

Installing Python and modules on FreeFlow Core

NOTE: This requires the [Advanced Automation License](#) to use the External Component.

FreeFlow Core can be enhanced via the External Component via scripting. One of the main scripting languages is Python.

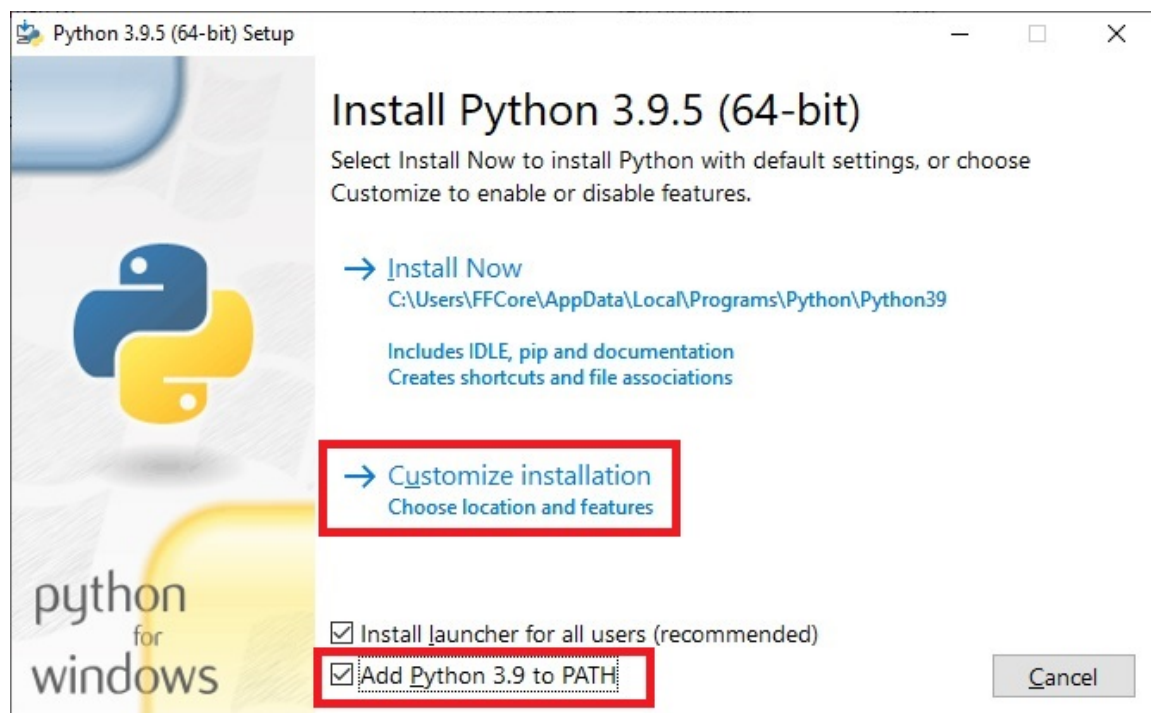
Download the newest version of Python here:

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

This documentation is to install Python 3.9.x You will see the version number as part of the typical installation path. As such any .bat files used in FFCore may need the path to Python updated inside it.

