

PERFORM VARIOUS EMAIL OPERATIONS - AA

Bot Overview

This bot performs the following:

- Performs several outlook operations. Description of all the operations can be found in this document.

Pre-Requisites

- Automation Anywhere Enterprise v10.7 sp2

Installation

- Download the bot from Bot Store.
- Double click on <Bot Name>.msi and follow the installation instructions.

For first time users, the "Bot Store" folder is created under <AA Directory>/My Tasks (on your local disk).

- **Installer creates the following folder structure with content under the <AA Directory>**

<AA Directory>

- My Tasks
 - Bot Store
 - Perform Various Email Operations (Folder)
 - My Tasks
 - OutlookMBOT_ReadAppointmentSample.atmx
 - Error Folder
 - Logs (Folder)
 - Error Logs Month-Day-Year.txt
 - Snapshots (Folder)
 - Error Snap Month-Day-Year.png
 - My Metabots
 - Outlook.mbot

How to Use the Bot:

Use the following information to configure your bot:

Notes

1. Ensure that you have at least one Outlook Mail Profile configured on the machine (Bot Runner/Bot Creator) where the Automation Task will run. Go to Control Panel → Mail → Show Profiles.

2. There is no need to open any SMTP, IMAP or POP3 ports for this Outlook Metabot to work, since it interacts with the Outlook Application. Ensure that the Outlook Application opens and works without any issues or prompts for input. In case of latter use Object Cloning to get through.
3. "LaunchOutlook" Function will take approximately 30 seconds to complete. During this time Outlook Application window will Minimize and then Maximize. You will notice inactivity during this window, still, DO NOT interrupt the process.
4. All the "Close****" Functions will take approximately 5 seconds to complete. You will notice inactivity during this window, still, DO NOT interrupt the process.
5. While passing "AccountName" value use exactly what you see in Outlook Application. Mostly it will be your Email Address. If you're not sure then use GetAccountInformation Function to get details of your configured Accounts.
6. Metabot Functions/Logics from which you do not expect to receive any Value will still return an Output string. If the operation was successful, then its value will be "Success". If the operation failed, then its value will be "[ERROR]:<error description>".
7. All Functions/Logics that accepts "NumberOfItems" parameter and retrieves a collection of Mails, Appointments or Meeting Requests, fetches newest items and not the oldest.
8. Convention for FolderPath:

Format: \\<AccountName>\<FolderName>\<SubFolderName>

Examples: \\John.Doe@AutomationAnywhere.Com\Projects\Archive

 \\John.Doe@AutomationAnywhere.Com\Sent Items

9. Before you can Get/Read Info or Properties of a Mail, Appointment or Meeting Request by calling corresponding methods, e.g. GetSenderSMTPAddress, GetAppointmentDurationInMinutes, GetMeetingRequestBody, etc., you will need to first call the SelectMailItem, SelectAppointment or SelectMeetingRequest one time to preselect a specific item you are working with. Once an item is selected then you can call any number of Get/Read Functions following that.
10. Functions that contain "Array" in their Name return a Single-Dimension Array, that is, 'N' number of Rows and 1 Column. Use Array Type Variable to map to Output Parameter of such Functions.
11. Some Functions/Logics may seem like Duplicates, but, do compare their Input-Output Parameters to see if there is any difference. Or those may be there to maintain backward compatibility with previous Version(s) of this Metabot.
12. DownloadAttachmentPath should be an accessible and valid fully qualified Folder Path that exists. Also, make sure that the Windows User running the Task has Read & Write privileges for that Folder.
13. Once a Meeting Request (received in Inbox) is Accepted/Tentative and saved on Calendar, it is referred to as "Appointment". After responding, Meeting Requests are moved to "Deleted Items" folder. All entries present on Calendar are referred to as "Appointment".

