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POWER AUTOMATE DESKTOP

is Microsoft Power Automate?

Microsoft Power Automate, previously known as Microsoft Flow, is a cloud-based workflow and automation platform. It allows users automate tasks that consume a lot of time and are repetitive. It gets all business processes in line by connecting to different data sources and integrating with different third-party services and apps.

It brings down the number of manual tasks to simplify daily routines. This is a low-code/ no-code platform. There is no need for the person to write any code for automating workflows and processes. Even those with low [technical](#) ability can use its drag and drop interface for creating custom workflows. It has more than [900 connectors](#) to give users the flexibility to integrate with different services and tools for everyday use.

Power Automation is an Automation Tool to automate day to day tasks, workflows etc.

DESKTOP FLOWS BROADEN THE EXISTING ROBOTIC PROCESS AUTOMATION (RPA) CAPABILITIES IN POWER Automate and enable you to automate all repetitive desktop processes. (eg : sending automate emails, web scrapping etc)

They use pre-built actions to interact with legacy and modern applications, websites, and files, allowing users to build and deploy automations for repetitive desktop processes like data entry, document organization, and data extraction without needing deep programming knowledge.

In Power Automate DeskTop, we create flows to automate tasks which we are doing manually can be automated by creating flows, so that mundane task be converted into robotic process

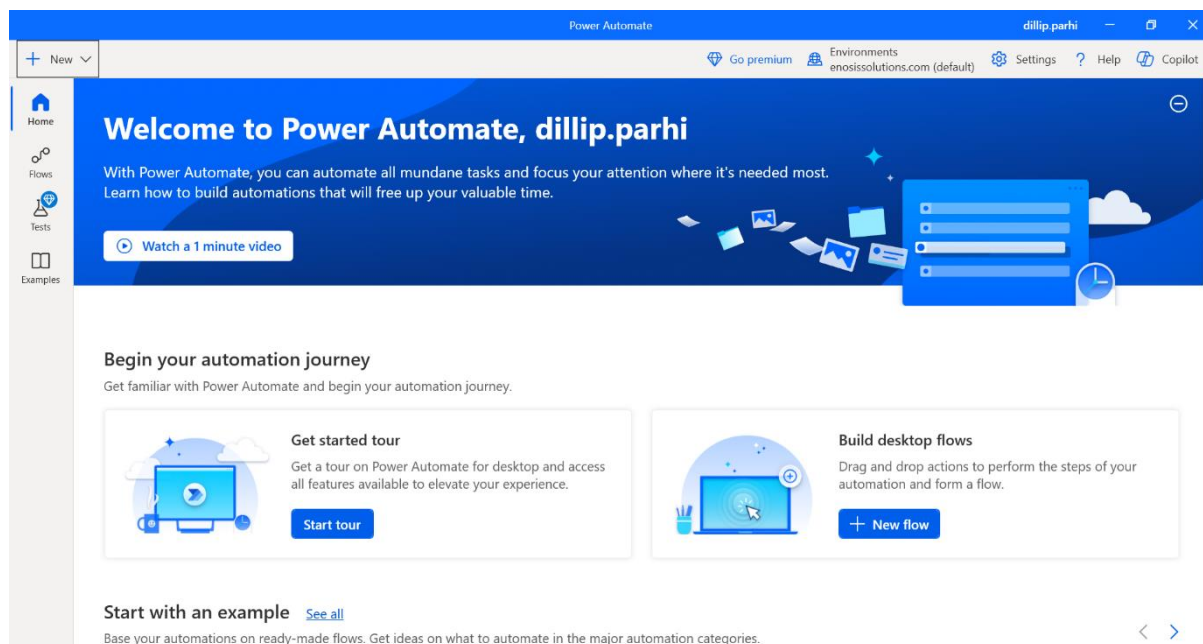
You need to first install power automate desktop

<https://learn.microsoft.com/en-us/power-automate/desktop-flows/install#install-power-automate-by-using-the-msi-installer>

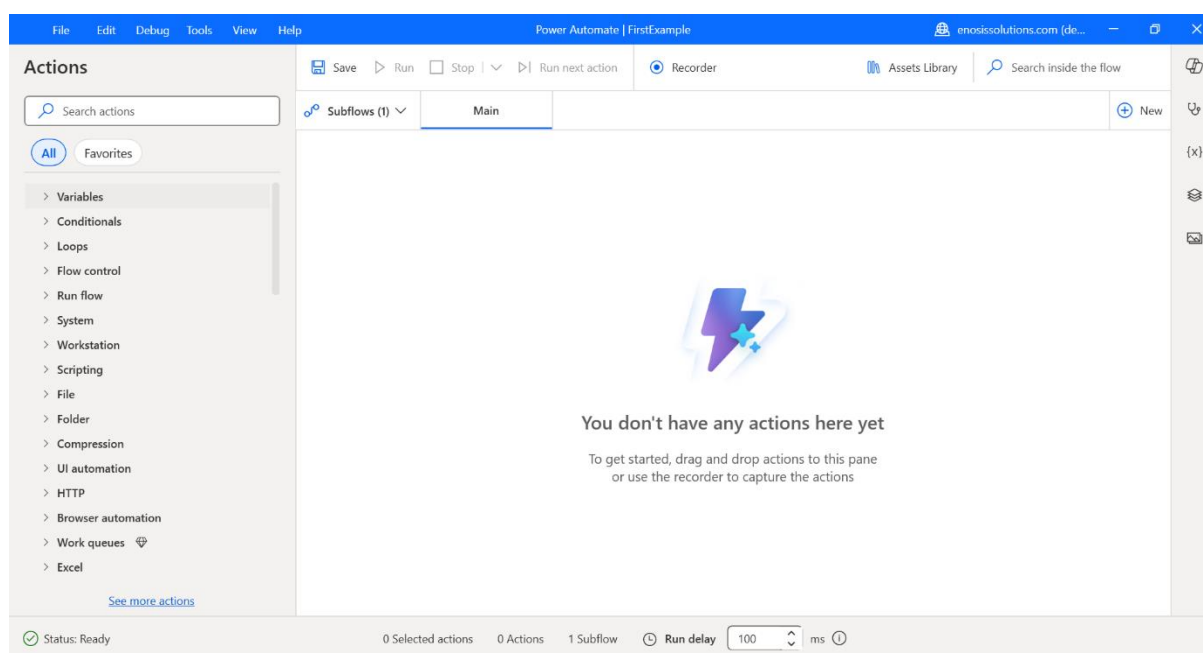
<https://blogs.windows.com/windowsexperience/2021/03/02/download-power-automate-desktop-for-windows-10-to-automate-tasks-and-processes-at-no-additional-cost/>

<https://www.microsoft.com/en-us/power-platform/products/power-automate/>

After Installation you can open Power Automate DeskTop and it will open the Power Automation DeskTop to build Flows.



To Create a New Flow, click on New to create Flow, it will ask for a Name and create the flow accordingly.



In the flow pane , we have set of actions & sub actions on the left side.On the centre we have the Main section where we can drag and drop the action.

On the right side, we have variables section. variables are created to store values which can be used by the actions.

BASIC PROGRAMMING FUNDAMENTALS OF POWER AUTOMATE DESKTOP

Power Automate Desktop consists of variables, conditional statements, looping statements, actions and connectors.. These are all the fundamentals of Power Automate Desktop, like any programming languages these also do programming task.

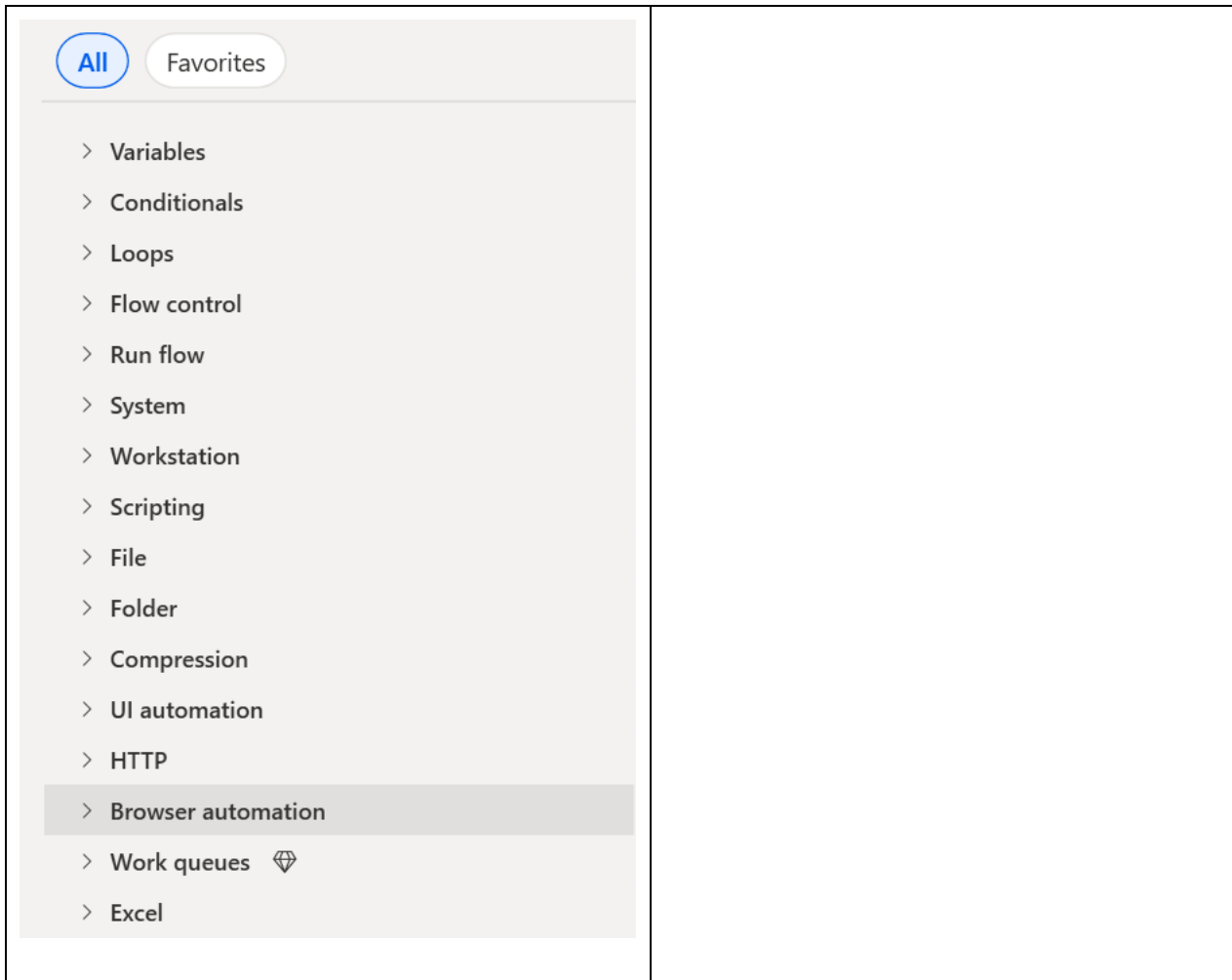
Eg : actions are like methods / functions/ procedures do certain operations as defined. They are predefined, just need to drag and drop in Power Automate to do the operations.

