

Navigate to <https://httpd.apache.org/>

In the menu on the left, click the “Download!” link

Welcome! - The Apache HTTP X +

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# APACHE

## HTTP SERVER PROJECT

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### Essentials

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### The Number One HTTP Server On The Internet

The Apache HTTP Server Project is an effort to develop and maintain an open source HTTP server. The goal of this project is to provide a secure, efficient and extensible server that

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the birthday as a project in February 2015.

The Apache HTTP Server is a project of [The Apache Software Foundation](#).

### Apache httpd 2.4.41 Released

In the page that appears, click the link under “Stable Release – Latest Version” (at the time of writing this document this was 2.4.41)

LEARN MORE

## Downloading the Apache HTTP Server

Use the links below to download the Apache HTTP Server from one of our mirrors. You can also download from our main distribution directory. The signatures can be verified with our [KEYS](#) file.

Only current recommended releases are available on the main distribution site and its previous releases are available from the [archive download site](#).

Apache httpd for Microsoft Windows is available from [a number of third party vendors](#).

### Reports

Stable Release - Latest Version:

- [2.4.41](#) (released 2019-08-14)

[Information](#) If you are downloading the Win32 distribution, please read these [important notes](#).

Click “Files for Microsoft Windows”

## Apache HTTP Server 2.4.41 (httpd): 2.4.41 is the latest available version

The Apache HTTP Server Project is pleased to [announce](#) the release of version 2.4.41 of the Apache HTTP Server. This is our latest GA release of the new generation 2.4.x branch of Apache HTTPD and represents fifteen previous releases!

For details, see the [Official Announcement](#) and the [CHANGES\\_2.4](#) and [CHANGES\\_2.4.41](#) lists.

- Source: [httpd-2.4.41.tar.bz2](#) [ [PGP](#) ] [ [SHA256](#) ]
- Source: [httpd-2.4.41.tar.gz](#) [ [PGP](#) ] [ [SHA256](#) ]
- [Binaries](#)
- [Security and official patches](#)
- [Other files](#)
- [Files for Microsoft Windows](#)

Select “Apache Lounge”

### Downloading Apache for Windows

The Apache HTTP Server Project itself does not provide binary releases for Windows as a convenience, but it is not a release deliverable.

If you cannot compile the Apache HTTP Server yourself, you can use one of the following options:

Popular options for deploying Apache httpd, and, optionally, PHP are:

- [ApacheHaus](#)
- [Apache Lounge](#)
- [Bitnami WAMP Stack](#)
- [WampServer](#)
- [XAMPP](#)

At the Apache Lounge website, download the latest apache installer for 64-bit Windows. Note that the Apache webserver is named “httpd” (as in “http daemon”). A daemon is a computer program that runs as a background process. In this case the program serves the http network protocol.

Also download the required Visual C++ redistributable, which are some additional files required by Apache.

Be sure you installed latest 14.24.28127.4 Visual C++ Redistributable for Visual Studio 2015-2019. See [vc\\_redist\\_x64](#) or [vc\\_redist\\_x86](#) see [Redistributable](#)

#### Apache 2.4 binaries VS16

##### [Info & Changelog](#)

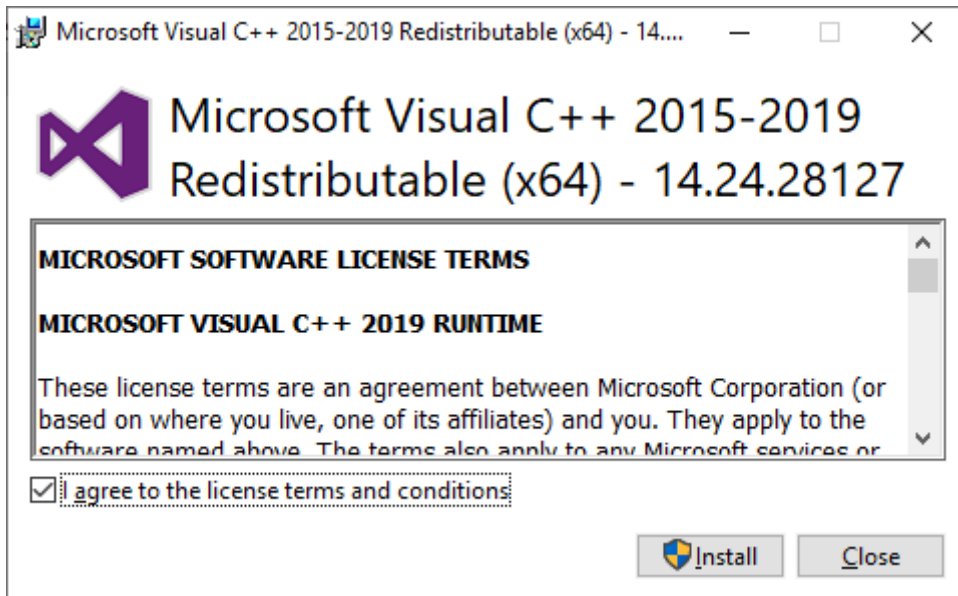
##### Apache 2.4.41 Win64

[httpd-2.4.41-win64-VS16.zip](#)

14 Aug '19 10.094k

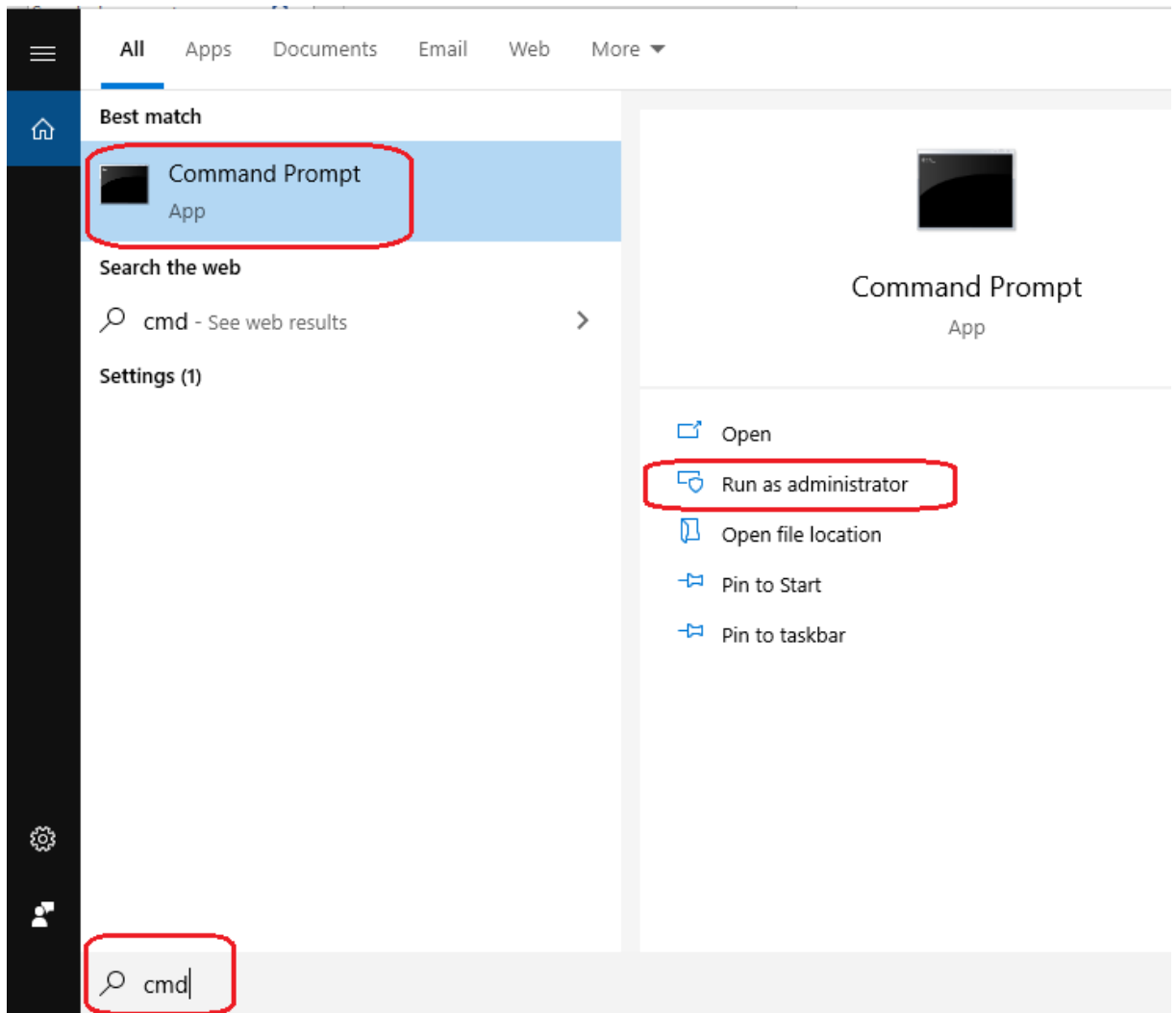
[PGP Signature](#) (Public [PGP key](#)), [SHA1-SHA512 Checksums](#)

After the downloads, install the software. Start with the redistributable. Agree to the terms and click Install. Also confirm the next warning that this program is allowed to make changes to the computer. You may need to restart the computer when done.