14. You will need to construct Filter value in a certain format to pass to “****ByFilter” Functions. You can read following article to learn more or search for more info on Google:
https://msdn.microsoft.com/en-us/library/microsoft.office.interop.outlook._items.find.aspx

a. Mail Example:

[ReceivedTime] > '11/13/2017 12:00 AM' And [ReceivedTime] < '11/17/2017 12:00 AM'

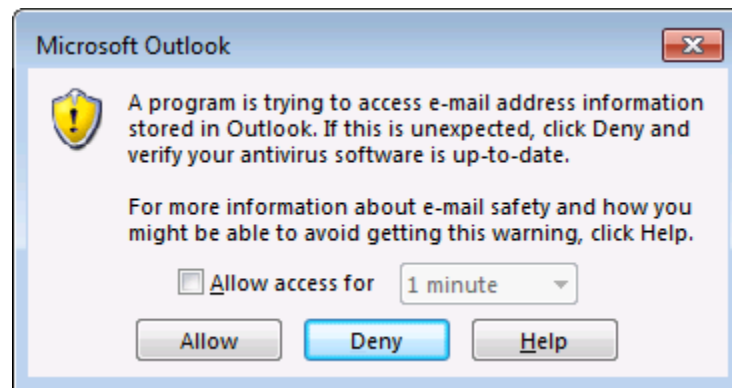
b. Appointment Example:

[Start] > '11/13/2017 12:00 AM' And [Start] < '11/17/2017 12:00 AM'

c. Meeting Request Example:

[ReceivedTime] > '11/13/2017 12:00 AM' And [ReceivedTime] < '11/17/2017 12:00 AM'

15. If you encounter an Error or a *Message Box* as shown below while using *SendMail* Function or while accessing Protected Properties, such as, Email Body, Email Sender Address, etc., then you will need to modify Outlook Settings using an Administrator User Account.



Try the two Resolution Methods described in following article:

<https://support.microsoft.com/en-us/help/3189806/a-program-is-trying-to-send-an-e-mail-message-on-your-behalf-warning-i>

Outlook Application

| Function | Inputs | Outputs | Comments |
|-----------------------------|--|------------------------------|--|
| LaunchOutlook | N/A | String – Success | Launches Outlook Application. It is an optional step and only required if you need Outlook Application Visible. Else you could directly call SelectProfile Function. |
| SelectProfile | N/A | String – Success | Selects the current profile for the account that is logged into Outlook. Execute this Directly if you don't need Outlook Application open and visible. |
| SelectProfileByNamePassword | String – Profile Name, String – Profile Password | String – Success | Selects indicated Profile specifically. |
| SelectAccount | N/A | String – Success | Selects the default account for the selected profile |
| SelectAccountByName | String – Account name (user.name@email.addr) | String – Success | Selects the indicated account for the selected profile. Same as SelectAccount(AccountName) |
| SelectInbox | N/A | String – Success | Selects the Inbox folder for selected account |
| SelectCalendar | N/A | String – Success | Selects the Calendar folder for selected account |
| SelectFolder | String – FolderPath (\\user.name@email.addr\Folder\SubFolder) | String – Success | Selects the Folder indicated. |
| GetAccountInformation | N/A | String – Account Information | Returns: DisplayName, UserName, SmtAddress, and AccountType for all the Accounts under selected Profile. |
| GetFoldersArray | N/A | Array – Folders | Returns Array containing all Folders for selected Account. |
| CloseOutlook | N/A | String – Success | Closes all Outlook Application windows. |

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| GetSharedFoldersArray | N/A | Array – Shared Folders | Returns Array containing all Shared Folders the User has access to and are added to Outlook Profile. Use GetFoldersArray Function for folders in your Primary/Default Email Account. |
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Mails

| Function | Inputs | Outputs | Comments |
|-------------------------------------|--|-------------------------|---|
| SelectMailItem | String – ID (140 Character ID) | String – Success | Selects Mail associated by the ID, see GetAllMailIDsArray() and similar Functions to get Array of Mail IDs. |
| GetAllMailIDsArray | String – Number Of Items | Array – Mail IDs | Returns Array containing IDs for Mails. |
| GetUnReadMailIDsArray | String – Number Of Items | Array – Mail IDs | Returns Array containing IDs for UnRead Mails. |
| GetReadMailIDsArray | String – Number Of Items | Array – Mail IDs | Returns Array containing IDs for Read Mails. |
| GetMailIDsArrayByFilter | String – Filter | Array – Mail IDs | Returns Array containing IDs for Mails satisfying Filter condition. |
| GetMailIDsArrayByDateRange | String – Start Date, String – End Date | Array – Mail IDs | Returns Array containing IDs for Mails received between given Start and End Date. |
| GetSenderSMTPAddress | N/A | String – Email Address | Returns the SMTP Email Address of Sender of selected Mail item. |
| GetSMTPAddressForCCRecipients Array | N/A | Array – Email Addresses | Returns Array containing SMTP Email Addresses of CC Recipients for the selected Mail item |

