

The PathWave Instrument RPA Quick Start Guide

Welcome to the exciting world of RPA automation testing! This quick start guide is designed to help you familiarize yourself with the RPA applications and equip you with the necessary knowledge to get started with RPA auto-testing.

Here's what you'll learn:

- **Installing RPA and obtaining a license:** Step-by-step instructions on installing the RPA software on your computer and obtaining a valid license to use it.
- **Tour RPA:** A brief overview of the RPA interface and its key features.
- **Creating a Device Under Test (DUT) connection:** Learn an example of how to establish a connection to the DUT and configure it correctly so that the automation process can function smoothly.
- **Executing an auto-test:** With the DUT connection in place, walk through the process of creating a Session, adding parameters, editing the Visual Script Editor, and creating and running a Workflow.

Let's get started and discover the power of RPA automation testing!

Installing RPA

Prerequisites for Installation

- Operation System: Windows 10 Home, Professional, Enterprise or Educational 64-bit
- Minimum Intel Core i5 CPU with 8 GB RAM
- Minimum 5 GB free hard disk space

Step by Step: Installing RPA

Below are step-by-step instructions for installing Eggplant Performance on the computer that will be your controller machine.

1. Download the latest Keysight PathWave Instrument RPA installer file by visiting the [Download RPA website](#).
2. Copy the downloaded installer file into the local drive.
3. Right-click the Installer file on your hard drive. In the pop-up menu, select Run Elevated (if you do not have Administrator Privileges on the PC) or Run as administrator (if you have Administrator Privileges on the PC).
4. Once install completed, please reboot the PC.
5. Double-click on shortcut icons on the Desktop / Start menu icon of PathWave Instrument.

Note: RPA is updated regularly, so periodically check the [Downloads](#) page for new releases, and details of new features.

Licensing RPA

To run RPA on your machine, you need to enter a valid license.

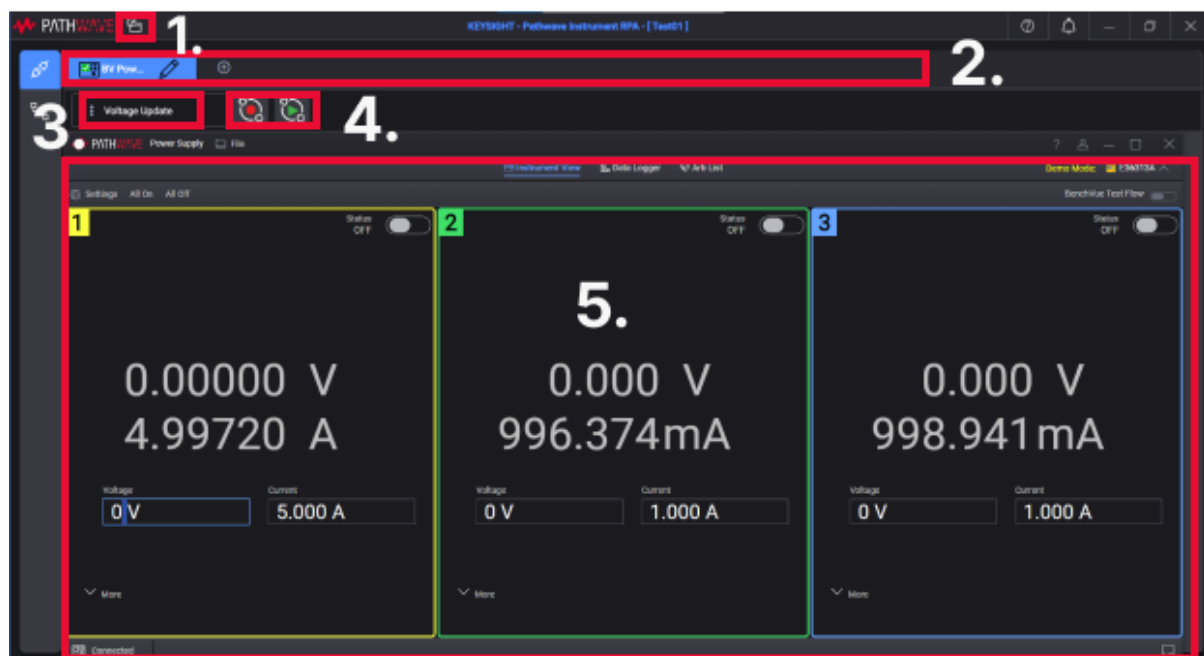
- **The 7-day trial** starts immediately after you download RPA. Upon providing **feedback**, you can then extend it by **another 7 days**.
- You can request a free trial license by visiting the [Request Free Trial License for PathWave Instrument RPA](#) website.
- Or use the [Redeem Entitlement Certificate](#) website to add a certificate to associate your license entitlements to your account.

Tour RPA

To get you started with the RPA software, this quick start guide will provide a brief overview of the interface and its key components.

The RPA interface consists of five main parts:

1. **Project List**
2. **Connection List**
3. **Session list**
4. **Record, Parameterization, Stop Recording, and Playback buttons**
5. **Viewer Window**
6. **Workflow Window**



RPA Interface (a)



RPA Interface (b)

Project List

The Project list in RPA is a key component of the interface that displays a list of all the projects that you have created and allows you to manage and organize them. Each project can contain multiple workflows, Sessions, and other elements, making it easy to keep track of your RPA automation efforts.

In the Project list, you can create new projects, load existing projects, and perform various operations on them, such as renaming, cloning, or deleting. By using the Project list, you can easily manage and organize your RPA projects and streamline your automation workflows.

Connection List

The Connection List is a component of the RPA interface that displays a list of all established connections to devices under test (DUTs). It displays the name of the device, its type, and the connection status, making it easy to manage and keep track of your connections. It allows users to manage and organize their connections and select a specific connection to work with in the RPA workflow.

Session List

The Session List is a key part of the RPA interface, located on the left side of the screen. This area displays a list of all the testing Sessions you have created, allowing you to easily switch between them and access the relevant information and configurations.

Record, Parameterization, Stop recording, and Playback Buttons

The four buttons on the RPA interface are essential tools for performing different testing tasks. These buttons are:

- **Record:** button allows you to start recording a test Session, capturing all the actions performed on the DUT.
- **Param:** This button enables you to create and modify parameters for the test Session.
- **Stop recording:** This button stops the recording process and saves the recorded test sSession.
- **Playback:** This button runs the recorded test Session or designed Workflow, automatically executing the actions performed on the DUT during the recording process.

These buttons provide an intuitive and user-friendly way to control and manage your RPA testing tasks, making it simple and efficient to automate your tests.

Viewer Window

The Viewer Window displays all the testing activities, including recorded test cases and their execution results. It is an essential tool for monitoring the progress of your test cases, troubleshooting issues, and evaluating the performance of your test automation efforts.

Workflow Window

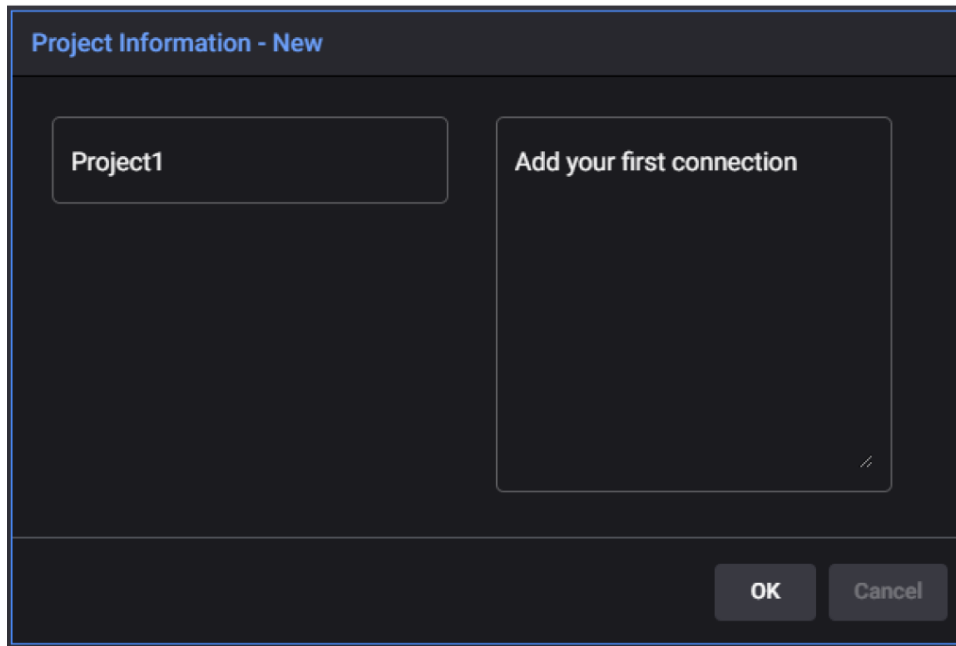
The Workflow window is where you can create and manage your automation workflows. It displays a graphical representation of the steps involved in your automation process, and allows you to add, edit, and delete steps as needed. One

of the key features of the Workflow window is the Visual Script Editor, which provides an intuitive, visual way to edit the parameters of each step in your Workflow.

With the Visual Script Editor, you can easily modify the parameters of each step to meet your unique needs, without having to write any code. This makes the Workflow window a powerful and flexible tool for automating your testing tasks, and it is a key part of the RPA interface.

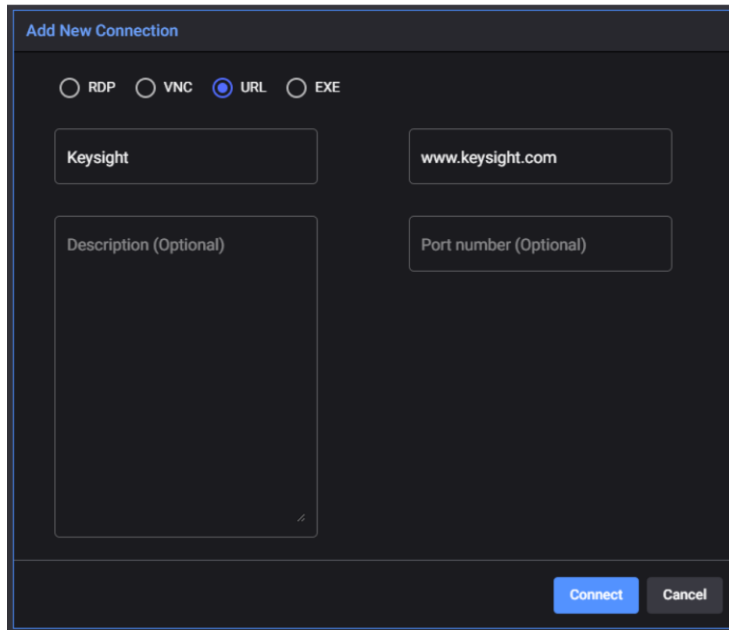
Add Your First Connection

1. Create a new project. You can rename your project in the **Name** field and enter a description (optional) in the **Description** field to identify the connection. And then click **OK**.