Now install apache. Installation consists of the following steps:

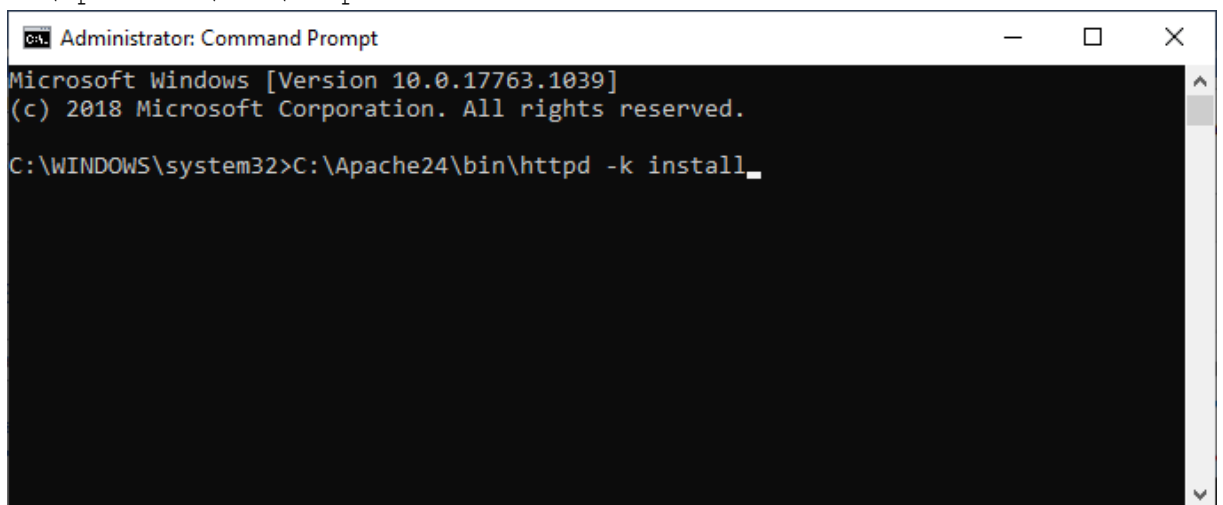
1. Unzip the downloaded zipfile httpd-2.4.41-win64-VS16.zip .
2. When unzipped, find the folder named "Apache24" and move it to the root of the C:\ drive (thus its destination will be C:\Apache24). Do a move (thus Cut/Paste)
3. The next step requires that you open an MS-DOS Command Prompt in Administrator mode:



Confirm allowing the command prompt making changes to the computer.