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| GetSMTPAddressForToRecipients Array | N/A | Array – Email Addresses | Returns Array containing SMTP Email Addresses of To Recipients for the selected Mail item |
| GetNumberOfAttachments | N/A | String – No. of attachmen ts | Returns number of attachments for selected Mail item |
| GetBody | N/A | String – Body | Returns the Body for selected Mail item in Plain Text format. |
| GetBodyHTML | N/A | String – Body | Returns the Body for selected Mail item in HTML format. |
| GetIsBodyHTML | N/A | String – “true” or “false” | Returns “true” if Body of selected Mail item is in HTML format, else “false” |
| GetSubject | N/A | String – Subject | Returns the subject for selected Mail item |
| GetSentOnDate | N/A | String – Date Sent | Returns the date selected Mail item was sent |
| GetIsUnReadStatus | N/A | String – “true” or “false” | Returns “true” if selected Mail item is Unread, else “false” |
| MarkAsRead | String – ID | String – Success | Changes the Unread status to Read for Mail item associated with given ID. |
| MarkAsUnRead | String – ID | String – Success | Changes the Unread status to Unread for Mail item associated with given ID. |
| DownloadAttachments | String – ID, String – DownloadAttachmentPath | String – Success | Downloads attachments to the path indicated for Mail item associated with given ID. |

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| DisplayMail | String – ID | String – Success | Displays Mail associated with given ID. |
| CloseMail | String – ID | String – Success | Closes Mail associated with given ID. |
| DeleteMail | String – ID | String – Success | Deletes Mail associated with given ID. |
| MoveMail | String – ID, String – FolderPath (\\user.name@email.addr\Folder\SubFolder) | String – Success | Moves Mail associated with given ID to given FolderPath. |
| SendMail | String – ToRecipients (use Semi-colon), String – CcRecipients (use Semi-colon), String – BccRecipients (use Semi-colon), String – Subject, String – Attachments (use Semi-colon), String – Body, String – IsBodyHTML (pass “true” or “1” if Body is in HTML format), String - ReplyRecipients (use Semi-colon) | String – Success | Sends Mail using the selected Account. Use Semi-colon to separate multiple Recipients’ SMTP Email Address and Attachment Paths. Body can be in Plain Text or HTML format. In case of HTML, pass “true” or “1” as value for <i>IsBodyHTML</i> input, else leave it blank. |
| SaveMailAsPDF | String – ID, String – FilePath (D:\folder1\folder2\filename.pdf) | String – Success | Saves Mail associated with given ID, as PDF Document using given FilePath. |
| GetFlagStatus | N/A | String – “Complete” or “Marked” or <blank> | Returns Flag Status as “Complete” or “Marked” and blank string in case of no Flag. |
| ClearMailFlag | String – ID | String – Success | Clears Flag for Mail associated with given ID. |
| MarkMailFlag | String – ID | String – Success | Marks Flag for Mail associated with given ID. |
| MarkMailFlagComplete | String – ID | String – Success | Marks Flag as Complete for Mail associated with given ID. |