The image shows a dark-themed dialog box titled "Project Information - New". It has two main input areas: a text field on the left containing "Project1" and a larger text area on the right with the placeholder text "Add your first connection". At the bottom right, there are two buttons labeled "OK" and "Cancel".

Project Information dialog box in RPA

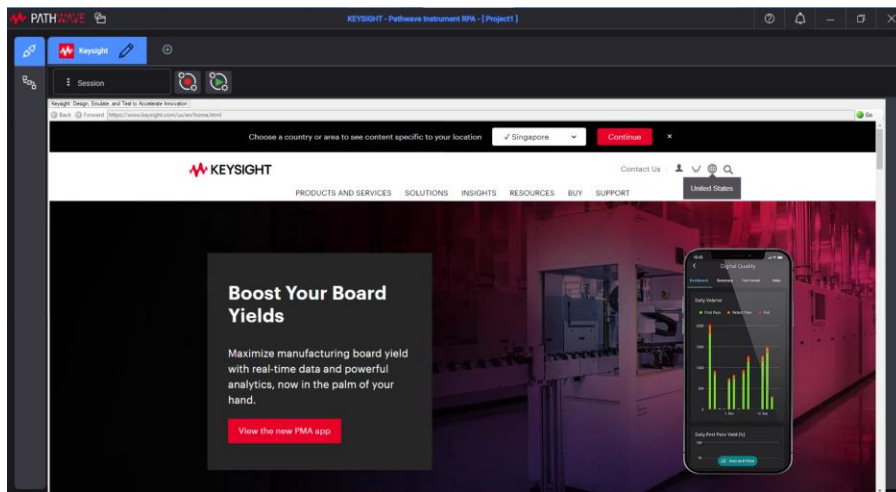
2. In the **Add New Connection** dialog box, connect to the Keysight website as the tutorial DUT. Select the connection type **URL**, which has the IP Address www.keysight.com. Enter Keysight in the **Connection Name** field to identify this connection.



The 'Add New Connection' dialog box in RPA is a dark-themed window. At the top, it has the title 'Add New Connection'. Below the title are four radio buttons: 'RDP', 'VNC', 'URL' (which is selected), and 'EXE'. Under the 'URL' selection, there are four input fields: 'Keysight' (containing the text 'Keysight'), 'www.keysight.com' (containing the text 'www.keysight.com'), 'Description (Optional)' (an empty text area), and 'Port number (Optional)' (an empty text field). At the bottom right of the dialog are two buttons: 'Connect' (in blue) and 'Cancel' (in grey).

The Add New Connection dialog box in RPA

3. Click **Connect**. Now you add your first connection successfully!



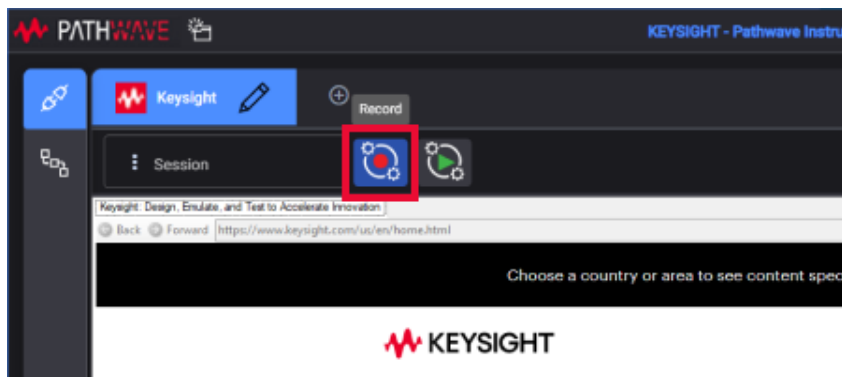
Connect to Keysight website in RPA

Set up your First Auto-test

Now you already add your first connection to a project. Experience Sessions and Workflow to set up your first auto-test.

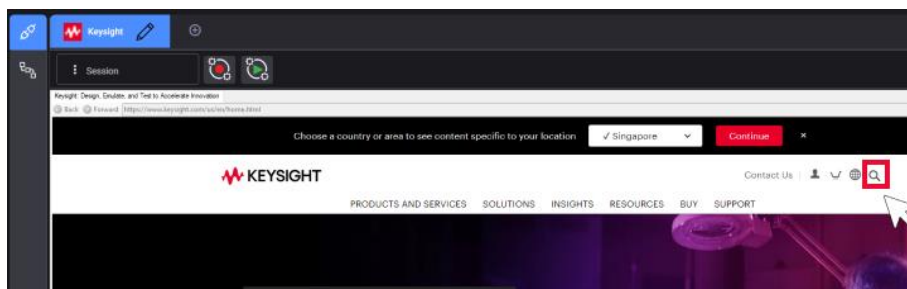
Add your first Session

1. Now you are going to record searching RPA on the Keysight website as a tutorial Session. Click the **Record** button to record a new Session.



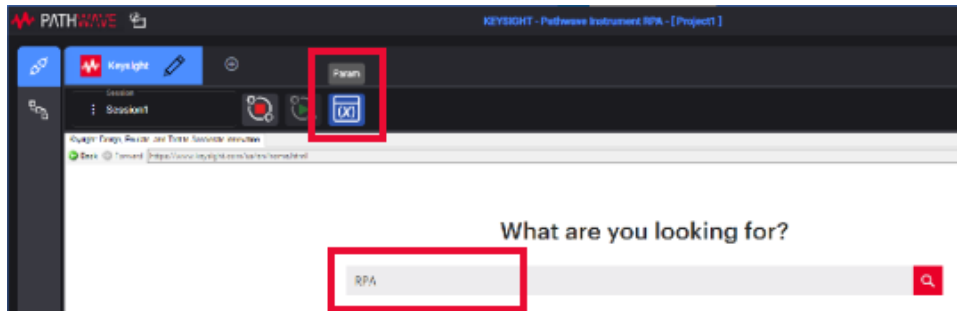
Record Button to start recording a Session in RPA

2. Click the **search** button in the top right corner of the Keysight website.



The search function on the Keysight website

3. Enter “RPA” in the search bar and click the **Param** button.



The param button in RPA and the search bar in Keysight Website

4. **Double-click** “RPA”. It is the input variable to be parameterized. You can edit the parameter name and value in the **Parameterization Configuration** dialog box and click save to save the parameter.

Parameterization Configuration

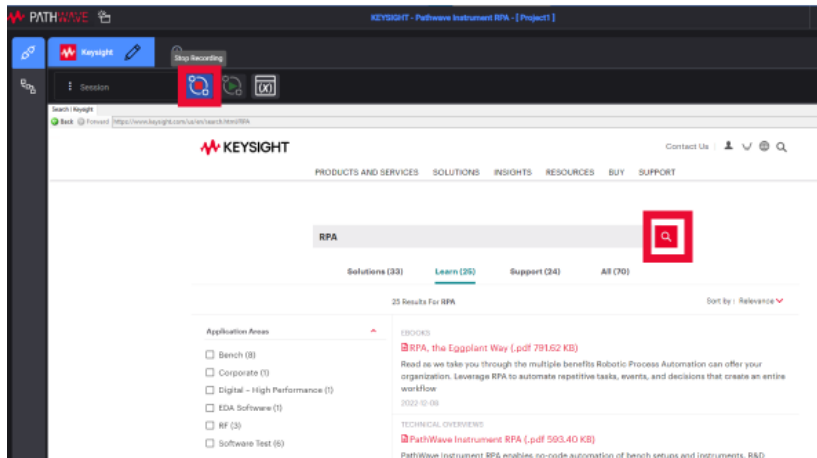
Parameter Name	Parameter Value
Search01	RPA

Tips:

1. Parameter Name is the name of variable in your Workflow. You can change Parameter Name to an intuitive name for your Workflow needs. Parameter Name must be unique within a Project and can only be changed in this window.
2. Parameter Value is the test variable being changed in your Workflow and can be edited directly and re-configured via Visual Script Editor.

