

# Automation Anywhere integration

*For Automation Anywhere*



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## INTRODUCTION

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Robotic Process Automation (RPA) is an ever-expanding market which allows for backend office automation via intelligent robots. With the addition of a Automation Anywhere® Artificial Intelligence offering, the list of use cases for RPA will increase dramatically.

This document focuses on the design of the integration between Automation Anywhere and Expert.ai cognitive analytics. The rest of this document focuses on describing the design of such integration.

## INTEGRATION OVERVIEW

The basic design is to provide a BOT Package that encapsulate **document annotation**, the main cognitive analytics function of Expert.ai. This BOT Package can then be seen as an easy bridge to connect a client's processes to the Expert.ai Platform.

### Overview of the process

The BOT Package interacts with The Platform by using HTTP to send a REST call. The BOT Package action then processes the response to produce easy-to-use summary collections of info which are returned as action outputs. The raw, unprocessed, REST API call response is returned too.

Access to The Platform may require user credentials which are given to each party as part of their contract with the service provider. Data Flow would be as such:

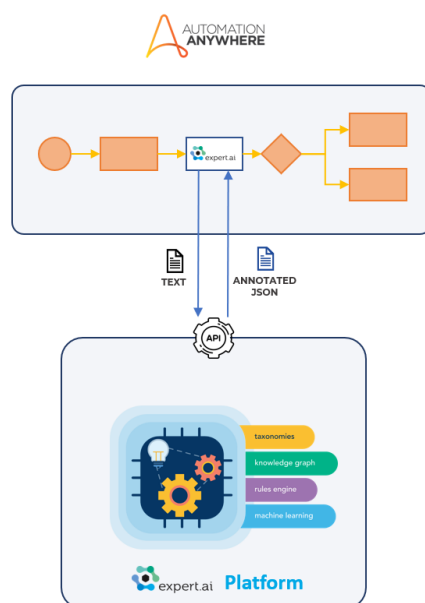


Figure 1 The integration component is deployed inside a BOT Package workflow

### Limitations

The following limitations should be understood before attempting to use this integration:

- Being an external service, there is always a possibility that the APIs will change. The BOT Package is provided as-is, without warranties and support is provided by Automation Anywhere on a best endeavors basis and are not subject to formal SLAs.

## PRE-REQUISITES AND ENVIRONMENT CONFIGURATION

This section outlines the pre-requisites that are required to use the integration.

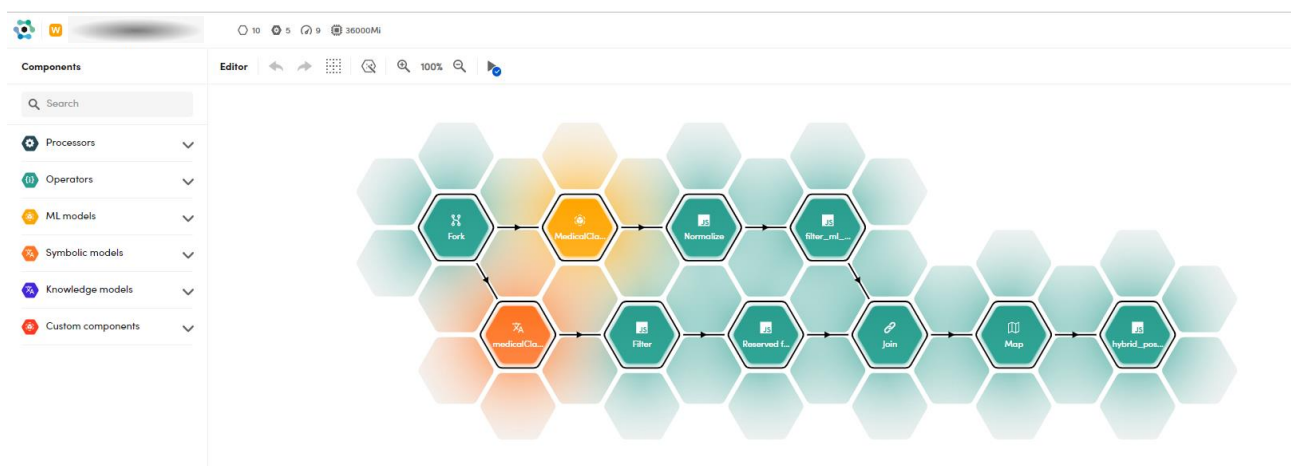
### Platform and NLFlow pre-requisites

To successfully implement Expert.ai integration, the following are required:

- Knowledge of Expert.ai annotation API concepts & features.
- Access to an instance of NLFlow annotation API which can be in the private cloud or offered as SaaS by Expert ai.
- AI needed **workflows** defined and properly configured on the NL Flow that will be used.