Meeting Requests

| Function | Inputs | Outputs | Comments |
|--------------------------------------|--|------------------------------|--|
| SelectMeetingRequest | String – ID (140 Character ID) | String – Success | Selects Meeting Request associated by the ID, see GetMeetingRequestIDsArray() and similar Functions to get Array of Meeting Request IDs. |
| GetMeetingRequestIDsArray | String – Number Of Items | Array – Meeting Request IDs | Returns Array containing IDs for Meeting Requests. |
| GetMeetingRequestIDsArrayByFilter | String – Filter | Array – Meeting Request IDs | Returns Array containing IDs for Meeting Requests satisfying Filter condition. |
| GetMeetingRequestIDsArrayByDateRange | String – Start Date, String – End Date | Array – Meeting Request IDs | Returns Array containing IDs for Meeting Requests received between given Start and End Date. |
| GetMeetingRequestSenderSMTPAddresses | N/A | String – Email Address | Returns the SMTP Email Address of Sender of selected Meeting Request. |
| GetMeetingRequestLocation | N/A | String – Location | Returns Location for the selected Meeting Request |
| GetMeetingRequestStartDateTime | N/A | String – Start Date Time | Returns Start Date Time for selected Meeting Request. |
| GetMeetingRequestEndDateTime | N/A | String – End Date Time | Returns End Date Time for selected Meeting Request. |
| GetMeetingRequestDurationInMinutes | N/A | String – Duration in Minutes | Returns Duration in Minutes for selected Meeting Request. |
| GetMeetingRequestNumberOfAttachments | N/A | String – No. of attachments | Returns number of attachments for selected Meeting Request |
| GetMeetingRequestBody | N/A | String – Body | Returns the body for selected Meeting Request |
| GetMeetingRequestSubject | N/A | String – Subject | Returns the subject for selected Meeting Request |
| GetMeetingRequestRecipientsArray | N/A | Array – Email Addresses | Returns Array containing SMTP Email Addresses of Recipients of selected Meeting Request. |
| GetMeetingRequestSentOnDate | N/A | String – Date Sent | Returns the date selected Meeting Request was sent |

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| GetIsMeetingRequestUnRead | N/A | String – “true” or “false” | Returns “true” if selected Meeting Request is Unread, else “false” |
| MeetingRequestMarkAsRead | String – ID | String – Success | Changes the Unread status to Read for Meeting Request associated with given ID. |
| MeetingRequestMarkAsUnRead | String – ID | String – Success | Changes the Unread status to UnRead for Meeting Request associated with given ID. |
| DownloadMeetingRequestAttachments | String – ID, String – DownloadAttachmentPath | String – Success | Downloads attachments to the path indicated for Meeting Request associated with given ID. |
| DisplayMeetingRequest | String – ID | String – Success | Displays Meeting Request associated with given ID. |
| CloseMeetingRequest | String – ID | String – Success | Closes Meeting Request associated with given ID. |
| DeleteMeetingRequest | String – ID | String – Success | Deletes Meeting Request associated with given ID. |
| AcceptMeetingRequest | String – ID | String – Success | Accepts Meeting Request associated with given ID. |
| TentativeMeetingRequest | String – ID | String – Success | Chooses Tentative for Meeting Request associated with given ID. |
| DeclineMeetingRequest | String – ID | String – Success | Declines Meeting Request associated with given ID. |
| SendMeetingRequest | String – RequiredAttendees (use Semi-colon), String – OptionalAttendees (use Semi-colon), String – Subject, String – Location, String – StartDateTime, String – EndDateTime, String – Attachments (use Semi-colon), String – Body | String – Success | Sends Meeting Request using selected Account. Use Semi-colon to separate multiple Attendees’ SMTP Email Address and Attachment Paths. Body can be in Plain Text only. Format for StartDateTime and EndDateTime: “01/17/2018 10:00 AM”. |

