



INTEGRATION PACK FOR EMAIL

For Microsoft System Center Orchestrator

User Guide

Version 1.4

Kelverion Integration Pack for Email

Kelverion Automation

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Kelverion Integration Pack for Email

The *Kelverion Integration Pack for Email* is an add-on for *Microsoft System Center Orchestrator* that enables you to send, retrieve and monitor email messages. The IP works with SMTP servers (outgoing email) and POP3 or IMAP servers (incoming email). The integration pack provides the following email activities:

- Delete Email
- Empty Mailbox
- Get Email
- Get Email List
- Get Mailbox Info
- Get Mailbox List
- Monitor Email
- Move Email
- Send Email

System Requirements

The Kelverion Integration Pack for Email requires the following software to be installed and configured prior to deploying the integration. For more information about installing and configuring Orchestrator and the SQL Server, refer to the respective product documentation.

- Microsoft System Center Orchestrator *2016, 2019*
- Microsoft .NET Framework 4.6.2

The Integration Pack also requires access to the following type of email servers:

- SMTP email server for sending email.
- POP3 or IMAP server for retrieving or monitoring email.

The Integration Pack for Email should be compatible with any email service that implements standard SMTP, POP3 and IMAP specifications and uses basic authentication. This version of the Integration Pack for Email does not support OAuth 2.0. For email services that require OAuth 2.0 authentication, such as Microsoft Exchange, you can use the **Kelverion Integration Pack for OAuth Email**.

Registering and Deploying the Integration Pack

After you download the integration pack file, you must register it with the Orchestrator management server and then deploy it to Runbook Servers and Runbook Designers. For more information about how to install integration packs, see the [How to Install an Integration Pack](https://technet.microsoft.com/en-us/library/hh420346.aspx) (<https://technet.microsoft.com/en-us/library/hh420346.aspx>).

To register the integration pack:

1. On the management server, copy the **.OIP** file for the integration pack to a local hard drive or network share.
2. Confirm that the file is not set to **Read Only** to prevent unregistering the integration pack later.

3. Start the **Deployment Manager**.
4. In the navigation pane of the Deployment Manager, expand **Orchestrator Management Server**, right-click **Integration Packs** to select **Register IP with the Orchestrator Management Server**. The **Integration Pack Registration Wizard** opens.
5. Click **Next**.
6. In the **Select Integration Packs or Hotfixes** dialog box, click **Add**.
7. Locate the **.OIP** file that you copied locally from step 1, click **Open** and then click **Next**.
8. In the **Completing the Integration Pack Wizard** dialog box, click **Finish**.
9. On the **End User Agreement** dialog box, read the Kelverion License Terms, and then click **Accept**.
10. The **Log Entries** pane displays a confirmation message when the integration pack is successfully registered.

To deploy the integration pack:

1. In the navigation pane of the **Deployment Manager**, right-click **Integration Packs**, click **Deploy IP to Runbook Server or Runbook Designer**.
2. Select the integration pack that you want to deploy, and then click **Next**.
3. Enter the name of the runbook server or computers with the Runbook Designer installed, on which you want to deploy the integration pack, click **Add**, and then click **Next**.
4. Continue to add additional runbook servers and computers running the Runbook Designer, on which you want to deploy the integration pack. Click **Next**.
5. In the **Installation Options** dialog box configure the following settings.
6. To choose a time to deploy the integration pack, select the **Schedule installation** check box, and then select the time and date from the **Perform installation** list.
7. Click one of the following:
 - a. **Stop all running runbooks before installing the integration pack** to stop all running runbooks before deploying the integration pack.
 - b. **Install the Integration Packs without stopping the running Runbooks** to install the integration pack without stopping any running runbooks.
8. Click **Next**.
9. In the **Completing Integration Pack Deployment Wizard** dialog box, Click **Finish**.
10. When the integration pack is deployed, the **Log Entries** pane displays a confirmation message.

Licensing the Integration Pack

After you register and deploy the integration pack, you must provide a valid Kelverion license before running any runbooks that contain activities from the integration pack.