Category	Description
Variables	Variables are used to store which can be used by other actions or other flows.
Message Boxes	Display Actions are used to display different message boxes. It consists of different types of dialog boxes
Flow	Flow actions are used to call Other Flows, sub flows etc
Conditional	Conditional Actions are used to write conditional statements
Looping	Looping actions are used to write looping statements. Eg : For Loop.
RunFlow	To call another flow / subflows
System	System actions are used to run application, terminate processes etc.
Workstation	Workstation actions are used to control workstation sound, desktop etc.
Scripting	Scripting actions are used to run python, csharp scripts/ code etc.
File	File actions are used to do file actions like delete, write etc
Folder	Folder actions are used to do folder actions like delete folder etc.
Compression	Compression actions are used to
UI automation	Action to automate User Interface, Windows App etc
Browser Automation	Action to automate Browsers Interface, Launch Web Url, scrap data etc
Excel	To read, write to excel sheets etc.
Word	To read, write to word documents. Eg : Launch Word, Read Words, Write Words
Database	To connect with database eg : SQL SERVER and do database operations
Access	To connect with access and do operations
Email	To connect with access.
Exchange Server	To connect with exchange server and do mail operations.
Outlook	To connect with outlook and do mail operations.

Mouse – Keyboard	To do mouse operations
ClipBoard	ClipBoard actions are used do clipboard operations like copy , paste etc
Text	To do text operations
DateTime	To do date operations. GetCurrentDate etc
PDF	To read text, images from PDF etc eg : Extract Images from PDF, Extract tables,Merge PDF,
Window Services	To start, stop a windows services. Start Service, Stop Service

Actions are categorized as follows

Action	Actions > Word > Database > Access > Email > Exchange Server > Outlook > Message boxes > Mouse and keyboard > Clipboard > Text > Date time > PDF > CMD session > Terminal emulation > OCR > Cryptography
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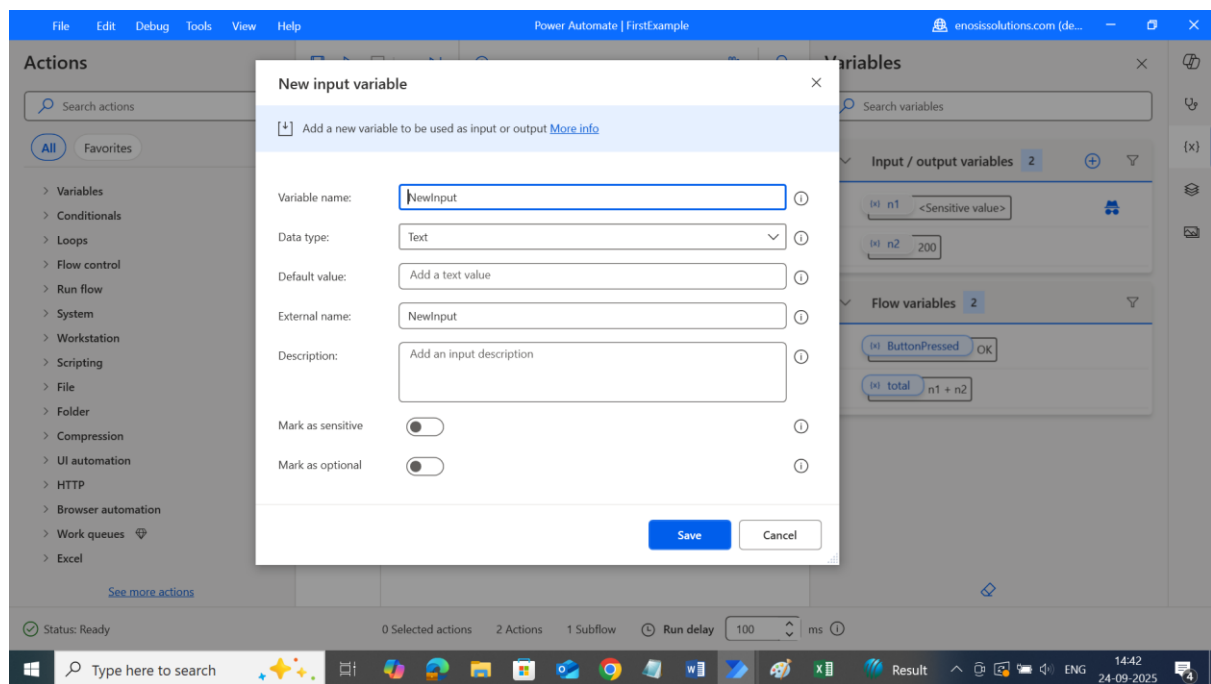


There are different types of variables

Flow Variables which are created within the variables and will be used within the flow

Input variables are used to pass input values to the Flow.

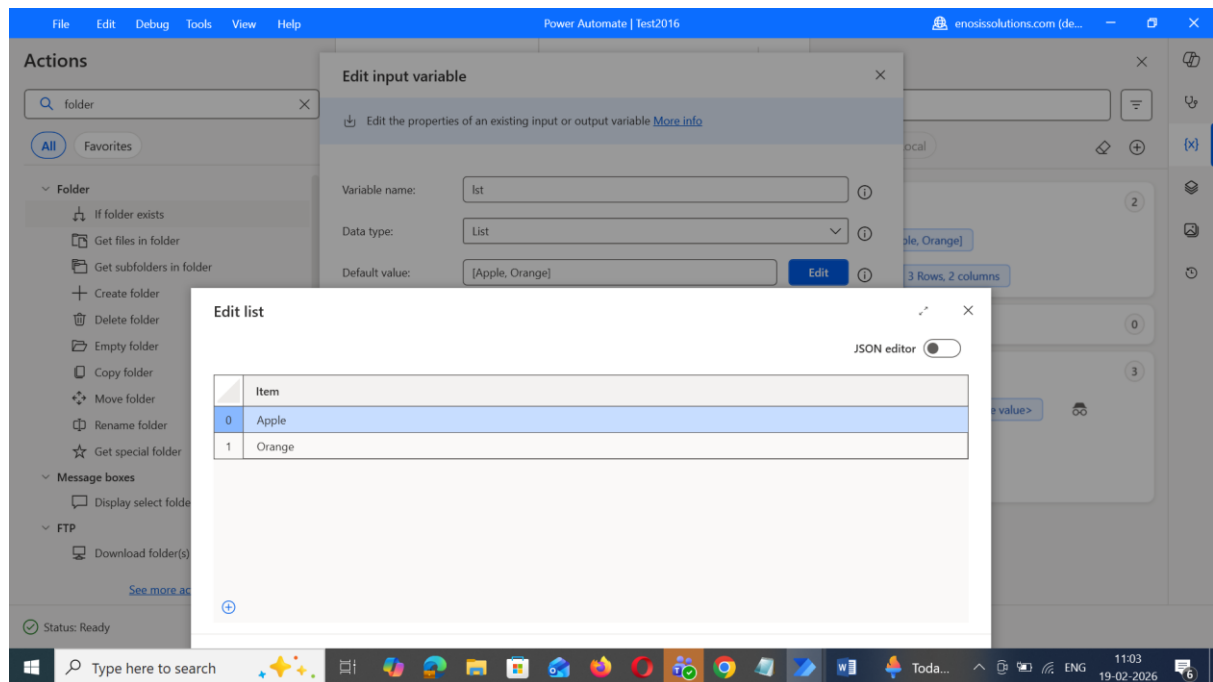
Output variables are used to get the values the Flow from other applications



VARIABLES DATA TYPES

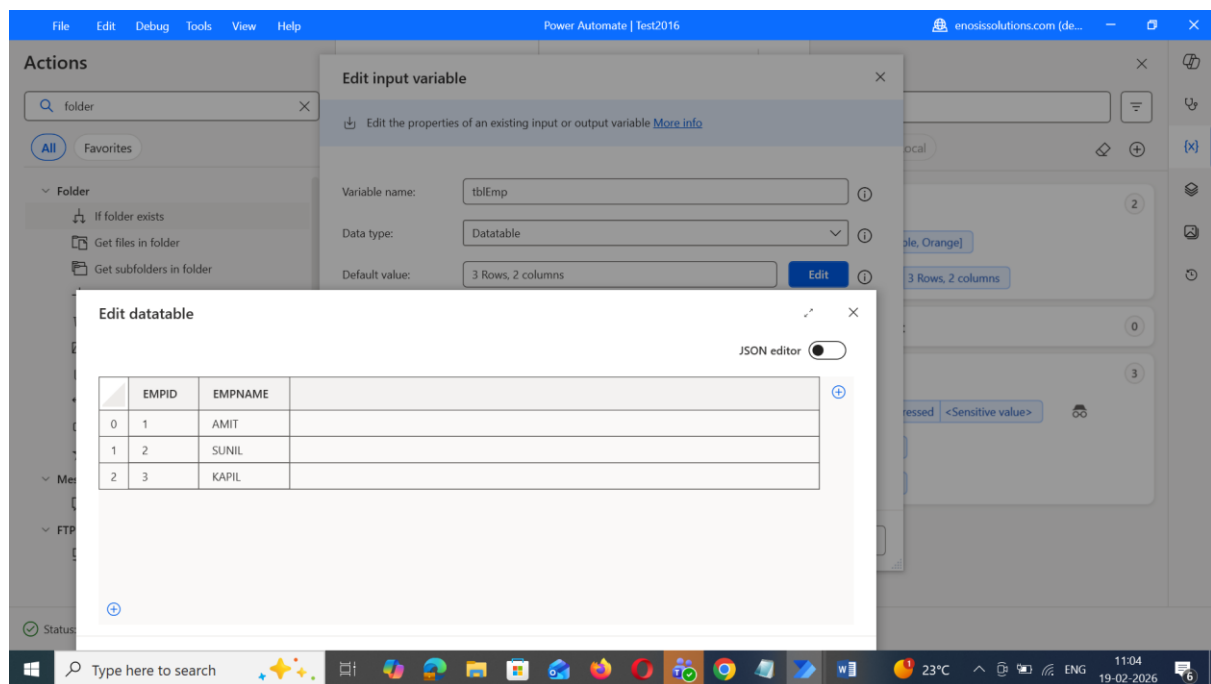
Data Type	Description
Text	Will store alphanumeric values
Number	Will store numbers etc
Boolean	Will store true or false
Custom Objects	Will store custom object...
List	Will store a list of Values
DataTable	Will store a data in the form of rows and columns
Instance	
Session	

