

How to setup python environment on windows

1. Python Env Setup

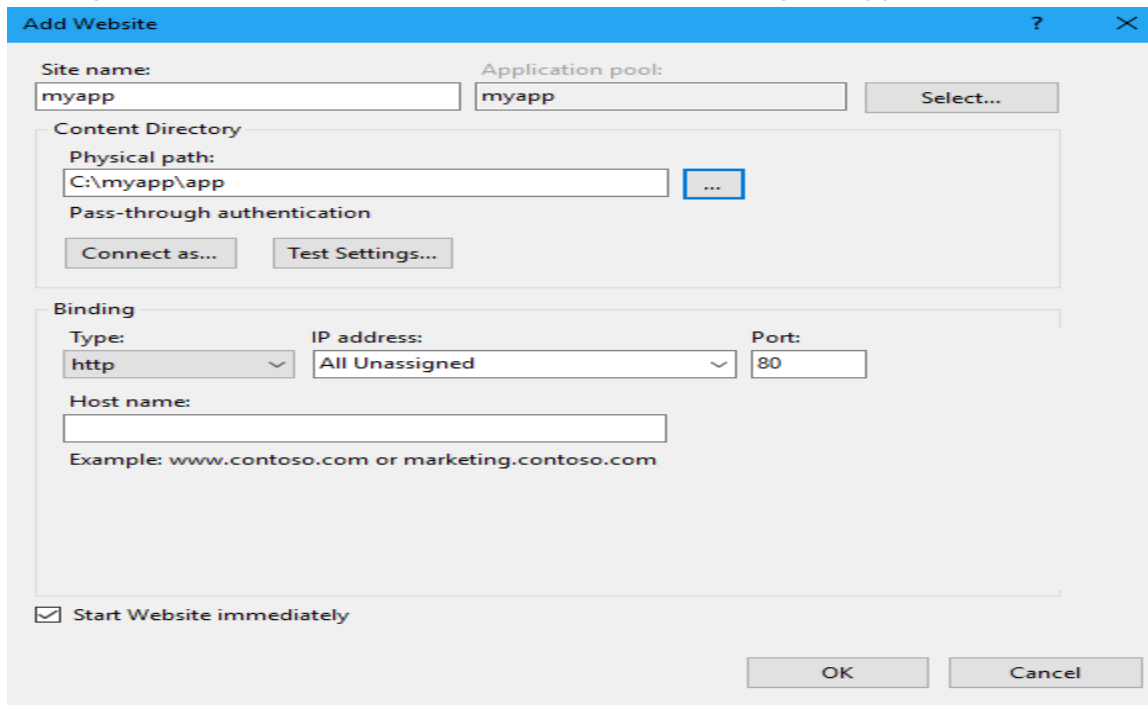
- 1.1. Install required python version.
- 1.2. Setup environment variable path. Ex: variable name = PYTHON_HOME.
variable value = C:\Anaconda\envs\python35;C:\Anaconda\envs\python35\Scripts
- 1.3. To create individual and independent virtual environment need to install virtualenv by running command "pip install virtualenv". To manage all individual environment running command "pip install virtualenvwrapper-win"
- 1.4. To create a virtual environment go to required directory and run command as administrator "python -m virtualenv myenv" and to active this run command ".\myenv\Scripts\activate"
- 1.5. Now we can install your required package by running pip command.
Ex: pip install numpy, pip install django==1.8.13
- 1.6. Installing a .whl Python package into a specific directory go to the required where python.exe is exists then run command like exists then run command like this ->
python -m pip install C:\Users\Taher\Downloads\scipy-0.19.1-cp36-cp36m-win_amd64.whl
-> python -m pip install nameOfPackage

we can use this virtual environment as existing environment when we use visual studio for python development.

