

INLS 672

Web Development 2

XAMPP



UNC
SCHOOL OF INFORMATION
AND LIBRARY SCIENCE

Joan Boone
jpboone@email.unc.edu

Why PHP?

Some statistics...

- Widely used: [Usage of server-side languages](#)
- [Usage statistics and market share](#)
- Among most popular technologies:
[Stackoverflow Developer Survey Results 2020](#)

PHP is still very widely used for back-end web development. Although many new technologies are providing alternatives, often the programming language decision is based on the type of application being developed.

- If you are interested in back-end development, you should have some familiarity with PHP
- If you understand PHP, then you will find it easier to learn other server-side technologies that adopt a similar programming model

To build web applications, you need a development server

- Install the [XAMPP Development Environment](#). This contains all of the component programs you will need, including the SQLite database (we will not be using MySQL)
- Typically, a simple install with very little configuration needed
- With a local environment, code changes can be made quickly, and testing is a matter of saving file updates and refreshing the browser

XAMPP

Select the download for your platform

[Apache Friends](#) [Download](#) [Add-ons](#) [Hosting](#) [Community](#) [About](#) [Search](#) [EN](#)

 **XAMPP** Apache + MariaDB + PHP + Perl

What is XAMPP?

XAMPP is the most popular PHP development environment

XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.



Download
Click here for other versions

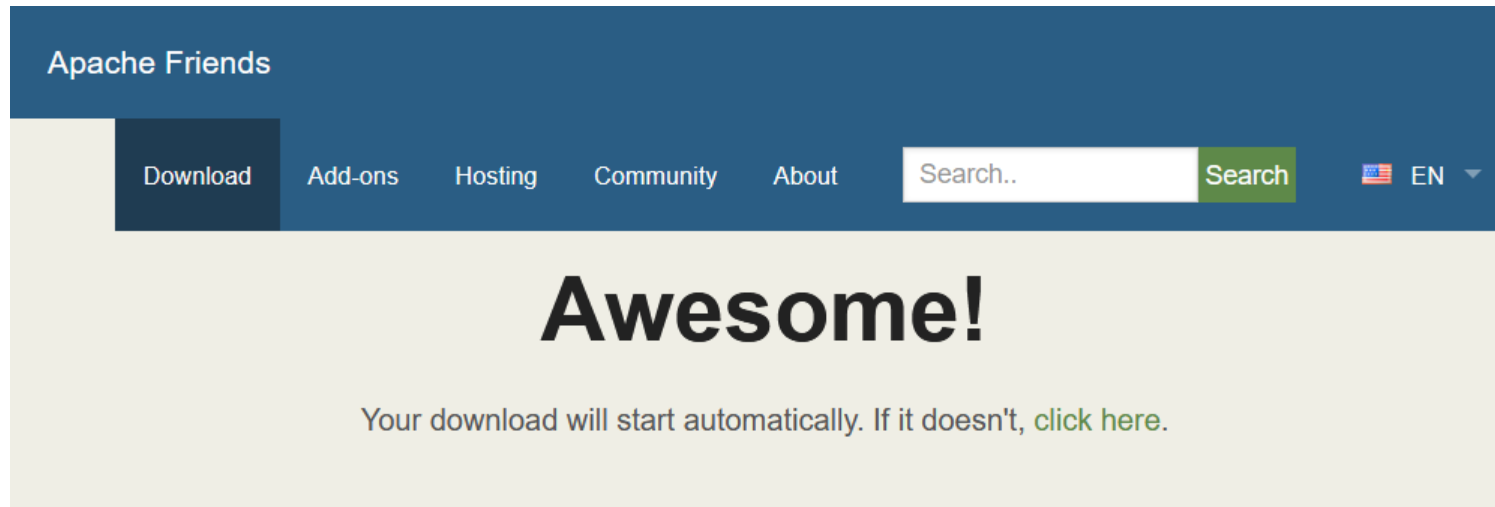
 **XAMPP for Windows**
8.0.0 (PHP 8.0.0)

 **XAMPP for Linux**
8.0.0 (PHP 8.0.0)

 **XAMPP for OS X**
8.0.0 (PHP 8.0.0)

XAMPP Download

After the download starts, this screen shows links for installation instructions, FAQs, support forum, and Stack Overflow.



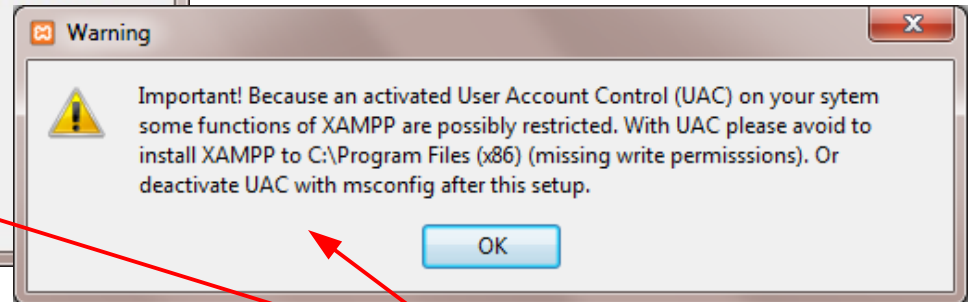
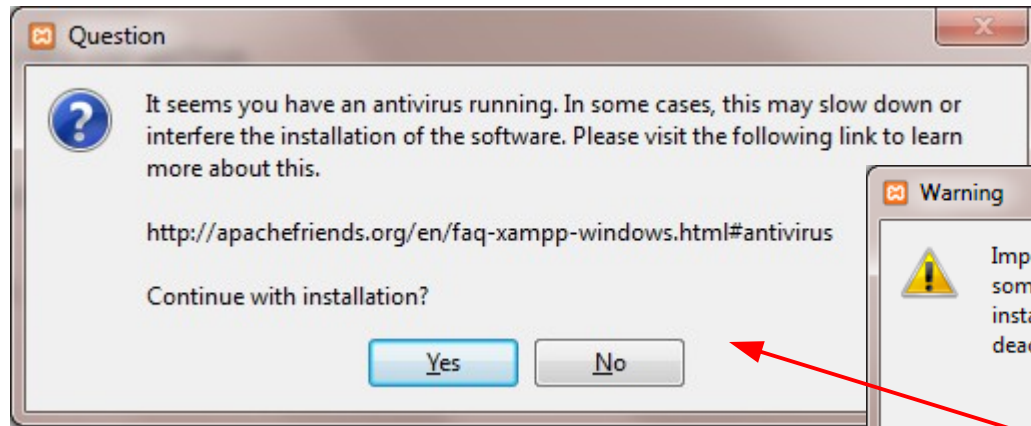
Reading