4. When the command prompt opens, type the following command, and press ENTER:

```
C:\Apache24\bin\httpd -k install
```

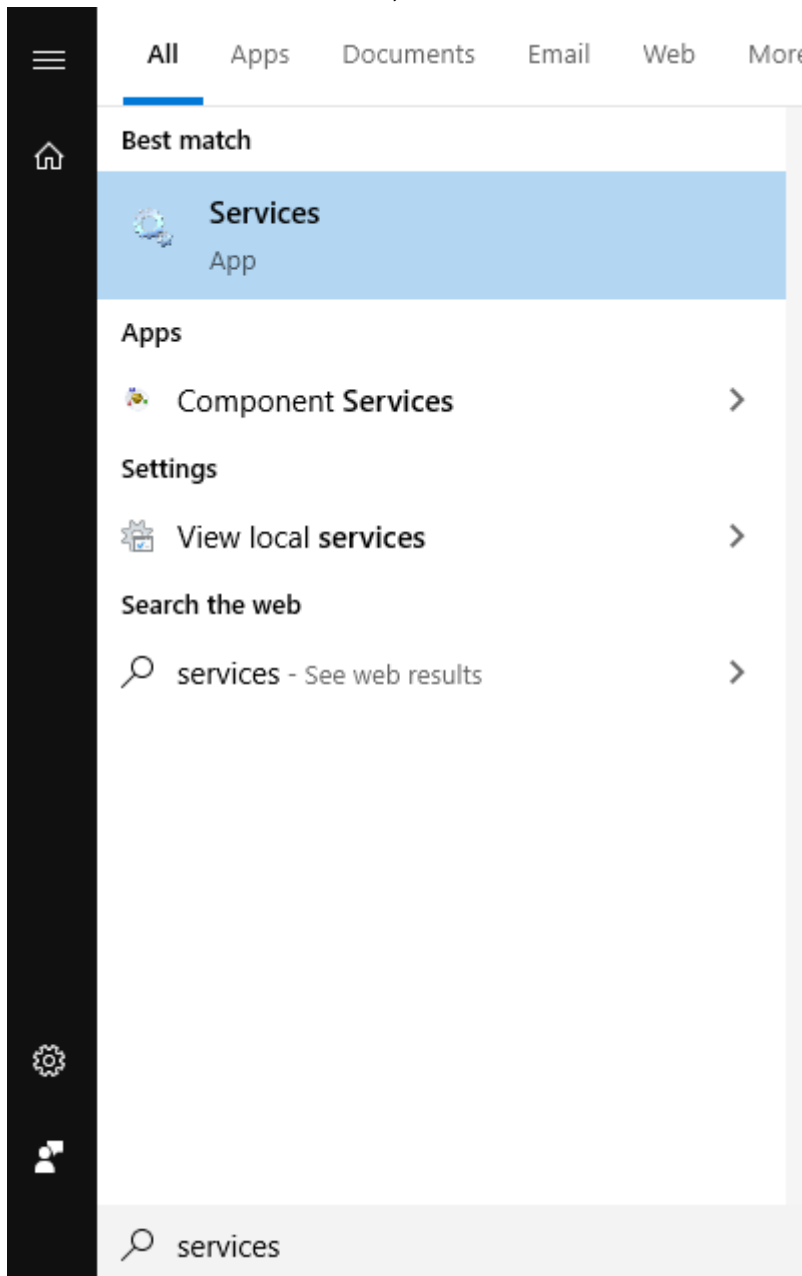


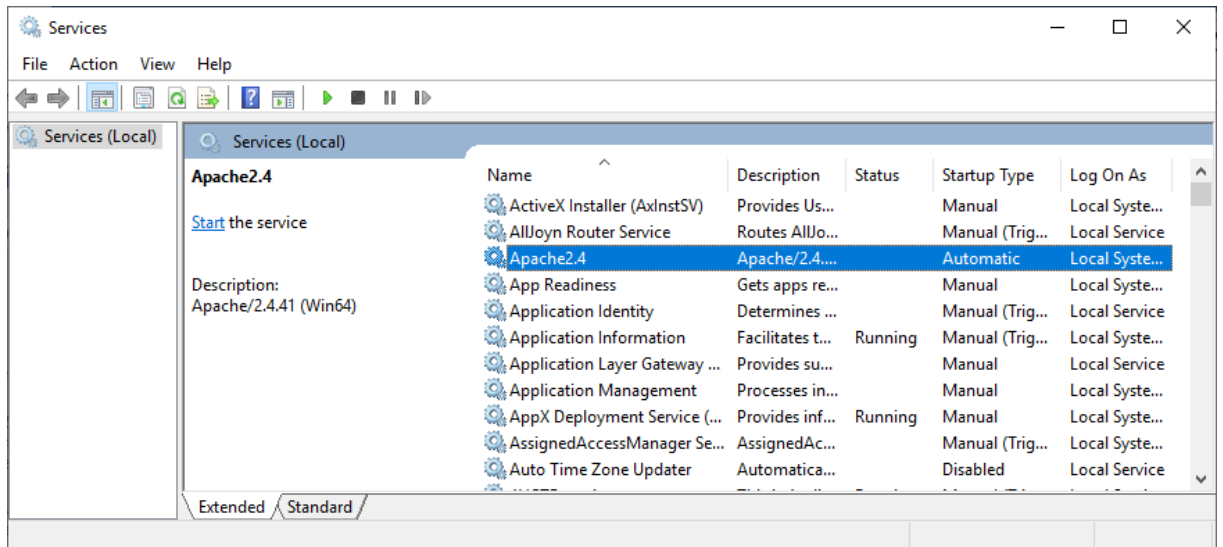
```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.1039]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>C:\Apache24\bin\httpd -k install
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
Testing httpd.conf...
Errors reported here must be corrected before the service can be started.

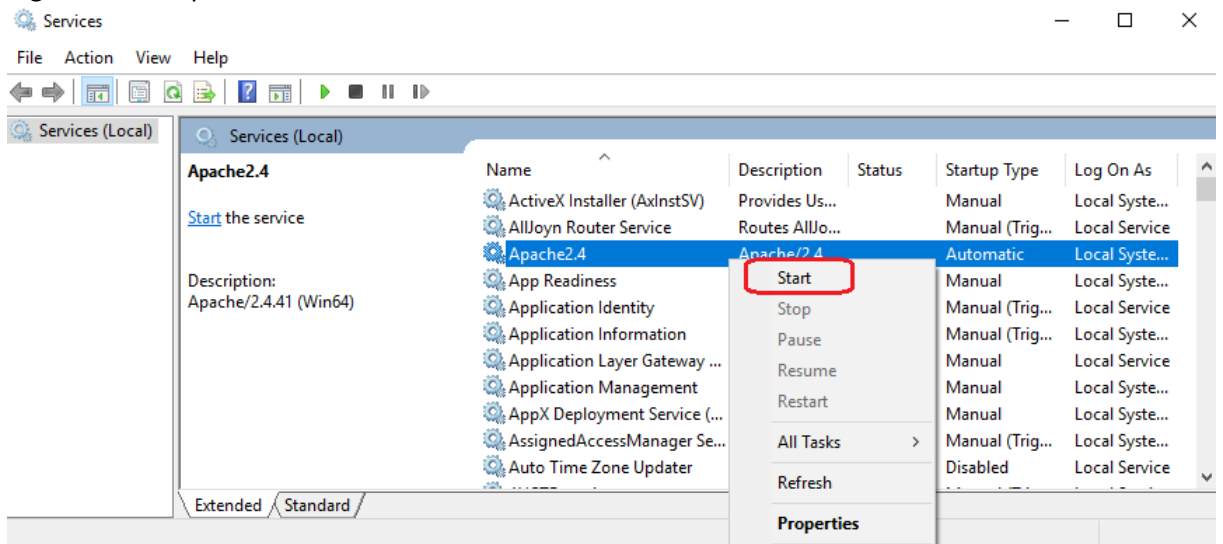
C:\WINDOWS\system32>_
```

5. Now start the Windows Services, and confirm that an item named Apache2.4 is in the list:

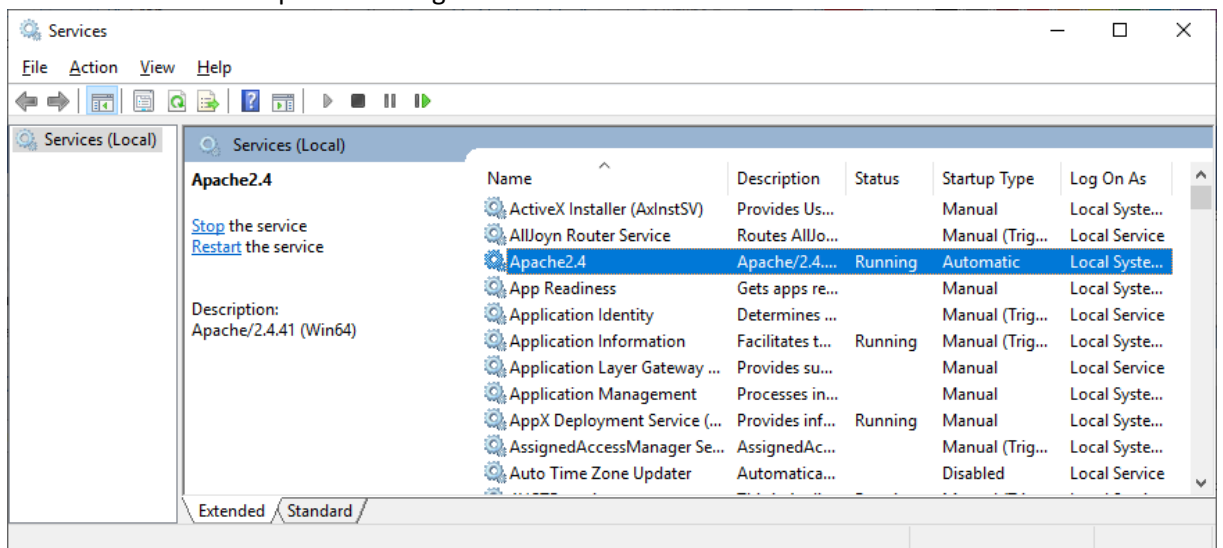




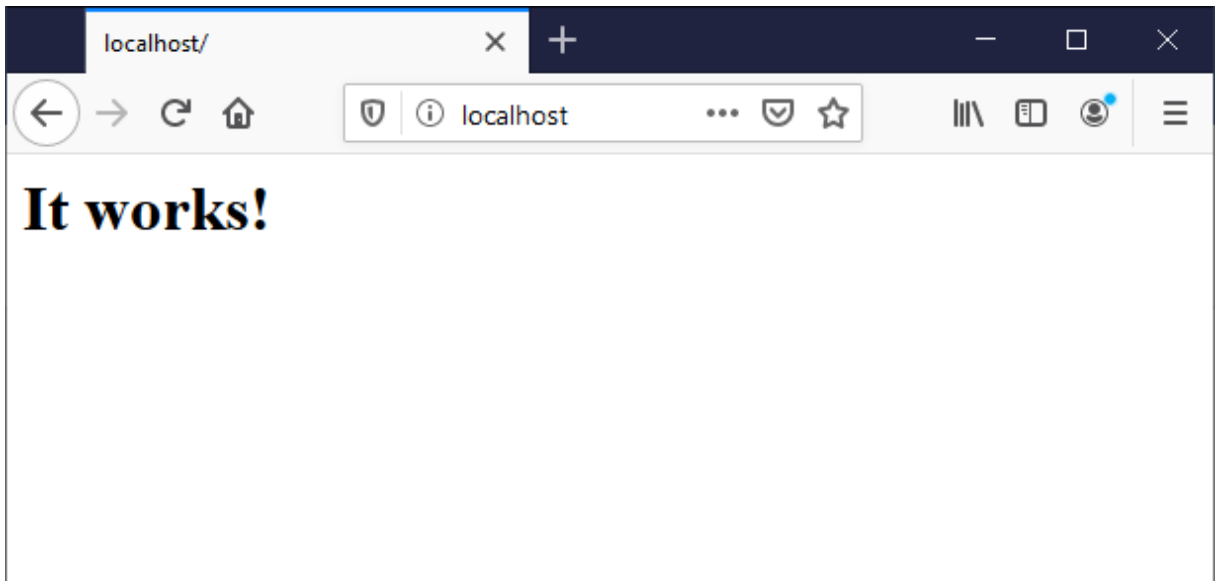
6. Right-click on Apache2.4 and select “Start”