To deploy the integration pack license file to System Center Orchestrator 2019 or earlier:

1. Copy the .KAL license file to %PROGRAMFILES(X86)%\Kelverion Automation\Licenses

2. Repeat for each Orchestrator Runbook Server and Runbook Designer host system.

Configuring the Kolverion Integration Pack for Email

A configuration establishes a reusable link between Orchestrator and the target email server. You can create multiple configurations, as you require, specifying links to multiple email servers. You can also create multiple configurations to the same email server to allow for different user accounts.

To add a KA Email Configuration in Runbook Designer:

1. In the Runbook Designer, click the **Options** menu, and select **KA Email**. The **KA Email** dialog box appears.
2. In the **Configurations** tab, click **Add** to begin the configuration setup. The **Add Configuration** dialog box appears.
3. In the **Name** box, enter a name for the configuration. This could be the name of the email server or a descriptive name to distinguish the type of configuration.
4. Click the ellipsis button (...) next to the **Type** box and select **Email Configuration**.
5. In the **Email Address** box, type the email address associated with the email account. This address will be used when sending emails.
6. In the **Incoming Protocol** box select **IMAP** or **POP3** to indicate the type of email server used to retrieve email.
7. In the **Incoming Server** box, enter the FQDN or the IP address of the incoming email server.
8. In the **Incoming Server Port** box enter the port used to communicate with the email server. The following table lists typical port values based on incoming protocol and security settings.

Protocol	Implicit SSL/TLS	Explicit SSL/TLS	None
POP3	995	110	110
IMAP	993	143	143

9. In the **Incoming Security Mode** box select the type of security used when communicating with email server. See [Configuring Security Mode](#) for details.
10. In the **Incoming User Name** box, type the user name or email address used to connect to the incoming server.
11. In the **Incoming User Password** box, type the password of the user that is used to connect to the incoming server.
12. In the **Incoming Timeout (Seconds)** box, type the number of seconds after which an email operation should time out.
13. In the **Incoming Retries** box, type the number of times the IP should retry a failed remote operation. Type zero to disable retries.
14. In the **Incoming Retry Delay (Seconds)** box, type the number of seconds the IP should wait between retry attempts.
15. In the **Outgoing Server (SMTP)** box, type the FQDN or the IP address of the outgoing server.

16. In the **Outgoing Server Port** box, type the port used to communicate with the outgoing server. The following table lists typical port values for SMTP based on security settings.

Implicit SSL/TLS	Explicit SSL/TLS	None
465	25 or 587	25 or 587

17. In the **Outgoing Security Mode** box, select the type of security used when communicating with the outgoing server. See [Configuring Security Mode](#) for details.
18. In the **Outgoing Server Requires Authentication** box, indicate whether the outgoing server should authenticate the user before sending an email message.
19. In the **Outgoing Users Different Credentials** box, indicate whether the outgoing server uses different credentials than the incoming server. If **False** is selected, the **Outgoing User Name** and **Outgoing User Password** values are ignored.
20. In the **Outgoing User Name** box, type the user name or email address used to connect to the SMTP server.
21. In the **Outgoing User Password** box, type the password for of the user used to connect to the SMTP server.
22. In the **Outgoing Timeout (Seconds)** box enter the number of seconds after which an email operation should time out.
23. In the **Outgoing Retries** box enter the number of times the IP should retry a failed remote operation. Type zero to disable retries.
24. In the **Incoming Retry Delay (Seconds)** box enter the number of seconds to wait between retry attempts.
25. In the **Trash Folders** box enter a comma (,) separated list of folder names that the IP should treat as trash folders. This list is used by the [Delete Email Activity](#) to determine how email messages should be deleted from a mailbox.
26. Click **OK** to close the configuration dialog box, and then click **Finish**.

Tip: When building new email configurations, it is recommended to reduce Timeout and disable Retries so that configuration errors can be quickly diagnosed. Once connection is established and IP communicates successfully with the email server, then Timeout and Retries should be tuned appropriately.

