Lab 13: Working with Emails

This lab will explore automating tasks that use **email**. We will be looking at the **Email** package in Automation Anywhere. We will look at how to connect to different types of email accounts, such as **Exchange Web Services (EWS)**, IMAP, and POP3. You will also learn about sending and receiving emails, as well as looping through different email folders. The walk-throughs will include working with attachments. This lab will also introduce the `Dictionary` variable type. A `Dictionary` variable type is used to store key-value pairs. Each item in the dictionary has a key and a value. The key is used as a mapping reference to the value. A system dictionary already exists for using emails in Automation Anywhere. We will learn how to use this system dictionary variable type.

In this lab, we will cover the following:

- Connecting to mailboxes
- Reading emails and attachments
- Sending emails and attachments

Technical requirements

In order to install Automation Anywhere Bot agent, the following requirements are necessary:

- Google Chrome
- Completed registration with Automation Anywhere Community Edition
- Successful log-on to Automation Anywhere Community Edition
- A successfully registered local device
- Successfully downloaded sample data from GitHub

Connecting to mailboxes

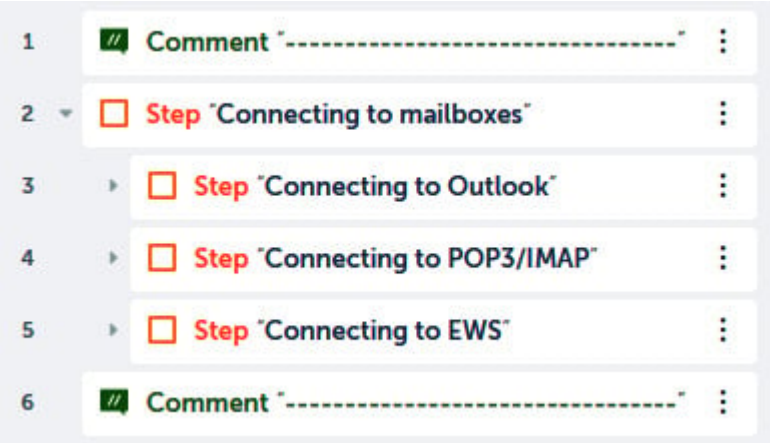
In the first walk-through, you will learn how to create a new session by connecting to the following:

- An Outlook mailbox
- An POP3/IMAP mailbox
- An EWS mailbox

The practical approach for this lab will be to demonstrate the different actions from the **Email** package. We will be using comments and steps to help structure all the actions. As the first section will look at how we can connect to different types of mailboxes, we can begin by building the initial skeleton using comments and steps.

Let's start this walk-through by executing the following steps:

1. Log in to **Control Room**.
2. Create a new bot in the `\Bot\` folder and call it `Lab 13 - Email Automation`.
3. Add a new **Comment** action on line **1** as `"----------"` and click on **Save**.
4. Add a **Step** just below line **1**, set the **Title** property as `"Connecting to mailboxes"`, and click on **Save**.
5. Add another **Step** just below line **2**, ensuring it is within the previous **Step** on line **2**, set the **Title** property as `"Connecting to Outlook"`, and click on **Save**.
6. Add another **Step** just below line **3**, ensuring it is aligned to the **Step** on line **3**, set the **Title** property as `"Connecting to POP3/IMAP"`, and click on **Save**.
7. Add another **Step** just below line **4**, ensuring it is aligned to the **Step** on line **4**, set the **Title** property as `"Connecting to EWS"`, and click on **Save**.
8. Add a new **Comment** action on line **6** as `"----------"` and click on **Save**. Your initial development interface should look like this:



That's great, we now have a structure for our walk-through. The first connection we will look at is Microsoft Outlook.

Connecting to Outlook

Outlook already has your mailbox configured, whether it is POP3, IMAP, Gmail, or Exchange. Because of this, no details or credentials are needed. Something to remember is that Automation Anywhere does not support multiple mailboxes on Outlook. If you do have more than one mailbox connected to Outlook, your bot will use the default mailbox.

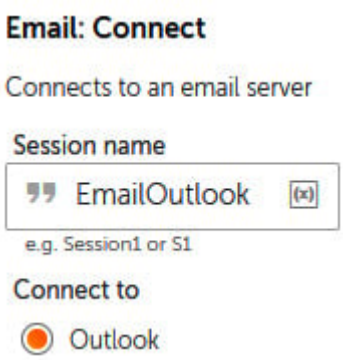
Let's start this walk-through by executing the following steps:

1. Expand the **Step** on line **3** titled `"Connecting to Outlook"`.
2. To create an Outlook session, add the **Email: Connect** action just below line **3**, ensuring it is within the **Step** on line **3**.
3. Set the following properties for the **Email: Connect** action on line **4**:

   Session name: `EmailOutlook`

   Connect to: **Outlook**

   The properties should look like this:

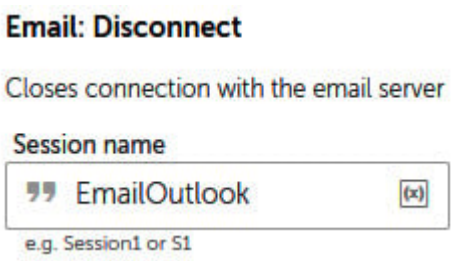
   

4. Click on **Save**.

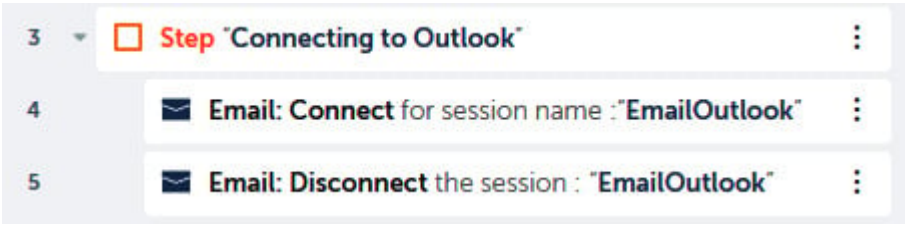
5. The session is now created. Once you have finished, you will need to disconnect from the mailbox. To do this, add the **Email: Disconnect** action just below line **4**, ensuring it is within the step on line **3**.
6. Set the following property for the **Email: Disconnect** action on line **5**:

   Session name: `EmailOutlook`

   The property should look like this:



7. Click on **Save** and your development interface for this section should look like this:



That's all there is to it; once a session has been established, the bot can start working with the mailbox. This could be tasks such as reading, searching, and moving emails. In the next section, we will look at how to establish a connection with a POP3 and IMAP mailbox to create a session.

Connecting to a POP3/IMAP mailbox

When connecting to a POP3 or IMAP mailbox, you will need the mailbox and credential details. This information would be needed whenever you want to connect to your mailbox using any email application. The following information is needed to establish a connection and read emails:

- Incoming mail server name
- Whether SSL is required
- Port number
- Email address/username
- Password

To give an example of this information, if you were connecting to a Gmail account, the details would be as shown in the following figure:

POP3 Settings	
Incoming Mail Server:	pop.gmail.com
Requires SSL:	Yes
Port:	995
Email address	*****@gmail.com
Password	**********

IMAP Settings	
Incoming Mail Server:	imap.gmail.com
Requires SSL:	Yes
Port:	993
Email address	*****@gmail.com
Password	**********

For our walk-through, we will be connecting to a Gmail account using IMAP, but you can use any mailbox as long as you have the required information.

Connecting to a Gmail account using IMAP

When connecting to a Gmail account using IMAP, you will need to ensure that the session secure app access is set to *on*. If it is set as *off*, Automation Anywhere will not be able to connect to your Gmail account. This setting is not required when connecting using POP.

Further details on how to configure this setting can be found at https://support.google.com/accounts/answer/6010255?hl=en.

We will enter our email address/password as an insecure string, in this case, but alternatively, you can use a variable.

Let's start this walk-through by executing the following steps:

1. Expand the step on line **6** titled `"Connecting to POP3/IMAP"`.
2. To create the **IMAP** session, add the **Email: Connect** action just below line **6**, ensuring it is within the step on line **6**.
3. Set the following properties for the **Email: Connect** action on line **7**:

   Session name: `EmailSession`

   Connect to: **Email server**

   Host: `imap.gmail.com`

   Port: `993`

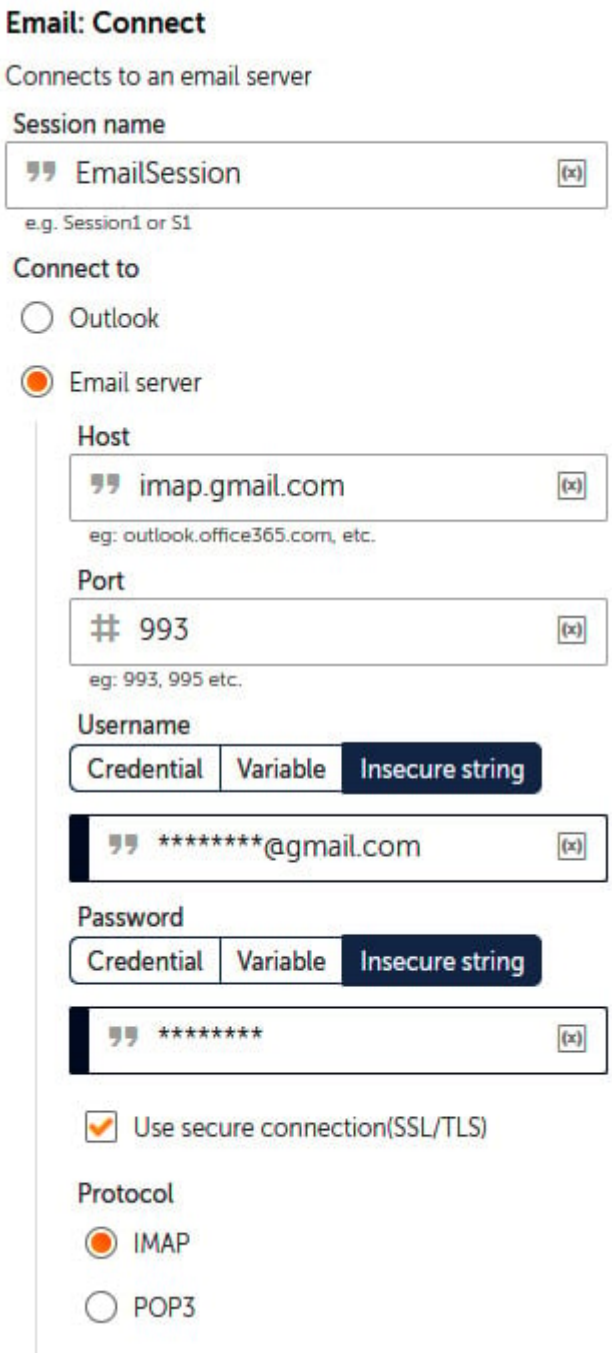
   Username: **Insecure string** -- `******@gmail.com` (*enter your email address*)