LIST-VARIABLE - EXAMPLE

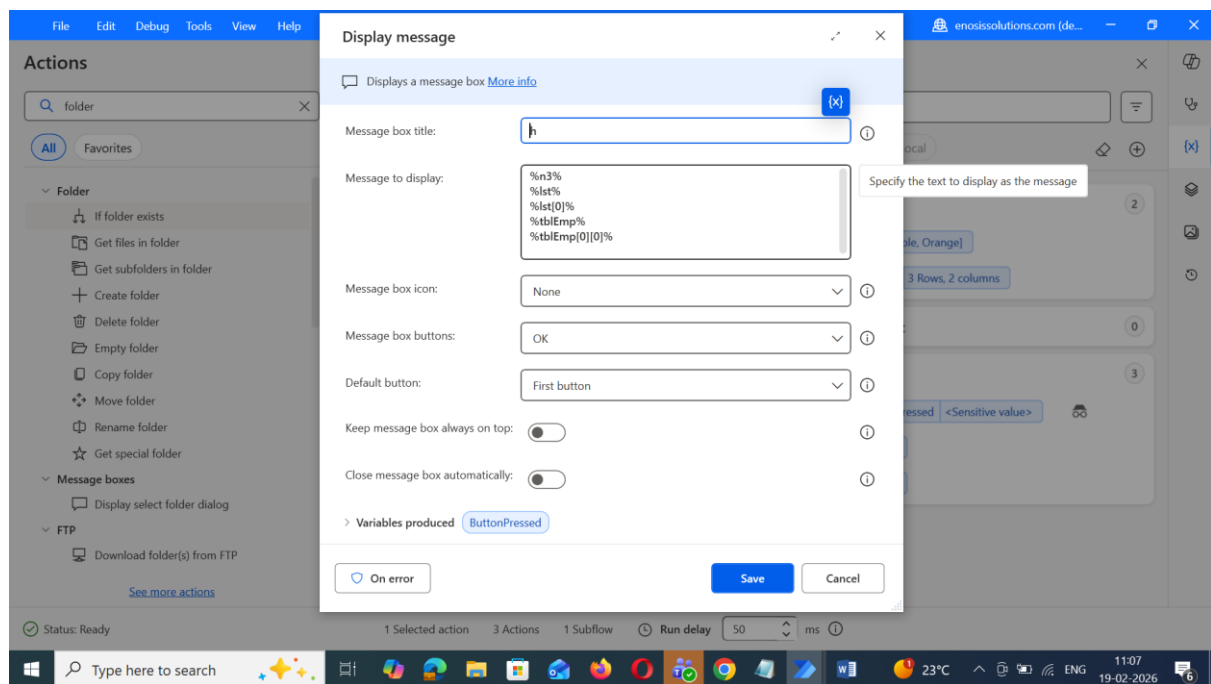


```
[  
  "Apple",  
  "Orange"  
]
```





```
[
{
"EMPID":"1",
"EMPNAME":"AMIT"
},
{
"EMPID":"2",
"EMPNAME":"SUNIL"
},
{
"EMPID":"3",
"EMPNAME":"KAPIL"
}
]
```



How to use variables in Power Automate actions/ messages etc

%n3%

%lst%

%lst[0]%

%tblEmp%

%tblEmp[0][0]%

MESSAGE BOX ACTIONS

Message Box actions are used to display messages or collect files etc

ACTION	DESCRIPTION
Display Message	To display messages
Display Input Dialog	To Take input values from user
Display Select File Dialog	To select file at runtime
Display Select Folder	To select folder at runtime

FLOW ACTIONS

Flow actions are used to call subflows , regions, on block etc exit flows etc

In Power BI Automate, we can create sub flows to modularize a code and call it from the main flow whenever required.

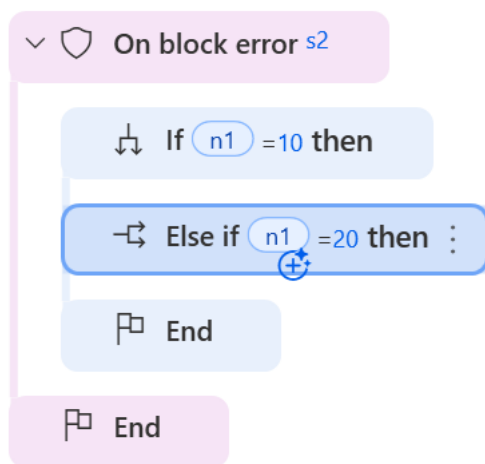
ACTION NAME	DESCRIPTION
Run SubFlow	To call a subflow
Labels	To create a label which can be navigated. T
Go To Label	To go to a Label
GetLastError	To get the last error (it will get the error message if any in the flow)
Region / End Flow	To create a region for a particular section of code
Blocks	Blocks are also similar to region to create a specific block of code
Wait	To put a wait in the flow. The execution will wait for the specific milliseconds
Comments	To put comments in the flow. Normally we put comments to make the program better readable and understandable
Run DeskTop Flow	Is Used to Call One desktop flow from another desktop flow

Run Desktop Flow: Is Used to Call One desktop flow from another desktop flow

CONDITIONAL

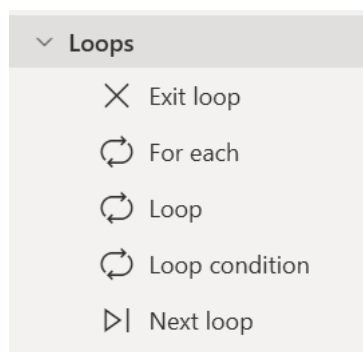
If – Else

If – Else If- Else –End	To put different conditions based upon which the flow will be executed
Switch – Case	Similar to if -else, used where we have lots of conditions

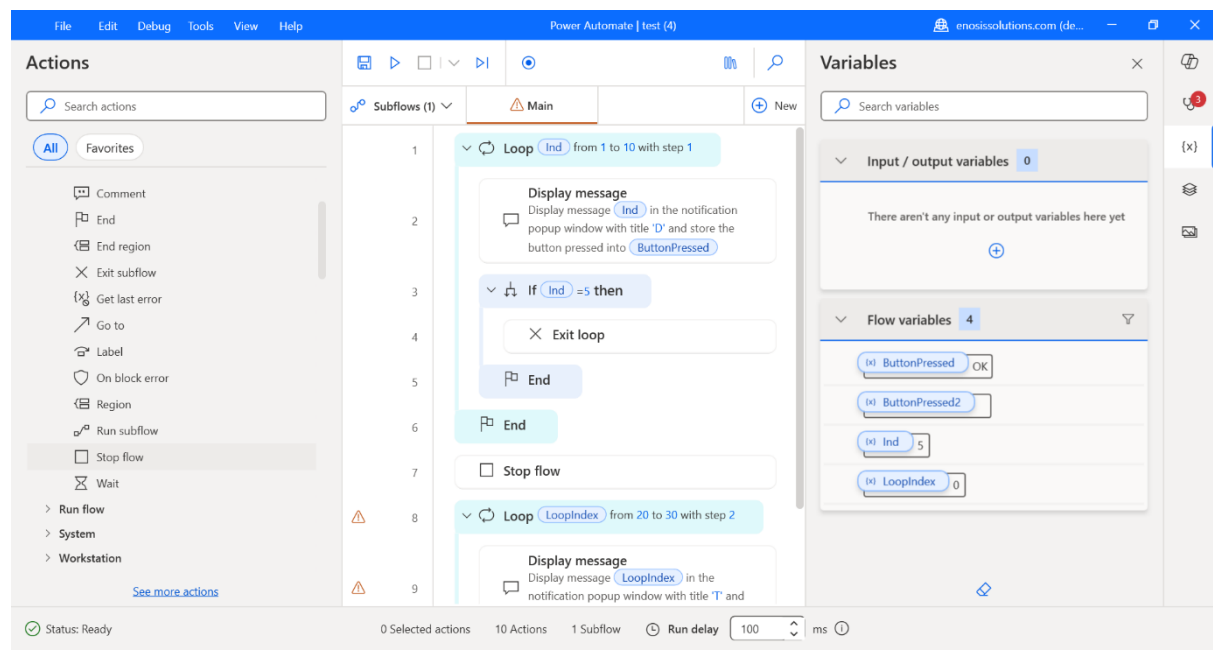


LOOPING ACTION

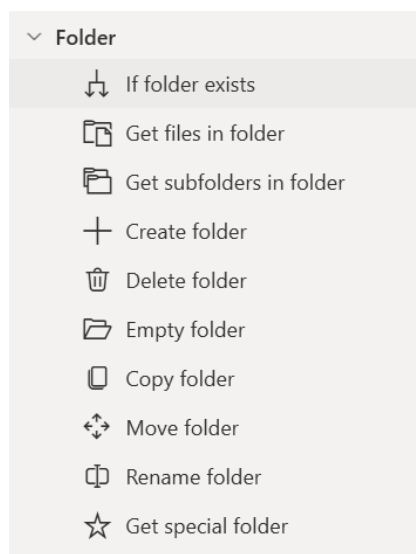
Loop Actions are used to call different types of loops



Loop	Will iterate from a start value till the end
For each	Will iterate for each item present in the collection
Loop Condition	Will iterate till a condition



FOLDERS / FILES ACTIONS

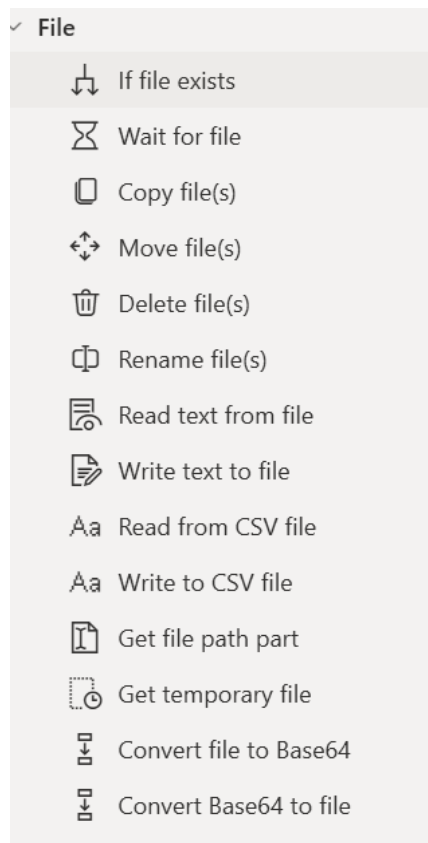


Folders actions are used to do Folder operations

Create	This will create a Folder
Delete	This will delete a folder
GetFiles	This will get a List of Files in a directory