Configuring Security Mode

When configuring incoming or outgoing server Security Mode, the available options are:

- Explicit SSL/TLS
- Implicit SSL/TLS
- None

When **Explicit SSL/TLS** is selected, secure communication is established only after the initial handshake is negotiated in the clear. Communication takes place over the same port used for unsecured connection, however the session is fully encrypted once secure communication has been established.

When **Implicit SSL/TLS** is selected, the connection is secured for the entire session. The email client connects, initiates the secure handshake and if successful the secure session is established. For this reason, a separate port is required when using this security mode.

When **None** is selected, all communication takes place in the clear.

The following table lists the ports that are typically used for different protocols with different security modes.

Common Email Port Numbers

Protocol	Implicit SSL/TLS	Explicit SSL/TLS	None
POP3	995	110	110
IMAP	993	143	143
SMTP	465	25 or 587	25 or 587

Email Message Identification

The Kolverion Integration Pack for Email uses Unique Identifiers, to uniquely identify and distinguish email messages. Unique ID values, which are supported by IMAP servers and POP3 servers with UIDL capability, provide a reliable mechanism for managing email messages, however, there are some considerations that users should take into account.

Considerations When Using POP3

The POP3 protocol implies that Unique ID of a message can be reused once the message has been deleted. Consequently, runbook designers should take special care when storing Unique ID values due to the possibility that the intended email message may have been deleted and its Unique ID value reassigned to another message. Users should also be aware that the Monitor Email activity would fail to identify an email message in the unlikely instance that an email is deleted, and its Unique ID value reassigned to another email within the duration of single monitor cycle.

Considerations When Using IMAP

When using IMAP to manage email messages, users should be aware that Unique ID values are only valid within a given mailbox and that an email message will be assigned a new Unique ID value if and when it is moved to another mailbox. It is also possible that email messages in different mailboxes can be assigned the same Unique ID value. Consequently, runbook designers should take care when building runbooks that move and/or delete email messages to ensure that they are using the correct Unique ID value.

It should also be noted that the Integration Pack for Email incorporates a feature of IMAP, called *UIDVALIDITY*, to help ensure that UID values are valid from one session to the next. Specifically, the **Unique ID** values that are published by the integration pack are a combination of an email's UID value and the *UIDVALIDITY* of the selected mailbox. In the rare instance that the integration encounters an invalid UID, the activity will fail with an appropriate error, or in the case of the Monitor Email activity, report a warning. Also, there is the possibility that the Monitor Email activity will fail to identify new email messages during the monitor cycle in which it responds to the

Working with Email Activities

This integration pack adds the **KA Email** category to the **Activities** pane in the Runbook Designer.

This category contains the following activities:

- Delete Email
- Empty Mailbox
- Get Email
- Get Email List
- Get Mailbox Info
- Get Mailbox List
- Monitor Email
- Move Email
- Send Email

Common Configuration Instructions for All Activities

The following configuration instructions apply to all activities in this integration pack. Links to this section are included in the configuration instructions for each activity.

Activity Properties

Each activity has a set of required or optional properties that define the configuration of that activity. This includes how it connects to other activity or how the activity performs its actions. You can view or modify activity properties in the Orchestrator Client.:

To configure the properties for an activity:

1. Double-click the activity. Alternatively, you can right-click the activity, and then click **Properties**.
2. To save your configuration entries, click **Finish**.

In the activity properties dialog box, several tabs along the left side provide access to general and specific settings for the activity. Although the number of available tabs for activity properties differs from activity to activity, all activities will have a **General** tab, a **Properties tab and/or Filters** tab, and a **Run Behavior** tab. Some activities may have additional tabs.

General Tab

This tab contains the **Name** and **Description** properties for the activity. By default, the **Name** of the activity is the same as its activity type, and the **Description** is blank. You can modify these properties to create more descriptive names or provide detailed descriptions of the actions of the activity.