   Password: **Insecure string** -- `*********` (*enter your email password*)

   Use secure connection(SSL/TLS): *Checked*

   Protocol: **IMAP** (*Select POP3 for a POP3 mailbox connection*)

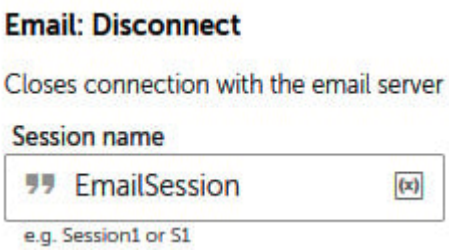
   The properties should look like this:



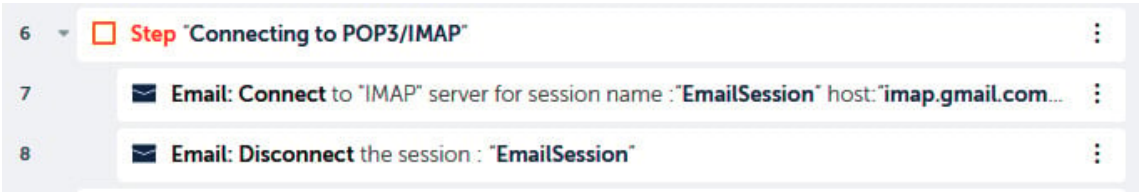
4. Click on **Save**.
5. To disconnect from the mailbox, just add the **Email: Disconnect** action below line **7**, ensuring it is aligned to the action on line **7**.
6. Set the following property for the **Email: Disconnect** action on line **5**:

   Session name: `EmailSession`

   The property should look like this:



7. Click on **Save**. Your development interface for this section should look like this:



That's another connection established. You should now be comfortable with connecting to mailboxes using the POP3 or IMAP protocol. Another popular type of mailbox is **Exchange Server**. We will learn how to connect to an Exchange mailbox in the next section.

Connecting to an EWS mailbox

When connecting to an Exchange mail server, only a few pieces of information are needed. The following information would be required whenever you want to connect to your mailbox using any email application to read emails:

- Username or email address
- Password
- Domain name (optional)
- Exchange server version

To give an example of this information, if you were connecting to an Outlook Exchange account, the details would be as shown in the following figure:

Exchange Server Settings	
Email:	******@outlook.com
Password:	********
Server:	outlook.com
Version:	Exchange 2010

For our walk-through, we will be connecting to an Outlook Exchange Server account, but you can use any Exchange mailbox as long as you have the required information. As we did in the *Connecting to a POP3/IMAP mailbox* section previously, we will enter the email address/password as an insecure string.

Let's start this walk-through by executing the following steps:

1. Expand the **Step** on line **9** titled `"Connecting to EWS"`.

2. To create the Exchange session, add the **Email: Connect** action just below line **9**, ensuring it is within the step on line **9**.

3. Set the following properties for the **Email: Connect** action on line **10**:

   Session name: `EmailSessionEWS`

   Connect to: **EWS server**

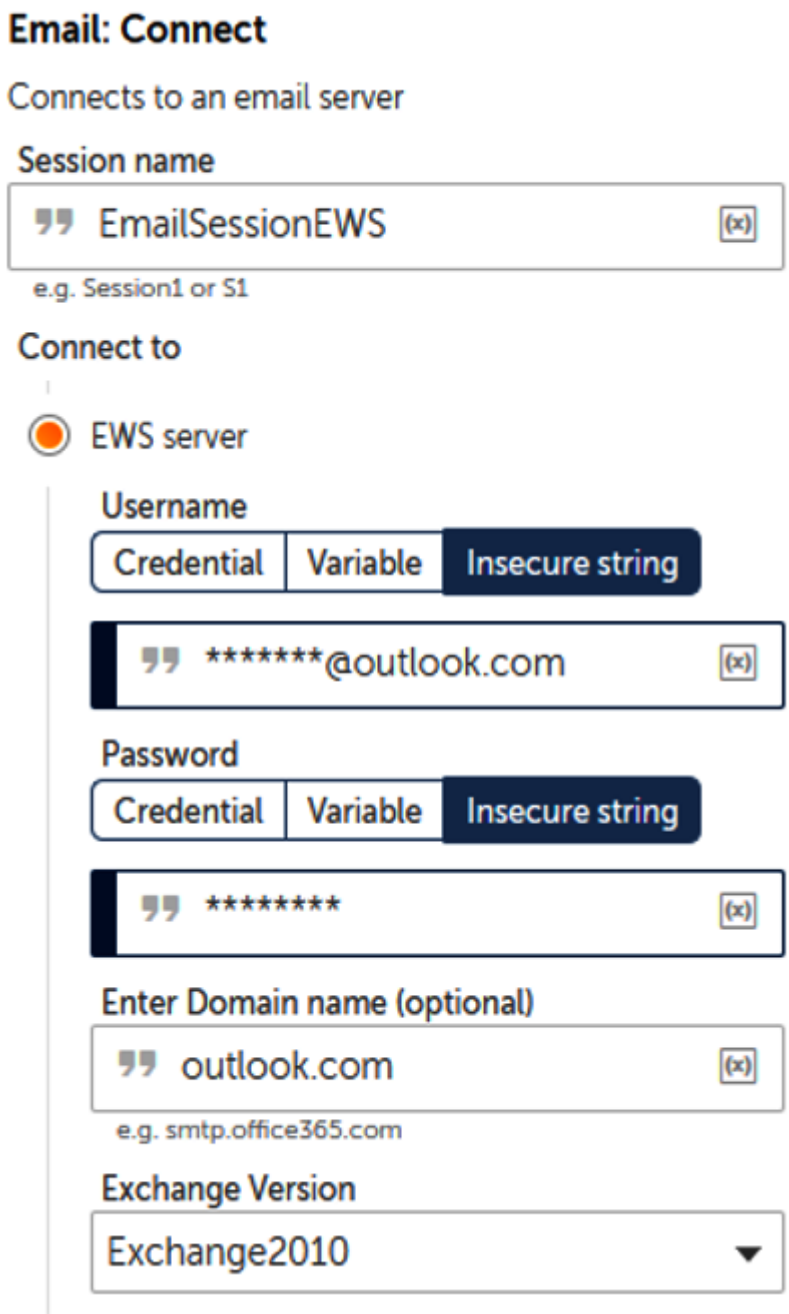
   Username: **Insecure string** -- `******@outlook.com` (*enter your email address*)

   Password: **Insecure string** -- `*********` (*enter your email password*)

   Enter Domain name (optional): `outlook.com`

   Exchange Version: **Exchange2010**

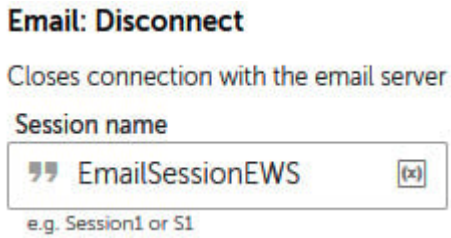
   The properties should look like this:



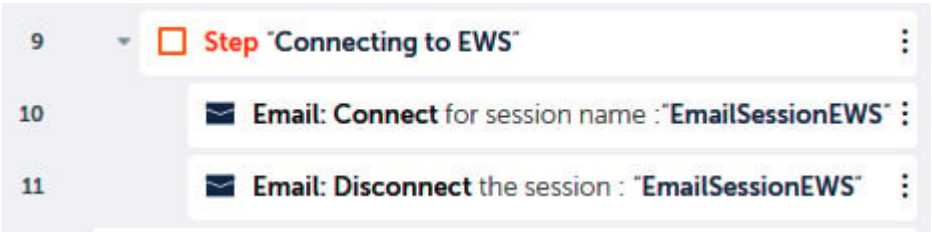
4. Click on **Save**.
5. To disconnect from the mailbox, just add the **Email: Disconnect** action below line **10**, ensuring it is aligned to the action on line **10**.
6. Set the following property for the **Email: Disconnect** action on line **11**:

   Session name: `EmailSessionEWS`

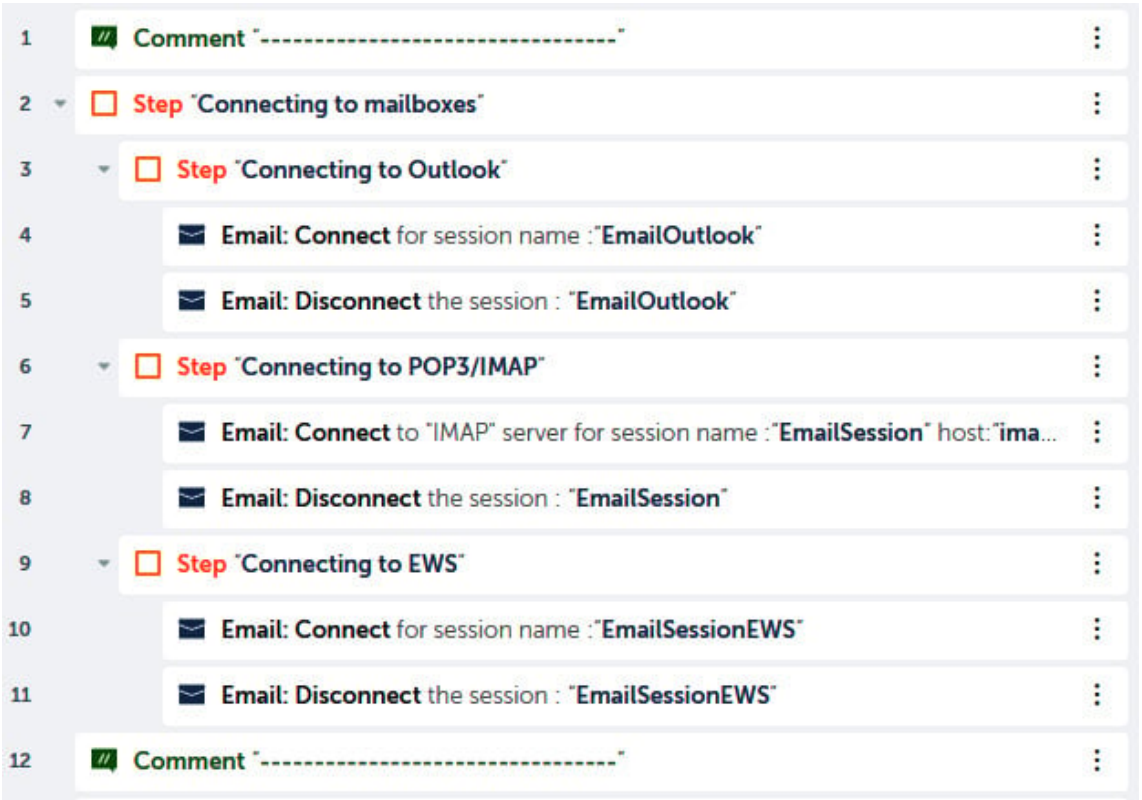
   The property should look like this:



7. Click on **Save** and your development interface for this section should look like this:

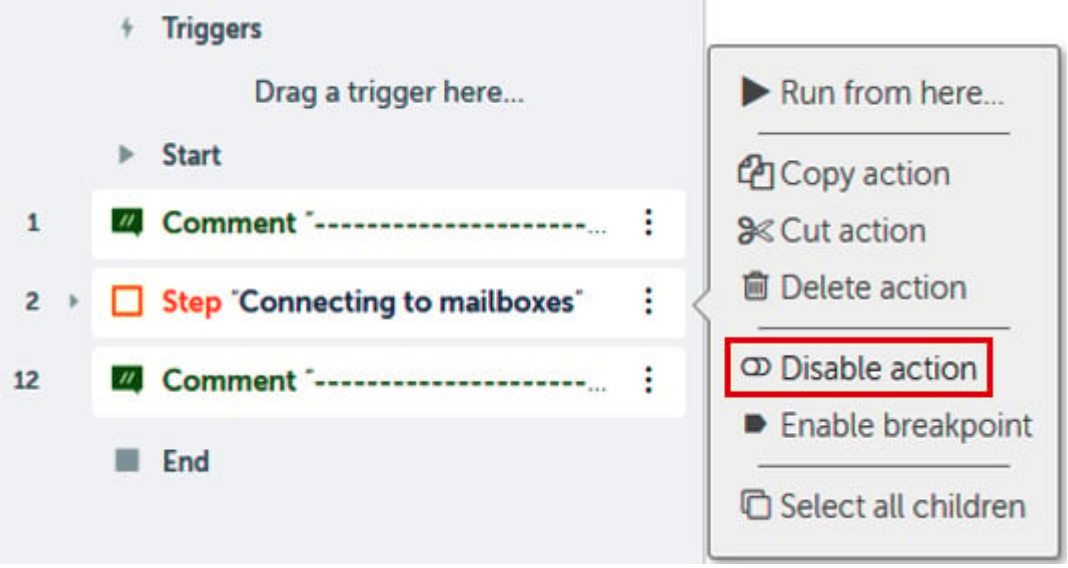


Great job! In this section, you've learned how to connect to the different types of mailboxes. The complete development interface for all the mailbox connections should look like this:



If you run the bot, it will look as if it hasn't done much, but your bot has connected to each mailbox and disconnected. As long as the mailbox and the credentials are correct, the bot will complete the task without raising any errors.

Before we move on to the next section, let's ensure that our bot is neat and tidy. You can collapse the step on line **2** and then disable this step by clicking on the three dots on line **2** and selecting **Disable action**. As you are disabling the step, all the actions and the sub-steps within this step will be disabled:



Our bot is now nice and tidy and we are ready to move on to the next section. In the next section, we will learn how to read emails from your mailbox and save attachments.

Reading emails and attachments

Once connected to our mailbox, we want our bot to process emails in one form or another. More than likely, our manual task would involve working with specific emails, such as emails sent from a particular sender. It could also include saving any attachments from our emails. In this section, you will learn how to create a loop to iterate through the inbox and only read unread emails from a specific sender. The bot will then change the email status to read and save any attachments.

You will also be introduced to the `Dictionary` type variable; Automation Anywhere already has a pre-built dictionary for emails. A `Dictionary` type variable stores a value for a given key value. Together, these are known as a **key-value pair**. For each email that your bot reads, the `Dictionary` variable will store the following information:

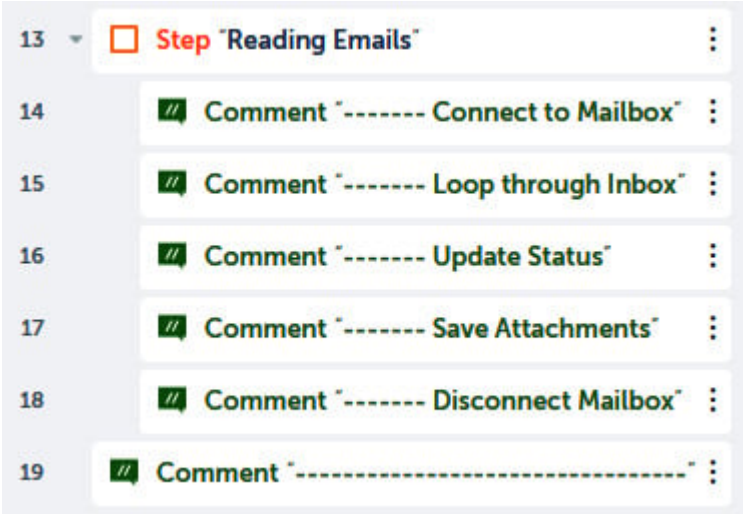
Key	Value
emailSubject	Email Subject
emailFrom	Senders Email
emailTo	Who the Email is addressed to
emailCc	Any Email CC's
emailBcc	Any Email Bcc's
emailMessage	Email Message
emailReceivedTime	Time Email received
emailReceivedDate	Date Email received

For this walk-through, we will use Outlook as our mailbox. You can, however, apply a different type of connection if you wish. As we have disabled the previous actions from our bot, we can continue using the same task bot. Before we add any actions for the bot to perform, we will begin by building the skeleton structure with comments and steps. You will build a bot that performs the following tasks:

1. Loops through emails in the inbox
2. Applies filters and specifies folders
3. Updates email status
4. Saves attachments

Let's start this walk-through by executing the following steps:

1. Add a step just below line **12**, set the **Title** property as `"Reading Emails"`, and click on **Save**.
2. Add a new **Comment** action as `"------- Connect to Mailbox"` on line **14**, ensuring it is within the **Step** on line **13**, and click on **Save**.
3. Add a new **Comment** action as `"------- Loop through Inbox"` on line **15**, ensuring it is within the **Step** on line **13**, and click on **Save**.
4. Add a new **Comment** action as `"------- Update Status"` on line **16**, ensuring it is within the **Step** on line **13**, and click on **Save**.
5. Add a new **Comment** action as `"------- Save Attachments"` on line **17**, ensuring it is within the **Step** on line **13**, and click on **Save**.
6. Add a new **Comment** action as `"------- Disconnect Mailbox"` on line **18**, ensuring it is within the **Step** on line **13**, and click on **Save**.
7. Add a new **Comment** action as `"--------------------------------"` on line **19** and click on **Save**. Your initial development interface should look like this:



That's great! We now have a structure for our walk-through. As we did in the previous section, *Connecting to mailboxes*, we will begin by creating our connection to Outlook:

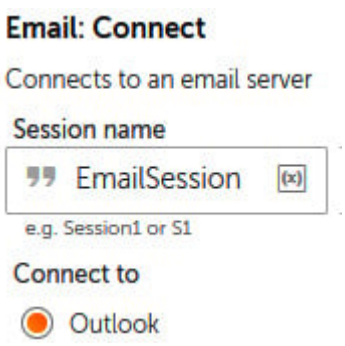
1. To create the Outlook session, add the **Email: Connect** action just below line **14**, ensuring it is within the step on line **13**.

