

Software Design Document, Testing, Deployment, Configuration Management And User Manual

- **Description:** Work Fusion enables enterprises to automate high-volume, manually intensive business processes through a combination of robotic process automation (RPA) and cognitive automation, powered by machine learning. Work Fusion is a desktop application. RPA Express is a free software product that lets you automate web, desktop, and terminal applications so that you can do bigger things. Here we are using this tool to automate our staging and exporting process. Work fusion is all about writing scripts.

- **Prerequisites:**

- 1) Make sure your computer meets System Requirements.
- 2) Stop your running programs.
- 3) Check if automatic Windows updates are not running at the moment.
- 4) Run the installer as Administrator.
- 5) In case installation includes a Server package, make sure you open ports 15100, 15110, 15280 for external usage inside your network (if you plan to use it on other computers).
Make sure that ports 15410-15423, 15444, 15580, 15306 are closed to any external interaction.

- **Selecting Licensing Model**

1. **RPA Express Starter** is a completely free product for individual use only, with no trial period, no license generated, and less system requirements. Within the licensing model, Work Fusion Studio is installed, OCR and RPA components are provided.
2. **RPA Express Pro Business** includes the whole set of server components together with Work Fusion Studio, thus enabling you to automate complex use cases, manage multiple bots, and run automation unattended at scale.

➤ **In our automation projects we have used RPA Express Starter which is absolutely free.**

- **System-Requirements:**

Type	OS	OS Type	CPU	RAM	Disk Space
Development Workstation and Server (Free + Premium features)	Windows: 7, 8, 8.1, 10 OR Windows Server: 2012, 2012 R2, 2016	64 bit	4 cores at 2.8 GHz	Minimum 8 GB of free memory (16 GB recommended)	8.5 GB
Development Workstation (Free)	Windows: 7, 8, 8.1, 10 OR Windows Server: 2012, 2012 R2, 2016		2 cores at 2.8 GHz	Minimum 4 GB of free memory (8 GB recommended)	5.3 GB

- We have used windows 10 as our operating system to develop the automation projects.

- **RPA Express Download:**

To download RPA Express, follow the instructions below.

1. Open the [Work Fusion website](#).

The screenshot displays the WorkFusion website's landing page for RPA Express. On the left, a hero section features the WorkFusion logo, the tagline 'Simpler automation. Smarter bots. Spectacular results.', and a brief description of the platform as an AI-native, enterprise-grade RPA solution. Below this is an illustration of a person at a desk with a computer and a 'Watch video' link. The main content area on the right is divided into two columns for different product tiers. The first column, labeled 'FREE' in a blue circle, is for 'RPA Express STARTER' and includes a 'Download free' button. The second column, labeled 'FREE TRIAL' in a blue circle, is for 'RPA Express Pro BUSINESS' and includes a 'Download trial' button and a link to 'Contact Sales'. Both columns list 'Key Uses' and 'Key Features' for their respective products.

WorkFusion

Why us Products Solutions Resources Community Company

Simpler automation. Smarter bots. Spectacular results.

Achieve amazing automation outcomes with the industry's only AI-native, enterprise-grade RPA platform.

[Watch video](#)

FREE

RPA Express STARTER

[Download free](#)

Automate manual tasks and watch your productivity rise and career soar

Key Uses

- ✓ Search the web for data
- ✓ Extract data from PDFs
- ✓ Pull data for reporting
- ✓ And more

Key Features

- ✓ Recorder
- ✓ No code automation
- ✓ Drag-and-drop builder
- ✓ Desktop and Web Automation
- ✓ Built-in OCR
- ✓ 1 bot

FREE TRIAL

RPA Express Pro BUSINESS

[Download trial](#) or [Contact Sales](#)

Automate further and watch your team's productivity rise even higher

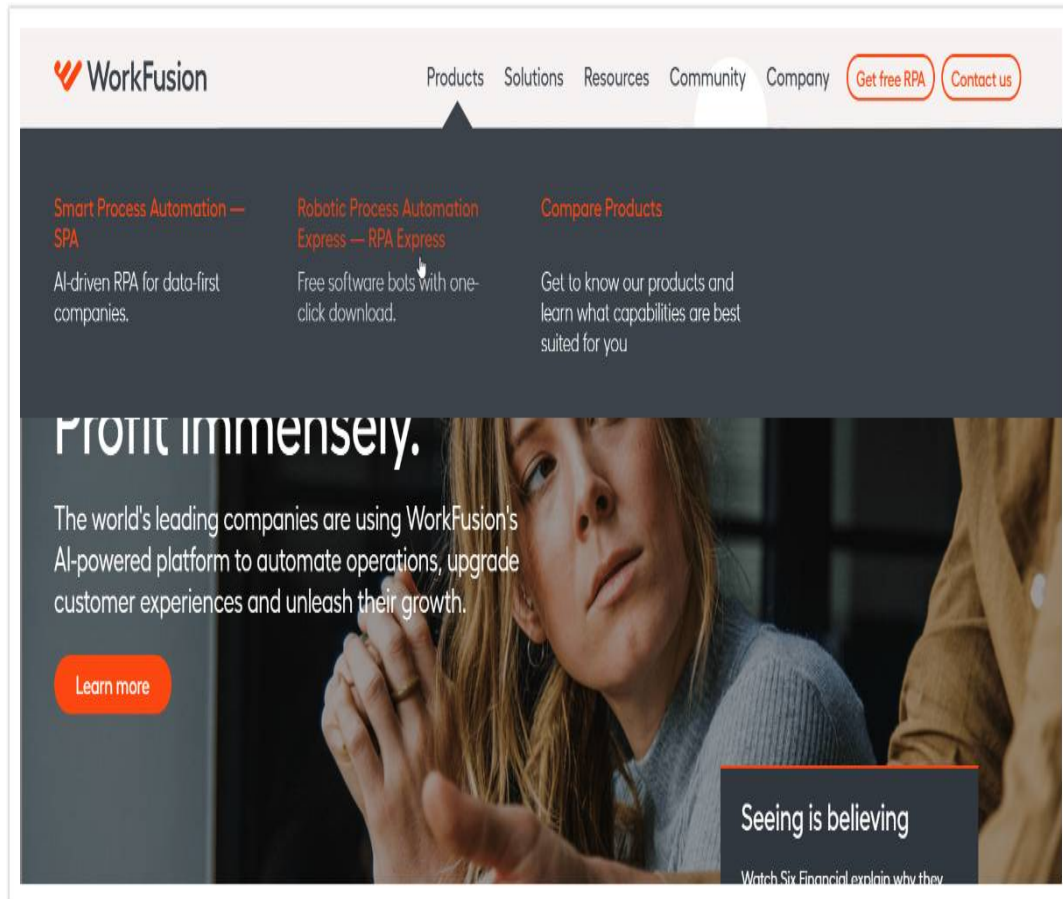
Key Uses

- ✓ Automate HR onboarding
- ✓ Manage patient appointments
- ✓ Generate and send reports
- ✓ And more

