

XAMPP Installation

tutorial #setup01

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Tutorial Goals

This tutorial will walk you through setting up XAMPP, for testing your webapps.

The first time through may take a bit, especially resolving port conflicts. Once you have done this a few times, it will be no big deal to setup a fresh installation of XAMPP on whatever computer you have available to work on!

Suggestion: you may want to skim the slideshow first, before working your way through it.

Do you Need XAMPP?

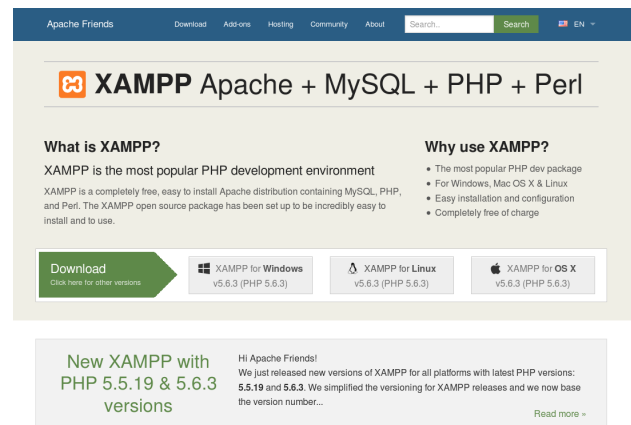
AMP = Apache + MYSQL + PHP (& perl)

IF you are already familiar with AMP,
AND you have a working AMP stack on your machine,
AND you know how to configure and manage it, specifically virtual hosts,
AND you plan to have with you in lab a machine with this or access to it,
THEN skip to the next tutorial.

Download XAMPP

Get AMP from the [Apache Friends](#) website.

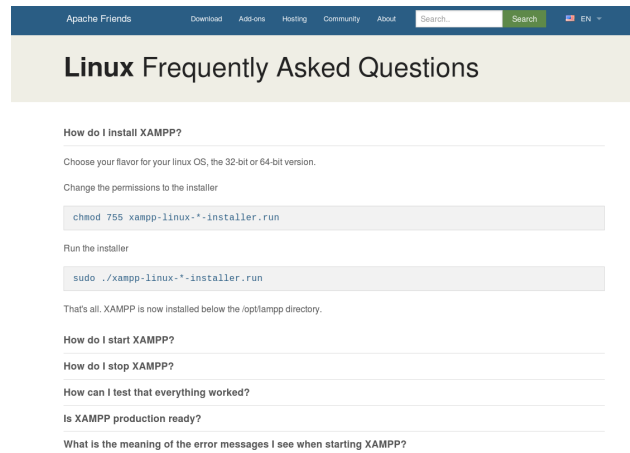
I strongly recommend using XAMPP instead of other apparently suitable packages, such as WAMPP or MAMPP. The other packages (and even some of the AMP stacks built into Linux) often have less than intuitive folder and configuration conventions, and I may not be able to help you with them.



The screenshot shows the Apache Friends website for XAMPP. The header includes navigation links: Apache Friends, Download, Add-ons, Hosting, Community, About, and a search bar. The main content area features the XAMPP logo and the text 'XAMPP Apache + MySQL + PHP + Perl'. Below this, there are two columns: 'What is XAMPP?' and 'Why use XAMPP?'. The 'What is XAMPP?' section states that XAMPP is the most popular PHP development environment and is a completely free, easy-to-install Apache distribution containing MySQL, PHP, and Perl. The 'Why use XAMPP?' section lists three reasons: it's the most popular PHP dev package, it's for Windows, Mac OS X & Linux, and it's completely free of charge. At the bottom, there is a 'Download' button with a link to 'Click here for other versions', followed by three download links: 'XAMPP for Windows v5.6.3 (PHP 5.6.3)', 'XAMPP for Linux v5.6.3 (PHP 5.6.3)', and 'XAMPP for OS X v5.6.3 (PHP 5.6.3)'. A footer section mentions 'New XAMPP with PHP 5.5.19 & 5.6.3 versions' and provides a link to 'Read more »'.

Heed the FAQ

Do read the appropriate FAQ page on apacheFriends.org. It can help you overcome some of the more common obstacles.