2. Set the following properties for the **Email: Connect** action on line **15**:

   Session name: `EmailSession`

   Connect to: **Outlook**

The properties should look like this:

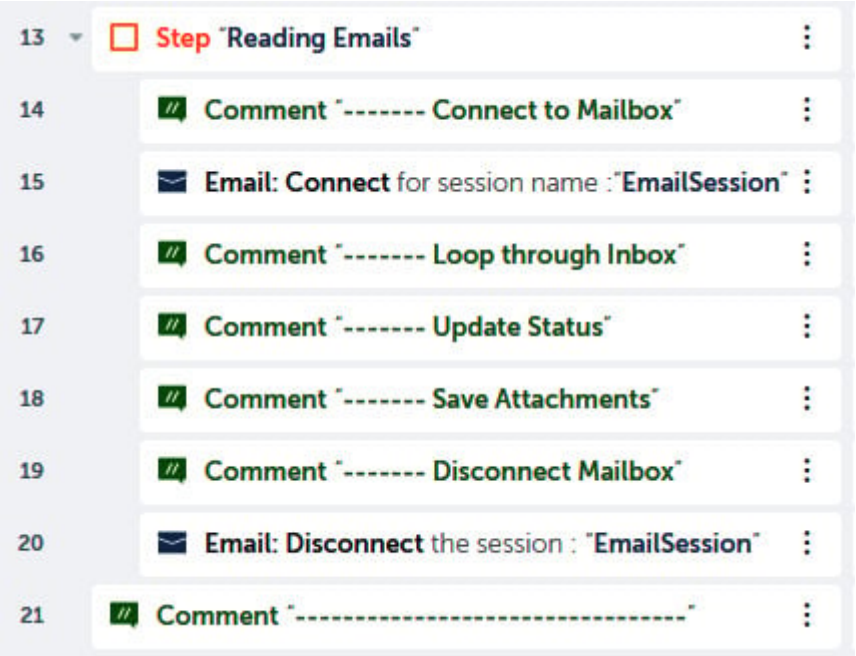


3. Click on **Save**.
4. Let's also add the disconnect action by adding **Email: Disconnect** just below line **19**, ensuring it is aligned to the **Comment** action on line **19**.
5. Set the following property for the **Email: Disconnect** action on line **20**:

   Session name: `EmailSession`

   The property should look like this:

6. Click on **Save** and your development interface for this section should look like the following:



We have now established the connection to the mailbox. In the next section, you will learn how to add a **Loop** action so that the bot can read email messages from the inbox.

Looping through emails from a folder

Once we have the loop in place, we will need a variable to store details of each individual email. For an email message, we will use the `Dictionary` variable type. Follow the given walk-through to guide you on how to build the loop and store each email:

1. For our `Dictionary` variable type, create a new variable called `dctEmail` and set **Type** to **Dictionary** and **Subtype** to **String**, as follows:

2. To add our loop to read all emails, drag the **Loop** action just below line **16**, ensuring it is aligned to the **Comment** action on line **16**.

3. Set the following properties for the **Loop** action on line **17**:

   Loop Type: **Iterator**

   Iterator: **For each mail in mail box**

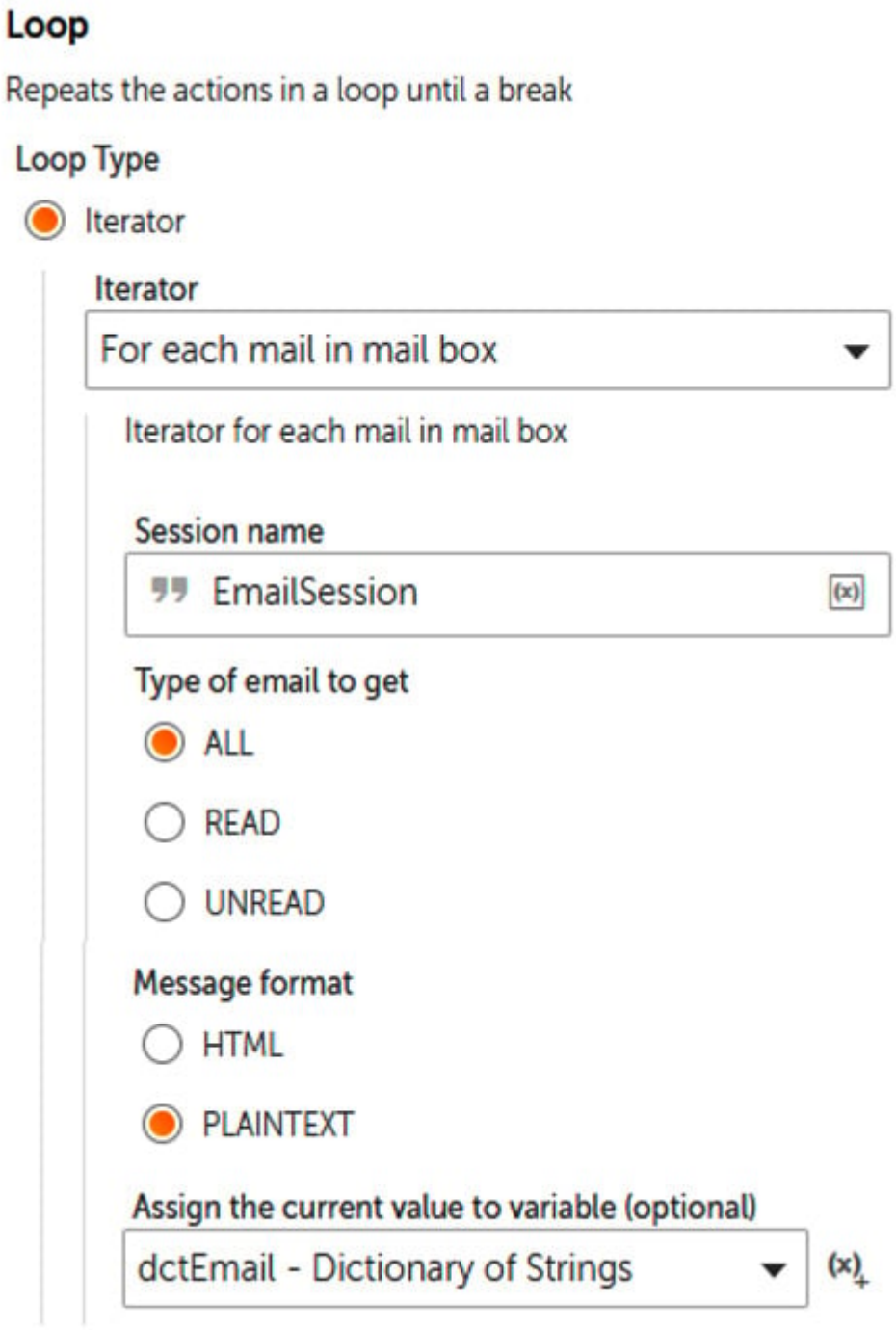
   Session name: `EmailSession`

   Type of email to get: **ALL**

   Message format: **PLAINTEXT**

   Assign the current value to variable: **dctEmail -- Dictionary of Strings**

   The properties should look like this:



4. Click on **Save**.

That's great! You have learned how to add a **Loop** action so that your bot can read each email from your mailbox. In the next section, you will learn how to add filters and specify folders to read.

Applying filters and specifying folders

The bot will read all emails from the connected mailbox, but to perform specific tasks, we often need to work with specific emails. To allow our bot to only look for emails that meet certain criteria, we can apply filters within our loop.

These filters include the following:

- Specifying the email status
- Specifying the mailbox folders
- Specifying the email subject line text
- Specifying the email sender
- Specifying the date and time of the received email

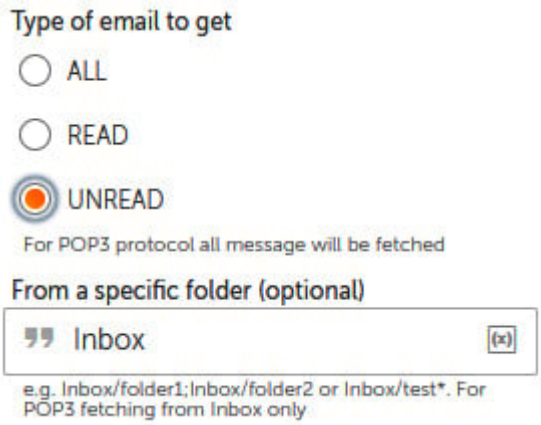
For this walk-through, we want our bot to only look for emails in the inbox that are unread. To configure our bot to only loop through these specific emails, execute the following steps:

1. Update the loop properties for the **Loop** action on line **17**:

   Type of email to get: **UNREAD**

   From a specific folder (optional): `Inbox`

   The properties should look like this:

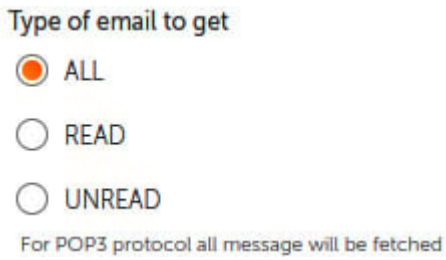


2. Click on **Save**.

As you can see, all the filters are configured on the **Loop** action. In the following subsections, we will outline all the other filters that can be applied.