Key Features

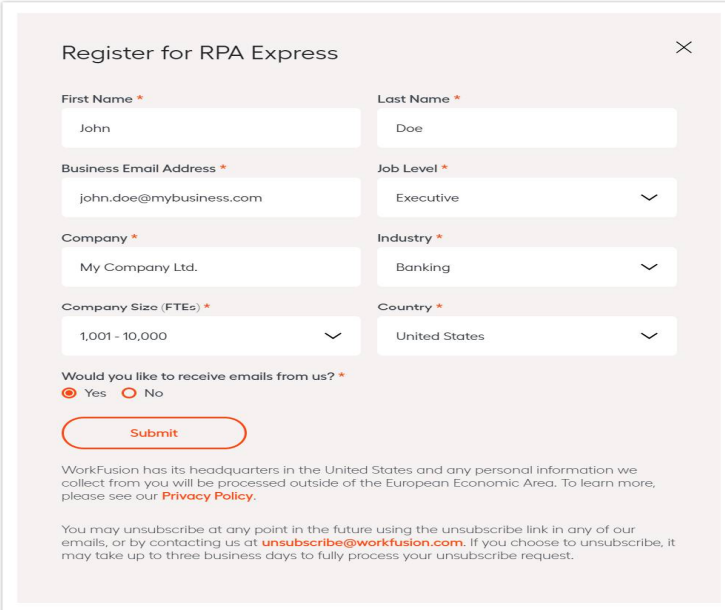
- ✓ Everything in RPA Express plus
- ✓ Centrally managed automation
- ✓ Unlimited users
- ✓ Multiple concurrent bots
- ✓ Workflow management
- ✓ Task scheduling, monitoring and routing (24x7)
- ✓ Seamless human-bot collaboration (Human-in-the-loop)
- ✓ Secure bot credentials

2. Click **Get free RPA** in the top-right corner, or select **Products > Robotic Process Automation Express – RPA Express**



3. Select your licensing-model and, depending on your choice, click **Download-free**.

4. Fill in the registration form and click **Submit**.

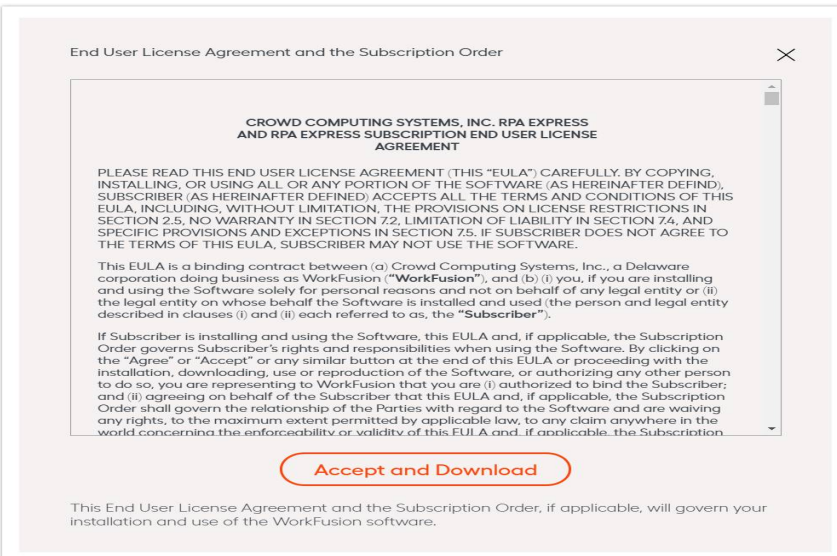


The registration form is titled "Register for RPA Express" and includes a close button (X) in the top right corner. It contains the following fields and options:

- First Name ***: Text input with "John" entered.
- Last Name ***: Text input with "Doe" entered.
- Business Email Address ***: Text input with "john.doe@mybusiness.com" entered.
- Job Level ***: Dropdown menu with "Executive" selected.
- Company ***: Text input with "My Company Ltd." entered.
- Industry ***: Dropdown menu with "Banking" selected.
- Company Size (FTEs) ***: Dropdown menu with "1,001 - 10,000" selected.
- Country ***: Dropdown menu with "United States" selected.
- Would you like to receive emails from us? ***: Radio buttons for "Yes" (selected) and "No".

A red "Submit" button is located below the form fields. Below the button, there is a disclaimer: "WorkFusion has its headquarters in the United States and any personal information we collect from you will be processed outside of the European Economic Area. To learn more, please see our [Privacy Policy](#)." Below this, another disclaimer states: "You may unsubscribe at any point in the future using the unsubscribe link in any of our emails, or by contacting us at unsubscribe@workfusion.com. If you choose to unsubscribe, it may take up to three business days to fully process your unsubscribe request."

5. You will see **End User License Agreement and the Subscription Order**. To continue, press **Accept and Download**.



The screen displays the "End User License Agreement and the Subscription Order" with a close button (X) in the top right corner. The main content area contains the following text:

CROWD COMPUTING SYSTEMS, INC. RPA EXPRESS AND RPA EXPRESS SUBSCRIPTION END USER LICENSE AGREEMENT

PLEASE READ THIS END USER LICENSE AGREEMENT (THIS "EULA") CAREFULLY. BY COPYING, INSTALLING, OR USING ALL OR ANY PORTION OF THE SOFTWARE (AS HEREINAFTER DEFINED), SUBSCRIBER (AS HEREINAFTER DEFINED) ACCEPTS ALL THE TERMS AND CONDITIONS OF THIS EULA, INCLUDING, WITHOUT LIMITATION, THE PROVISIONS ON LICENSE RESTRICTIONS IN SECTION 2.5, NO WARRANTY IN SECTION 7.2, LIMITATION OF LIABILITY IN SECTION 7.4, AND SPECIFIC PROVISIONS AND EXCEPTIONS IN SECTION 7.5. IF SUBSCRIBER DOES NOT AGREE TO THE TERMS OF THIS EULA, SUBSCRIBER MAY NOT USE THE SOFTWARE.