Be sure to read the install instructions and FAQs:

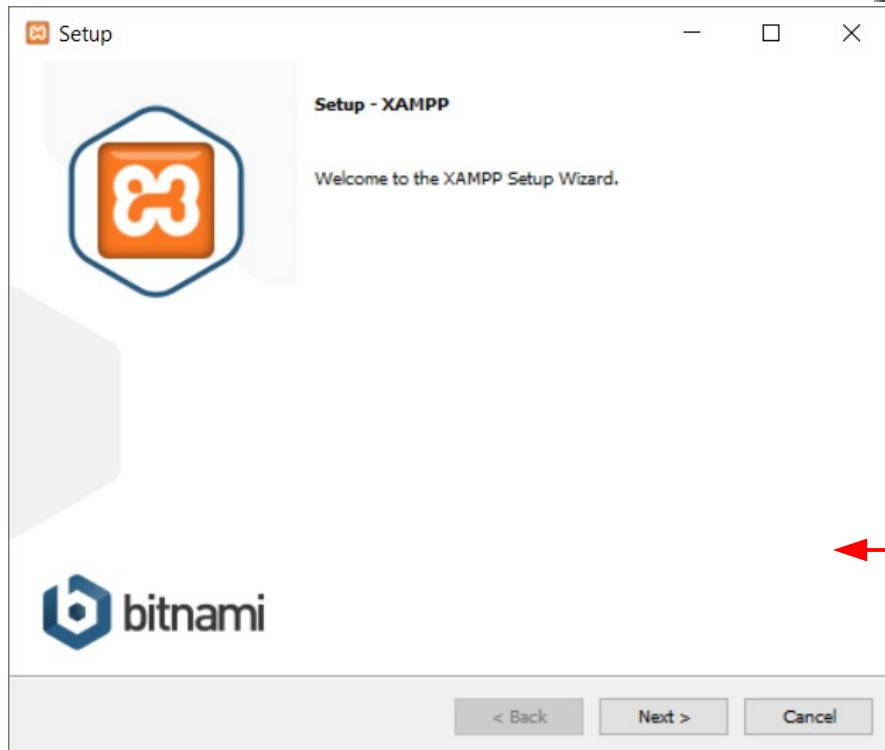
- [Linux FAQs](#)
- [Windows FAQs](#)
- [OS X FAQs](#)
- [OS X XAMPP-VM FAQs](#)

You can find additional help on our [forums](#) or [Stack Overflow](#).

XAMPP Installation (Windows)