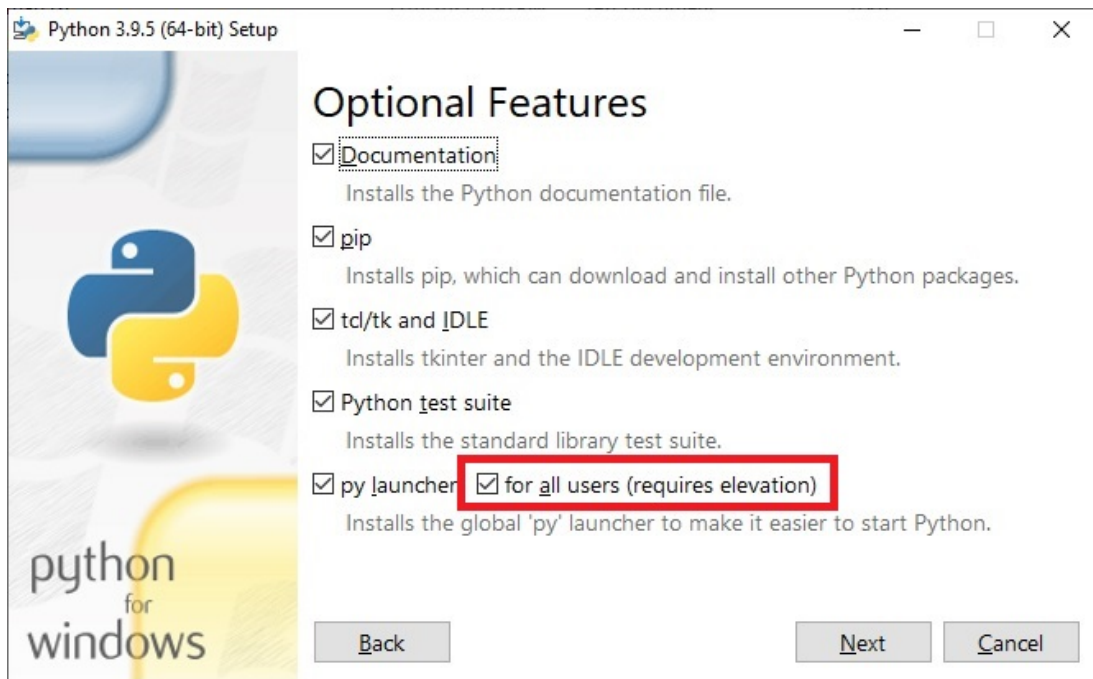
Install Python:

Select the checkbox at the bottom of the window to **'Add Python 3.9 to PATH'**



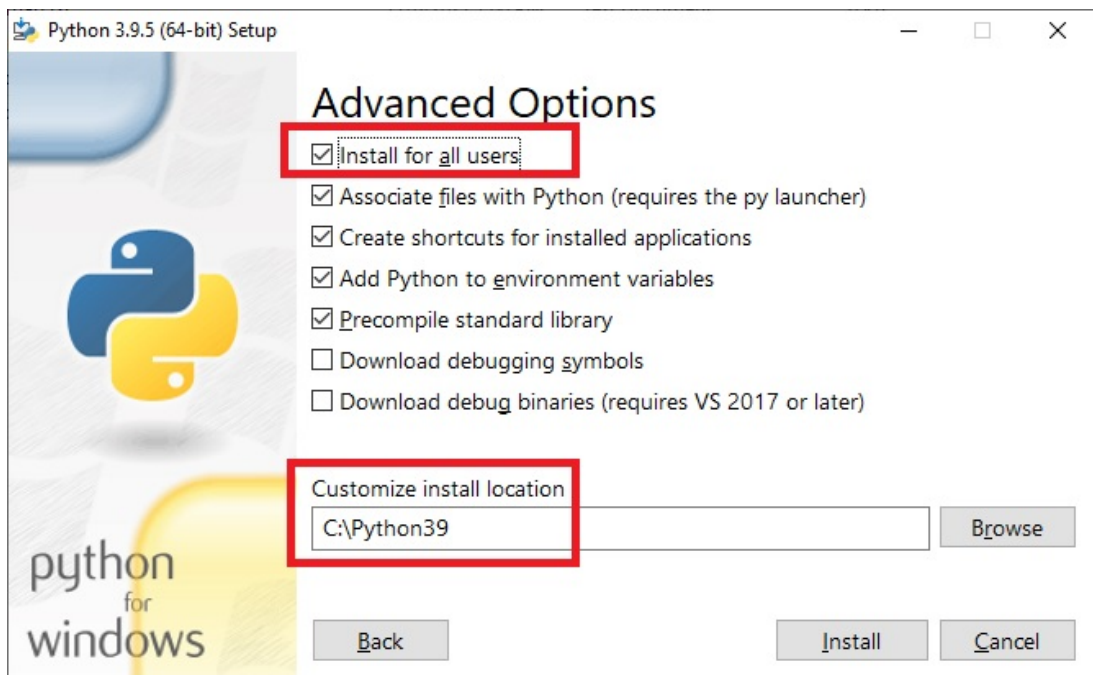
Select the option to **Customize Installation**.