Properties/Filters Tab

These tabs contain properties that are specific to the activity.

All activities in this integration pack have the **Configuration Name** property at the top of the **Properties** tab. This property is used to specify the connection to a SQL table.

To configure the Configuration Name proper:

1. Click the ellipsis (...) button next to the **Name** field, and then select the applicable connection name. Connections displayed in the list have been previously configured as described in [Configuring the SQL Server Connections](#).

Working with NULL Values

For columns that allow NULL values, you can specify that you want to assign a NULL value to a column for filter by using the **NULL** keyword.

Filter Behavior

The Select and Monitor activities use filters to determine the values that will invoke a runbook or retrieve activities. Property values of potential candidates are compared to the values of the filters to determine if they meet the criteria. When matching against values, you can select one of the available methods of comparison. An option is provided to either match or not match the filter using each method. For example, the "Does not" version of a method finds messages that do not match the filter to start the activity. All text filters are case sensitive.

- **Equals:** the column of the record exactly matches the text or number specified in the filter. Alternatively, you can enter **NULL** as the filter value to perform an *IS NULL* query against the selected column.

- **Does not equal:** the column of the record does not exactly match the text or number specified in the filter. Alternatively, you can enter **NULL** as the filter value to perform an *IS NOT NULL* query against the selected column.
- **Is less than:** the column of the record is less than the number specified in the filter.
- **Is less than or equal to:** the column of the record is less than or equal to the number specified in the filter.
- **Is greater than:** the column of the record is greater than the number specified in the filter.
- **Is greater than or equal to:** the column of the record is greater than or equal to the number specified in the filter.
- **Contains:** the column of the record contains the exact text specified in the filter. Unlike the Equals behavior, there can be other text surrounding the matching text.
- **Does not contain:** the column of the record does not contain the exact text specified in the filter. Unlike the Equals behavior, there can be other text surrounding the matching text.
- **Matches:** the column of the record matches the text specified in the filter. Uses syntax and semantics comparable to the SQL LIKE operator.
- **Does not match:** the column of the record does not match the text specified in the filter. Uses syntax and semantics comparable to the SQL LIKE operator.
- **Starts with:** the column of the record starts with the exact text specified in the filter. Unlike the Equals behavior, there can be other text following the matching text.
- **Ends with:** the column of the record ends with the exact text specified in the filter. Unlike the Equals behavior, there can be other text preceding the matching text.

Run Behavior Tab

This tab contains the properties that determine how the activity handles multi-value published data and what notifications will be sent if the activity fails or runs for an excessive period.

Multi-Value Published Data Behavior

The Get activities retrieve information from another activity or outside source and can return one or more values in the published data. For example, when you use the Get Collection Member activity, the data output from that activity might be a list of computers that belong to the specified collection.

By default, the data from the Get activity will be passed on as multiple individual outputs. This invokes the next activity as many times as there are items in the output. Alternatively, you can provide a single output for the activity by enabling the **Flatten** option. When you enable this option, you also choose a formatting option:

- **Separate with line breaks.** Each item is on a new line. This format is useful for creating human-readable text files for the output.
- **Separate with _** . Each item is separated by one or more characters of your choice.
- **Use CSV format.** All items are in CSV (comma-separated value) format. This format is useful for importing data into spreadsheets or other applications.

The activity will produce a new set of data every time it runs. The **Flatten** feature does not flatten data across multiple instances of the same activity.

Event Notifications

Some activities are expected to take a limited amount of time to complete. If they do not complete within that time they may be stalled or there may be another issue preventing them from completing. You can define the number of seconds to wait for completion of the action. After this period a platform event will be sent, and the issue will be reported. You can also choose whether to generate a platform event if the activity returns a failure.

To be notified when the activity takes longer than a specified time to run or fails to run:

1. In the **Event Notifications** box, enter the **number of seconds** of run time before a notification is generated.
2. Select **Report if activity fails to run** to generate run failure notifications.