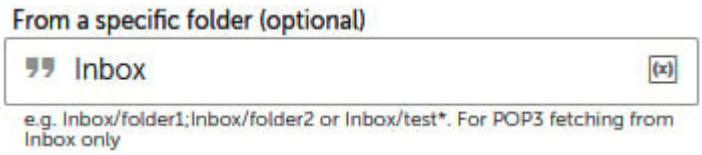
Specifying the email status

You have just updated the email status filter, but you can see, as per the following screenshot, that you have an option to select either **ALL**, **READ**, or **UNREAD** emails only:



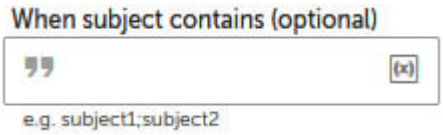
Specifying the mailbox folders

You can set a specific folder here. Wildcard characters can also be used as part of the folder name. Nested subfolders can be specified using the `Inbox/SubFolder1` format. If needed, variables can also be used to enter this value. The following screenshot shows how to set `Inbox` as the specified folder:



Specifying the email subject line text

To set a particular text in the subject line, you can do so here. If needed, **String** type variables can also be used to enter this value:

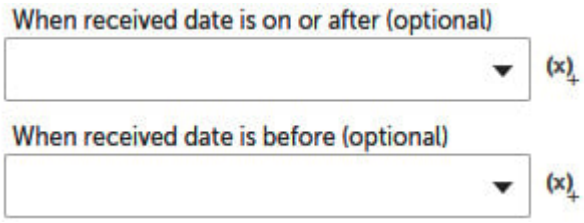


Specifying the email sender

Here, you can look at emails from a specific sender. Enter the sender's email address (you can also enter multiple email addresses separated by a semicolon). If needed, `String` type variables can also be used to enter this value:

Specifying the date and time of the received email

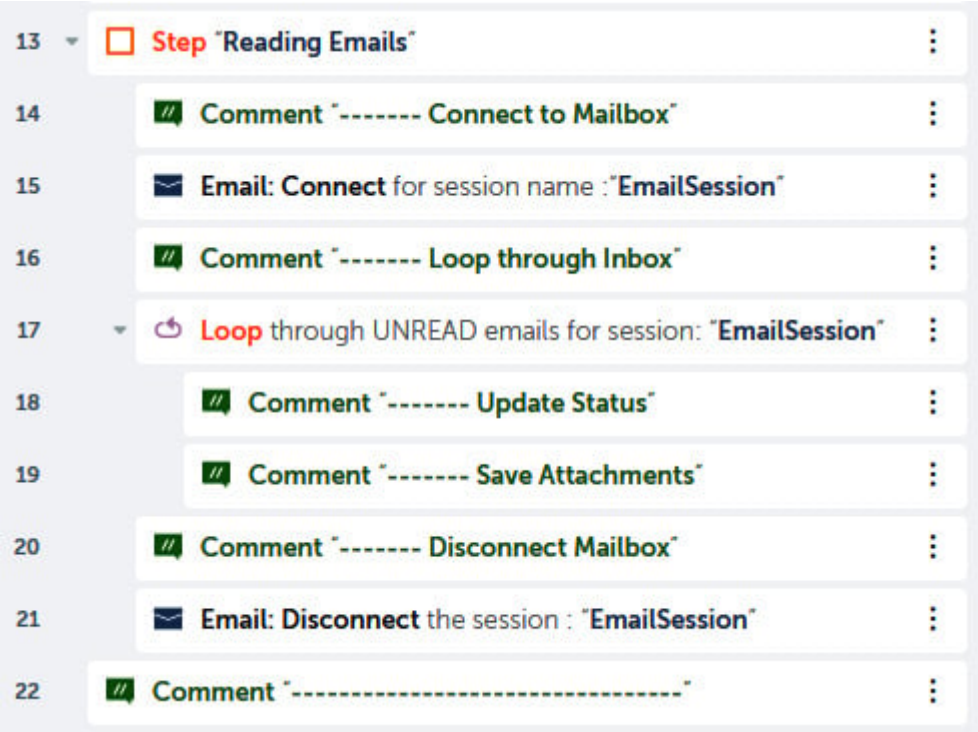
You can also set a date/time filter. Again, variables can be used here, but they need to be of the `Datetime` type:



Hopefully, this has given you an overview of how you would configure your bot to apply the different types of filters to your **Loop** action. As we continue with our walk-through, we have already added our loop. All our actions for each email need to be moved to within our loop.

Let's continue with our bot by moving our comments so that they are inside our loop:

1. Drag the **Comment** actions to lines **18** and **19** so that they are within the loop on line **17**.
2. Click on **Save** and your development window should be looking like this:



All looking good so far; the bot will now loop through all unread emails in the inbox. In the next section, we will look at how to update the email status.

Updating the email status

As our bot will only be processing unread emails, we do not want it to duplicate the process multiple times for the same email. If we update the email status to **READ**, it will ensure that the same email is not picked up by the bot again.

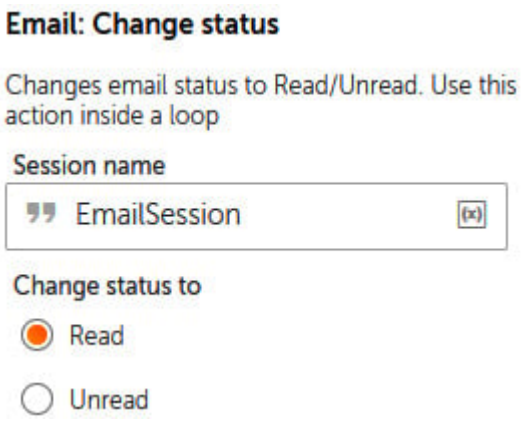
Let's start this walk-through by executing the following steps:

1. To update the status, add the **Email: Change status** action just below line **18**, ensuring it is aligned to the **Comment** action on line **18**.
2. Set the following properties for the **Email: Change status** action on line **19**:

   Session name: `EmailSession`

   Change status to: `Read`

   The properties should look like this:



3. Click on **Save**.

Great progress! Your bot will now update the status of each unread email to read, ensuring any processing is not duplicated. Quite often, we work with attachments in our emails. In the next section, you will learn how to save email attachments.

Saving attachments

When automating tasks that involve email, we tend to perform tasks with attached documents. We will continue with our walk-through and further build the bot. Here, you will learn about managing attached documents. We will instruct our bot to save any attachments to a specific folder.

To ensure the bot is robust, we will check whether the target folder exists and create it if it doesn't. We will configure our bot to save any attachments to the folder at `C:\Hands-On-RPA-with-AA-Sample-Data\Chapter13_Emails`.

Let's start this walk-through by executing the following steps:

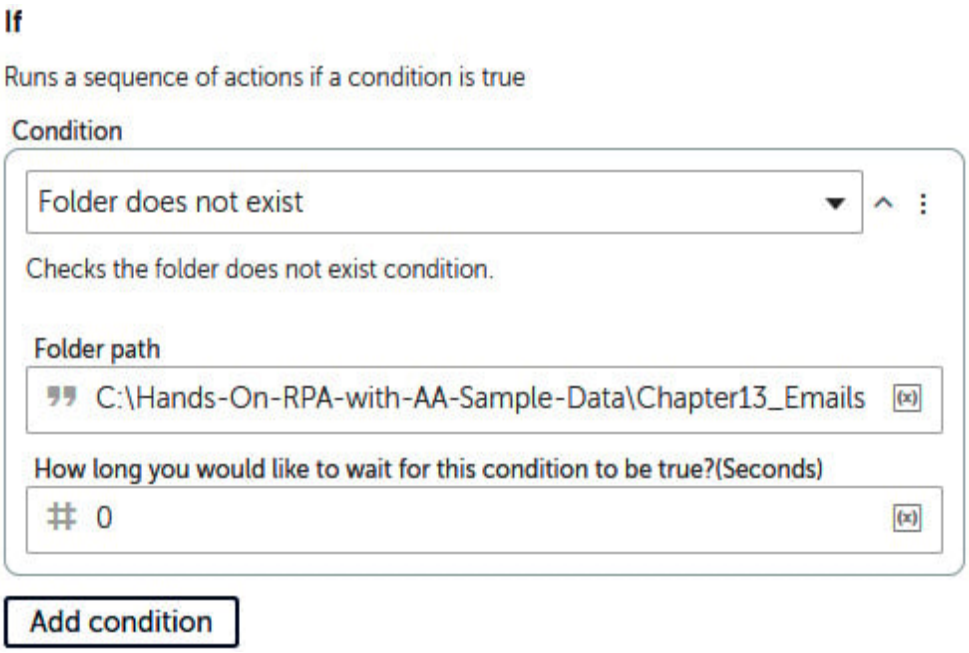
1. To check whether our target folder exists, add the **If** action just below line **20**, ensuring it is aligned to the **Comment** action on line **20**.
2. Set the following properties for the **If** action on line **21**:

   Condition: **Folder does not exist**

   Folder path: `C:\Hands-On-RPA-with-AA-Sample-Data\Chapter13_Emails`

   How long you would like to wait for this condition to be true?(Seconds): `0`

   The properties should look like this:

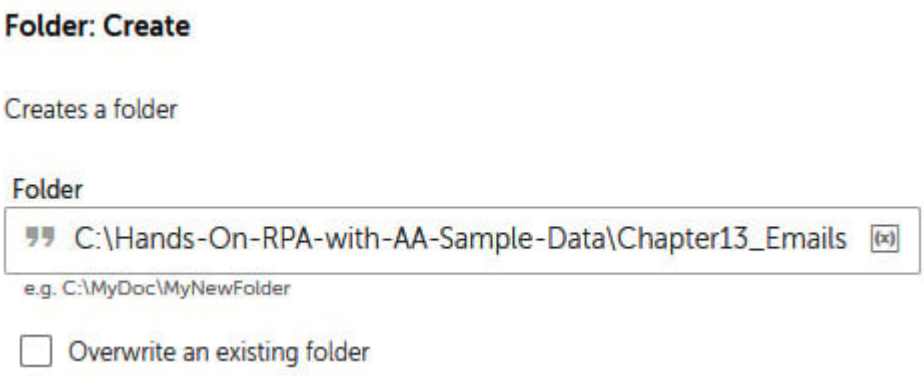


3. Click on **Save**.
4. To create the folder if it doesn't exist, add the **Folder: Create** action just below line **21**, ensuring it is within the **If** action on line **21**.
5. Set the following properties for the **Folder: Create** action on line **22**:

   Folder: `C:\Hands-On-RPA-with-AA-Sample-Data\Chapter13_Emails`

   Overwrite an existing folder: *Unchecked*

   The properties should look like this:



6. Click on **Save**.
7. We are now ready to add the action to save any email attachments. Add the **Email: Save attachments** action just below line **22**, ensuring it is within the **Loop** action on line **17** but not within the **If** condition on line **21**. We will set the **Overwrite files** property to `True`, as we may test the bot multiple times and we do not want it to fail while trying to save an attachment that already exists.