Platform Specific Guides

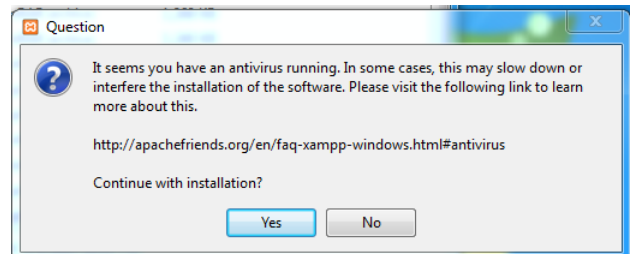
At this point, you will switch to the tutorial part most appropriate to your platform:

1. [Windows](#) ...  XAMPP for Windows
2. [Linux](#) ...  XAMPP for Linux
3. [Mac OSX](#) ...  XAMPP for OS X
4. [Jump to the post installation part if XAMPP has already been installed](#)

Run the Installer - Windows

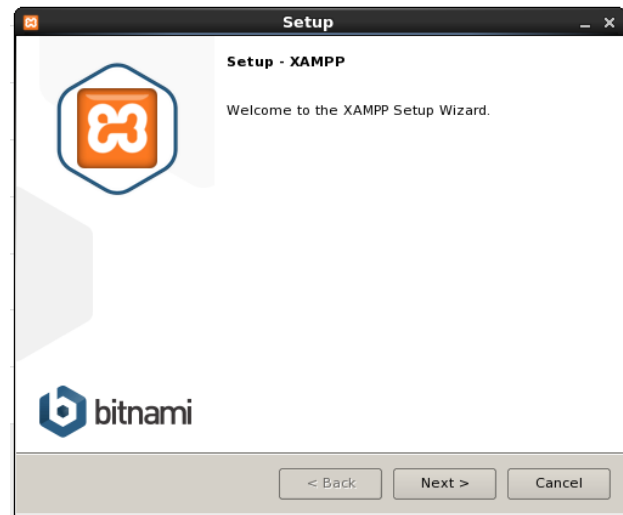
When you run the Windows installer, you will be prompted for permission to execute it. This is normal and expected.

You might get an additional anti-virus prompt, shown right. We have not experienced difficulties proceeding.



Installer Initialization

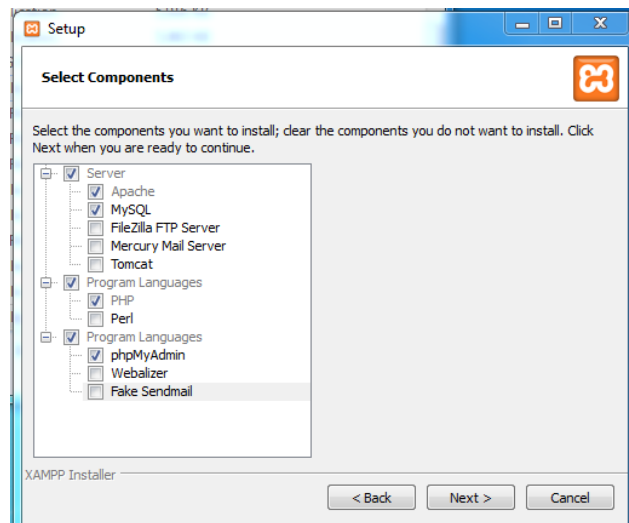
Once the installer has initialized, you should see a setup screen, shown right. There are no options to select - it is safe to proceed.



Component Selection - Windows

The Windows installation has more choices.

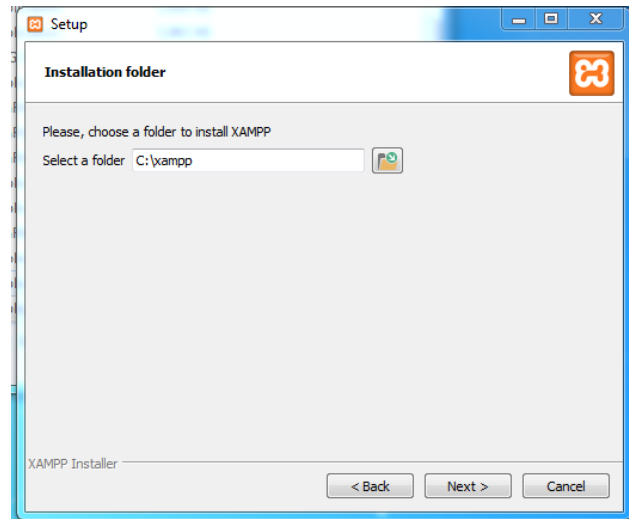
You only need to select MySQL and phpMyAdmin, as shown to the right. Uncheck the others unless you want to play with them.



