

Bot Name: Run Python Code

Bot Description:

This metabot allows you to run python scripts. You can either run the script in fire and forget manner or wait for script to be completed. You can also pass parameters and get a return value.

Bot Details:

Features:

You can select which python installation you want to run the script against. This gives you greater freedom when multiple versions of python are installed.

You have the option to continue the robot script while python script is running or it is possible to wait until the script is complete.

You can pass unlimited number of input parameters to python script as an array or string.

If there is a return value from the script it will be returned back to the robot.

Benefits:

Extremely useful on following categories.

1. To trigger machine learning or AI algorithms via python scripts. (i.e.: NLP)
2. For backend integrations with other applications
3. Network automation
4. To quickly handle large volumes of data and generate structured outcome for AA
5. Data Analysis

Key Use Cases:

Natural Language Processing:

Identify contents on unstructured documents such as e-mails and evaluate the contents on certain criteria.

Network Automation:

You can use python scripts for key rotation, configure your cloud infrastructure or perform network configurations such as creation of AMI (Amazon Machine Images)

Data Cleanup:

Python scripts can be used to quickly perform data clean-ups such as identifying duplicates and missing values. Also, they can be used to identify outliers within your data such as wrong values (text entered instead of a number or wrong date format) and values which seems to be way off compared to others.

Data Analysis:

Python can be used to analyse large volumes of data with minimum effort. With its ever growing set of libraries python can be an ideal companion of RPA projects. For example, python scripts can be used to classify your data set to identify risks associated with your banking transactions, to identify patterns within client sales. This data can feed back into AA robot to perform various activities.

On top of that python can generate graphs on your data which can be useful when it comes to generating ad-hoc reports using your robot.

Pre-Requisites

- Automation Anywhere client installed
- Python installed
- .net framework 4.5+

How to use the metabot

Metabot provides two methods with different parameters

Method Name: RunPythonCode

| Parameter Name | Type | Direction | Additional Info |
|--------------------|----------|-----------|--------------------------------------------------------------------------|
| vPythonPath | String | Input | Path of your python exe "C:/Python/python.exe" |
| vPythonPath | String | Input | Path of your script file "C:/Python/script.py" |
| vWaitForCompletion | String | Input | True: Wait until execution is finished. AnythingElse: Fire and Forget |
| vArgs | String[] | Input | Array of parameter values for your script |
| vReturnValue | String | Output | |

Method Name: RunPythonCodeWithStringArgs

| Parameter Name | Type | Direction | Additional Info |
|--------------------|--------|-----------|----------------------------------------------------------------------------|
| vPythonPath | String | Input | Path of your python exe "C:/Python/python.exe" |
| vPythonPath | String | Input | Path of your script file "C:/Python/script.py" |
| vWaitForCompletion | String | Input | True: Wait until execution is finished. AnythingElse: Fire and Forget |
| vArgs | String | Input | String of parameters separated by a space for your script "arg1 arg2 arg3" |
| vReturnValue | String | Output | |

Note: If an error occurs both functions will return a string with "ERROR: <error details>"

Examples

Refer the examples folder.

Examples/pythonScripts : contains set of test scripts

Examples/AA: Contains set of sample AA task to invoke metabot

Bot Deployment

Copy the metabot (Python.mbot) from package (AA Home\Automation Anywhere\My MetaBots) to your %AA Home%\Automation Anywhere\My MetaBots