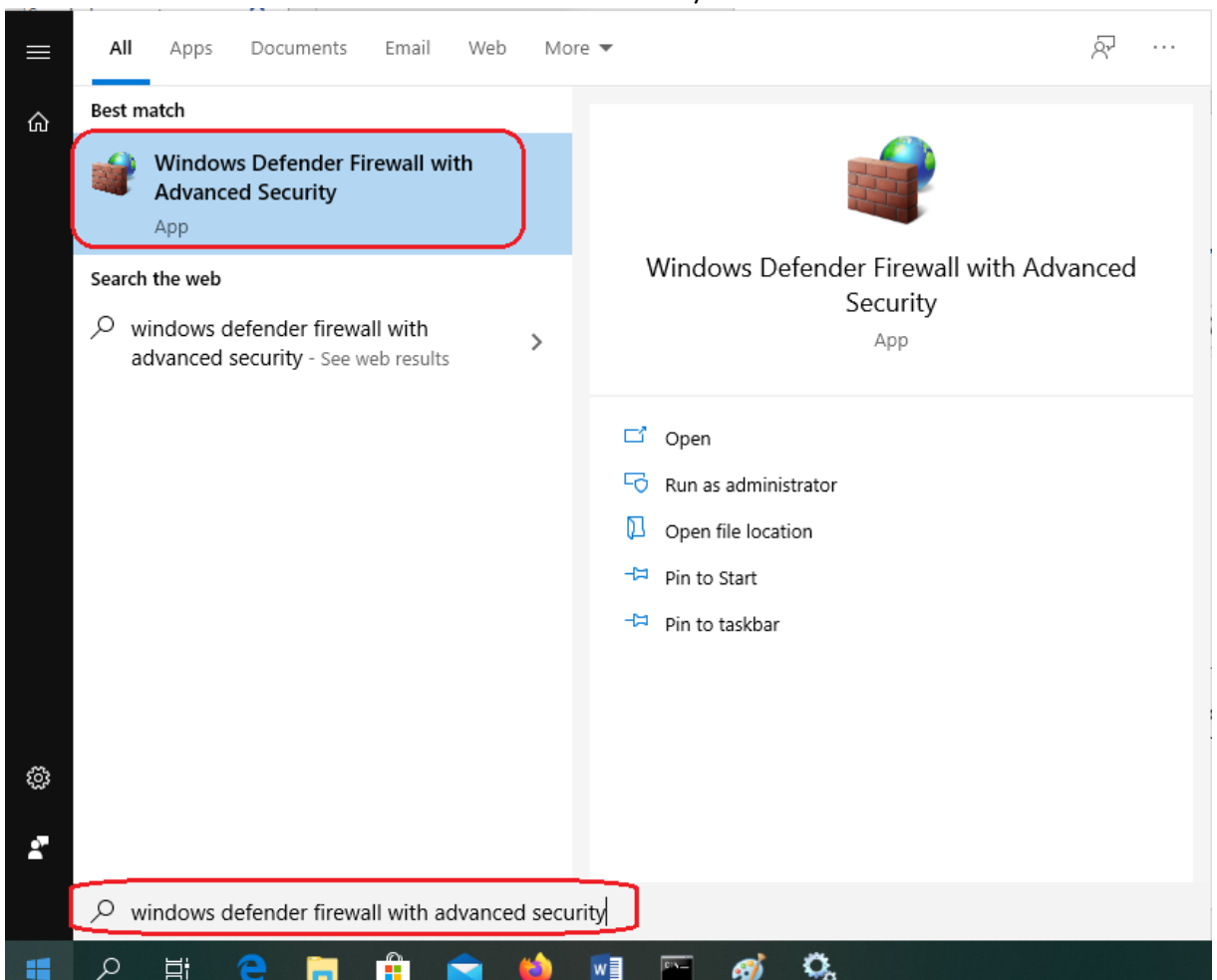
7. Now the service will report “Running”:



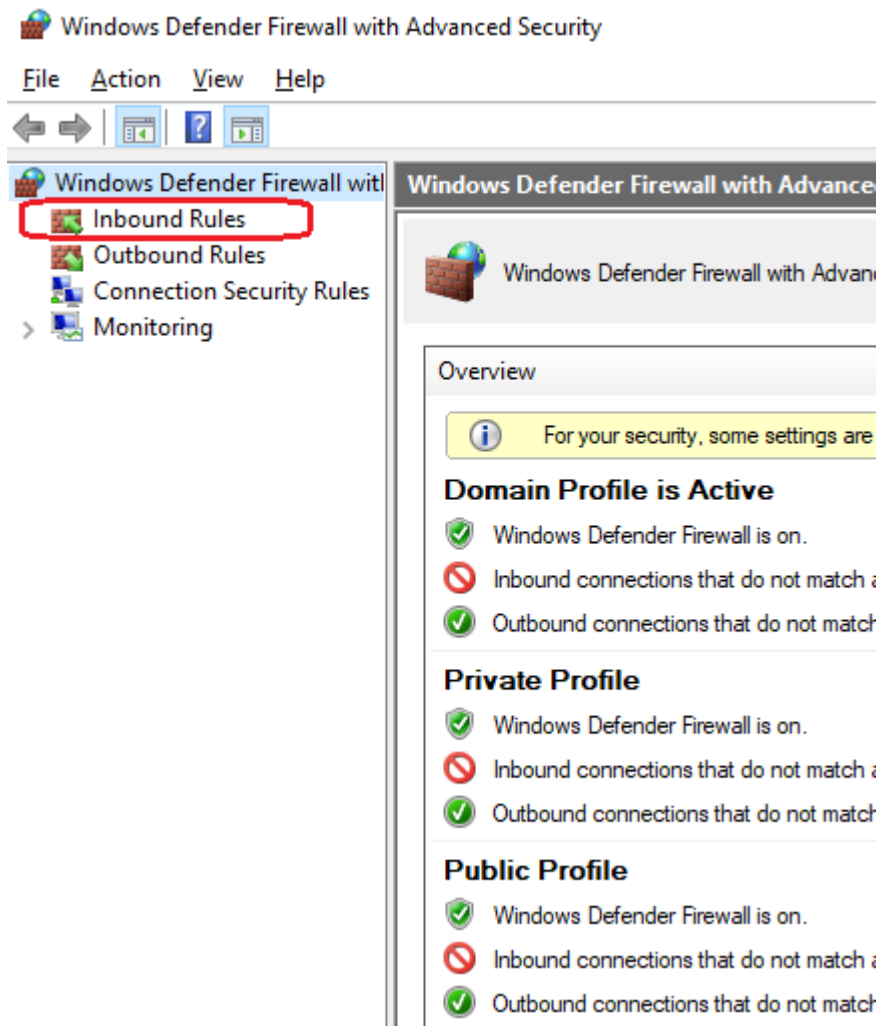
8. Confirm it is working, by opening your browser on this computer, and navigating to the website “localhost”. If you see the text “It works!”, then the webserver was installed successfully.



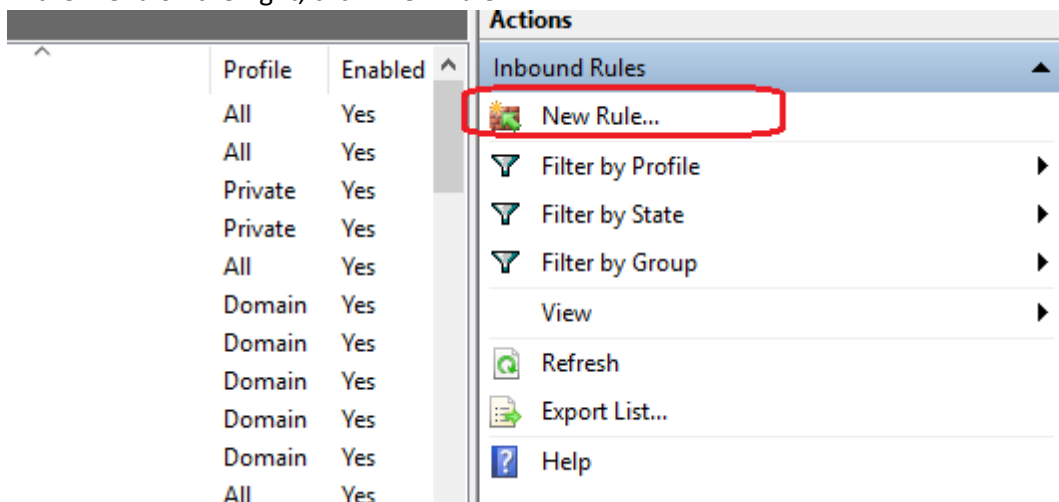
9. In order to allow connection from other computers, you must still enable allowing http network traffic through the Windows Firewall. To do this, find and start the application named "windows defender firewall with advanced security"



