

What Is a WAMP, MAMP, or LAMP?

WAMP, MAMP, and LAMP are abbreviations for “Windows, Apache, MySQL, and PHP,” “Mac, Apache, MySQL, and PHP,” and “Linux, Apache, MySQL, and PHP.” These abbreviations describe a fully functioning setup used for developing dynamic Internet web pages. WAMPs, MAMPs, and LAMPs come in the form of a package that binds the bundled programs together so that you don’t have to install and set them up separately. This means you can simply download and install a single program, and follow a few easy prompts, to get your web development server up and running in the quickest time with a minimum hassle. During installation, several default settings are created for you. The security configurations of such an installation will not be as tight as on a production web server, because it is optimized for local use. For these reasons, you should never install such a setup as a production server. But for developing and testing websites and applications, one of these installations should be entirely sufficient.

Installing XAMPP on Windows

There are several available WAMP servers, each offering slightly different configurations, but out of the various open source and free options, the best is probably XAMPP. You can download it at <http://apacheFriends.org>, as shown in Figure 1.1.



Figure 1.1. The XAMPP website

I recommend that you always download the latest stable release (in this instance, its 1.8.3), and there is a direct download link for Windows, OS X, and Linux on the main page.

Once you've downloaded the installer, run it to bring up the window shown in Figure 1.1. Before arriving at that window, though, if you use an anti-virus program or have User Account Control activated on Windows, you may first be shown one or more advisory notices, and will have to click Yes and/or OK to continue installation.

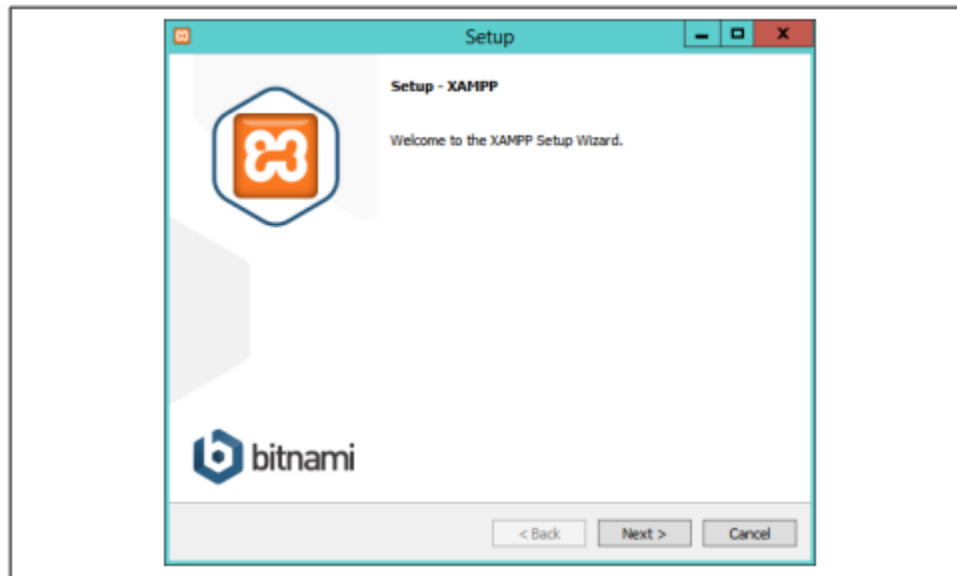


Figure1.2. The initial installation window of the installer

Click Next and then uncheck any of the components shown in Figure 1-3 that you don't need. For example, at the minimum for this lab you will want to keep Apache, MySQL, PHP, and PHPMyAdmin checked. The other features are not covered in this lab, but you can get more details on all of these, plus the core XAMPP technologies, at http://apachefriends.org/faq_windows.html. Clicking Next brings up the screen in Figure 1-4, in which you should choose a folder for the installation. You are recommended to accept the default provided unless you have a good reason to choose a different one. In this lab, the default location is assumed. If the folder you choose exists and is not empty, you will be unable to use it.