FILE ACTIONS

File actions are used to do File Operations



Read From File	We can read from a txt or csv file using Read from File.
Write To File	We can write to a txt or csv file using write to file
Delete file	To delete a file

EXCEL

Excel action are used to do excel operations

Launch Excel	It will launch excel instance and can open a excel
Add New Worksheet	It will add a new worksheet to the excel work book
Read Excel	It can read the data from sheet or cells
Write Excel	It can write the data into a excel sheet
Close Excel	It will close the excel file opened

Example : Write to a excel worksheet

The screenshot shows a workflow editor with a top toolbar containing icons for save, play, stop, undo, redo, and search. Below the toolbar is a navigation bar with tabs for 'Subflows (3)', 'Reading', and 'Excel'. The 'Excel' tab is selected. The workflow consists of four steps:

- Launch Excel**: Launch Excel and open document 'D:\Data1.xlsx' using an existing Excel process and store it into Excel instance. The output field is 'ExcelInstance'.
- Add new worksheet**: Add a new worksheet named 'Dillip' to the Excel document in instance. The output field is 'ExcelInstance'.
- Write to Excel worksheet**: Write the value 'welcome' into cell in column 1 and row 1 of the Excel instance. The output field is 'ExcelInstance'.
- Close Excel**: Save the Excel document and close the Excel instance. The output field is 'ExcelInstance'.

WORD ACTIONS

In Word , these are the list of actions.

Launch Word	To launch an word instance
Write	To write to word file.
Insert Image	To insert image into a existing or new word file.
Read Word	To read from a word file.
Save Word	The document can be saved in different format like word, pdf etc
Close	To Close a word file or instance

PDF ACTIONS

In PDF, there are the list of actions

Extract Images	To extract images from pdf files and store in a folder
Extract text	To extract text from pdf files
Extract Tables	To extract tables from pdf files
Merge PDF	To merge pdf files into single file

OUTLOOK ACTIONS

In Outlook, these are the list of actions

Launch Outlook	Will launch an outlook instance
Retrive email messages	Will retrieve outlook email messages, attachments
Save outlook messages	Will save outlook email messages into a specified format
Send email messages	Send email messages, attachment
Close Outlook	Close the outlook instance

DATABASE ACTIONS

In Database, these are the list of actions

Open SQL	Will connect to a SQL SERVER
Execute SQL statements	To execute a SQL command
Close SQL	To Close the connection

SYSTEM / WINDOWS SERVICE ACTIONS

In windows service, these are the list of actions

Run Application	To call an external exe or applications
Terminate Process	To a terminate a process running
Start Service	To start a service
Stop Service	To stop a service
Get Windows Environment Variable	To get the values from a windows environment

BROWSER ACTIONS

- ▼ Browser automation
 - > Web data extraction
 - > Web form filling
 - 📄 If web page contains
 - ⌚ Wait for web page content
 - 🌐 Launch new Internet Explorer
 - 🌐 Launch new Firefox
 - 🌐 Launch new Chrome
 - 🌐 Launch new Microsoft Edge
 - 📄 Create new tab
 - 📄 Go to web page
 - 🔗 Click link on web page
 - ⬇️ Click download link on web page
 - JS Run JavaScript function on web page
 - 🖱️ Hover mouse over element on web page

EXAMPLE1 : EXTRACT DATA FROM A WEB PAGE

The screenshot displays the Power Automate 'Test' environment. The workflow consists of four steps:

- Launch new Microsoft Edge**: Attach to Microsoft Edge tab with URL `www.amazon.in` and store the instance into `Browser`.
- Extract data from web page**: Extract list from web pages and store it in `DataFromWebPage`. A configuration dialog is open for this step.
- Display message**: Display message `DataFromWebPage` in the notification popup window with title 'D' and store button pressed into `ButtonPressed`.
- Close web browser**: Close web browser `Browser`.

The 'Extract data from web page' configuration dialog shows the following settings:

- Web browser instance: `%Browser%`
- Process data upon extraction: ☐ (unchecked)
- Timeout: 60
- On error: ☐ (selected)

The status bar at the bottom indicates 'Status: Ready', '1 Selected action', '4 Actions', '1 Subflow', and 'Run delay: 50 ms'.

EXAMPLE 2 - INPUT – OUTPUT VARIABLES

Input – Output variables are used to pass put values to the Flow from external calling application or flows and get the output.. Refer TestInOu

Run desktop flow

 Runs a desktop flow which can receive input variables and may produce output variables. [More info](#)

Desktop flow: ⓘ

Wait for flow to complete: ☒ ⓘ

Input variables

NewInput:

> Variables produced **contents2**

 On error

Save Cancel

EXAMPLE 3: EXTRACT DATA FROM A FILE USING FILE DIALOG AND WRITE TO A WORD FILE

Variables
Truncate number
Get the integral or fractional digits of a numeric value, or round up the value to a specified number of decimal places
Generate random number
Generate a random number or a list of random numbers that fall between a minimum and maximum value
Clear list
Remove all items from a list
Remove item from list
Remove one or multiple items from a list
Sort list
Sort the items of a list. Use items of the same type
Shuffle list
Create a random permutation of a list
Merge lists
Merge two lists into one
Reverse list
Reverse the order of the items of a list
Remove duplicate items from list
Remove the multiple occurrences of items in a list, so that in the resulting list each item will be unique
Find common list items
Compare two lists and create a new list with the items that are common to both
Subtract lists
Compare two lists and create a new list with the items that are in the first list but not in the second
Retrieve data table column into list
Convert the contents of a data table column into a list
Convert JSON to custom object

Variables (cont)
Convert a JSON string to a custom object
Convert custom object to JSON
Convert a custom object to a JSON string
Add item to list
Append a new item to a list
Create new list
Create a new empty list
Increase variable
Increase the value of a variable by a specific amount
Decrease variable
Decrease the value of a variable by a specific amount
Set variable
Set the value of a new or existing variable, create a new variable or overwrite a previously created variable

UI automation
If window contains
Marks the beginning of a conditional block of actions depending on whether a specific piece of text or UI element exists in a window
Wait for window content
Suspends the execution of the automation until a specific piece of text or UI element appears or disappears from a Window
If image
This action marks the beginning of a conditional block of actions depending on whether a selected image is found on the screen or not
Use desktop
Performs desktop and taskbar related operations
Select tab in window
Selects a tab from a group of tabs
Wait for image

UI automation (cont)
This action waits until a specific image appears on the screen or on the foreground window
Hover mouse over UI element in window
Hover the mouse over any UI element on window
Click UI element in window
Clicks on any UI element of a window
Select menu option in window
Selects an option in a menu of a window
Drag and drop UI element in window
Drags and drops a UI element of a window
Expand/collapse tree node in window
Expands or collapses a node of a tree view residing in a window
If window
This action marks the beginning of a conditional block of actions depending on whether a window is open or not or whether a window is the focused (foreground) window
Wait for window
Suspends the execution or the process until a specific window opens, closes, get or loses the focus

UI automation - Data Extraction
Get details of window
Gets a property of a window such as its title or its source text
Get details of a UI element in window
Gets the value of a UI element's attribute in a window
Get selected checkboxes in window
Retrieves the names of the selected checkboxes in a checkbox group or the state of a specific checkbox
Get selected radio button in window

UI automation - Data Extraction (cont)
Retrieves the names of the selected radio button in a radio button group or the state of a specific radio button
Extract data from window
Extracts data from specific parts of a window in the form of single values, lists, or tables
Take screenshot of UI element
Takes a screenshot of a UI element in window
Extract data from table
Extracts data from a table in the form of a datatable

UI automation - Form filling
Focus text field in window
Sets the focus on a text box of a window and scrolls it into view
Populate text field in window
Fills a text box in a window with the specified text
Press button in window
Presses a window button
Select radio button in window
Selects a radio button on a window
Set checkbox state in window
Checks or unchecks a checkbox in a window form
Set drop-down list value in window
Sets or clears the selected option(s) for a drop-down list in a window form

UI automation - Windows
Get window
Gets a running window, for automating desktop applications
Focus window
Activates and brings to the foreground a specific window
Set window state

UI automation - Windows (cont)
Restores, maximizes or minimizes a specific window
Set window visibility
Shows a hidden window or hides a visible window
Move window
Sets the position of a specific window
Resize window
Sets the size of a specific window
Close window
Closes a specific window

Browser automation
If web page contains
Mark the beginning of a conditional block of actions, depending on whether a specific piece of text or element exists in a web page
Wait for web page content
Suspend the flow until a specific piece of text or web page element appears or disappears from a web page
Launch new Internet Explorer
Launch a new instance or attach to a running instance of Internet Explorer for automating web sites and web applications
Launch new Firefox
Launch a new instance or attach to a running instance of Firefox for automating web sites and web applications
Launch new Chrome
Launch a new instance or attach to a running instance of Chrome for automating web sites and web applications
Launch new Edge
Launch a new instance or attach to a running instance of Edge for automating web sites and web applications
Create new tab

Browser automation (cont)
Create a new tab and navigate to the given URL (supported in Edge, Chrome and Firefox)
Go to web page
Navigate the web browser to a new page
Click link on web page
Click on a link or any other element of a web page
Click download link on web page
Click on a link in a web page that results in downloading a file
Run JavaScript function on web page
Run a JavaScript function on the web page and get the returned result
Hover mouse over element on web page
Hover the mouse over an element of a web page
Close web browser
Close a web browser window

Browser automation - Web form filling
Focus text field on web page
Set the focus on an input element of a web page and scroll it into view
Populate text Field on web page
Fill a text field in a web page with the specified text
Set check box state on web page
Check or uncheck a check box in a web form
Select radio button on web page
Select a radio button on the web page
Set drop-down list value on web page
Set or clear the selected option for a drop-down list in a web form
Press button on web page
Press a web page button

Browser automation - Web data extraction

Extract data from web page

Extract data from specific parts of a web page in the form of single values, lists, rows or tables