10. In the menu on the left, click "Inbound Rules"



11. In the menu on the right, click “New Rule...”



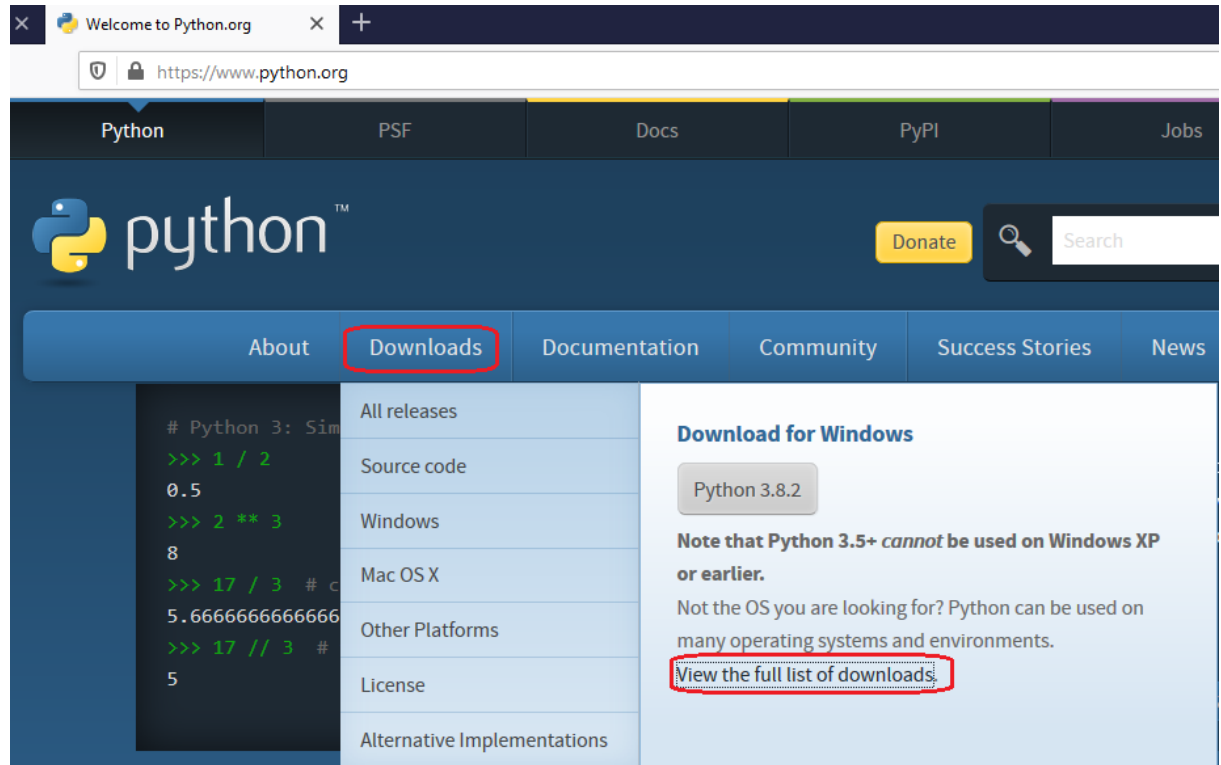
12. Go through the “New Inbound Rule Wizard”, and make the following selection: Port, TCP, 80, Allow the connection, Domain, Private, Public, give the name “Apache” and Finish.

13. After this rule is added, connection to the webserver of this computer will also be possible from other computers. Just use any other computer, and type the IP address of this computer to confirm that the page “It works!” also appears.

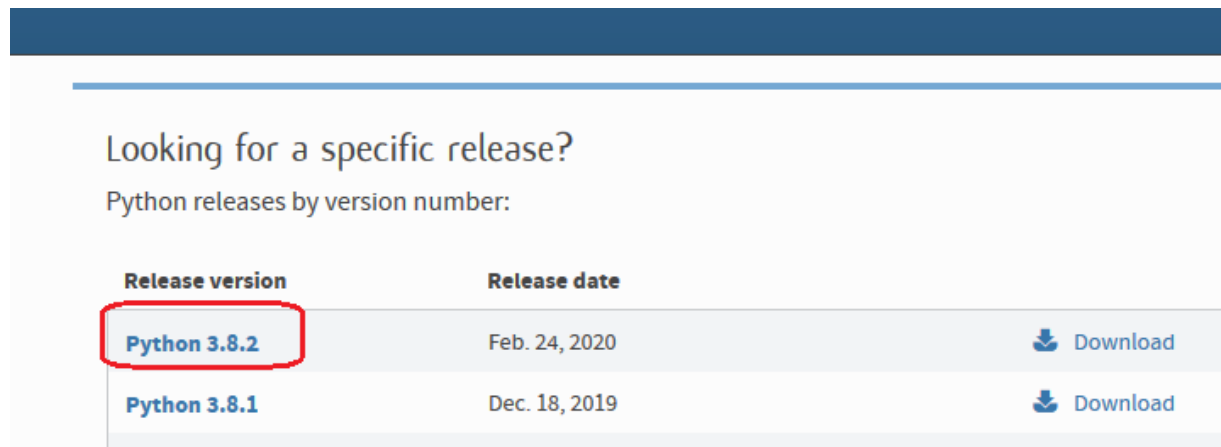


Now download and install python.

Go to the website <http://www.python.org/>, click “Downloads” and then “View the full list of downloads” (do not click on the button “Python 3.8.2”, this will most likely download the 32-bits version of Python):



In the next page, click the latest release under “Looking for a specific release”:



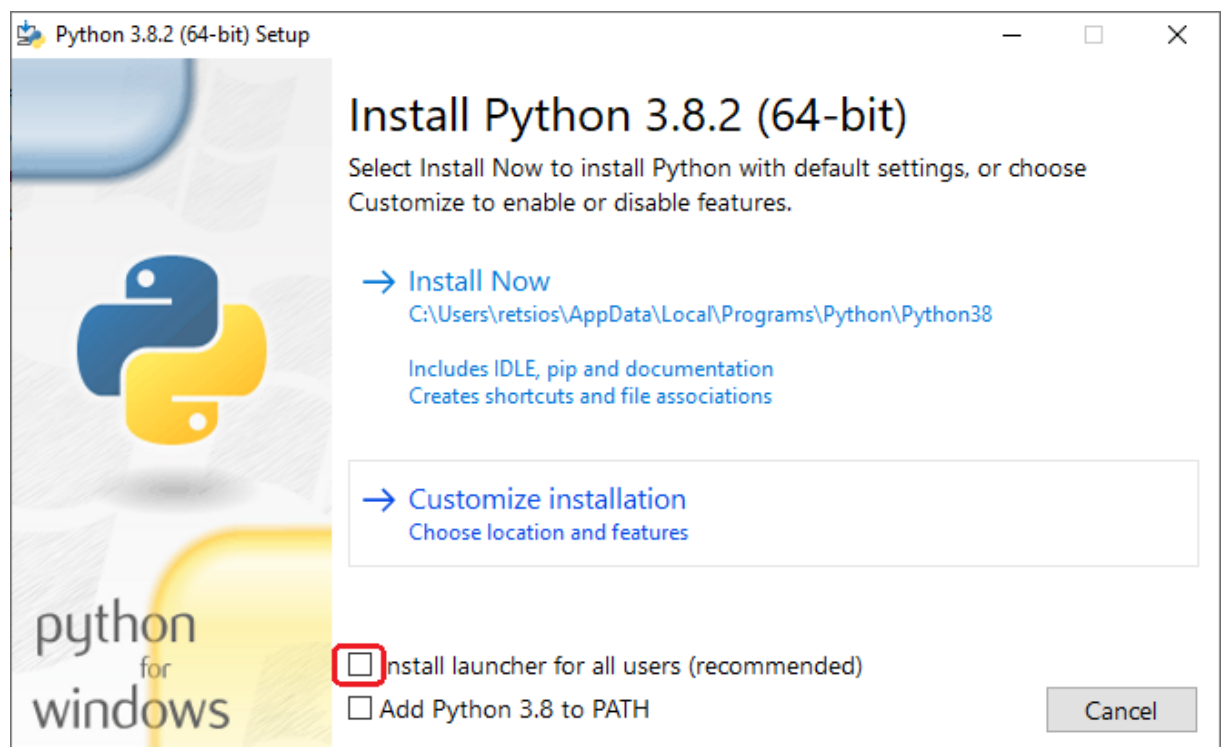
In the page that appears, scroll down and click the “Windows x86-64 executable installer”