This EULA is a binding contract between (a) Crowd Computing Systems, Inc., a Delaware corporation doing business as WorkFusion ("WorkFusion"), and (b) (i) you, if you are installing and using the Software solely for personal reasons and not on behalf of any legal entity or (ii) the legal entity on whose behalf the Software is installed and used (the person and legal entity described in clauses (i) and (ii) each referred to as, the "Subscriber").

If Subscriber is installing and using the Software, this EULA and, if applicable, the Subscription Order governs Subscriber's rights and responsibilities when using the Software. By clicking on the "Agree" or "Accept" or any similar button at the end of this EULA or proceeding with the installation, downloading, use or reproduction of the Software, or authorizing any other person to do so, you are representing to WorkFusion that you are (i) authorized to bind the Subscriber; and (ii) agreeing on behalf of the Subscriber that this EULA and, if applicable, the Subscription Order shall govern the relationship of the Parties with regard to the Software and are waiving any rights, to the maximum extent permitted by applicable law, to any claim anywhere in the world concerning the enforceability or validity of this EULA and, if applicable, the Subscription Order.

A red "Accept and Download" button is located below the text. Below the button, a disclaimer states: "This End User License Agreement and the Subscription Order, if applicable, will govern your installation and use of the WorkFusion software."

6. You are automatically redirected to the download page, and the installer file (**18 MB**) is downloaded automatically.

• **RPA Express Installation:**

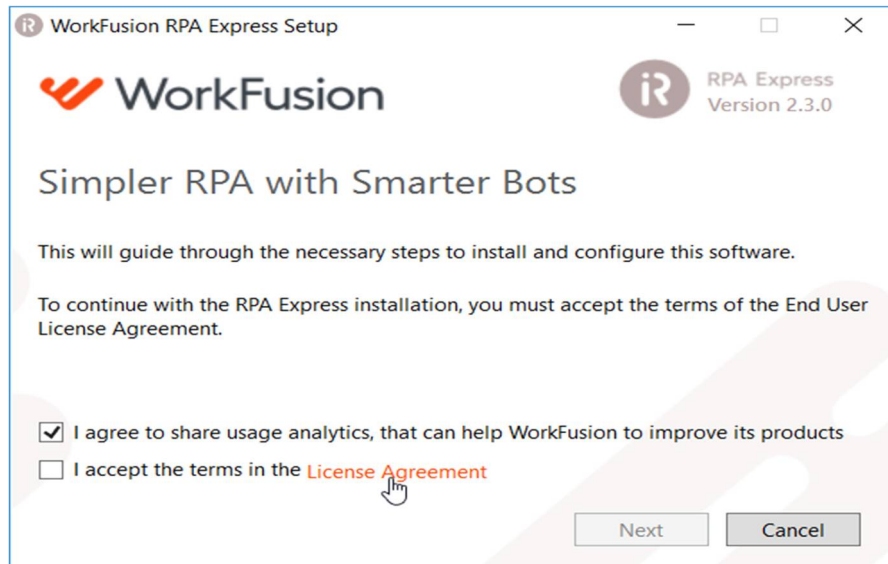
Depending on what licensing model you have selected, the installation procedure varies. At the moment, there are two installation options. We are using RPA-Express Starter in our project.

RPA Express Starter refers to a completely free product, with no trial period, no license generated.

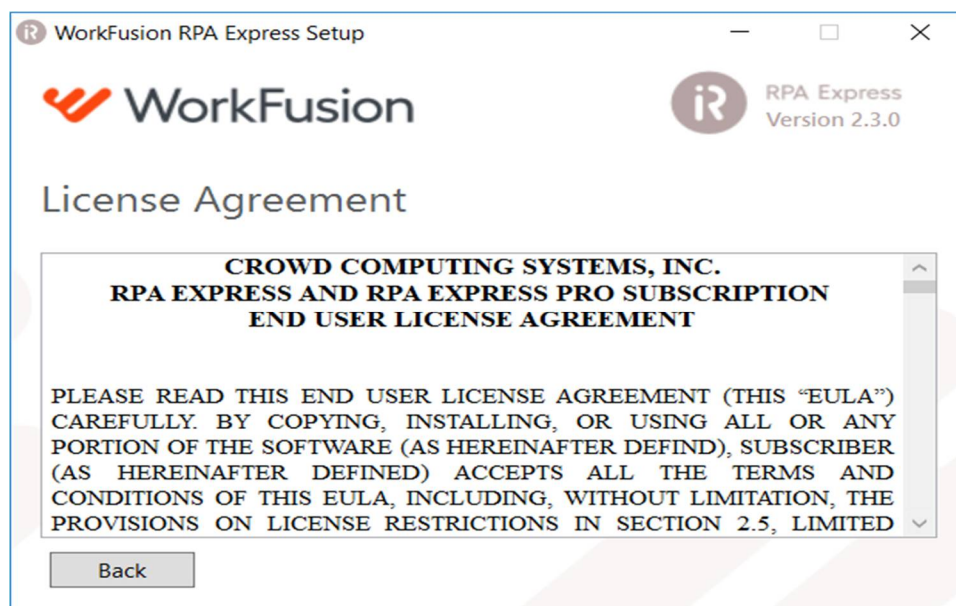
To install RPA Express, follow the steps below.

1. Run **FreeRPAExpressInstaller.exe**

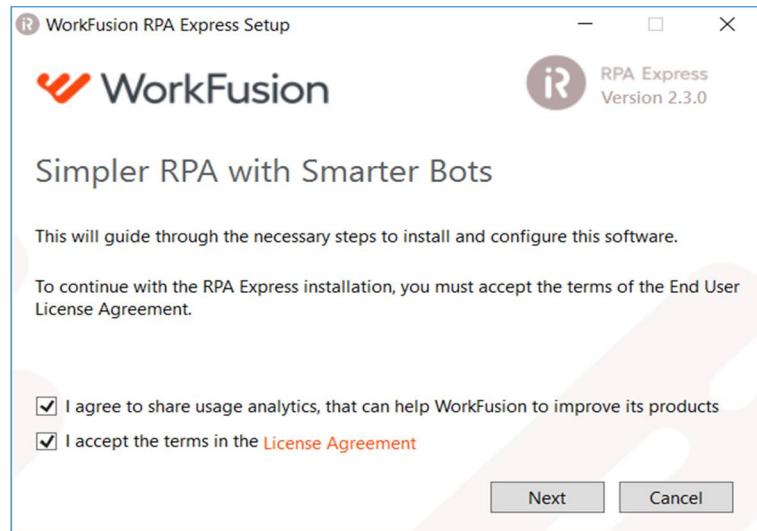
2.To start installation process, you must accept the License Agreement. Click **License Agreement** to view it.