Installation Directory - Windows

The Windows installer lets you choose the folder to install XAMPP into.

I suggest using the default installation folder. If you want to install it somewhere else, make sure you do not end up with it installed somewhere where the fully qualified pathname would include spaces (eg "~\My Documents\..."), as that will cause issues with some of the tools later.



XAMPP Configuration...

On Windows, Apache configuration settings files are found in the "apache/conf" folder inside your XAMPP installation directory.

These can be edited through the XAMPP control panel, or directly from your file manager. You may need administrator privileges to save changes!

Optional Components

Bitnami, the sponsor of the XAMPP installer, then asks you to visit their site to download optional packages to use with your XAMPP installation.

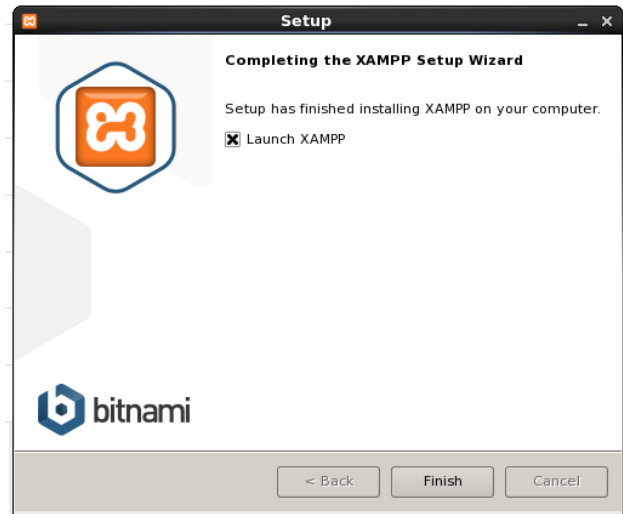
These are not needed, and you can uncheck the checkbox in the center of the window.



Starting the Control Panel

If your installation is successful, you will be prompted to start the XAMPP control panel. We want to do that.

On Windows, the XAMPP control panel can be accessed later from the Start menu.

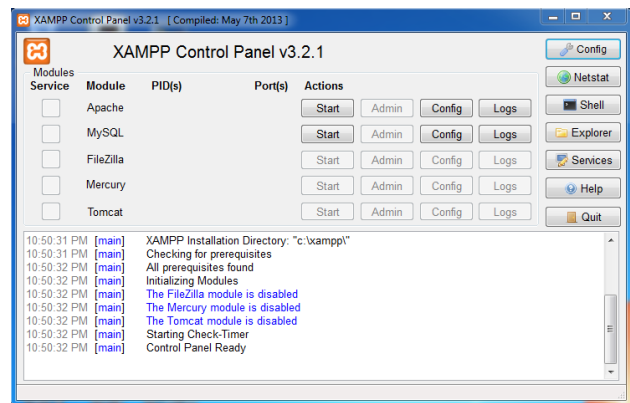


XAMPP Control Panel - Windows

The Windows XAMPP Control Panel looks different than the Linux one.

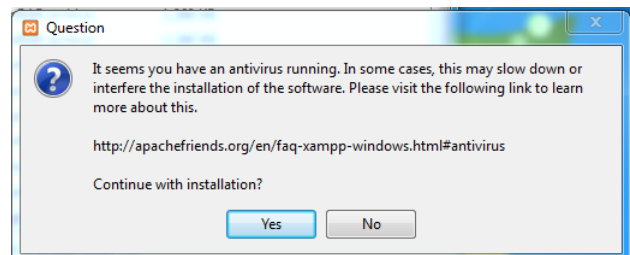
There is a "Service" column down the left. Checking the box beside a module will have that server run as a memory-resident service whenever you login, consuming resources.

