Address	The address to receive e-mails notifying of recipients that do not exist. 📝 **Note** There could be instances when you enter an incorrect address when sending an e-mail. In this case, an automated e-mail is generated and sent to the address in this field containing the recipient that do not exist. If there are multiple recipients, the e-mail is delivered to all recipients with a correct e-mail address. For example, if you enter `thingWorx@ptc@com` instead of `thingworx@ptc.com`, an error notification is sent. The sender of the notification e-mail would be either the address that you have set in **No-Reply Address** or, if it is not set, then the mail account user. No notification is sent when the recipient e-mail address is correct. Also, notifications are only sent for syntactically incorrect e-mail addresses and not for non-existent or otherwise invalid e-mail addresses. For example, if `thingworx@ptc.com` does not exist, sending an e-mail would not generate a notification from the mail extension.

4. Click **Save**.

Services

The ThingWorx Mail extension provides a set of services that enable you to execute the features provided by the extension. Click on **Services** for a Mail Thing to open the services. Click on an individual service to open that service and view or modify any inputs. For more information, see Thing Services on page .

The following services are available:

- **GetNotificationHandlers** — Shows when the configured Mail Thing is a notification handler.

  For more information, see

- **ReadMessages** — Reads messages on the configured server and e-mail account.

  This services has the following inputs:

  - **maxItems** — The maximum number of messages to return
  - **withDelete** — Whether to delete messages on the server once they are retrieved (this behavior is specific to the e-mail provider)
  - **withAttachments** — Whether to save any e-mail attachments

  This service returns an infotable with the following fields:

  - `from` — The sender of the e-mail
  - `timestamp` — When the e-mail was sent
  - `subject` — The subject of the e-mail
  - `content` — The body of the e-mail
  - `hasAttachments` — Whether the e-mail has attachments (`true` or `false`)

- **SendMessage** — Sends an e-mail message.

  This services has the following inputs:

  - **from** — The valid e-mail address of the sender (for example, `donotreply@domain.com`)
  - **to** — The valid e-mail address specifying the recipient of the e-mail
  - **subject** — The subject of the e-mail
  - **body** — The content of the e-mail (this is an HTML parameter)

- **SendMessageWithAttachment** — Sends an e-mail message with a single attachment.

> **Note**
>
> Use this service only when you have a single attachment with the e-mail. Use **SendMessageWithAttachments** when you want to attach more than one file with the e-mail.

This services has the following inputs:

- ○ **from** — The valid e-mail address of the sender (for example, as `donotreply@domain.com`)
- ○ **to** — The valid e-mail address specifying the recipient of the e-mail
- ○ **cc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied
- ○ **bcc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied and without being visible to other recipients
- ○ **subject** — The subject of the e-mail
- ○ **body** — The content of the e-mail (this is an HTML parameter)
- ○ **fileRepository** — The repository in which the e-mail attachments are stored
- ○ **path** — The path of file to be attached
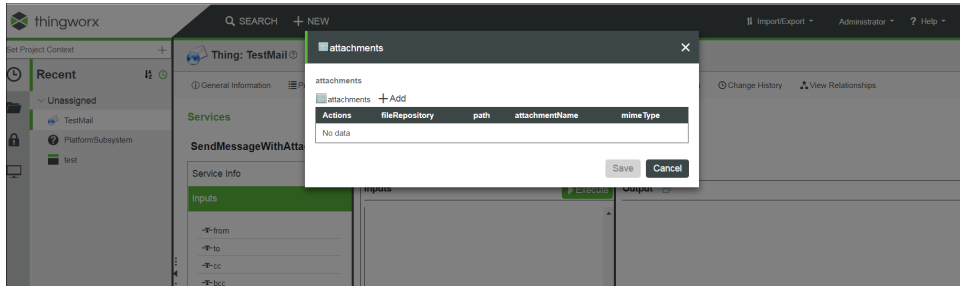

📝 Note

If you have stored the attachment in `ThingworxStorage/ repository/SystemRepository`, you can directly give the name of file in this field. For example, if the file name is `Testfile.pdf`, then you can enter this name as it is in this field.

- ○ **attachmentName** — the name of file to be attached.
- ○ **mimeType** — the type of mime. For example, the mimeType for `Testfile.pdf` will be `application/pdf`.
- **SendMessageWithAttachments** — Sends an e-mail message with multiple attachments.