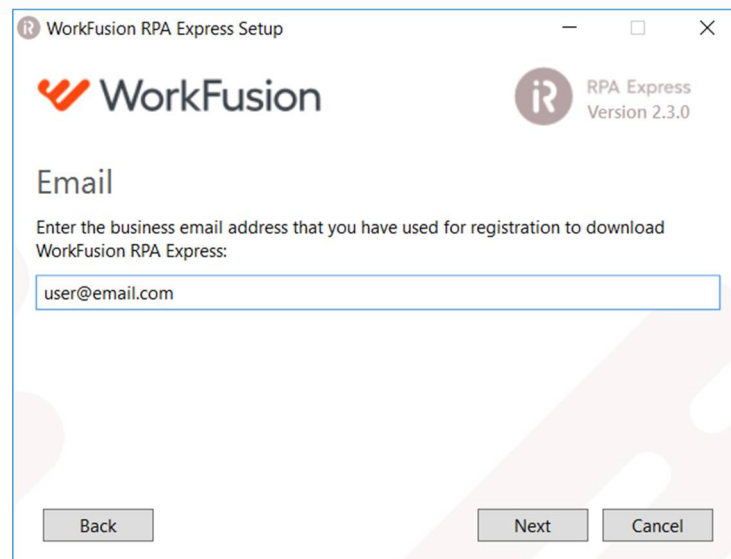
2. Read the License Agreement carefully. Use the scroll bar or press the page-down-key.



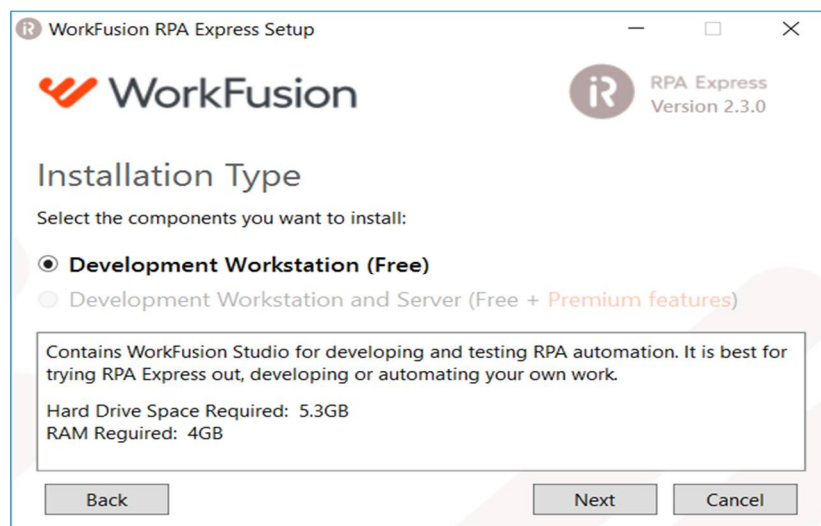
3. To accept, check **I accept the terms in the License Agreement** and press **Next**.



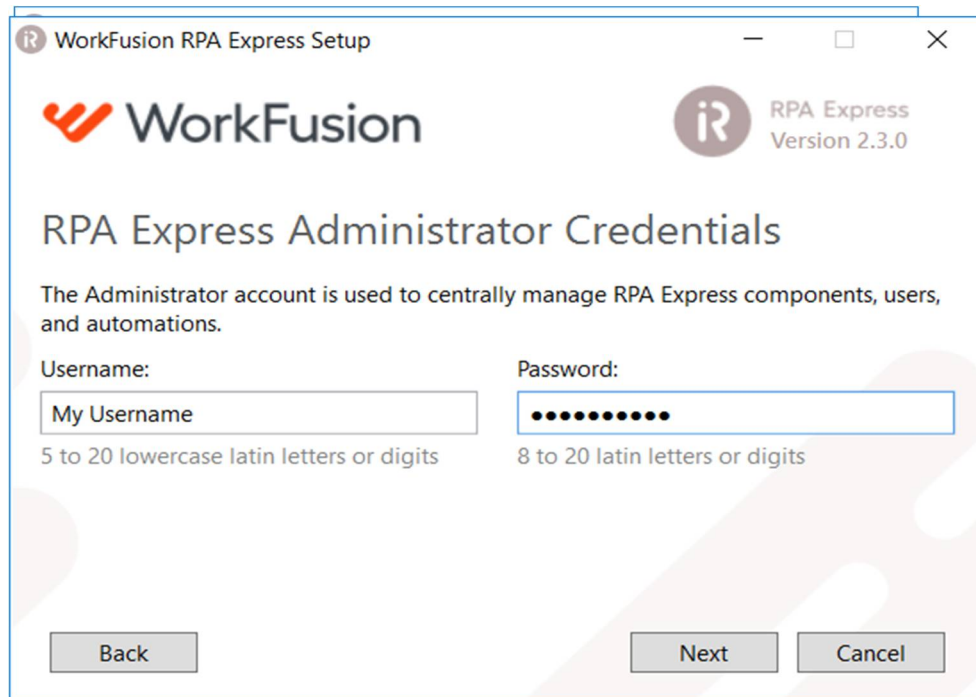
5. Enter the email you used when registering for RPA Express.



4. **Development Workstation (Free)** is selected by default. Click **Next** to proceed.