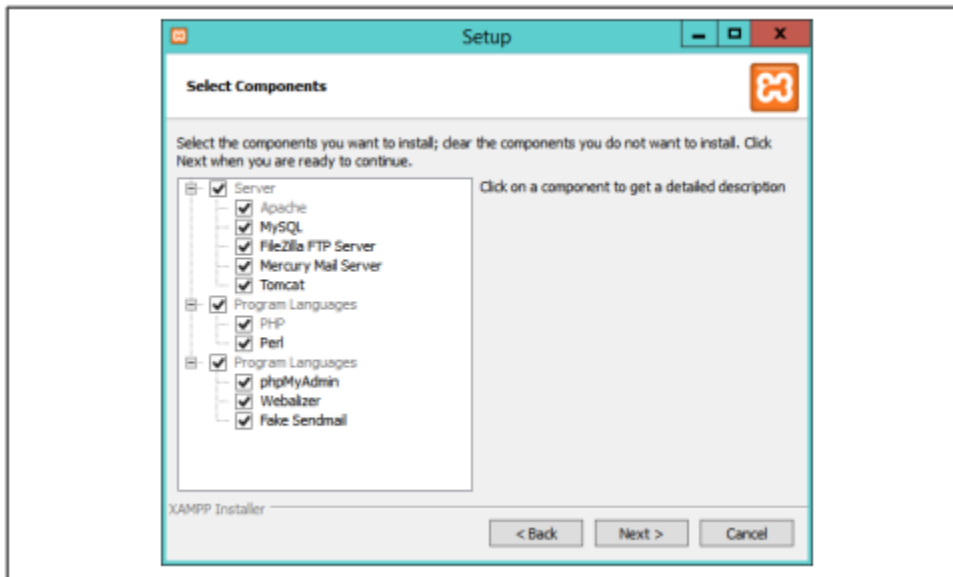


Figure 1-3. Select the components to install

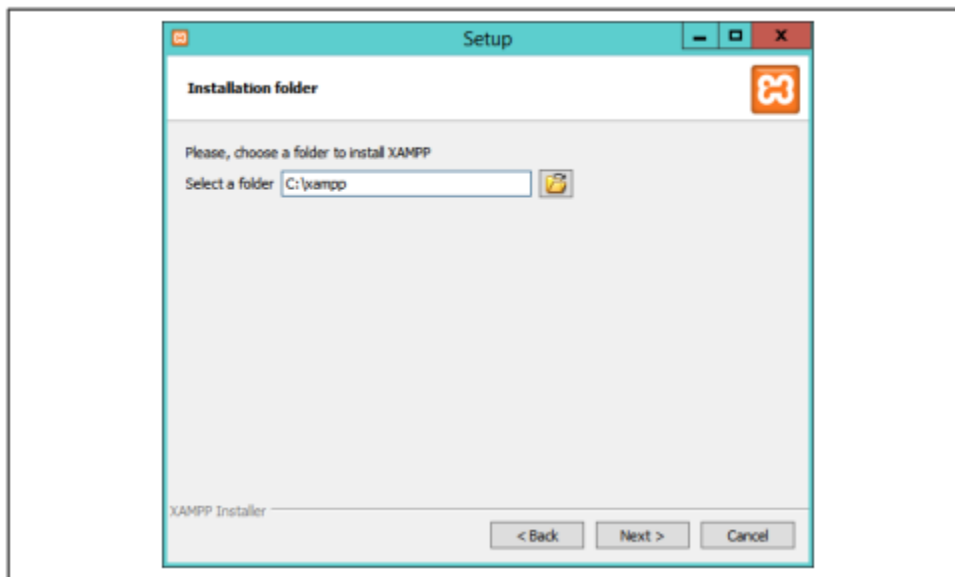


Figure 1-4. Choose a folder for the installation

Clicking Next brings up the screen in Figure 1-5 with a checkbox already checked (which you can uncheck) for supplying information on adding free installers for related products in a new web browser window or tab. After you choose whether or not to receive this information, click the Next button.