# Files

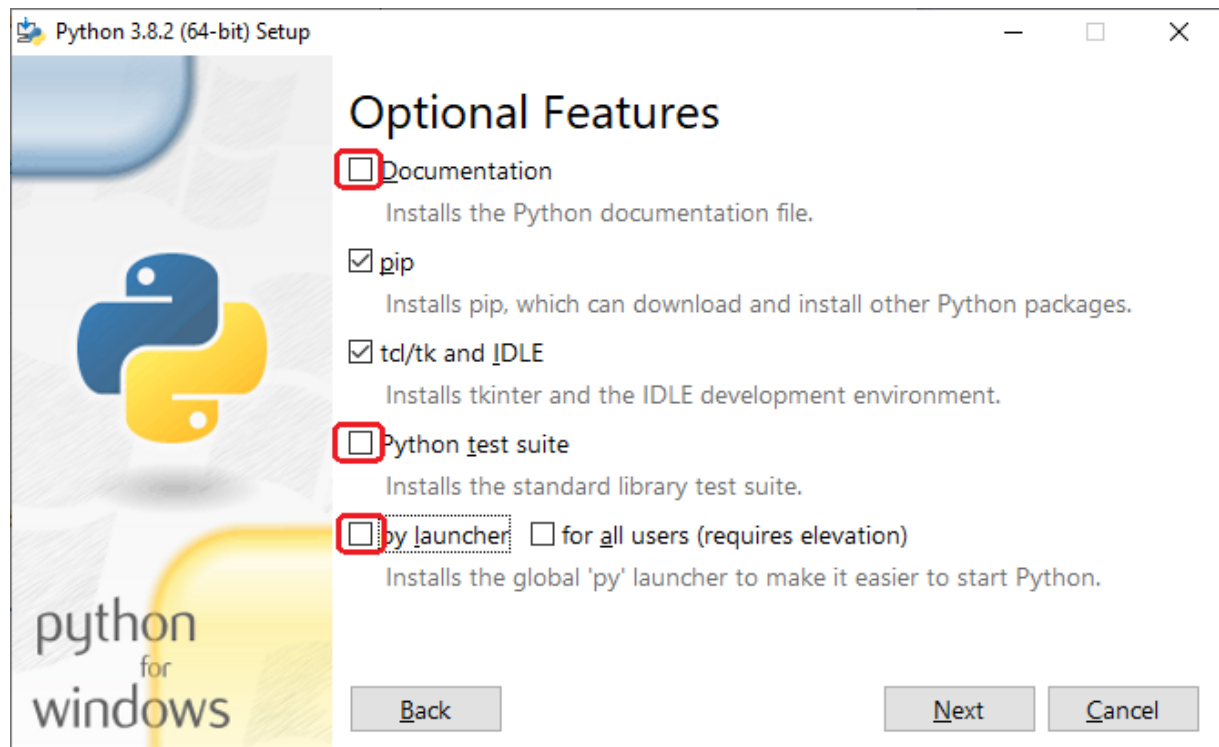
Version	Operating System	Description	MD5 Su
<a href="#">Gzipped source tarball</a>	Source release		f9f3768
<a href="#">XZ compressed source tarball</a>	Source release		e9d6eb
<a href="#">macOS 64-bit installer</a>	Mac OS X	for OS X 10.9 and later	f122031
<a href="#">Windows help file</a>	Windows		750667!
<a href="#">Windows x86-64 embeddable zip file</a>	Windows	for AMD64/EM64T/x64	1a9856:
<a href="#">Windows x86-64 executable installer</a>	Windows	for AMD64/EM64T/x64	b5df1ct
<a href="#">Windows x86-64 web-based installer</a>	Windows	for AMD64/EM64T/x64	2586cd:

Save the file, and when it is downloaded, double-click it to start the installation of Python.

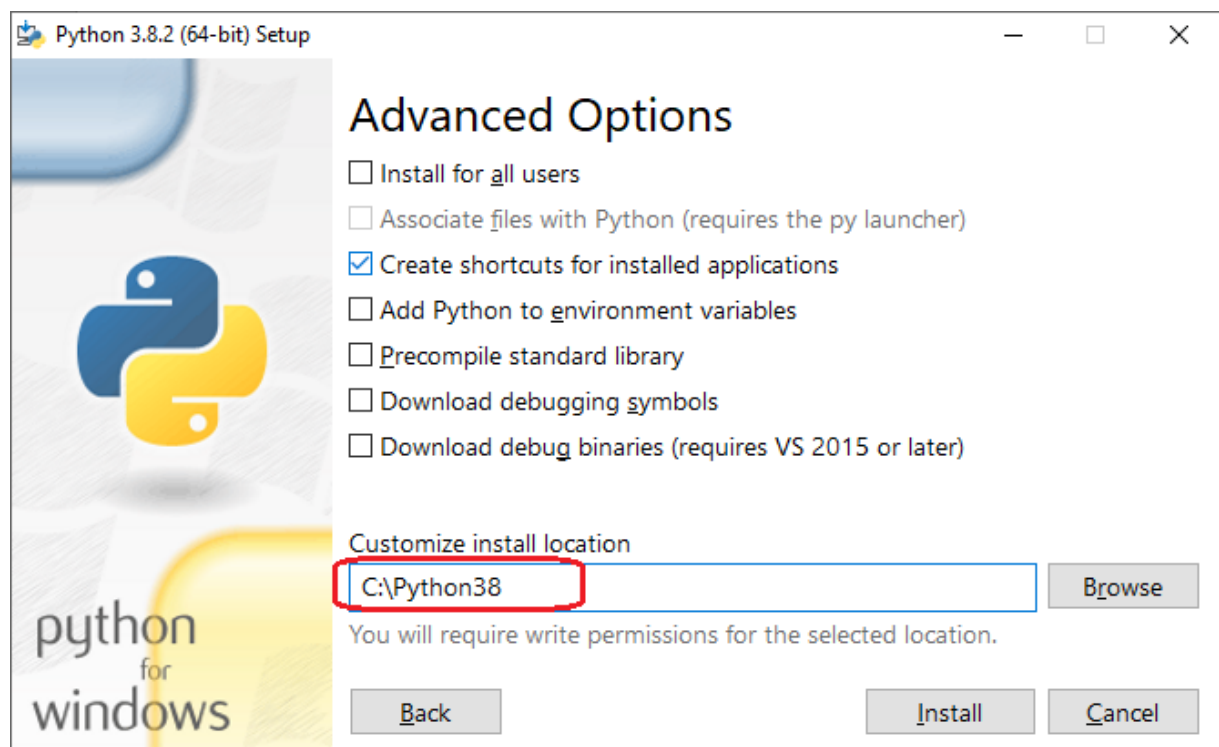
Uncheck the option “Install launcher for all users (recommended)”, and click “Customize installation”.



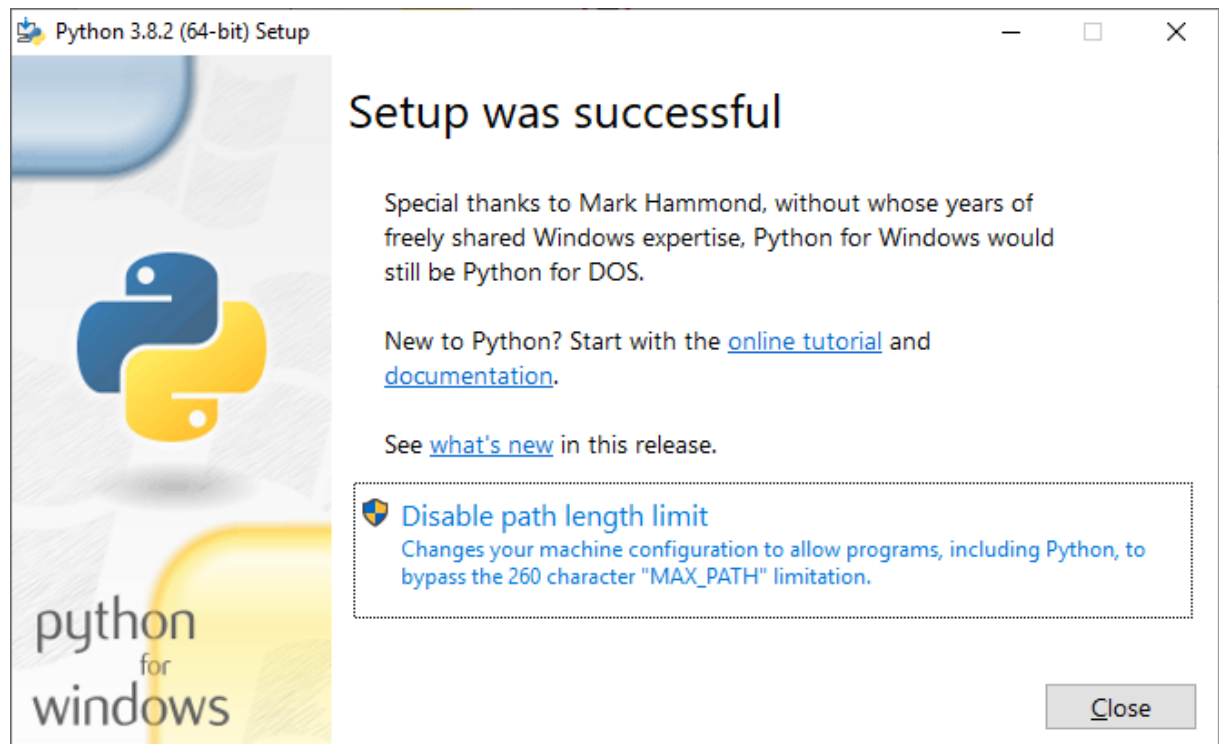
In the next page, uncheck the options Documentation, Python test suite and py launcher before clicking Next.