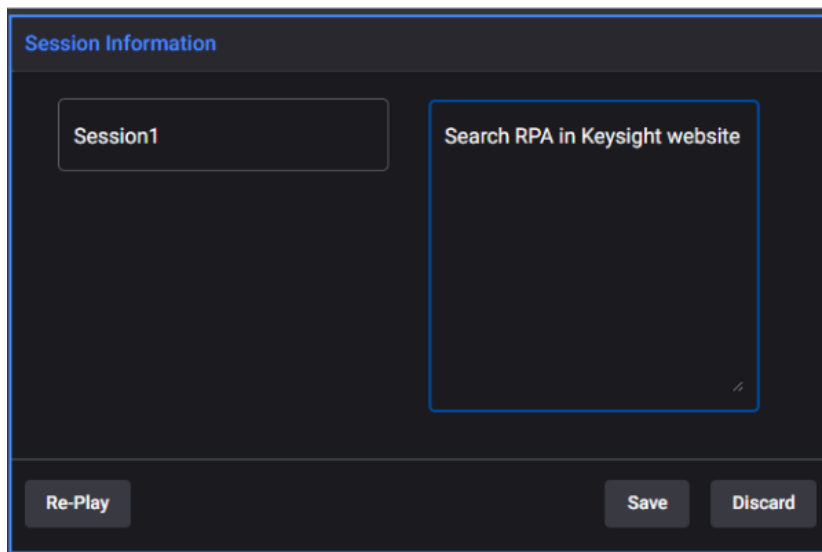
The Parameterization Configuration dialog box in RPA

5. Click the **search** button and then the **Stop Recording** button to end the Session.



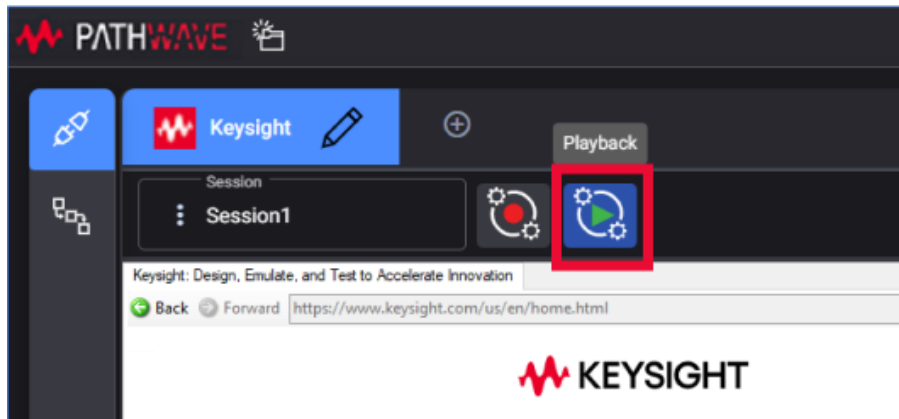
The Stop Recording button to end the Session

6. Enter a name and description (optional) in the Session Information dialog box. Then click **Save**.



The Session Information dialog box in RPA

7. Click the **Playback** button to run the Session you created just now. Now you successfully create and run your first example Session!

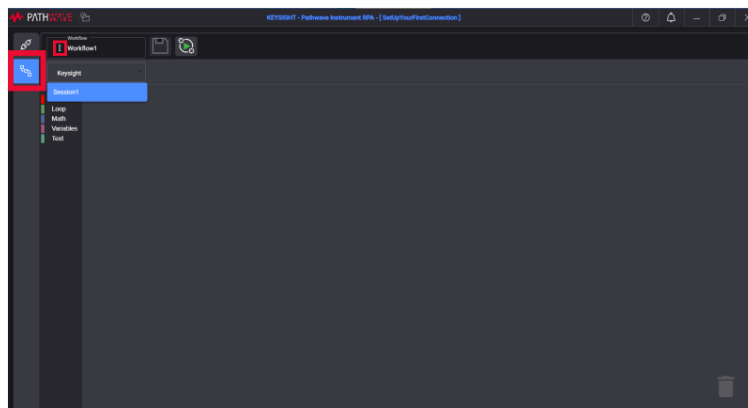


The playback button to run a Session in RPA

Add Your First Workflow

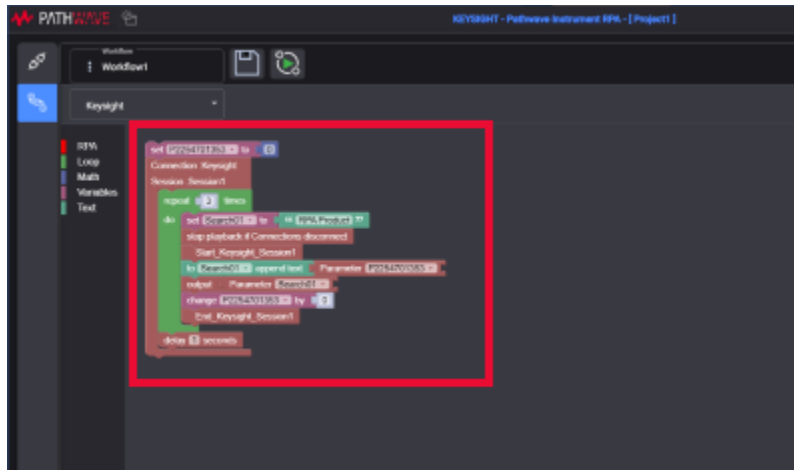
You have successfully established your first connection and recorded a Session for it. To complete your automation journey, the next step is to add a Workflow.

1. Click the **Workflow Automations** button.
2. Select your desired Session “Session1” by **clicking** on the **Connection** drop-down list. This will create Session1 within the Visual Script Editor of the Workflow.



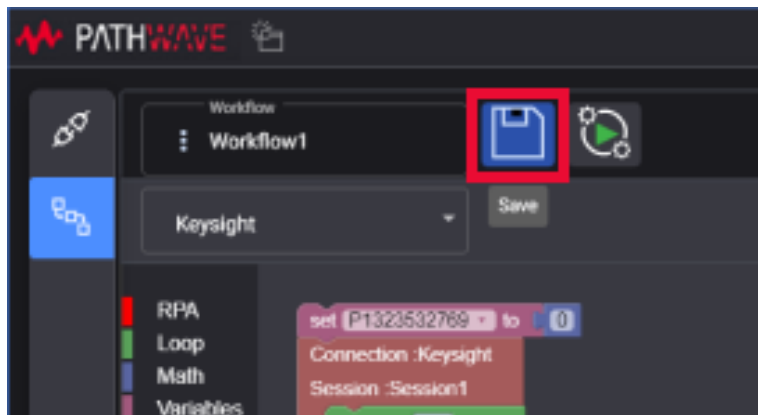
Add a Session in the Workflow

3. Experiment with editing "Session1" within the Visual Script Editor. As an example, modify the value of the parameter Search01 from "RPA" to "RPA Support" and increase the repeat times from 1 to 3.

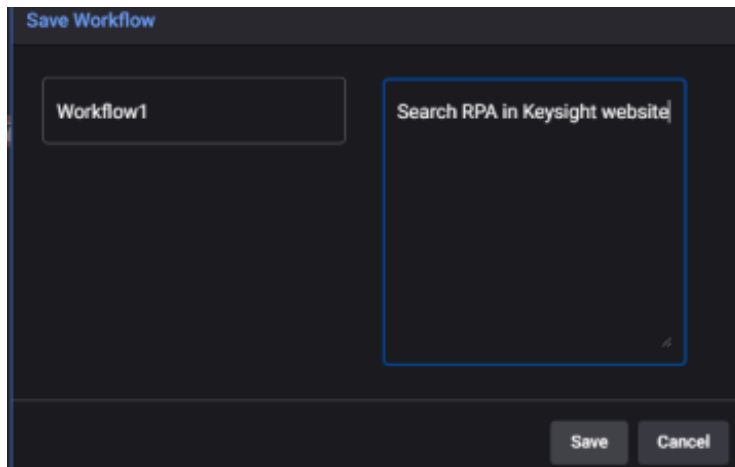


The visual script editor with a Session information

4. Click on **Save Workflow** button to save the edited Workflow. Enter a name and description (optional) for the Workflow in the **Save Workflow** dialog box to identify it.

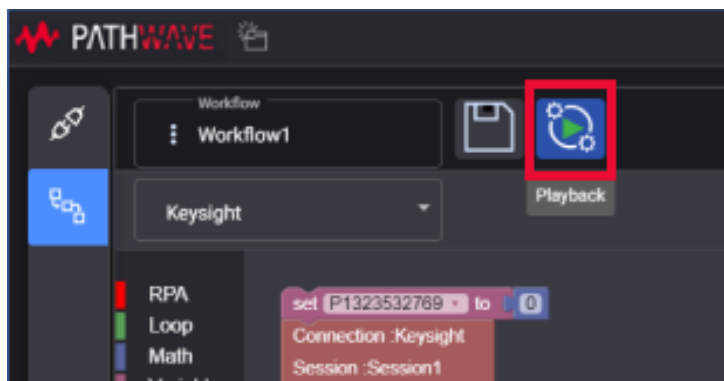


Save button to save a Workflow



Save the Workflow dialog box in RPA

5. Click the **Playback** button to run the active Workflow. Then the active Workflow will play and end automatically. You can also press **ESC** to cancel Playback actively.



The Playback button to run a Workflow

PathWave Instrument RPA User Guide

Welcome to the PathWave Instrument RPA User Guide! This user guide is designed to help you get the most out of the PathWave Instrument RPA software, by providing you with comprehensive instructions and detailed examples on how to use the software's key features.

Here's what you'll learn:

- **Project management:** Discover how to create, organize, and manage projects in RPA.
- **Connecting to DUTs:** Learn how to establish and configure connections to devices under test (DUTs), including how to set up network connections, configure authentication, and manage connection profiles.
- **Session Automations:** Explore the power of Sessions in RPA, which enable you to record, parameterization, and playback interactions with DUTs in a seamless and automated way. Learn how to create, customize, and manage Sessions, as well as how to use the Session Playback feature to test and validate your automations.
- **Workflow Automations:** Discover how to use Workflows in RPA to automate complex sequences of actions across multiple Sessions and DUTs. Learn how to create, edit, and manage Workflows, as well as how to use the Workflow Playback feature to optimize your automation testing processes.
- **API Calling:** Get hands-on experience with the RPA API by learning how to make API calls to the RPA software using various programming languages and tools. Learn how to interact with Sessions and Workflows, retrieve data, and manage RPA resources programmatically.

Let's dive in and start exploring the exciting world of RPA automation testing!

Project Management

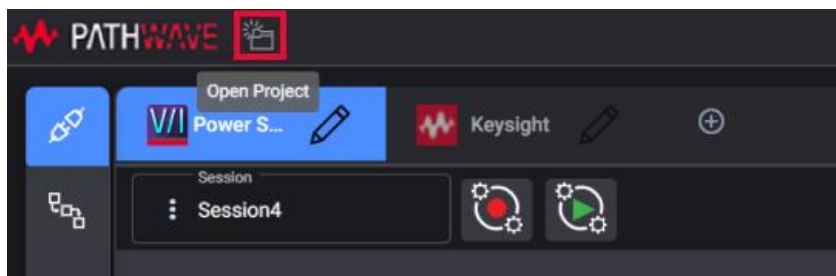
A Project in RPA represents a collection of Connections, Sessions, Workflows, and other related resources. It provides a convenient way to organize your automation tasks and manage them as a cohesive unit.