Get details of web page

Get a property of a web page, such as its title or its source text

Get details of element on web page

Get the value of an element's attribute on a web page

Take screenshot of web page

Take a screenshot of the web page (or an element of the web page) currently displayed in the browser and save the image into a file or to the clipboard

HTTP

Download from web

Downloads text or a file from the web and stores it

Invoke SOAP web service

Invokes a method from a SOAP web service

Invoke web service

Invokes a web service by sending data and retrieves the response from the web service

Mouse and keyboard

Block Input

Blocks user mouse and keyboard input, so that the flow can perform mouse and keyboard actions without interference from the user

Get mouse position

Retrieves the current position of the mouse cursor on the screen in pixel coordinates

Move mouse

Moves the mouse to a specific position

Mouse and keyboard (cont)

Move mouse to image

Moves the mouse over an image found on screen or on the foreground window

Move mouse to text on screen (OCR)

Moves the mouse over a text found on the screen or on the foreground window using OCR

Send mouse click

Sends a mouse click event

Send keys

Sends keys to the application that is currently active

Press/release key

Presses (and holds) or releases one or more modifier keys (Alt, Control, or Shift)

Set key state

Sets the state (on or off) for the keys Caps Lock, Num Lock or Scroll Lock

Wait for mouse

Suspends the execution of the flow until the mouse pointer changes, usually to or from the 'wait cursor' or hourglass

Get keyboard identifier

Retrieves the active keyboard identifier from the machine's registry

Wait for shortcut key

Pause the flow run until a specific shortcut key is pressed. Shortcut keys must contain at least one key or a key and one of (ctrl, alt, shift). Multiple shortcut keys can be defined

Azure

Create session

Creates an Azure session

Get subscriptions

Gets subscriptions that the current account can access

End session

Ends an Azure session

Azure - Resource groups

Get resource groups

Gets the resource groups based on the specified criteria

Create resource group

Creates a new resource group

Delete resource group

Deletes the specified resource group and all the contained resources

Azure - Virtual machines

Get virtual machines

Gets the basic information for the virtual machines

Describe virtual machine

Gets all the information for the virtual machine(s) based on the specified criteria

Start virtual machine

Starts the virtual machine

Stop virtual machine

Stops the virtual machine and deallocates the related hardware (CPU and memory) and network resources

Shut down virtual machine

Shuts down the operating system of a virtual machine

Restart virtual machine

Restarts a virtual machine

Cryptography

Encrypt text with AES

Encrypt a string with AES, using a key and a specified encoding format

Decrypt text with AES

Decrypt a string with AES based on a specified key and an encoding format

Encrypt from file with AES

Encrypt the contents of a file with AES, using a key and a specified encoding format

Decrypt to file with AES

Cryptography (cont)
Decrypt a string to a file with AES based on a specified key and an encoding format
Hash text
Hash a string, using a specified algorithm and an encoding format
Hash from file
Hash the contents of a file, using a specified algorithm and an encoding format
Hash text with key
Hash a string with a key, using a specified algorithm and an encoding format
Hash from file with key
Hash the contents of a file with a key, using a specified algorithm and an encoding format

CyberArk
Get password from CyberArk
Retrieves a password for a specific application from CyberArk

Google cognitive - Natural language
Analyze sentiment
Invokes the Google Cloud Natural Language service named 'Analyze Sentiment'
Analyze entities
Invokes the Google Cloud Natural Language service named 'Analyze Entities'
Analyze syntax
Invokes the Google Cloud Natural Language service named 'Analyze Syntax'

Google cognitive - Vision
Label detection
Invokes the Google Cloud Vision service named 'Label Detection'
Landmark detection
Invokes the Google Cloud Vision service named 'Landmark Detection'
Text Detection

Google cognitive - Vision (cont)
Invokes the Google Cloud Vision service named 'Text Detection'
Logo detection
Invokes the Google Cloud Vision service named 'Logo Detection'
Image properties detection
Invokes the Google Cloud Vision service named 'Image Properties Detection'
Safe search detection
Invokes the Google Cloud Vision service named 'Safe Search Detection'

SharePoint ♦
Update file
Updates the contents of the file specified by the file identifier.
Delete file
Deletes the file specified by the file identifier.
Get file content using path
Gets file contents using the file path.
Get file content
Get file contents using the file identifier. The contents can be copied somewhere else, or be used as an attachment.
Create file
Uploads a file to a SharePoint site. Make sure to pick an existing library.
List folder
Returns files contained in a SharePoint folder.
Get all lists and libraries
Get all lists and libraries.
Get file metadata
Gets information about the file such as size, etag, created date, etc. Uses a file identifier to pick the file. Use Get file properties action to get to the values stored in the columns in the library.

SharePoint ♦ (cont)
Get file metadata using path
Gets information about the file such as size, etag, created date, etc. Uses a file path to pick the file. Use "Get file properties" action to get to the values stored in the columns in the library.
Get folder metadata
Gets information about the folder. Uses a file identifier to pick the folder.
Get folder metadata using path
Gets information about the folder. Uses a folder path to pick the folder.
List root folder
Returns files in the root SharePoint folder.
Extract folder
Extracts an archive file into a SharePoint folder (example: zip).
Get lists
Gets SharePoint lists from a site.
Create sharing link for a file or folder
Create sharing link for a file or folder.
Copy file
Copies a file. Works in a similar way to the "Copy to" command in SharePoint libraries. Returns information about the new file after copy.
Move file
Moves a file. Works in a similar way to the "Move to" command in SharePoint libraries. Returns information about the new file after move.
Copy folder
Copies a folder. Works in a similar way to the "Copy to" command in SharePoint libraries. Returns information about the new folder after copy.
Move folder

SharePoint ♦ (cont)

Moves a folder. Works in a similar way to the "Move to" command in SharePoint libraries. Returns information about the new folder after move.

Check out file

Check out a file in a document library to prevent others from editing the document, and your changes from being visible until the document is checked in.

Discard check out

If you check out a file and don't make changes to it, or you make changes that you don't want to keep you can simply discard the checkout, rather than saving the file. If your organization tracks versions, a new version is created each time you check a file back into the library. By discarding the checkout, you can avoid making new versions when you haven't made any changes to the file.

Check in file

Check in a checked out file in a document library, which makes the version of the document available to others.

Get list views

Gets views from a SharePoint list.

Add attachment

Adds a new attachment to the specified list item

Set content approval status

Sets the content approval status for an item in a list or library that has content approval turned on. You must provide an ETag for pages and files. You can get the ETag using the Get File Metadata action. This action is only available for SharePoint Online and SharePoint 2019.

Stop sharing an item or a file

Delete all links giving access to an item or a file and remove all people with direct access except for owners.

SharePoint ♦ (cont)

Update file properties

Updates the properties stored in columns in a library for the item specified by the item id. Use "Update file" action to update file contents. When using this with the On-Premises Data Gateway, the name of the library to connect to may need to be entered manually.

Update file properties using AI Builder model results

Updates the values stored in library columns for a file analyzed by the model specified by the ModelId.

Get file properties

Gets the properties saved in the columns in the library for the item specified by the item id. You can add a "Get file content" step and use the "File identifier" property returned by this action to get to the contents of the file. When using this with the On-Premises Data Gateway, the name of the library to connect to may need to be entered manually.

Get files (properties only)

Gets the properties saved in the columns in the library for all folders and files stored in the library. You can also filter down to the items that match a condition. An "Apply to each" section is usually used to work with the output from this action. When using this with the On-Premises Data Gateway, the name of the library to connect to may need to be entered manually.

Create item

Creates a new item in a SharePoint list.

Create new folder

Creates a new folder or folder path.

Delete attachment

Deletes the specified attachment.

Delete item

SharePoint ♦ (cont)

Deletes an item from a SharePoint list.

Generate document using Microsoft Syntex

Use this action to create documents based on modern templates from Microsoft Syntex. This requires a Syntex license. Pricing is subject to change. For more info see: <https://docs.microsoft.com/en-us/microsoft-365/contentunderstanding/content-assembly>.

Get attachment content

Returns file contents using the file identifier. The contents can be copied somewhere else, or be used as an attachment.

Get attachments

Returns the list of attachments for the specified list item. You can add a "Get attachment content" step and use the "File identifier" property returned by this action to get to the contents of the file.

Get changes for an item or a file (properties only)

Returns information about columns that have changed within a given time window. Note: The list must have Versioning turned on.

Update item

Updates an item in a SharePoint list.

Get item

Gets a single item by its id from a SharePoint list.

Get items

Gets items from a SharePoint list.

Create new document set

Creates a new document list item

Grant access to an item or a folder

Grant access to an item or a folder in SharePoint to specific people

Send an HTTP request to SharePoint

SharePoint ♦ (cont)

Construct a SharePoint REST API to invoke. Note - This action may execute any SharePoint REST API you have access to. Please proceed with

Logging ♦

Log Message

Adds a custom text message to the flow run action details

OneNote (Business) ♦

Create a page in Quick Notes

Create a new page in the Quick Notes section.

Create page in a section

Create new page in a specified section.

Create section in a notebook

Create section in a notebook.

Delete a page

Delete a page.

Get page content

Get HTML page content.

Get pages for a specific section

Get pages for a specific section.

Get recent notebooks

Get recent notebooks.

Get sections in notebook

Get sections in a specific notebook.

Update page content

Update HTML page content.

Word Online (Business) ♦

Convert Word Document to PDF

Gets a PDF version of the selected file

Populate a Microsoft Word template

Reads a Microsoft Word template to then fill the template fields with selected dynamic values to generate a Word Document.