For more information about Orchestrator events, see the "Event Notifications " topics in the [Runbook Properties](https://technet.microsoft.com/en-us/library/hh489610.aspx#EventNotifications) (https://technet.microsoft.com/en-us/library/hh489610.aspx#Event Notifications).

Published Data

Published data is the foundation of a working runbook. It is the data produced because of the actions of an activity. This data is published to an internal data bus that is unique for each runbook. Subsequent activities in the runbook can subscribe to this data and use it in their configuration. Link conditions also use this information to add decision-making capabilities to runbooks.

An activity can subscribe only to data from the activities that are linked before it in the runbook. You can use published data to automatically populate the property values needed by activities.

To use published data:

1. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
2. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
3. To view additional data elements common to all activities, select **Show Common Published Data**.
4. Click the published data element that you want to use, and then click **OK**.

For a list of the data elements published by each activity, see the Published Data tables in the activity topic. For information about the common published data items, see the [Published Data](http://technet.microsoft.com/en-us/library/hh403821.aspx) (http://technet.microsoft.com/en-us/library/hh403821.aspx).

Delete Email Activity

The **Delete Email** activity can be used in a runbook to delete one or more email messages.

The behavior of the Delete Email activity differs based on the **Incoming Protocol** of the configuration that is selected when the activity is defined. With IMAP configurations, the user can use the **Permanent Remove** property to specify whether messages are to be permanently deleted or whether they are to be moved to another location. With **POP3** configurations, messages are permanently removed when deleted.

Required Properties

You must configure the following properties.

Mailbox Name	Specifies the name of the mailbox where email messages are to be deleted from. Only available for IMAP configurations. When specifying a folder (mailbox) which is listed in under Trash Folders property in the activity configuration, the activity will permanently remove specified messages from the mailbox.
Unique ID	Identifies one or more email messages to be deleted. Use comma (,) or semicolon (;) to separate multiple message IDs. When a list of IDs is specified, the activity will process multiple email messages in a single session, thus reducing network traffic and improving performance. <i>Tip</i> Use the Flatten option under Run Behavior tab of activity properties, to combine multiple Unique IDs published by Get Email List activity into a single comma (,) or semi-colon (;) separated list of IDs.
Permanent Remove	Specifies whether messages will be permanently deleted or whether they will be moved to another mailbox. Only available for IMAP configurations. This property is not available when Mailbox Name is configured with a folder which is listed in under Trash Folders property in the activity configuration.
Move To	Specifies the target mailbox where messages are to be moved. Only available for IMAP configurations. This property is only available when Permanent Remove is configured to False .

Published Data

This activity generates the following published data.

Unique ID	Unique ID(s) of the messages that were deleted/moved.
Message Count	Number of messages that were deleted/moved.

Empty Mailbox Activity

The **Empty Mailbox** activity can be used in a runbook to permanently remove email messages from a specified mailbox. This activity can only be used with IMAP configurations.

Required Properties

You must configure the following properties.

Mailbox Name	Specifies the name of the mailbox to remove messages from. Only available for IMAP configurations.
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Published Data

This activity generates the following published data.

Unique ID	Unique ID(s) of the messages that were removed from the mailbox.
Message Count	Number of messages that were removed from the mailbox.

Get Email Activity

The **Get Email** activity can be used in a runbook to download the contents of email messages, including message body and attachments.

Required Properties

You must configure the following properties.

Unique ID	Identifies one or more email messages to be retrieved. Use comma (,) or semicolon (;) to separate multiple message IDs. When a list of IDs is specified, the activity will process multiple email messages in a single session, thus reducing network traffic and improving performance. <i>Tip</i> Use the Flatten option under Run Behavior tab of activity properties to combine multiple Unique IDs published by Get Email List Activity into a single comma (,) or semi-colon (;) separated list of IDs.
Mailbox Name	Specifies the name of the mailbox that contains the email message(s). Only available for IMAP configurations.

Optional Properties

The following properties are optional and can be used as required.