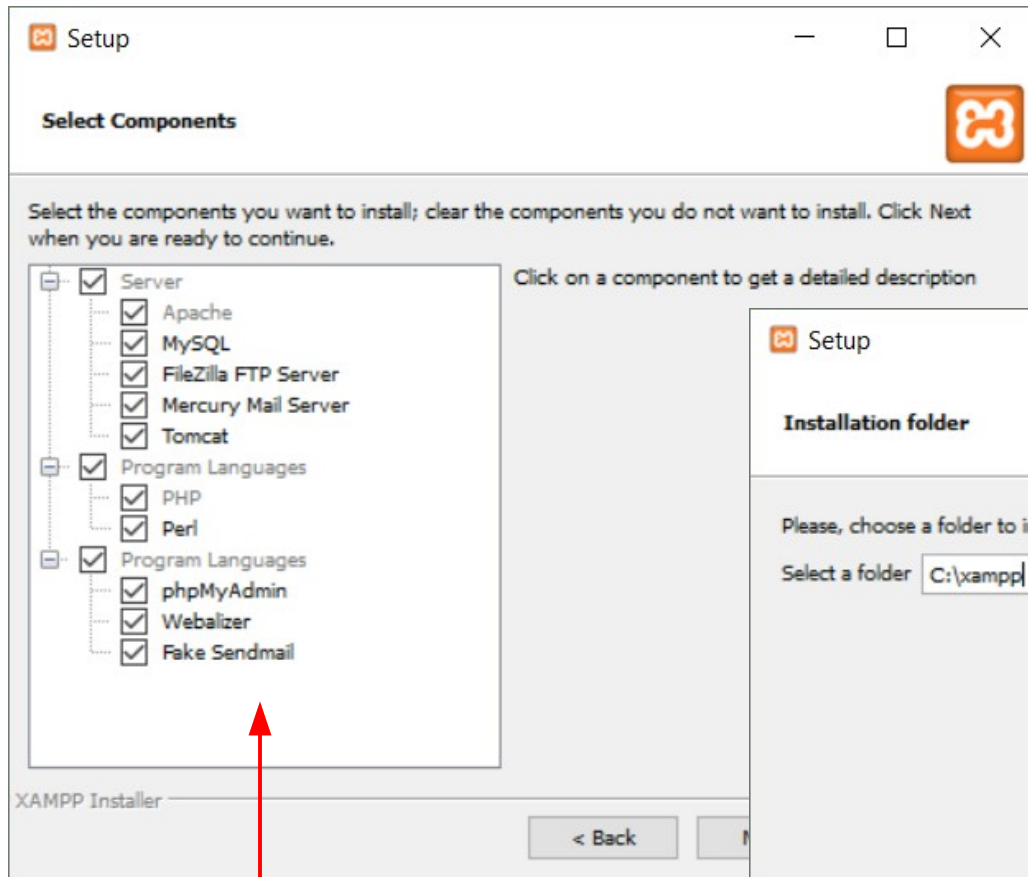


If you use an anti-virus program or have User Account Control activated on Windows, you may see an advisory notice, and will have to click Yes and/or OK to continue the installation