This chapter provides guidance on:

- Step-by-Step Guide to Create or Load a Project
- Step-by-Step Guide to Rename, Clone, or Delete a Project

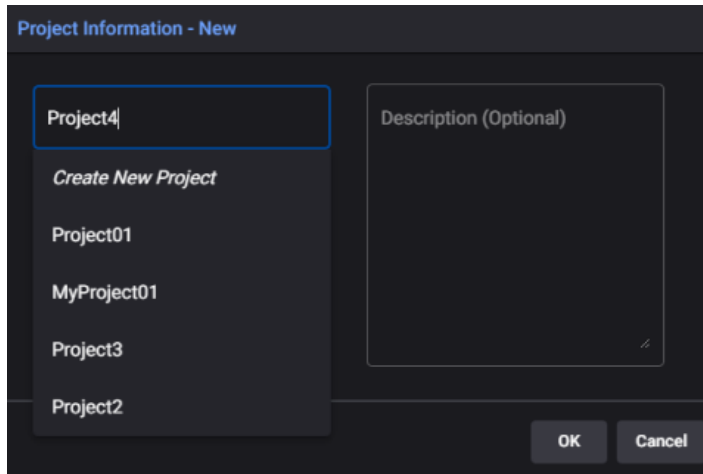
Step by step to create or load a Project

1. Click the **Open Project** button located in the top left corner of the RPA interface.



The Open Project icon in RPA

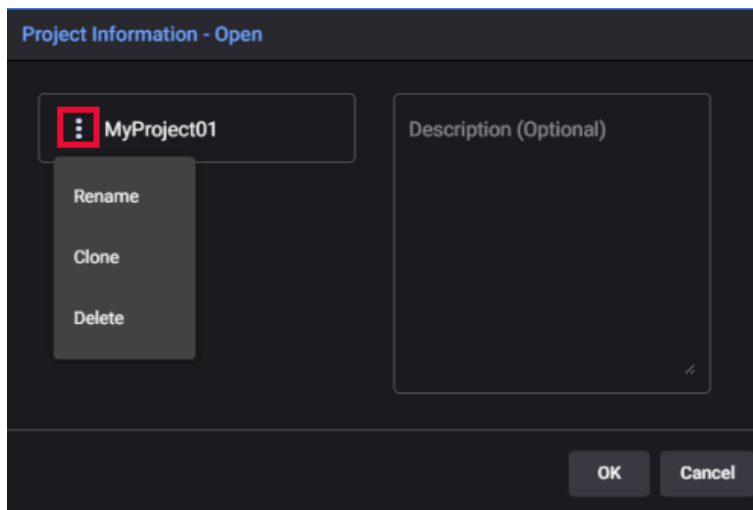
2. In the Project Information dialog box, you can either create a new Project by clicking "**Create New Project**", or select an existing Project by clicking on it to load it.



The Project Information dialog box to create or load a Project

Step by step to Rename, Clone or Delete a Project

1. **Select** the Project you want to act on in the Project Information dialog box.
2. Click the **three dots** icon located to the left of the Project name. From there, you can choose to **rename** the Project, **clone** the Project, or **delete** the Project.



The Project Information dialog box to rename, clone, delete a Project

Connections to DUTs

The Device Under Test (DUT) is a key aspect of the RPA process. It represents the device or application that will be automated, serving as the target for the software robots to interact with and carry out the automated tasks.

Some common types of DUTs that you can connect to our RPA include the following:

Hardware devices: These are physical devices that can be automated, such as a power supply, oscilloscope, temperature sensor, and even VR/AR glasses.

Desktop applications: These are applications that are installed on a desktop or laptop computer, such as Pathwave BenchVue Software, Microsoft Excel, Adobe Photoshop, or Google Chrome.

Mobile applications: These are applications that run on a mobile device, such as an Android or iOS smartphone or tablet.

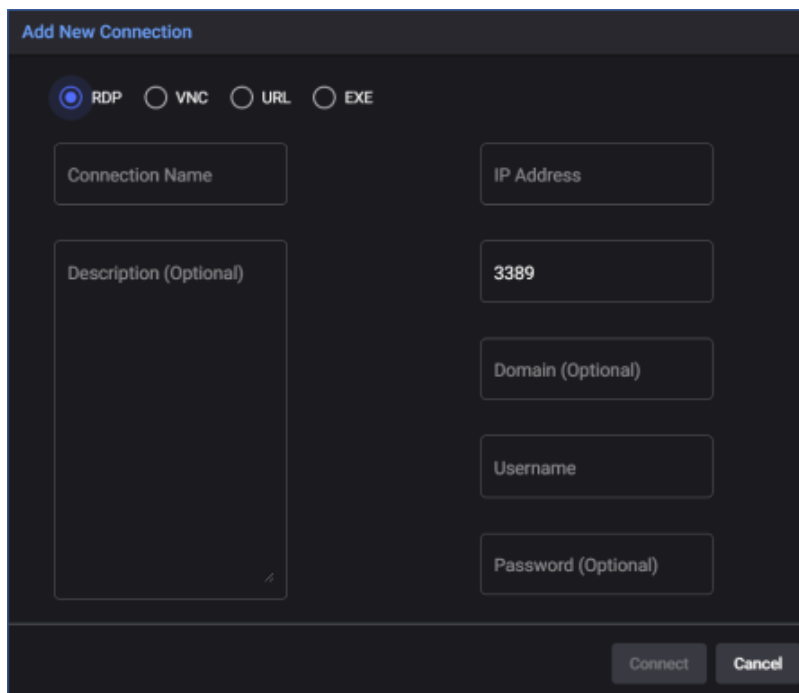
Web applications: These are applications that run in a web browser, such as Gmail, Facebook, or Salesforce.

By defining and configuring the DUT connection in RPA, you can enable the automation of tasks across different types of devices and applications.

Adding DUTs to the Connection list

1. Click the **Add Connection** button in the Connection Column to add a new connection.
2. In the **Add New Connection** dialog box, select your targeted connection type from: **RDP, VNC, URL, or EXE**. To read about details of these 4 types of connections, see [Four Connection Types](#) below.

3. Enter a name for the connection in the **Connection Name** field to identify the connection.
4. Enter a description for the connection in the **Description** field. Although this field is optional, it's useful to have descriptive text to identify the connection.
5. Each connection includes the fields for entering DUT information.
6. Click **Connect** to save the connection details and the new connection is added.



The screenshot shows the 'Add New Connection' dialog box. At the top, there's a title 'Add New Connection'. Below it, four radio buttons are visible: 'RDP' (which is selected), 'VNC', 'URL', and 'EXE'. The main body of the dialog contains several input fields arranged in two columns. The left column has 'Connection Name' and a large 'Description (Optional)' text area. The right column has 'IP Address', a port field containing '3389', 'Domain (Optional)', 'Username', and 'Password (Optional)'. At the bottom right, there are two buttons: 'Connect' and 'Cancel'.

The New Connection dialog box in RPA

Four Connection Types

RDP Connection

In the **Add New Connection** dialog box, select **RDP** to create an RDP connection.

- **IP address:** IP address or hostname of the DUT you want to connect to.
- **Port number:** RDP connections default to port 3389, but you can change this value in the port field if necessary.
- **Domain:** For RDP connections, this information refers to the identity of a network domain, also known as a Windows domain. It is an optional information.
- **Username and Password:** For RDP connections, this information refers to the Windows user account for the DUT you are connecting to. This information is always required for RDP connections.

Note: You must also configure the DUT to accept the connection for RDP.

VNC Connection

In the **Add New Connection** dialog box, select **VNC** to create a VNC connection.

- **IP address:** IP address or hostname of the DUT you want to connect to.
- **Port number:** For VNC connections, the port is set to 5900 by default. You can change the value in the Port field if necessary.
- **Password:** This field refers to the values for the VNC server on the DUT.

The VNC connection dialog box IN RPA

URL Connection

In the **Add New Connection** dialog box, select **URL** to create an URL connection.

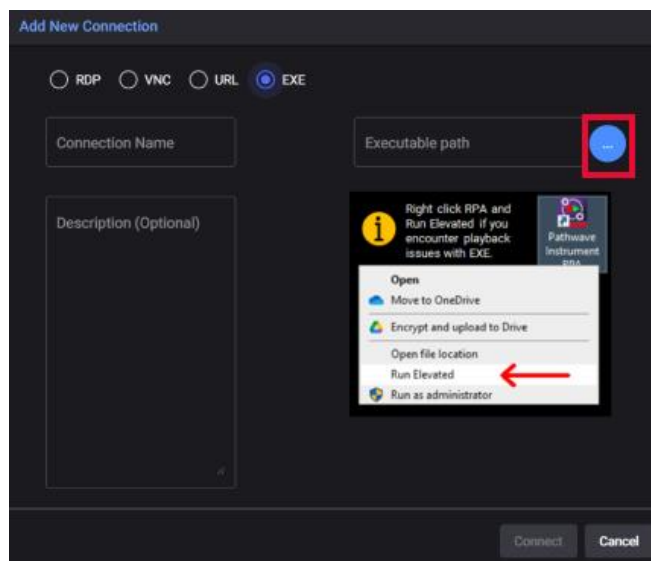
- **IP address:** Enter the URL or IP address of a website you want to connect to.
- **Port number:** To see the port number of a URL, you can simply look for the port number in the URL string. The port number is usually located immediately following the domain name or IP address and is separated by a colon (":"). If the port number is not specified in the URL, the browser assumes the default port number for the protocol. For example, the default port number for HTTP is 80, and the default port number for HTTPS is 443.

Note: For example, the URL "www.google.com" can be resolved to the IP address "172.217.16.174", which is the current IP address of the Google server. You can use the URL or IP address to create the connection successfully.

EXE Connection

In the **Add New Connection** dialog box, select **EXE** to create an EXE connection.

- **Executable path:** Select an executable file on your computer from the drop-down list of Executable paths.