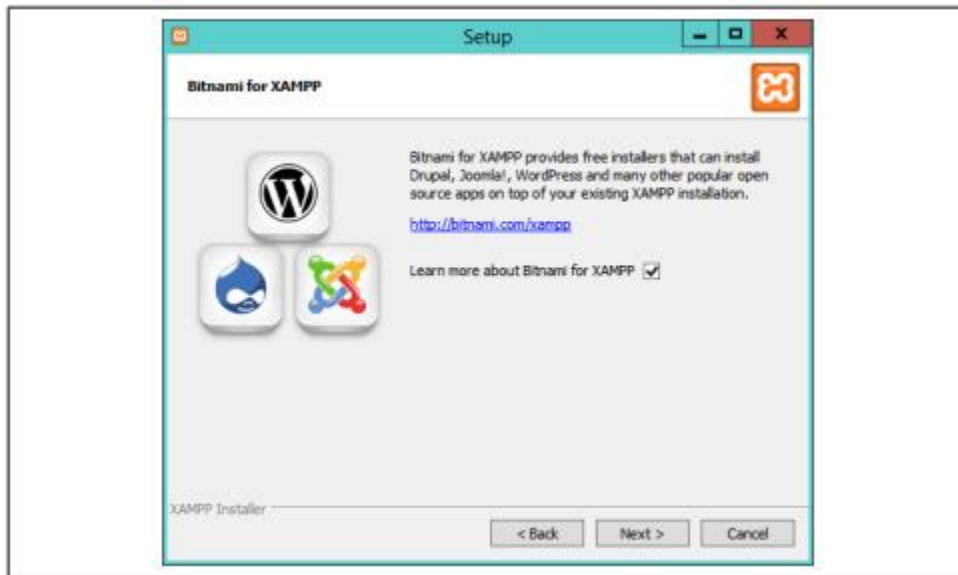


Figure 1-5. Information on related free products is available

Having supplied the basic information required by the installer, you will arrive at the screen in Figure 1-6. Setup is ready to start, so click the Next button.

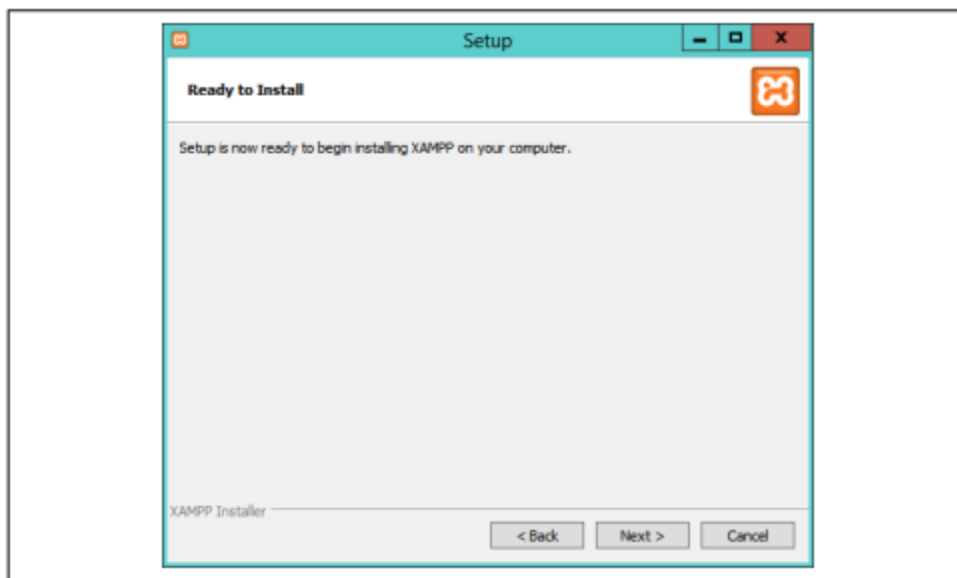


Figure 1-6. Accept the default values offered for the ports

When you click the Next button, installation will begin, and you will see the screen in Figure 1-7 while it progresses. During installation, you can click any of the icons to open up a web browser window displaying information on the product shown. The whole process should take only a few minutes on most computers.



Figure 1-7. Installation is in progress

Once installation is complete, the screen in Figure 1-8 will be displayed with a check- box already checked for starting the XAMPP control panel. I recommend you leave this checked and then click Finish. Now you are ready to start using XAMPP by configuring it from the control panel, as shown in Figure 1-9. The panel is automatically displayed if you kept the checkbox checked on completing installation. Or you can call it up from the Start menu or start screen.