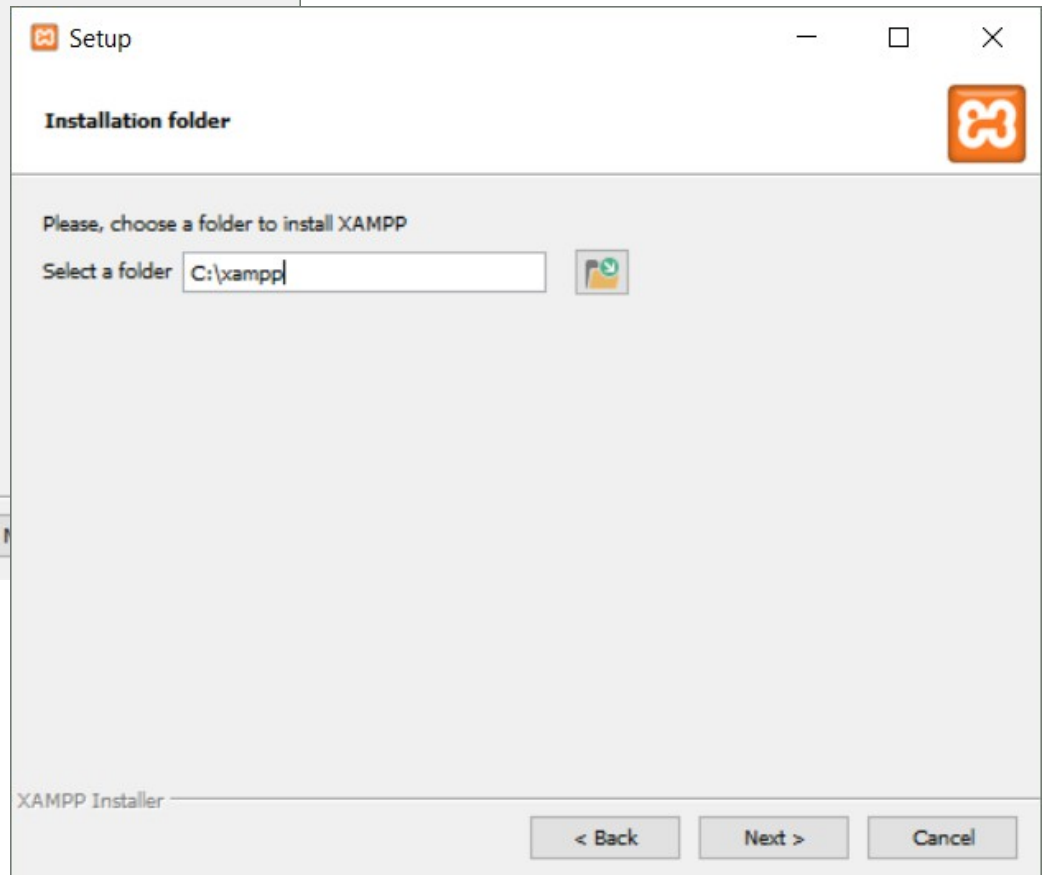


Initial installation window of the installer

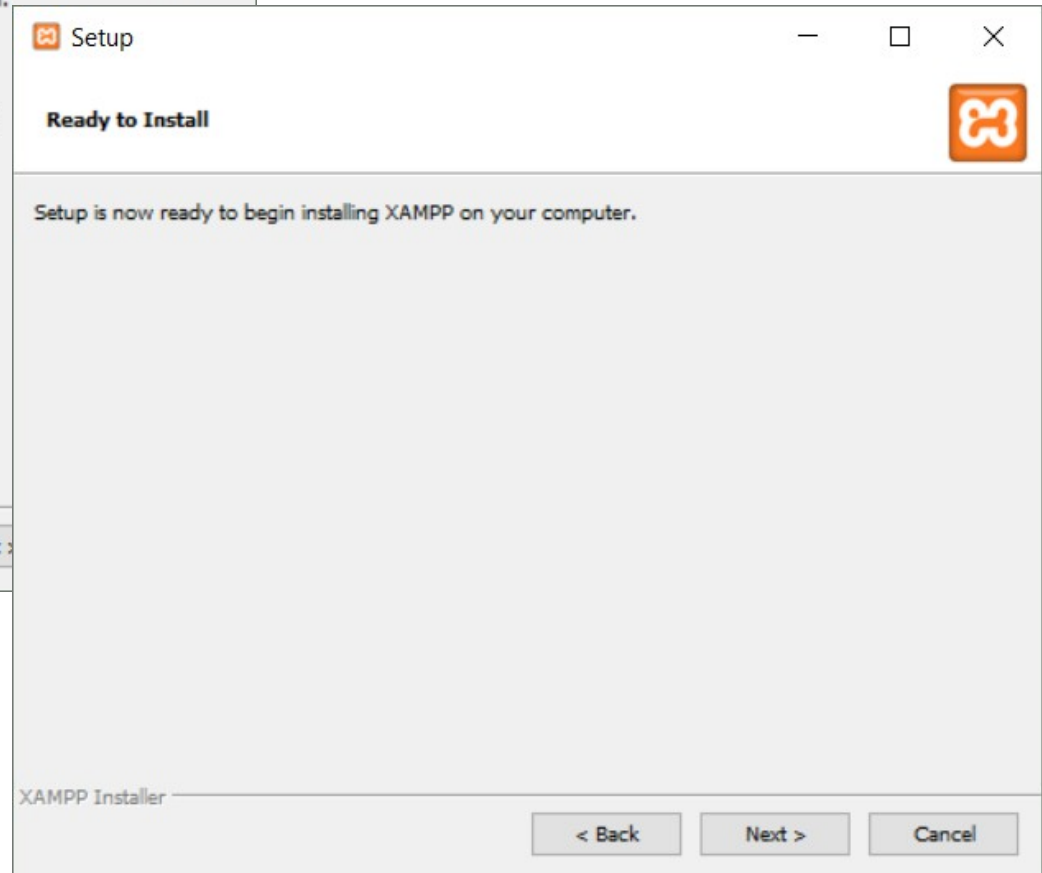
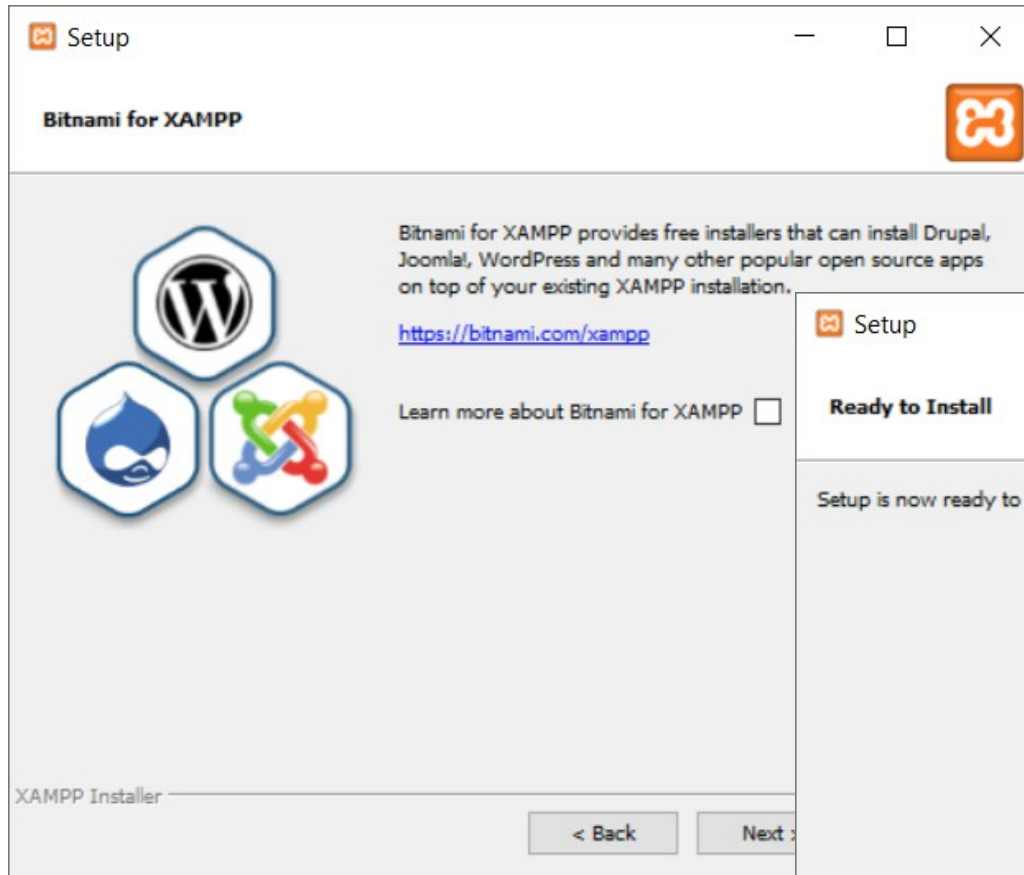
XAMPP Installation (Windows)