In the next screen, change the install location to C:\Python38 , and click Install.



When done, click Close (ignore the option to Disable path length limit)



Now configure the apache webserver to run python scripts.

Use Notepad to edit the file C:\Apache24\conf\httpd.conf

Search and find the line with text "Options Indexes FollowSymLinks" (halfway in the file). Change this line, append the option ExecCGI. The line will then read "Options Indexes FollowSymLinks ExecCGI". Note that the line starts with 4 spaces. Keep it that way.

Now search and find the line with the text "#AddHandler cgi-script .cgi".

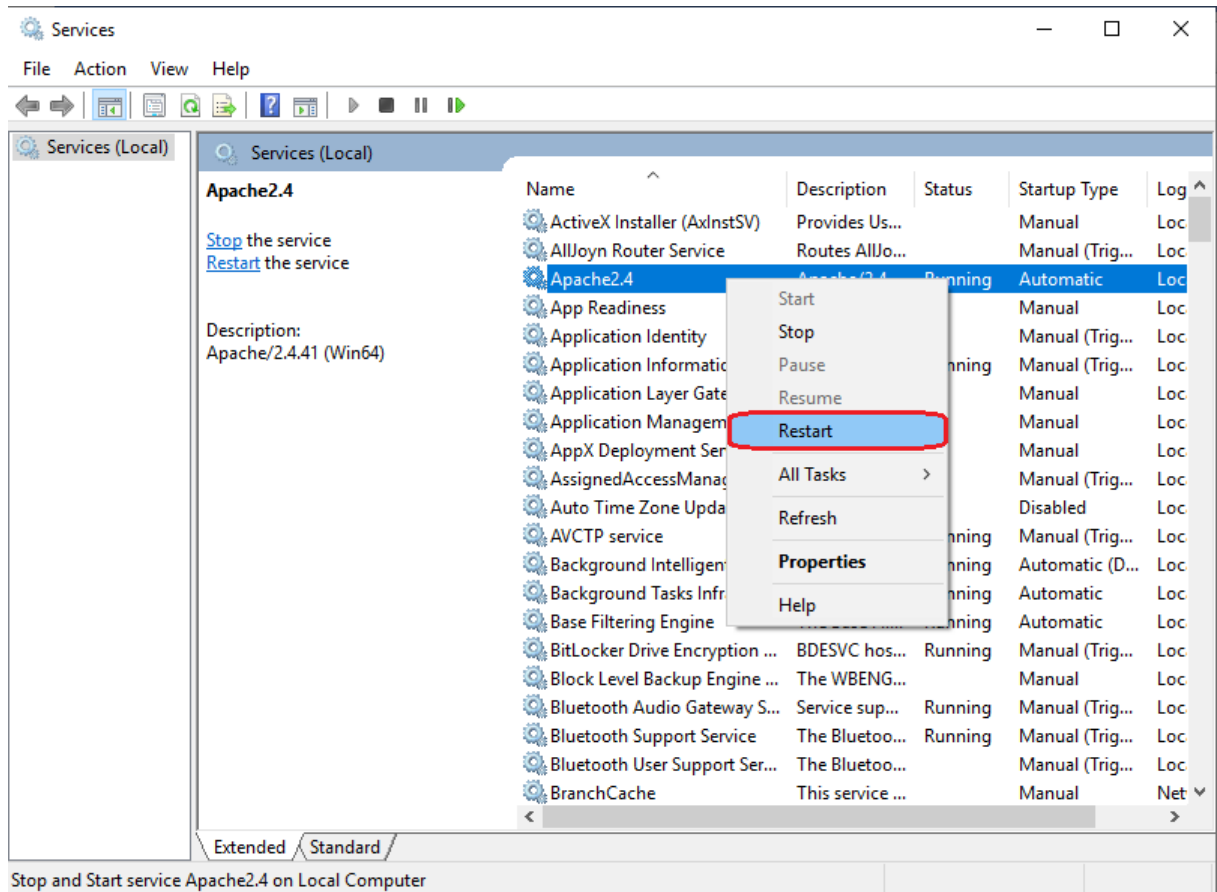
Uncomment this line, by removing the # in front of the line. Also add .py to the end of the line. The new line should look like this:

```
AddHandler cgi-script .cgi .py
```

Maintain the 4 spaces before the line (as it was).

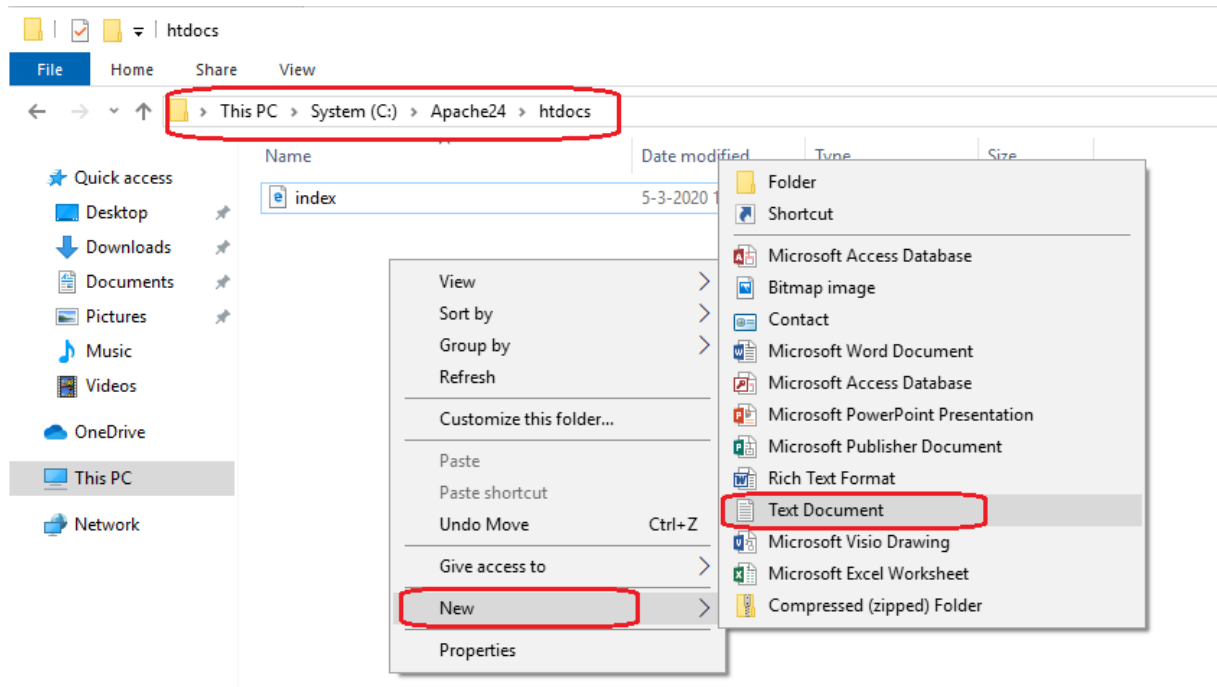
Save the file, and close Notepad.

Now restart the Apache webserver. Do this through the Services application. Find Apache2.4, right-click on it, and from the menu that appears select Restart.