You may now proceed to the post-installation part of this tutorial.



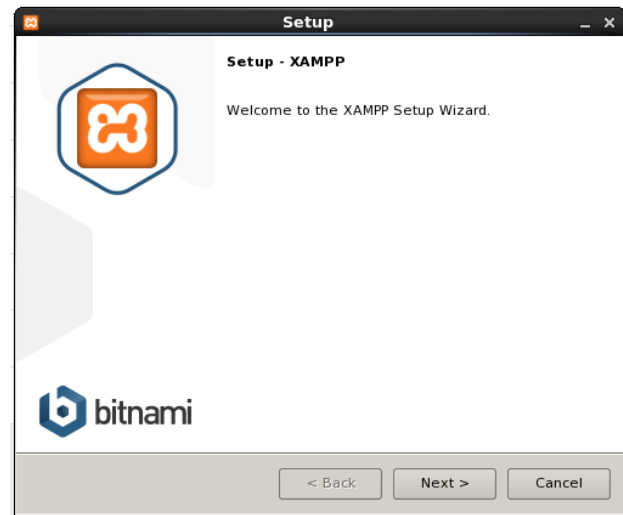
Run the Installer - Linux

On Linux, you need to change the installer's file permissions to allow execution, before you can run it.



Installer Initialization

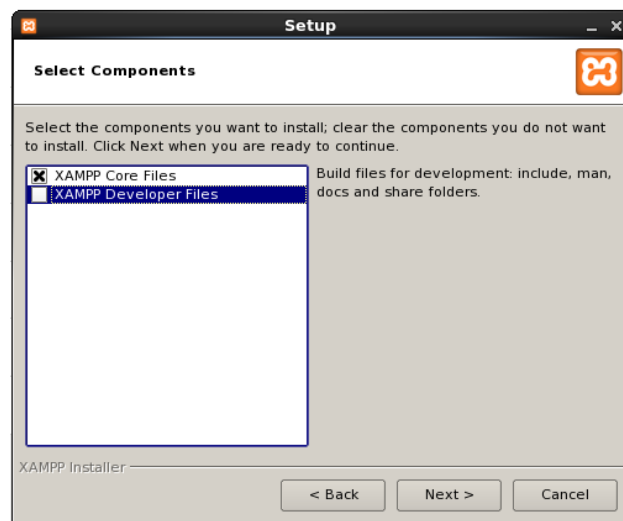
Once the installer has initialized, you should see a setup screen, shown right. There are no options to select - it is safe to proceed.



Component Selection - Linux

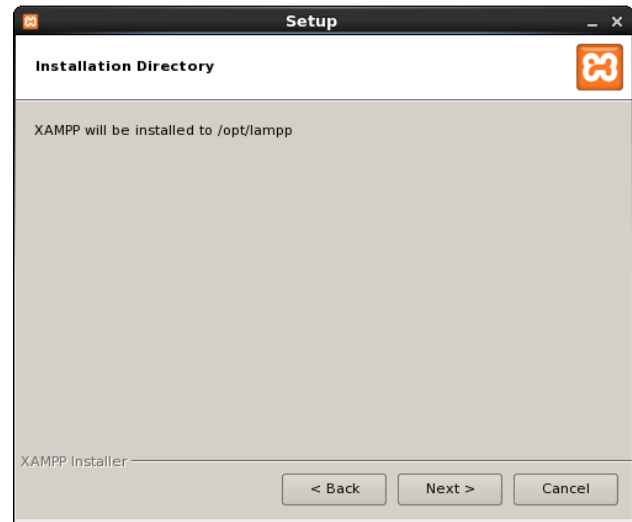
The Linux installation has only two choices - the core XAMPP files and the developer files, shown right.

You need the core files, but it is up to you whether to install the developer files too.



Installation Directory - Linux

The Linux installer will put XAMPP into the /opt/lampp folder. You have no choice.



XAMPP Configuration...

On Linux, Apache configuration settings files are found in the "etc" folder inside your XAMPP installation directory.

These can be edited through the XAMPP control panel, or directly from your file manager. You may need root privileges to save changes!

Optional Components

Bitnami, the sponsor of the XAMPP installer, then asks you to visit their site to download optional packages to use with your XAMPP installation.