2. Flask Env Setup

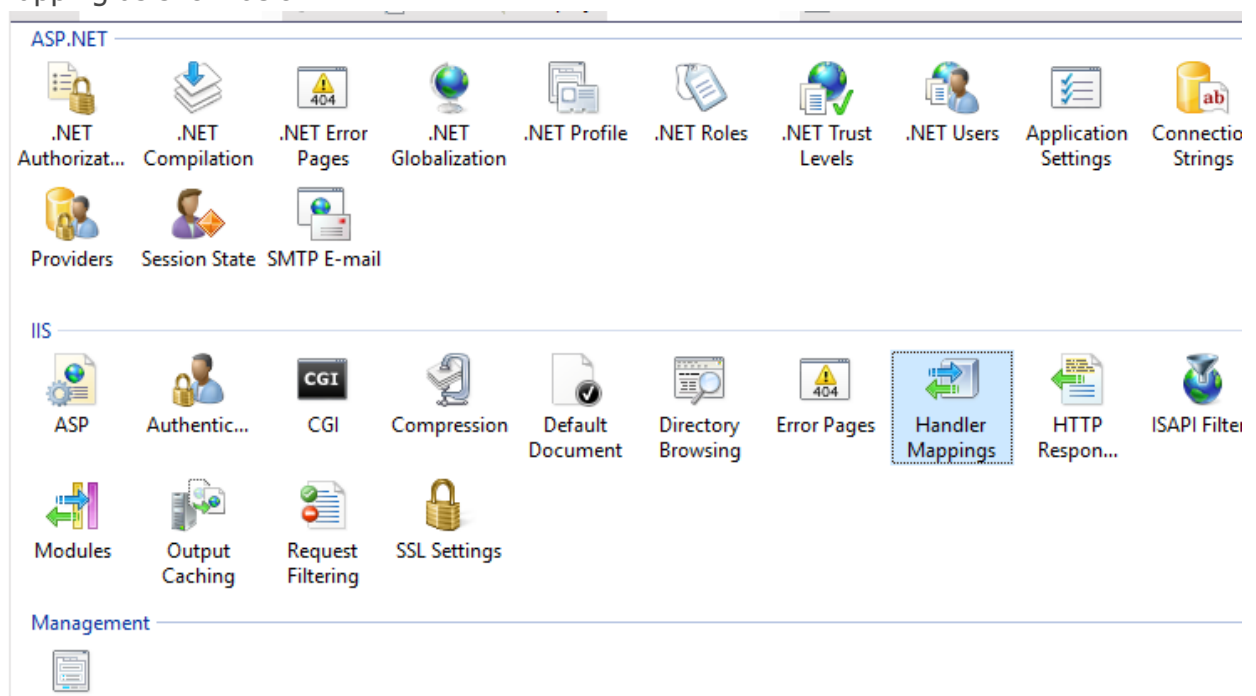
- 2.1. pip install flask
- 2.2. Create a python file app.py and add code file below
7. Install wfastcgi by running pip install wfastcgi from the command line.
And copy the wfastcgi.py file from \myenv\Lib\site-packages\wfastcgi folder to the root of your application.
3. 8. Now open the command line as admin and go to the root of your application and
4. Run following command one by one.
5. icaccls . /grant "NT AUTHORITY\IUSR:(OI)(CI)(RX)"
6. icaccls . /grant "Builtin\IIS_IUSRS:(OI)(CI)(RX)"

7. 9. Now open IIS and create a new website with the root at your application like this



The 'Add Website' dialog box in IIS Manager is shown. It has a blue title bar with a question mark and a close button. The 'Site name' field contains 'myapp'. The 'Application pool' dropdown is set to 'myapp', with a 'Select...' button to its right. Below this is the 'Content Directory' section, which includes a 'Physical path' field containing 'C:\myapp\app' and a browse button (...). There are also 'Pass-through authentication' and 'Connect as...' buttons. The 'Binding' section has a 'Type' dropdown set to 'http', an 'IP address' dropdown set to 'All Unassigned', and a 'Port' field set to '80'. There is an empty 'Host name' field with an example text 'Example: www.contoso.com or marketing.contoso.com'. At the bottom, the 'Start Website immediately' checkbox is checked. 'OK' and 'Cancel' buttons are at the bottom right.

8. 10. Now click on the name of your website in IIS on the left and click on Handle Mapping as show below



11. Click on Add Module Mapping on the right and complete the fields on the forms like so

The 'Edit Module Mapping' dialog box is shown with the following fields and options:

- Request path:** A text box containing an asterisk (*). Below it, an example is provided: "Example: *.bas, wsvc.axd".
- Module:** A dropdown menu with "FastCgiModule" selected.
- Executable (optional):** A text box containing "C:\Python34\python.exe|C:\Python34\wfastcgi.py" and a browse button (...).
- Name:** A text box containing "Python FCGI".
- Request Restrictions...** button.
- OK** and **Cancel** buttons at the bottom right.