As Plain Text	Specifies that the plain text message body should be published for an email message flagged as HTML. When a sender does not include a plain text version, Message Body will return as empty.
Attachment Download Folder	Specifies a folder where email attachments are to be downloaded. If the folder does not exist, the activity creates it.
If Attachment Exists	Specifies what action to take if a file with the same name already exists in the folder where an attachment is to be saved. <ul style="list-style-type: none">• Rename – adjusts the name of the attachment so that it does not conflict with existing file name.• Overwrite – overwrites existing file with new attachment file.• Ignore – does not save the attachment and leaves the exiting file unchanged.

Published Data

This activity generates the following published data.

Attachment Count	Number of attachments contained by a message.
Attachment Download Folder	Folder where message attachment(s) were saved.
Bcc	Semicolon (;) separated list of email addresses specifying hidden recipient(s) of the email message.
Cc	Semicolon (;) separated list of email addresses specifying other recipients of

	the email message.
Date Received	Date and time when the email message was received.
Date Received in UTC	UTC date and time when the email message was received.
Date Sent	Date and time when the email message was sent.
Date Sent in UTC	UTC date and time when the email message was sent.
From	Semicolon (;) separated list of email addresses specifying author(s) of the email message.
HTML	Indicates if the Message Body is in HTML format.
Is Encrypted	Indicates if the email message is encrypted.
Is Read Only	Indicates if the email message is read only.
Is Signed	Indicates if the email message has been signed.
Message Body	Body of the email message.
Message Count	Number of messages retrieved by the activity.
Message ID	Uniquely identifies the email message.
Priority	Message priority.
Saved Attachments	Comma (,) separated list of attachment file names.
Sequence Number	Sequence number of the email message.
Size (Bytes)	The size of the mail message in bytes.
Subject	The subject of the email.
To	Semicolon (;) separated list of email addresses specifying primary recipients of the email message.
Unique Id	Uniquely identifies the email message.

Get Email List Activity

The **Get Email** List activity is used in a runbook to retrieve a list of email messages from a mailbox. This activity retrieves information about email messages, however, it does not download message body or attachments. Typically, you would use Get Email List activity to retrieve and filter email messages and subsequently you would use Get/Delete/Move Email activities to further process those messages.

Tip: Use the Flatten option under Run Behavior tab of activity properties to combine multiple Unique IDs published by Get Email List activity into a single comma (,) or semi-colon (;) separated list of IDs. You can then feed this list into the Unique ID property of activities which accept ID lists, such as Get/Move/Delete Email, so that multiple messages are processed together. Doing so will reduce network traffic and improve performance of the IP.

Required Properties

You must configure the following properties.

Mailbox Name	Specifies the name of the mailbox from which to retrieve email messages. Only available for IMAP configurations.
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Optional Properties

The following properties are optional and can be used as required.

Keyword	Specifies a keyword to search for in the message header or body. The activity will return only messages containing this keyword. Only available for IMAP configurations.
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Filters

You can use the following filters to control which email messages to retrieve from the server.

Bcc	Filters email messages by hidden recipient(s).
Cc	Filters email messages by other recipient(s).
Date Received	Filters email messages by Date Received. Only available for IMAP configurations.
Date Received in UTC	Filters email messages by UTC Date Received. Only available for IMAP configurations.
Date Sent	Filters email messages by Date Sent.
Date Sent in UTC	Filters email messages by UTC Date Sent.
From	Filters email messages by author(s)
Is Deleted	Filters email messages by Is Deleted flag. Only available for IMAP configurations.
Is Draft	Filters email messages by Is Draft flag. Only available for IMAP configurations.

Is Read	Filters email messages by Is Read flag. Only available for IMAP configurations.
Is Signed or Encrypted	Filters email messages by Is Signed or Encrypted flag. Only available for IMAP configurations.
Message ID	Filters email messages by Message ID.
Sequence Number	Filters email messages by Sequence Number.
Size (Bytes)	Filters email messages by Size.
Subject	Filters email messages by Subject.
To	Filters email messages by primary recipient(s).
Unique Id	Filters email messages by Unique ID.

