

Imatest Control API README

Download the SDK zip file that corresponds to your OS. Various tools, SDKs and Bindings are provided inside the zip file.

Setting the License Code:

When running the SDK, a license code may need to be specified. To set a license code set the environment variable `IC_API_LICENSECODE=<IMATEST_LICENSECODE>`

For example in a bash terminal, run **`export IC_API_LICENSECODE="123456...5432"`** before running a script or executable (in the same terminal).

PowerShell:

Unset

```
$env:IC_API_LICENSECODE="12345678987654321"
```

Bash:

Unset

```
export IC_API_LICENSECODE="12345678987654321"
```

CMD (Windows Terminal):

Unset

```
set IC_API_LICENSECODE=12345678987654321
```

MATLAB:

Unset

```
setenv("IC_API_LICENSECODE", "12345678987654321");
```

Additional Documentation:

https://www.imatest.com/wp-content/uploads/controlapi-docs/cpp_docs/index.html

https://www.imatest.com/wp-content/uploads/controlapi-docs/python_docs/index.html

Imatest Control API Python Setup Guide

Software Resources and Documentation

Set up visual studio code and python or use your preferred python environment.

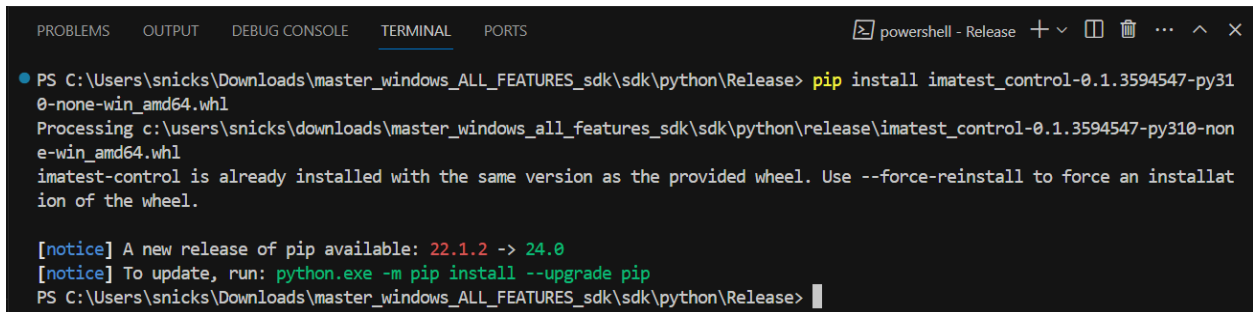
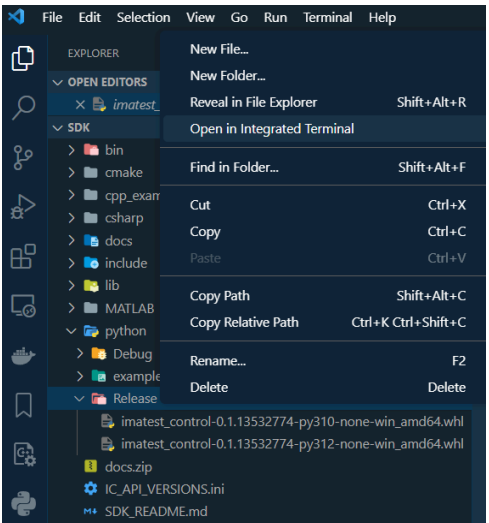
<https://code.visualstudio.com>

<https://www.python.org/downloads/>

After getting set up with your development environment, open the unzipped SDK folders linked below. Download the appropriate master control api zip file for your operating system: <https://www.imatest.com/controlAPI>

In Visual Studios, select File>Open Folder, and select the unzipped control api folder. In the Visual Studio explorer window, navigate to **SDK/Python/Releases**. Pick the .whl file that corresponds to the Python version on your system. To install the controlAPI library, open a terminal in visual studio by right clicking the “sdk/python/Releases” folder and selecting “Open in Integrated Terminal.” Use the pip install command in the terminal to install the imatest controlAPI package. For example:

```
pip install
python/Release/imatest_control-0.1.3594547-py310-none-win_amd64.whl
```



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell - Release + v [] ... ^ x
● PS C:\Users\snicks\Downloads\master_windows_ALL_FEATURES_sdk\sdk\python\Release> pip install imatest_control-0.1.3594547-py310-none-win_amd64.whl
Processing c:\Users\snicks\downloads\master_windows_all_features_sdk\sdk\python\release\imatest_control-0.1.3594547-py310-none-win_amd64.whl
imatest-control is already installed with the same version as the provided wheel. Use --force-reinstall to force an installation of the wheel.

[notice] A new release of pip available: 22.1.2 -> 24.0
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\snicks\Downloads\master_windows_ALL_FEATURES_sdk\sdk\python\Release> |
```

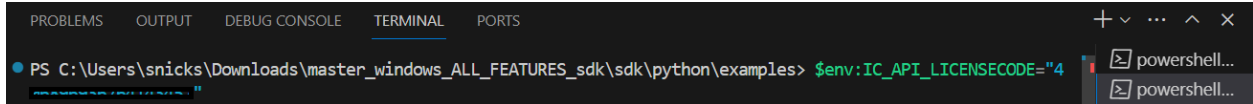
The documentation is linked below for the controlAPI wheel package:

https://www.imatest.com/wp-content/uploads/controlapi-docs/cpp_docs/index.html

https://www.imatest.com/wp-content/uploads/controlapi-docs/python_docs/index.html

Next right click the Examples folder under Python and select “Open in Integrated Terminal”. In the terminal set the license code set the environment variable

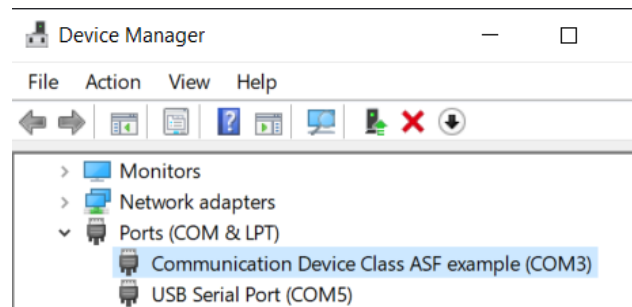
```
$env:IC_API_LICENSECODE="<IMATEST_LICENSECODE>"
```



Communication Ports

Some devices require specifying the COM port from within your script. With your hardware device powered on, plug in the USB from the control box to your computer. Determine the COM port using the directions below.

For Windows: Open the Device Manager to determine which COM Ports your computer is using (e.g. "COM3")



For Mac: Open the Terminal and send the following command to get a list of serial USB devices:

```
ls /dev/tty.*
```

The serial COM ports should look something like the following examples::

```
/dev/tty.usbserial-AC01ZOSX  
/dev/tty.usbmodem141101
```

Select the python script to run, for example the RoboClaw_Example.py script needs a COM port number specified on line 11 in this example file to the one determined. Save the file.

To initialize and run the script right click the "sdk/python/Examples" folder and select "Open in Integrated Terminal." Then enter the following command with the file you wish to run, in our example we will run RoboClaw_Example.py, and enter.

```
python filename.py
```