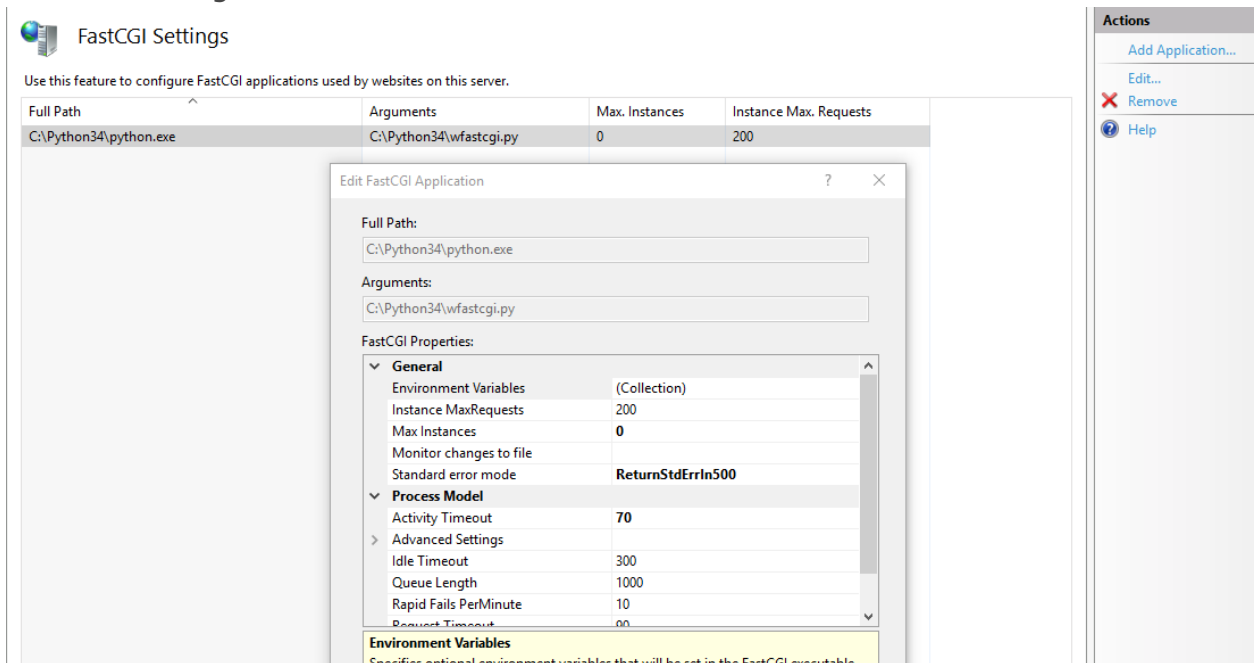
Before you click on OK, click on Request Restrictions and uncheck the box that says **Invoke handler only if request is mapped to:**

The 'Request Restrictions' dialog box is shown with the following tabs and options:

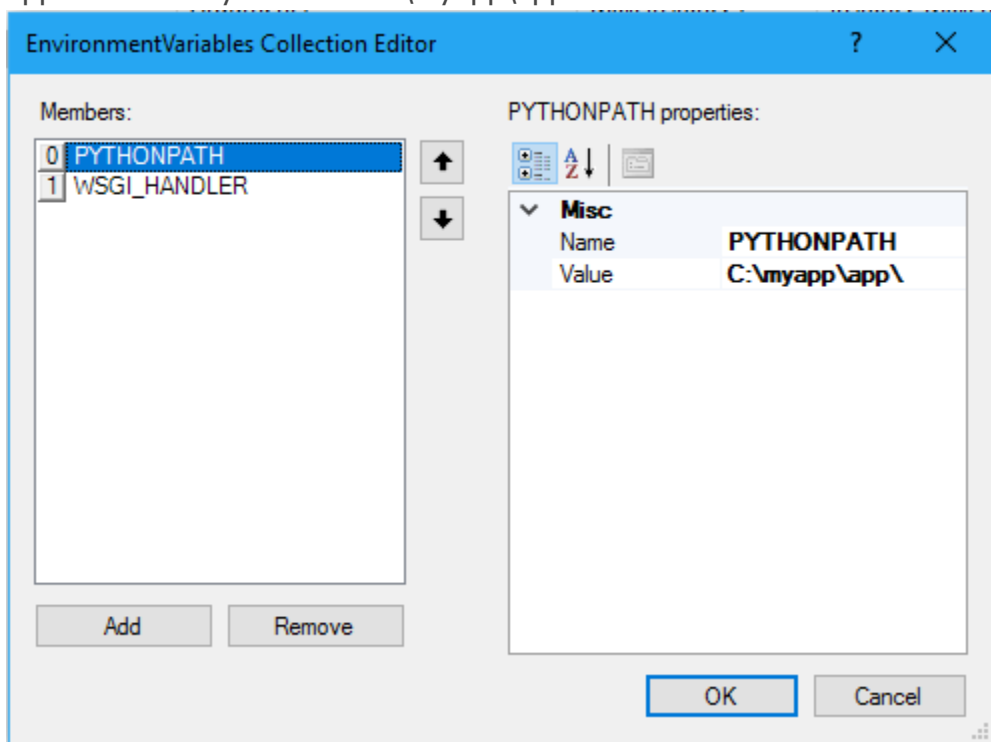
- Mapping** (selected), **Verbs**, and **Access** tabs.
- ☐ **Invoke handler only if request is mapped to:**
 - ☒ File
 - ☐ Folder
 - ☐ File or folder
- OK** and **Cancel** buttons at the bottom right.

Click on OK and OK again to save the changes

9. 12 Now click on the server name on the left and Go to the root server settings and click "FastCGI Settings":

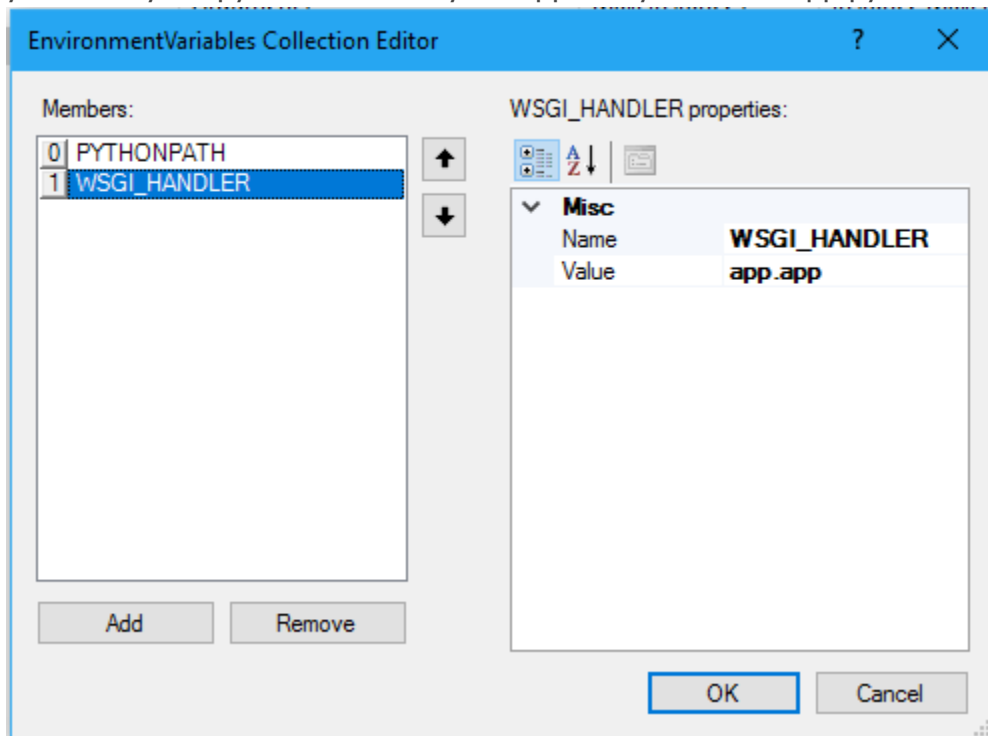


10. 12. . Set the PYTHONPATH like the image below where by the Value is the path to your application in my case it is C:\myapp\app



13. Set the WSGI_HANDLER which in this case is the name of your application file. If

yours is mysite.py the make it mysite.app in my case it is app.py so it will be app.app



11. Now go to your browser and type in <http://localhost> and you will see

12.