This services has the following inputs:

- ○ **from** — The valid e-mail address of the sender (for example, as `donotreply@domain.com`)
- ○ **to** — The valid e-mail address specifying the recipient of the e-mail
- ○ **cc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied
- ○ **bcc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied and without being visible to other recipients
- ○ **subject** — The subject of the e-mail
- ○ **body** — The content of the e-mail (this is an HTML parameter)
- ○ **attachments** — The infotable field you must select to add multiple attachments

Click **attachments** and the following page opens:

- ○ **Add** — Click this to add an attachment
- ○ **fileRepository** — The repository in which the e-mail attachments are stored
- ○ **path** — The path of file to be attached

> 📝 **Note**
>
> If you have stored the attachment in `ThingworxStorage/repository/SystemRepository`, you can directly give the name of file in this field. For example, if the file name is `Testfile.pdf`, then you can enter this name as it is in this field.

- ○ **attachmentName** — The name of file to be attached.
- ○ **mimeType** — The type of mime

  For example, the mimeType for `Testfile.pdf` will be `application/pdf`.

- ○ **Save** — Click this and your attachment will be saved

> 📝 **Note**
>
> You can add multiple attachments using **Add**. Make sure you save all attachments and then you can see them listed in the infotable.

- **SendMessageWithImage** — Sends an e-mail message with a single attached image.

> 📝 **Note**
>
> Use this service only when you want to attach a a single image to the e-mail. Use **SendMessageWithImages** when you want to attach more than one image.

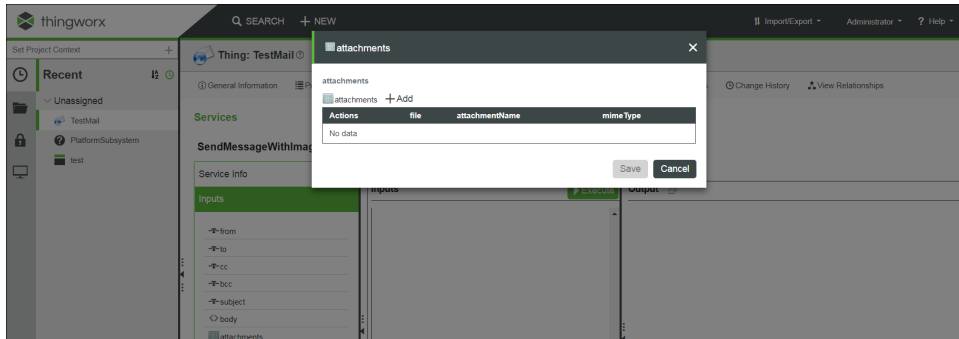This services has the following inputs:

- ○ **from** — The valid e-mail address of the sender (for example, as `donotreply@domain.com`)
- ○ **to** — The valid e-mail address specifying the recipient of the e-mail
- ○ **cc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied
- ○ **bcc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied and without being visible to other recipients
- ○ **subject** — The subject of the e-mail
- ○ **body** — The content of the e-mail (this is an HTML parameter)
- ○ **Image** — The image to attach to the e-mail

    Click **Change** to browse to and select the image that you want to send with the e-mail.

- ○ **attachmentName** — The name of image to be attached
- ○ **mimeType** — The type of mime

    For example, the mimeType for `Testimage.png` will be `image/png`.

- • **SendMessageWithImages** — Sends an e-mail message with a multiple attached images.

    This services has the following inputs:

- ○ **from** — The valid e-mail address of the sender (for example, as `donotreply@domain.com`)
- ○ **to** — The valid e-mail address specifying the recipient of the e-mail
- ○ **cc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied
- ○ **bcc** — The valid e-mail address specifying any other recipient to whom the e-mail should be copied and without being visible to other recipients
- ○ **subject** — The subject of the e-mail
- ○ **body** — The content of the e-mail (this is an HTML parameter)

- **attachments** — The infotable field that you must select to add multiple images

  Click **attachments** and the following page opens:

- **Add** — Click this to add an image

- **file** — Click **Change**

  This enables you to browse and select the image you want to send with the e-mail.

- **attachmentName** — The name of image to be attached

- **mimeType** — The type of mime

  For example, the mimeType for `Testimage.png` will be `image/png`.

- **Save** — Click this and your image will be saved.

📋 Note

You can add multiple images using **Add**. Make sure to save all images and then you can see them listed in the infotable.

- **SendMessageWithNoReplyTo** — Sends an e-mail message from the default address you entered in the **No-Reply Address** field.

  This services has the following inputs:

  - **to** — valid e-mail address specifying the recipient of the e-mail.
  - **subject** — the subject of the e-mail.
  - **body** — the content of the e-mail (this is an HTML parameter).

- **SetDebug** — Determines whether debugging is turned on.

  This service has as single input **debug** that you set to **True** or **False**. Debugging writes additional information to the Application Log.

- **IsDebug** — Checks whether debugging is turned on.