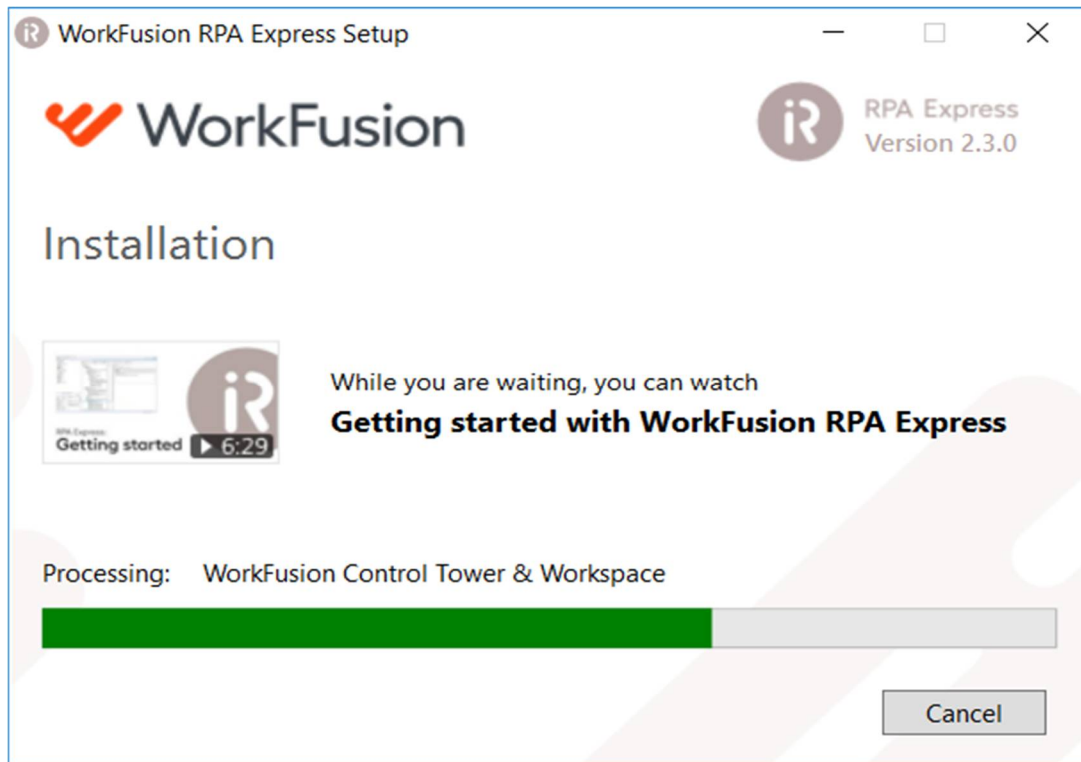


5. On the **RPA Express Administrator Credentials** screen, enter Administrator username and password that will be used to centrally manage your automations and click **Next**.
6. Pick **any username and password** at your choice, though observe the following requirements.
 - The username should be 5 to 20 characters long and contain lowercase Latin letters and digits. Special symbols are not allowed.
 - The password should be 8 to 20 characters long and contain Latin letters and digits. Special symbols are not allowed.

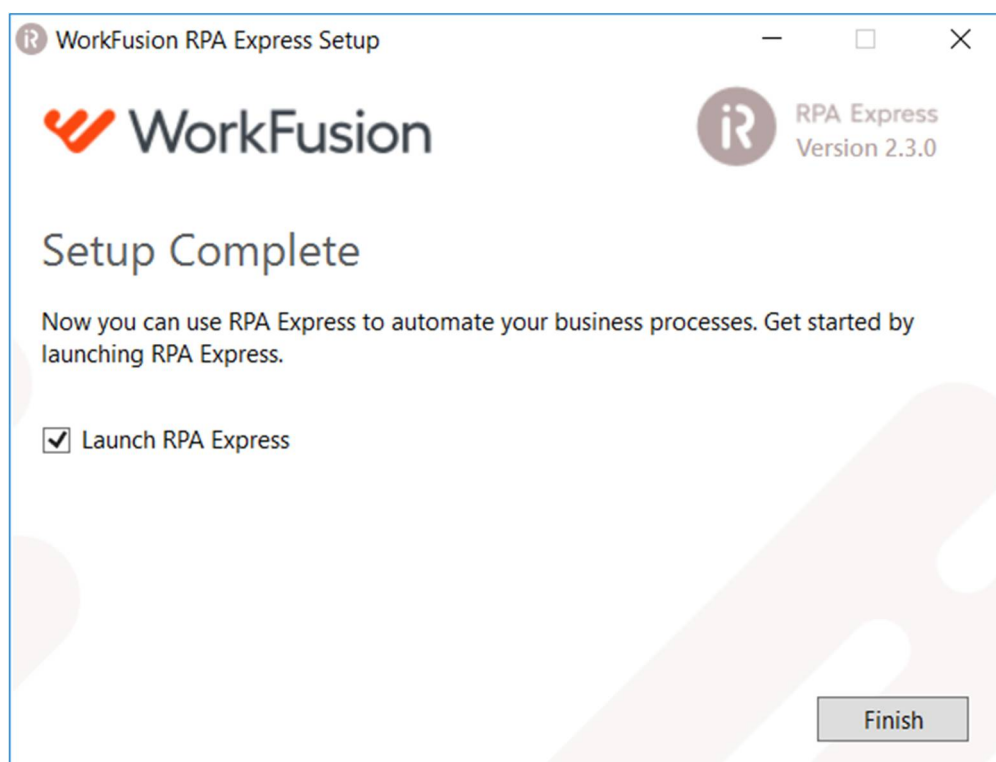


The screenshot shows a Windows-style window titled "WorkFusion RPA Express Setup". The WorkFusion logo is on the left, and "RPA Express Version 2.3.0" is on the right. The main heading is "RPA Express Administrator Credentials". Below it, a note states: "The Administrator account is used to centrally manage RPA Express components, users, and automations." There are two input fields: "Username:" with the text "My Username" and a requirement of "5 to 20 lowercase latin letters or digits"; and "Password:" with masked characters and a requirement of "8 to 20 latin letters or digits". At the bottom are "Back", "Next", and "Cancel" buttons.

7. Set the destination folder for RPA Express installation and click **Install**.
8. Username and password are already registered with workfusion
Username: vinayak11
Password: 32Watts13579#



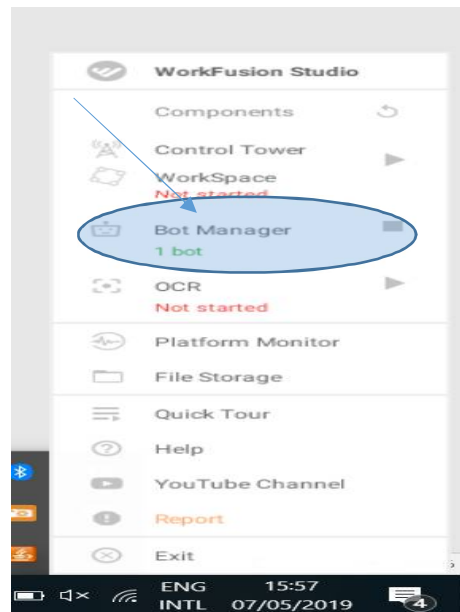
9. Wait until the installation is finished and click **Finish**. To launch RPA Express, click on the RPA Express icon on your desktop.