Appointments

| Function | Inputs | Outputs | Comments |
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| SelectAppointment | String – ID (140 Character ID) | String – Success | Selects Appointment associated by the ID, see GetAppointmentIDsArray() and similar Functions to get Array of Appointment IDs. |
| GetAppointmentIDsArray | String – Number Of Items | Array – Appointment IDs | Returns Array containing IDs for Appointments. |
| GetAppointmentIDsArrayByFilter | String – Filter | Array – Appointment IDs | Returns Array containing IDs for Appointments satisfying Filter condition. |
| GetAppointmentIDsArrayByDateRange | String – Start Date, String – End Date | Array – Appointment IDs | Returns Array containing IDs for Appointments that Start between given Start and End Date. |
| GetAppointmentOrganizerSMTPAddress | N/A | String – Email Address | Returns the SMTP Email Address of Organizer of selected Appointment. |
| GetAppointmentLocation | N/A | String – Location | Returns Location for the selected Appointment. |
| GetAppointmentStartDateTime | N/A | String – Start Date Time | Returns Start Date Time for selected Appointment. |
| GetAppointmentEndDateTime | N/A | String – End Date Time | Returns End Date Time for selected Appointment. |
| GetAppointmentDurationInMinutes | N/A | String – Duration in Minutes | Returns Duration in Minutes for selected Appointment. |
| GetAppointmentNumberOfAttachments | N/A | String – No. of attachments | Returns number of attachments for selected Appointment |
| GetAppointmentBody | N/A | String – Body | Returns the body for selected Appointment |
| GetAppointmentSubject | N/A | String – Subject | Returns the subject for selected Appointment |
| GetAppointmentRecipientsArray | N/A | Array – Email Addresses | Returns Array containing SMTP Email Addresses of Recipients/Attendees of selected Appointment. |
| DownloadAppointmentAttachments | String – ID, String – DownloadAttachmentPath | String – Success | Downloads attachments to the path indicated for Appointment associated with given ID. |
| DisplayAppointment | String – ID | String – Success | Displays Appointment associated with given ID. |
| CloseAppointment | String – ID | String – Success | Closes Appointment associated with given ID. |
| DeleteAppointment | String – ID | String – Success | Deletes Appointment associated with given ID. |

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| CreateAppointment | String – Subject, String – Location, String – StartDateTime, String – EndDateTime, String – Attachments (use Semi-colon), String – Body | String – Success | Creates new Appointment on selected Calendar Folder (or default one). Use Semi- colon to separate multiple Attachment Paths. Body can be in Plain Text only. Format for StartDateTime and EndDateTime: “01/17/2018 10:00 AM”. |
| GetIsAppointmentRecurring | N/A | String – “true” or “false” | Returns “true” if selected Appointment is part of Recurring Appointment Series, else “false”. |

Below are the common input variables:

| Parameter Name | Type | Direction | Additional Info |
|-----------------|--------|-----------|---|
| vErrorFolder | String | Input | This is error folder inside bot folder which contains Logs and Snapshots folder (Already defined, no need to add value unless want to change location of file). |
| vLogFolder | String | Input | This folder contains Log file in case of error (Already defined, no need to add value unless want to change location of file). |
| vSnapshotFolder | String | Input | This folder contains Screenshot in case of error (Already defined, no need to add value unless want to change location of file). |

Error Handling

- Each Bot folder contains the below hierarchy.
 - Error Folder
 - Logs
 - Error Logs Month-Day-Year.txt: In case of any error, this file logs error message along with time stamp
 - Snapshots
 - Error Snap Month-Day-Year.png: In case of any error, this file captures screenshot of error.
- Task Status of bot is set to failed in case of error.

Task Flow For Sample Tasks

TaskBot flow for reading Mails

1. LaunchOutlook (optional – call only if you want Outlook Application Window visible)
2. SelectProfile or SelectProfileByNamePassword
3. SelectAccount or SelectAccountByName
4. SelectInbox or SelectFolder
5. GetMailIDsArrayByDateRange or alternate Function
6. Loop to iterate over Mail IDs and process them.
7. CloseOutlook

TaskBot flow for reading Appointments

1. LaunchOutlook (optional – call only if you want Outlook Application Window visible)
2. SelectProfile or SelectProfileByNamePassword
3. SelectAccount or SelectAccountByName
4. SelectCalendar
5. GetAppointmentIDsArrayByDateRange or alternate Function
6. Loop to iterate over Appointment IDs and process them.
7. CloseOutlook

TaskBot flow for reading and processing Meeting Requests

1. LaunchOutlook (optional – call only if you want Outlook Application Window visible)
2. SelectProfile or SelectProfileByNamePassword
3. SelectAccount or SelectAccountByName
4. SelectInbox or SelectFolder
5. GetMeetingRequestIDsArrayByDateRange or alternate Function
6. Loop to iterate over Meeting Request IDs and process them.
7. CloseOutlook