These are not needed, and you can uncheck the checkbox in the center of the window.



Starting the Control Panel

If your installation is successful, you will be prompted to start the XAMPP control panel. We want to do that.

On Linux, start the XAMPP control panel later by running "manager-linux-x64.run" in the /opt/lampp folder.



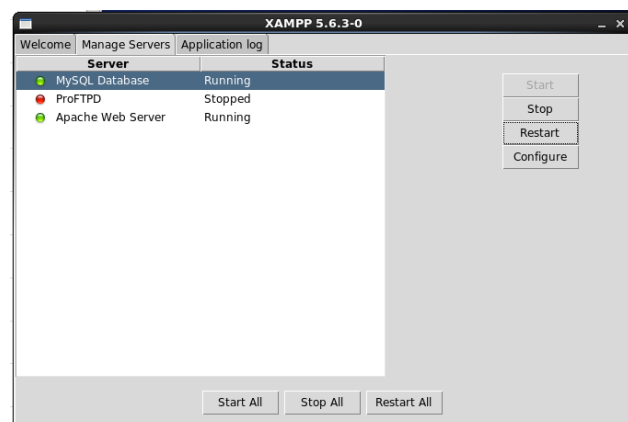
XAMPP CP Start - Linux

The Linux XAMPP Control Panel has a start screen, shown right.



XAMPP CP Manager - Linux

You will need to select the "Manage Servers" tab to actually get to the manager controls. Their use should be intuitive.

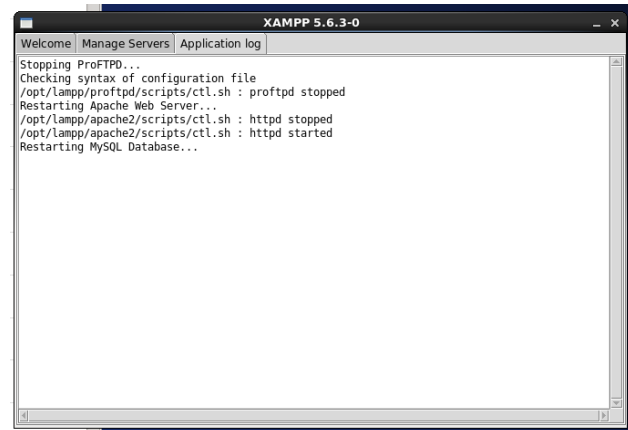


XAMPP CP Logs - Linux

If your XAMPP does not start, you can check the Apache log file using the "Application Log" tab of the CP.

Issues starting one of your hosts might require you to examine host-specific log files in the `/opt/lampp/logs` folder.

You may now proceed to the [post-installation](#) part of this tutorial.



Run the Installer - Mac OSX

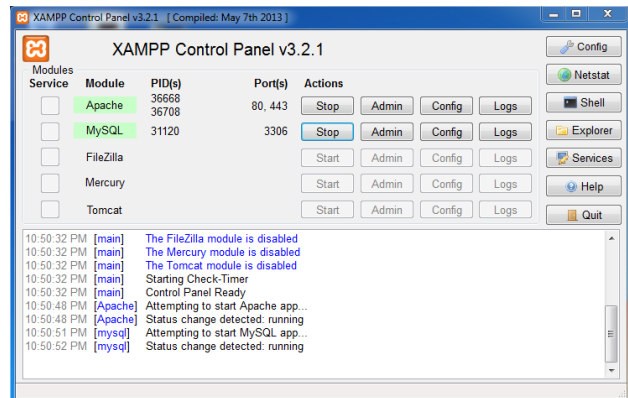
I do not have step-by-step directions or screenshots for installing XAMPP on MacOSX :(

One of the course trial users (thank you, Don Myers) suggested using [MAMP](#) as an alternative to XAMPP, and he provided some screenshots for that. Unfortunately, the free version of MAMP does not support virtual hosting, so I have not included those screenshots here until I can figure out a work-around.

XAMPP Start Success

Click the "Start" button beside a server to start it. If the servers start successfully, they will be highlighted in green, and the ports used shown.