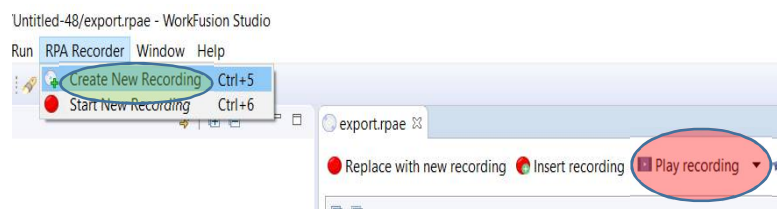
Contributing:

- So after launching the application user must be aware of Bot manager. User must start the bot manager before playing any of the recording. The

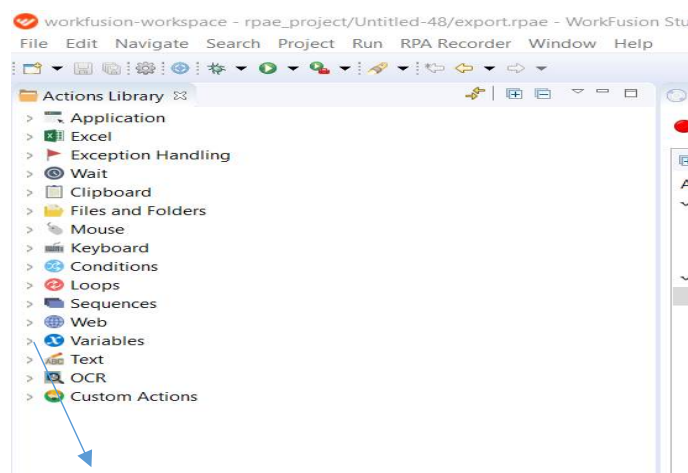
other components may or may not be active as there is no role of them in our project.



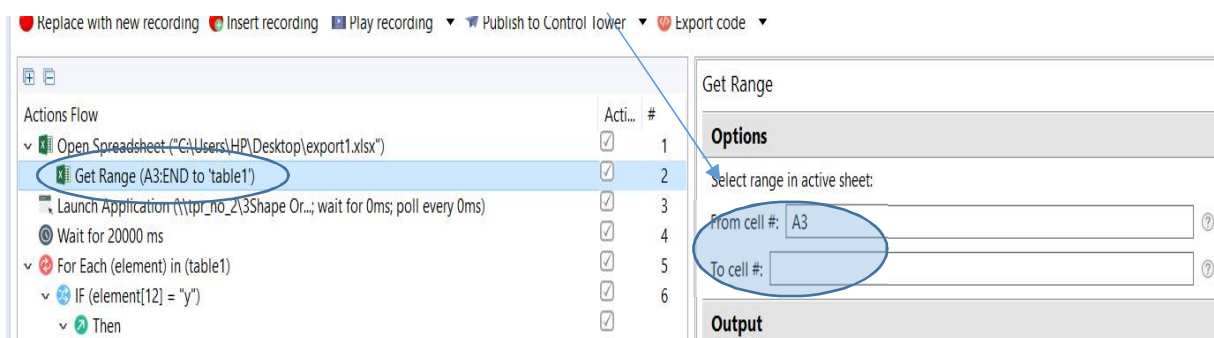
- User can create new recording or new file in RPA Recorder option in main menu. The file can be run by clicking on play recording option. Sometimes file may not work or throw an error “unable to connect bot”. In that case user must restart the bot manager.



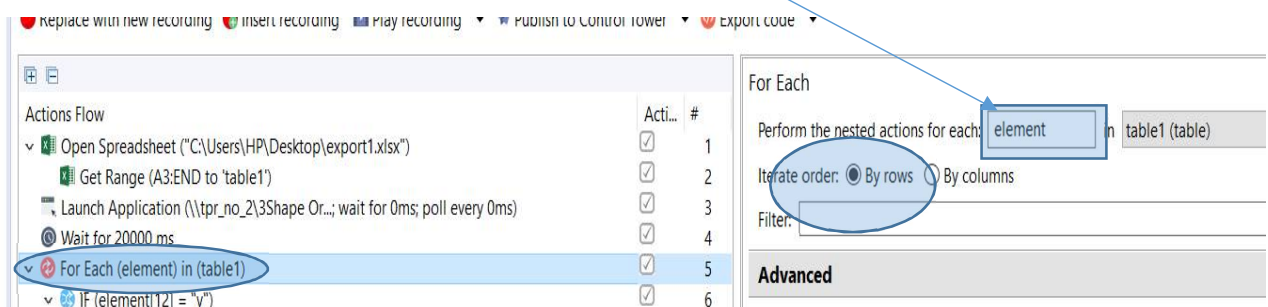
- User can perform certain action by writing various scripts from action library. Also user can declare certain variables according to need in the program. It supports many data types like Boolean, string, number etc. It is not necessary to initialise the variable with certain value.



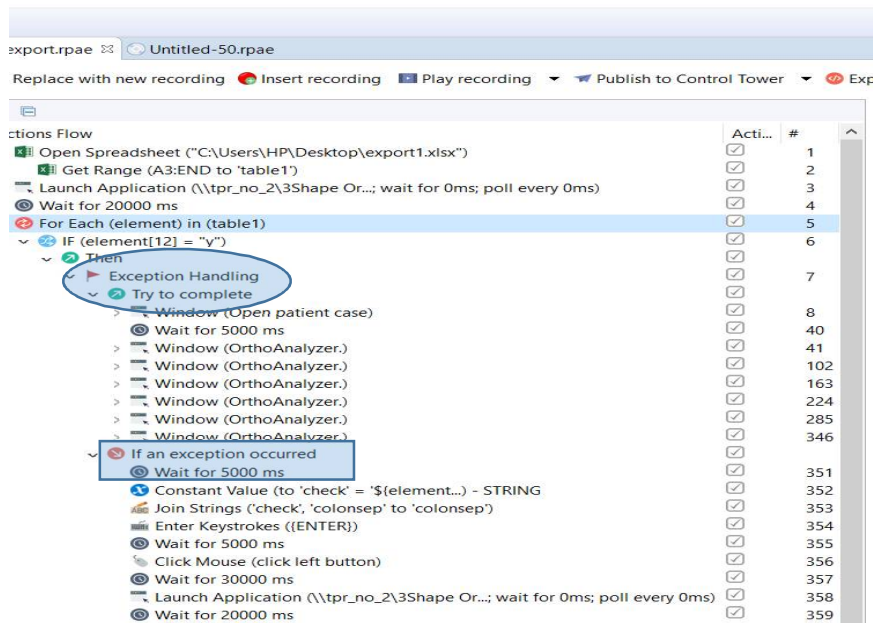
- Various actions are used in our projects from action library like application launch, mouse operations, excel operations and many more.
- **Get Range:** It is used to get all the values from excel sheet. We can define from which cell we have import values from excel sheet. Get range must always be specified inside the excel spreadsheet. If we don't specify the end cell, then it automatically import the whole excel sheet.