The only action of the BOT Package, **Analyze**, allows sending a plain text to the NL Flow to be annotated by the plan defined.

The output will be a JSON file containing an easy-to-use summary collection of info plus the complete and detailed result of the analysis.



*Figure 2 Example of a workflow defined inside the NL Flow*

The workflow should be published on the NL Flow and provide the URL to the Automation Anywhere component.

To interact with the workflow an API key is needed to have access to it. This pre-requisite is important because without the API key the component will not be able to connect to the endpoint offered from Expert ai.

**Settings**

General

**Information**

Workflow published on 09/09/2022

Workflow ID

Document analysis endpoint

Workflow status endpoint

1 API key

Cancel Save

Figure 3 Example of the public link to use the workflow

## USING EXPERT.AI PLATFORM BOT

To use the expert.ai BOT Package that allows using the analysis performed by a workflow available in an instance of expert.ai Platform, you have to create a project with the Automation Anywhere tool Control Room, creating a workflow (BOT). The configuration is explained in the following section.

In Figure 4 you can find a simple example of a workflow that can be created with the expert.ai BOT Package:

- Text file BOT. It is a standard BOT that loads a file from the filesystem and provides it as the output of the BOT
- expert.ai BOT. It receives as input the text, contacts the expert.ai Platform to perform the analysis, and provides it as output in JSON format.
- Message box. It is a standard BOT that receives as input a "string" and prints it in a message box.