Word

Launch Word

Opens a new Word instance or opens a Word document

Attach to running Word

Attaches to a Word document that's already open

Save Word

Saves a previously launched Word instance

Close Word

Closes a Word instance

Read from Word document

Reads the text content from a document of a Word instance

Write to Word document

Write or append text to a Word file

Insert image in Word document

Insert an image to a Word file

Find and replace words in Word document

Finds text and replaces it with another in the active worksheet of an Excel instance

SAP automation

Launch SAP

Open the SAP GUI application and connect to an SAP system

Create new SAP session

Creates a new SAP session based on the same SAP instance

Select SAP menu item

Select an SAP menu item in the window tool bar

Start SAP transaction

Opens a specific transaction code in existing session

End SAP transaction

Closes the SAP transaction in a specific SAP instance and returns to the SAP easy access menu

SAP automation (cont)

Close SAP connection

Close the SAP connection of the selected SAP instance

Click SAP UI element

Interacts through click action on any UI element of an SAP window

Get details of SAP UI element

Gets the value of an SAP UI element's attribute in an SAP window

Populate SAP text field in element

Fills a text box in an SAP window with the specified text

Power Automate secret variables ♦

Get credential

Retrieves the values of a credential created through Power Automate's portal page for this environment

Variables - Data table

Create new data table

Creates a new data table variable

Insert row into data table

Inserts a row at the end or before a specific index value

Find or replace in data table

Finds and/or replaces data table values

Update data table item

Update a data table row item on a defined column

Delete row from data table

Delete a data table row item

Insert column into data table

Inserts a column at the end or before a specific index value

Delete column from data table

Delete a data table column at the specified column index or column name

Delete empty rows from data table



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Variables - Data table (cont)

Deletes the rows of the data table that have all of their cells empty

Delete duplicate rows from data table

Deletes all the rows that are duplicate from the data table, if the values have the same data type in each column

Clear data table

Deletes all the rows of the data table, keeping table headers unaffected

Sort data table

Sorts the data table rows in ascending or descending order by the specified column, if all its values have the same data type

Filter data table

Filters the data table rows based on the applied rules

Merge data tables

Merges two data tables together, specifying the merging behavior in case their number of columns is different

Join data tables

Joins two data tables based on the specified join rule

Read from CSV text variable

Generates a data table from a CSV text

Convert data table to text

Converts a data table to a CSV text

Conditionals

Case

An expression that, if met, a block of actions associated with that particular case runs

Default case

A block of actions that is run, if no case expression has been met in the switch body

Else

Conditionals (cont)

Marks the beginning of a block of actions that ran if the condition specified in the preceding 'If' statements aren't met

Else if

Marks the beginning of a block of actions that ran if the conditions specified in the preceding 'If' statements aren't met, but the condition specified in this statement is met

If

Marks the beginning of a block of actions that is run if the condition specified in this statement is met

Switch

Dispatches execution to different parts of the switch body based on the value of the expression

Loops

Exit loop

Terminates the loop and the flow resumes at the next action or statement following the loop

For each

Iterates over items in a list, data table or data row, allowing a block of actions to be executed repeatedly

Loop

Iterates a block of actions for a specified number of times

Loop condition

Iterates a block of actions as long as a specified condition proves to be true

Next loop

Forces the next iteration of the block to take place, skipping any actions in between

Folder

If folder exists

Mark the beginning of a conditional block of actions depending on whether a folder exists or not

Get files in folder

Retrieve the list of files in a folder

Get subfolders in folder

Retrieve the list of subfolders in a folder

Create folder

Create a new folder

Delete folder

Delete an existing folder and its contents (files and subfolders)

Empty folder

Delete all the contents of a folder (files and subfolders) without deleting the folder itself

Copy folder

Copy a folder into a destination folder

Move folder

Move an existing folder into a destination folder

Rename folder

Change the name of a folder

Get special folder

Retrieve the path of a Windows' special folder (such as Desktop, My Pictures, Internet Cache etc)

Compression

ZIP files

Compress one or more files or folders into a ZIP archive

Unzip files

Uncompress one or more files or folders contained in a ZIP archive

Workstation
Print document
Prints a document on the default printer
Get default printer
Gets the name of the default printer
Set default printer
Sets a printer as the default printer
Log off user
Logs off the current user
Shutdown computer
Instructs the computer to shut down
Show desktop
Shows the desktop
Lock workstation
Locks the workstation's display to protect it from unauthorized use
Play sound
Plays a system sound or a wav file
Empty recycle bin
Deletes all files from the windows recycle bin
Take screenshot
Takes a screenshot of the foreground window or the specified screen and saves the image in a file or to the clipboard
Control screen saver
Enables, disables, starts or stops the screensaver
Get screen resolution
Gets the width, height, bit count and frequency of a selected monitor
Set screen resolution
Sets the width, height, bit count and frequency of a selected monitor during an attended desktop flow run.

System
If process
Marks the beginning of a conditional block of actions depending on whether a process is running or not
Wait for process
Suspends the execution until a process starts or stops
Run application
Executes an application or opens a document by executing the associated application
Terminate process
Immediately stops a running process
Ping
Sends a message to determine whether a remote computer is accessible over the network
Set Windows environment variable
Sets an environment variable to a given value
Get Windows environment variable
Retrieves the value of an environment variable
Delete Windows environment variable
Deletes an environment variable from a given scope
PDF
Extract text from PDF
Extract text from a PDF file
Extract tables from PDF
Extract tables from a PDF file
Extract images from PDF
Extract images from a PDF file
Extract PDF file pages to new PDF file
Extract pages from a PDF file to a new PDF file
Merge PDF files
Merges multiple PDF files into a new one

OCR
If text on screen (OCR)
Marks the beginning of a conditional block of actions depending on whether a given text appears on the screen or not, using OCR
Wait for text on screen (OCR)
Wait until a specific text appears/disappears on the screen, on the foreground window, or relative to an image on the screen or foreground window using OCR
Extract text with OCR
Extract text from a given source using the given OCR engine
Text
Append line to text
Appends a new line of text to a text value
Get subtext
Retrieve a subtext from a text value
Crop text
Retrieves a text value that occurs before, after or between the specified text flag(s) in a given text
Pad text
Creates a fixed length text by adding characters to the left or to the right of an existing text
Trim text
Removes all occurrences of white space characters (such as space, tab, or new line) from the beginning and/or end of an existing text
Reverse text
Reverses the order of letters in a text string
Change text case
Changes the casing of a text to uppercase, lowercase, title case or sentence case
Convert text to number

Text (cont)
Converts a text representation of a number to a variable that contains a numeric value
Convert number to text
Converts a number to text using a specified format
Convert text to datetime
Converts a text representation of a date and/or time value to a datetime value
Convert datetime to text
Converts a datetime value to text using a specified custom format
Create random text
Generates a text of specified length consisting of random characters. This can be useful for generating passwords
Join text
Converts a list into a text value by separating its items with a specified delimiter
Split text
Creates a list containing the substrings of a text that are separated by a specified delimiter or a regular expression
Parse text
Parses a text to find the first or all occurrences of a specified subtext or a regular expression pattern
Replace text
Replaces all occurrences of a specified subtext with another text. It can also be used with regular expressions
Escape text for regular expression
Escapes a minimal set of characters (, *, +, ?, , {, [, (, ^, \$, ., #, and white space) by replacing them with their escape codes
Recognize entities in text
Recognizes entities in text, such as numbers, units, data/time and others expressed in natural language across multiple languages

Text (cont)
Create HTML content
Generates rich HTML content and stores it in a variable

XML
Read XML from file
Read the contents of an XML file into a variable
Write XML to file
Write the contents of an XML node variable into a file
Execute XPath expression
Extract values from an XML document based on the provided XPath query
Get XML element attribute
Get the value of an attribute of an XML element
Set XML element attribute
Set the value of an attribute of an XML element
Remove XML element attribute
Remove an attribute from an XML element
Get XML element value
Get the value of an XML element
Set XML element value
Set the value of an XML element
Insert XML element
Insert a new XML element into an XML document
Remove XML element
Remove one or more XML elements from an XML document

Database
Open SQL connection
Open a new connection to a database
Execute SQL statement

Database (cont)
Connect to a database and execute a SQL statement
Close SQL connection
Close an open connection to a

CMD session
Open CMD session
Open a new CMD session
Read from CMD session
Read the output of a CMD session
Write to CMD session
Execute a command on an open CMD session
Wait for text on CMD session
Wait for a specific text on a previously opened CMD session
Close CMD session
Close a previously opened CMD session

Windows services
If service
Marks the beginning of a conditional block of actions depending on whether a service is running, paused, stopped or installed on the computer
Wait for service
Suspend the execution of the automation until a service is running, paused or stopped on the computer
Start service
Start a stopped Windows service
Stop service
Stop a running Windows service
Pause service
Pause a running Windows service
Resume service
Resume a paused Windows service

Azure - Virtual machines - Snapshots

Get snapshots

Gets the snapshots based on the specified criteria

Create snapshot

Creates a snapshot from the specified disk

Delete snapshot

Deletes the snapshot with the specified name and resource group

Azure - Virtual machines - Disks

Get disks

Gets the disks based on the specified criteria

Attach disk

Attaches an existing disk to the virtual machine with the specified name and resource group

Detach disk

Detaches the disk from the virtual machine with the specified name and resource group

Create managed disk

Creates a managed disk with the specified settings

Delete disk

Deletes the managed disk with the specified name and resource group

Active Directory

Connect to server

Connects to an Active Directory server

Close connection

Closes the connection with the Active Directory server

Active Directory - Group

Create group

Creates a group in the Active Directory

Get group info

Gets information about a group from the Active Directory server

Get group members

Gets the members of a group in the Active Directory

Modify group

Modifies a group in the Active Directory

Active Directory - Object

Create object

Creates an object in the Active Directory

Delete object

Deletes an object in the Active Directory

Move object

Moves an object in the Active Directory

Rename object

Renames an object in the Active Directory

Microsoft cognitive - Bing spell check

Spell check

Invokes the Microsoft Cognitive service named 'Bing Spell Check'

Microsoft cognitive - Computer vision

Analyze image

Invokes the Microsoft Cognitive service named 'Analyze Image'

Describe image

Invokes the Microsoft Cognitive service named 'Describe Image'

OCR

Microsoft cognitive - Computer vision (cont)

Invokes the Microsoft Cognitive service named 'OCR'

Tag image

Invokes the Microsoft Cognitive service named 'Tag Image'

Microsoft cognitive - Text Analytics

Detect language

Invokes the Microsoft Cognitive service named 'Text Analytics - Detect Language'

Key phrases

Invokes the Microsoft Cognitive service named 'Text Analytics - Key Phrases'

Sentiment

Invokes the Microsoft Cognitive service named 'Text Analytics - Sentiment'

Clipboard

Get clipboard text

Gets clipboard text.

Set clipboard Text

Sets clipboard text.

Clear clipboard contents

Clears clipboard contents.

AI Builder ♦

Create text with GPT

Get a response generated by GPT.

Office 365 Outlook ♦

Create contact (V2)

This operation creates a new contact in a contacts folder.

Create event (V4)

This operation creates a new event in a calendar.

Delete contact (V2)

This operation deletes a contact from a contacts folder.

Delete email (V2)

Office 365 Outlook ♦ (cont)

This operation deletes an email by id.

Delete event (V2)

This operation deletes an event in a calendar.

Export email (V2)

Export the content of the email in the EML file format.