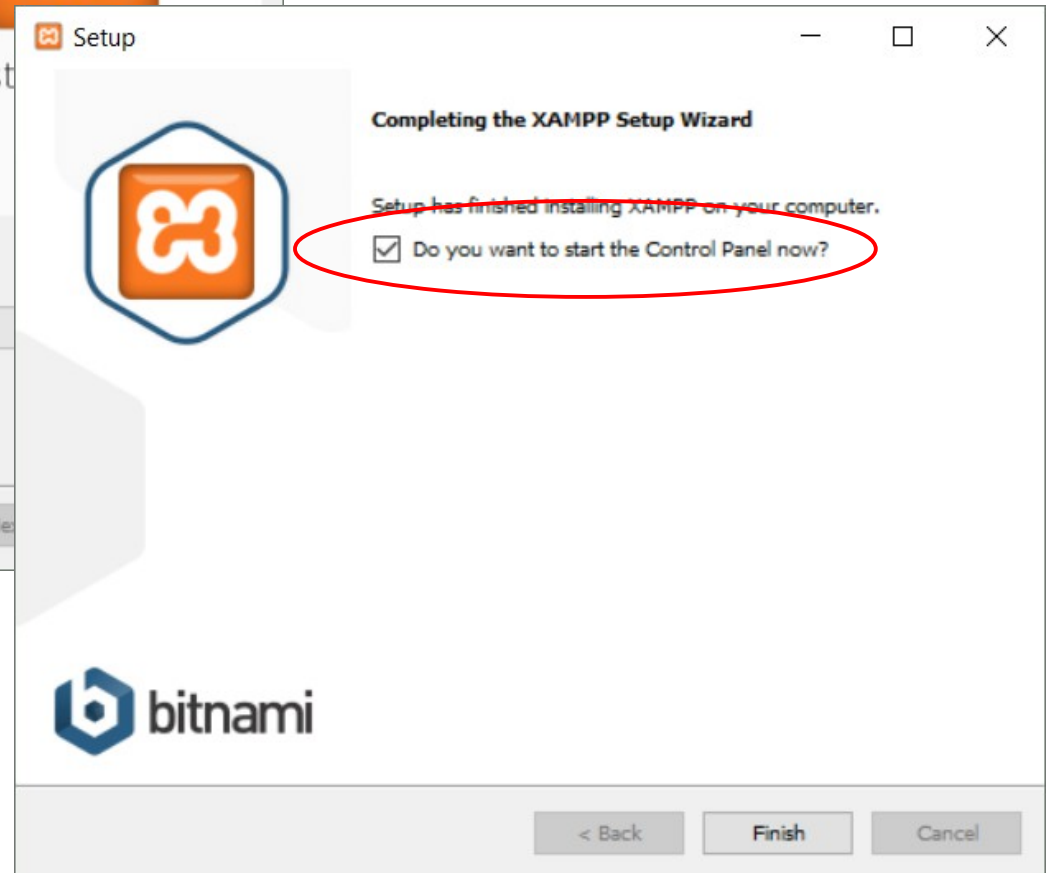
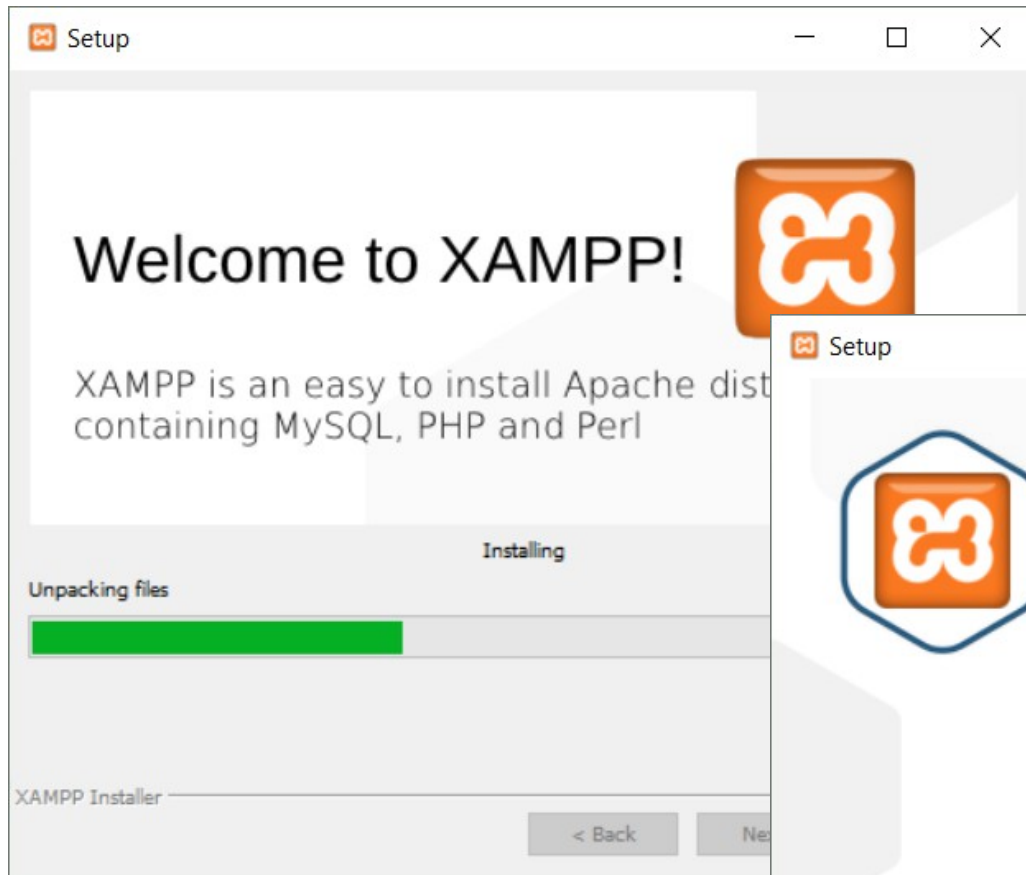
You may not need all of these components, but would recommend taking the default selections.



