Robot Framework
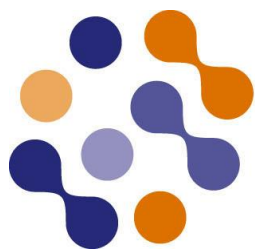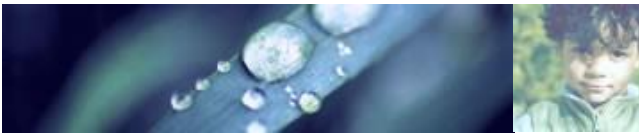
Install Guide

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2. Installation

This chapter goes through all installations step by step to prepare a fully functional automation environment.

2.1. Python

The first requirement is to have a working Python version. The test automation framework is developed using Python version 2.7.13. Any other versions are not guaranteed to work.

Step 1.

Navigate to https://www.python.org/downloads/release/python-2713/

Step 2.

Choose a preferred installation method and OS

Step 3.

Once the file is downloaded, execute the installer.

Step 4.

For Windows users, make sure the Path variable contains the folder of the installation location of Python.

a. Press the Windows icon in the bottom left corner of the screen.
b. Right click "Computer" and select "Properties"
c. Go to "Advanced system settings"
d. Press "Environment Variables"
e. Select the "Path" variable and double click it
f. Add the installation path of Python and the script path of Python (i.e. C:\Python27 and C:\Python27\Scripts) as separate variables using a semi-colon.

2.2. Robot Framework

The test automation framework is made using Robot Framework. To get the test automation framework up and running, Robot Framework 3.0.2 or higher is required.

Step 1.

Open a command line interface tool (i.e. cmd for Windows)

Step 2.

Ensure the Path variable is set correctly (see chapter 2.1)

In the command line interface tool, enter the following command: pip install Robotframework

2.3. Libraries

The test automation framework requires some external libraries to be fully functional. These can be downloaded using pip.

Step 1.

Open a command line interface tool (i.e. cmd for Windows)

Step 2.

In the command line interface tool, enter the following commands:

a. pip install requests
b. pip install DateTime
c. pip install robotframework-requests
d. pip install robotframework-jsonlibrary
e. pip install robotframework-seleniumlibrary

2.4. Development environment

To further develop test scripts or additional features an IDE is required. Fortunately for Robot Framework any text editor is suited to make these scripts. However, using a more suited environment will be beneficial to the project. To this end, Eurofins has selected 3 IDEs which work well to perform these tasks with. These IDEs are just as an example and others can be used. Eurofins' preferred choice of IDE is Visual Studio Code.

2.4.1. Visual Studio code

Visual Studio code can also be used for Robot Framework and is Eurofins' recommended IDE.

2.4.1.1. Installation

To set Visual Studio Code as the IDE the following steps must be performed:

Step 1.

Install Visual Studio Code; the installers can be found at: https://code.visualstudio.com/

Step 2.

Open Visual Studio Code and go to View / Command Palette…

Step 3.

To open the install manager type Extensions: Install Extensions and press Enter

Step 4.

Once the package manager is opened, new extensions can be installed. Enter Robot Framework Intellisense in the package manager
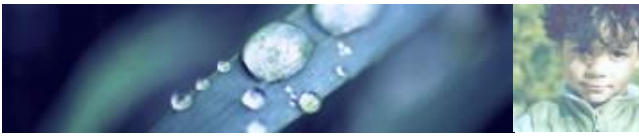
Step 5.

Repeat step 4 for the following packages:

a. robot framework language

2.4.1.2. Usage

To execute Robot Framework test cases with Visual Studio Code, go to View / Integrated Terminal. Use the terminal at the bottom of the screen to enter the Robot commands.

2.4.2. Sublime Text 3

Sublime Text can be modified to support Robot Framework.

2.4.2.1. Installation

To set Sublime Text as the IDE the following steps must be performed:

Step 1.

Install Sublime Text 3; the installers can be found at: https://www.sublimetext.com/3

Step 2.

Open Sublime Text 3 and go to View / Show Console

Step 3.

To install the package manager, enter the string found at the following page in the newly opened console: https://packagecontrol.io/installation#st3

Step 4.

Once the package manager is installed press ctrl+shift+p and enter Package Control: Install Package and press enter.

Step 5.

Enter Python 3 in the newly opened window and press enter

Step 6.

Repeat step 4 and 5 for the following packages:

a. Python Completions
b. SublimeREPL
c. Robot Framework Assistant
d. Base Encoder

2.4.2.2. Usage

To execute test cases, go to Tools / SublimeREPL and choose a command line interface tool (i.e. Shell for windows) from the dropdown. Use the newly opened tab as a command line interface to execute the framework. The exact commands to enter here will be discussed further in this document.
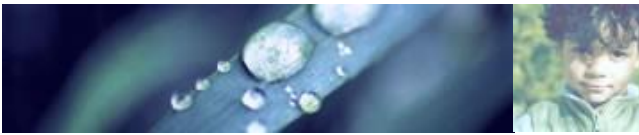
2.4.3. Notepad++

Alternatively, Notepad++ can be configured to support Robot Framework.

2.4.3.1. Installation

To set Notepad++ as the IDE the following steps must be performed:

Step 1.

Install Notepad++; the installers can be found at: https://notepad-plus-plus.org/download/v7.5.1.html

Step 2.

Open Notepad++ and go to Plugins / Plugin Manager / Show Plugin Manager

Step 3.

In the popup window, scroll down to 'NppExec' and press the Install button

Step 4.

A Robot Framework syntax highlighter for Notepad++ can be downloaded from the following url: https://github.com/vkosuri/npp-robot

Step 5.

To configure this highlighter in Notepad++, go to Language / Define Your Language / Import. Select the xml file downloaded in the previous step (lang-robot.xml)

2.4.3.2. Usage

To execute the test automation framework, go to Plugins / NppExec / Show Console Dialog. This will bring up a console (which can also be docked to the sides of the Notepad++ window) wherein the actual Windows command prompt can be started by entering 'cmd' and pressing the Enter button. When the command prompt is open, all commands can be run from within the Notepad++ console.