Select the checkbox **'for all users (requires elevation)'**.



Select **Next**.

Select the checkbox **'Install for all users'**:



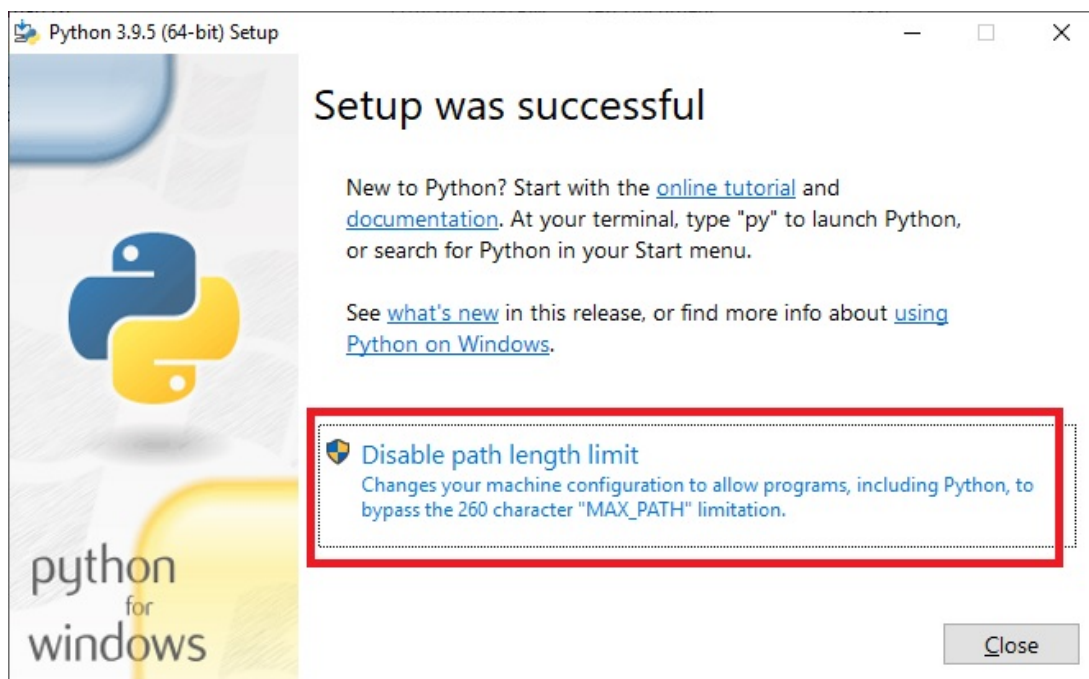
Then **CHANGE** the install location to a simple path like C:\Python39 as shown above.

Write this location down as you will need this path to update the .bat scripts that will call the Python scripts.

NOTE: If the installation path is left as the default, then it is a long path, and if the path is into 'Program Files' then the install will go in ok, but all the add on modules will typically FAIL during installation and get placed into the incorrect location and will not function when called inside FreeFlow Core. Use the recommended path shown above to avoid these issues.

Select **INSTALL**.

Select '**Disable path length limit**', then select **Close**.



Installation complete.

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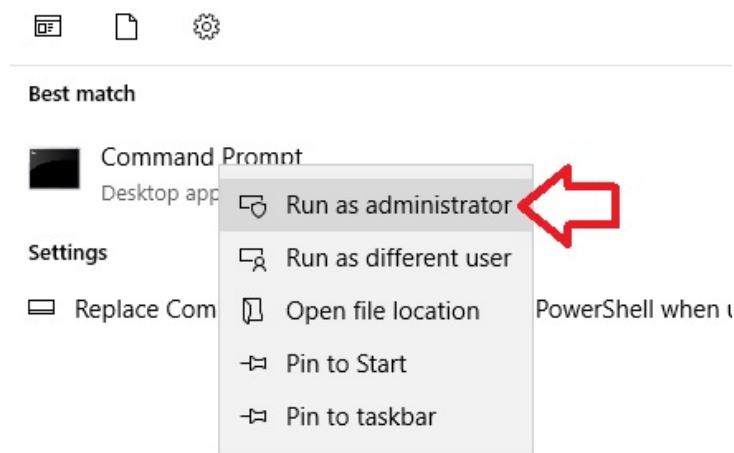
Upgrading PIP and installing modules

PIP is a component used in Python. When installing new modules, you will get warnings about new pip updates that are available.