Published Data

This activity generates the following published data.

Bcc	Semicolon (;) separated list of email addresses specifying hidden recipient(s) of the email message.
Cc	Semicolon (;) separated list of email addresses specifying other recipients of the email message.
Date Received	Date and time when the email message was received. Only available for IMAP configurations.
Date Received in UTC	UTC date and time when the email message was received. Only available for IMAP configurations.
Date Sent	Date and time when the email message was sent.
Date Sent in UTC	UTC date and time when the email message was sent.
From	Semicolon (;) separated list of email addresses specifying author(s) of the email message.
Is Deleted	Indicates if the email message is marked as “deleted”. Only available for IMAP configurations.
Is Draft	Indicates if the email message is a draft. Only available for IMAP configurations.
Is Read	Indicates if the email message has been read. Only available for IMAP configurations.
Is Signed or Encrypted	Indicates if the email message is signed or encrypted. Only available for IMAP configurations.
Message Count	Specifies the number of email messages retrieved by the activity.
Message ID	Uniquely identifies the email message.
Sequence Number	Sequence number of the email message.
Size (Bytes)	Email message size in bytes.

Subject	Email message subject.
To	Semicolon (;) separated list of email addresses specifying primary recipients of the email message.
Unique Id	Uniquely identifies the email message.

Get Mailbox Info Activity

The **Get Mailbox** Info activity can be used in a runbook to retrieve information about a specified mailbox. Typically, you would use this activity to make sure that a mailbox does not grow too large. The performance of the IP can be negatively affected when working with a large mailbox which contains a large number of messages.

Required Properties

You must configure the following properties.

Mailbox Name	Specifies the name of the IMAP mailbox. Only available for IMAP configurations.
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Published Data

This activity generates the following published data.

Mailbox Name	The name of the mailbox. Only available for IMAP configurations.
Mailbox Size (Bytes)	The total size of the mailbox, in bytes. Only available for POP3 configurations.
Message Count	The number of messages present in the mailbox.

Get Mailbox List Activity

The **Get Mailbox List** activity can be used in a runbook to retrieve the mailbox names using filter criteria that you specify. This activity is only available for IMAP configurations.

Required Properties

You must configure the following properties.

Name	Filters mailboxes by mailbox name
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Published Data

This activity generates the following published data.

Mailbox Count	The number of mailbox names that were retrieved
Mailbox Name	The name of the mailbox

Monitor Email Activity

The **Monitor Email** activity can be used in a runbook to monitor a mailbox for new email messages. The monitor performance is directly affected by the size of the mailbox it monitors, therefore, to optimize performance, it is recommended to keep the mailbox clean and delete messages when they are no longer needed. You can use the **Get Mailbox Info** activity to check the size and number of messages in a mailbox.

Required Properties

You must configure the following properties.

Mailbox Name	Specifies the name of the IMAP mailbox to monitor. Only available for IMAP configurations.
Monitor Interval (seconds)	Specifies how often the monitor checks if new emails have arrived on the server.

Optional Properties

The following properties are optional and can be used as required.

Keyword	Specifies a keyword to search for in the message header or body. The activity will return only messages containing this keyword. Only available for IMAP configurations.
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Filters

You can use the following filters to control which email messages will trigger the monitor.

Bcc	Filters email messages by hidden recipient(s).
Cc	Filters email messages by other recipient(s).
Date Received	Filters email messages by Date Received. Only available for IMAP configurations.
Date Received in UTC	Filters email messages by UTC Date Received. Only available for IMAP configurations.
Date Sent	Filters email messages by Date Sent.
Date Sent in UTC	Filters email messages by UTC Date Sent.
From	Filters email messages by author(s)
Is Deleted	Filters email messages by Is Deleted flag. Only available for IMAP configurations.
Is Draft	Filters email messages by Is Draft flag. Only available for IMAP configurations.
Is Read	Filters email messages by Is Read flag. Only available for IMAP configurations.
Is Signed or Encrypted	Filters email messages by Is Signed or Encrypted flag. Only available for

	IMAP configurations.
Message ID	Filters email messages by Message ID.
Sequence Number	Filters email messages by Sequence Number.
Size (Bytes)	Filters email messages Size.
Subject	Filters email messages by Subject.
To	Filters email messages by primary recipient(s).
Unique Id	Filters email messages by Unique ID.