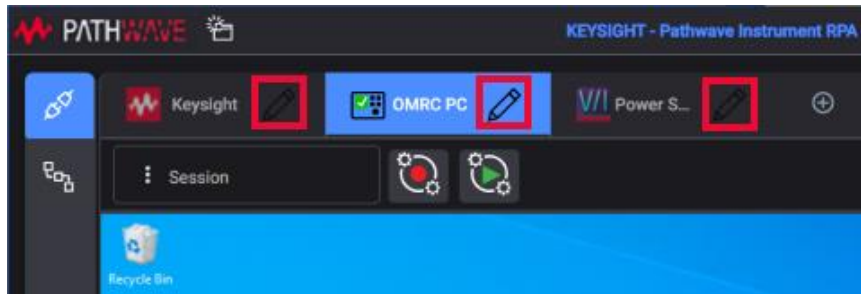


The EXE Connection dialog box in RPA

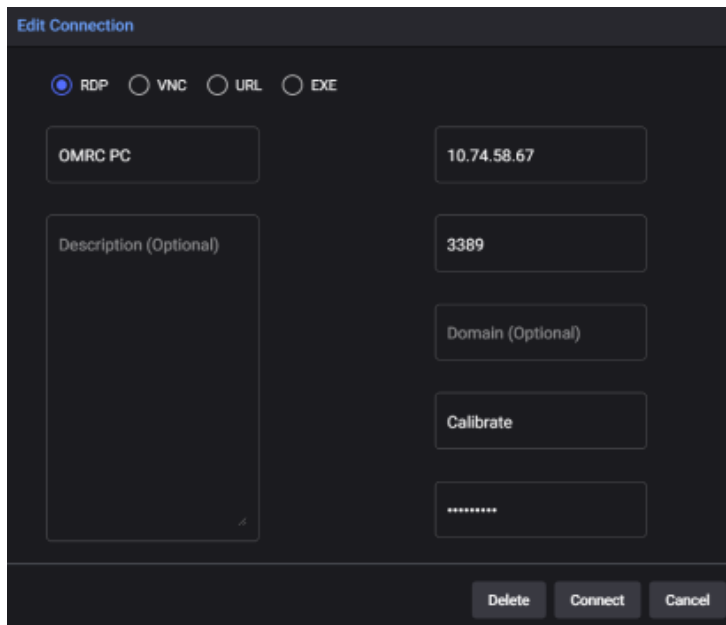
Note: If you encounter playback issues with the EXE connection, right-click RPA and select Run Elevated to solve the problem.

Closing or Editing a DUT connection

Click the **Pen** icon on the right side of each connection to open the **Edit Connection** dialog box. You can always edit the details of a connection or delete a connection here.



The Pen icon to edit/delete a connection in RPA

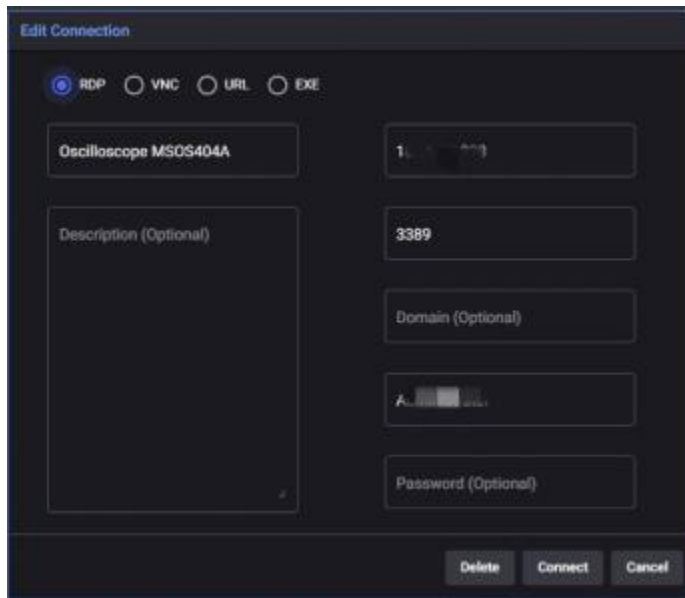


The Edit Connection dialog box in RPA

RDP Connection Example

Connect to Oscilloscope MSOS404A using RDP

1. Name the DUT and fill in its IP address, Username, and password (optional).



The RDP connection dialog box in RPA

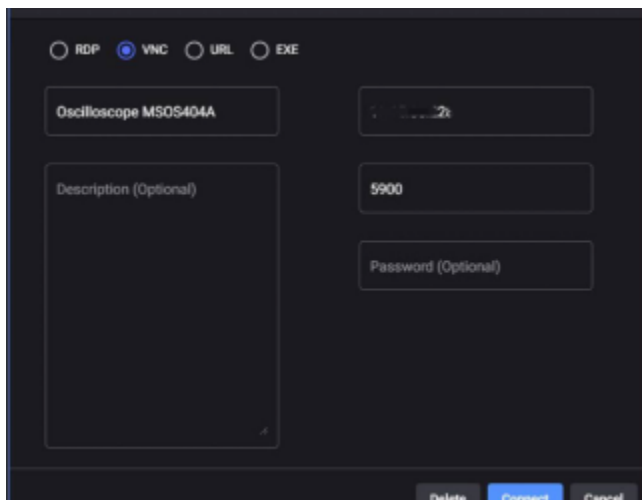
2. Click Connect, and you will see Infiniium Mixed Signal Oscilloscope MSOS404A is now connected to RPA successfully.



VNC Connection Example

Connect to Oscilloscope MSOS404A using VNC

1. Name the DUT and fill in its IP address and password (optional).



The VNC connection dialog box IN RPA

2. Click Connect, and you will see Infiniium Mixed Signal Oscilloscope MSOS404A is now connected to RPA successfully.



Connect to Oscilloscope MSOS404A using VNC

URL Connection Example

Connect to the Keysight website using the URL

1. Name the DUT (Website) and fill in its IP address/URL and password (optional).

Add New Connection

☐ RDP ☐ VNC ☒ URL ☐ EXE

Name: Keysight

URL: www.keysight.com

Description (Optional):

Port number (Optional):

Connect Cancel

The URL connection dialog box in RPA

2. Click Connect, and you will see Keysight Website is now connected to RPA successfully.

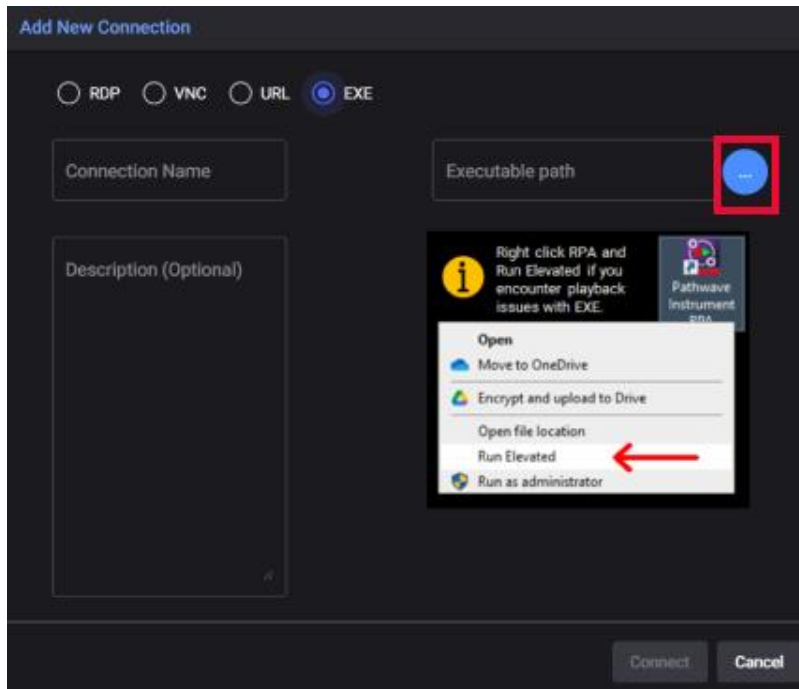


Connect to the Keysight Website using URL

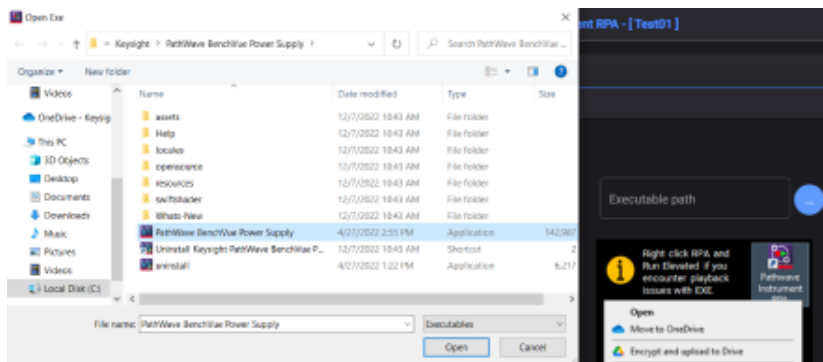
EXE Connection Example

Connect to Power Supply using EXE

1. Open the drop-down list for the Executable path.
2. Select PathWave BenchVue Power Supply from the list and click open.

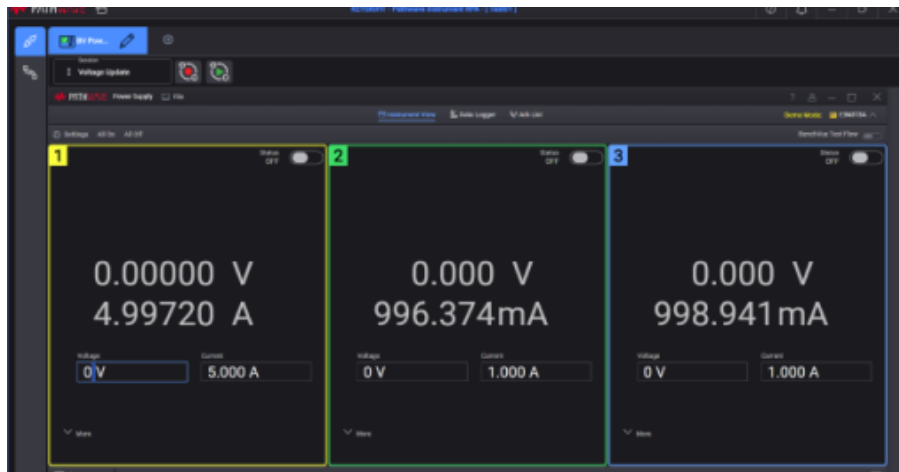


The drop-down list for the Executable path in The EXE Connection



EXE connection example to PathWave BenchVue Power Supply

3. Click Connect, and you will see PathWave BenchVue Power Supply is now connected to RPA successfully.



Connect to PathWave BenchVue Power Supply using EXE

Session Automations

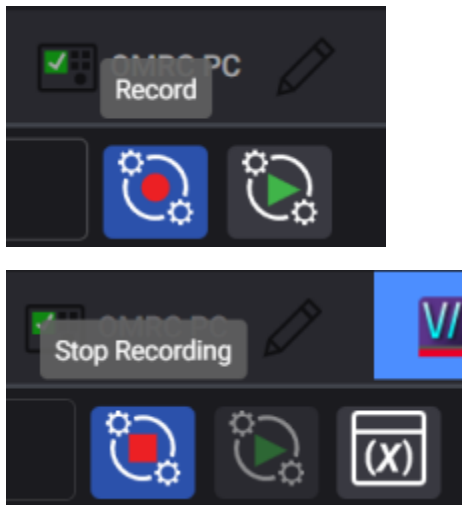
In RPA, Session refers to a period of interaction between a DUT and a user. During a Session, RPA records and emulates the actions of a human user, such as clicking buttons, entering data, or navigating pages, in order to complete a specific task.