XAMPP Installation (Windows)



XAMPP Installation (Windows)



XAMPP: Control Panel

XAMPP Control Panel v3.2.4 [Compiled: Jun 5th 2019]

XAMPP Control Panel v3.2.4

Service	Module	PID(s)	Port(s)	Actions
<input type="checkbox"/>	Apache			Start Admin Config Logs
<input type="checkbox"/>	MySQL			Start Admin Config Logs
<input type="checkbox"/>	FileZilla			Start Admin Config Logs
<input type="checkbox"/>	Mercury			Start Admin Config Logs
<input type="checkbox"/>	Tomcat			Start Admin Config Logs

1:59:36 PM [main] Initializing Control Panel
1:59:36 PM [main] Windows Version: Enterprise 64-bit
1:59:36 PM [main] XAMPP Version: 8.0.0
1:59:36 PM [main] Control Panel Version: 3.2.4 [Compiled: Jun 5th 2019]
1:59:36 PM [main] You are not running with administrator rights! This will work for most application stuff but whenever you do something with services there will be a security dialogue or things will break! So think about running this application with administrator rights!
1:59:36 PM [main] XAMPP Installation Directory: "c:\xampp\
1:59:36 PM [main] Checking for prerequisites
1:59:37 PM [main] All prerequisites found
1:59:37 PM [main] Initializing Modules
1:59:37 PM [main] Starting Check-Timer
1:59:37 PM [main] Control Panel Ready

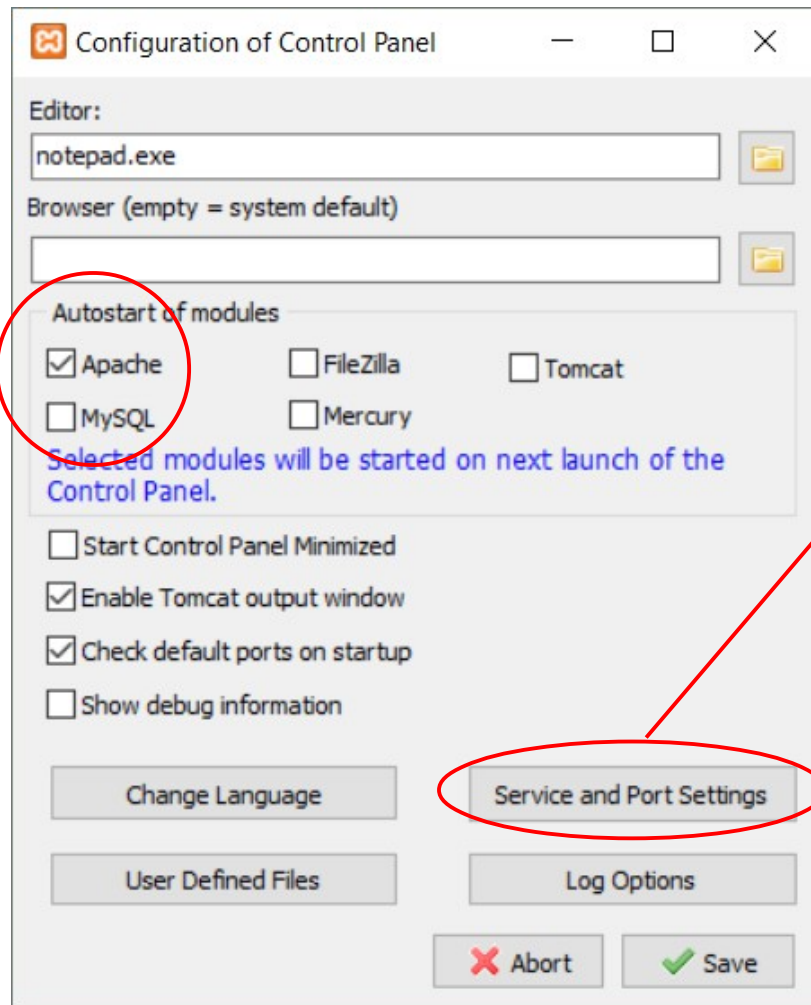
Optional, but you should be familiar with what configuration changes you can make

Check the messages to ensure there are no errors.

The most common error is that another process on your computer is using the same port numbers.

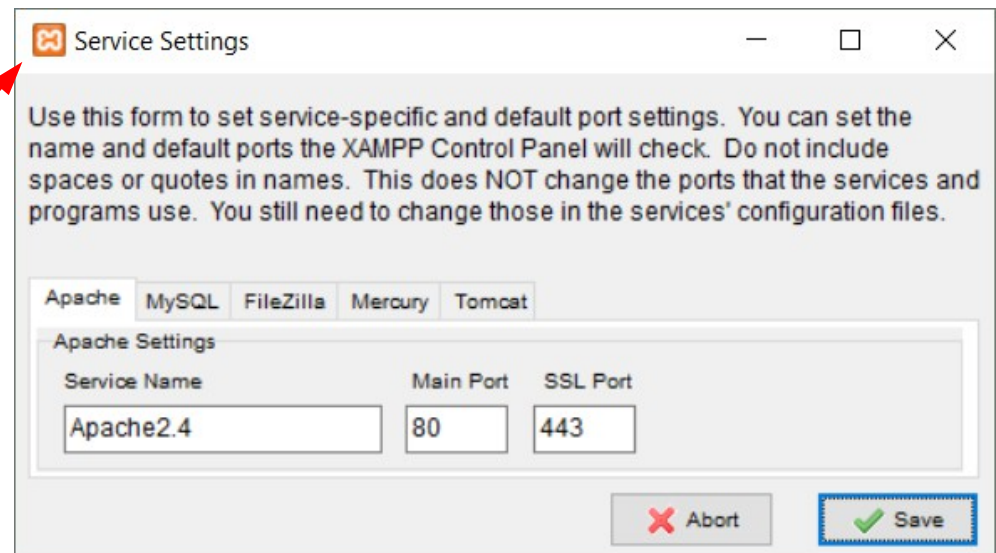
You can change the port numbers using 'Configure' or stop the other process so there is no port conflict.