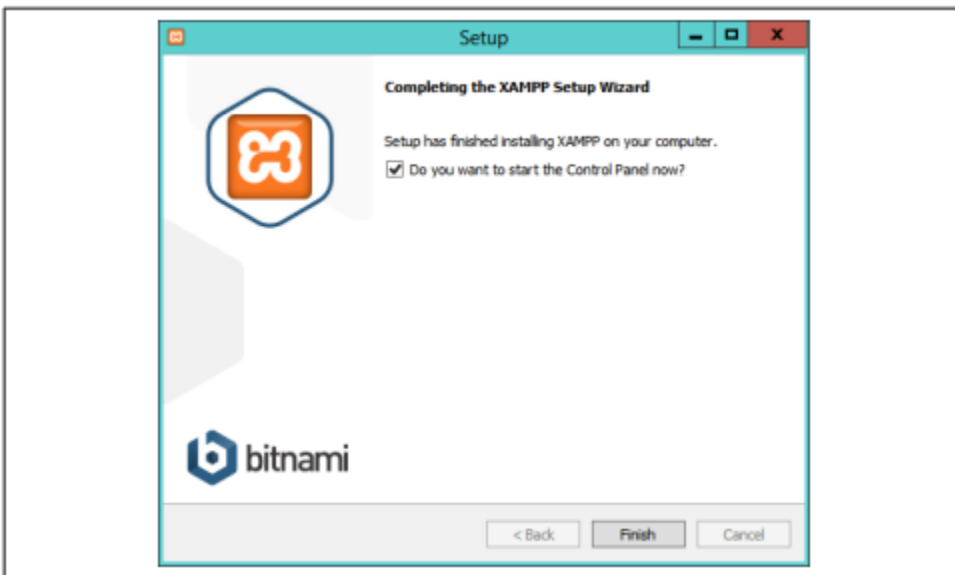


Figure 1-8. Click Finish to complete installation

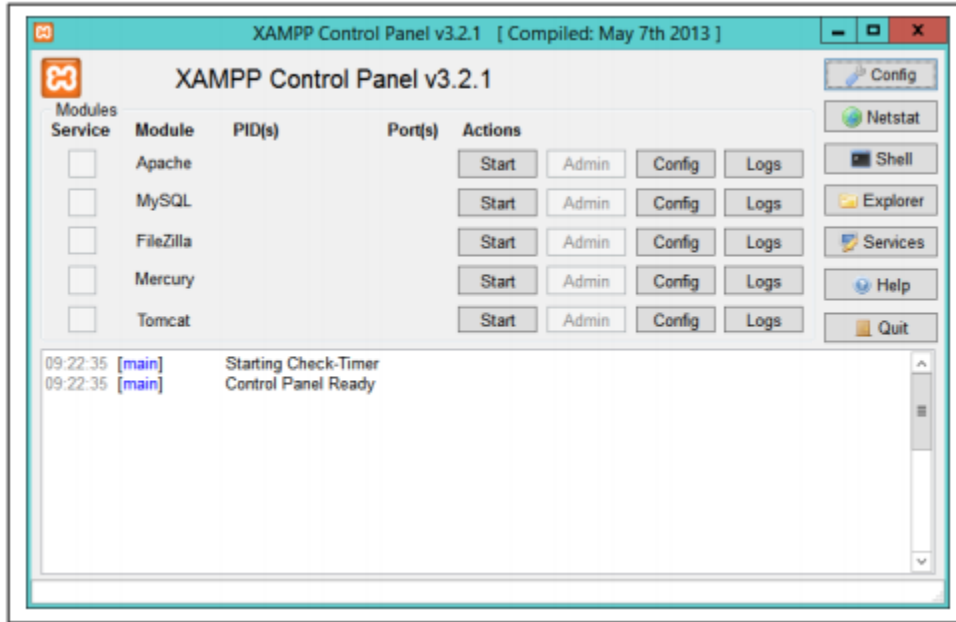


Figure 1-9. The control panel

The first thing I recommend you do is click the Config button at the top-right corner to call up the window shown in Figure 1-10. In particular, if they are not already checked, I recommend you check the Apache and MySQL boxes to ensure them auto start. Or, you can simply click the Start buttons for Apache and MySQL to have them run for this session only.