This chapter provides guidance on:

- Step-by-Step Guide to Create a Session
- Step-by-Step Guide to Run a Session
- Step-by-Step Guide to Rename or Delete a Session

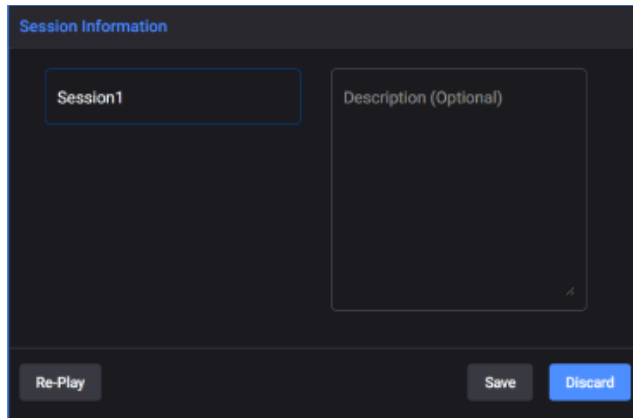
Step by step to Create a Session

1. Select a connection in which you want to create a Session.
2. Click the **Record** button to record a new Session.
3. RPA will record a period of interaction automatically. You can create a parameter during this time. To read more details of Parameterize , see [Parameterization](#).
4. Click the **Stop Recording** button to end the new Session.



The Record button and the Stop Recording button in a new Session

5. In the **Session Information** dialog box, enter a name for the Session in the **Name** field to identify the Session. The **Description** field is optional for you to add some descriptive text.

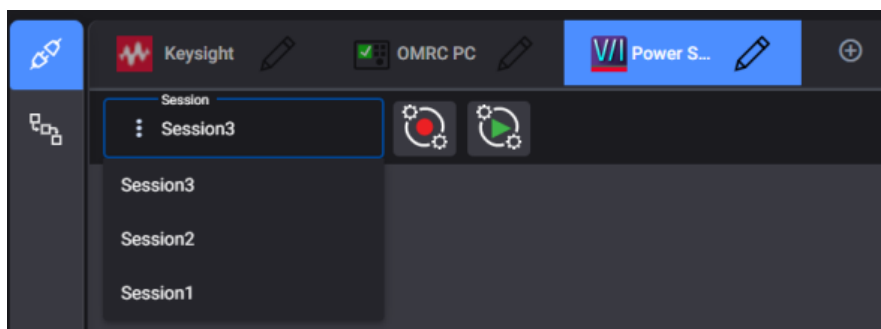


The Session Information dialog box in RPA

6. Click **Save** to save the session details and the new Session is added.

Step by step to Run a Session

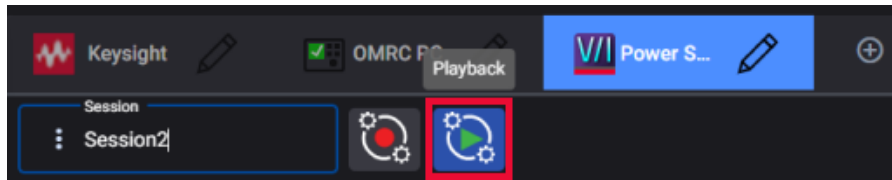
1. Click the Session name to see the Session drop-down list and select a target Session to run.



The Session drop-down list in RPA

Note: By default, the last saved Session is the active Session.

2. Click the Playback button to run the active Session.

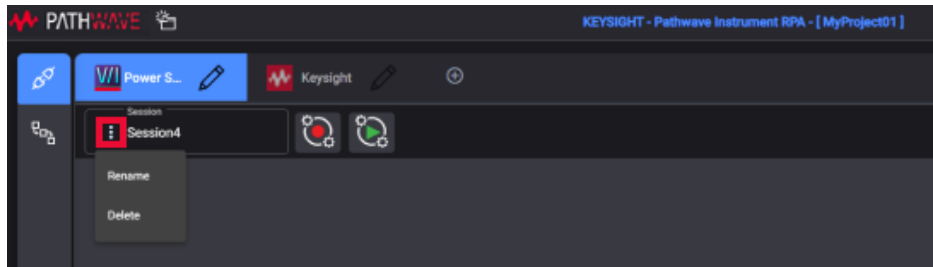


The EXE Connection dialog box in RPA

3. Then the active Session will run and end automatically. You can also press **ESC** to cancel Playback actively.

Step by step to Rename or Delete a Session

To **rename** or **delete** a Session, click the **three-dot** icon located at the left side of the Session name.



Rename or delete a Session in RPA

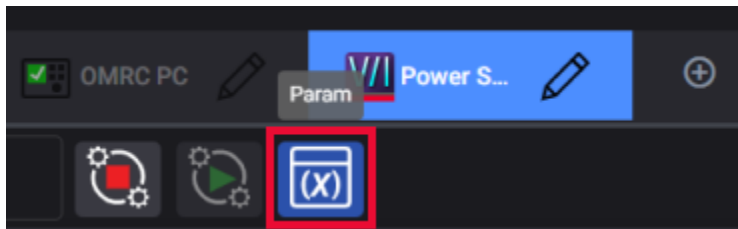
Parameterization

Parameterization in RPA (Robotic Process Automation) refers to the process of replacing values such as numbers, strings, dates, etc in the visual script with variables that can be passed as input at runtime.

You can use RPA to automate a wider range of tasks by parameterizing values, RPA can execute the same automation script with different inputs to perform similar operations on different data sets.

Step-by-step to Parameterization

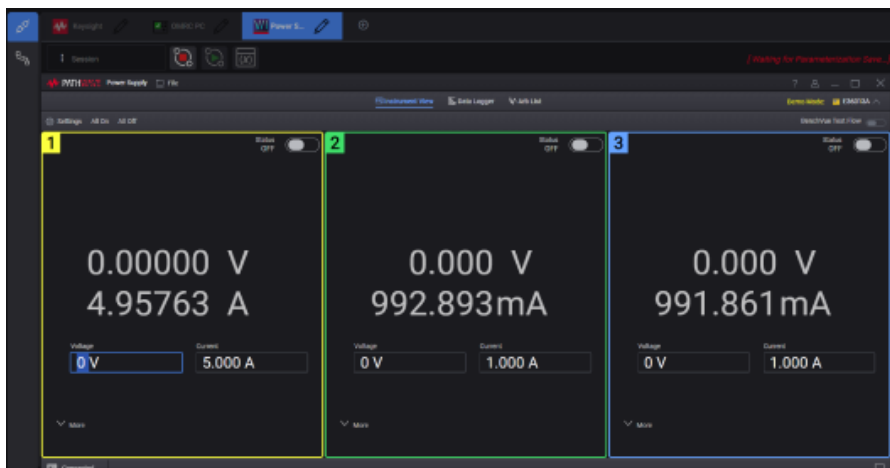
1. After you start to record a Session, Click **Parameterize** button to create or parameterize Workflow test variables. The saved parameter can be edited and re-configured in Visual Script Editor to simplify repetitive testing.



The Param button in a new Session

Note: For example, instead of manually changing an input voltage from 1V to 2V to 3V, etc. You can use Parameterization to create a loop, and RPA will change the voltage for you automatically.

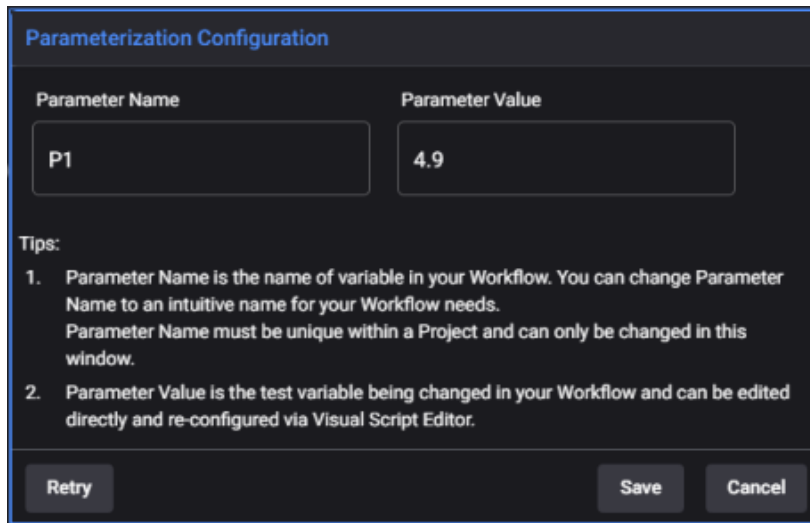
2. Then, **double-click** an input variable to be parameterized.



Example: Double-click the voltage value to Parameterize an input voltage

Note: You can only parameterize input variables that you can interactively alter.

3. In the **Parameterization Configuration** dialog box, enter a name for the parameter in the **Name** field to identify it. Enter the value for the parameter in the **Parameter Value** field.