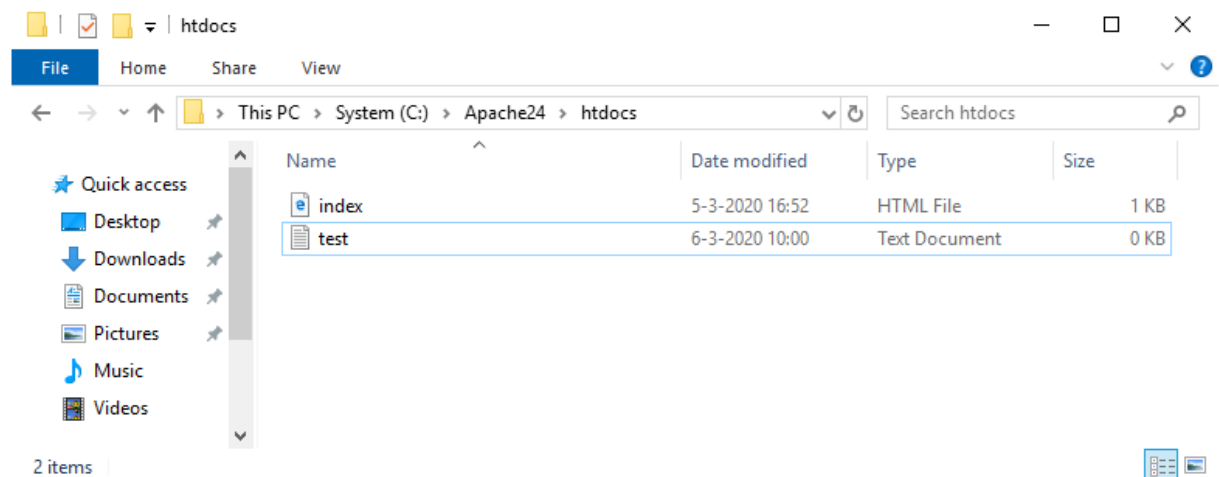


Test the Apache configuration adjustment, confirm that Apache is now executing .py scripts, instead of downloading the text-content.

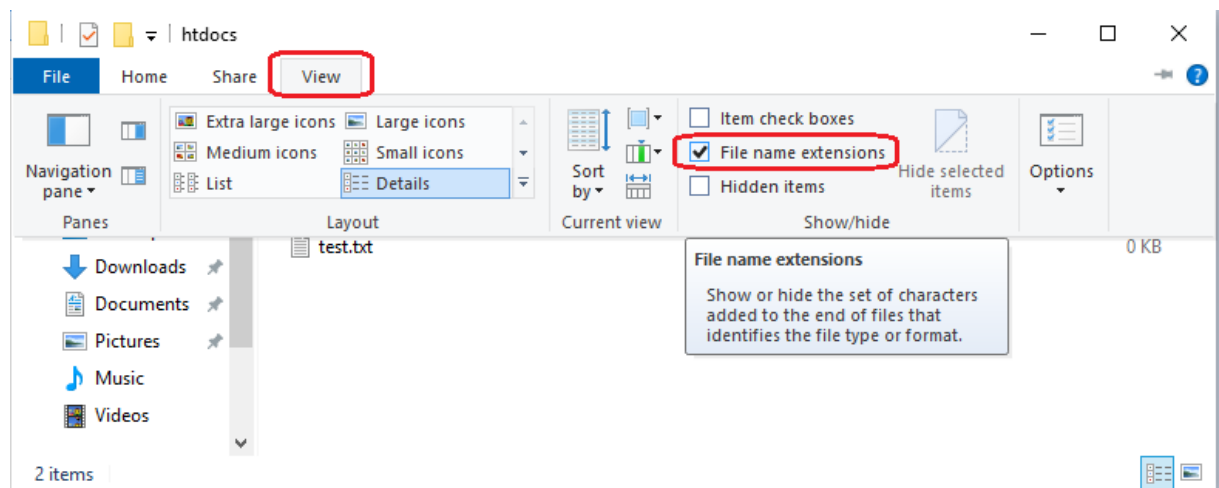
To do so, use the Windows Explorer to go to folder C:\Apache24\htdocs . Once there, create a new textfile (right-click on the empty space on the right, and from the menu that appears, select "New -> Text Document").



Name the new file “test”.



Make an adjustment to the Windows Explorer settings, making it show the full filename (including the extension). Go to View, and enable File name extensions.



Now the new textfile will reveal its extension. It will show “test.txt”.

Double-click the file to open it in Notepad for editing.

Copy/Paste the following 6 lines of content into the textfile:

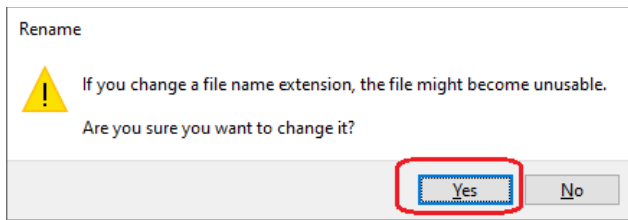
```
#!/Python38/python
print('Content-type: text/html')
print('')
print('<html><head></head><body>')
print('Only this text must be visible!')
print('</body></html>')
```

Note the first line, reading `#!/Python38/python` ; this should match the location where you have installed Python. Note also that the quotes are pasted as regular single quotes (not pretty open and close quotes, as Microsoft Word may have the tendency to auto-change them).

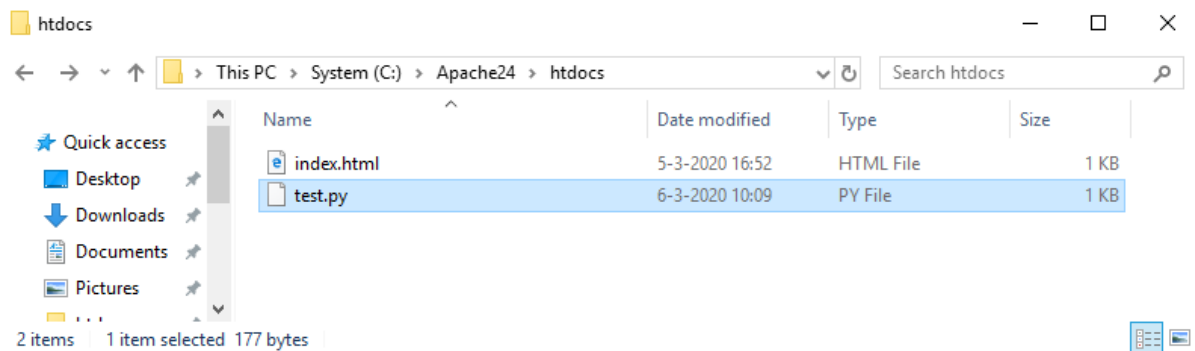
Save the file and close Notepad.

Now rename the file to test.py (change the extension from .txt to .py).

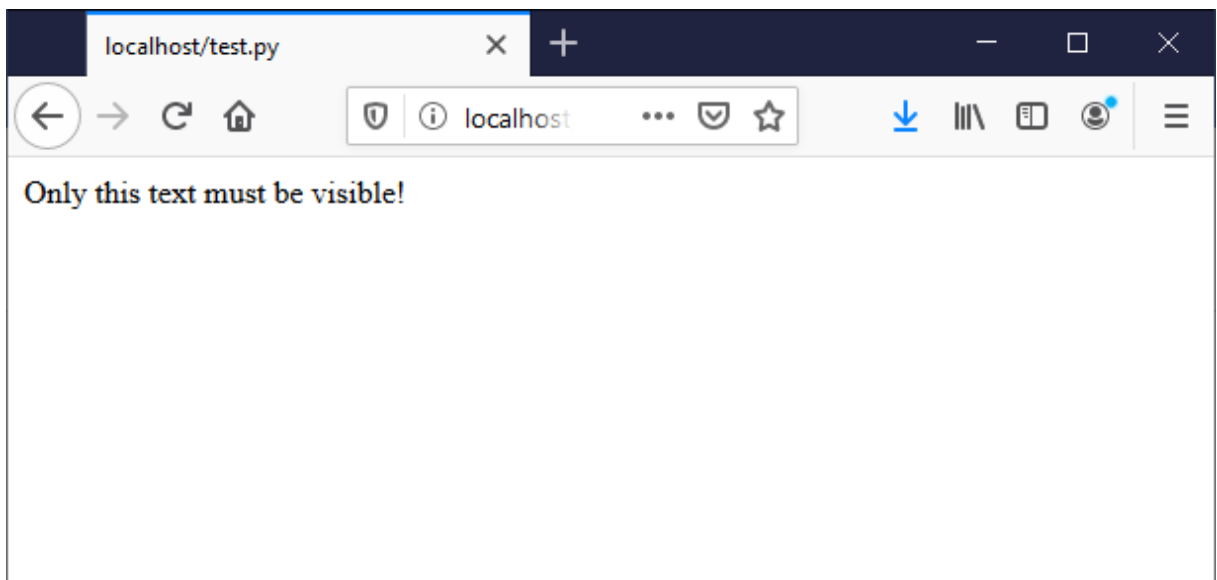
Click Yes on the warning that Windows Explorer gives when changing the file extension.



Result:



Confirm it is working, by opening your browser on this computer, and navigating to the website "http://localhost/test.py". If you see the text "Only this text must be visible!", then the python scripting was configure successfully.



If, instead, you see the 6 lines of text that were typed into the textfile earlier, then there is a mistake in one of the steps that must be corrected.