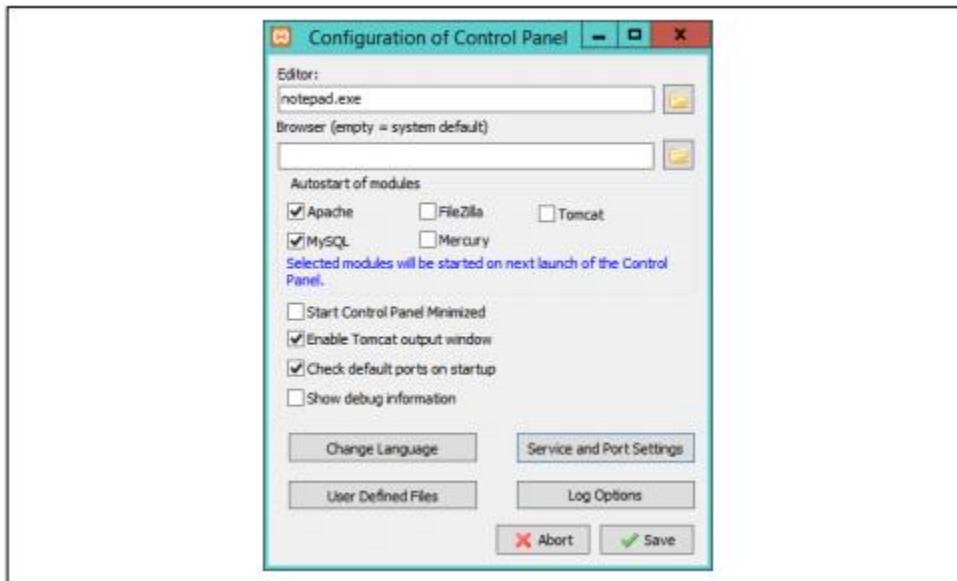


Figure 1-10. Choose your editor, auto start components and more

While on that screen, you may find that you also wish to alter the port settings used by clicking Service and Port Settings to call up the window in Figure 1-11.

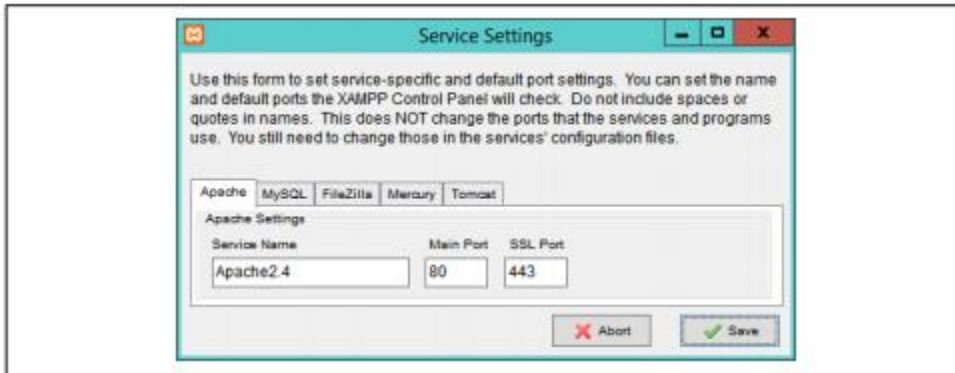


Figure 1-11. Click Save to complete setup

The control panel is where you can conduct most of the actions required for managing XAMPP, including editing and viewing the various configuration files, and looking at access, error, and other log files, all with a simple interface. For example, in Figure 1-11, the Apache Log button has been clicked, and the folder of log files opened.