The image shows a 'Parameterization Configuration' dialog box with a dark background. It has two input fields: 'Parameter Name' containing 'P1' and 'Parameter Value' containing '4.9'. Below these fields is a 'Tips' section with two numbered points. At the bottom are three buttons: 'Retry', 'Save', and 'Cancel'.

Parameter Name	Parameter Value
P1	4.9

Tips:

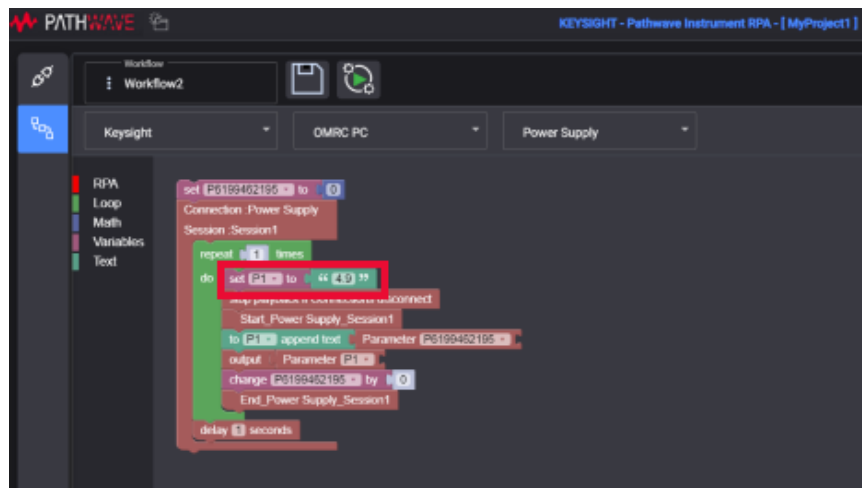
1. Parameter Name is the name of variable in your Workflow. You can change Parameter Name to an intuitive name for your Workflow needs. Parameter Name must be unique within a Project and can only be changed in this window.
2. Parameter Value is the test variable being changed in your Workflow and can be edited directly and re-configured via Visual Script Editor.

Buttons: Retry, Save, Cancel

The Parameterization Configuration dialog box in RPA

4. Click **Save** to save the parameter.

5. The saved parameter can be edited and re-configured in Visual Script Editor. To read more details, see [Visual Script Editor](#).



The parameter in Visual Script Editor

Workflow Automations

Workflows are at the heart of RPA, as they define the series of automated steps that software robots follow to perform routine and repetitive tasks.

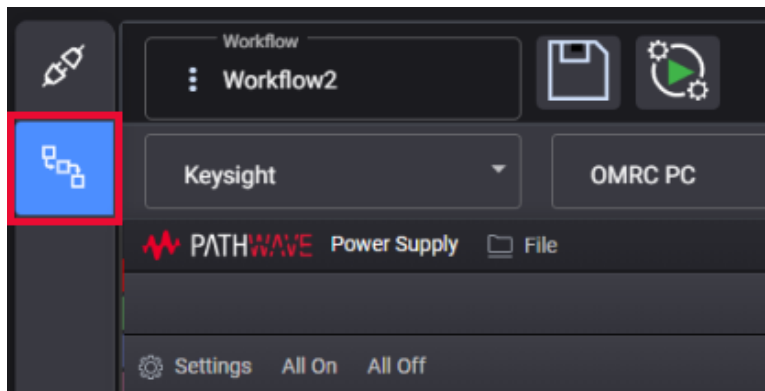
With the Visual Script Editor providing a visual representation of the workflows, you can add and edit the Sessions and parameters of your connections to optimize the automation process.

This chapter provides guidance on:

- Step-by-Step Guide to Create a Workflow
- Step-by-Step Guide to Running a Workflow
- Step-by-Step Guide to Add, Clear, Delete or Rename a Workflow

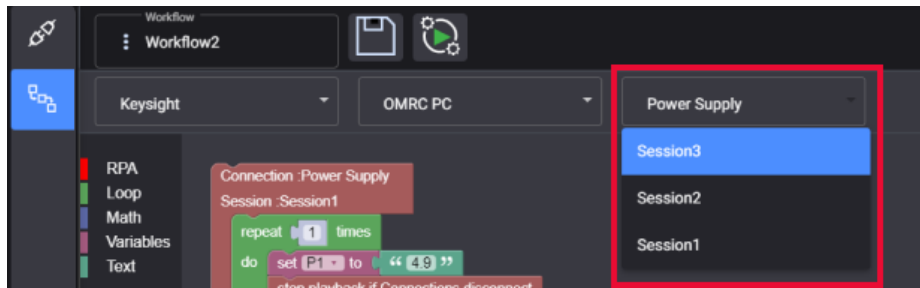
Step by step to Create a Workflow

1. Click on the **Workflow** icon to switch to Workflow.



The Workflow icon in RPA

2. Select desired Sessions to be augmented in Visual Script Editor by **clicking** on the **Connection** drop-down list.

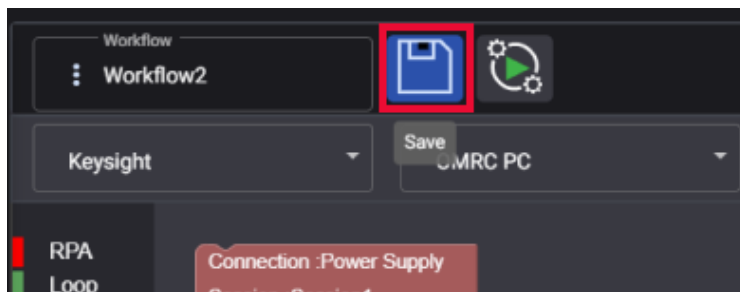


Selecting Sessions to be augmented in Workflow

Note: You can stitch and augment as many Sessions as needed to create the required Workflow.

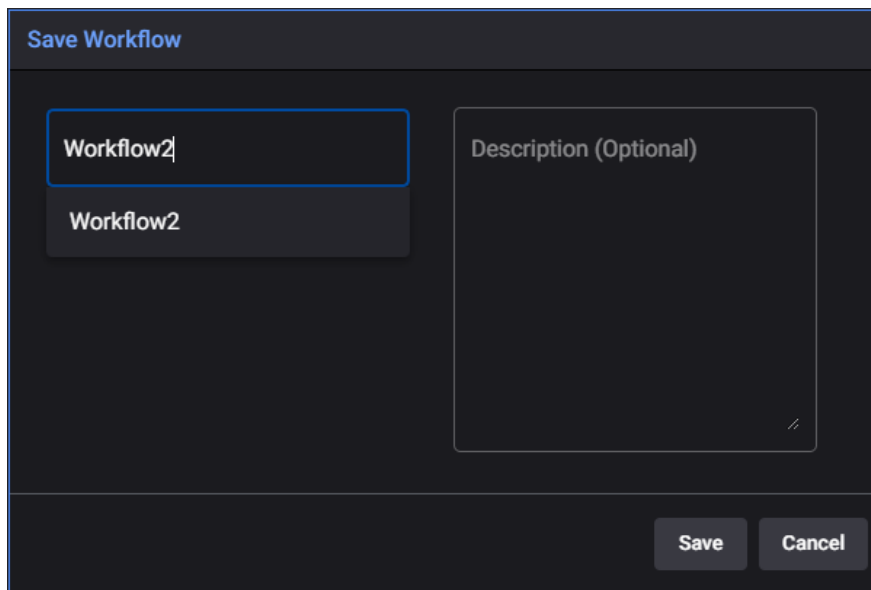
3. Visual Script Editor allows you to stitch Sessions, edit and add flow controls. To read more details about Visual Script Editor, see below [Visual Script Editor](#).

4. Click on the **Save Workflow** button to save the edited Workflow.



Save Workflow button in RPA

5. In the Save Workflow dialog box, enter a name for the Workflow in the **Name** field to identify the Session. The **Description** field is optional for you to add some descriptive text.

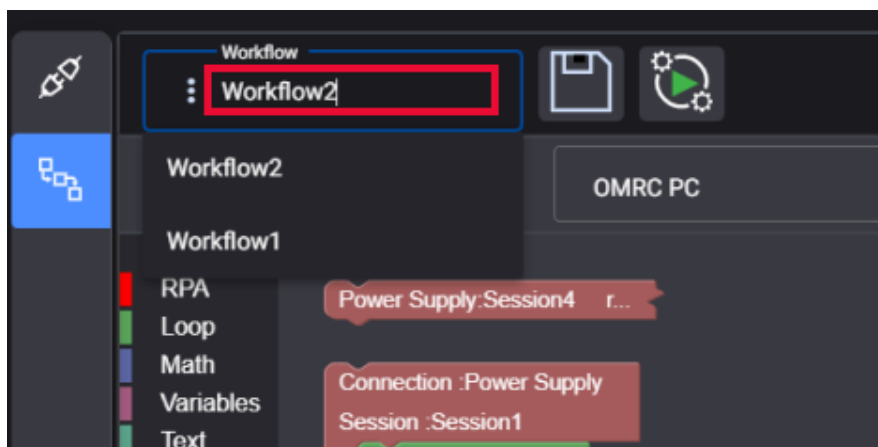


The Save Workflow dialog box in RPA

6. Click **Save** to save the Workflow details and the new Workflow is added.

Step by step to run a Workflow

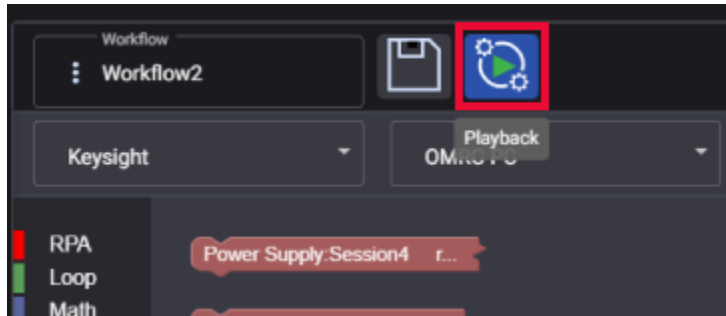
1. Click the Workflow name to see the **Workflow** drop-down list and select a target Workflow to run.



The Workflow drop-down list in RPA

Note: By default, the last saved Workflow is the active Workflow.