8. Set the following properties for the **Email: Save attachments** action on line **23**:

   Save attachments to folder: `C:\Hands-On-RPA-with-AA-Sample-Data\Chapter13_Emails`

   Overwrite file(s): *Checked*

   The properties should look like this:

9. Click on **Save**.

10. Just one final action left. Let's add a message box so that we can see the contents of each email the bot reads. For this, we will use the `Dictionary` variable we created. Add the **Message box** action just below line **23**, ensuring it is within the **Loop** action on line **17** but not within the **If** condition on line **21**.

11. Set the following properties for the **Message box** action on line **24**:

    Enter the message box window title: `Reading Emails`

    Enter the message to display:

    ```
    subject: |$dctEmail{emailSubject}$|
    ```

    ```
    From: |$dctEmail{emailFrom}$|
    ```

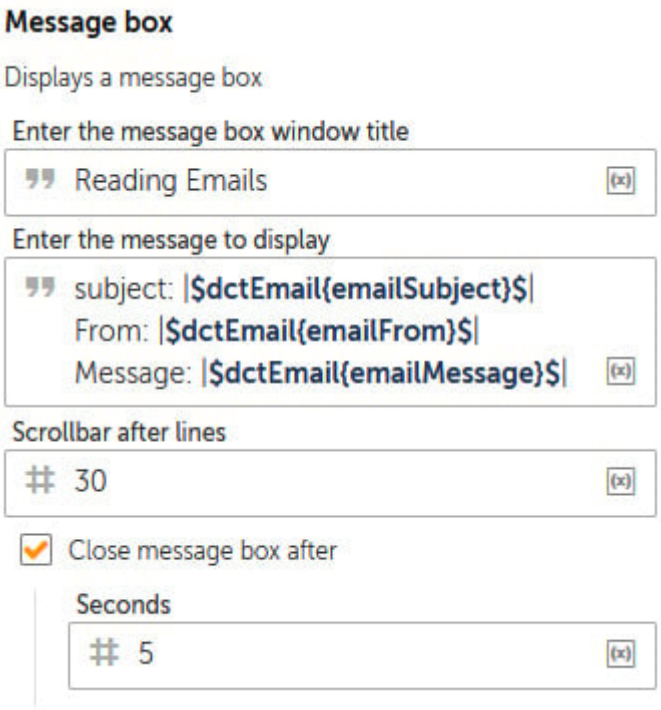
    ```
    Message: |$dctEmail{emailMessage}$|
    ```

    Scrollbar after lines: `30`

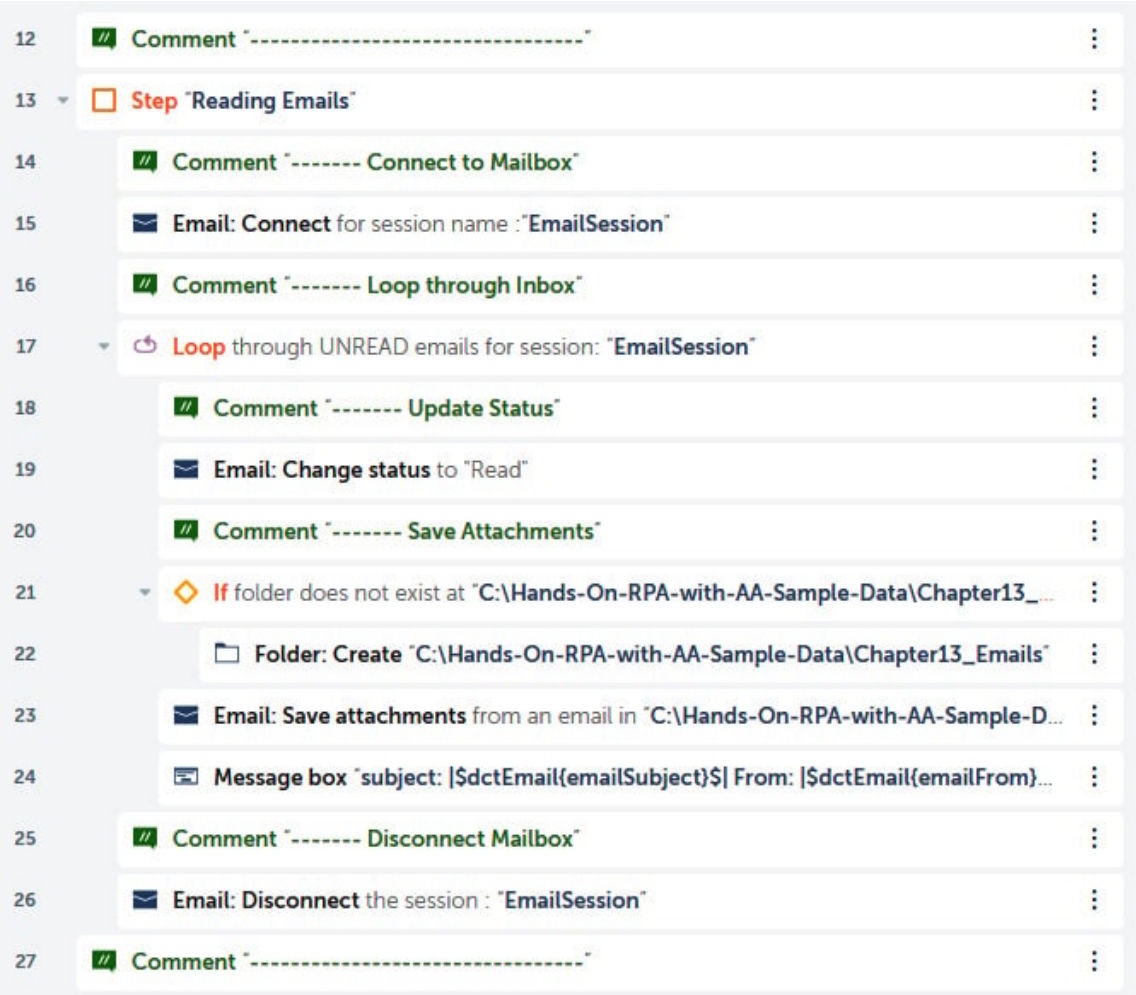
    Close message box after: *Checked*

    Seconds: `5`

    The properties should look like this:



12. Click on **Save**. The development window for the **Reading Emails** section should look like this:



You can send yourself some emails and test your bot. Ensure you have the correct incoming server details if you are not using Outlook. The bot will read the new emails, save all attachments, and update the status. Good work. We will next look at sending emails.

Sending emails and attachments

We have looked at connecting with incoming mail servers to read emails. We will now move on to the next section, where we will be exploring how to send emails. Emails are always sent in one of the following three ways -- either a simple independent email, a forwarded message, or a reply. For all three, you will need to know the outgoing mailbox details. As it is the same with reading emails, you can send an email via Outlook, POP3/IMAP, or Exchange. The information needed for the outgoing server is as follows:

- Outgoing mail server name
- Whether SSL/TLS/authentication is required
- SSL/TLS port number
- Email address/username
- Password

To give an example of this information, if you were connecting to a Gmail account, the outgoing server IMAP details would be as shown in the following figure:

Gmail IMAP Settings	
Outgoing Mail Server:	smtp.gmail.com
Requires SSL:	Yes
Requires Authentication:	Yes
Port for SSL:	465
Port for TLS/STARTTLS:	587
Email address:	*****@gmail.com
Password:	*********

For our walk-through, we will be demonstrating how to perform the following actions:

- Sending an email
- Forwarding an email
- Replying to an email

When forwarding or replying to an email, a source email is needed. For instance, you need an initial email in order to reply to it and you need an initial email in order to forward it. This is why both the **Reply** and **Forward** actions need to be performed within an email session. This ensures they have a source email to work with. When just sending an email by itself, a session is not needed as it's not dependent on a source email.

For this walk-through, we will demonstrate all three methods of sending an email. As always, we will start by creating the skeleton using comments and steps.

Let's start this walk-through by executing the following steps:

1. Add a step just below line **27**, set the **Title** property as `" Sending Emails"` , and click on **Save**.
2. Add a new **Comment** action as `"------- Sending an Email"` on line **29**, ensuring it is within the **Step** on line **28**, and click on **Save**.
3. Add a new **Comment** action as `"------- Forwarding an Email"` on line **30**, ensuring it is within the **Step** on line **28**, and click on **Save**.
4. Add a new **Comment** action as `"------- Replying to an Email"` on line **31**, ensuring it is within the **Step** on line **28**, and click on **Save**.
5. Add a new **Comment** action as `"----------------------"` on line **32**, and click on **Save**. Your development interface should look as in the following screenshot:

That's good, we now have a structure for our demonstration. In the next section, we will start by looking at sending a simple email and then one that includes an attached document.