Of course, you must install Python before you can upgrade pip.

After the installation of Python, click on the **'Start'** menu, then type **'Command Prompt'**. After you type a few characters it should appear at the top of the menu.

Right click on **'Command Prompt'** and select **'Run as Administrator'**:



Type the following to upgrade pip:

Python.exe -m pip install --upgrade pip

```
C:\Windows\system32>python.exe -m pip install --upgrade pip
Requirement already satisfied: pip in c:\python310\lib\site-packages (21.2.3)
Collecting pip
  Downloading pip-21.3.1-py3-none-any.whl (1.7 MB)
  | 1.7 MB 3.3 MB/s
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 21.2.3
    Uninstalling pip-21.2.3:
      Successfully uninstalled pip-21.2.3
  Successfully installed pip-21.3.1
C:\Windows\system32>
```

Installing Optional Modules

There are many optional modules that can be installed. The syntax will typically be the same for all modules.

We will use 2 examples that we use in Core: PyMuPDF and PyPDF2.

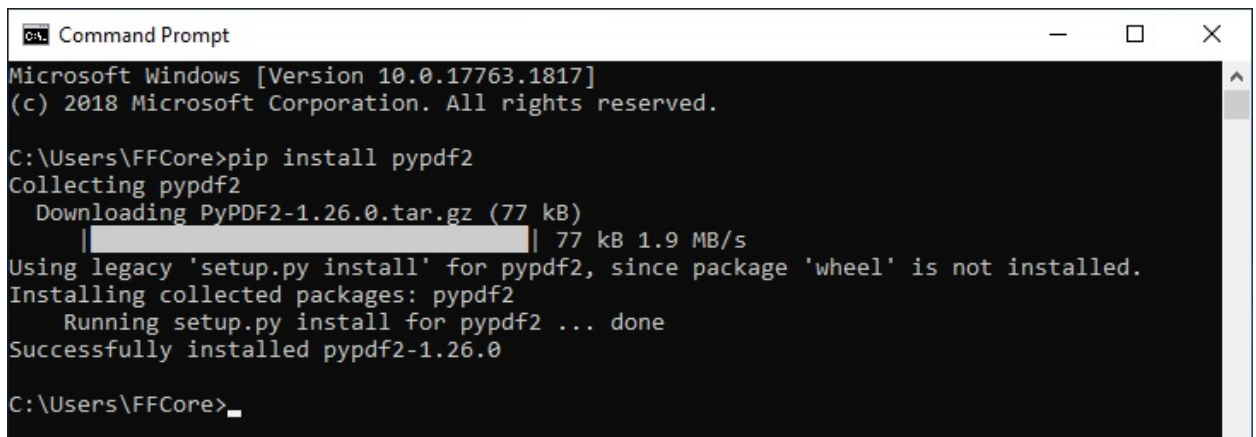
Open the Command Prompt as administrator – or run these just after upgrading pip.

For PyPDF2:

Type:

```
pip install pypdf2
```

Files will download and installation will occur (must have internet connection):



```
Command Prompt
Microsoft Windows [Version 10.0.17763.1817]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\FFCore>pip install pypdf2
Collecting pypdf2
  Downloading PyPDF2-1.26.0.tar.gz (77 kB)
    |-----| 77 kB 1.9 MB/s
Using legacy 'setup.py install' for pypdf2, since package 'wheel' is not installed.
Installing collected packages: pypdf2
  Running setup.py install for pypdf2 ... done
Successfully installed pypdf2-1.26.0

C:\Users\FFCore>
```

For PyMuPDF:

Type:

```
pip install pymupdf
```

Files will download and installation will occur (must have internet connection).

NOTE: If Python was installed in a location like 'Program Files' you are bound to see 'permissions' issues with the optional modules during installation.

Some modules will have pre-requisite applications that must be installed before they can be installed (like Visual Studio). Search for the specific directions for each module online.