2. Click the **Playback** button to run the active Workflow.

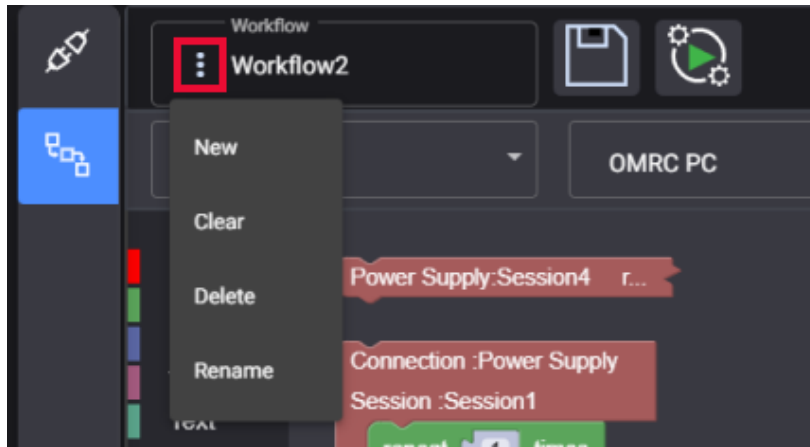


The Playback button for a workflow

3. Then the active Workflow will play and end automatically. You can also press **ESC** to cancel Playback actively.

Step by step to Add, Clear, Delete or Rename a Workflow

You can **Add** a new Workflow, **Clear** the content of a Workflow, **Delete** a Workflow, or **Rename** a Workflow by clicking the **three dots** icon.



The three dots icon to edit Workflow in RPA

Visual Script Editor

The Visual Script Editor is a key component of RPA that allows users to create, edit, and manage workflows for automating routine and repetitive tasks. This graphical interface makes it easy to define the series of automated steps that software robots must follow to complete a process.

Key functions of Visual Script Editor

- **Graphical Interface:** The Visual Script Editor provides a drag-and-drop interface that makes it easy to define the flow of a workflow. Users can add and arrange elements to create the desired process flow.
- **Session and Parameter Management:** The Visual Script Editor allows users to add and edit the sessions and parameters of their connections. This makes it easy to optimize the automation process and adapt workflows to changing business requirements.
- **Workflow Visualization:** The Visual Script Editor provides a visual representation of the Workflow, making it easy to understand how the

different tasks are connected and how the software robots will execute the process.

- **Error Handling:** The Visual Script Editor provides tools for handling exceptions and error conditions, ensuring the automation process runs smoothly with minimal interruptions.
- **Code-Free Environment:** The Visual Script Editor provides a code-free environment, making it easy for users to create and edit workflows without writing any code.

Five Key Elements of the graphic language



Five key elements of the graphic language in RPA

- **RPA:** The Visual Script Editor provides useful operations to perform any task, such as time arrangement, instrument control, connection control, parameter control, Input/Output Ports, decision points, random number, etc.
- **Loop:** Loops are used to automate repetitive tasks by executing a set of actions multiple times, until a specific condition is met.
- **Math**
 - **Basic Operations:** The Visual Script Editor supports basic mathematical operations, including addition, subtraction, multiplication, and division, allowing users to perform simple arithmetic calculations in a workflow.

- **Advanced Operations:** The Visual Script Editor also supports advanced mathematical operations, including trigonometric functions, and decision-making, allowing users to perform conditional logic based on the results of numerical calculations.
- **Variables:** The variables created during the Sessions can be accessed and used throughout the workflow. Mathematical operations can be performed on variables, allowing users to store, manipulate, and retrieve numerical data during the execution of a Workflow.
- **Text:** The Visual Script Editor supports basic text operations, and text operations can be performed on variables, allowing users to store, manipulate, and retrieve text data during the execution of a workflow.

RPA API Calling

With the PathWave Instrument RPA API, you can send requests and interact with your Sessions and Workflows. This enables you to automate your testing process even further and seamlessly integrate RPA into your own Workflows.

In this section, we will introduce how to use the API to run our RPA software product. The API documentation can be found at <http://localhost:3950/api-docs#/>. From this documentation, you can access various HTTP GET methods.

Localhost and Port 3950

Localhost is a hostname that refers to the current device used to access it. In the context of our RPA API, it implies that the API is running on the same machine as your RPA software. This allows you to access the API server directly from your device without having to rely on external servers or networks.

To access the API on localhost, simply open a web browser and enter the provided URL, such as <http://localhost:3950/api-docs#/>. If the API server is running correctly, you should see the API documentation page.

The number "3950" in the URL (<http://localhost:3950/api-docs#/>) represents the port number on which the API server is running.

In our case, the API server listens to port 3950 for incoming requests. This means that when you access the API through the provided URL, your RPA software knows to send its requests to port 3950.

Accessing the API

To access the API, simply enter the appropriate HTTP GET method in your browser or through a tool like Postman or curl. For example, to start a Session playback, use the following URL format:

URL Example:

<http://localhost:3950/api/v1/SessionPlayback?projectname=MyProject01&connectionname=PowerSu>

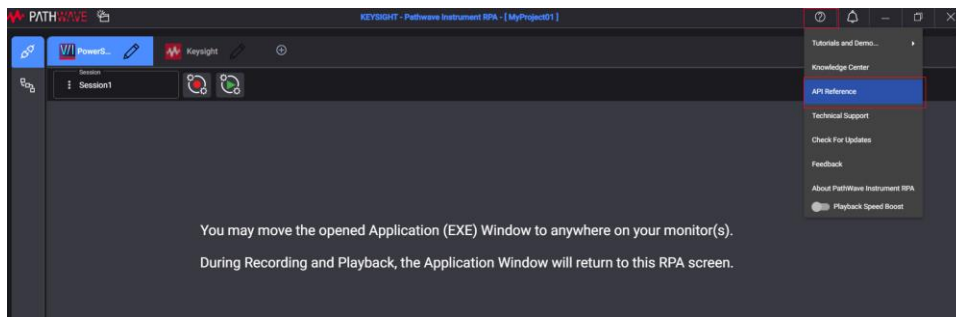
[pply&sessionname=Session1](#)

Replace "MyProject01", "PowerSupply", and "Session1" with the respective project name, connection name, and Session name you want to execute.

By accessing the API through the provided methods, you can control and monitor your RPA software remotely, integrate it with other software systems, or even create custom front-end interfaces for your users.

RPA reference documentation

To access the PathWave Instrument RPA API Reference documentation, you can directly go to url: "<http://localhost:3950/api-docs#/>". Another way to open RPA reference documentation is by clicking the **Information and Technical Support** icon located in the top right corner of the RPA interface. From there, select the **API Reference** option to open the API Calling documentation. This documentation provides detailed information on the API methods and parameters you can use to interact with your RPA Sessions and Workflows programmatically.



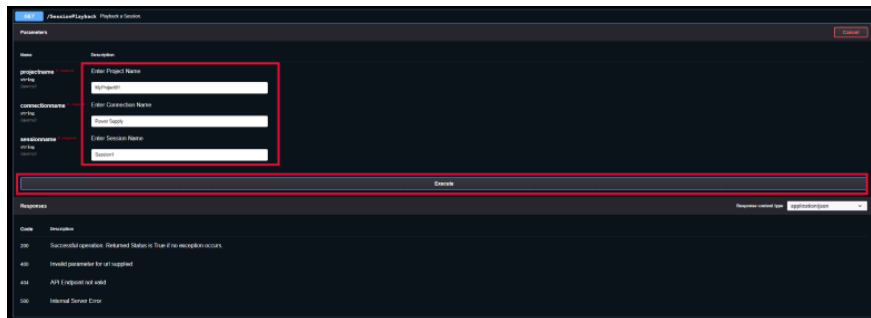
API Reference in RPA

To access the details of an API method, click the corresponding **GET** method in the API Reference documentation. From there, click **Try it out** button to view the necessary parameters required to complete the method. Some methods may not require parameters.



API Reference documentation in RPA

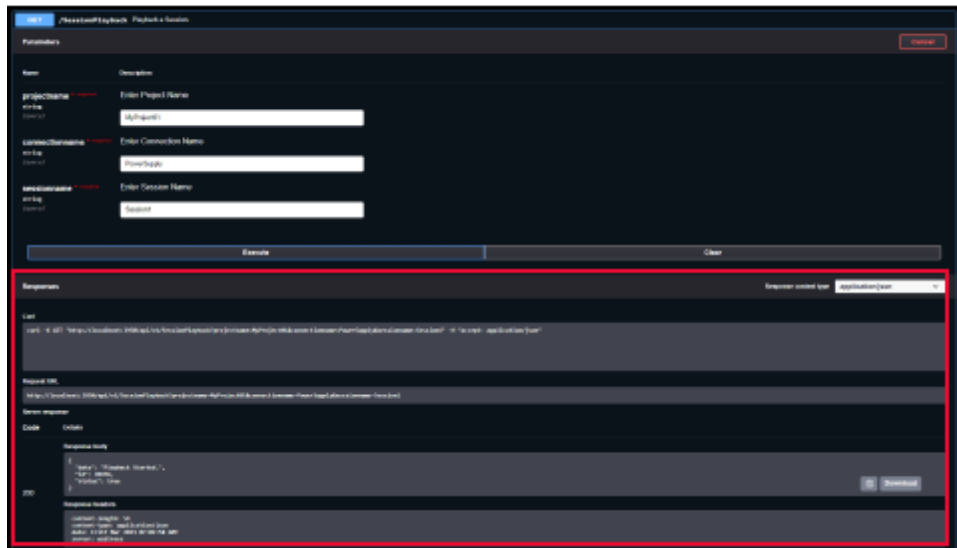
For example, to play back a Session, enter the required parameters (Project Name, Connection Name, Session Name) and then click **Execute**.



An example of executing the API method

After executing the API method, a property list is returned, including the following information:

- **Curl:** The command line syntax used to execute the API method.
- **Request URL:** The URL of the API endpoint used for the method.
- **Response Body:** The JSON object returned by the method. The response body contains the data returned by the method, including any errors or warnings.
- **Response Headers:** The HTTP headers included in the response. The response headers provide information about the response, such as the content type and length.



The response after executing the API method