Sending an email

For this walk-through, we will use a Gmail account to send our email. We know what the SMTP outgoing server settings need to be for this. You will need to know your email account credentials for testing.

Connecting to a Gmail account using IMAP

When connecting to a Gmail account using IMAP, you will need to ensure that the less secure app access is set to *on*. If it is set as *off*, Automation Anywhere will not be able to connect to your Gmail account. This setting is not required when connecting using POP.

Further details on how to configure this setting can be found at https://support.google.com/accounts/answer/6010255?hl=en.

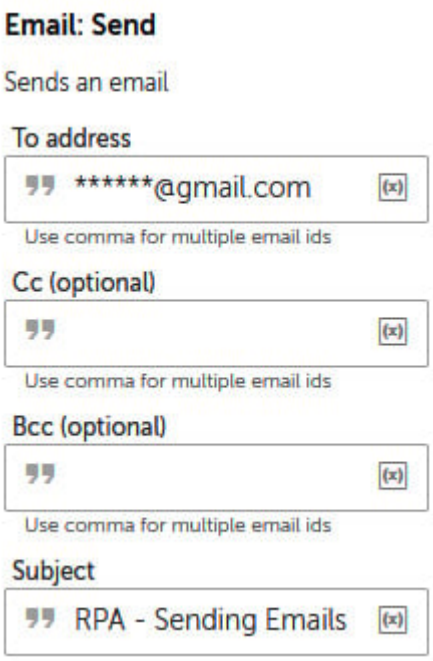
Let's begin by executing the following steps:

1. To send our email, add the **Email: Send** action just below line **29**, ensuring it is within the step on line **28**.
2. There are a number of properties to set for the **Email: Send** action. Starting with the recipient and subject details, set the following properties for the **Email: Send** action on line **30**:

   To address: `******@gmail.com` (*the email address you are sending to*)

   Subject: `RPA - Sending Emails`

   These property settings should look like this:

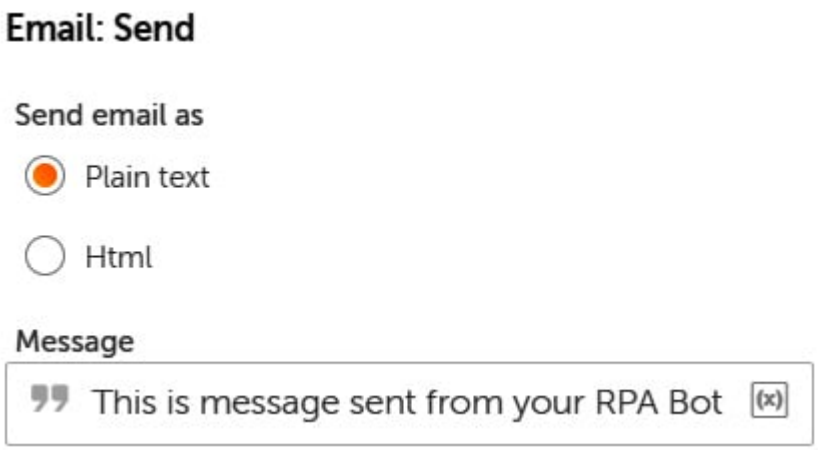


3. Continue with configuring the **Email: Send** action on line **30** by adding the following settings to configure the message contents:

   Send email as: **Plain text**

   Message: `This is message sent from your RPA Bot`

   These property settings should look like this:



4. Finally, to configure the outgoing server connection details, add the following settings for the **Email: Send** action on line **30**:

   Send email via: **Email server**

   From address: `******@gmail.com` (*email address you are sending from*)

   Email server host: `smtp.gmail.com`

   Email server port: `587`

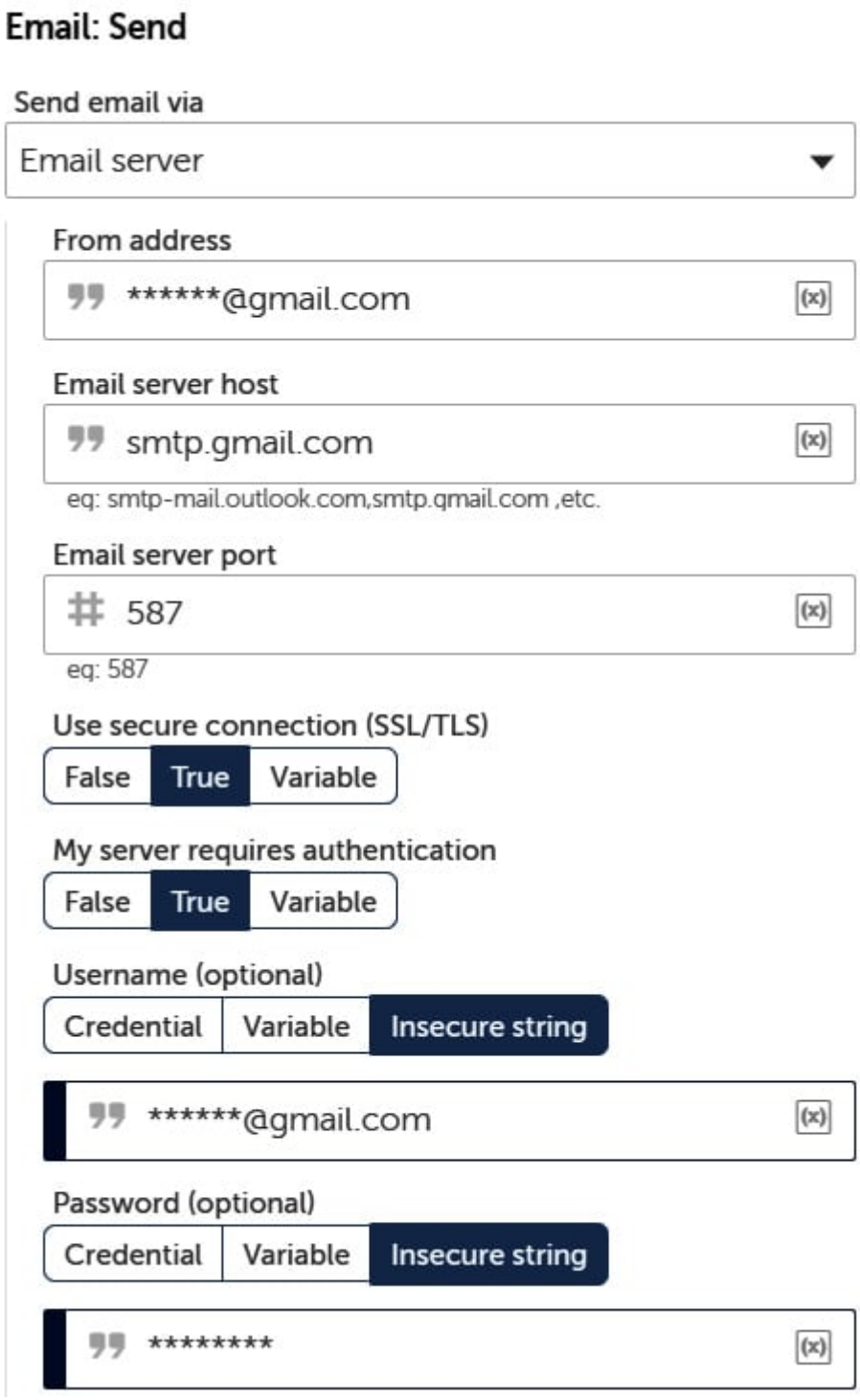
   Use secure connection (SSL/TLS): **True**

   My server requires authentication: **True**

   Username (optional): **Insecure string** -- `******@gmail.com` (*enter your email address*)

   Password (optional): **Insecure string** -- `********` (*enter your email password*)

   These properties should look like this:



5. Click on **Save**.

All set to send an email, great work! As long as you have the correct mail server settings, it should all be good to go. We will continue by adding an attachment to this email in the following section.

Attaching a document to an email

Here, we will further build on our bot and add an attachment to our email. This is all done within the **Email: Send** action. Follow the given steps to add a document to the email:

1. To add an attachment, update the following property for the **Email: Send** action on line **30**:

   Attachment (optional): **Desktop file** -- `C:\Hands-On-RPA-with-AA-Sample-Data\Chapter05_InputData.csv`

   The property should look like this:

2. Click on **Save**.

Your bot can now send an email. To do this, you don't need an email session; all the required information is contained within the **Email: Send** action. In the next section, we will look at forwarding an email.

Forwarding an email

You can only perform an **Email: Forward** action from within an email session and loop. There needs to be a source email that you are actually forwarding, but apart from that, all that's needed is the forwarding email address, a message (optional), and your outgoing server mailbox details.