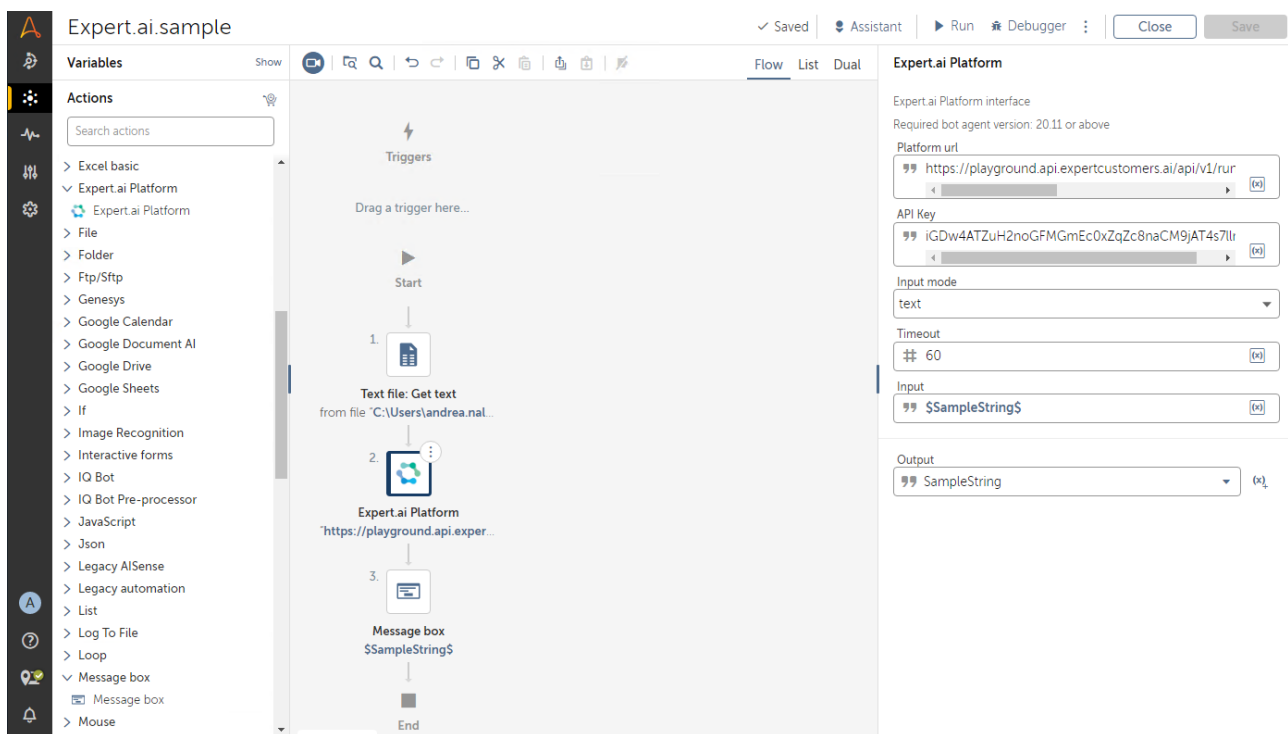


Figure 4 Example of the RPA workflow with the Expert.AI BOT Package designed with Control Room.

## Configuration

The Expert.AI BOT Package configuration:

Parameter	Type	Value
<b>Platform url</b>	String	The URL for the workflow to be called. <a href="https://[URL]/api/v1/workflow/[WORKFLOW_ID]/action/analyze">https://[URL]/api/v1/workflow/[WORKFLOW_ID]/action/analyze</a>
<b>API Key</b>	String	The authentication key to use to access the workflow in a secure way.
<b>Input mode</b>	Choice	Can be text or JSON.

<b>Timeout</b>	Number	Max number of seconds to wait for the analysis result from the expert.ai Platform. After this time the Package provides an error (default is 60 seconds).
<b>Input</b>	String	<p>Depending on the previous choice (Input mode):</p> <ul style="list-style-type: none"> <li>- The plain text to be analyzed by the linguistic package deployed on the workflow.</li> </ul> <p>Example: "I am writing this letter in regards with the insurance claim for my car. My car insurance policy number is 123456"</p> <ul style="list-style-type: none"> <li>- A JSON file containing a custom request: the structured information that can be interpreted and analyzed by the workflow available in the Platform.</li> </ul> <p>The input of the package will be read from the variable SampleString and interpreted based on the Input mode selected.</p>
<b>Output</b>	String	The output of the package will be in JSON format. It is stored in a variable SampleString as output of the package.

Example of an analysis output Json:

```
{
  "content": "###BEGIN_WO###\npress wont open after reheat\n###END_WO###\n###BEGIN_LONG_DESCR###\n\nvibis solenoid cap shorted\n###END_LONG_DESCR###\n",
  "language": "en",
  "version": "sensei: 4.9.1; disambiguator: 16.1-QNTF-2017",
  "topics": [
    {
      "label": "electricity",
      "id": 116,
      "score": 6.69,
      "winner": false
    },
    {
      "label": "technical terminology",
      "id": 389,
      "score": 5.69,
      "winner": false
    },
    {
      "label": "electrotechnics",
      "id": 118,
      "score": 4.5,
      "winner": false
    },
    {
      "label": "journalism",
      "id": 170,
      "score": 0.89,
      "winner": false
    },
    {
      "label": "clothing",
      "id": 0,
      "score": 0.89,
      "winner": false
    }
  ],
  "extractions": [
    {
      "namespace": "Michelin_DigitalAssistantPoV_Michelin_DigitalAssistantPoV",
      "template": "Solution",
      "fields": [
        {
          "name": "action",
          "value": "short",
          "positions": [
            {
              "start": 99,
              "end": 106
            }
          ]
        },
        {
          "name": "object",
          "value": "cap",
          "positions": [
            {
              "start": 95,
              "end": 98
            }
          ]
        }
      ]
    }
  ]
}
```

Figure 5 JSON example of the analysis made by a workflow

This result is the output that must be handled by the rest of RPA workflow.

## Deployment

The code developed to implement the connector with the expert.ai Platform (package BOT) is a Java class based on Automation Anywhere libraries available for integration. The deployment of the BOT can be done with the standard procedure using the Control Room tool and uploading the package as Java JAR file.