XAMPP Installation (Windows)



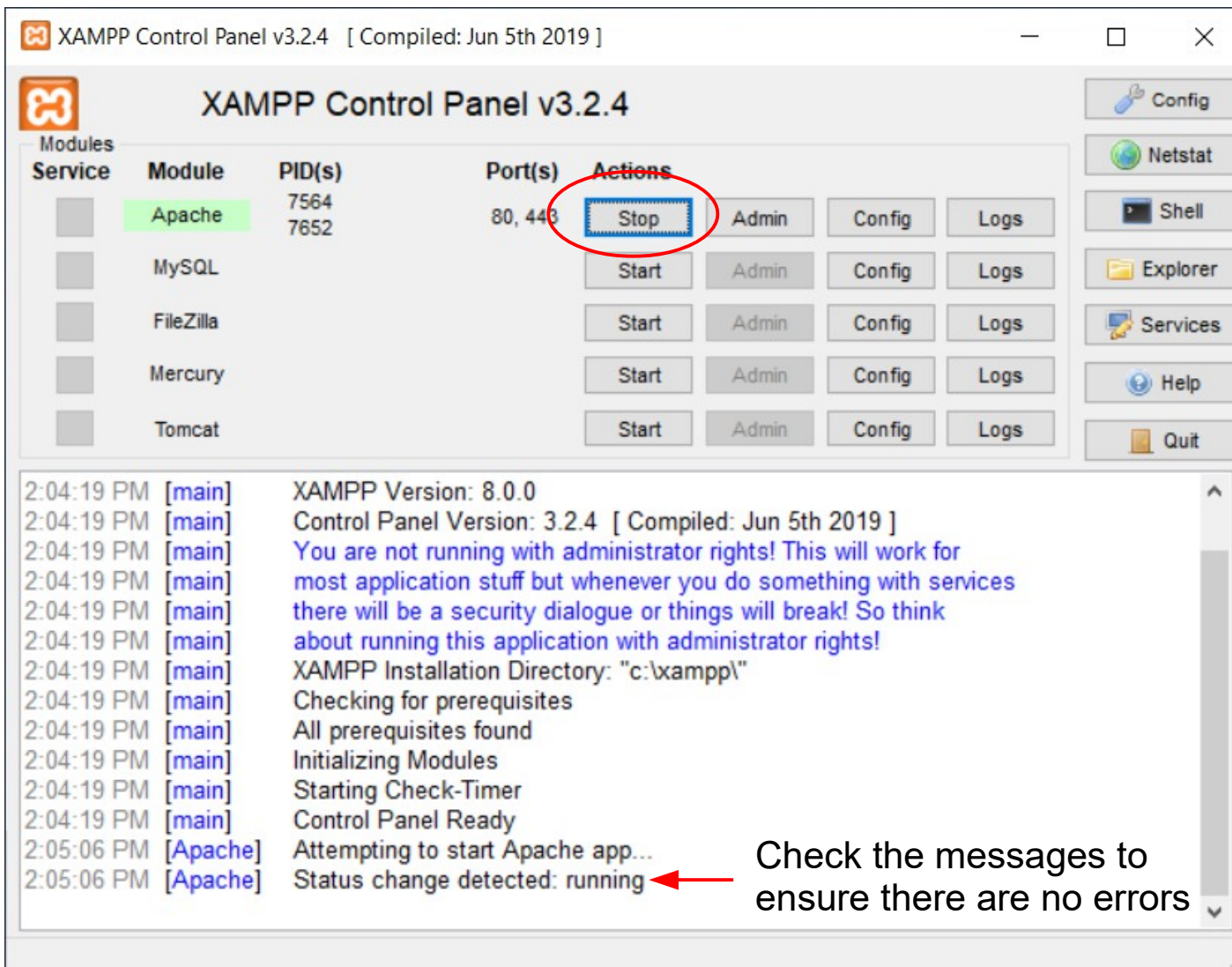
Configure Apache to autostart (optional). otherwise, you can start/stop it from the Control Panel.

If you need to change the default port #s



XAMPP: Control Panel

Click 'Start' action for the Apache server.



XAMPP Control Panel v3.2.4 [Compiled: Jun 5th 2019]