In this example, we will use Outlook as our outgoing mailbox. Let's assume you have already built your email session and loop to read your emails from your incoming mailbox. To configure your bot to forward an email, just follow these steps:

1. Add the **Email: Forward** action just below line **31**, ensuring it is within the step on line **28**.
2. Set the following properties for the **Email: Forward** action on line **32**:

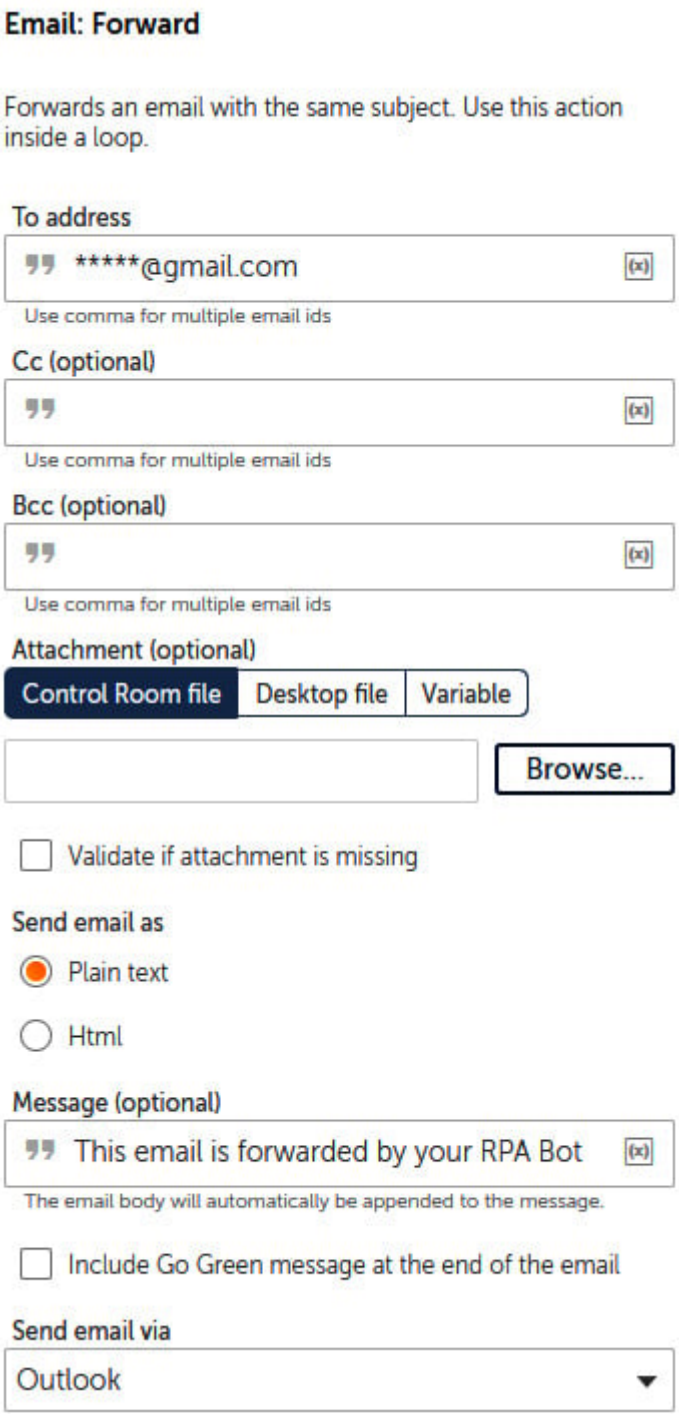
   To address: `******@gmail.com` (*the email address you are forwarding the message to*)

   Send email as: **Plain text**

   Message (optional): `This email is forwarded by your RPA Bot`

   Send email via: **Outlook**

   The properties should look like this:



3. Click on **Save**.

It's as simple as that; attachments can be added in the same way as you would when sending a standard email. Only one more type of email sending to go -- that is, replying to an email, which we will look at next.

Replying to an email

Just like forwarding an email, you can only perform an **Email: Reply** action from within an email session and loop. In this example, we will again use Outlook as our outgoing mailbox and once again assume you have already built your email session and loop to read your emails from your incoming mailbox. To configure your bot to reply to an email, just follow the given steps:

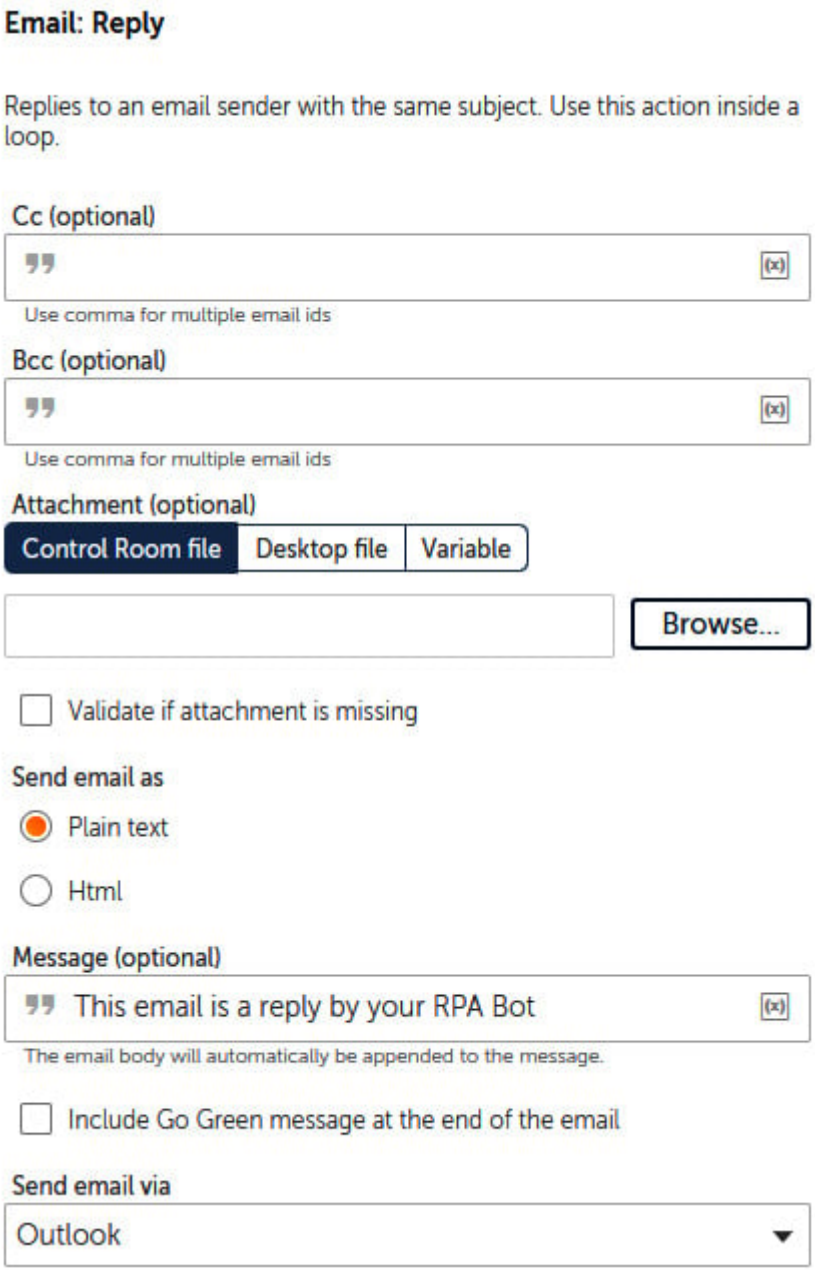
1. Add the **Email: Reply** action just below line **33**, ensuring it is within the step on line **28**.
2. Set the following properties for the **Email: Reply** action on line **34**:

   Send email as: **Plain text**

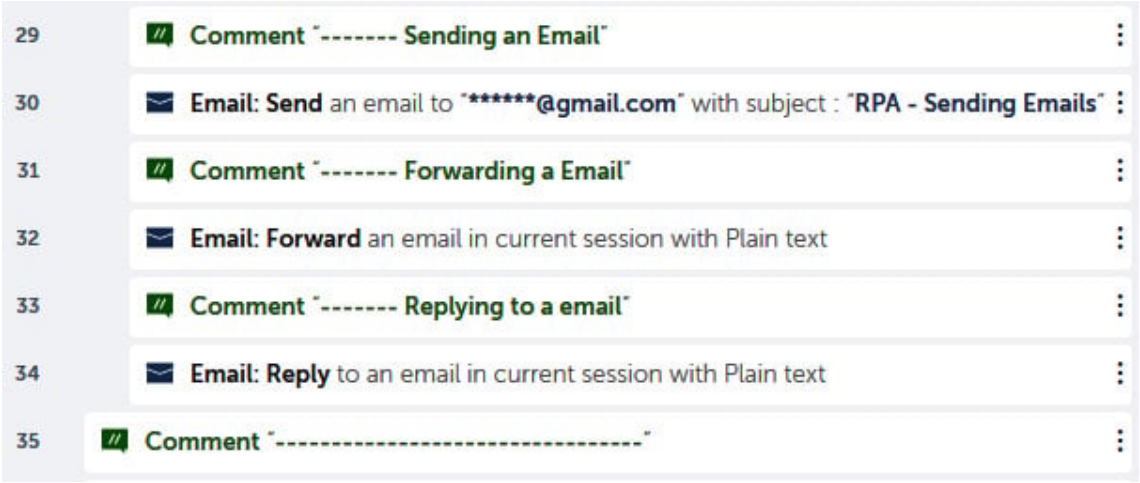
   Message (optional): `This email is a reply by your RPA Bot`

   Send email via: **Outlook**

   The properties should look like this:



3. Click on **Save**. The development window for the **Reading Emails** section should look like this:



You have done absolutely great! All three types of outgoing emails are completed. Again, attaching files works the same in all three. Your bot is ready for any email-related automation you need.

Summary

This lab has been about everything related to email. The walk-throughs have demonstrated how to connect to the different types of mail servers, as well as using Outlook. You learned how to read from any email folder using specified criteria, such as a certain sender or a particular value in the subject line. You further built your knowledge of learning how to send emails, including replying and forwarding emails. That's not all; we also included how to save and add attachments to our emails.

In the next lab, we will move on to using automation with PDF files. PDF files are very popular and are commonly used. There are many uses -- one being invoices. You will learn how to use a bot to read PDF files, including extracting text and images. You will also learn how to split and merge documents and decrypt and encrypt PDF files.