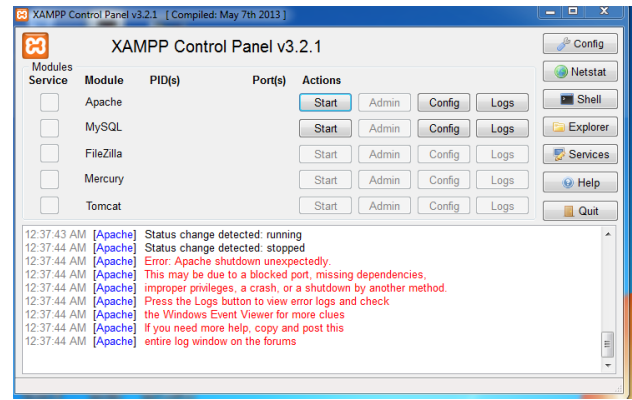
The Linux CP is a bit different, using colored buttons, but the intent is the same.



XAMPP Start Failure

If the servers cannot start, it is almost always because of a port conflict - some other program is using port 80, the default. Such programs include IIS, Oracle and Skype.

You have two choices - kill the other program(s) or use a different port for Apache.



Apache Server Port

If you want to use a different port, tailor xampp/etc/httpd.conf. There is a "Listen 80" directive, around line 52. Replace "80" with an unused port, for instance "4711". If Apache still doesn't start, you have bigger problems and will need to see me for help.

Note: port 443 may have to be changed as well, if it is in use by another program (such as Skype).

About line 43:

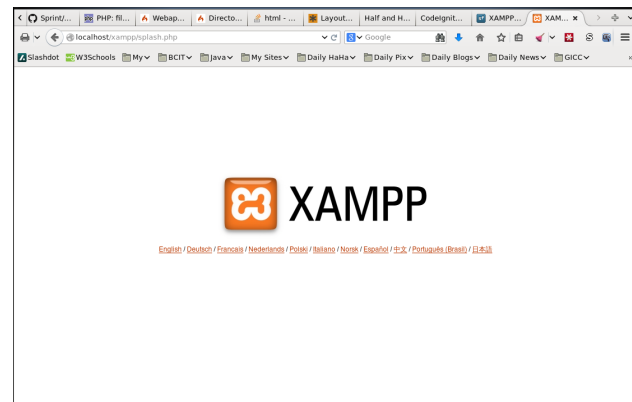
```
#
# Listen: Allows you to bind Apache to specific
# ports, instead of the default. See also the <V
# directive.
#
# Change this to Listen on specific IP addresses
# prevent Apache from glomming onto all bound IP
#
#Listen 12.34.56.78:80
Listen 80
```

Are We There Yet?

In your browser, open the location "localhost". You should see the XAMPP splash screen, right.

If you changed the port in order to get Apache to start, remember to specify that in the URL too, eg. "localhost:4711"

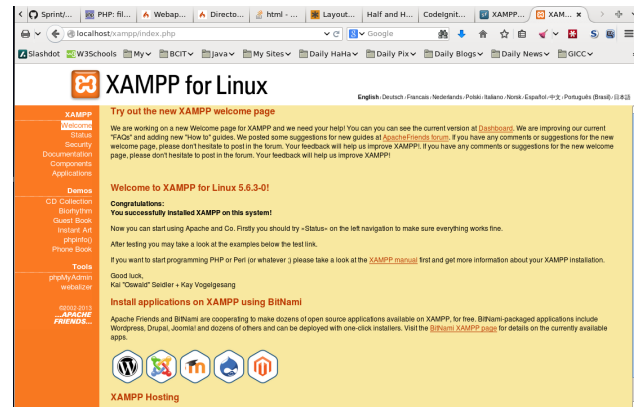
Some browsers may still require that you specify the protocol in your URL, eg. "http://localhost".



Now We're There

Selecting the language of your choice on the XAMPP splash screen will take you to the XAMPP homepage, shown right.

You should not see the splash page again :)



Congratulations!

You have completed tutorial #setup01: XAMPP Installation

If you would take a minute to provide some feedback, we would appreciate it!

The next activity in sequence is: setup02 Virtual Hosting Setup

You can use your browser's back button to return to the page you were on before starting this activity, or you can jump directly to the course homepage, organizer, or reference page.