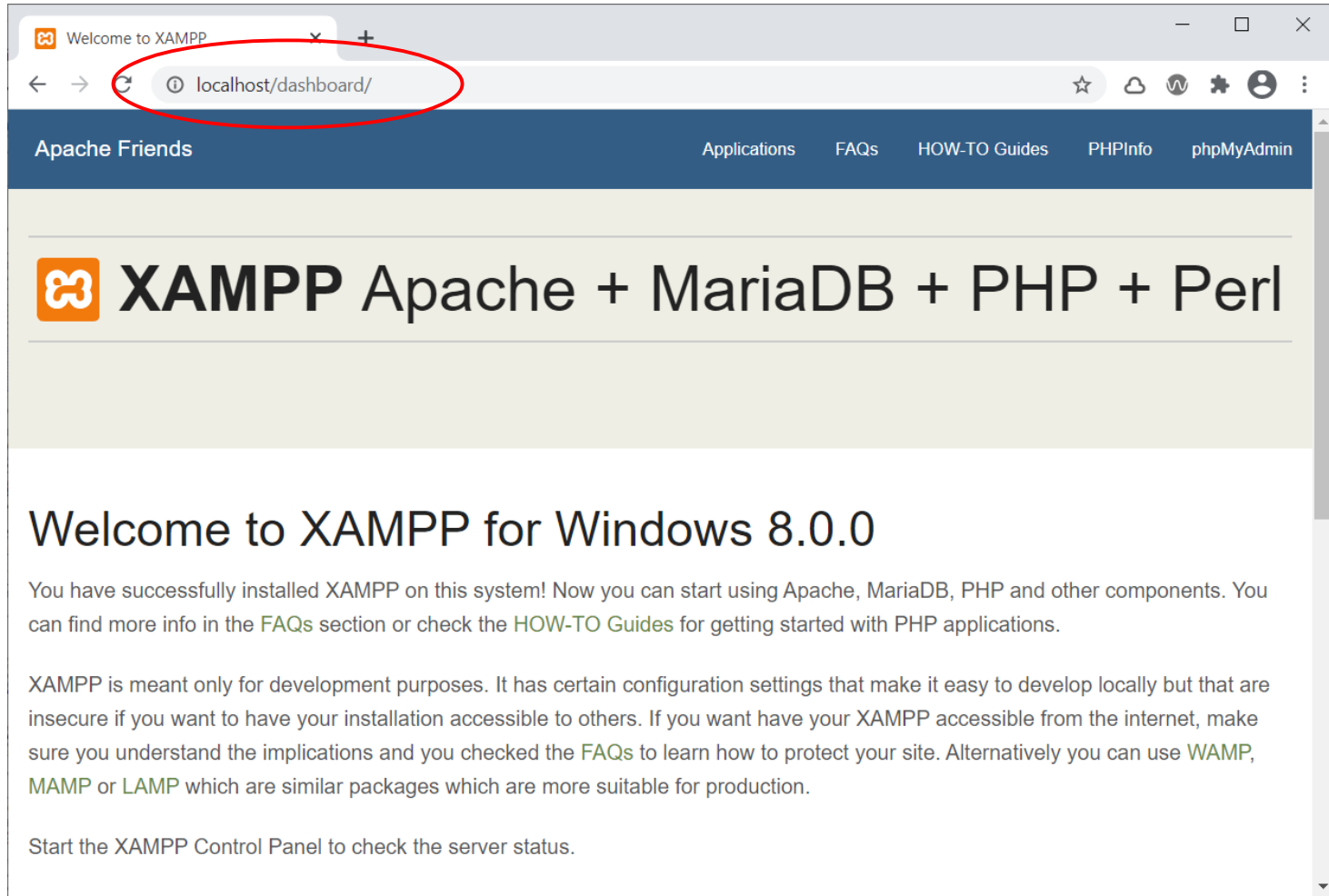
Service	Module	PID(s)	Port(s)	Actions
<input type="checkbox"/>	Apache	7564 7652	80, 443	Stop Admin Config Logs
<input type="checkbox"/>	MySQL			Start Admin Config Logs
<input type="checkbox"/>	FileZilla			Start Admin Config Logs
<input type="checkbox"/>	Mercury			Start Admin Config Logs
<input type="checkbox"/>	Tomcat			Start Admin Config Logs

2:04:19 PM [main] XAMPP Version: 8.0.0
2:04:19 PM [main] Control Panel Version: 3.2.4 [Compiled: Jun 5th 2019]
2:04:19 PM [main] You are not running with administrator rights! This will work for most application stuff but whenever you do something with services there will be a security dialogue or things will break! So think about running this application with administrator rights!
2:04:19 PM [main] XAMPP Installation Directory: "c:\xampp\
2:04:19 PM [main] Checking for prerequisites
2:04:19 PM [main] All prerequisites found
2:04:19 PM [main] Initializing Modules
2:04:19 PM [main] Starting Check-Timer
2:04:19 PM [main] Control Panel Ready
2:05:06 PM [Apache] Attempting to start Apache app...
2:05:06 PM [Apache] Status change detected: running

Check the messages to ensure there are no errors

XAMPP: Test installation

Enter localhost or 127.0.0.1 in browser address bar. You should see the following page displayed.



Document Root

What is it?

- The folder that contains the main web documents for a domain. This is the folder where you will place all of your application files.
- Folder name is `htdocs`
- Files placed in the document root can be accessed by browsing to `http://localhost/<file_name>`
 - If you are not using the default port numbers, then you would need to specify the address as: `http://localhost:<port_number>/<file_name>`

Where is it?

- The `htdocs` folder is located in the XAMPP installation folder. The default installation folder is typically:
 - Windows: `c:/xampp/htdocs`
 - Mac OS X: `/Applications/XAMPP/htdocs`

Another installation test: create a simple web page

The image shows two windows side-by-side. The top window is the Atom text editor, titled 'Testing123.html — C:\xampp\htdocs — Atom'. The left sidebar shows a file explorer with the 'htdocs' directory expanded, listing various files and folders. The main editor area shows the HTML code for 'Testing123.html', which includes a DOCTYPE declaration, html, head, and body tags. The body contains an h3 heading and an unordered list with three items: 'One', 'Two', and 'Three'. A red circle highlights the title bar of the Atom window, and a red arrow points from the text 'Create the page in the htdocs directory' to the 'htdocs' directory in the file explorer.

Create the page in the htdocs directory

The bottom window is a web browser titled 'Testing 1, 2, 3'. The address bar shows 'localhost/Testing123.html', which is circled in red. A red arrow points from the text 'Load the page from localhost' to the address bar. The browser displays the content of the HTML page, showing the heading 'Testing...1, 2, 3' and the list of three items.

Load the page from localhost