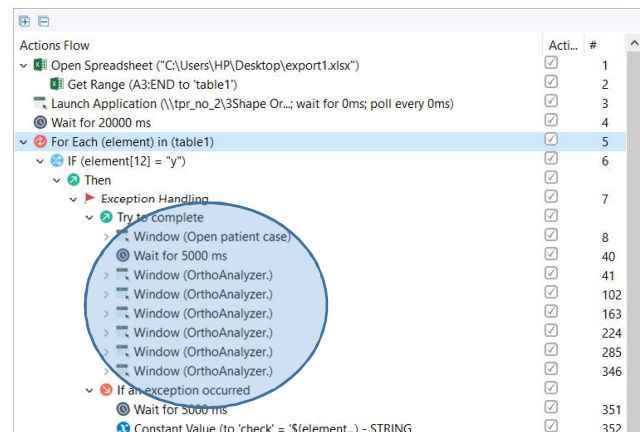
- **For each loop:** This action stores the values of excel in a list. The values can be stored in two ways either by rows or by columns. In our project we are iterating the loop by rows. For each loop perform every action written inside the loop on each row. Each row is stored as a list in variable. Here the variable is element.



- **Exception Handling:** To get the error message in RPA Express, you can keep the code outside of exception handling and then, the software will through error message on its' own. Once you get the type of error (by running the bot once), you can put the solution in catch block by keeping the code inside exceptional handling feature.

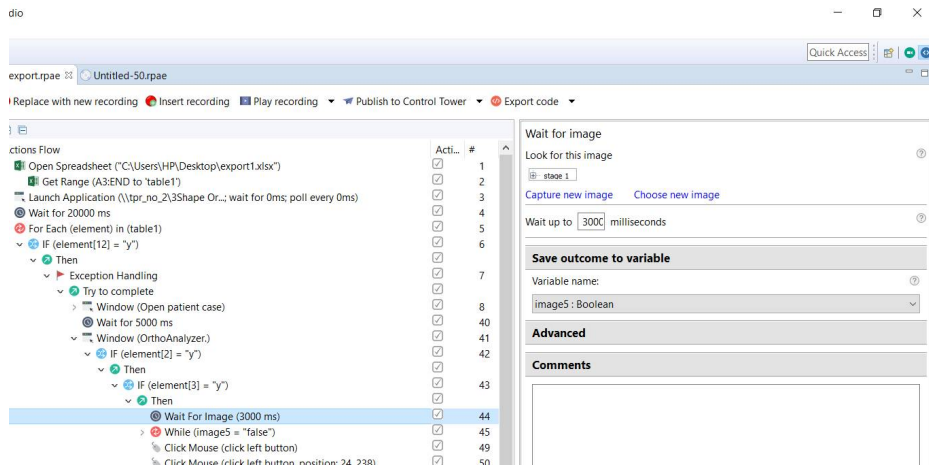


- **Windows:** This action help to bind all the action in one window. Many actions which are performing in one window are clubbed together so that action's don't get mixed up.



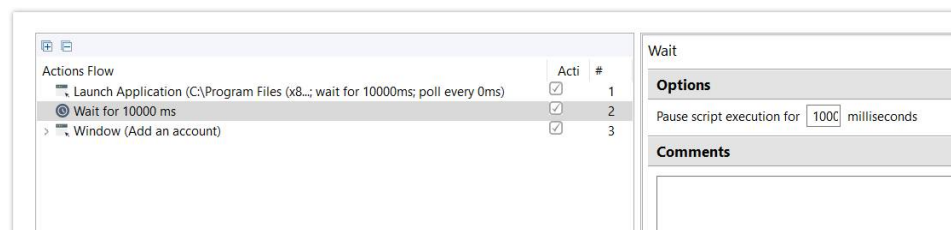
Wait for image: The action performs a search for a defined image on the current screen and puts the search result into a Boolean variable. The values are as follows.

- true – if the image was found on the current screen
- false – if the image was NOT found on the current screen



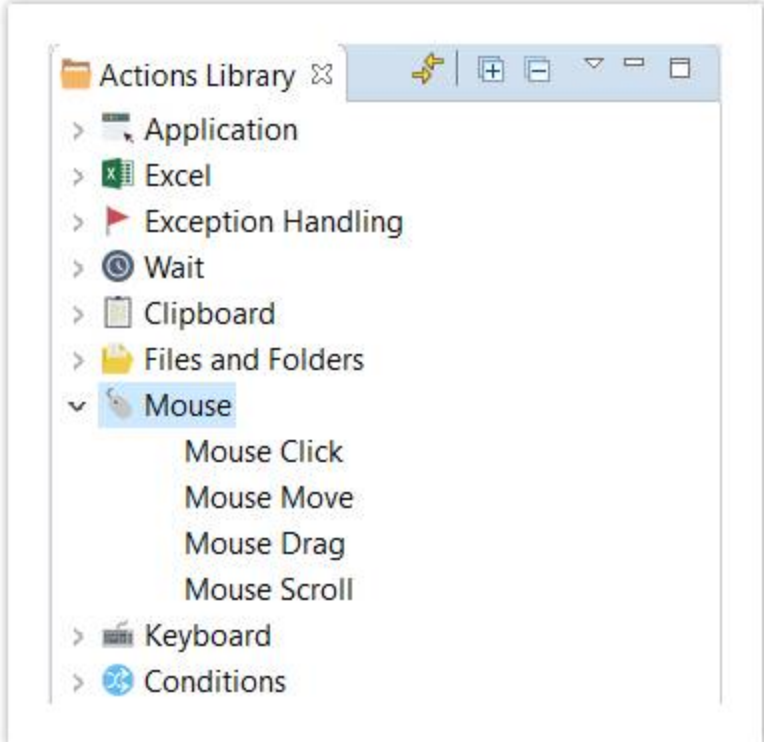
➤ Wait

The action pauses the bot execution for a specified amount of time, then automatically resumes.



MOUSE: The Mouse action group is intended to interact with user interface using mouse. All the **Mouse** actions are automatically recorded when you manipulate your mouse during the recording process.

You can add the Mouse Click, Move, Drag, or Scroll actions manually by dragging from Actions Library to Actions Flow.