Published Data

This activity generates the following published data.

Bcc	Semicolon (;) separated list of email addresses specifying hidden recipient(s) of the email message.
Cc	Semicolon (;) separated list of email addresses specifying other recipients of the email message.
Date Received	Date and time when the email message was received. Only available for IMAP configurations.
Date Received in UTC	UTC date and time when the email message was received. Only available for IMAP configurations.
Date Sent	Date and time when the email message was sent.
Date Sent in UTC	UTC date and time when the email message was sent.
From	Semicolon (;) separated list of email addresses specifying author(s) of the email message.
Is Deleted	Indicates if the email message is marked as “deleted”. Only available for IMAP configurations.
Is Draft	Indicates if the email message is a draft. Only available for IMAP configurations.
Is Read	Indicates if the email message has been read. Only available for IMAP configurations.
Is Signed or Encrypted	Indicates if the email message is signed or encrypted. Only available for IMAP configurations.
Message Count	Specifies the number of email messages retrieved by the monitor.
Message ID	Uniquely identifies the email message.
Sequence Number	Sequence number of the email message.
Size (Bytes)	Email message size in bytes.
Subject	Email message subject.
To	Semicolon (;) separated list of email addresses specifying primary recipients of the email message.
Unique Id	Uniquely identifies the email message.

Move Email Activity

The **Move Email** activity can be used in a runbook to move one or more email messages between folders. This activity is only available for IMAP configurations.

Required Properties

You must configure the following properties.

Unique ID	Identifies one or more email messages to be moved. Use comma (,) or semicolon (;) to separate multiple message IDs. When a list of IDs is specified, the activity will process multiple email messages in a single session, thus reducing network traffic and improving performance. 💡 Tip Use the Flatten option under Run Behavior tab of activity properties to combine multiple Unique IDs published by Get Email List Activity into a single comma (,) or semi-colon (;) separated list of IDs.
Mailbox Name	Specifies the name of the mailbox where messages are to be moved from.
Move To	Specifies the name of the mailbox where messages are to be moved.

Published Data

This activity generates the following published data.

Unique ID	Unique ID(s) of the messages that were moved.
Message Count	Number of messages that were moved.

Send Email Activity

The **Send Email** activity can be used in a runbook to send an email message.

Required Properties

You must configure the following properties:

Attachment Count	Specifies the number of attachments to be sent with this email message. Specify zero when the message does not contain any attachments. Use this property for specifying email attachments statically.
Attachment 1..10	File path for an email attachment. Only available when Attachment Count specifies a number greater than 0.
From	One or more email addresses specifying the author(s) of the email message. Multiple email addresses should be semicolon (;) separated.
Message Body	Body of the email message.
Subject	Subject of the email message.
To	One or more email addresses specifying the primary recipient(s) of the email message. Multiple email addresses should be semicolon (;) separated.

Optional Properties

The following properties are optional and can be used as required.

Additional Attachments	Semicolon (;) separated list of attachment paths. Use this property for specifying email attachments dynamically. The attachments specified by this property are sent in addition to any attachments specified by Attachment 1..10 properties.
Bcc	One or more email addresses specifying recipient(s) that should not be visible to the other recipients of the email message. Multiple email addresses should be semicolon (;) separated.
Cc	One or more email addresses specifying other recipients(s) of the email message. Multiple email addresses should be semicolon (;) separated.
Copy Sent Message To	Specifies the target mailbox where a copy of the sent message should be saved. Only available for IMAP configurations.
HTML	Specifies whether the Message Body is in HTML format.
Priority	Specifies the priority of the message.