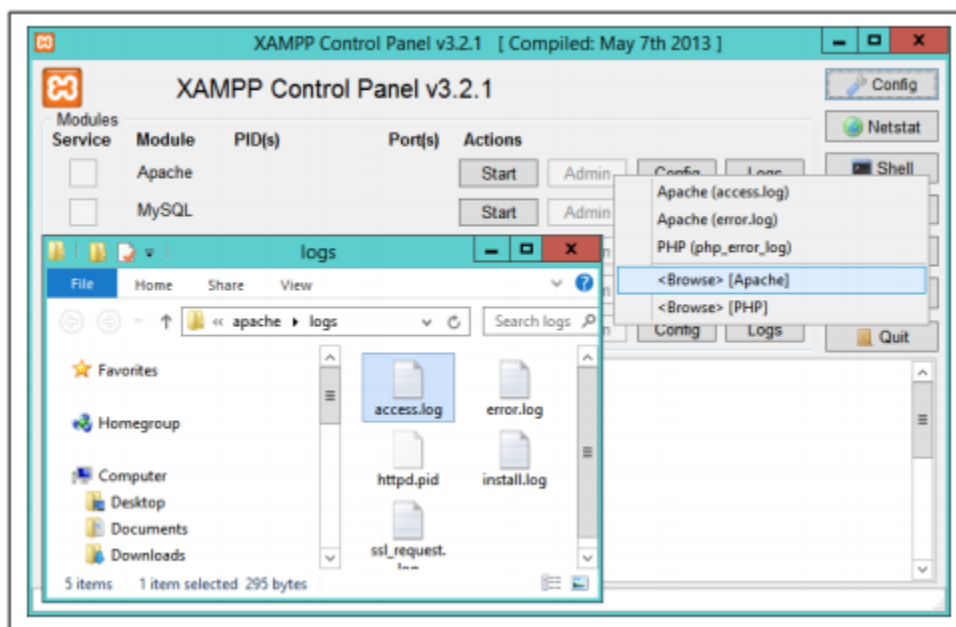


Figure 1-11. Opening the Apache log file folder

Testing the Installation The first thing to do at this point is verify that everything is working correctly. To do this, you are going to try to display the default web page, which will have been saved in the server’s document root folder (see Figure 1-13). Enter either of the following two URLs into the address bar of your browser:

- localhost
- 117.0.0.1



Figure 1-13. How the XAMPP home page should look by default

The word localhost is used in URLs to specify the local computer, which will also respond to the IP address of 127.0.0.1, so you can use either method of calling up the document root of your web server.

Accessing the document root

The document root is the directory that contains the main web documents for a domain. This is the one that is entered when a basic URL without a path is typed into a browser, such as <http://yahoo.com> or, for your local server, <http://localhost>.

By default, XAMP uses the following location for this directory:

C:/xampp/htdocs

To ensure that you have everything correctly configured, you should now create the obligatory “Hello World” file. So create a small PHP file along the following lines using Windows Notepad++ or any other program editor, but not a rich word processor such as Microsoft Word (unless you save as plain text):

```
<?php
Echo “Hello World!”;
?>
```

Once you have typed this, save the file into the document root directory previously discussed, using the filename test.php. If you are using Notepad++, make sure that the “Save as type” box is changed from “Text Documents (*.txt)” to “All Files (*.*)”. Or, if you prefer, you can save the file using the .html file extension; either is acceptable. You can now call this page up in your browser by entering one of the following URLs (according to the extension you used) in its address bar (see Figure 1-14):

<http://localhost/test.php>

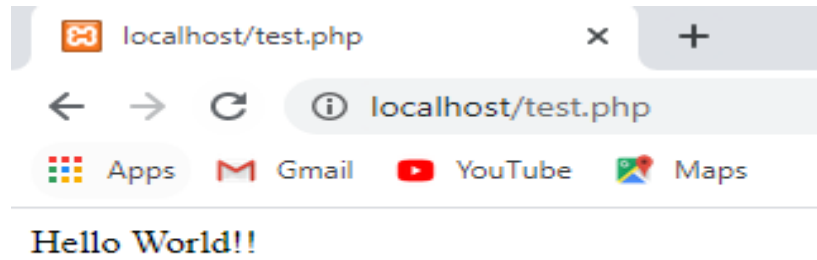


Figure 1-14. Your first web page

You can use 127.0.0.1 instead of localhost as below.