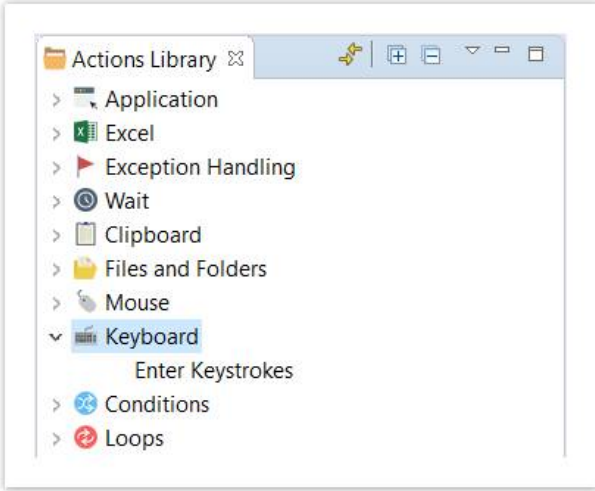
Actions Library	Action Description
	Mouse Action Location Window Control Image Position Web Element Mouse Actions Click Mouse Find Element by Text Find Element by XPath Find Element Example Move Mouse Drag Mouse Scroll Mouse

Keyboard: The Keyboard action group is intended for entering text and typing key combinations using keyboard. The **Enter Keystrokes** action is automatically recorded when you type something during recording process.

You can add the **Enter Keystrokes** actions manually when editing a recording by dragging it from Actions Library to Actions Flow.

There are three ways of using the **Enter Keystrokes** action.

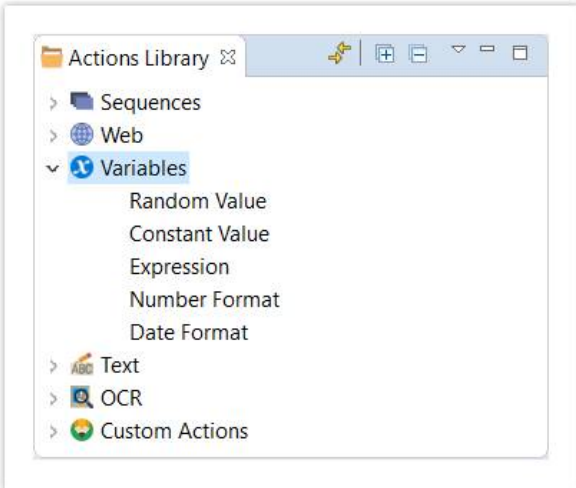
- Key combination (e.g., 'CTRL + HOME')
- Type text (e.g., 'Some input text string that cannot be changed at run-time')
- Text from variable (e.g., \${current_State}– dynamical value)

Actions Library	Action Description
	Key Combination Type Text Text from Variable

➤ Variables:

Using **Variables** from Actions Library, you can assign the following values to Recorder variables:

- Random value
- Constant value
- Expression result
- Number format
- Date format

Actions Library	Actions Description
	How to Use Variables Random Value Constant Value Expression Value Number Format Date Format

➤ Constant Value

The **Constant Value** action is used to assign a constant value to the Recorder Variable. Specify the following properties.

- **Variable** – a Recorder Variable which gets the value from **Constant Value**. The value type is the same as the type of the Recorder Variable which the Action Variable is bound to.
- **Value** – the value to be assigned. The value corresponds to the type of the Recorder Variable where the value is set to.

The screenshot shows the 'Constant Value' action configuration. On the left, the 'Actions Flow' pane lists several actions: 'Constant Value (to 'var_num1' = 15) - Num' (Active, #1), 'Open Website' (Active, #2), 'Open Spreadsheet' (Active, #4), 'While (var_num < var_num1)' (Active, #5), and 'Set Cell Value (Cell below)' (Active, #6). The 'Constant Value' action is selected. On the right, the 'Constant value' configuration pane is shown. It has two main sections: 'Variable' and 'Value'. In the 'Variable' section, 'Select variable:' is set to 'var_num1' and 'Variable type:' is 'Number'. In the 'Value' section, 'Set value:' is set to '15'. There is also a 'Comments' section at the bottom.

Actions Flow	Active	#
Constant Value (to 'var_num1' = 15) - Num	<input checked="" type="checkbox"/>	1
> Open Website	<input checked="" type="checkbox"/>	2
✓ Open Spreadsheet	<input checked="" type="checkbox"/>	4
✓ While (var_num < var_num1)	<input checked="" type="checkbox"/>	5
✓ Set Cell Value (Cell below)	<input checked="" type="checkbox"/>	6

Constant value

Variable

Select variable:

Variable type: Number

Value



Set value:

Comments

➤ Expression Value

The **Expression Value** action has three functions, depending on the type of the assigned variable:

- with a variable of Number type, it computes a value from operations with a number of the Recorder variables
- with a variable of List type, it appends a text or content from another list to the list, or gets the list size and saves it to a numeric variable
- with a variable of Table type, it appends a content of a list to the table either as a row or a column, or gets the number of table rows or columns and saves the size to the respective numeric variable

Actions Flow	Active	#
 Expression value (to 'var_num')	<input checked="" type="checkbox"/>	1
>  Save to text	<input checked="" type="checkbox"/>	2

Expression value

Variable

Select variable: ?

var_num ▼

Expression

Set expression to assign for this variable: ?

You can use the following operators: + - / * % ()
To add variables use: \${variable_name}

Advanced

➤ Number Format

The **Number Format** action enables conversions of number values to/from string values. Select one of the available options.

- **Reformat string** – extracts a number value in a predefined format from a string variable, applies another format to the extracted number value, and saves the result to a string variable
- **Convert number to string** – converts a number variable value to a string value using a predefined format and saves the result to a string variable
- **Convert string to number** – converts a string variable value to a number value using a predefined format and saves the result to a number variable

Reformat String is used to change the format of the number value containing in a string.

Actions Flow

	Active	#
> Get prices from invoices	<input checked="" type="checkbox"/>	1
▼ For Each (item) in (lstPrices)	<input checked="" type="checkbox"/>	14
> Number Format	<input checked="" type="checkbox"/>	15
> Save prices to Excel	<input checked="" type="checkbox"/>	16

Number Format

☒ Reformat string
☐ Convert number to string
☐ Convert string to number

Input

Input string: To add variables user: \${variable_name}

Format:

Sample: 1,234,567.89 [Show presets](#)

Locale:

Output

Select variable:

Format:

Sample: 1,234,567,89 [Show presets](#)

Locale:

Advanced

Comments