Find meeting times (V2)

Find meeting time suggestions based on organizer, attendee availability, and time or location constraints

Flag email (V2)

This operation updates an email flag.

Forward an email (V2)

Forward an email.

Get Attachment (V2)

This operation gets an email attachment by id.

Get calendar view of events (V3)

This operation gets all events (including instances of recurrences) in a calendar using Graph API. Recurrence property is null in this case.

Get calendars (V2)

This operation lists available calendars.

Get contact (V2)

This operation gets a specific contact from a contacts folder.

Get contacts (V2)

This operation gets contacts from a contacts folder.

Get email (V2)

This operation gets an email by id.

Get emails (V3)

Office 365 Outlook ♦ (cont)

This operation gets emails from a folder via graph apis. Please note that filtering related to these fields: To, Cc, To Or Cc, From, Importance, Fetch Only With Attachments, Subject Filter, is performed using first 250 items in a given mail folder. To avoid that limitation you can use 'Search Query' field.

Get event (V3)

This operation gets a specific event from a calendar using Graph API. (V3)

Get events (V4)

This operation gets events from a calendar using Graph API. (V4)

Get room lists (V2)

Get all the room lists defined in the user's tenant

Get rooms (V2)

Get all the meeting rooms defined in the user's tenant

Get rooms in room list (V2)

Get the meeting rooms in a specific room list

Mark as read or unread (V3)

This operation marks an email as read/unread.

Move email (V2)

This operation moves an email to the specified folder within the same mailbox.

Reply to email (V3)

This operation replies to an email.

Respond to an event invite (V2)

Respond to an event invite.

Send an email (V2)

This operation sends an email message.

Send an email from a shared mailbox (V2)

Office 365 Outlook ♦ (cont)

This operation sends an email from a shared mailbox. Your account should have permission to access the mailbox for this operation to succeed.

Set up automatic replies (V2)

Set the automatic replies setting for your mailbox.

Update contact (V2)

This operation updates a contact in a contacts folder.

Update event (V4)

This operation updates an event in a calendar using Graph API.

Send an HTTP request

Construct a Microsoft Graph REST API request to invoke. These segments are supported: 1st segment: /me, /users/ 2nd segment: messages, mailFolders, events, calendar, calendars, outlook, inferenceClassification. Learn more: <https://docs.microsoft.com/en-us/graph/use-the-api>

RSS ♦

List all RSS feed items

This operation retrieves all items from an RSS feed.

Microsoft Teams ♦

Add a member to a tag

This operation adds a user to a tags.

Add a member to a team

This operation adds a member to a team.

Create a channel

This operation is used to create a new channel for a specific Team.

Create a chat

This operation creates a one on one or group chat

Create a tag for a team

Microsoft Teams ♦ (cont)
This operation creates a tag.
Create a team
This operation creates a new team.
Create a Teams meeting
Create a meeting with a link at the bottom of the invite to join the meeting online on Teams
Delete a member from a tag
This operation deletes a member from a tag.
Delete a tag
This operation deletes a tag.
Get a team
This operation returns details for a team using the team's unique ID.
Get an @mention token for a tag
This operation creates a token that can be inserted into a message or adaptive card sent as a user in a channel to @mention a tag.
Get an @mention token for a user
This operation creates a token that can be inserted into a message or adaptive card to @mention a user.
Get message details
This operation gets details of a message in a chat or a channel.
Get messages
This operation is used to get messages from a channel in a specific Team.
List all tags for a team
This operation retrieves a list of tags.
List channels
This operation retrieves a list of all the channels for a specific Team.
List chats
This operation retrieves a list of recent chats.

Microsoft Teams ♦ (cont)
List members
This operation lists members based on a threadtype (chat, channel, etc).
List teams
This operation retrieves a list of all the Teams (Office 365 Groups) you are a member of.
List the members for a tag
This operation lists the members for a tag.
Post a feed notification
This operation posts a feed notification.
Post card in a chat or channel
This operation posts a card to a chat or a channel.
Post message in a chat or channel
This operation posts a message to a chat or a channel.
Reply with a message in a channel
This operation replies with a message in a channel.
Reply with adaptive card in a channel
This operation replies with an adaptive card to a channel.
Update an adaptive card in a chat or channel
This operation updates an existing adaptive card.
Send a Microsoft Graph HTTP request
Construct a Microsoft Graph REST API request to invoke against the Microsoft Team endpoints. These segments are supported: 1st segment: /teams, /me, /users 2nd segment: channels, chats, installed-Apps, messages, pinnedMessages. Learn more: https://docs.microsoft.com/en-us/graph/use-the-api

Microsoft Forms ♦
Get response details
This action retrieves a form response
SAP automation - Advanced
Attach
Attach the running SAP GUI application to an SAP instance
Microsoft Dataverse ♦
Add a new row to selected environment
Create a new row in a table in a Power Platform environment
Delete a row from selected environment
Delete a row from a table in a Power Platform environment
Download a file or an image from selected environment
Retrieve file or image data from a row in a Power Platform environment
Get a row by ID from selected environment
Get a row from a table in a Power Platform environment
List rows from selected environment
List rows from a table in a Power Platform environment
Perform a bound action in selected environment
Run a Dataverse action bound to a table in a Power Platform environment, including custom actions
Perform an unbound action in selected environment
Run a global Dataverse action in a Power Platform environment, including custom actions
Relate rows in selected environment
Associate individual rows in tables that have a one-to-many or many-to-many relationship in the same Power Platform environment
Unrelate rows in selected environment

Microsoft Dataverse + (cont)

Remove the association between individual rows in a Power Platform environment

Upload a file or an image to selected environment

Update file or image content in a row in a Power Platform environment

Upsert a row in selected environment

Update or add (upsert) a row in a table in a Power Platform environment

Flow control

Comment

User comment

End

Set rules and manage the course of the flow

Exit subflow

Exits current subflow and returns to the point it was called from

Get last error

Retrieves the last error that occurred in the flow

Go to

Transfers the flow of execution to another point, indicated by a label

Label

Acts as the destination of a 'go to' statement

On block error

Marks the beginning of a block to handle actions errors

Run subflow

Run a subflow specifying any required arguments

Stop flow

Terminates the flow

Wait

Suspends the execution of the flow for a specified amount of seconds

Region

Flow control (cont)

Marks the beginning of a group of actions

End region

Marks the end of a group of actions

Run flow

Run desktop flow

Runs a desktop flow which can receive input variables and may produce output variables. The parent flow run will be paused until the called desktop flow completes.

File

If file exists

Marks the beginning of a conditional block of actions depending on whether a file exists or not

Wait for file

Suspend the execution of the automation until a file is created or deleted

Copy file(s)

Copy one or more files into a destination folder

Move file(s)

Move one or more files into a destination folder

Delete file(s)

Delete one or more files

Rename file(s)

Change the name of one or more files

Read text from file

Read the contents of a text file

Write text to file

Write or appends text to a file

Read from CSV file

Read a CSV file into a data table

Write to CSV file

File (cont)

Write a data table, data row or list to a CSV file

Get file path part

Retrieve one or more parts (directory, filename, extension etc) from a text that represents a file path

Get temporary file

Create a uniquely named, empty temporary file on disk, and get the file object (which is a representation, and can access the file and all its information)

Convert file to Base64

Convert a file to Base64 encoded text

Convert Base64 to file

Convert a Base64 encoded text to file

Convert file to binary data

Convert a file to binary data.

Convert binary data to file

Convert binary data to file.

Email

Retrieve email messages

Retrieves email messages from an IMAP server

Process email messages

Moves, deletes or marks as unread an email (or a list of emails) retrieved by a Retrieve emails action

Send email

Creates and sends a new email message

Exchange Server

Connect to Exchange server

Open a new connection to an Exchange server

Retrieve Exchange email messages

[Type here]

Exchange Server (cont)
Retrieve email messages from the specified Exchange server
Send Exchange email message
Create and send a new email message
Process Exchange email messages
Move, delete or mark as unread an email message (or a list of email messages)

Outlook
Launch Outlook
Launch Outlook and create a new Outlook instance
Retrieve email messages from Outlook
Retrieve email messages from an Outlook account
Send email through Outlook
Create and send a new email message through Outlook
Process email messages in Outlook
Move or deletes an email (or a list of email messages) retrieved by a 'Retrieve emails from Outlook' action.
Save Outlook email messages
Save Outlook email messages given an account
Respond to Outlook mail message
Respond to an Outlook message, by replying, replying to all or forwarding it
Close Outlook
Close a previously launched Outlook instance

Excel - Advanced
Resize columns/rows in Excel worksheet
Resizes a selection of columns or rows in the active worksheet of an Excel instance
Run Excel Macro
Runs a specified macro on the document of an Excel instance

Excel - Advanced (cont)
Get active Excel worksheet
Retrieves an Excel document's active worksheet
Get all Excel worksheets
Retrieves all worksheet names of an Excel document
Delete Excel worksheet
Deletes a specific worksheet from an Excel instance
Rename Excel worksheet
Renames a specific worksheet of an Excel instance
Activate Cell in Excel Worksheet
Activate a cell in the active worksheet of an Excel instance, by providing column, row and offset
Select cells in Excel worksheet
Selects a range of cells in the active worksheet of an Excel instance
Get selected cell range from Excel worksheet
Retrieve the selected range of cells in a structure consisting of first column, first row, last column and last row
Copy cells from Excel worksheet
Copies a range of cells from the active worksheet of an Excel instance
Paste cells to Excel worksheet
Pastes a range of cells to the active worksheet of an Excel instance
Delete from Excel worksheet
Deletes a cell or a range of cells from the active worksheet of an Excel instance
Insert row to Excel worksheet
Inserts a row above a selected row of an Excel instance
Delete row from Excel worksheet
Deletes a selected row from an Excel instance
Insert column to Excel worksheet

Excel - Advanced (cont)
Inserts a column to the left of a selected column of an Excel instance
Delete column from Excel worksheet
Deletes a selected column from an Excel instance
Find and replace cells in Excel worksheet
Finds text and replaces it with another in the active worksheet of an Excel instance
Get first free row on column from Excel worksheet
Retrieve the first free row, given the column of the active worksheet
Copy Excel worksheet
Copies a worksheet from an Excel document and paste it to the Excel document of the same or different Excel instance
Read formula from Excel
Reads the formula inside a cell in Excel
Get table range from Excel worksheet
Retrieves the range of a table in the active worksheet of an Excel instance
Auto fill cells in Excel worksheet
Auto fills a range with data, based on the data of another range, in the active worksheet of an Excel instance
Append cells in Excel worksheet
Appends a range of cells to the active worksheet of an Excel instance
Lookup range in Excel worksheet
Finds and returns the result of Excel's LOOKUP function
Set color of cells in Excel worksheet
Fills the background of the selected cells with the specified color, in the active worksheet of an Excel instance

[Type here]

[Type here]

Excel
Launch Excel
Launches a new Excel instance or opens an Excel document
Attach to running Excel
Attaches to an Excel document that's already open
Read from Excel worksheet
Reads the value of a cell or a range of cells from the active worksheet of an Excel instance
Get active cell on Excel worksheet
Get the active cell in the active worksheet of the Excel document
Save Excel
Saves a previously launched Excel instance
Write to Excel worksheet
Writes a value into a cell or a range of cells of an Excel instance
Close Excel
Closes an Excel instance
Set active Excel worksheet
Activates a specific worksheet of an Excel instance
Add new worksheet
Adds a new worksheet to the document of an Excel instance
Get first free column/row from Excel worksheet
Retrieves the first free column and/or row of the active worksheet. This is useful for adding new data into a worksheet that already has data in it
Get column name on Excel worksheet
Gets the name of the column
Clear cells in Excel worksheet
Clears a range of cells or a named cell in the active worksheet of an Excel instance
Sort cells in Excel worksheet

[Type here]

Excel (cont)
Sort cells based on one or more columns in an Excel worksheet
Filter cells in Excel worksheet
Applies filters on a specified column in an Excel worksheet
Clear filters in Excel worksheet
Clear filters on a specified column in an Excel worksheet
Get empty cell
Get empty cell

Message boxes
Display message
Displays a message box
Display input dialog
Displays a dialog box that prompts the user to enter text
Display select date dialog
Displays a dialog box that prompts the user to enter a date or date range
Display select from list dialog
Displays a dialog box with options that lets the user select from a list
Display select file dialog
Displays the select file dialog and prompts the user to select one or more files
Display select folder dialog
Displays the select folder dialog and prompts the user to select a folder
Display custom form
Display a customized form that can include multiple types of elements, like text, number or file inputs etc.

Date time
Add to datetime
Adds (or subtracts) a specific number of seconds, minutes, hours or days to a datetime value
Subtract dates

Date time (cont)
Finds the time difference between two given dates in days, hours, minutes, or
Get current date and time
Retrieves the current date or the current date and time

Scripting
Run DOS command
Executes a DOS command or console application in invisible mode and retrieves its output upon completion
Run VBScript
Executes some custom VBScript code and retrieves its output into a variable
Run JavaScript
Executes some custom JavaScript code and retrieves its output into a variable
Run PowerShell script
Executes some custom PowerShell script and retrieves its output into a variable
Run Python script
Executes Python 2 script code and retrieves its output
Run .NET script
Executes a user provided .NET script and stores its output in variables.

FTP
Open FTP connection
This action establishes a specific connection to a remote FTP server, and stores that connection as a variable for later use.
List FTP directory
This action returns the subdirectories and files contained in the current directory of an FTP connection
Open secure FTP connection

FTP (cont)

This action establishes a specific secure connection to a remote FTP server, and stores that connection as a variable for later use

Close connection

This action closes an open FTP connection

Change working directory

This action sets the current working directory for an FTP connection

Download file(s) from FTP

Downloads one or more files from an FTP server

Download folder(s) from FTP

Downloads one or more folders from an FTP server

Upload File(s) to FTP

Uploads one or more files to an FTP server

Upload folder(s) to FTP

Uploads one or more folders to an FTP server

Delete FTP file

Deletes one or more files from an FTP server

Rename FTP File

Renames a file that resides on an FTP server

Create FTP directory

Creates a directory on an FTP server

Delete FTP directory

Deletes a directory from an FTP server

Invoke FTP command

Invokes the given literal FTP command on the server

Synchronize directories

FTP (cont)

Synchronize the files and subdirectories of a given Folder with a given remote FTP directory

AWS - EC2

Create EC2 session

Create an EC2 client to automate EC2 web services

End EC2 session

Dispose an open EC2 client

AWS - EC2 - Instances

Start EC2 instance

Start EC2 instance(s)

Stop EC2 instance

Stop EC2 instance(s)

Reboot EC2 instance

Reboot EC2 instance(s)

Get available EC2 instances

Get information for the relevant EC2 instances

Describe instances

Returns all the information for the specified EC2 instance(s)

AWS - EC2 - Snapshots

Create snapshot

Create a snapshot of an EBS volume and stores it in Amazon S3

Describe snapshots

Describes the specified EBS snapshots available

Delete snapshot

Delete the specified snapshot

AWS - EC2 - Volumes

Create volume

Create an EBS volume

Attach volume

Attach an EBS volume to an EC2 instance

AWS - EC2 - Volumes (cont)

Detach volume

Detach an EBS volume from an EC2 instance

Describe volumes

Describe the specified EBS volumes

Delete volume

Delete the specified EBS volume

Active Directory - User

Create user

Creates a user in the Active Directory

Get user info

Gets a user's information in the Active Directory

Modify user

Modify a user in the Active Directory

Unlock user

Unlocks an Active Directory user

Update user info

Updates a user's information in the Active Directory

Terminal emulation

Open terminal session

Open a new terminal session

Close terminal session

Close an open terminal session

Move cursor on terminal session

Move the terminal's cursor on the specified position

Get text from terminal session

Get text from a terminal session

Set text on terminal session

Set text on a terminal session

Send key to terminal session

Send a control key to a terminal session

Wait for text on terminal session

Terminal emulation (cont)

Wait for a specific text to appear on a terminal session

Search for text on terminal session

Search for all occurrences of a specific text on a terminal session

IBM cognitive - Document conversion

Convert document

Invokes the IBM service named 'Convert Document'

IBM cognitive - Visual recognition

Classify Image

Invokes the IBM service named 'Classify Image'

IBM cognitive - Language translator

Translate

Invokes the IBM service named 'Translate'

Identify language

Invokes the IBM service named 'Identify Language'

IBM cognitive - Tone analyzer

Analyze tone

Invokes the IBM service named 'Analyze Tone'

Work queues ♦

Process work queue items

Indicates to the orchestrator that the machine is ready to process one or more work queue items, if available

Update work queue item

Updates the status and processing result of a specific work queue item

Add work queue item

Add a work queue item into a work queue

Requeue item with delay

Work queues ♦ (cont)

Requeue a work queue item and delay it until a specified date and time

Add multiple work queue items

Adds one or more work queue items to a work queue based on the data provided in the work queue item data table

Update work queue item processing notes

Updates the processing notes of a specific work queue item

Get work queue items by filter

Retrieves one or more work queue items based on FetchXML filtering expressions

OneDrive for Business ♦

Copy file

This operation copies a file within OneDrive.

Copy file using path

This operation copies a file within OneDrive by path.

Create file

This operation creates a file.

Create share link

This operation creates a share link for a file.

Create share link by path

This operation creates a share link for a file using the path.

Delete file

This operation deletes a file.

Extract archive to folder

This operation extracts an archive file into a folder (example: .zip). Maximum archive size is 50 MB and 100 files inside.

Find files in folder

This operation finds files within a folder using search or name pattern match.

Find files in folder by path

OneDrive for Business ♦ (cont)

This operation finds files within a folder by path using search or name pattern match.

Get file content

This operation gets the content of a file.

Get file content using path

This operation gets the content of a file using the path.

Get file metadata

This operation gets the metadata for a file.

Get file metadata using path

This operation gets the metadata of a file using the path.

Get file thumbnail

This operation gets the thumbnail of a file. The thumbnail will only be valid for 6 hours.

List files in folder

This operation gets the list of files and subfolders in a folder.

List files in root folder

This operation gets the list of files and subfolders in the root folder.

Move or rename a file

This operation moves or renames a file.

Move or rename a file using path

This operation moves or renames a file using the path.

Update file

This operation updates a file.

Upload file from URL

This operation uploads a file from a URL to OneDrive.

Convert file

OneDrive for Business ♦ (cont)

This operation converts a file to another format. The list of supported conversions can be found at <https://aka.ms/onedriveconversions>

Convert file using path

This operation converts a file to another format using the path. The list of supported conversions can be found at <https://aka.ms/onedriveconversions>

Excel Online (Business) ♦

Add a key column to a table

Add a key column to an Excel table. The new column will be appended to the right.

Add a row into a table

Add a new row into the Excel table.

Create table

Create a new table in the Excel workbook.

Create worksheet

Create a new worksheet in the Excel workbook.

Delete a row

Delete a row using a key column.

Get a row

Get a row using a key column.

Get tables

Get a list of tables in the Excel workbook.

Get worksheets

Get a list of worksheets in the Excel workbook.

List rows present in a table

List rows present in a table.

Run script

Runs an Office Script against an Excel workbook. Use this action when the script is saved in the default location.

Run script from SharePoint library

Excel Online (Business) ♦ (cont)

Runs an Office Script against an Excel workbook. Use this action when the script is saved outside of the default location.

Update a row

Update a row using a key column. The input value will overwrite the specified cells and columns left blank will not be updated. In order to append (instead of overwrite) a value, use the "Get a row" action to retrieve the content first.

OneDrive ♦

Convert file

This operation converts a file to another format. The list of supported conversions can be found at <https://aka.ms/onedriveconversions>

Convert file using path

This operation converts a file to another format using the path. The list of supported conversions can be found at <https://aka.ms/onedriveconversions>

Copy file

This operation copies a file within OneDrive.

Copy file using path

This operation copies a file within OneDrive by path.

Create file

This operation creates a file.

Create share link

This operation creates a share link for a file.

Create share link by path

This operation creates a share link for a file using the path.

Delete file

This operation deletes a file.

Extract archive to folder

OneDrive ♦ (cont)

This operation extracts an archive file into a folder (example: .zip). Maximum archive size is 50 MB and 100 files inside.

Find files in folder

This operation finds files within a folder using search or name pattern match.

Find files in folder by path

This operation finds files within a folder by path using search or name pattern match.

Get file content

This operation gets the content of a file.

Get file content using path

This operation gets the content of a file using the path.

Get file metadata

This operation gets the metadata for a file.

Get file metadata using path

This operation gets the metadata of a file using the path.

Get file thumbnail

This operation gets the thumbnail of a file. The thumbnail will only be valid for 6 hours.

List files in folder

This operation gets the list of files and subfolders in a folder.

List files in root folder

This operation gets the list of files and subfolders in the root folder.

Move or rename a file

This operation moves or renames a file.

Move or rename a file using path

This operation moves or renames a file using the path.

Update file